Integration Guide
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1 Overview of Integration Options

This guide explains the different integration options with SAP Marketing Cloud. Its aim is to help you quickly find the documentation that will guide you through the integration process from wherever your integration journey starts.

**i Note**
Before you start, make sure you have the required version of this document. You can find the available versions at the following location: https://help.sap.com/mkt

**i Note**
In the PDF version of the guide, some links to topics may be missing. All links are available in the HTML version of the guide.

Integration Options

- Implementing Integrations for Business Scenarios [page 9]
- Integration Scenarios [page 39]
The graphic shows only the major integration options.

## Where to Find the Information You Need

<table>
<thead>
<tr>
<th>Questions This Guide Answers</th>
<th>Read Me</th>
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</thead>
<tbody>
<tr>
<td>Which business scenarios do I want to implement and how do I connect with the outside world?</td>
<td>Learn more about the integration options from a marketing process perspective.</td>
</tr>
<tr>
<td>How do I connect the marketing solution to an existing solution, for example, to a Sales solution from SAP?</td>
<td>Find out how to bridge the gap between marketing and other business domains that are built on cloud or on premise solutions.</td>
</tr>
<tr>
<td>How do I integrate a new best-of-breed solution with the marketing solution, for example, in the context of social marketing?</td>
<td>Our Open Marketing Connectors are pre-built connectors that simplify integration with third-party apps. In the Open Marketing Connectors section you’ll find a comprehensive guide to typical integration scenarios.</td>
</tr>
</tbody>
</table>
| Which API should I use if I want to integrate a third-party data source that provides, for example, agreement, campaign, or contact information? | - Quick Guide · Which API for Which Entity [page 384]  
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## 2 Document History

The following table provides an overview of the most important document changes.

<table>
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<tr>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>2020-11-04</td>
<td>Added link to Interaction Contacts event on SAP API Business Hub. For more information, see Interaction Contacts [page 1090].</td>
</tr>
</tbody>
</table>
3 Implementing Integrations for Business Scenarios

Overview of business scenarios, their scope items, related main and additional integration activities, as well as configuration and business administration activities.

A business scenario is a sequence of business processes designed to achieve key business objectives. A scope item is a self-contained and reusable entity of predefined content for the implementation of a business process. A business scenario can include one or more scope items.

You can find scope items in the Manage Your Solution application under View Solution Scope.

**Note**
You can use a business scenario only if its corresponding scope item is active in your system, that is, it has a green flag.

Scope items that are active in your system will only work if you have the required licenses and the integration to the corresponding application is implemented.

If a scope item is not active in your system, it has a gray sign. If you want to activate a scope item, contact SAP.

Integration of SAP Marketing Cloud with external systems can be achieved by using integration scenarios which are predelivered packages or by using integration services, such as public APIs.

Furthermore, communication scenarios are technical references used to enable the integration of SAP Marketing Cloud with external systems. A communication arrangement describes a communication scenario with a remote system during configuration time and provides the necessary metadata for service configuration.

The following business scenarios and scope items are available:

- **Business Scenario: Dynamic Customer Profiling and Segmentation [page 10]**
  - Scope Item: Consumer and Customer Profiling (JC1)

- **Business Scenario: Campaign and Journey Orchestration [page 11]**
  - Scope Item: Segmentation and Campaign Execution by Email (JC2)
  - Scope Item: External Campaigns (JC9)
  - Scope Item: Facebook Campaigns (JC6)
  - Scope Item: Trigger-Based Campaigns and Trigger-Based Campaigns - with Abandoned Shopping Cart (JC8)
  - Scope Item: Google Ads Campaigns (Create/Assign) and Google Campaign Manager (Assign) (JC7)
  - Scope Item: Asian Network Campaigns (23T)
  - Scope Item: Permission Marketing (IT1)
  - Scope Item: Marketing Events (3ZE)

- **Business Scenario: Commerce Marketing [page 17]**
  - Scope Item: Product Recommendation (JC3)
  - Scope Item: Offer Recommendation (1SW)
3.1 Business Scenario: Dynamic Customer Profiling and Segmentation

Overview of the Dynamic Customer Profiling and Segmentation business scenario, its scope item, related main and additional integration activities, as well as configuration and business administration activities.

For information about the business scenario and its corresponding process steps, see Dynamic Customer Profiling and Segmentation.

Scope Item: Dynamic Customer Profiling (JC1)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- Contacts [page 408] (SAP_COM_0207) integration service
- Interaction Contacts [page 465] (SAP_COM_0206) integration service
- Corporate Accounts [page 508] (SAP_COM_0207) integration service
- Enabling Geospatial Segmentation with here.com [page 313]

Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- To import customer and contact data, as well as sales volume data like quotes, orders and returns, use the SAP ERP Integration with SAP Marketing Cloud (1KW) scope item with SAP_COM_0060 communication scenario. For more information, see SAP ERP Integration with SAP Marketing Cloud.
- Integration with SAP Commerce (SAP_COM_0082) communication scenario and Integration with SAP Product Content Management (SAP_COM_0051) integration scenario. For more information, see Integration with SAP Commerce Cloud [page 51] and Integration with SAP Product Content Management [page 310].
Google Analytics Integration (SAP_COM_0079) integration scenario. For more information, see Integration with Google Analytics [page 76].

Gigya Integration for Contacts and Accounts (SAP_COM_0264) integration scenario. For more information, see SAP Customer Data Cloud and SAP Marketing Cloud [page 329].

To integrate with SAP Cloud for Customer, the following integration scenarios are available:
  - Integration with SAP Cloud for Customer - Inbound Channel [page 333]
  - Integration with SAP Cloud for Customer - Outbound Channel [page 356]

File Based Data Load for SAP Marketing Cloud (14F) scope item. For more information, see SAP Marketing Cloud Integration With File Based Data Load.

SAP S/4HANA Integration with SAP Marketing Cloud (23L) scope item. For more information, see SAP S/4HANA Integration with SAP Marketing Cloud.

To use scores with this business scenario, you must set up a predictive scenario with external score values. For more information, see Predictive Marketing. The Scores (SAP_COM_0307) integration service is available. For more information, see Scores [page 696].

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- Contacts and Profiles
- Segmentation Configuration
- General Settings
- Map Free Texts
- Manage Interests
- Marketing Attribute Categories

3.2 Business Scenario: Campaign and Journey Orchestration

Overview of the Campaign and Journey Orchestration business scenario, its scope items, related main and additional integration activities, as well as configuration and business administration activities.

For information about the business scenario and its corresponding process steps, see Campaign and Journey Orchestration.

Scope Item: Segmentation and Campaign Execution by Email (JC2)

Main Integration Activities for SAP Digital Interconnect

You can perform the following main integration activities for this scope item:

- Marketing – Campaign Execution E-Mail Integration (SAP_COM_0040 for emails and SAP_COM_0041 for text messages) integration scenario. For more information, see Setting Up Service Provider for Emails and Text Messages [page 100].
- Enabling Geospatial Segmentation with here.com [page 313]
Main Integration Activities for Amazon

You can perform the following main integration activities for this scope item:

- **Marketing – Campaign Execution E-Mail Integration** *(SAP_COM_0016 for emails and SAP_COM_0039 for bounces)* integration scenario. For more information, see Setting Up Amazon [page 129].
- **Enabling Geospatial Segmentation with here.com** [page 313]

Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- **Marketing – Campaign Open Channel Integration** *(SAP_COM_0049)* integration scenario. For more information, see Open Channel Integration [page 197].
- **Marketing – Generic DAM Integration** *(SAP_COM_0050)* integration scenario. For more information, see Integrate with Content Management Systems or Digital Asset Management Systems [page 302] and Integrate with SAP Document Center [page 308].
- **Marketing – SAP Product Content Management Integration** *(SAP_COM_0051)* integration scenario. For more information, see Integration with SAP Product Content Management [page 310].
- **Marketing - Campaign Message Integration** *(SAP_COM_0208)* integration service. For more information about exporting and importing message content for multiple languages, see Campaign Message Content and Personalized Email Content [page 793].
- **Marketing - Export File Content Integration** *(SAP_COM_0311)* integration service. For more information about reading export file content in campaigns, see Read Content of Export Files in Campaigns [page 901].

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- Inbound Marketing Permissions
- Outbound Marketing Permissions
- Activate Campaign Trigger
- Custom Business Objects
- Custom Fields in Segmentation
- Segmentation Configuration
- Workflow for Business Objects
- Sender Profiles [page 156]
- Managing Approval Workflows
- Verifying Email Addresses Using a Partner Solution [page 316]

Scope Item: Marketing Events (3ZE)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- **Marketing - Marketing Events Integration** *(SAP_COM_0474)* will be deprecated in a future release. **Marketing - Event Outbound Integration** *(SAP_COM_0541)* and **Marketing - Event Inbound Integration** *(SAP_COM_0371)* integration scenarios.
For more information, see in the integration flow guide Integrating Marketing Events Data with SAP Marketing Cloud under Create Communication Arrangement.

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- If event data is to be fetched from different event provider platforms, define ID origin using the ID Origin configuration application. For more information, see Configuring Origins.
- If you want to create an event with a specific media type, for example, EVENTS, define media types using the Media Types configuration application. For more information, see Media Types.
- If you want to assign an event to a specific marketing area, for example, GLOBAL, define marketing areas using the Marketing Areas configuration application. For more information, see Marketing Areas.
- Create and schedule application jobs to import marketing events data from event provider platforms. For more information, see Marketing Events: Import Marketing Events.

Scope Item: External Campaigns (JC9)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- Marketing – External Campaign Execution (SAP_COM_0037) integration scenario. For more information, see Setting Up External Campaign Execution [page 157].

Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- Marketing – Campaign Success Integration (SAP_COM_0390) integration service. For more information, see Campaign Success Data [page 812].

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- Inbound Marketing Permissions
- Outbound Marketing Permissions
- Activate Campaign Trigger
- Custom Business Objects
- Custom Fields in Segmentation
- Segmentation Configuration
Scope Item: Facebook Campaigns (JC6)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- *Marketing – Campaign Execution Facebook Integration* ([SAP_COM_0031](#)) integration scenario. For more information, see *Social Campaigns Using Facebook and Instagram* [page 245].

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- Contacts and Profiles
- Campaigns
- General Settings
- Segmentation Configuration

Scope Item: Trigger-Based Campaigns and Trigger-Based Campaigns - with Abandoned Shopping Cart (JC8)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- *Marketing – Campaign Execution E-Mail Integration* ([SAP_COM_0016](#)) integration scenario. For more information, see *Setting Up Service Provider for Emails and Text Messages* [page 100].

Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- *Marketing – Landing Pages Integration* ([SAP_COM_0023](#)) integration scenario. For more information, see *Custom Integration of Forms* [page 81].
- For the abandoned shopping cart process, the *Marketing - SAP Commerce Data Integration* ([SAP_COM_0082](#)) integration scenario is required. For more information, see *Integration with SAP Commerce Cloud* [page 51].

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- Inbound Marketing Permissions
- Outbound Marketing Permissions
- Activate Campaign Trigger
- Custom Business Objects
- Custom Fields in Segmentation
- Segmentation Configuration
- Sender Profiles [page 156]
Scope Item: Google Ads and Google Campaign Manager Campaigns (JC7)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- **Marketing - Google Ads Integration** *(SAP.COM_0030)* integration scenario. For more information, see Integration with Google Ads [page 238].
- **Marketing - External Campaign Integration** *(SAP.COM_0037)*. For more information, see Integration with Google Campaign Manager [page 254].

Scope Item: Asian Network Campaigns (23T)

Main Integration Activities for WeChat Campaigns

For the WeChat Campaigns variant of this scope item, perform the following main integration activities:

- **Marketing – Network Channel Events Integration** *(SAP.COM_0174)* integration scenario
- **Marketing – Campaign Execution – WeChat Integration** *(SAP.COM_0085)* integration scenario
- **Marketing – Baidu Map Integration** *(SAP.COM_0075)* integration scenario

Configuration and Business Administration Activities for WeChat Campaigns

Perform the following configuration and business administration activities:

- Create WeChat official accounts.
- Create and schedule application jobs.
- Activate the All China Consumers (B2C) segmentation profile.

For more information, see WeChat Integration [page 55] and Integration with Baidu Maps for Geospatial Segmentation [page 314].

Main Integration Activities for LINE Campaigns

For the LINE Campaigns variant of this scope item, perform the following main integration activities:

- **Marketing – Network Channel Events Integration** *(SAP.COM_0174)* integration scenario
- **Marketing – Campaign Execution – LINE Integration** *(SAP.COM_0218)* integration scenario

Configuration and Business Administration Activities for LINE Campaigns

Perform the following configuration and business administration activities:

- Create LINE accounts.
- Create and schedule application jobs.

For more information, see LINE Integration [page 67].

Main Integration Activities for Alibaba Email Campaigns

For the Alibaba Email Campaigns variant of this scope item, perform the following main integration activities:

- **Marketing – Campaign Execution – Alibaba Cloud Email Integration** *(SAP.COM_0231)* integration scenario
Configuration and Business Administration Activities for Alibaba Email Campaigns

Perform the following configuration and business administration activities:

- Configure the access key and secret key.
- Create a sender profile.

For more information, see Setting Up Alibaba Cloud DirectMail Service [page 137].

Main Integration Activities for Alibaba Text Message Campaigns

For the Alibaba Text Message Campaigns variant of this scope item, perform the following main integration activities:

- Marketing – Campaign Execution – Alibaba Cloud SMS Integration (SAP_COM_0232) integration scenario

Configuration and Business Administration Activities for Alibaba Text Message Campaigns

Perform the following configuration and business administration activities:

- Configure the access key and secret key.
- Create a sender profile.
- Create an export definition.

For more information, see Setting Up Alibaba Cloud Short Message Service [page 141].

Main Integration Activities for Baidu Paid Search Campaigns

For the Baidu Paid Search Campaigns variant of this scope item, perform the following main integration activities:

- Marketing - Baidu Paid Search Integration (SAP_COM_0270) integration scenario
- Create your own implementation that replicates paid search campaigns and their success data from Baidu to SAP Marketing Cloud.

For more information, see Integration with Baidu Paid Search Campaigns (To Be Deprecated) [page 250].

Scope Item: Permission Marketing (1T1)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- Marketing – Campaign Execution E-Mail Integration (SAP_COM_0016) integration scenario. For more information, see Setting Up Service Provider for Emails and Text Messages [page 100].

Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- Marketing – Form Integration (SAP_COM_0023) integration scenario. For more information, see Custom Integration of Forms [page 81].
- Marketing - Form Publication Integration (SAP_COM_0148) integration scenario. For more information, see Form Publication [page 94].
• **Marketing – SAP Cloud Platform Landing Page Integration** (SAP_COM_1074) integration scenario. For more information, see Landing Page Design.

• **Marketing – External Landing Page Data Integration** (SAP_COM_0342) integration scenario. For more information, see Introduction.

• **Marketing – SAP Cloud Platform Form Integration** (SAP_COM_1041) integration scenario. For more information, see Standard Integration of Forms [page 91].

### Configuration and Business Administration Activities
To set up this scope item, perform the following configuration and business administration activities:

- Contacts and Profiles
- Configuration for Permission Marketing
- Campaigns
- General Settings
- Sender Profiles [page 156]
- Segmentation Configuration

### 3.3 Business Scenario: Commerce Marketing

Overview of the **Commerce Marketing** business scenario, its scope items, related main and additional integration activities, as well as configuration and business administration activities.

For information about the business scenario and its corresponding process steps, see Commerce Marketing.

### Scope Item: Product Recommendation (JC3)

#### Main Integration Activities

You can perform the following main integration activities for this scope item:

- **Contacts** [page 408] (SAP_COM_0207) integration service
- **Interactions** [page 605] (SAP_COM_0206) integration service
- **Interaction Contacts** [page 465] (SAP_COM_0207) integration service
- **Corporate Accounts** [page 508] (SAP_COM_0207) integration service
- **Marketing - Recommendations (SAP Cloud Platform)** (SAP_COM_1043) integration scenario. For more information, see Recommendations (SAP Cloud Platform) [page 927].
- **Marketing - Recommendations Integration** (SAP_COM_0019) integration scenario. For more information, see Recommendations [page 943].

#### Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- **Marketing - SAP Commerce Data Integration** (SAP_COM_0082) integration scenario. For more information, see Integration with SAP Commerce Cloud [page 51].
- Integration with SAP Product Content Management [page 310] (SAP_COM_0207) integration service.
- **External Recommendations Integration** (SAP_COM_0300) integration service. For more information, see External Recommendations [page 958].
- Recommendations Interaction Data [page 975]

**Configuration and Business Administration Activities**

To set up this scope item, perform the following configuration and business administration activities:

- Recommendation Algorithms
- Recommendation Data Source Pre-Filters

**Scope Item: Offer Recommendation (1SW)**

**Main Integration Activities**

You can perform the following main integration activities for this scope item:

- **Marketing - Offer Integration** (SAP_COM_0020) integration service. For more information, see Import Offers [page 977].

**Additional Integration Activities**

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- **Marketing - Offer Discovery Integration** (SAP_COM_0021) integration service. For more information, see Discover Offers [page 1012].
- **Marketing - SAP Commerce Data Integration** (SAP_COM_0082) integration scenario. For more information, see Integration with SAP Commerce Cloud [page 51].
- **External Recommendations Integration** (SAP_COM_0300) integration service. For more information, see External Recommendations [page 958].

**Scope Item: Offer and Coupon Management in Marketing (1HQ)**

**Main Integration Activities for Offers with Coupons on Mobile App**

You can perform the following main integration activities for the Offers with Coupons on Mobile App variant of this scope item:

- **Contacts** [page 408] (SAP_COM_0207) integration service
- Interaction Contacts [page 465] (SAP_COM_0206) integration service
- Corporate Accounts [page 508] (SAP_COM_0207) integration service
- **Marketing - Offer Integration** (SAP_COM_0020) integration service. For more information, see Import Offers [page 977].
- **Marketing - Mobile Channel in Campaign Management** (SAP_COM_0061) integration scenario. For more information, see Mobile App Integration with Google Firebase [page 239].
Additional Integration Activities for Offers with Coupons on Mobile App

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for the Offers with Coupons on Mobile App variant of this scope item:

- **Marketing - Offer Discovery Integration** (SAP_COM_0021) integration service. For more information, see Discover Offers [page 1012].
- **Marketing - Marketing Location Integration** (SAP_COM_0305)
- **Offer – for wallet use case** (SAP_COM_0306)
- **Marketing - Mobile Channel - Inbound Interactions with Campaign Reference** (SAP_COM_0169)

Main Integration Activities for Offers with External Coupon Service

You can perform the following main integration activities for the Offers with External Coupon Service variant of this scope item:

- **Marketing - External Coupon Management Service Integration** (SAP_COM_0286) integration scenario. For more information, see Integration with an External Coupon Service System [page 317].
- **Marketing - Coupon Integration** (SAP_COM_0317) integration scenario. For more information, see Coupons [page 1028].
- **Marketing - Campaign Execution - Shared Mobile Services E-Mail Integration** (SAP_COM_1025) integration scenario.

Additional Integration Activities for Offers with External Coupon Service

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for the Offers with External Coupon Service variant of this scope item:

- **Marketing - Offer Discovery Integration** (SAP_COM_0021) integration service. For more information, see Discover Offers [page 1012].
- **Marketing - Offer Integration** (SAP_COM_0020) integration service. For more information, see Import Offers [page 977].
  The following integration scenarios provide APIs for dependent offer objects such as products, target groups, or marketing locations. For example, you can first import products and then assign the imported products to an imported offer.
  - Marketing - Target Group UI Integration (SAP_COM_0205). For more information, see Target Groups [page 754].
  - Marketing - Marketing Location Integration (SAP_COM_0305). For more information, see Marketing Locations [page 706].

Main Integration Activities for Offer and Coupons with External Services

You can perform the following main integration activities for the Offers and Coupons with External Services variant of this scope item:

- **Marketing - External Coupon Management Service Integration** (SAP_COM_0286) integration scenario. For more information, see Integration with an External Coupon Service System [page 317].
- **Marketing - Coupon Integration** (SAP_COM_0317) integration scenario. For more information, see Coupons [page 1028].
- **Marketing - Campaign Execution - Shared Mobile Services E-Mail Integration** (SAP_COM_1025) integration scenario.
• **Marketing - Interaction UI Integration** (**SAP_COM_0206**) integration service.

### Additional Integration Activities for Offer and Coupons with External Services

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for the Offers and Coupons with External Services variant of this scope item:

- **Marketing - Offer Discovery Integration** (**SAP_COM_0021**) integration service. For more information, see [Discover Offers](#) [page 1012].
- **Marketing - Offer Integration** (**SAP_COM_0020**) integration service. For more information, see [Import Offers](#) [page 977].

  The following integration scenarios provide APIs for dependent offer objects such as products, target groups, or marketing locations. For example, you can first import products and then assign the imported products to an imported offer.

  - Marketing - Target Group UI Integration (**SAP_COM_0205**). For more information, see [Target Groups](#) [page 754].
  - Marketing - Marketing Location Integration (**SAP_COM_0305**). For more information, see [Marketing Locations](#) [page 706].

### 3.4 Business Scenario: Lead- and Account-Based Marketing

Overview of the **Lead Management and Nurturing** business scenario, its scope items, related main and additional integration activities, as well as configuration and business administration activities.

For information about the business scenario and its corresponding process steps, see [Lead- and Account-Based Marketing](#).

### Scope Item: Marketing Lead Management (JCO)

#### Main Integration Activities

For the **Lead Campaign** feature of this scope item, you need to integrate with SAP Cloud for Customer or with SAP Customer Relationship Management (SAP CRM). For more information, see:

- **SAP Cloud for Customer Integration with SAP Marketing Cloud**. The following information on integration scenarios is available:
  - Integration with SAP Cloud for Customer - Inbound Channel [page 333]
  - Integration with SAP Cloud for Customer - Outbound Channel [page 356]
- **SAP CRM Integration with SAP Marketing Cloud**. The following information on integration scenarios is available:
  - Integration with SAP CRM - Inbound Channel [page 337]
  - Integration with SAP CRM - Outbound Channel [page 349]
For the Call Qualifications feature of this scope item, you can integrate with SAP Cloud for Customer. For more information, see SAP Cloud for Customer Integration with SAP Marketing Cloud. The following information on integration scenarios is available:

- Integration with SAP Cloud for Customer - Inbound Channel [page 333]
- Integration with SAP Cloud for Customer - Outbound Channel [page 356]

Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- UI Integration with SAP Cloud for Customer (SAP_COM_0045) integration scenario, for navigation from contacts to sales system

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- Optionally, you can set up the workflow. Workflow for Business Objects
- In case you have activated more than one communication arrangement, that is, you have configured more than one target system, the Business Add-In (BAdI) Lead Management: Determine Target System Type is performed. With the Custom Fields and Logic app, you can implement the BAdI. You define the target system type (either SAP_C4C or SAP_CRM) depending on different attributes of the contact that is currently in process. The BAdI is performed once for each member of the target group. That is, you define in which target system the correspondings leads or activities are created.

Scope Item: Marketing-Driven Sales Enablement (1SY)

Main Integration Activities

For the Activity for Sales feature of this scope item, you need to integrate with SAP Cloud for Customer or with SAP CRM.

For more information, see:

- SAP Cloud for Customer Integration with SAP Marketing Cloud. The following information on the integration scenarios is available:
  - Integration with SAP Cloud for Customer - Inbound Channel [page 333]
  - Integration with SAP Cloud for Customer - Outbound Channel [page 356]
- SAP CRM Integration with SAP Marketing Cloud. The following information on the integration scenarios is available:
  - Integration with SAP CRM - Inbound Channel [page 337]
  - Integration with SAP CRM - Outbound Channel [page 349]

For the Sales Insights on Marketing Campaigns feature of this scope item, you need to integrate with SAP Cloud for Customer.

For more information, see SAP Cloud for Customer Integration with SAP Marketing Cloud. The following information on the integration scenarios is available:

- Integration with SAP Cloud for Customer - Inbound Channel [page 333]
Additional Integration Activities

Depending on your business needs and the business scenarios and scope items you want to use, you might have to perform the following additional integration activities for this scope item:

- **UI Integration with** SAP Cloud for Customer (SAP_COM_0045) integration scenario, for navigation from contacts to sales system

Configuration and Business Administration Activities

To set up this scope item, perform the following configuration and business administration activities:

- Optionally, you can set up the workflow.
  Workflow for Business Objects
- For the feature Sales Insights on Marketing Campaigns, you have to activate the campaign transfer. 
  Campaigns: Transfer Campaigns to Sales

Scope Item: Marketing Lead Nurturing (2ZM)

The Lead Nurture feature uses email campaigns and lead campaigns (optional). To use this scope item, please refer to the following dependent scope items:

- **Scope Item: Segmentation and Campaign Execution by Email (JC2) [page 11]**: To design the stream and run email campaigns.
- **Scope Item: Marketing Lead Management (JC0) [page 20]** (optional): Only if you want to transfer the qualified leads to sales.

3.5 Business Scenario: Marketing Planning and Performance

Overview of the Marketing Planning and Performance business scenario, its scope item, related main integration activities, as well as configuration and business administration activities.

For information about the business scenario and its corresponding process steps, see Marketing Planning and Performance.

Scope Item: Marketing Planning (JC5)

Main Integration Activities

You can perform the following main integration activities for this scope item:

- **Marketing - Business Data Integration** (SAP_COM_0004) integration service. For more information, see Importing Actual and Committed Spend from SAP ERP [page 377].
• **Marketing - Planning Spends Integration** *(SAP_COM_0018)* integration scenario. For more information, see Integration with SAP ERP for Spend Planning [page 374].

**Configuration and Business Administration Activities**

To set up this scope item, perform the following configuration and business administration activities:

1. If custom dimensions are going to be used for budget planning, define them using the **Custom Dimensions** configuration application. For more information, see Custom Dimensions.
2. If you defined custom dimensions, define or import custom dimension values in the system from a comma-separated value (CSV) file in the **Custom Dimension Values** business administration application. For more information, see Custom Dimension Values.
3. If brand is going to be used as a dimension for budget planning, define or import brands in the system from a comma-separated value (CSV) file in the **Brands** business administration application. For more information, see Brands.
4. If market is going to be used as a dimension for budget planning, define markets and assign countries to markets using the **Markets** configuration application. For more information, see Markets.
5. If audience is going to be used as a dimension for budget planning, define or import audiences using the **Audiences** business administration application. For more information, see Audiences.
6. If planning is going to be done for different media types, define media types using the **Media Types** configuration application. For more information, see Media Types.
7. Define marketing areas using the **Marketing Areas** configuration application. For more information, see Marketing Areas.
8. Define planning models using the **Planning Models** configuration application. For more information, see Planning Models.
9. If you want to restrict the values that can be used for budget plans in budget planning, define dimension relationships using the **Dimension Relationships** business administration application. For more information, see Dimension Relationships.
10. If you defined custom dimensions or if you want to change the labels for the standard dimensions, define labels for dimensions using the **Labels for Dimensions** configuration application. For more information, see Labels for Dimensions.
11. If you want to change the labels for the standard measures, define labels for measures using the **Labels for Measures** configuration application. For more information, see Labels for Measures.
12. Define the actual spend data you want to display in planning using the **Actual Spend and Ad Serving Cost** configuration application. For more information, see Actual Spend and Ad Serving Cost.
13. Define spend types using the **Spend Types** configuration application. For more information, see Spend Types.
14. Activate workflow for business objects using the **Workflow for Business Objects** configuration application. For more information, see Workflow for Business Objects.
15. Define workflows for marketing approvals using the **Manage Workflows** business administration application. For more information, see Managing Approval Workflows.
16. Activate change log for business objects using the **Change Log** configuration application. For more information, see Change Log.
17. Activate snapshots for business objects using the **Snapshots for Business Objects** configuration application. For more information, see Snapshots for Business Objects.
3.6 Business Scenario: Marketing Analytics

Overview of the Marketing Analytics business scenario, its scope items, and related main integration activities. For information about the business scenario and its corresponding process steps, see Marketing Analytics.

Scope Item: Analytics Extensibility and Data Extraction (3SM)

Analytics Extensibility

These are the available extensibility options for this scope item. To learn more about the two types of integration and which one you have, see Setup of SAP Analytics Cloud, Embedded Edition/SAP Analytics Cloud.

- Create Custom Analytics Stories
  For more information, see Create Custom Stories, SAP Analytics Cloud and Create Custom Stories, SAP Analytics Embedded Edition.

- Create Custom Operational Reports
  For more information, see Custom Operational Reports.

Core Data Services (CDS)-Based Data Extraction

You can perform the following main integration activities for this scope item:

- Core Data Services-Based Data Extraction from SAP Marketing Cloud to SAP BW Systems
  For more information, see Setting Up Analytics Extensibility and Data Extraction.
  For more information, see Core Data Services-Based Extraction from SAP Marketing Cloud to SAP BW Systems [page 24].

- Core Data Services-Based Data Extraction from SAP Marketing Cloud to Other SAP and Non-SAP Systems
  For more information, see Core Data Services-Based Extraction from SAP Marketing Cloud to Other SAP and Non-SAP Systems [page 26].
  For more information, see Cloud Data Integration API [page 31].

3.6.1 Core Data Services-Based Extraction from SAP Marketing Cloud to SAP BW Systems

This procedure helps you set up the Core Data Services-Based Extraction from SAP Marketing Cloud to an SAP BW system.

Context

BW Modeling Tools installation
SAP HANA Studio with BW Modeling Tools must be installed on the local PC to perform the setup. For more information, see Install BW Modeling Tools.

**Object List**

Ensure that the following objects have been created in prerequisites setup instructions. There may be different names based on different system environment, you can ask for them from Administrators who performed the setup.

<table>
<thead>
<tr>
<th>Object</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source System</td>
<td>&lt;system ID&gt;-&lt;client&gt;</td>
</tr>
<tr>
<td>DataSource</td>
<td>IMKTTG_DS</td>
</tr>
<tr>
<td>DataStore Object</td>
<td>IMKTTGDSO</td>
</tr>
<tr>
<td>Data Transfer Process</td>
<td>DTP-Full RSDS IMKTTG_DS &lt;system ID&gt;-&lt;client&gt; ADSO &gt; IMKTTGDSO</td>
</tr>
</tbody>
</table>

**Procedure**

1. Verify the source system.
   a. Open SAP BW/4HANA, and log on to SAP BW/4HANA system.
      You successfully logged on, and SAP Easy Access page is displayed.
   b. Access the BW Workbench, and run TCode RSA1.
      The Process Chain Display Planning View page is displayed.
   c. In the Source System panel, expand ODP – ABAP CDS Views and find the source system XXX that you created in set-up instructions or you’re required to test in your own scenario.
      The source system is displayed.
   d. Right-click the source system and choose Check.
      Source system connection XXX OK is displayed at the bottom of the screen.

2. Verify the data flow.
   a. Open the SAP HANA studio, and navigate to the SAP BW/4HANA system using the BW Modeling Perspective.
      You’ve successfully opened the SAP BW/4HANA project.
   b. In the Data Sources node, expand the ABAP CDS Views folder and then expand the source system.
      Check if data source (for example, IMKTTG_DS) exists and activated.
      The Data Source IMKTTG_DS is displayed.
   c. In the BW Repository node, expand the NODESNOTCONNECTED folder and then expand the DataStore Object (advanced) folder. Check if DSO (for example, IMKTTGDSO) exists and activated.
      The Data Store Object IMKTTGDSO is displayed.
   d. In the DataStore Object (advanced) > IMKTTGDSO node, expand the Data Transfer Process folder and check if DTP (for example, DTP-Full RSDS IMKTTG_DS <system ID>-<client> ADSO > IMKTTGDSO) exists and activated.
The Data Transfer Process `DTP-Full RSDS IMKTTG_DS <system><client> > ADSO IMKTTGDSO` is displayed.

3. Verify the extracted data.
   a. Open the SAP HANA studio, and navigate to the SAP BW/4HANA system using the `BW Modeling` Perspective.
      You’ve successfully opened the SAP BW/4HANA project.
   b. Open DSO `IMKTTGDSO` and navigate to `Properties – DDIC` tab. Choose `/BIC/AXXX1` link beside `Active Table`.
      The SAP BW/4HANA screen is opened in a new page.
   c. On the `Dictionary: Display Table` screen, choose `Contents`. In the `Select Fields for Selection` screen, check `Target Group` field according to your own scenario and then choose `Execute`.
      The Data Browser page (SE16) is displayed.
   d. On the `Data Browser` screen, choose `Number of Entries`. If data exists in source system, the result must be XX.
      The extracted data records are displayed.

   ○ If you are interested to figure out which CDS Views are capable of extracting data from SAP Marketing Cloud into the desired target system, see the following blog at: Discover CDS View Based Extractors from SAP S/4HANA Cloud

### 3.6.2 Core Data Services-Based Extraction from SAP Marketing Cloud to Other SAP and Non-SAP Systems

This section provides information on how to extract data from an SAP Marketing Cloud system to other SAP and non-SAP systems using the SAP Cloud Data Integration (CDI) API.

The previous section, Core Data Services-Based Extraction from SAP Marketing Cloud to SAP BW Systems [page 24] explains data extraction from an SAP Marketing Cloud system to SAP BW systems while this section deals with data extraction to other SAP and non-SAP systems.

You can extract data from an SAP Marketing Cloud system to other SAP and non-SAP systems using the communication scenario `SAP_COM_0531`.

The CDI API enables data extraction from SAP Marketing Cloud to be consumed via an ODataV4 endpoint. You must implement the ODataV4 client for consuming the CDI API services using one of the following:

- SAP Cloud Platform Integration (CPI)
- SAP Data Intelligence (Data Hub)
- SAP Smart Data Integration (SDI)

**Note**

Consumption of the CDI API services in a non-SAP is supported system only using the above-listed services. For more information, see Cloud Data Integration API [page 31].
Prerequisites

You have to create a communication arrangement for the communication scenario SAP_CON_0531. Creating a communication arrangement is required on SAP Marketing Cloud irrespective of the consuming channel, that is, SAP CPI, Data Hub, or SAP SDI.

Set Up the Communication Arrangement on SAP Marketing Cloud

To access the CDI API services, complete the following steps on SAP Marketing Cloud.

Create a Communication User

A technical user is required to access the CDI API services. This user is a special user used for data extraction purposes.

1. Log in to the SAP Marketing Cloud system as an Administrator.
2. In the SAP Marketing Cloud system, choose the Maintain Communication Users app, click New to create a new communication user.
3. Enter the User Name, Description, and Password (either enter a password manually or use the proposed password). Click Create.

Note

The certificate upload isn’t mandatory for this scenario.

Create a Communication System

The connection management needs to know in which system the connection is being set up, hence a communication system has to be created.

1. Log in to the SAP Marketing Cloud system as an Administrator.
2. Open SAP Marketing Cloud in a new browser window. In the Communication Systems app, click New to create a new communication system.

3. Enter a System ID and System Name for your communication system, and choose Create.

4. On the Communication System page, under Technical Data, enter the following:
   1. Host Name: If host name not required then System ID is sufficient. Host Name is required when the connection needs to be set up with third-party system and its Host ID is required.
   2. Logical System: Not required.
   3. Port: Default port is 443. Don’t change the port number.

5. Under Users for Inbound Communication, choose + button.

6. In the New Inbound Communication User pop-up screen, enter the User Name and select User Name and Password option for Authentication Method, and then click OK.
7. On the Communication System page, choose Save.

Create Communication Arrangement

To access the CDI API services, a communication arrangement is required. The communication arrangement generates the service endpoints and assigns the right authorization roles required to access the provider data.

Use the Communication Scenario ID SAP_COM_0531 to create a communication arrangement. While creating a communication arrangement, the authorizations required to access the CDI API services are granted to the communication user from the communication scenario role SAP_COM_0531. With the creation of communication arrangement, the service endpoints are exposed with the communication user and are ready for consumption.

1. Log in to the SAP Marketing Cloud system as an Administrator.
2. In the SAP Marketing Cloud system, choose the Communication Arrangements app, click New to create a new arrangement.

3. In the New Communication Arrangement pop-up screen, enter the scenario SAP_COM_0531 and click Create.
4. Enter the Communication System that you defined while setting up a Communication System, and click **Save**.

Once the communication system is saved, the two ODataV4 service groups (Cloud Data Integration (CDI) and Cloud Data Integration for Core Data Services (CDI_CDS)) are populated on the Communication Arrangements page, under Inbound Services.

---

**Note**

Upon creation of Communication Arrangement service, the service endpoints aren’t listed but only OData groups are listed as shown. To access the CDI admin service endpoint, you must fetch the URL in the following way: `<Host>/<Service Path>` where, `<Service Path>` is `/sap/opu/odata4/sap/cdi/default/sap/cdi/0001/`. Once the admin service endpoint is accessible, you can fetch the service path for each of the providers with a GET call to the provider EntitySet as shown: `<Host>/sap/opu/odata4/sap/cdi/default/sap/cdi/0001/Providers.`
For more information on the CDI API, see Cloud Data Integration API [page 31].

Related Information

- For an overview of CDS-based data extraction, see the blog: CDS-Based Data Extraction - An Overview
- If you are interested to figure out which CDS Views are capable of extracting data from SAP Marketing Cloud into the desired target system, see the following blog at: Discover CDS View Based Extractors from SAP S/4HANA Cloud

3.6.2.1 Cloud Data Integration API

This section provides the technical information of the Cloud Data Integration (CDI) API.

To access the CDI admin service endpoint, you must fetch the URL in the following way: `<Host>/<Service Path>` where, `<Host>` is the SAP Marketing Cloud host similar to `https://myXXXXXXX.s4hana.ondemand.com` and `<Service Path>` is `/sap/opu/odata4/sap/cdi/default/sap/cdi/0001/`.

Accordingly, the service endpoint URL is: `https://myXXXXXXX-api.s4hana.ondemand.com/sap/opu/odata4/sap/cdi/default/sap/cdi/0001/`.

The response to the service endpoint call consists of the following entity sets:

```json
{ "@odata.context": "$metadata", "value": [ { "name": "Namespaces", "url": "Namespaces" }, { "name": "Providers", "url": "Providers" }, { "name": "Subscriptions", "url": "Subscriptions" } ] }
```

Entity Sets

The following are the CDI API Entity Sets:

- **Namespaces**: For SAP Marketing Cloud, the ABAP CDS Views are the applicable namespaces.
- **Providers**: Providers are the different CDS Views that have been enabled for extraction. In SAP Marketing Cloud, all the CDS Views that start with the naming convention I_MKT_* or C_MKT_* are the providers.
  
  ```
  GET /sap/opu/odata4/sap/cdi/default/sap/cdi/0001/Providers
  { "NamespaceID": "ABAP_CDS", "ProviderID": "I_MKT_CONTACTFACETDATA_2", "Description": "Marketing: Contact Facet Data", "ServiceURL": "/sap/opu/odata4/sap/cdi_cds/cdi_cds/sap/i_mkt_contactfacetdata_2/0001/" }
  
  GET /sap/opu/odata4/sap/cdi_cds/cdi_cds/sap/i_mkt_contactfacetdata_2/0001/
  Based on the type of CDS View, the corresponding entity set is displayed, for example the MasterData, Facets, etc.
  ```

  ```
  { "@odata.context": "$metadata", "value": [ { "name": "MasterData", "url": "MasterData" } ] }
  
  The provider-specific OData service contains the entity set with data access. The client can access the list of columns accessed by sending a GET request to `<serviceRoot>/$metadata`.
  ```

  ```
  GET /sap/opu/odata4/sap/cdi_cds/cdi_cds/sap/i_mkt_contactfacetdata_2/0001/$metadata provides the service metadata.
  ```

- **Subscriptions**: There can be (0: N) subscriptions for a provider. This information is required for delta extraction scenario. The CDS Views advertise their change-tracking capabilities by annotating entity sets with the `Capabilities.ChangeTracking` term. The client requests the service track changes by specifying track-changes preference on a request in the Prefer header.
Prefer: odata.track-changes
If supported for the request, the service includes a Preference-Applied header in the response containing
the track-changes preference and includes a delta link on the last page of results.
A subscription is created implicitly by accessing the provider data with odata.track-changes enabled.
The Subscriptions are stopped via a DELETE call to the Subscriptions entity set. It’s possible to create a
subscription explicitly via a POST call. In this case, the client can set an external ID. The
currentDeltaLink and the previousDeltaLink are calculated by the server.

Deletion of Subscriptions
Subscriptions can be deleted with a DELETE request specifying the NameSpaceID, ProviderID, and
SubscriptionID key fields.

Provider Data Access
- **Data Preview**: A GET call to the EntitySet of a provider URL with top and/or skip fetches the data in preview
  mode. For example, <Host>/<Serv_path>/EntitySet?$top=2&$skip=1.
- **Full Mode**: A GET call to the EntitySet of a provider URL fetches the data in preview mode. For example,
  <Host>/<Serv_path>/EntitySet.
  In the GET <HOST>/sap/opu/odata4/sap/cdi_cds/cdi_cds/sap/
  i_mkt_contactfaceteddata_2/0001/MasterData call along with the header information Prefer: odata.maxpagesize=<pagesize>, you can set the desired pagesize for pagination. The
  @odata.nextLink contains the link to fetch the next set of entries.
- **Delta Mode**: A GET call to the EntitySet of a provider URL with header fetches the data in Delta mode. The
  first fetch is delta init and the delta link is provided at the end of payload. Use this link to make subsequent
  calls to retrieve Deltas only.
  For example, <Host>/<Serv_path>/EntitySet with Header Prefer: odata.track-changes
  The response is similar to the following with the data ending with delta link as shown:
  "@odata.deltaLink": "<Serv_path>/EntitySet?
  $deltatoken=D_KJKAAPANFENVANLRA2BI3KCHM"
  This action results in implicit subscription creation for provider.

Delta mode can be used along with the pagesize attribute. If the specified pagesize is smaller than the
data, the response contains data along with a link to the next page and the subsequent requests fetch
the data from the next pages. During the last page fetch, the delta link is returned.

3.6.3 Models for Core Data Service-Based Extractions
3.6.3.1 CDS Modeling: Campaign and Campaign Performance

Overview of the data model that illustrates the relationships between the CDS views for campaign and campaign performance.

Prerequisites

For information regarding prerequisites, see Business Scenario: Marketing Analytics [page 24] and open the collapsible section titled Core Data Services (CDS)-Based Data Extraction.

Technical Details
The I_MKT_AssgnCmpgnSuccessData view contains the actual campaign performance data in the date level. You can aggregate the data into the campaign level and compare with the target defined in the I_MKT_CampaignTarget view. The view also contains additional dimensions, for example, gender, age, and country/region.

The I_MKT_CampaignTarget view contains the defined performance target in the campaign level.

(K) Represents key fields.

The purpose of this diagram is to show how the CDS views for Campaigns and Campaign Performance are linked together to form a model. The complete CDS view definitions, including all of the available fields can be viewed in the View Browser application.

Released CDS Views that are enabled for data extraction contain the following annotation:
@Analytics.dataextraction.enabled: true.

Released CDS Views that support delta extraction contain the following annotation:
@Analytics.dataextraction.delta.

For more information about the views that are enabled for extraction, see the following blog at: Discover CDS View Based Extractors from SAP S/4HANA Cloud.

Change History

New as of 2008 release.

3.6.3.2 CDS Modeling: Contacts and Profiles

Models available to show relationships between CDS views for data extraction.

3.6.3.2.1 Interaction Contacts

Overview of the data model that illustrates the relationships between the CDS views for Interaction Contacts.

For information about prerequisites, see Business Scenario: Marketing Analytics [page 24] and open the collapsible section titled Core Data Services (CDS)-Based Data Extraction.
Technical Details

3.6.3.3 CDS Modeling: Scores and Predictive Studio

Overview of CDS views, which are modeled according to the relationships between the different entities of scores.

Prerequisites

- Support CDI (Cloud Data Integration)
- Export data of Score entities into non-marketing systems (BW, SAP DI, etc.) with better performance than Rest API, and with delta capability.

For more information regarding prerequisites, see Business Scenario: Marketing Analytics [page 24] and open the collapsible section titled Core Data Services (CDS)-Based Data Extraction.

Note

With an ODP source system, we recommend using ABAP runtime, since the extraction is done by ABAP anyway. A transformation in SAP HANA would cause unnecessary effort, since the data must first be persisted. For more information, see Transformation in the SAP HANA Database.
### Technical Details

#### Score CDS Views

<table>
<thead>
<tr>
<th>Entity</th>
<th>CDS View</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>I_MKT_CustomPredictiveScore</td>
<td>Custom Scores created with Predictive Scenarios application</td>
</tr>
<tr>
<td></td>
<td>I_MKT_ConfiguredScore</td>
<td>• Scores configured with customizing: SAP delivered scores</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Score Builder scores</td>
</tr>
<tr>
<td>Score Implementation</td>
<td>I_MKT_CustomPrdtvScoreImplmtn</td>
<td>Implementation methods of custom scores created with Predictive Scenarios application</td>
</tr>
<tr>
<td></td>
<td>I_MKT_ConfiguredScoreImplmtn</td>
<td>Implementation methods of scores that are either configured via customizing or score builder scores</td>
</tr>
<tr>
<td>Score Model</td>
<td>I_MKT_ScoreModel</td>
<td>Score Models (Predictive Models)</td>
</tr>
<tr>
<td>Score Persistence</td>
<td>I_MKT_ScorePersistence</td>
<td>Score Persistence</td>
</tr>
<tr>
<td>Score Value</td>
<td>I_MKT_MktgIntactnCntctScrVal</td>
<td>Persisted Score Values</td>
</tr>
</tbody>
</table>
**Best Practises: Score Extraction and System Performance**

Before extracting score values, please consider how it can influence your system performance. Especially consider the following points:

- It is more performant to schedule regular full load, if
  - your delta load regularly contains big amounts of data
  - the amount of data in your delta load is similar to or even greater than that of the full load
  One possible scenario where this applies is: customer has many scores which allow only one version to be persisted. Since adding the new version will delete the previous version, it doubles the amount of records contained in the delta.
- Please be cautious of the update frequency of scores. The more daily scores you have, the heavier is your delta load.
- Although the CDS-based extraction provides excellent performance, it still adds to the overall resource consumption.
- Additionally, a huge delta load leads to longer extraction runtime.

→ Tip

To safeguard system performance, we recommend that the number of records contained in a delta load not exceed 600 million.

**Example: How to calculate your data load volume**

The numbers shown in this example serve only as reference.

Let's assume you have the following number of scores, score versions and interaction contacts in your system:

<table>
<thead>
<tr>
<th>Score Persistence</th>
<th>Number of Score Versions Kept</th>
<th>Number of Scores Created</th>
<th>Number of Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>daily</td>
<td>10</td>
<td>5</td>
<td>5 million</td>
</tr>
<tr>
<td>weekly</td>
<td>10</td>
<td>5</td>
<td>5 million</td>
</tr>
<tr>
<td>monthly</td>
<td>10</td>
<td>5</td>
<td>5 million</td>
</tr>
</tbody>
</table>

Then the load of score values ranks from 750 million in the initial load to 50 million score values in the daily delta load.

<table>
<thead>
<tr>
<th>Load</th>
<th>Calculation of Score Values</th>
<th>Number of Score Values</th>
<th>Estimated Duration of Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Load</td>
<td>10 versions *5 scores + 10 versions * 5 scores + 10 versions *5 scores) * 5 million contacts</td>
<td>750 million</td>
<td>5 hours</td>
</tr>
<tr>
<td>Load</td>
<td>Calculation of Score Values</td>
<td>Number of Score Values</td>
<td>Estimated Duration of Load</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Delta Load for Daily Persistence</td>
<td>5 newly created scores * 5 million contacts + 5 deleted scores * 5 million contacts</td>
<td>50 million</td>
<td>30 minutes</td>
</tr>
<tr>
<td></td>
<td>Since the maximum number of score versions has been reached, adding a new version will delete the oldest score version. The delta load also includes the deleted versions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta Load for Weekly Persistence</td>
<td>(5 newly created scores * 5 million contacts + 5 deleted scores * 5 million contacts) + (5 newly created scores * 5 million contacts + 5 deleted scores * 5 million contacts)</td>
<td>100 million</td>
<td>45 minutes</td>
</tr>
<tr>
<td></td>
<td>Once a week, the delta load contains 100 million score values. 50 million score values for the daily load and another 50 million score values for the weekly load.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delta Load for Monthly Persistence</td>
<td>(5 newly created scores * 5 million contacts + 5 deleted scores * 5 million contacts) + (5 newly created scores * 5 million contacts + 5 deleted scores * 5 million contacts) + (5 newly created scores * 5 million contacts + 5 deleted scores * 5 million contacts)</td>
<td>150 million</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td>Once a month, the delta load contains 150 million values. 50 million score values for the daily load, 50 million score values for the weekly load and another 50 million score values for the monthly load.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4 Integration Scenarios

See the section for information about the integration of SAP Marketing Cloud with external systems.

Overview

Integration Scenarios provide a tight business process integration between SAP Marketing Cloud and other solutions. Technically they are loosely coupled by the SAP CPI middleware. We distinguish between Inbound [page 50] processes, where an external process step triggers a business process step in SAP Marketing Cloud and Outbound [page 98] processes, where a business process step in SAP Marketing Cloud triggers an external process step.

Application-Enabling Integrations [page 262] feature the integration of complete applications such as SAP Analytics Cloud or Google AdWords.

Suite-Enabling Integrations [page 329] include the integrations that form the SAP Customer Experience portfolio.

Apps for Setting Up a Typical Integration

In general, you enable the data exchange with an external system in the cloud by setting up the communication with the system. Each integration has its specific parameters, described in the respective integration guide topic, but all are set up in the following apps: Communication Management.

See the following topics for information about how to perform the steps in general:

- Maintain Communication Users
- Communication Arrangements
- How to Create a Communication Arrangement
- Maintain Communication Systems

Prerequisites and Details

For prerequisites and details you specify to enable specific integration options, see the topics in this section.

- Overview of Integration Scenarios (Table) [page 40]
- Inbound [page 50]
- Outbound [page 98]
- Application-Enabling Integrations [page 262]
  The section provides information about integration options that enable specific applications of SAP Marketing Cloud, such as geospatial segmentation, or analyzing marketing data based on the analytic capabilities of SAP BusinessObjects Cloud.
- Suite-Enabling Integrations [page 329]
This section contains details of integration with applications in the SAP Suite, such as SAP Customer Experience, S/4HANA, CRM, ERP, and includes inbound, outbound, and bidirectional integration.

### 4.1 Overview of Integration Scenarios (Table)

#### Inbound

The content of the following table can be sorted and filtered.

<table>
<thead>
<tr>
<th>Category</th>
<th>Connected Solution</th>
<th>Content</th>
<th>Communication Scenario/Comment</th>
<th>Integration Package on API Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Data and Events</td>
<td>Integration with Data Management Platforms [page 77] (DMP)</td>
<td>Cookie-based user data &amp; interactions</td>
<td>SAP_COM_0343</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Category</td>
<td>Connected Solution</td>
<td>Content</td>
<td>Communication Scenario/Comment</td>
<td>Integration Package on API Hub</td>
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<tr>
<td></td>
<td></td>
<td>2. Create external landing pages using an iFlow</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>3. Bring prefill functionality to external tools using the OutboundID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales and Service Data</td>
<td>Non-SAP SFA solutions</td>
<td>For example accounts and contacts from Salesforce Sales Cloud</td>
<td>SAP_COM_0017</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Category</td>
<td>Connected Solution</td>
<td>Content</td>
<td>Communication Scenario/Comment</td>
<td>Integration Package on API Hub</td>
</tr>
<tr>
<td>----------</td>
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<td>------------------------------</td>
</tr>
<tr>
<td>Social media, Web, Commerce, Mobile, IoT</td>
<td>SAP Jam Communities [page 53]</td>
<td>User profiles, created product reviews, read product reviews</td>
<td>SAP_COM_003, SAP_COM_004</td>
<td>Currently not on API Hub</td>
</tr>
<tr>
<td>Social media, Web, Commerce, Mobile, IoT</td>
<td>WeChat Integration [page 55]</td>
<td>Posting events (follow, unfollow, send messages)</td>
<td>SAP_COM_0174</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Social media, Web, Commerce, Mobile, IoT</td>
<td>LINE Integration [page 67]</td>
<td>Posting events (follow, unfollow, send messages) of Network Channel</td>
<td>SAP_COM_0174</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Category</td>
<td>Connected Solution</td>
<td>Content</td>
<td>Integration Package on API Hub</td>
<td></td>
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<tr>
<td>---------------------------</td>
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<td>-------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Social media, Web, Commerce, Mobile, IoT</td>
<td>Khoros (fka Spredfast / Lithium) activity tracker</td>
<td>Contacts with their social IDs, interactions like raw marketing leads for follow ups</td>
<td>Not available on SAP API Hub.</td>
<td></td>
</tr>
<tr>
<td>Survey</td>
<td>Integration with Third-Party Survey Providers [page 98]</td>
<td>Import Survey Metadata and Responses from third-party tools.</td>
<td>Third Party Survey Data Integration with SAP Marketing Cloud</td>
<td></td>
</tr>
</tbody>
</table>

**Outbound**

The content of the following table can be sorted and filtered.
<table>
<thead>
<tr>
<th>Category</th>
<th>Connected Solution</th>
<th>Content</th>
<th>Communication Scenario/Comment</th>
<th>Integration Package on API Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Channel</td>
<td>WeChat Integration [page 249]</td>
<td>WeChat Message Campaigns</td>
<td>SAP_COM_0085</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Digital Channel</td>
<td>LINE Integration [page 249]</td>
<td>Line Message Campaigns</td>
<td>SAP_COM_0218</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Digital Channel</td>
<td>Integration with Baidu Paid Search Campaigns (To Be Deprecated) [page 250]</td>
<td>Paid Search campaigns including success data</td>
<td>SAP_COM_0270</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Email and Text Messages</td>
<td>Setting Up Amazon [page 129] (Email Service Provider)</td>
<td>Outbound Mails incl. Bounce/Success</td>
<td>SAP_COM_0016, SAP_COM_0039</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Category</td>
<td>Solution</td>
<td>Content</td>
<td>Comment</td>
<td>Integration Package on API Hub</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>------------------------</td>
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<td>-------------------------------</td>
</tr>
<tr>
<td>Email and Text Messages</td>
<td>Setting Up SAP Digital Interconnect [page 103] (Email Service Provider)</td>
<td>Outbound Emails</td>
<td>SAP_COM_0040</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Email and Text Messages</td>
<td>SAP Digital Interconnect Setting Up SAP Digital Interconnect [page 103]</td>
<td>SMS</td>
<td>SAP_COM_0041</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Email and Text Messages</td>
<td>Alibaba Setting Up Alibaba Cloud DirectMail Service [page 137] and Setting Up Alibaba Cloud Short Message Service [page 141]</td>
<td>Outbound Emails &amp; SMS</td>
<td>SAP_COM_0231, SAP_COM_0232</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Email and Text Messages</td>
<td>Setting Up a Generic Email and Text Message Interface [page 107] (Any Email Service Provider)</td>
<td>Outbound Emails</td>
<td>SAP_COM_0234</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Email and Text Messages</td>
<td>Setting Up a Generic Email and Text Message Interface [page 107]</td>
<td>SMS</td>
<td>SAP_COM_0258</td>
<td>Not available on SAP API Hub.</td>
</tr>
</tbody>
</table>
## Category

### Connected Solution

<table>
<thead>
<tr>
<th>Category</th>
<th>Connected Solution</th>
<th>Content</th>
<th>Comment</th>
<th>Integration Package on API Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensions</td>
<td>Setting Up External Campaign Execution [page 157]</td>
<td>External Campaign Execution: Transfer Target Group Member Data</td>
<td>SAP_COM_0037</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Extensions</td>
<td>Open Channel Integration [page 197]</td>
<td>Open Campaign Channel: Create customer specific actions &amp; follow-on objects</td>
<td>SAP_COM_0049</td>
<td>Not available on SAP API Hub.</td>
</tr>
</tbody>
</table>

## Application-Enabling

The content of the following table can be sorted and filtered.

**Application-Enabling scenarios**

<table>
<thead>
<tr>
<th>Connected Solution</th>
<th>Use Scenario</th>
<th>Communication Scenario/Comment</th>
<th>Integration Package on API Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP Predictive Analytics - Automated Predictive (fka SAP Infinite Insight)</td>
<td>Consumer Buying Propensity</td>
<td>Not applicable</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Integration with SAP Analytics Cloud (1SO) [page 263]</td>
<td>Self-service BI/agile analytics in the cloud</td>
<td>SAP_COM_00065</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Connected Solution</td>
<td>Communication Scenario/Comment</td>
<td>Integration Package on API Hub</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Enabling Geospatial Segmentation with here.com [page 313] (fka Nokia Here)</td>
<td>Geospatial Segmentation</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not available on SAP API Hub.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not available on SAP API Hub.</td>
<td></td>
</tr>
<tr>
<td>Integrate with Content Management Systems or Digital Asset Management Systems [page 302] (OpenText and others)</td>
<td>Enrich email campaign content with creative assets from PCM/DAM solutions</td>
<td>SAP_COM_005 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SAP Marketing Cloud Integration With Content Management Systems</td>
<td></td>
</tr>
<tr>
<td>Integrate with SAP Document Center [page 308]</td>
<td>Upload images and access images for use via the Content Studio app</td>
<td>SAP_COM_005 0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not available on SAP API Hub.</td>
<td></td>
</tr>
<tr>
<td>Verifying Email Addresses Using a Partner Solution [page 316] (Neverbounce)</td>
<td>Email ID lists for verification and Hard Bounce Prevention, see Blog for CSV based integration and blog for CPI based integration</td>
<td>SAP_COM_004 9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not available on SAP API Hub.</td>
<td></td>
</tr>
<tr>
<td>Integration with an External Coupon Service System [page 317]</td>
<td>Ingest externally generated coupons codes for offers</td>
<td>SAP_COM_028 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not available on SAP API Hub.</td>
<td></td>
</tr>
</tbody>
</table>
### Connected Solution

<table>
<thead>
<tr>
<th>Use Scenario</th>
<th>Communication Scenario/Comment</th>
<th>Integration Package on API Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fetch Events data from third-party event provider platforms</td>
<td>SAP_COM_0474 (will be deprecated in a future release) Marketing - Event Oubound Integration (SAP_COM_0541) and Marketing - Event Inbound Integration (SAP_COM_0371)</td>
<td>Third Party Marketing Events Integration with SAP Marketing Cloud</td>
</tr>
</tbody>
</table>

### Suite-Enabling Integrations

The content of the following table can be sorted and filtered.

<table>
<thead>
<tr>
<th>Category</th>
<th>Connected Solution</th>
<th>Content</th>
<th>Communication Scenario/Comment</th>
<th>Integration Package on API Hub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial data</td>
<td>Integration with SAP ERP for Spend Planning [page 374]</td>
<td>WBS spend for campaigns including project creation</td>
<td>SAP_COM_0018</td>
<td>SAP Marketing Cloud - SAP ERP Actual and Committed Spend Integration</td>
</tr>
<tr>
<td>Industry data</td>
<td>(CAR) SAP Customer Activity Repository retail applications bundle [page 345]</td>
<td>POS data</td>
<td>SAP_COM_0004 requires SAP CAR 2.0 FP1</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Market Data and Events</td>
<td>Integration with SAP Qualtrics Surveys [page 379]</td>
<td>Import survey response data</td>
<td>SAP_COM_0073</td>
<td>SAP Qualtrics Surveys Integration with SAP Marketing Cloud</td>
</tr>
<tr>
<td>Sales Automation</td>
<td>Integration with External Sales Systems - Outbound Channel [page 369]</td>
<td>For example: Lead Handover to Salesforce Sales Cloud</td>
<td>SAP_COM_0017</td>
<td>Partner Offering by Advantco</td>
</tr>
<tr>
<td>Category</td>
<td>Connected Solution</td>
<td>Content</td>
<td>Communication Scenario/Comment</td>
<td>Integration Package on API Hub</td>
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<td>------------------------------------------------</td>
</tr>
<tr>
<td>Sales and Service Data</td>
<td>Integration of Business Partners and Business Partner Relationships [page 330]</td>
<td>Business partner and business partner relationships</td>
<td>SAP_COM_0475</td>
<td>SAP S/4HANA Cloud Integration with SAP Marketing Cloud - Business Partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Sales business documents such as orders, opportunities etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Permissions (Migration)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrating Service Tickets [page 342]</td>
<td>2. Leads and opportunities, call activities, appointments/visits</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>3. Marketing attributes</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>4. Permissions (one time migration)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Connected Solution</td>
<td>Content</td>
<td>Communication Scenario/Comment</td>
<td>Integration Package on API Hub</td>
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<td></td>
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<td></td>
<td><a href="https://api.sap.com/package/SAPHybrisMarketingCloud-SAPS4HANAEnterpriseCloudIntegration?section=Overview">https://api.sap.com/package/SAPHybrisMarketingCloud-SAPS4HANAEnterpriseCloudIntegration?section=Overview</a></td>
</tr>
<tr>
<td>Social media, Web, Commerce, Mobile, IoT</td>
<td>SAP Customer Data Cloud and SAP Marketing Cloud [page 329](fka Gigya)</td>
<td>User profiles, marketing attributes &amp; permissions, newsletter subscriptions</td>
<td>SAP.COM_0264</td>
<td>Not available on SAP API Hub.</td>
</tr>
<tr>
<td>Social media, Web, Commerce, Mobile, IoT</td>
<td>Integration with SAP Commerce Cloud [page 51]</td>
<td>Product recommendations, personalized content consumers and sales-related business documents, and clickstreams</td>
<td>SAP.COM_0082; SAP.COM_0019</td>
<td>SAP Commerce Cloud Integration with SAP Marketing Cloud</td>
</tr>
</tbody>
</table>

### 4.2 Inbound

Commerce, Social Media, Web, and IoT [page 51]
Landing Pages and Forms [page 80]
Integration options for landing pages and forms.

Survey [page 97]
Extensions [page 98]

4.2.1 Commerce, Social Media, Web, and IoT

Integration with SAP Commerce Cloud [page 51]
Support omnichannel activities by integrating SAP Marketing Cloud with SAP Commerce Cloud.

SAP Jam Communities [page 53]
Provides user profiles and product reviews.

Facebook Pages and Twitter [page 54]
With this integration, you can retrieve and analyze social posts with Facebook Pages and Twitter using sentiment engagement.

WeChat Integration [page 55]
With this integration, you can synchronize the followers of your WeChat official accounts as well as the follower interactions to SAP Marketing Cloud. What’s more, you can create and carry out WeChat campaigns through SAP Marketing Cloud. Analytical reports about WeChat followers and interactions are available as well.

LINE Integration [page 67]
With this integration, you can synchronize the followers of your LINE accounts as well as the follower interactions to SAP Marketing Cloud. What’s more, you can create and carry out LINE campaigns through SAP Marketing Cloud. Analytical reports about LINE followers and interactions are available as well.

Integration with Google Analytics [page 76]
Overview of the integration scenario.

Integration with Data Management Platforms [page 77]
With this integration scenario, you can capture and replicate DMP IDs from DMP providers, such as Adform. A DMP ID is mapped to a commerce contact ID and stored inside SAP Marketing Cloud.

4.2.1.1 Integration with SAP Commerce Cloud

Support omnichannel activities by integrating SAP Marketing Cloud with SAP Commerce Cloud.

This integration leverages the value of commerce stores by personalization of customer engagement on the one hand as it allows you to display SAP Marketing Cloud content such as recommendations and personalized campaign content in SAP Commerce Cloud. On the other hand, the integration drives the customer retention by gathering data from SAP Commerce Cloud for your marketing activities in SAP Marketing Cloud.
You perform installation and configuration activities for the integration entirely in SAP Commerce Cloud.

For information about setting up the integration, see Configuring SAP Cloud Platform Integratoin and Configuring SAP Marketing Cloud. Documentation for SAP Commerce Cloud is accessible to SAP customers and partners.

**i Note**

You can also integrate with the on-premise version of SAP Commerce.

For all integration options, see SAP Marketing Cloud Integration Module.

### System Requirements

The system requirements for the integration are as follows:

<table>
<thead>
<tr>
<th>Feature</th>
<th>SAP Commerce Cloud (in the Public Cloud)</th>
<th>SAP Marketing Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product recommendations</td>
<td>1905 and higher</td>
<td>1908</td>
</tr>
<tr>
<td>Offer recommendations</td>
<td>1905 and higher</td>
<td>1908</td>
</tr>
<tr>
<td>Personalized campaign content (segmentation)</td>
<td>1905 and higher</td>
<td>1908</td>
</tr>
<tr>
<td>Master and transactional data</td>
<td>1905 and higher</td>
<td>1908</td>
</tr>
<tr>
<td>Clickstream data</td>
<td>1905 and higher</td>
<td>1908 and higher</td>
</tr>
</tbody>
</table>

For an overview of the features introduced with each release of SAP Commerce Cloud, see the release notes for SAP Commerce Cloud. The release notes are available from the SAP Commerce Cloud product page on the SAP Help Portal at SAP Commerce, under What’s New.

To view the documentation for a given release, use the version drop-down list.
Outbound: Product and Offer Recommendations, Personalized Storefront Content (Segmentation)

Display product and offer recommendations based on the latest information submitted from the customer, such as their cart contents or recently viewed items. SAP Commerce Cloud tracks the visibility and success of your recommendations, and sends this data to SAP Marketing Cloud for analysis.

You can define restrictions to drive the display of individual page components based on real-time campaign lookups in SAP Marketing Cloud. You can also drive the display of entire page variants using marketing data.

For detailed information on the required communication settings, see Configuring SAP Marketing Cloud.

Inbound: Master Data, Transactional Data, and Clickstream Data

Various types of master and transactional data are collected by SAP Commerce Cloud, such as customer, product, saved shopping cart, abandoned shopping cart, order, and review data. This data is then sent to SAP Marketing Cloud.

For detailed information on the required communication settings, see Configuring SAP Marketing Cloud.

With clickstream integration, customer browsing events are aggregated in SAP Commerce Cloud, and then sent to SAP Marketing Cloud for follow-up marketing activities. Various types of events can be sent, such as products viewed, addition or removal of products from the cart, successful checkout, and reviews read.

For detailed information, see Context-Driven Services Foundation Integration. The system automatically deletes the contacts for anonymous users, which only have a SAP_CDS_PROFILE origin, if the users have remained anonymous for more than 90 days. This is independent from the licensed number of contacts.

For more information on the handling of contacts, see Contacts.

4.2.1.2 SAP Jam Communities

Provides user profiles and product reviews.

The integration option provides user information of consumers or contacts on a commerce store, and product reviews from SAP JAM Communities for the use in SAP Marketing Cloud. If known users read product reviews, interactions are created.

The integration is based on the capabilities of SAP JAM Communities when used in commerce context to facilitate discussions on a product, asking and answering questions on a product, and creating product reviews.
Integration Setup

To enable the connection with SAP JAM Communities, create the following communication settings:

- Communication user
- Communication system
- Two communication arrangements: One selecting Communication Scenario SAP_COM_0003, and a second selecting Communication Scenario SAP_COM_0004.

For information about how to use the communication management apps in general, see Communication Management.

SAP JAM Communities Data in SAP Marketing Cloud

Find the replicated user data along with profile picture, email address, user ID, user ID of the SAP Commerce shop (if integrated with SAP JAM Communities) in the Consumer Profile.

Reviews are treated as a specific interaction type that captures the review score (1-5 stars) in the valuation field, which is also used by sentiments (1 = strong negative to 5 = strong positive). Product data is added to the product node of the interaction. The product name is a tag of the interaction. Interactions of this type run through the SAP HANA text analysis identifying additional tags that can be used for further processing, or interest assignment.

For information about how to set up the integration, see the product page SAP Jam Collaboration and choose Administrator Guide Integrations Integrate an SAP S/4HANA application.

4.2.1.3 Facebook Pages and Twitter

With this integration, you can retrieve and analyze social posts with Facebook Pages and Twitter using sentiment engagement.

You can get data from Twitter or Facebook via SAP Cloud Platform Integration by using the Facebook Page Integration with SAP Marketing Cloud and Twitter Integration with SAP Marketing Cloud integration packages from the SAP API Business Hub https://cloudintegration.hana.ondemand.com/. For more information about the integration, see the Integration Guide.

You can also connect other data sources using the interaction inbound interfaces. You can call these interfaces directly or use middleware, such as SAP Cloud Platform Integration. This allows you to connect not only to social platform, but also to internal data sources such as complaints or emails. For more information, see Harvesting Tweets into Social Intelligence tables using a Python Script on SAP Community Network http://scn.sap.com/docs/DOC-53824.

Incoming posts are processed by SAP Marketing Cloud and stored as interactions. If an interaction contact does not already exist in the system, a new one is created. The sentiment of the post is determined by SAP HANA Text Analysis. Inbound marketing permissions are checked before storing the data, and if permissions are missing, the incoming posts are discarded or stored anonymously based on customizing settings. For more information, see Inbound Marketing Permissions.
Contacts and interactions created from posts can then be used elsewhere in SAP Marketing Cloud.

4.2.1.4  WeChat Integration

With this integration, you can synchronize the followers of your WeChat official accounts as well as the follower interactions to SAP Marketing Cloud. What’s more, you can create and carry out WeChat campaigns through SAP Marketing Cloud. Analytical reports about WeChat followers and interactions are available as well.

**i Note**

The WeChat integration supports **WeChat subscription accounts and WeChat service accounts only**.

The following is a detailed list of the business functions that come with the WeChat integration:

- Synchronization of WeChat followers and interactions to SAP Marketing Cloud
- Creation and execution of WeChat campaigns through SAP Marketing Cloud
- Analytical reports about the acquisition of WeChat followers, including reports predefined by SAP and custom reports that you can build with a CDS view
- Analytical reports about WeChat interactions, including reports predefined by SAP and custom reports that you can build with a CDS view

For information about setting up and administering the WeChat integration, see the following documents:

- Setting Up the WeChat Integration [page 55]
- Administering the WeChat Integration [page 62]

For extensibility options, see Extensibility [page 66].

For the descriptions of the business functions, see the following documents:

- Followers of Digital Accounts
- Attributes Related to Followers of Digital Accounts
- WeChat Campaigns

4.2.1.4.1  Setting Up the WeChat Integration

Set up the connection between SAP Marketing Cloud and your WeChat official account.

**Prerequisites**

You have registered an official account through the WeChat Official Account Admin Platform.
Procedure

1. Import the WeChat certificate.
   For more information, see Importing the WeChat Certificate [page 56].
2. Create communication configurations for the inbound communication and outbound communication, respectively.
   For more information, see Creating Communication Configurations [page 57].
3. Create your official account.
   For more information, see Creating a WeChat Official Account [page 61].
4. Create and schedule application jobs.
   You must create a job based on the template Digital Accounts: Process Inbound Messages, which is required for the automatic synchronization of followers and interactions to SAP Marketing Cloud.
   If your WeChat official account already had followers before the WeChat integration goes live, you must create a job based on the template Digital Accounts: Synchronize WeChat Users to synchronize the existing followers to SAP Marketing Cloud.
   There are other jobs that are required for specific functions only. For more information, see Creating and Scheduling Application Jobs [page 63].

Results

The system synchronizes followers and follower interactions from the WeChat server to SAP Marketing Cloud automatically. Depending on the application jobs you have run, the system synchronizes other types of data (for example, campaign content) to SAP Marketing Cloud.

4.2.1.4.1.1 Importing the WeChat Certificate

In the standard delivery, the system gets and posts WeChat data directly through the WeChat server. If you adopt this approach, import the WeChat certificate so that SAP Marketing Cloud will be trusted by the WeChat server. If you have your own logic for getting and posting WeChat data through a different server, which uses the HTTPS communication protocol, then import the certificate of that server instead.

Prerequisites

A business role that contains the Security (SAP_CORE_BC_SEC) business catalog is required. You can use the standard business role Administrator (SAP_BR_ADMINISTRATOR), which contains the Security business catalog and other administration-related catalogs. Alternatively, you can create custom business roles using the Maintain Business Roles app.
**Procedure**

2. Locate the WeChat certificate and export it to a file.
4. Open the Maintain Certificate Trust List app.
5. Choose + (Add).
   The Upload Certificate window appears.
6. Upload the WeChat certificate file.

**Next Steps**

Creating Communication Configurations [page 57]

### 4.2.1.4.1.2 Creating Communication Configurations

Create the configurations required for the communication between SAP Marketing Cloud and the WeChat server.

**Prerequisites**

A business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog is required. You can use the standard business role Administrator (SAP_BR_ADMINISTRATOR), which contains the Communication Management business catalog and other administration-related catalogs. Alternatively, you can create custom business roles using the Maintain Business Roles app.

**Context**

The WeChat integration involves communication in both the inbound and outbound directions. In the inbound communication, the WeChat server pushes to a customer-defined servlet WeChat events as well as messages that followers send to WeChat official accounts. Then the servlet forwards the WeChat events and messages to SAP Marketing Cloud by calling the private ICF service <host name>/sap/cuan/ntwrk/. The outbound communication involves synchronizing data (for example, basic follower information and campaign content) from the WeChat server and executing WeChat campaigns through SAP Marketing Cloud.

The inbound communication and outbound communication require their respective communication system/communication arrangement pair. In addition, you need to create a communication user for the inbound...
communication. When calling the private ICF service to forward the WeChat events and messages to SAP Marketing Cloud, your servlet must authenticate itself with this communication user first.

The following communication scenarios are relevant to the WeChat integration:

- Marketing – Network Channel Events Integration (SAP_COM_0174)
- Marketing – Campaign Execution – WeChat Integration (SAP_COM_0085)

For detailed instructions, see Configuring the Inbound Communication [page 58] and Configuring the Outbound Communication [page 60].

For general information about communication management, see Communication Management.

### 4.2.1.4.1.2.1 Configuring the Inbound Communication

Create the communication user, communication system, and communication arrangement required for the inbound communication.

#### Customer Implementation

You must define a servlet for the inbound communication. This servlet receives the WeChat events and messages pushed by the WeChat server and then forwards them to SAP Marketing Cloud by calling the private ICF service `<host name>/sap/cuan/ntwrk/`. For more information, see the blog [Inbound Connection from WeChat or LINE to SAP Marketing Cloud](#).

#### Creating the Communication User

Proceed as follows:

1. Log into SAP Fiori launchpad with a business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog.
2. Open the Maintain Communication Users app.
3. Choose New.
   - The Create Communication User dialog box appears.
4. Fill in the following fields:
   - User Name and Description (for example, WECHAT_EVENT and WeChat Event)
   - Password
5. Save the communication user.
   - A communication user ID is generated automatically.

**i Note**

When calling the private ICF service, your servlet should authenticate itself with the communication user ID instead of the user name.
Creating the Communication System

This communication system is a dummy one. The purpose of it is to bind the communication user that you created earlier with the communication arrangement that you will create later.

To create the communication system, proceed as follows:

1. Open the Communication Systems app.
2. Choose New.
   The New Communication System dialog box appears.
3. Enter a system ID and its name, for example, WECHAT_EVENT and WeChat Event. Choose Create.
   The editing screen for the communication system appears.
4. A host is irrelevant to the inbound communication. Enter dummy in the Host Name field to assign a dummy host.
5. Assign the communication user created earlier to this communication system, as follows:
   1. In the User for Inbound Communication section, choose + (Add).
      The New Inbound Communication User dialog box appears.
   2. Enter the user created earlier and select the authentication method User Name and Password.
6. Save and activate the communication system.
   Do not exit SAP Fiori launchpad.

Creating the Communication Arrangement

Proceed as follows:

1. Open the Communication Arrangements app.
2. Choose New.
   The New Communication Arrangement dialog box appears.
3. Enter scenario SAP_COM_0174 and an arrangement name. Choose Create.
   The editing screen for the communication arrangement appears.
4. In the Communication System field, enter the communication system created earlier.
5. Save and activate the communication arrangement.

Next Steps

Configuring the Outbound Communication [page 60]
4.2.1.4.1.2.2 Configuring the Outbound Communication

Create the communication system and communication arrangement required for the outbound communication.

Creating the Communication System

Proceed as follows:
1. Log into SAP Fiori launchpad with a business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog.
2. Open the Communication Systems app.
3. Choose New.
   The New Communication System dialog box appears.
4. Enter a system ID and its name, for example, WECHAT_API and WeChat API. Choose Create.
   The editing screen for the communication system appears.
5. In the Host Name field in the Technical Data section, enter api.weixin.qq.com, which is the host name of the WeChat server. Choose Save.

   **Note**
   If you have your own logic for getting and posting WeChat data through another server, then enter the host name of that server instead. For more information, see Extensibility [page 66].
6. Set the authentication method to None, as follows:
   1. In the User for Outbound Communication section, choose + (Add).
      The New Outbound User dialog box appears.
   2. Select the authentication method None. Choose Create.
7. Save and activate the communication system.
   Do not exit SAP Fiori launchpad.

Creating the Communication Arrangement

Proceed as follows:
1. Open the Communication Arrangements app.
2. Choose New.
   The New Communication Arrangement dialog box appears.
3. Enter scenario SAP_COM_0085 and an arrangement name. Choose Create.
   The editing screen for the communication arrangement appears.
4. In the Communication System field, enter the communication system that you have created.
5. Activate all the outbound services by selecting the Active checkboxes.
6. Save and activate the communication arrangement.
Next Steps

Creating a WeChat Official Account [page 61]

4.2.1.4.1.3 Creating a WeChat Official Account

Create a WeChat official account in SAP Marketing Cloud.

Prerequisites

A business role that contains the Marketing - Data (SAP_CEC_BC_MKT_PRD_PC) business catalog is required. You can use the standard business role Marketing Expert (SAP_BR_MARKETING_EXPERT), which contains the Marketing - Data business catalog and other marketing-related catalogs. Alternatively, you can create custom business roles using the Maintain Business Roles app.

Procedure

1. Log into SAP Fiori launchpad with a business role that contains the Marketing - Master Data (SAP_CEC_BC_MKT_PRD_PC) business catalog.
2. Open the Digital Accounts app.
3. On the landing page, choose Create Digital Account.
   The Select Digital Account Type dialog box appears.
4. Select WeChat Official Account.
   The editing screen for the official account appears.
5. Select the marketing area and enter the required information. Choose Create.
   The required information includes:
   ○ ID and name of the official account that are registered through the WeChat Official Account Admin Platform
   ○ Handshake token
     You create your own handshake token. The token entered here must be the same as the one specified on the Basic Configurations page on the WeChat Official Account Admin Platform.
   ○ Original ID
   ○ Credentials for the official account, including the following:
     ○ App ID
     ○ App Secret
     You can find these credentials from the Basic Configurations page on the WeChat Official Account Admin Platform.
6. On the WeChat Official Account Admin Platform, enter your handshake token and the URI of your servlet.
Results

The official account appears with the *Active* status on the landing page of the *Digital Accounts* app. By default, the system sets the image assigned to the *WeChat* communication medium in the *Manage Images* app as the profile picture of the official account. Clicking the account displays various tabs that contain different kinds of information about the official account. The *Information* tab contains basic information about the official account and the credentials. You can change the profile picture, credentials, and so on, by clicking the *Edit* button.

Next Steps

Creating and Scheduling Application Jobs [page 63]

4.2.1.4.2 Administering the WeChat Integration

Learn about the system administration activities relevant to the WeChat integration.

- **Creating and Scheduling Application Jobs [page 63]**
  Learn about the application job templates relevant to the WeChat integration. Some are required for the WeChat integration in general, while others are required for specific functions.

- **Activating, Deactivating, and Restricting a WeChat Official Account [page 64]**
  You can set a WeChat official account to any of these statuses in the *Digital Accounts* app: *Active*, *Inactive*, and *Restricted*.

- **Overview of Business Catalogs Required for Different Business Functions [page 65]**
  Different business functions require different business catalogs. Learn about the business catalogs that are required for the functions related to the WeChat integration and assign business roles to business users appropriately.
4.2.1.4.2.1 Creating and Scheduling Application Jobs

Learn about the application job templates relevant to the WeChat integration. Some are required for the WeChat integration in general, while others are required for specific functions.

Overview of Related Application Job Templates

<table>
<thead>
<tr>
<th>Application Job Template</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Accounts: Process Inbound Messages</td>
<td>A job created using this template creates contacts and interactions from digital accounts, such as WeChat official accounts, in SAP Marketing Cloud. For more information, see Digital Accounts: Process Inbound Messages.</td>
</tr>
<tr>
<td>Digital Accounts: Synchronize WeChat Users</td>
<td>You have set up the WeChat integration and thus the followers of a WeChat official account can be synchronized to SAP Marketing Cloud automatically. However, there are certain situations where you must synchronize WeChat followers by running a job that is created with this template. For more information, see Digital Accounts: Synchronize WeChat Users.</td>
</tr>
<tr>
<td>Digital Accounts: Synchronize Campaign Content from WeChat</td>
<td>You must create a job using this template if you want to create and carry out WeChat campaigns through SAP Marketing Cloud. Business users maintain campaign content on the WeChat Official Account Admin Platform. The application job synchronizes the campaign content from the WeChat Official Account Admin Platform to SAP Marketing Cloud. For more information, see Digital Accounts: Synchronize Campaign Content from WeChat.</td>
</tr>
</tbody>
</table>

Checking the Application Log

You can find a log of all these application jobs centrally from the Application Logs app. The filters that you can use for the application jobs are as follows:

<table>
<thead>
<tr>
<th>Application Job</th>
<th>Filter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Accounts: Process Inbound Messages</td>
<td>Category CUAN, subcategory CUAN_NTWRK</td>
</tr>
<tr>
<td>Digital Accounts: Synchronize WeChat Users</td>
<td>Category CUAN, subcategory CUAN_WECHAT</td>
</tr>
<tr>
<td>Digital Accounts: Synchronize Campaign Content from WeChat</td>
<td>Category CUAN, subcategory CUAN_WECHAT</td>
</tr>
</tbody>
</table>
Alternatively, you can find the log of a particular application job directly from the Marketing Application Jobs app. From the application job list, click the icon next to an application job.

**Required Business Role**

A business role that contains the Marketing - Business Administration (SAP_CEC_BC_MKT_ADM_PC) business catalog is required for scheduling application jobs and checking logs. You can use the standard business role Administrator - Marketing (SAP_BR_ADMINISTRATOR_MKT), which already contains this business catalog. Alternatively, you can create custom business roles using the Maintain Business Roles app.

### 4.2.1.4.2.2 Activating, Deactivating, and Restricting a WeChat Official Account

You can set a WeChat official account to any of these statuses in the Digital Accounts app: **Active**, **Inactive**, and **Restricted**.

#### Activating a WeChat Official Account

To use the full functionality of the WeChat integration, you must set an official account to **Active** status. When completing creating an official account, the status of the official account is set to **Active** automatically.

To set an official account from **Restricted** status to **Active** status, choose the **Activate** button.

To set an official account from **Inactive** status to **Active** status, choose the **Switch to Restricted Mode** button and then the **Activate** button.

#### Deactivating a WeChat Official Account

If you do not want to connect to an official account, for example, because the official account is no longer in use, deactivate it by choosing the **Deactivate** button.

#### Restricting a WeChat Official Account

When an official account is restricted, the outbound connection to the official account stops working. Therefore, the following functions become unavailable:

- Execution of WeChat campaigns through SAP Marketing Cloud
- Synchronization of basic information about new followers from WeChat, such as nickname and gender
- Synchronization of WeChat followers using an application job created based on the job template *Digital Accounts: Synchronize WeChat Users*
- Synchronization of campaign content from WeChat using an application job created based on the job template *Digital Accounts: Synchronize Campaign Content from WeChat*

When an official account is restricted, there is no impact on the inbound connection from an official account. The synchronization of interactions between followers and the official account still works and the messages that followers send to the official account are still synchronized.

To set an official account to *Restricted* status, choose the *Switch to Restricted Mode* button.

### 4.2.1.4.2.3 Overview of Business Catalogs Required for Different Business Functions

Different business functions require different business catalogs. Learn about the business catalogs that are required for the functions related to the WeChat integration and assign business roles to business users appropriately.

The following table lists the business catalogs that are required for different functions:

<table>
<thead>
<tr>
<th>Business Function</th>
<th>Required Business Catalog</th>
<th>Standard Business Role That Can Be Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functions Available with the <em>Digital Accounts</em> App</td>
<td>Marketing - Data (SAP_CEC_BC_MKT_PRD_PC)</td>
<td>Marketing Expert (SAP_BR_MARKETING_EXPERT)</td>
</tr>
<tr>
<td>Contact Profiles of WeChat Followers</td>
<td>Marketing - Contacts and Profiles Base (SAP_CEC_BC_MKT_DMB_PC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing - Contacts and Profiles Standard (SAP_CEC_BC_MKT_DMS_PC)</td>
<td></td>
</tr>
<tr>
<td>Segmentation</td>
<td>Marketing - Segmentation (SAP_CEC_BC_MKT_SEG_PC)</td>
<td></td>
</tr>
<tr>
<td>WeChat Campaigns</td>
<td>Marketing - Campaign Management (SAP_CEC_BC_MKT_CPM1_PC)</td>
<td></td>
</tr>
<tr>
<td>Custom analytical reports in the <em>Query Browser</em> app</td>
<td>Marketing - Data (SAP_CEC_BC_MKT_PRD_PC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Query Browser (SAP_CA_BC_VDM_BROWSE)</td>
<td></td>
</tr>
<tr>
<td>Quick Launch</td>
<td>Marketing - Quick Launch (SAP_CEC_BC_MKT_COM_PC)</td>
<td></td>
</tr>
</tbody>
</table>
4.2.1.4.3 Extensibility

Customize the way that you use the WeChat integration.

Custom Fields

You can add custom fields to the Digital Accounts app using the Custom Fields and Logic app. When creating custom fields on the Custom Fields tab, use business context MKT_DIGITAL_ACCOUNT.

Due to ABAP DDIC restrictions, only a defined number of fields and characters can be created for each business context.

<table>
<thead>
<tr>
<th>Business Context</th>
<th>Description</th>
<th>Maximum Number of Fields</th>
<th>Maximum Number of Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_DIGITAL_ACCOUNT</td>
<td>Marketing: Digital Account</td>
<td>100</td>
<td>1000</td>
</tr>
</tbody>
</table>

For general information about creating and enabling custom fields, see Custom Fields.

Custom Logic for Getting WeChat Access Tokens

In the standard delivery, the system requests WeChat access tokens directly from the WeChat server. However, due to business requirements, you may have multiple servers that have outbound connections to the same official account. You use one of them as a primary server, which is responsible for getting and storing access tokens. In this situation, you can set up the system to get access tokens through the primary server by creating an enhancement implementation in the Custom Fields and Logic app. When creating your enhancement implementation on the Custom Logic tab, use the Marketing: Digital Account business context and Getting of Access Token enhancement option.

Required Business Role

A business role that contains the Extensibility (SAP_CORE_BC_EXT) business catalog is required for creating custom fields and logic. You can use the standard business role Administrator (BR_ADMINISTRATOR), which already contains this business catalog. Alternatively, you can create custom business roles using the Maintain Business Roles app.
4.2.1.5  LINE Integration

With this integration, you can synchronize the followers of your LINE accounts as well as the follower interactions to SAP Marketing Cloud. What’s more, you can create and carry out LINE campaigns through SAP Marketing Cloud. Analytical reports about LINE followers and interactions are available as well.

**i Note**
The LINE integration supports **LINE@ accounts only**.

The following is a detailed list of the business functions that come with the LINE integration:

- Synchronization of LINE followers and interactions to SAP Marketing Cloud

  **i Note**
  Not all LINE followers of a LINE account are necessarily synchronized to SAP Marketing Cloud. Only the following followers are synchronized:
  - Those who followed the LINE account before the LINE integration went live and have initiated an interaction with the LINE account after the LINE integration went live
  - Those who follow the LINE account after the LINE integration went live

- Creation and execution of LINE campaigns through SAP Marketing Cloud
- Analytical reports about the acquisition of LINE followers, including reports predefined by SAP and custom reports that you can build with a CDS view
- Analytical reports about LINE interactions, including reports predefined by SAP and custom reports that you can build with a CDS view

For information about setting up and administering the LINE integration, see the following documents:

- Setting Up the LINE Integration [page 67]
- Administering the LINE Integration [page 73]

For extensibility options, see Extensibility [page 75].

For the descriptions of the business functions, see the following documents:

- Followers of Digital Accounts
- Attributes Related to Followers of Digital Accounts
- LINE Campaigns

4.2.1.5.1  Setting Up the LINE Integration

Set up the connection between SAP Marketing Cloud and your LINE account.

**Procedure**

1. Create communication configurations for the inbound communication and outbound communication, respectively.
2. Create your LINE account in SAP Marketing Cloud.
   For more information, see Creating a LINE Account [page 72].

   This job is required for the synchronization of followers and interactions. For more information, see Creating and Scheduling Application Jobs [page 73].

Results

The system synchronizes followers and follower interactions from the LINE server to SAP Marketing Cloud automatically.

**Note**

Not all LINE followers of a LINE account are necessarily synchronized to SAP Marketing Cloud. Only the following followers are synchronized:

- Those who followed the LINE account before the LINE integration went live, but have initiated an interaction with the LINE account since the LINE integration went live
- Those who follow the LINE account after the LINE integration went live

4.2.1.5.1.1 Creating Communication Configurations

Create the configurations required for the communication between SAP Marketing Cloud and the LINE server.

Prerequisites

A business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog is required. You can use the standard business role Administrator (SAP_BR_ADMINISTRATOR), which contains the Communication Management business catalog and other administration-related catalogs. Alternatively, you can create custom business roles using the Maintain Business Roles app.

Context

The LINE integration involves communication in both the inbound and outbound directions.

Inbound Communication

You must define a servlet for the inbound communication. In the inbound communication, the LINE server pushes to your servlet LINE events as well as messages that followers send to a LINE account. Then the servlet
forwards the LINE events and messages to SAP Marketing Cloud by calling the private ICF service <host name>/sap/cuan/ntwrk/.

The inbound communication requires a communication system/communication arrangement pair. In addition, you need to create a communication user for the inbound communication. When calling the private ICF service to forward the LINE events and messages to SAP Marketing Cloud, your servlet must authenticate itself with this communication user first.

**Outbound Communication**

The outbound communication involves synchronizing data (for example, basic follower information) from the LINE server and executing LINE campaigns through SAP Marketing Cloud. The outbound communication requires a communication system/communication arrangement pair.

The following communication scenarios are relevant to the LINE integration:

- Marketing – Network Channel Events Integration (SAP_COM_0174)
- Marketing – Campaign Execution – LINE Integration (SAP_COM_0218)

For detailed instructions, see Configuring the Inbound Communication [page 69] and Configuring the Outbound Communication [page 71].

For general information about communication management, see Communication Management.

### 4.2.1.5.1.1.1 Configuring the Inbound Communication

Create the communication user, communication system, and communication arrangement required for the inbound communication.

**Customer Implementation**

You must define a servlet for the inbound communication. This servlet receives the LINE events and messages pushed by the LINE server and then forwards them to SAP Marketing Cloud by calling the private ICF service <host name>/sap/cuan/ntwrk/.

**Creating the Communication User**

Proceed as follows:

1. Log into SAP Fiori launchpad with a business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog.
2. Open the Maintain Communication Users app.
3. Choose New.
   - The Create Communication User dialog box appears.
4. Fill in the following fields:
Creating the Communication System

This communication system is a dummy one. The purpose of it is to bind the communication user that you created earlier with the communication arrangement that you will create later.

To create the communication system, proceed as follows:

1. Open the Communication Systems app.
2. Choose New.
   The New Communication System dialog box appears.
3. Enter a system ID and its name, for example, LINE_EVENT and LINE Event. Choose Create.
   The editing screen for the communication system appears.
4. A host is irrelevant to the inbound communication. Enter dummy in the Host Name field to assign a dummy host.
5. Assign the communication user created earlier to this communication system, as follows:
   1. In the User for Inbound Communication section, choose + (Add).
      The New Inbound Communication User dialog box appears.
   2. Enter the user created earlier and select the authentication method User Name and Password.
6. Save and activate the communication system.
   Do not exit SAP Fiori launchpad.

Creating the Communication Arrangement

Proceed as follows:

1. Open the Communication Arrangements app.
2. Choose New.
   The New Communication Arrangement dialog box appears.
3. Enter scenario SAP_COM_0174 and an arrangement name. Choose Create.
   The editing screen for the communication arrangement appears.
4. In the Communication System field, enter the communication system created earlier.
5. Save and activate the communication arrangement.
Next Steps

Configuring the Outbound Communication [page 71]

4.2.1.5.1.1.2 Configuring the Outbound Communication

Create the communication system and communication arrangement required for the outbound communication.

Creating the Communication System

Proceed as follows:

1. Open the Communication Systems app.
3. Enter a system ID and its name, for example, LINE_API and LINE API. Choose Create. The editing screen for the communication system appears.
4. Under | Technical Data | General |, enter api.line.me in the Host Name field, which is the host name of the LINE server. Choose Save.
   
   **Note**
   
   If you have your own logic for getting and posting LINE data through another server, then enter the host name of that server instead.

5. Set the authentication method to None, as follows:
   1. In the User for Outbound Communication section, choose + (Add). The New Outbound User dialog box appears.
   2. Select the authentication method None.
   3. Choose Create.
6. Save and activate the communication system. Do not exit SAP Fiori launchpad.

Creating the Communication Arrangement

Proceed as follows:

1. Open the Communication Arrangements app.
3. Enter scenario SAP_COM_0218 and an arrangement name. Choose Create. The editing screen for the communication arrangement appears.
4. In the **Communication System** field, enter the communication system that you created earlier.
5. Activate all the outbound services by selecting the **Active** checkboxes.
6. Save and activate the communication arrangement.

**Next Steps**

Creating a LINE Account [page 72]

### 4.2.1.5.1.2 Creating a LINE Account

Create a LINE account in SAP Marketing Cloud.

**Prerequisites**

A business role that contains the **Marketing - Master Data** (SAP_CEC_BC_MKT_PRD_PC) business catalog is required. You can use the standard business role **Marketing Expert** (SAP_BR_MARKETING_EXPERT), which contains the **Marketing - Master Data** business catalog and other marketing-related catalogs. Alternatively, you can create custom business roles using the **Maintain Business Roles** app.

**Procedure**

1. Log into SAP Fiori launchpad with a business role that contains the **Marketing - Master Data** (SAP_CEC_BC_MKT_PRD_PC) business catalog.
2. Open the **Digital Accounts** app.
3. On the landing page, choose **Create Digital Account**.
4. Select **LINE Account**.
   - The editing screen for the LINE account appears.
5. Select the marketing area and enter the required information. Choose **Create**.
6. In the Channel Console, enter the URI of your servlet on the relevant configuration page.

**Results**

The LINE account appears with the **Active** status on the landing page of the **Digital Accounts** app. By default, the LINE account inherits the profile picture from the LINE platform. If there is no profile picture set on the LINE
platform, the system sets the image assigned to the LINE communication medium in the Manage Images app as the profile picture of the LINE account. Clicking the account displays various tabs that contain different kinds of information about the official account. The Information tab contains basic information about the LINE account and the credentials. You can change the profile picture, credentials, and so on, by clicking the Edit button.

**Next Steps**

Creating and Scheduling Application Jobs [page 73]

### 4.2.1.5.2 Administering the LINE Integration

Learn about the system administration activities relevant to the LINE integration.

#### 4.2.1.5.2.1 Creating and Scheduling Application Jobs

Learn about the application jobs required for the LINE integration.

**Required Application Job**

To use the LINE integration, you must create an application job using the following template:

<table>
<thead>
<tr>
<th>Application Job Template</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Digital Accounts: Process Inbound Messages</strong></td>
<td>A job created using this template creates contacts and interactions from digital accounts, including LINE official accounts, in SAP Marketing Cloud. For more information, see Digital Accounts: Process Inbound Messages.</td>
</tr>
</tbody>
</table>

**Checking the Application Log**

You can find a log of the application job from the Application Logs app using category **CUAN** and subcategory **CUAN_NTWRK** as filters.

Alternatively, you can find the log directly from the Marketing Application Jobs app. From the application job list, click the icon next to the application job.
Required Business Role

A business role that contains the **Marketing - Business Administration** (SAP_CEC_BC_MKT_ADM_PC) business catalog is required for scheduling application jobs and checking logs. You can use the standard business role **Administrator - Marketing** (SAP_BR_ADMINISTRATOR_MKT), which already contains this business catalog. Alternatively, you can create custom business roles using the *Maintain Business Roles* app.

### 4.2.1.5.2.2 Activating, Deactivating, and Restricting a LINE Account

You can set a LINE account to any of these statuses in the *Digital Accounts* app: Active, Inactive, and Restricted.

#### Activating a LINE Account

To use the full functionality of the LINE integration, you must set a LINE account to Active status. When completing creating a LINE account, the status of the account is set to Active automatically.

To set a LINE account from Restricted status to Active status, choose the Activate button.

To set a LINE account from Inactive status to Active status, choose the Switch to Restricted Mode button and then the Activate button.

#### Deactivating a LINE Account

If you do not want to connect to a LINE account, for example, because the account is no longer in use, deactivate it by choosing the Deactivate button.

#### Restricting a LINE Account

When a LINE account is restricted, the outbound connection to the account stops working. Therefore, the following functions become unavailable:

- Execution of LINE campaigns through SAP Marketing Cloud
- Synchronization of basic follower information

When a LINE account is restricted, there is no impact on the inbound connection from the account. The synchronization of interactions between followers and the account still works and the messages that followers send to the account are still synchronized.

To set a LINE account to Restricted status, choose the Switch to Restricted Mode button.
4.2.1.5.2.3 Overview of Business Catalogs Required for Different Business Functions

Different business functions require different business catalogs. Learn about the business catalogs that are required for the functions related to the LINE integration and assign business roles to business users appropriately.

The following table lists the business catalogs that are required for different functions:

<table>
<thead>
<tr>
<th>Business Function</th>
<th>Required Business Catalog</th>
<th>Standard Business Role That Can Be Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functions Available with the Digital Accounts App</td>
<td>Marketing - Data (fka Products) (SAP_CEC_BC_MKT_PRD_PC)</td>
<td>Marketing Expert (SAP_BR_MARKETING_EXPERT)</td>
</tr>
<tr>
<td>Contact Profiles of LINE Followers</td>
<td>Marketing - Contacts and Profiles Base (SAP_CEC_BC_MKT_DMB_PC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marketing - Contacts and Profiles Standard (SAP_CEC_BC_MKT_DMS_PC)</td>
<td></td>
</tr>
<tr>
<td>Segmentation</td>
<td>Marketing - Segmentation (SAP_CEC_BC_MKT_SEG_PC)</td>
<td></td>
</tr>
<tr>
<td>LINE Campaigns</td>
<td>Marketing - Campaign Management (SAP_CEC_BC_MKT_CPM1_PC)</td>
<td></td>
</tr>
<tr>
<td>Custom analytical reports in the Query Browser app</td>
<td>Marketing - Data (fka Products) (SAP_CEC_BC_MKT_PRD_PC)</td>
<td>Query Browser (SAP_CA_BC_VDM_BROWSE)</td>
</tr>
<tr>
<td>Quick Launch</td>
<td>Marketing - Quick Launch (SAP_CEC_BC_MKT_COM_PC)</td>
<td></td>
</tr>
</tbody>
</table>

4.2.1.5.3 Extensibility

Customize the way that you use the LINE integration.

Custom Fields

You can add custom fields to the Digital Accounts app using the Custom Fields and Logic app. When creating custom fields on the Custom Fields tab, use business context MKT_DIGITAL_ACCOUNT.

Due to ABAP DDIC restrictions, only a defined number of fields and characters can be created for each business context.
For general information about creating and enabling custom fields, see Custom Fields.

Required Business Role

A business role that contains the Extensibility (SAP_CORE_BC_EXT) business catalog is required for creating custom fields and logic. You can use the standard business role Administrator (BR_ADMINISTRATOR), which already contains this business catalog. Alternatively, you can create custom business roles using the Maintain Business Roles app.

4.2.1.6 Integration with Google Analytics

Overview of the integration scenario.

The integration with Google Analytics allows you to do the following:

- Enrich sales order interactions of type SALES_ORDER with Google Analytics data. You can enrich a sales order interaction with its source campaign and device category information. For more information, see Interactions: Enrich Sales Orders with Google Analytics.

- Create interactions with web tracking data from Google Analytics or Google BigQuery. You create query configurations that identify the set of web hits data that you want to retrieve from Google Analytics or Google BigQuery. You define mapping values that identify how to map the data retrieved from Google to the interaction data in SAP Marketing Cloud. For more information, see Overview of Create Interactions Scenario.

- Match and merge additional contact ID information in SAP Marketing Cloud with data retrieved from Google Analytics or Google BigQuery. You create query configurations that identify the contact ID information that you want to retrieve. You import contact ID data which goes through the match and merge process. For more information, see Overview of Match and Merge Scenario.

<table>
<thead>
<tr>
<th>Business Context</th>
<th>Description</th>
<th>Maximum Number of Fields</th>
<th>Maximum Number of Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_DIGITAL_ACCOUNT</td>
<td>Marketing: Digital Account</td>
<td>100</td>
<td>1000</td>
</tr>
</tbody>
</table>

Note

You can set up one or more of the scenarios, depending on your needs.

Configuration Settings

For a complete description of the configuration settings required for the integration scenario, see the Integration Guide.
**Integration Package**

For more information about the Google Analytics Integration with SAP Marketing Cloud/SAP Marketing integration package, see [Google Analytics Integration with SAP Marketing Cloud/SAP Marketing](#).

### 4.2.1.7 Integration with Data Management Platforms

With this integration scenario, you can capture and replicate DMP IDs from DMP providers, such as Adform. A DMP ID is mapped to a commerce contact ID and stored inside SAP Marketing Cloud.

The following graphic shows the overall process:

To use this integration, you must configure SAP Marketing Cloud.

#### 4.2.1.7.1 Configuring SAP Marketing Cloud

To establish communication with the OData service, you perform procedures in SAP Marketing Cloud.

The overall process is as follows:

1. **Define a Communication User [page 78]**
   
   You can use an existing communication user, or create a new one.

2. **Set Up the Communication System [page 78]**
   
   After defining your communication user, set up a communication system for the DMP integration scenario.

3. **Set Up the Communication Arrangement [page 79]**
   
   After setting up the communication system, set up the communication arrangement for the DMP integration scenario.
4.2.1.7.1.1 Define a Communication User

You can use an existing communication user, or create a new one.

Procedure

1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
2. Launch the Maintain Communication Users app and choose New.
3. Enter the required User Name, Description, and Password.
4. Create and save your user.
   Note down the user data for further processes.

Task overview: Configuring SAP Marketing Cloud [page 77]

Next task: Set Up the Communication System [page 78]

4.2.1.7.1.2 Set Up the Communication System

After defining your communication user, set up a communication system for the DMP integration scenario.

Prerequisites

To set up a communication system and communication arrangement, you require the Communication Management (SAP_CORE_BC_COM) business catalog role.

Procedure

1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose the Communication Systems app.
3. Choose New.
4. Enter a system ID and name for your communication system.
5. Choose Create.
6. On the Communication System page, enter the following:
   a. Under Technical Data, enter dummy as the Host Name to assign a dummy host.
      This is a dummy communication system as its only purpose is to bind the communication user that you previously created to the communication arrangement that you will create in the next step.
b. Under *User for Inbound Communication*, choose (+) and enter your communication user name.
c. For *Authentication Method*, select *User Name and Password*.

7. Save your changes and exit the app.

**Task overview:** Configuring SAP Marketing Cloud [page 77]

**Previous task:** Define a Communication User [page 78]

**Next task:** Set Up the Communication Arrangement [page 79]

### 4.2.1.7.1.3 Set Up the Communication Arrangement

After setting up the communication system, set up the communication arrangement for the DMP integration scenario.

**Prerequisites**

To set up a communication system and communication arrangement, you require the Communication Management (SAP_CORE_BC_COM) business catalog role.

**Procedure**

1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose the *Communication Arrangements* app.
3. Create a new communication arrangement.
4. Select SAP_COM_0343 (*Marketing – DMP Integration*).
5. Choose *Create*.
6. In the *Communication Arrangements* screen, do the following:
   a. Under *Common Data*, choose the communication system that you created previously.
   b. Under *Inbound Communication*, choose the communication user name for inbound services that you assigned to the communication system.
7. Save your changes and exit the app.

**Task overview:** Configuring SAP Marketing Cloud [page 77]

**Previous task:** Set Up the Communication System [page 78]
4.2.2 Landing Pages and Forms

Integration options for landing pages and forms.

Landing Pages

Find out how to get data entered on external landing pages into SAP Marketing Cloud. For more information, see Landing Pages and Forms [page 80].

i Note

If you create a landing page (with or without a form) using the landing page editor in the Content Studio, you can publish your page immediately. There is no configuration necessary. For more information, see Landing Page Design.

Forms

If you use forms standalone, the following documentation is relevant:

- Custom integration allows you to host forms on your own Web server and connect them to your SAP Marketing Cloud system. For more information, see Custom Integration of Forms [page 81].

  i Note

  If you use forms as part of landing pages, custom integration is not relevant. You need only the documentation for standard integration and form publication. Please also note that a form does not need to be published in order to use it in a landing page.

- Standard integration allows you to host forms on your own Web server and to connect them to your SAP Marketing Cloud system using an SAP integration service on the SAP Cloud Platform. For more information, see Standard Integration of Forms [page 91].

- You can automate the process of making the form files available on customer web servers. For more information, see Form Publication [page 94].

- You can captcha configuration to enhance the security of your forms and decrease vulnerability to malicious attacks by bots that send fraudulent contact data into your system. For more information, see Setting Up Captcha Configuration for Forms [page 259].
4.2.2.1 Custom Integration of Forms

Custom integration of forms supports the technical user with specific integration tasks when deploying forms in the customer’s Web server. You can alternatively integrate a form into a landing page and publish it immediately out-of-the-box.

Use

This document provides details for the technical user to support with implementing an integration service between the HTML-based frontend and the OData-based backend when deploying forms in the customer’s Web server.

Setting up Forms

In SAP Marketing Cloud, you are provided with the Forms content type in the Content Studio app. This allows you to design forms to collect interaction contact and marketing permission data.

For security and performance reasons, you must deploy the forms you create on your Web server to make them available to the internet. The Web server must send the collected data to the server of SAP Marketing Cloud using the public OData service CUAN_CONTENT_PAGE_RESULT_SRV. The service saves the data and triggers follow-on actions.

Implementation of forms includes the following:

- Deploying the files onto your Web server
- Implementing the Web server in order to forward the results to SAP Marketing Cloud

Related Information

Forms
Form Publication [page 94]
4.2.2.1.1  Creating the Communication Arrangement

To prepare for the technical implementation of forms, the administrator must create a user, a communication system, and a communication arrangement.

Create a Communication User

1. Open the *Maintain Communication Users* app and click *New*.
2. Enter a username, for example *MKT_FORM_RESULT_USER*, and a description, for example *Marketing - Form Result User*.
3. Enter a password.
4. Click *Create*.

Create a Communication System

1. Open the *Communication Systems* app and click *New*.
2. Enter a system ID and Name, for example *MKT_FORM_TEST_SERVER*.
3. Enter the domain name of the server you host your form on.
4. Add the previously created communication user under *User for Inbound Communication*.
5. Click *Save*.

Create a Communication Arrangement

1. Open the *Communication Arrangements* app and click *New*.
2. Select the integration scenario *SAP_COM_0023* (Marketing - Form Integration).
3. If you like, you can adjust the proposed Arrangement name before clicking *Create*.
4. Select the previously created communication system under *Common Data*.
5. The previously created communication user should appear automatically under *Inbound Communication*. If one does not appear, return to the communication system and make sure that a user was added under *User for Inbound Communication*.
6. Click *Save*.

The communication user you created has the integration role assigned from the arrangement, and is ready for use in your integration.

4.2.2.1.2  Deploying the Form

The source code (HTML) for every form you design must be downloaded using the user interface and deployed on your Web server. The HTML file that is generated describes the design and the content of the specific form.
In addition, you must download a style sheet (CSS) and a JavaScript file and adapt them according to your requirements and your system setup. This step is required for your initial system setup and allows you to deploy the CSS and JavaScript files.

**i Note**

You do not need to adapt these files again until you perform an upgrade to a new release. Adapting the files when you upgrade ensures that you can avail of new features.

By default, the HTML file tries to load both files with the names `sapContentPage.css` and `sapContentPage.js` from the same folder in which the HTML file is located. If you want to adjust those names or the file paths you must change the HTML file content.

### 4.2.2.1.3 Adjusting the JavaScript File

After downloading the JavaScript file you must adjust the Web service path written in the file.

The default base path is the path for the OData service on the SAP Marketing Cloud server:

- `/sap/opu/odata/sap/CUAN_CONTENT_PAGE_RESULT_SRV`

You must adjust this path according to the Web server implementation (see section Implementing the Result OData Service [page 83]).

When a user opens a form, the path is loaded using an HTTP HEAD request to fetch a CSRF token. Further data requests are sent to the result path, which is added to the base path. The result path can be adjusted or left empty in the JavaScript file. The default path `ResultHeaders` describes the OData service entity used for the results.

You are not required to perform any implementation for the front end. The JavaScript that is delivered collects the user input independently. It is possible to adapt and enhance the form HTML file that is generated, but you must preserve the integrity of the standard structure.

### 4.2.2.1.4 Implementing the Result Service

You must implement your Web server to enable it to receive the requests of the form JavaScript files and forward them to the SAP Marketing Cloud server.

By default, the requests are ready for the result service `CUAN_CONTENT_PAGE_RESULT_SRV` and do not need to be adjusted.

**i Note**

In some usage scenarios, the request data must be enhanced to enable all features. To do this, you must decode the JSON payload string and add the appropriate attributes before encoding the JSON string again for the result service.
Caution

The actual implementation depends on the technology and development language that you use in your company. The sample code provided below is an example PHP implementation. SAP does not take responsibility if you use it in your productive system.

To use this PHP implementation, you must adjust the `BasePath` and `ResultHeadersPath` at the beginning of your Javascript file to read as follows:

```javascript
(function () {
    "use strict";
    var C = { 
        BasePath: "/myLandingPageIntegrationScript.php",
        ResultHeadersPath: "",
        ...
    }
```

Here `myLandingPageIntegrationScript.php` stands for the name of the PHP script, and must be replaced by the name of your PHP script.

### PHP Example

```php
<?php
/**
 * This class is an example implementation
 * of a PHP based form integration.
 * Note: This is a template, which is used at your own risk.
 */
class LandingPageIntegration {
    /**
     * The BasePath is the URL for the system
     * including the form result service.
     * @var string
     */
    /**
     * The ResultHeadersPath is the name of the ResultHeaders entity
     * which is used for processing the form results.
     * @var string
     */
    const RESULT_HEADERS_PATH = "ResultHeaders";
    /**
     * The credentials are used for authenticating on the system.
     * This is usually a dedicated system or communication user
     * with the integration role assigned.
     * @var string
     */
    const CREDENTIALS = "USERNAME:PASSWORD";
    /**
     * The cookies are remembered between consecutive OData requests
     * to implement the session handling
     * and security measures of the SAP Gateway.
     */
```
* @var string
/**
 * The CSRF-Token is required for the OData service communication
 * and must be fetched before it is possible
 * to perform any changing requests such as 'POST'.
 * @var string
*/
private $csrfToken = null;
/**
 * This method is the main entry point
 * for processing the requests received from forms.
 */
public function execute()
{
    switch ($_SERVER['REQUEST_METHOD']) {
        case "POST":
            $this->handlePostRequest();
            break;
    }
}
/**
 * POST requests must be forwarded to the system
 * and the responses must be passed to the client
 * to ensure correct form integration.
 */
private function handlePostRequest()
{
    // first fetch the csrf-token
    $this->fetchCsrfToken();

    // read the POST data sent by the form
    $requestBody = @file_get_contents("php://input");
    $requestData = json_decode($requestBody);

    // optional: enhance the request data with the IP address for tracking purposes
    $requestData->IpAddress = $_SERVER['REMOTE_ADDR'];

    // optional: add the campaign id to connect all form interactions to your campaign
    // $requestData->CampaignId = "your-campaign-id";

    // send the prepared request data to the system
    $requestString = json_encode($requestData);
    $response = $this->sendHttpRequest("POST", $this::BASE_PATH . $this::RESULT_HEADERS_PATH, $requestString);

    // print the response
    echo $response;
}
/**
 * Send a 'HEAD' request to fetch
 * the required CSRF-Token from the OData service.
 * If the HEAD request fails, a 'GET' request is performed.
 */
private function fetchCsrfToken()
{
    $this->sendHttpRequest("HEAD", $this::BASE_PATH, null);
    if (! $this->csrfToken) {
        // HEAD request failed -> fallback using GET
        $this->sendHttpRequest("GET", $this::BASE_PATH, null);
    }
}
/**
 * This method performs a synchronous HTTP request
private function sendHttpRequest($method, $path, $body) {
    // first create stream context
    $context = $this->createStreamContext($method, $body);
    // perform http request
    $response = file_get_contents($path, false, $context);
    if ($response === false) {
        // request failed - print error for analysis
        $error = error_get_last();
        if (is_array($error)) {
            echo $error['message'];
        } else {
            echo $error;
        }
    }
    // process response headers
    $this->readResponseHeaders($http_response_header);
    // return response
    return $response;
}

private function createStreamContext($method, $body) {
    // basic authorization uses base64 encoded credentials
    $credentials = base64_encode($this::CREDENTIALS);
    // build http request headers
    $headers = array(
        "Authorization: Basic " . $credentials,
        "Accept: application/json",
        "Content-Type: application/json"
    );
    if ($this->cookies) {
        // add remembered cookies
        array_push($headers, "Cookie: " . $this->cookies);
    }
    // add x-csrf-token header for fetching or using the already fetched token
    $csrfToken = ($this->csrfToken ?: "Fetch");
    array_push($headers, "x-csrf-token: " . $csrfToken);
// build complete options array
$options = array(
    "http" => array(
        "header" => $headers,
        "method" => $method,
        "content" => $body,
        "ignore_errors" => true,
        "max_redirects" => 0
    )
);

// return stream context using the built options
return stream_context_create($options);

/**
 * This method processes the HTTP response headers
 * in order to read the fetched CSRF-Token and cookies.
 *
 * @param array $responseHeaders
 */
private function readResponseHeaders($responseHeaders)
{
    // loop response headers
    foreach ($responseHeaders as $responseHeader) {
        // split header name from value
        $parts = explode(" ", $responseHeader);

        // handle response header based on name
        switch (strtolower($parts[0])) {
            case "HTTP/1.0":
                // status code
                http_response_code($parts[1]);
                break;
            case "x-csrf-token":
                // save fetched csrf-token
                $this->csrfToken = $parts[1];
                break;
            case "set-cookie":
                // set received cookies
                $this->cookies .= $parts[1];
                break;
        }
    }
}

// initialize the integration class and start the processing
$landingPageIntegration = new LandingPageIntegration();
$landingPageIntegration->execute();

Java Example

```java
package com.sap.hpa.cei.cntpg.man.integration;

import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStream;
```
import java.io.InputStreamReader;
import java.io.OutputStream;
import java.net.CookieHandler;
import java.net.CookieManager;
import java.net.HttpURLConnection;
import java.net.URL;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import sun.misc.BASE64Encoder;
public class IntegrationServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  /**
   * The BasePath is the URL for the system including the form result
   * OData service. Note: It needs to include the trailing slash (/).
   *
   * @var String
   */
  /**
   * The ResultHeadersPath is the name of the ResultHeaders entity which is
   * used
   * for processing the form results.
   *
   * @var String
   */
  private static final String RESULT_HEADERS_PATH = "ResultHeaders";
  /**
   * The credentials are used for authenticating on the system. This is
   * usually a
   * dedicated system or communication user with the integration role
   * assigned.
   *
   * @var String
   */
  private static final String CREDENTIALS = "USERNAME:PASSWORD";
  /**
   * The cookie manager remembers cookies between consecutive OData
   * requests to
   * implement the session handling and security measures of the SAP
   * Gateway.
   *
   * @var CookieManager
   */
  private CookieManager cookieManager = null;

  @Override
  protected void doHead(HttpServletRequest req, HttpServletResponse resp)
  throws ServletException, IOException {
  }

  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse
  response)
  throws ServletException, IOException {
    String content = this.readContent(request.getReader());
    String csrfToken = this.fetchCsrfToken();
    String responseText = this.postData(content, csrfToken);
    response.getWriter().write(responseText);
  }

  /**
   * Read request body
   */
  private String readContent(BufferedReader reader) throws IOException {
    StringBuffer stringBuffer = new StringBuffer();
    // Read content from the reader
    return stringBuffer.toString();
  }

  /**
   * Fetch CSRF token
   */
  private String fetchCsrfToken() {
    // Fetch CSRF token
    return null;
  }

  /**
   * Post data with CSRF token
   */
  private String postData(String content, String csrfToken) {
    // Post data with CSRF token
    return null;
  }
}
String line = null;
while ((line = reader.readLine()) != null) {
    stringBuffer.append(line);
}
return stringBuffer.toString();
/**
 * Send a HEAD request to fetch the CSRF token
 */
private String fetchCsrfToken() throws IOException {
    HttpURLConnection connection = this.createConnection(BASE_PATH, "HEAD", null);
    connection.connect();
    String csrfToken = connection.getHeaderField("x-csrf-token");
    connection.disconnect();
    return csrfToken;
}/**
 * Send POST request to forward the form result to the backend system
 */
private String postData(String data, String csrfToken) throws IOException {
    // open HTTP connection and send body
    HttpURLConnection connection = this.createConnection(BASE_PATH + RESULT_HEADERS_PATH, "POST", csrfToken);
    connection.setDoOutput(true);
    OutputStream outputStream = connection.getOutputStream();
    outputStream.write(data.getBytes());
    connection.connect();
    // read success or error response
    InputStream inputStream;
    if (200 <= connection.getResponseCode() && connection.getResponseCode() <= 299) {
        inputStream = connection.getInputStream();
    } else {
        inputStream = connection.getErrorStream();
    }
    InputStreamReader inputStreamReader = new InputStreamReader(inputStream);
    BufferedReader reader = new BufferedReader(inputStreamReader);
    String response = this.readContent(reader);
    connection.disconnect();
    return response;
}
private HttpURLConnection createConnection(String path, String method, String csrfToken) throws IOException {
    if (this.cookieManager == null) {
        // create the cookie manager
        this.cookieManager = new CookieManager();
        CookieHandler.setDefault(this.cookieManager);
    }
    // open HTTP connection and set relevant headers
    HttpURLConnection connection = (HttpURLConnection) new URL(path).openConnection();
    connection.setRequestMethod(method);
    connection.setRequestProperty("Accept", "application/json");
    connection.setRequestProperty("Content-Type", "application/json");
    connection.setRequestProperty("Connection", "keep-alive");
    // set base64-encoded authorization header
    BASE64Encoder encoder = new BASE64Encoder();
    String credentials = encoder.encode(CREDENTIALS.getBytes());
    connection.setRequestProperty("Authorization", "Basic " + credentials);
    // set CSRF token header to 'Fetch' or to the actual token value if available
    if (csrfToken != null) {
        connection.setRequestProperty("x-csrf-token", csrfToken);
    } else {
System User Authentication

The result service CUAN_CONTENT_PAGE_RESULT_SRV can only be called by users with the corresponding authorization. You must use the user created for integration scenario SAP_COM_0023. The example PHP script shows the authentication using an HTTP header named Authorization using Basic Authentication (user and password).

Contact Identification

The forms integration offers different ways to identify the Web user who visits the form. The following usage scenarios are supported:

- **Scenario A**: The Web user is anonymous (unknown)
  In this scenario, the user cannot be identified on the form.

- **Scenario B**: The Web user has accessed the form using a tracking link in an SAP Marketing Cloud email.
  Scenario B does not require any additional implementation effort. The form script performs the required actions autonomously. If the form is accessed using a SAP Marketing Cloud email, the link contains a tracking ID that is sent along with the data requests. This ID is used to identify the user that received the email.

Prefill Contact Data

When a Web user who accesses a form is identified, it is possible to prefill data for the Input and Permission elements in the form. Selecting the Prefill Contact Data checkbox allows the form elements to be filled with data for the identified contact, which is maintained in the SAP Marketing Cloud system.

To support the prefill of contact data, the Web server implementation needs to pass the response data from the SAP Marketing Cloud system to the form (web client) that initiated the request. The SAP Marketing Cloud system provides all necessary data for forms with the Prefill Contact Data setting. There is no additional effort for the implementation, apart from the forwarding of response data.
Optional Attributes

In order to complete the form integration, you can enhance the OData requests with the following optional attributes:

- **IPAddress**
  The IP address of the web client visiting a form can be saved in order to have additional evidence that the user submitted the form, and gave marketing permissions and contact data.

- **CampaignId**
  The campaign ID can be supplied to connect the interactions created out of the form to a specific SAP Marketing Cloud campaign. If the form is opened with a URL parameter `sap-campaign-id` with its value set to the ID, it is automatically added to all form requests. This connection will also be created if the form is opened out of a SAP Marketing Cloud email sent as part of a campaign.

### 4.2.2.2 Standard Integration of Forms

The SAP Marketing Cloud offers a built-in integration service, which allows you to use forms on your web server without having to implement a custom integration of forms service as described in Custom Integration of Forms [page 81].

**Use**

This document provides details for the technical user to support with implementing an integration between the HTML-based based frontend and the OData-based backend when deploying forms in the customer’s Web server.

### Setting Up Forms

In SAP Marketing Cloud, you are provided with the *Forms* content type in the *Content Studio* app. This allows you to design forms to collect interaction contact and marketing permission data.

For security and performance reasons, you must deploy the forms you create on your Web server to make them available to the internet. The form sends the collected data to an elastic service on the SAP Cloud Platform, which forwards the data to the SAP Marketing Cloud using the public OData service `CUAN_CONTENT_PAGE_RESULT_SRV`. The service saves the data and triggers follow-on actions.

Implementation of forms includes the following:

- Preparing the form files
- Deploying the files onto your Web server

### 4.2.2.2.1 Deploying the Form

The source code (HTML) for every form you design must be downloaded using the user interface and deployed on your Web server. The HTML file that is generated describes the design and the content of the specific form.
In addition, you must download a style sheet (CSS) and a JavaScript file and adapt them according to your requirements and your system setup. This step is required for your initial system setup and allows you to deploy the CSS and JavaScript files.

**i Note**

You do not need to adapt these files again until you perform an upgrade to a new release. Adapting the files when you upgrade ensures that you can avail of new features.

By default, the HTML file tries to load both files with the names `sapContentPage.css` and `sapContentPage.js` from the same folder in which the HTML file is located. If you want to adjust those names or the file paths you must change the HTML file content.

### 4.2.2.2 Adjusting the JavaScript File

After downloading the JavaScript file, you must adjust the configuration variables that are included. These variables define how the landing pages communicate with the backend system. Please be aware that the JavaScript file is only delivered in a minified version, which saves resources and increases performance for end users.

The following variables must be adjusted to use the standard landing page integration:

- **BasePath**
  - The default base path is the path for the OData service on the SAP Marketing Cloud server: `/sap/opu/odata/sap/CUAN_CONTENT_PAGE_RESULT_SRV/`
  - You must adjust this path to the respective SAP Cloud Platform service URL depending on the data center of your SAP Marketing Cloud system:

**SAP Cloud Platform Service URLs**

<table>
<thead>
<tr>
<th>Data Center</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney (AP)</td>
<td>“<a href="https://s4cloudlpicb1aab197.ap1.hana.ondemand.com/elastic-access/sap/lpi/%E2%80%9D">https://s4cloudlpicb1aab197.ap1.hana.ondemand.com/elastic-access/sap/lpi/”</a></td>
</tr>
<tr>
<td>Shanghai (CN)</td>
<td>“<a href="https://s4cloudlpiz4055ed249.cn1.hana.ondemand.com/elastic-access/sap/lpi/%E2%80%9D">https://s4cloudlpiz4055ed249.cn1.hana.ondemand.com/elastic-access/sap/lpi/”</a></td>
</tr>
<tr>
<td>Rot (EU)</td>
<td>“<a href="https://s4cloudlpia9f27a988.hana.ondemand.com/elastic-access/sap/lpi/%E2%80%9D">https://s4cloudlpia9f27a988.hana.ondemand.com/elastic-access/sap/lpi/”</a></td>
</tr>
<tr>
<td>Tokyo (JP)</td>
<td>“<a href="https://s4cloudlpib423c25653.jp1.hana.ondemand.com/elastic-access/sap/lpi/%E2%80%9D">https://s4cloudlpib423c25653.jp1.hana.ondemand.com/elastic-access/sap/lpi/”</a></td>
</tr>
<tr>
<td>Moscow (RU)</td>
<td>“<a href="https://s4cloudlpin6265058ca.ru1.hana.ondemand.com/elastic-access/sap/lpi/%E2%80%9D">https://s4cloudlpin6265058ca.ru1.hana.ondemand.com/elastic-access/sap/lpi/”</a></td>
</tr>
</tbody>
</table>
## CORS
The default value is `false` and must be changed to `true`. This change ensures that the landing page sends its requests in the correct manner to support Cross-Origin-Resource-Sharing (CORS).

### Note
The value is a boolean value, so you must write `false` and `true` without using apostrophes.

## CSRFTokenHeader
The default value “X-CSRF-Token” can be removed by changing it to an empty string “”.

## AppendScenarioParameter
The default empty value “” must be changed to “_L54AD1F204_”, which ensures that the landing page sends the technical parameter as part of its requests. This provides the elastic service on the SAP Cloud Platform with the required scenario information.

## Tenant
The default empty value “” must be filled with the domain name of your SAP Marketing Cloud system. The name value must respect the following format: “my123456.s4hana.ondemand.com”.

It’s not necessary to change any other parts of the JavaScript file to use the standard functionality.

### Example Configuration

```javascript
(function() { "use strict"; var C={BasePath:"https://s4cloudlpi9f27a988.hana.ondemand.com/elastic-access/sap/lpi/",ResultHeadersPath:"ResultHeaders",CORS:true,CSRFTokenHeader:"",AppendScenarioParameter:"_L54AD1F204_",Tenant:"my123456.s4hana.ondemand.com",Version:"1.2.3"}; [...]
```
4.2.2.3 Form Publication

The automated form publication describes a scenario that makes it possible to automate the process of making the form files available on customer web servers.

This scenario replaces the manual activities of downloading the files and uploading them to the web server.

Implementing the Publication Service

A standard solution can’t take care of storing the files on the customer web server considering that there are many technologies available and customers might need to adjust the files and their locations to their needs. Therefore, SAP Marketing Cloud provides logic that calls a custom service on the desired target system making it possible to automatically store the files using your own implementation.

Request

This publication service needs to be implemented to handle the requests sent by SAP Marketing Cloud. These requests use the HTTP method ‘POST’ with a JSON payload. The format of the JSON body looks as follows:

```
{
  "landingPageKey": "<Form key>",
  "landingPageName": "<Form name>",
  "systemId": "<System ID>",
  "targetId": "<Publication target ID>",
  "baseDirectory": "<Base directory/folder>",
  "htmlFileName": "<File name entered by the business user>",
  "html": "<Form HTML file content>",
  "css": "<Form CSS file content>",
  "js": "<Form JS file content>"
}
```

Note

The placeholder texts in the above code sample are updated to mention forms. The technical names however still mention landing pages for compatibility reasons.

The publication service handling these requests needs to store the form files contained in the JSON attributes “html”, “css” and “js” on the file system according to your needs. For this purpose, the implementation can use additional details like the form name, system ID, target ID, or base directory to distinguish between multiple possible locations or projects.

Before the request is sent, SAP Marketing Cloud adjusts the file contents using the parameters provided for the publication target. This involves changes the paths to the CSS and JavaScript files in the HTML file content and the service paths in the JavaScript file content.

The service implementation needs to store the files in the correct location for the selected publication target. Otherwise the references in the files won’t be correct and the form can’t be used. If necessary, the implementation can also adjust the files on your side. However, there is also a Business Add-In (BAdI) available to do this in SAP Marketing Cloud.
Response

SAP Marketing Cloud expects a response from the publication service containing details about the form address. This address will be displayed to the business user for further usage.

The response body needs to conform to a JSON format that looks as follows:

```
Sample Code
{
  "landingPageUrl": "<Public form URL>"
}
```

Creating the Communication System and Maintaining the Communication User

The communication between SAP Marketing Cloud and your web server is based on a communication arrangement. Therefore, it’s necessary to create a related communication system for the desired target system.

1. Open the Communication Systems app and select New.
2. Enter a system ID and name and click Create.
3. Enter the host name of your web server and any additional details needed.
4. If necessary, create an outbound communication user to be used for the publication service on the web server. You will need to select the appropriate authentication method and enter the related details, for example, a user name and password as well as credentials of a valid user.
5. Be sure to save before creating a communication arrangement.

Creating the Communication Arrangement

1. Open the Communication Arrangements app and select New.
2. Select the scenario SAP_COM_0148, Marketing - Form Publication Integration.
3. Enter a name for the publication target, which will appear on the business user interface, and click Create.
4. Select the previously created communication system.
5. Enter the following additional properties:
   ○ The paths to your form integration service and result headers that you prepared during your form integration
   ○ The desired folder for the form files as the base directory
   ○ The paths to the stylesheet (CSS) and JavaScript (JS) files
6. If necessary, select the outbound communication user.
7. Enter the publication path in the section Outbound Services under the entry Deployment Service.

Once the communication arrangement has been created successfully and is active, the Forms content type in the Content Studio app will offer the option to publish a form automatically.
Optional: Implementing Custom Logic for Form Publication

In case the standard publication logic doesn’t completely fit your needs, you can adjust it using a custom logic extension point, or Business Add-In (BAdI).

Change File Contents Before Form Publication

The BAdI definition Change File Contents Before Form Publication makes it possible to automatically adjust the contents of the HTML, CSS, and JS files.

Business Context: Marketing: Form
Enhancement Spot: CUAN_ODATA_CONTENT_PAGE
BAdI Definition: CUAN_CP_DEPLOY_ADJUST_FILES

Related Information

Custom Integration of Forms [page 81]

4.2.2.4 External Landing Page Data Integration with SAP Marketing Cloud

Integration of External Landing Page Data with SAP Marketing Cloud using the SAP Cloud Platform Integration service.


By supporting the integration of external landing page data with SAP Marketing Cloud, customers can benefit from the features of external tools, such as Adobe Experience Manager (AEM), while also being able to bring in and store their data in the SAP Marketing Cloud system.

To achieve this integration the following integration flows are provided:

- **Configure and Deploy the 'Create Landing Page Data in SAP Marketing Cloud’ Integration Flow**
  Bring data entered on external landing pages, such as basic contact data and the corresponding marketing permissions easily into SAP Marketing Cloud for use in follow-on marketing activities.

- **Configure the 'Retry Loading Buffered Data to SAP Marketing Cloud’ Integration Flow**
  The out-of-the-box data buffer functionality ensures that data is safe during scheduled or unscheduled system downtime. The SAP Cloud Platform Integration integration adapter buffers unsuccessful requests and when the backend is available again, the data is re-sent to SAP Marketing Cloud.

- **Configure the 'Get Personalization Data from SAP Marketing Cloud’ Integration Flow**
  The landing page prefill functionality allows you to automatically fill landing page fields and checkboxes with existing contact and permission data that is stored in SAP Marketing Cloud. This decreases the amount of time a contact has to spend entering data and supports faster action for follow-on marketing activities.
Configure and Deploy the 'Create External Landing Page in SAP Marketing Cloud' Integration Flow
Submit external landing page metadata to SAP Marketing Cloud to create a new representation of the external landing page. The landing page is then available in the Content Studio app ready for reuse in other marketing activities, such as a link in a newsletter campaign.

*Note*

The payload, which is submitted through the REST API, can be sent in the source system format or the adapter standard format. If a non-standard format is used, the corresponding mapping in the Partner Directory must be specified to transform the source system schema to the SAP Marketing Cloud format.

The integration package runs on the SAP Cloud Platform Integration tenant and connects to the SAP Marketing Cloud system using an OData service.

For more information, see Introduction.

### 4.2.3 Survey

The documentation for survey explains the following:

- How to integrate survey metadata and survey responses from third-party survey tools into SAP Marketing Cloud using an OData service. For more information, see Survey OData API [page 890].
- How to integrate survey metadata and survey responses from third-party survey tools into SAP Marketing Cloud using integration flows. For more information, see Integration with Third-Party Survey Providers [page 98].
4.2.3.1 Integration with Third-Party Survey Providers

Integration of Survey Data with SAP Marketing Cloud using SAP Cloud Platform Integration.

For more information about the Survey Data Integration with SAP Marketing Cloud, see Third Party Survey Data Integration with SAP Marketing Cloud.

By supporting the integration of survey data with SAP Marketing Cloud, customers can benefit from the features of third-party tools, such as Qualtrics, Clicktools, SurveyMonkey, SurveyGizmo, and so on. This integration fetches and stores data easily from the third-party tools into SAP Marketing Cloud system.

To achieve this integration, the following iFlows are provided:

- Create Survey Data in SAP Marketing Cloud.
- Retry Loading Buffered Survey Data to SAP Marketing Cloud.

For more information, see Integrating Survey Data with SAP Marketing Cloud.

4.2.4 Extensions

4.2.4.1 Import CSV Using SAP Cloud Platform Integration

With this integration you can do file-based data load to your SAP Marketing Cloud system. The data is fetched from an SFTP server or, alternatively, posted via HTTP request, and pushed to your system using an OData service.

The package enables you to load the following message types and also provides sample CSV templates:

- Interactions
- Accounts
- Contacts

For more information, see the corresponding setup guide on the SAP Help Portal under Setting Up File-Based Data Load for SAP Marketing Cloud (14F) and the integration package in the SAP API Business Hub under SAP Marketing Cloud - File-Based Data Load.

4.3 Outbound

Sending Emails and Text Messages [page 99]

The integration enables you to send emails and text messages using service providers, such as SAP Digital Interconnect.

Setting Up External Campaign Execution [page 157]
Open Channel Integration [page 197]
With this integration you create own actions that send data for further processing to an external system, such as SAP Cloud Platform, when the campaign has been executed. But you can also just implement the inbound side of this integration to get external data in your campaigns.

Mobile, Social, and Digital Channel [page 237]

Setting Up Captcha Configuration for Forms [page 259]
Use captcha configuration to enhance the security of your forms and decrease vulnerability to malicious attacks by bots that send fraudulent contact data into your system.

4.3.1 Sending Emails and Text Messages

The integration enables you to send emails and text messages using service providers, such as SAP Digital Interconnect.

You find the list of integration options under Service Provider and Available Features [page 101].

For information about how to set up the integration with a service provider, see Setting Up Service Provider for Emails and Text Messages [page 100].

Campaign Processing in Detail

In the following you find an example of detailed processing steps for an automated campaign in the system. The campaign uses a dynamic target group and has the actions Send Email and Open Channel assigned.

When the user starts the campaign, the activation runs some consistency checks, for example, the system checks whether all actions and their parameters correct. The activation also schedules one or more background jobs which are started at the defined execution date and time.

Because the campaign uses a dynamic target group the activation schedules the following background jobs:

- The first job rebuilds the dynamic target group. It is scheduled for the defined execution date and time.
- After the first background job has been finished the two other jobs are processing the actions Send Email and Open Channel in parallel as successor.

Action job Send Email does the following steps:

- The job reads the members of target group and split them into smaller packages, for example, into target groups of 500 members.
- Packages are processed in parallel tasks in order to reduce the runtime of the complete action and use the available resources of the system in an optimal way.

Steps within package:

- Check permission
- Create personalized emails
- Send out emails by handing over them to the email service provider
- Create interactions for all target group members, also for those where email cannot be sent, because, for example, marketing permission is missing.

- After all packages have been executed, the execution status is updated and the background job ends.
Action job **Open Channel** does the following steps:

- The job reads the members of target group and split them into smaller packages, for example, into target groups of 500 members.
- Usually packages are processed in parallel tasks in order to reduce the runtime of the complete action and use the available resources of the system in an optimal way.

  Steps within package:
  - Check permission (if activated by customer extension)
  - Read values of attributes defined in export definition
  - Transfer personalized payload to SAP Cloud Platform Integration
  - Create interactions for all target group members (if activated by customer extension)

- After all packages have been executed, the execution status is updated and the background job ends.

After all background jobs have been finished the campaign’s execution status is updated.

See also **Open Channel Integration** [page 197].

### 4.3.1.1 Setting Up Service Provider for Emails and Text Messages

In the following you will find information about how to conduct your system for SAP Marketing Cloud with the required service providers, such as SAP Digital Interconnect (formerly known as SAP Mobile Services), for sending out emails and text messages directly out of the system.

Read the following chapters to set up the connection with an email or text message provider.

**Note**

A system of SAP Marketing Cloud enables you to design and organize marketing campaigns. But to reach your customers, you also need email and text message service provider who take over the data from the SAP system and finally send the text messages and emails.

This service provider must be able to send **mass emails and text messages** for **marketing campaigns**, and should also collect bounces and unsubscribes. These providers are also called **marketing service providers (MSPs)**.

Don’t mix them up with your email and cell phone providers for normal communication.

**Service Provider and Available Features [page 101]**

The table gives you an overview about the features available for each service provider.

**Setting Up SAP Digital Interconnect [page 103]**

With SAP Digital Interconnect as service provider, you send mass emails and text messages to your customers and inform them, for example, about your new developments. With this setup you are also enabled to get bounces and complaints for emails, and receive bounces and unsubscribes for text messages.

**Setting Up a Generic Email and Text Message Interface [page 107]**

With this generic email and text message interface, you can conduct any email or text message service provider to a system of SAP Marketing Cloud to send mass messages. With this setup, you’re also enabled to get bounces.
The integration with Amazon is very powerful and covers a wide span of functionality for email and text message campaigns.

Setting Up Alibaba Cloud DirectMail Service [page 137]
Set up Alibaba Cloud DirectMail Service so that you can use it to send emails to your customers. Configurations, including RFC destinations and sender profiles, are required.

Setting Up Alibaba Cloud Short Message Service [page 141]
Set up Alibaba Cloud Short Message Service (Alibaba Cloud SMS) so that you can use it to send text messages to your customers. Configurations, including RFC destinations, export definitions, and sender profiles, are required.

Usage of Multiple Service Provider Instances [page 147]
In case you want to run campaigns for different customers you can use several instances of the same service provider to gain a better overview about your figures and costs.

Campaign Execution Whitelist [page 151]
You use the Campaign Execution Whitelist app to maintain allowed email addresses and telephone numbers.

Unsubscribe for Emails and Text Messages [page 151]
In the following, you learn about the possibilities to unsubscribe from emails and text messages.

Complaints for Emails [page 154]
Complaints for email means that an email recipient classifies emails from dedicated senders as spam. For classifying emails as spam, the email recipient either drops the email to the spam folder of the email provider or declares the email as spam. This technology is also known as email feedback loops.

Troubleshooting for Campaigns [page 156]
In case you have issues with the execution of your campaigns, we recommend to read also the troubleshooting in the Administration Guide.

Sender Profiles [page 156]
A sender profile allows you to carry out campaigns for different channels in different markets. You can maintain sender profiles for channels, such as email, text message, and mobile push notifications.

4.3.1.1.1 Service Provider and Available Features

The table gives you an overview about the features available for each service provider.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>A system of SAP Marketing Cloud enables you to design and organize marketing campaigns. But to reach your customers, you also need email and text message service provider who take over the data from the SAP system and finally send the text messages and emails.</td>
</tr>
<tr>
<td>This service provider must be able to send mass emails and text messages for marketing campaigns, and should also collect bounces and unsubscribes. These providers are also called marketing service providers (MSPs).</td>
</tr>
<tr>
<td>Don’t mix them up with your email and cell phone providers for normal communication.</td>
</tr>
<tr>
<td>Feature</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Sending Emails</td>
</tr>
<tr>
<td>Scenario ID:</td>
</tr>
<tr>
<td>Bounces for Emails</td>
</tr>
<tr>
<td>Scenario ID:</td>
</tr>
<tr>
<td>Complaints for Emails</td>
</tr>
<tr>
<td>Scenario ID:</td>
</tr>
<tr>
<td>Unsubscribe for Emails</td>
</tr>
<tr>
<td>Scenario ID:</td>
</tr>
<tr>
<td>Best Sending Time (for emails)</td>
</tr>
<tr>
<td>Sending Text Messages</td>
</tr>
<tr>
<td>Scenario ID:</td>
</tr>
<tr>
<td>Bounces for Text Messages</td>
</tr>
<tr>
<td>Scenario ID:</td>
</tr>
<tr>
<td>Unsubscribes for Text Messages</td>
</tr>
<tr>
<td>Scenario ID:</td>
</tr>
</tbody>
</table>

Related Information

Unsubscribe for Emails and Text Messages [page 151]
4.3.1.1.2 Setting Up SAP Digital Interconnect

With SAP Digital Interconnect as service provider, you send mass emails and text messages to your customers and inform them, for example, about your new developments. With this setup you are also enabled to get bounces and complaints for emails, and receive bounces and unsubscribes for text messages.

Context

As a preparation we recommend to read the following documents and recommendations to don’t get listed as a spammer Deliverability Best Practices.

To be prepared for the onboarding for SAP Digital Interconnect as email provider, see SAP E-Mail 365 - Onboarding Guide (SAP Digital Interconnect direct customers) and fill out the form provided by SAP Digital Interconnect on this page: SAP E-Mail 365 – Provisioning Form.

i Note

For already existing customers: If you are changing something in the settings for your system connection after the upgrade from a lower release to release 1902 or higher, you must re-enter the following data:

- Credentials in the Communication Systems app
- Path in the Communication Arrangements app under Outbound Services

This is valid for the communication arrangement with scenario ID SAP_COM_0040 and SAP_COM_0041.

Procedure

Follow the steps below to get your service provider up and running:

1. Set up SAP Digital Interconnect:
   - You got SAP Digital Interconnect account for:
     - sending emails using http service call
     - sending text messages
     - receiving bounces and unsubscribes for text messages
   - If you need more details or have questions on this solution, send an email to SAP Digital Interconnect mailto:sapdigitalinterconnect@sap.com.
   - Check that you got a User and a Password as well as a Host and a Path Prefix from SAP Digital Interconnect.

2. To be able to establish the system connection, check that the apps Communication System and Communication Arrangements are assigned to your user.

3. Set up the communication system in the Communication System app.

i Note

Use the data from the onboarding material for a proper set-up.
The technical details below may differ from the onboarding material you got from SAP Digital Interconnect.

- **Communication System for Emails**
  System ID: Enter a system ID, such as **DI_EMAIL**.
  System Name: Enter a system name, such as **SAP Digital Interconnect Email**.
  Host Name: **email-eu1.sapdigitalinterconnect.com**
  User for Outbound Communication: Enter the user name and password you got from SAP Digital Interconnect.

- **Communication System for Text Messages**
  System ID: Enter a system ID, such as **DI_TEXT_MESSAGE**
  System Name: Enter a system name, such as **SAP Digital Interconnect Text Message**.
  Host Name: **sms-pp.sapmobileservices.com**
  User for Outbound Communication: Enter the user name and password you got from SAP Digital Interconnect.

- **Communication System Details Required for Bounces and Unsubscribes for Text Messages**
  System ID: Enter a system ID, such as **DI_TEXT_MESSAGE_BOUNCE_UNSUBSCRIBE**
  System Name: Enter a system name, such as **SAP Digital Interconnect Text Message: Bounce and Unsubscribe**.
  Host Name: **livelink.sapmobileservices.com**
  User for Outbound Communication: Enter the App Key as **User Name** and the Secret as **Password**.

In case you need to change user and password again later, you will do this also in the Communication System app.

4. Establish the communication arrangement in the Communication Arrangement app.
   1. To create a new arrangement choose **New**, select the required **Scenario** and enter an **Arrangement Name**.
      Technical details for the communication arrangement:
      - **Communication Arrangement for Emails**
        Scenario: **SAP_COM_0040**
      - **Communication Arrangement for Text Messages**
        Scenario: **SAP_COM_0041**
      - **Communication Arrangement for Bounces and Unsubscribes for Text Messages**
        Scenario: **SAP_COM_0299**
   2. Select the previously created Communication System.
   3. Depending on the used setup enter the following **Additional Properties**: Enter a Provider ID and Sender Profile ID, and assign a suitable Marketing Area ID.
      Note that you use for the setup of **SAP_COM_0041** and **SAP_COM_0299** the same Provider ID.
   4. Under Outbound Communication select the User Name, you created in the Communication System app, you got from SAP Digital Interconnect.
   5. Under Outbound Services check that the Service Status is activated, and Port 443 is used.
      In addition, maintain the Path as followed:
      - **Scenario: SAP_COM_0040**
        Path: depending on the information you got from SAP Digital Interconnect: `/in365-api/<accountID>/notifications` or `/email/<accountID>/notifications`
      - **Scenario: SAP_COM_0041**
        Path: such as `/cmn/<accountID>/sms`
      - **Scenario: SAP_COM_0299**
   During the save the system establishes the required system connections and creates a provider and sender profile.

5. Finally maintain your sender profiles. For more information, see Sender Profiles [page 156].

Using Several Accounts

If you want to use several accounts, you must do the steps above for each account separately. To get more information about the dependencies in the setup, see Usage of Multiple Service Provider Instances [page 147].

Related Information

Consuming the Integration APIs [page 390]

4.3.1.2.1 Bounces and Unsubscribe for Text Messages

When you want to use unsubscribe and bounces offered by SAP Digital Interconnect, you need a connection between your SAP system and SAP Digital Interconnect.

Prerequisites

You set up the connection to SAP Digital Interconnect. For more information, see Setting Up SAP Digital Interconnect [page 103].

In addition, you have also set up the scenario SAP_COM_0041 and SAP_COM_0299.

How It Works

After you did all the settings, the recipients of text messages can unsubscribe and you can collect bounces for text messages.

Unsubscribe

If the contact does not want to get further text messages, she or he has to send a text message with the word **STOP** as reply to the received text message. These unsubscribes can happen at any time.
The unsubscribe requests are collected on SAP Digital Interconnect’s side in a queue. A background job then pulls the unsubscribe requests from SAP Digital Interconnect and creates corresponding interactions in the system. The system evaluates the interactions and updates marketing permissions for the contact.

In detail the following steps happen:

1. The marketing expert executes a text message campaign.
2. The system sends out the marketing text messages.
3. A recipient is getting the text message on the mobile.
4. The recipient unsubscribes by sending the word STOP as reply to the received text message. Optionally, the recipient can send back the word STOP plus the campaign ID to unsubscribe from a specific campaign with a specific marketing area. Prerequisite is that the marketing area separation is active and the campaign ID is part of the sent text message, ideally using personalization attributes in the Content Studio. At the end an interaction with type MKT_PERM_OPTOUT and with the marketing area of this campaign is created.
5. The mobile service provider sends the text message with the unsubscribe request to SAP Digital Interconnect.
6. SAP Digital Interconnect collects unsubscribe requests and bounces in a queue.
7. SAP pulls the unsubscribe requests and bounces, and creates interactions.
8. Based on the interactions the system updates marketing permissions.

Bounces
To see the number of hard and soft bounces, open the corresponding campaign in the Campaigns app. On the Performance tab, you see the actuals under Outbound.

For more information, see also Handling Bounces.
4.3.1.1.3 Setting Up a Generic Email and Text Message Interface

With this generic email and text message interface, you can conduct any email or text message service provider to a system of SAP Marketing Cloud to send mass messages. With this setup, you’re also enabled to get bounces.

SAP Marketing Cloud offers a generic interface that transfers the message header and body data in a JSON format.

The system calls

- either the service provider directly, if it supports the defined JSON interface natively,
- or an integration engine like SAP Cloud Platform to transform the message from SAP format into any kind of legacy formats. The integration engine is optional in this scenario even though it’s the most likely use case.

**i Note**

A system of SAP Marketing Cloud enables you to design and organize marketing campaigns. But to reach your customers, you also need email and text message service provider who take over the data from the SAP system and finally send the text messages and emails.

This service provider must be able to send mass emails and text messages for marketing campaigns, and should also collect bounces and unsubscribes. These providers are also called marketing service providers (MSPs).

Don’t mix them up with your email and cell phone providers for normal communication.

You’ve prepared the following data:

- Connection data to connect SAP Marketing Cloud with SAP Cloud Platform:
  - hostname of SAP Cloud Platform
  - logon credentials such as user and password for the outbound communication to SAP Cloud Platform
  Instead of user and password, you can also work with certificates. You activate the certificates in the Communication Systems app during the setup.

- Connection data to connect SAP Cloud Platform with your service provider:
  - hostname of your service provider
  - logon credentials such as user and password

- **Optional:** Depended on the service provider, you must upload the provider’s certificates to the SAP Cloud Platform. To upload the certificates on the platform, choose [Operations View] [Manage Keystore] [Add Certificate] and upload the certificate.
In addition, you have access to the following apps:

- 
- **Communication Systems**
- **Communication Arrangements**
- **Sender Profiles**

## Set Up with User and Password

1. In the **Communication Systems** app, you create the system entry by entering:
   - host name of SAP Cloud Platform
   - logon credentials such as user and password under **User for Outbound Communication**

2. In the **Communication Arrangements** app, create a new communication arrangement with the Scenario ID SAP_COM_0234 or SAP_COM_0258 and a name.
   Add the communication system from the previous step and make sure that
   - you activated the **Service Status** and
   - you entered the **Path** under **Outbound Services**.

   - **i Note**
   
   The path doesn’t need any path enhancement, such as `/send`, `/bounces`, `/complaints`, or `/verifiedSenders`.

   - **Example**
   
   In SAP Cloud Platform you’ve defined an iFlow with the following settings:
   - Type of the adapter = HTTPS
   - Connection address = `/sap_mkt_cloud/send`
   
   In the communication arrangement, you must enter the **Path** `/http/sap_mkt_cloud` without the path enhancement `/send`.

   The **Service URL** looks, for example, like `https://<hostname of SAP Cloud Platform Integration>:443/http/sap_mkt_cloud`. 
3. After the activation of your communication arrangement, choose the Sender Profiles app and complete the incomplete entries:
   - Profile ID GNML for emails
   - Profile ID GENS for text messages
   Open the profile GNML and enter a valid email address as Sender Address.

**Set Up with Certificates**

**Note**
The following steps describe the setup by usage of SAP Cloud Platform.

1. In the Communication Systems app, you create the system entry by entering host name of SAP Cloud Platform and choose the Authentication Method SSL Client Certificate under User for Outbound Communication.
2. In the Communication Arrangements app, create a new communication arrangement with the Scenario ID SAP_COM_0234 or SAP_COM_0258 and a name.
   Add the communication system from the previous step and make sure that
   - you activated the Service Status and
   - you entered the Path under Outbound Services.

**Note**
The path doesn't need any path enhancement, such as /send, /bounces, /complaints, or /verifiedSenders.

**Example**
In SAP Cloud Platform you've defined an iFlow with the following settings:
- Type of the adapter = HTTPS
- Connection address = /sap_mkt_cloud/send

In the communication arrangement, you must enter the Path /http/sap_mkt_cloud without the path enhancement /send.

The Service URL looks, for example, like https://<hostname of SAP Cloud Platform Integration>:443/http/sap_mkt_cloud.

3. To use the certificates, you have to download them in the Communication Arrangements app for the corresponding communication arrangement under Outbound Communication Download Authentication Certificate.
4. Then switch to the SAP Cloud Platform, choose Design Artifacts. Then open the iFlow Adapter and select the outbound communication channel that needs the certificate.
   Under Connection Authorization, select Client Certificate, choose Add Select, and upload the certificate from the Communication Arrangements app.
   Don't forget to save and deploy the iFlow.
5. After the activation of your communication arrangement, choose the Sender Profiles app and complete the incomplete entries:
   ○ Profile ID GNML for emails
   ○ Profile ID GEN5 for text messages

Open the profile GNML and enter a valid email address as Sender Address.

More Information

- Consuming the Integration APIs [page 390]
- SAP Marketing Cloud – Connect any email service provider to SAP Marketing Cloud
- SAP Marketing Cloud – Connect any text message service provider to SAP Marketing Cloud
- SAP Help Portal: SAP Cloud Platform Integration
  - Discover
  - What is SAP Cloud Platform Integration
  - SAP Cloud Platform Integration
  - Connecting a Customer System to Cloud Integration
- Cloud Integration – How to Setup Secure HTTP Inbound Connection with Client Certificates

4.3.1.1.3.1 Generic Email and Text Message Integration

With this REST service and methods you integrate any email and text message service provider (SP) with a system of SAP Marketing Cloud. For email you use scenario ID SAP_COM_0234 and for text message you use SAP_COM_0258.

Using the campaign automation, you can send emails or text messages to your customers.

The email bodies contain personalized content and trackable links. Countable interactions are, for example, email opened, link clicked, and email hard bounce. Emails are sent using a REST service to an email SP.

The text messages contain personalized content. Text messages are sent using a REST service API to an SP for text messages.

The integration is a pure outbound scenario. You require an account and license on the email or text message SP's side.

⚠️ Caution

When you connect an email or text message service provider, it’s your responsibility to establish the connection by implementing the methods defined by SAP. This is also valid for required enhancements on the SAP Cloud Platform, such as doing the mapping or persisting data.
### Methods for Email Integration

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Action</th>
<th>Path Enhancement (that must be the same in SAP Cloud Platform)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td><strong>Send Emails</strong></td>
<td>/send</td>
</tr>
<tr>
<td></td>
<td>Mandatory method</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: Send Emails [page 111]</td>
<td></td>
</tr>
<tr>
<td>GET</td>
<td><strong>Get Bounces</strong></td>
<td>/bounces</td>
</tr>
<tr>
<td></td>
<td>Email: Get Bounces [page 115]</td>
<td></td>
</tr>
<tr>
<td>GET</td>
<td><strong>Get Complaints</strong></td>
<td>/complaints</td>
</tr>
<tr>
<td></td>
<td>Email: Get Complaints [page 117]</td>
<td></td>
</tr>
<tr>
<td>GET</td>
<td><strong>Get Unsubscribes</strong></td>
<td>/unsubscribes</td>
</tr>
<tr>
<td></td>
<td>Email: Get Unsubscribes [page 118]</td>
<td></td>
</tr>
<tr>
<td>GET</td>
<td><strong>Get Verified Senders</strong></td>
<td>/verifiedSenders</td>
</tr>
<tr>
<td></td>
<td>Mandatory method</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: Get Verified Senders [page 119]</td>
<td></td>
</tr>
</tbody>
</table>

### Methods for Text Message Integration

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Action</th>
<th>Path Enhancement (that must be the same in SAP Cloud Platform)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td><strong>Send</strong></td>
<td>/send</td>
</tr>
<tr>
<td></td>
<td>Mandatory method</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Text Message: Send [page 120]</td>
<td></td>
</tr>
<tr>
<td>GET</td>
<td><strong>Collect Delivery Status</strong></td>
<td>/status</td>
</tr>
<tr>
<td></td>
<td>Text Message: Collect Delivery Status [page 123]</td>
<td></td>
</tr>
<tr>
<td>GET</td>
<td><strong>Get Unsubscribes</strong></td>
<td>/unsubscribes</td>
</tr>
<tr>
<td></td>
<td>Text Message: Get Unsubscribes [page 125]</td>
<td></td>
</tr>
</tbody>
</table>

### 4.3.1.1.3.1.1 Email: Send Emails

With this method you send the emails to your email service provider (ESP).

*Note*

This method is **mandatory** for the integration.
## Request

**URI:** /send

**HTTP Method:** POST

### Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bodyContentHTML</td>
<td>Yes</td>
<td>String</td>
<td>Body Content. Format: HTML, JSON encoded</td>
</tr>
<tr>
<td>bodyContentPlainText</td>
<td>Yes</td>
<td>String</td>
<td>Body Content (for multipart or alternative email MIME). Format: Plain Text, JSON encoded</td>
</tr>
<tr>
<td>campaignId</td>
<td>No</td>
<td>String</td>
<td>Campaign ID of the campaign that generates this email. Can be empty for send tests in campaign content and sender profile. Helpful for support.</td>
</tr>
<tr>
<td>listUnsubscribe</td>
<td>No</td>
<td>String</td>
<td>Header for list unsubscribe in raw format. Possible entries: mailto:&lt;email address&gt;, https::&lt;URL&gt;</td>
</tr>
<tr>
<td>outboundId</td>
<td>No</td>
<td>String</td>
<td>Unique identifier of outbound message generated by SAP Marketing Cloud</td>
</tr>
<tr>
<td>recipient</td>
<td>Yes</td>
<td>String</td>
<td>Recipient (To field)</td>
</tr>
<tr>
<td>recipientName</td>
<td>No</td>
<td>String</td>
<td>Recipient name. Not yet supported. Format: Plain Text, JSON encoded</td>
</tr>
<tr>
<td>replyTo</td>
<td>Yes</td>
<td>String</td>
<td>Reply-To Address (Reply-To field)</td>
</tr>
<tr>
<td>replyToName</td>
<td>Yes</td>
<td>String</td>
<td>Reply-To Name. Format: Plain Text, JSON encoded</td>
</tr>
<tr>
<td>sendAt</td>
<td>No</td>
<td>String</td>
<td>Timestamp for scheduled sends. Format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>sender</td>
<td>Yes</td>
<td>String</td>
<td>Sender Address (From field)</td>
</tr>
<tr>
<td>senderName</td>
<td>Yes</td>
<td>String</td>
<td>Sender Name. Format: Plain Text, JSON encoded</td>
</tr>
<tr>
<td>Parameter</td>
<td>Required</td>
<td>Data Type</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------</td>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>sourceSystem</td>
<td>No</td>
<td>String</td>
<td>Logical System (Netweaver). Required to get corresponding bounces and complaints related to outbound messages.</td>
</tr>
<tr>
<td>subjectContentPlain</td>
<td>Yes</td>
<td>String</td>
<td>Subject; Format: Plain Text, JSON encoded</td>
</tr>
<tr>
<td>type</td>
<td>No</td>
<td>String</td>
<td>Indicates for the middleware which integration flow for which type of ESP should be processed</td>
</tr>
</tbody>
</table>

**Request Example**

`/send`

HTTP method POST

Content-Type: application/json
Encoding: UTF-8

Body:

```json
{
    "type": "email",
    "outboundId": "33fds34534x4",
    "campaignId": "123456789",
    "sourceSystem": "XYZCLNT100",
    "sendAt": "20170328080000",
    "sender": "john.miller@example.com",
    "senderName": "John Miller",
    "replyTo": "news@example.com",
    "replyToName": "SAP News",
    "recipient": "recipient@example.com",
    "recipientName": "Recipient",
    "listUnsubscribe": "mailto:yyyy>, <http::zzz>"
    "subjectContentPlainText": "Hello Recipient",
    "bodyContentHtml": "<b>Hello, this email body is HTML<b>",
    "bodyContentPlainText": "Hello, this email body is plain text"
}
```
Response

Response Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>errorCategory</td>
<td>No</td>
<td>String</td>
<td>Permanently appearing errors lead to a stop of the campaign execution. Retryable errors result in multiple retries to resolve the issue before the campaign stops. Throttling reduces the throughput that is generated by the backend. Possible values are Retriable, Permanent, or Throttling.</td>
</tr>
<tr>
<td>errorText</td>
<td>No</td>
<td>String</td>
<td>Error text is written to the log and shown to the end user. Format: Plain Text</td>
</tr>
<tr>
<td>messageId</td>
<td>Yes</td>
<td>String</td>
<td>Unique identifier for outbound message provided by ESP. Could be 'outboundId' if supported by ESP, but not necessarily.</td>
</tr>
</tbody>
</table>

Response Codes

- The response refers only to the email sent using the connected service provider or SAP Cloud Platform. You can’t get bounces, such as email address is not valid, with the response. For more information, see Email: Get Bounces [page 115].
- Note that the success code must start with 2 followed by two digits, for example, 202.
- For erroneous responses the following generic codes are used:
  - 401 Unauthorized: This code stops the running campaign.
  - 403 Forbidden: This code stops the running campaign.
  - 429 Too Many Requests: With this code the system throttles the email delivery, such as in the case of the throttling for Amazon: How the System Reacts on Amazon's Throttling [page 136].

>Note

Keep in mind that these codes will only work when the errorCategory is empty. The errorCategory has always a higher priority then the error codes.

Response Example

```json
Success Code 202
Content-Type: application/json
{"messageId": "33fds34534r4"}
```
Error Example

Sample Code

Error Codes 4xx, 5xx:
{
  "errorCategory" : "Retriable"
  "errorText" : "Sending messages failed and can be retried."
}

Sample Code

Error Codes 4xx, 5xx:
{
  "errorCategory" : "Permanent"
  "errorText" : "Messages cannot be sent."
}

Sample Code

Error Codes 4xx, 5xx:
{
  "errorCategory" : "Throttling"
  "errorText" : "Throughput for sending messages is too high. Sending messages can be throttled."
}

4.3.1.1.3.1.2 Email: Get Bounces

With this method you request the bounces from your connected email service provider (ESP).

Request

URI: /bounces

HTTP Method: GET

Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
</table>
Parameter | Required | Data Type | Description
---|---|---|---
startTimeUTC | Yes | String | Timestamp to begin with query collected bounces on ESP side. Format: YYYYMMDDHHMMSS.
endTimeUTC | Yes | String | Timestamp to end with query collected bounces on ESP side. Format: YYYYMMDDHHMMSS.
page | No | Integer | Indicates the result page in case of multiple pages. Possible values are 0 to n.

**Request Example**

```
/bounces
GET
sourceSystem=XYZCLNT100
startTimeUTC=20181115221500
endTimeUTC=20181115223000
Page=2
```

**Response**

**Response Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
</table>
page | No | Integer | Indicates the result page in case of multiple pages. Possible values are 0 to n. |
lastPage | Yes | Boolean | Indicates the last page of the result. |
bounces | Yes | JSON Array | Contains the bounce details. |
messageId | No | String | Reference to outbound message, see sending interface. |
recipient | Yes | String | The email address that bounced or created a complaint. Value: <email address> |
type | Yes | String | Type of feedback, depending on bounce or complaint use case. Possible values are: Hard, Soft, abuse, fraud, virus, other, not-spam |
timestamp | No | String | Timestamp when bounce occurred. Format: YYYYMMDDHHMMSS |
errorCode | No | String | Error code for bounces. Possible entries are: DSN error code (X.Y.Z), SMTP error code (XYZ) |
errorText | No | String | Error text for bounce message. |

**Response Example**

```json
{
  "page": "2",
  "lastPage": "false",
  "bounces": [ ]]```
"bounces": [
  {
    "messageId"   : "12343243243413",
    "recipient"   : "bounce@example.com",
    "errorCode"   : "5.1.1.",
    "errorText"   : "Address does not exist",
    "Type"        : "Hard",
    "Timestamp"   : "20181116093500"
  }
]

4.3.1.1.3.1.3 Email: Get Complaints

With this method you request the complaints from the connected email service provider (ESP).

For the parameter values please refer to Email: Get Bounces [page 115].

Request

URI: /complaints

HTTP Method: GET

Request Example

```
/complaints
GET
sourceSystem=XYZCLNT100
startTimeUTC=20180925211500
endTimeUTC=20180925213000
Page=2
```

Response

Response Example

```
{
  "page":"2",
  "lastPage":"false",
  "complaints": [
    {
      "messageId"   : "12343243243413",
      "recipient"   : "spam@example.com",
      "Type"        : "abuse",
      "Timestamp"   : "20180926093500"
    }
  ]
}
```
4.3.1.3.1.4 Email: Get Unsubscribes

With this method you request the unsubscribes from your connected email service provider (ESP).

Request

URI: /unsubscribes
HTTP Method: GET

Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sourceSystem</td>
<td>No</td>
<td>String</td>
<td>Logical system that is required to get unsubscribes related to outbound messages.</td>
</tr>
<tr>
<td>startTimeUTC</td>
<td>No</td>
<td>String</td>
<td>Timestamp to begin with query collected unsubscribes on ESP side. Not required for bounce queue. Format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>endTimeUTC</td>
<td>No</td>
<td>String</td>
<td>Timestamp to end with query collected unsubscribes on ESP side. Not required for bounce queue. Format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>page</td>
<td>No</td>
<td>Integer</td>
<td>Indicates the result page in case of multiple pages. Possible values are 0 to n</td>
</tr>
</tbody>
</table>

Request Example

```
/unsubscribes
GET
sourceSystem=XYZCLNT100
startTimeUTC=20180815064512
endTimeUTC=20180815073422
Page=2
```

Response

Response Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>No</td>
<td>Integer</td>
<td>Indicates the result page in case of multiple pages. Possible values are 0 to n</td>
</tr>
<tr>
<td>lastPage</td>
<td>Yes</td>
<td>Boolean</td>
<td>Indicates the last page of the result.</td>
</tr>
<tr>
<td>unsubscribes</td>
<td>Yes</td>
<td>JSON Array</td>
<td>Contains the unsubscribe details.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Required</td>
<td>Data Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>outboundId</td>
<td>No</td>
<td>String</td>
<td>Reference to outbound message, see sending interface. Unique identifier of outbound message generated by SAP Marketing Cloud.</td>
</tr>
<tr>
<td>messageId</td>
<td>No</td>
<td>String</td>
<td>This is the ESP-specific message ID provided by the generic provider.</td>
</tr>
<tr>
<td>recipient</td>
<td>Yes</td>
<td>String</td>
<td>The email address that unsubscribed. Value: &lt;email address&gt;</td>
</tr>
<tr>
<td>timestamp</td>
<td>Yes</td>
<td>String</td>
<td>Timestamp when unsubscribe occurred. Format: YYYYMMDDHHMMSS</td>
</tr>
</tbody>
</table>

**Response Example**

```json
{
  "page": "2",
  "lastPage": "false",
  "unsubscribes": [
    {
      "messageId": "12343243243413",
      "recipient": "unsubscribe@example.com",
      "timestamp": "20180817163255"
    }
  ]
}
```

In the SAP system, a multi-level approach is implemented and, for example, the `outboundId` is evaluated first. But in case the `outboundId` is not provided and is, for example, initial, the `messageId` is evaluated. And in case, the `messageId` is not provided, too, email address is evaluated (recipient).

**Note**

Note: If one of the regarding values (`outboundId, messageId`) is not initial, the system takes the entries as valid. A fall back on other levels only happens when the previous level values are initial.

**4.3.1.3.1.5 Email: Get Verified Senders**

With this method you get the verified senders from your connected email service provider (ESP).

**i Note**

This method is mandatory for the integration. Only with this method implemented, you can:

- maintain sender profiles
- send test emails
- send emails out of a campaign
→ Recommendation

We recommend to use your customer domain as senderDomains instead of *. 

Request

URI: /verifiedSenders

HTTP Method: GET

Request Example

/verifiedSenders
GET

Response

Response Example

Response
{
  "senders": [ "sender1@example.com", "sender2@example.com" ],
  "senderDomains": [ "news.sap.com", "sap.com", "example.com" ]
}

4.3.1.1.3.1.6 Text Message: Send

With this method you send text messages to your connected text messaging service provider.

Request

URI: /send

HTTP Method: POST
### Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>No</td>
<td>String</td>
<td>Indicates for the middleware which integration flow for which type of service provider should be processed; entry 'sms'</td>
</tr>
<tr>
<td>outboundId</td>
<td>No</td>
<td>String</td>
<td>Unique identifier of outbound message generated by SAP Marketing Cloud</td>
</tr>
<tr>
<td>campaignId</td>
<td>No</td>
<td>String</td>
<td>Campaign ID of SAP Marketing Cloud that generates this email. Can be empty for send tests in campaign content and sender profile. Helpful for support.</td>
</tr>
<tr>
<td>sourceSystem</td>
<td>No</td>
<td>String</td>
<td>Logical System (SAP Neaver). Required to get corresponding bounces or complaints related to outbound messages.</td>
</tr>
<tr>
<td>sender</td>
<td>Yes</td>
<td>String</td>
<td>Sender address; name or phone number</td>
</tr>
<tr>
<td>recipient</td>
<td>Yes</td>
<td>String</td>
<td>Recipient; phone number</td>
</tr>
<tr>
<td>bodyContentPlainText</td>
<td>Yes</td>
<td>String</td>
<td>Body content as plain text and JSON encoded.</td>
</tr>
</tbody>
</table>

### Request Example

```json
{  "type" : "sms",  "outboundId" : "33fds34534r4",  "campaignId" : "123456789",  "sourceSystem" : "ANACLNT100",  "sender" : "SAP News",  "recipient" : "+49123456789",  "bodyContentPlainText" : "Hello, this is plain text"}
```

---

### Sample Code

Path `/send`  
HTTP method POST  
Content-Type: application/json  
Encoding: UTF-8

Body:

```json
{  "type" : "sms",  "outboundId" : "33fds34534r4",  "campaignId" : "123456789",  "sourceSystem" : "ANACLNT100",  "sender" : "SAP News",  "recipient" : "+49123456789",  "bodyContentPlainText" : "Hello, this is plain text"}
```
Response

Response Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>messageId</td>
<td>Yes</td>
<td>String</td>
<td>Unique identifier for out-bound message provided by service provider. Could be outboundId if supported by service provider.</td>
</tr>
<tr>
<td>errorCategory</td>
<td>No</td>
<td>String</td>
<td>Permanent errors lead to a stop of the campaign execution. Errors that can be fixed by a retry result in multiple retries to resolve the issue before the campaign stops. Throttling reduces the throughput that is generated by the backend. Possible values are Retriable, Permanent, or Throttling.</td>
</tr>
<tr>
<td>errorText</td>
<td>No</td>
<td>String</td>
<td>Error text is written to the log and shown to the end user in plain text.</td>
</tr>
</tbody>
</table>

i Note

- The response refers only to the text message sent using the connected service provider or SAP Cloud Platform. You can’t get bounces, such as phone number is not valid, with the response. For more information, see Text Message: Collect Delivery Status [page 123].
- Note that the success code must start with 2 followed by two digits, for example, 202.

Response Example

```sample_code
Response:
Success Code 202
Content-Type: application/json

{   "messageId": "33fds34534r4"
}
```

Error Example

```sample_code
Error Codes 4xx, 5xx:

{   
```
4.3.1.3.1.7 Text Message: Collect Delivery Status

With this method you get back the status of your connected text messages sent.

Request

URI: /status
HTTP Method: GET

Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sourceSystem</td>
<td>No</td>
<td>String</td>
<td>Logical System (SAP NetWeaver). Required to get corresponding bounces or complaints related to outbound messages.</td>
</tr>
<tr>
<td>startTimeUTC</td>
<td>No</td>
<td>String</td>
<td>Timestamp to begin with query collected bounces on service provider side. Not needed in case of a bounce queue; format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>endTimeUTC</td>
<td>No</td>
<td>String</td>
<td>Timestamp to end with query collected bounces on service provider side. Not needed in case of a bounce queue; format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>page</td>
<td>No</td>
<td>Integer</td>
<td>Indicates the result page in case of multiple pages; possible values: 0..n</td>
</tr>
</tbody>
</table>

Request Example

```
/status
GET
sourceSystem=ANACLNT100
startTimeUTC=20170912144813
dendTimeUTC=20170913144813
Page=2
```
# Response

## Response Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>No</td>
<td>Integer</td>
<td>Indicates the result page in case of multiple pages. Possible values are 0 to n</td>
</tr>
<tr>
<td>lastPage</td>
<td>Yes</td>
<td>Boolean</td>
<td>Indicates the last page of the result.</td>
</tr>
<tr>
<td>status</td>
<td>Yes</td>
<td>JSON Array</td>
<td>Contains the bounce details.</td>
</tr>
<tr>
<td>messageId</td>
<td>No</td>
<td>String</td>
<td>Reference to outbound message, see sending interface.</td>
</tr>
<tr>
<td>recipient</td>
<td>Yes</td>
<td>String</td>
<td>The phone number that bounced or created a complaint. Value: phone number</td>
</tr>
<tr>
<td>type</td>
<td>Yes</td>
<td>String</td>
<td>Type of feedback, depending on bounce or complaint use case. Possible values: Permanent or Temporary. Note that the type is mapped in the SAP system as followed: Permanent - hard bounce Temporary - soft bounce</td>
</tr>
<tr>
<td>timestamp</td>
<td>No</td>
<td>String</td>
<td>Timestamp when bounce occurred. Format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>statusCode</td>
<td>No</td>
<td>String</td>
<td>The status code that your connected service provider sends back to inform you about the delivery status. Keep in mind that - status codes can’t be mapped to statuses in the SAP system and - shall not be longer than 10 characters due to further processing.</td>
</tr>
<tr>
<td>errorText</td>
<td>No</td>
<td>String</td>
<td>Error text for bounce message.</td>
</tr>
</tbody>
</table>

## Response Example

### Sample Code

```json
{
   "page": 2,
   "lastPage": false,
   "status": [
      {
         "messageId": "12343243243413",
         "recipient": "+49123456789",
         "statusCode": "10",
         "statusText": "Number does not exist",
         "type": "Permanent",
         "timestamp": "20170913144813"
      }
   ]
}
```
4.3.1.3.1.8 Text Message: Get Unsubscribes

With this method you request the unsubscribes (also known as 'Stop Trigger') from your connected text message provider.

Request

URI: /unsubscribes
HTTP Method: GET

Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sourceSystem</td>
<td>No</td>
<td>String</td>
<td>Logical system that is required to get unsubscribes related to outbound messages.</td>
</tr>
<tr>
<td>startTimeUTC</td>
<td>Yes</td>
<td>String</td>
<td>Timestamp to begin with query collected unsubscribes on service provider side. Format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>endTimeUTC</td>
<td>Yes</td>
<td>String</td>
<td>Timestamp to end with query collected unsubscribes on ESP side. Format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>page</td>
<td>No</td>
<td>Integer</td>
<td>Indicates the result page in case of multiple pages; possible values: 0..n</td>
</tr>
</tbody>
</table>

Request Example

```
/unsubscribes
GET
sourceSystem=ABCClNT100
startTimeUTC=20180815064512
endTimeUTC=20180815073422
Page=2
```

Response

Response Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>No</td>
<td>Integer</td>
<td>Indicates the result page in case of multiple pages. Possible values are 0 to n</td>
</tr>
</tbody>
</table>

Integration Guide

Integration Scenarios
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>lastPage</td>
<td>Yes</td>
<td>Boolean</td>
<td>Indicates the last page of the result.</td>
</tr>
<tr>
<td>unsubscribe</td>
<td>Yes</td>
<td>JSON Array</td>
<td>Contains the unsubscribe details.</td>
</tr>
<tr>
<td>outboundId</td>
<td>No</td>
<td>String</td>
<td>Reference to outbound message, see sending interface. Unique identifier of outbound message generated by SAP Marketing Cloud.</td>
</tr>
<tr>
<td>messageId</td>
<td>No</td>
<td>String</td>
<td>Reference to an outbound ID provide by the generic ESP.</td>
</tr>
<tr>
<td>recipient</td>
<td>Yes</td>
<td>String</td>
<td>Phone number of the original text message that replied with an unsubscribe (stop trigger). Value: phone number</td>
</tr>
<tr>
<td>sender</td>
<td>No</td>
<td>String</td>
<td>Phone number to which the unsubscribe (stop trigger) was sent. Value: phone number</td>
</tr>
<tr>
<td>timestamp</td>
<td>Yes</td>
<td>String</td>
<td>Timestamp when unsubscribe occurred. Format: YYYYMMDDHHMMSS</td>
</tr>
<tr>
<td>messageText</td>
<td>No</td>
<td>String</td>
<td>Message text that was sent with the unsubscribe, for example, the campaign ID.</td>
</tr>
</tbody>
</table>

**Response Example**

```plaintext
{
    "page": 2,
    "lastPage": false,
    "unsubscribe": [
        {
            "outboundId" : "AHGB789345",
            "recipient" : "+49123456789",
            "messageText" : "Stop 0815",
            "timestamp" : "20180913144813"
        }
    ]
}
```

In the SAP system, a multi-level approach is implemented and, for example, evaluates

- `outboundId` first, in case that it is not provided
- `messageId`, in case it is not provided
- mobile number (recipient) only.

For this level the system evaluates the message text if it contains a campaign ID. In this case the campaignID is considered with regards to marketing area separation.

**Note:** If one of the regarding values (outboundId, messageId) is not initial, the system takes the values as valid ones.

A fall back on other levels only happens, when the previous level values are initial.
4.3.1.1.4  Amazon Setup

The integration with Amazon is very powerful and covers a wide span of functionality for email and text message campaigns.

The following graphic gives you an overview how the integration roughly works and how the data flows. In addition there are links, where suitable for the setup or other useful information.
Enabling Automatic Unsubscribe for Emails by Amazon

Setting Up Amazon

Bounces, Unsubscribes, and Complaints

Bounces, Unsubscribes, and Complaints

Related Information

Service Provider and Available Features

4.3.1.1.4.1 Setting Up Amazon

To establish the connection to Amazon’s Simple Email Service (SES) for email and bounce handling, you must do several steps at Amazon and at SAP.

Prerequisites

The following prerequisites exist for setting up Amazon as an email service provider:

- Use the Campaign Execution Whitelists app during the system setup and test phase. The settings in the app prevent that target group members (contacts) receive emails when you execute an email campaign for test purposes. For more information, see Campaign Execution Whitelist.
- You are familiar with the basics of the Amazon Service for Emails, Notifications and Queues:
  - [aws.amazon.com/de/documentation/ses/](aws.amazon.com/de/documentation/ses/)
  - [aws.amazon.com/de/documentation/sns/](aws.amazon.com/de/documentation/sns/)
  - [aws.amazon.com/de/documentation/sqs/](aws.amazon.com/de/documentation/sqs/)
- You have access granted on Amazon for the following API methods:
  - SendRawEmail (SES)
  - ListIdentities (SES)
  - GetIdentityVerificationAttributes (SES)
  - GetSendQuota (SES)
  - ReceiveMessage (SQS)
  - DeleteMessageBatch (SQS)
  - SendRawEmail
  - ListIdentities
  - GetIdentityVerificationAttributes
  - GetSendQuota
  - ReceiveMessage
  - DeleteMessageBatch

For more information, see Controlling Access to Amazon SES.

Procedure

1. To send marketing emails to your customers, you have to configure Amazon Web Services (AWS). For more information, see Setting up Amazon.
2. After you did the configuration at Amazon, you go further with the configuration at SAP. Download the certificates and import them to the SAP system. For more information, see Importing Certificates [page 132].

3. Establish the system connection between Amazon and SAP. For more information, see Establishing System Connection [page 132].

Next Steps

i Note

The following blog is not part of the official documentation of SAP Marketing Cloud and some of the information may be outdated.

Related Information

How the System Reacts on Amazon’s Throttling [page 136]

4.3.1.1.4.1.1 Setting up Amazon

Here you create an Amazon Web Services (AWS) account and verified email addresses. Then you configure your SNS topics and bounce queues, create Identity and Access Management (IAM) users, generate your credentials for the Simple Email Service (SES), and set up group administration for your users to assign policies.

Procedure

1. Create an Amazon Web Services (AWS) account to get an account ID and password.

2. Log in to https://console.aws.amazon.com with your credentials.

3. Ensure, to select the correct region you intend to use. You see the region beside your account ID in the AWS Console itself and in the URL of your browser, for example, https://eu-west-1.console.aws.amazon.com/ses/home?region=eu-west-1#.

4. In the AWS Console under Identity Management, create the required verified sender email addresses under Email Addresses.

You need the verified sender address, when you define a sender profile later on.
Keep in mind that the MAIL FROM Domain of your verified email addresses must in the same region as the Host Name entered in the system connection later on.

For more information, see Regions and Amazon SES.

5. Now edit the notification configuration for the verified sender email address by choosing Notifications Edit Configuration Click here to create a new Amazon SNS topic.

An Edit Notification Configuration popup opens.

Create a new Amazon SNS topic, for example, for bounces and complaints. Give the new topic the same name as the feedback queue, such as AMAZON_BOUNCE.

6. Then under SNS Topic Configuration select the previously created topics for bounces and complaints.

Note that you don’t maintain a topic for deliveries. The system is not able to handle the delivery notification.

7. Also in the Edit Notification Configuration popup under Email Feedback Forwarding, disable the email feedback forwarding.

8. Save your configuration.

After the saving you can find your Amazon Resource Names (ARN) under Notifications.

For more information, see also Amazon Resource Names (ARNs) and AWS Service Namespaces.

9. In the SQS console, create a new queue with the same name you gave the feedback queue in technical configuration.

To do so, choose SQS Create New Queue and enter a topic name from the previous steps. Keep all other values as default and save your entries.

10. Subscribe to new queue to the SNS topic you created earlier.

a. Go to your AWS-SES account and choose Security Credentials.

b. Under Your Security Credentials, you create an IAM user required to send or used in Sender Profiles. We recommend to use IAM users to send emails as you can control with them the permissions and authorizations.

11. To start, choose Get Started with IAM Users:

a. Choose Create New Users.

b. Enter the user names.

c. Select Generate an access key for each user.

d. Choose Create.

A confirmation message should appear that the users have been created.

12. Now you have set up an account at Amazon for and you receive the following parameters during account set-up:

- Amazon Access Key ID (hash string)
- Secret Access Key (hash string)
- Feedback Queue Path

The Feedback Queue Path is the last individual portion of the queue URL at Amazon. For example, the path from https://sqs.eu-west-1.amazonaws.com/NNNNNNNNNNNN/ABC is /NNNNNNNNNNNN/ABC.

Note that you need these parameters again in the apps Communication Systems and Communication Arrangements.
13. In the AWS Dashboard under **Groups**, create a new group to assign policies to users. For example, create a group named **Administrator** and assign all the admin policies in the **Attach Policies** step.

14. To assign users to the created group, choose **Group Actions** > **Add Users to Group**.

### 4.3.1.4.1.2 Importing Certificates

---

**i Note**

The following blogs are not part of the official documentation of SAP Marketing Cloud and some of the information may be outdated.

---

The following blogs describe how to download and import the certificates to SAP Marketing Cloud:

- Heads-up: Amazon Simple Email Services (SES) change Certificates

### 4.3.1.4.1.3 Establishing System Connection

After you have downloaded and imported the certificated, you now have to establish the connection between Amazon and the SAP system.

**Context**

For already existing customers: If you are changing something in the settings for your system connection after the upgrade from a lower release to release 1902 or higher, you must re-enter data that you have maintained previously in the **Provider Credentials** app:

- For scenario ID **SAP_COM_0016**, you have maintained the credentials (access key and secret key) in the **Communication Systems** app.
- For scenario IDs **SAP_COM_0039** and **SAP_COM_0289**, you have maintained the corresponding paths in the **Communication Arrangements** app under **Outbound Services**.

**Using Several Accounts**

If you want to use several accounts, you must do the steps above for each account separately. To get more information about the dependencies in the setup, see [Usage of Multiple Service Provider Instances][page 147].

**Procedure**

1. To be able to establish the system connection, check that the apps **Communication System** and **Communication Arrangements** are assigned to your user.
2. In the Communication Systems app you create the connection with the SAP system and define a communication user with user and password.
   a. Enter a System ID and System Name.
   b. Enter the host names, you got from Amazon. You require different hosts, depending whether you want to create a communication system for sending emails or for bounce and unsubscribe handling.
      - Host Name for emails (Amazon SES): email.eu-west-1.amazonaws.com
      - Host Name for bounce and unsubscribe handling (Amazon SQS): sqs.eu-west-1.amazonaws.com
      Note that you have to use different host names when you are using Amazon in another region than, for example, EU–WEST.
   c. Under User for Outbound Communication create a user with your provider credentials by choosing Add.
      You use for emails (Amazon SES) your real credentials, called Access Key (User) and Secret Key (Password).
      Whereas for bounce and unsubscribe handling (Amazon SQS), you use a dummy user with a generic password.

3. Establish the communication arrangement in the Communication Arrangement app.
   a. To create a new arrangement choose New, select the required Scenario and enter an Arrangement Name.
      Technical details for the communication arrangement:
      - Communication Arrangement for Emails
        Scenario: SAP_COM_0016
      - Communication Arrangement for Bounce Handling
        Scenario: SAP_COM_0039
      - Communication Arrangement for Unsubscribe
        Scenario: SAP_COM_0289
   b. Select the previously created Communication System which fits to the scenario.
   c. Depending on the used setup enter, as far as it applies, the following Additional Properties: Enter a Provider ID and Sender Profile ID, and assign a suitable Marketing Area ID.
      - For emails (SAP_COM_0016) enter a Provider ID, Sender Profile ID, and assign a suitable Marketing Area ID.
      - For bounce handling (SAP_COM_0039) and unsubscribe handling (SAP_COM_0289) enter the SAME (!) Provider ID as you created it for emails (SAP_COM_0016).
      In case, you want to use multiple Amazon instances, use the Provider ID of that SAP_COM_0016 instance that you want to connect to the regarding bounce and unsubscribe instances.
   d. Under Outbound Services check that the Service Status is activated, and Port 443 is used.
      In addition, check the paths:
      - Scenario: SAP_COM_0016
        Path: no path
      - Scenario: SAP_COM_0039
        Path: The path (also known as Feedback Queue Path) is the last individual portion of the queue URL at Amazon. For example, the path from https://sqs.eu-west-1.amazonaws.com/NNNNNNNNNNNN/ABC is /NNNNNNNNNNNN/ABC.
      - Scenario: SAP_COM_0289
**Path**: The path is the last individual portion of the queue URL at Amazon for unsubscribe. For example, the path from https://sqs.eu-west-1.amazonaws.com/NNNNNNNNNNNN/ABC is /NNNNNNNNNNNN/ABC.

For more information, see Enabling Automatic Unsubscribe for Emails by Amazon [page 134].

e. Now save your entries.

During the save the system establishes the required system connection and creates a provider and sender profile.

Note that if you change an already existing communication arrangement in release 1902 and higher, you must

○ maintain your user credentials, called Access Key (User) and Secret Key (Password), in the Communication Systems app.

○ maintain the paths in the Communication Arrangements app.

4. Finally maintain your sender profiles. For more information, see Sender Profiles [page 156].

**Related Information**

Consuming the Integration APIs [page 390]

**4.3.1.4.1.4 Useful Blog**

**i Note**

The following blog is not part of the official documentation of SAP Marketing Cloud and some of the information may be outdated:

How to Set Up Amazon SES as Email Service Provider

**4.3.1.4.2 Enabling Automatic Unsubscribe for Emails by Amazon**

When you want to use the unsubscribe offered by Amazon, you need to do settings at Amazon and at SAP.

After you did all the settings, the header of the recipient’s email contains the possibility to unsubscribe.

If the contact does not want to get further emails, she or he sends an unsubscribe request to the unsubscribe email address entered in the sender profile. The unsubscribe requests are collected on Amazon side in a queue. A background job then pulls the unsubscribe requests from Amazon and creates corresponding interactions in the system. The system evaluates the interactions and updates marketing permissions or list subscriptions for the marketing contact.
In detail the following steps will happen:

1. The marketing expert executes an email campaign.
2. The system sends out the marketing emails.
3. A recipient is getting an email in the inbox.
4. The recipient unsubscribes by clicking on the option in the email header.
5. Email client sends an unsubscribe request to unsubscribe email address of Amazon.
6. Amazon collects unsubscribe requests in a queue.
7. SAP pulls the unsubscribe requests and creates interactions.
8. Based on the interactions the system updates marketing permissions and list subscriptions.

**Prerequisites**

You need the communication scenarios *Marketing - Campaign Execution - Amazon E-Mail Integration* (SAP_COM_0016) and optionally *Marketing - Campaign Execution - Amazon E-Mail Bounce Integration* (SAP_COM_0039).

**Setup**

At Amazon
1. Create and configure an AWS account. For more information, see Before You Begin.

2. Registering a New Domain.

3. Check and verify your domain. For more information, see Verify your Domain; Amazon SES Domain Verification TXT Records, and Publishing an MX Record for Amazon SES Email Receiving.

4. Now you can create your rule set. For more information, see Set up a Receipt Rule. Note that when you create a rule, choose action type SNS (instead of S3 mentioned in the documentation) and give the SNS topic a meaningful name such as unsubscribe.

5. Then create a queue with Amazon Simple Queue Service (SQS) by choosing Subscribe Queue to SNS Topic from the dropdown menu. Important here to know is that you must connect this queue with the previously created SNS topic. For more information, see Create a Queue in Amazon Simple Queue Service.

At SAP

1. Open the Communication Systems app and create, if not yet existing, an Amazon SQS system by maintaining the according data.

2. Open the Communication Arrangements app and create a communication arrangement for the communication system that was created in the previous step. Enter a / (slash) in the Path field. Use for the setup the Communication Scenario SAP_COM_0289.

3. Open the Sender Profiles app and add the Email Address for Unsubscribing. For more information, see Opting-Out and Unsubscribing by Email.

4. Create either a new domain or register an existing one using Amazon Route 53 for the Amazon Email sender profiles you use in the messages for your campaign execution.

4.3.1.1.4.3 How the System Reacts on Amazon's Throttling

When Amazon runs into throttling, Amazon returns an error message. The SAP system reacts on it by reducing the send rate and processing the failed messages.

When Amazon SES runs into throttling, it returns an error message with the following text: API error: Code "400", Reason: "Bad Request", Message: "Throttling Maximum sending rate exceeded."

This happens if the maximum send rate is exceeded.

The campaign execution reacts on it by reducing the number of parallel sent request to Amazon SES. Messages that failed due to the Amazon SES error are automatically reprocessed by the campaign execution.

As result of throttling the campaign execution needs more time to process all requests because it sends less in parallel to avoid that the maximum send rate is exceeded again.

→ Recommendation

If the issue still persists, we recommend to exceed the quota at Amazon.

For more information, see also information given by Amazon: What Happens When You Reach Your Sending Limits?
4.3.1.1.5 Setting Up Alibaba Cloud DirectMail Service

Set up Alibaba Cloud DirectMail Service so that you can use it to send emails to your customers. Configurations, including RFC destinations and sender profiles, are required.

Prerequisites

You should be familiar with the basics of Alibaba Cloud DirectMail Service. For product details and documentation, see Alibaba Cloud DirectMail Service at the Alibaba Cloud site.

If you want to get bounces from the Alibaba Cloud platform, you need a basic knowledge of Alibaba Cloud Message Service. For product details and documentation, see Alibaba Cloud Message Service at the Alibaba Cloud site.

The following are concrete prerequisites that you must meet:

- You have an account on the Alibaba Cloud platform (https://www.aliyun.com/).
- You have created a pair of access key and secret key for your Alibaba Cloud account in the Alibaba Cloud Console, under accesskeys. A pair of access key and secret key is required to call Alibaba Cloud APIs. Later you need to configure them in SAP Marketing Cloud.
- You have activated Alibaba Cloud DirectMail Service and completed the following configurations in the Alibaba Cloud DirectMail Service Console:
  - Email domain
    - See Setting Up Domain Names at the Alibaba Cloud site for instructions.
  - Sender address
    - When creating a sender profile in SAP Marketing Cloud, you must provide a sender address that has been configured in the DirectMail Service Console.
    - For instructions on how to create a sender address, see Setting Up Sender Addresses at the Alibaba Cloud site.
- You have activated Alibaba Cloud Message Service and created message queues in the Alibaba Cloud Message Service Console.
  - Use this service only if you want to get bounce data for e-mail campaigns from the Alibaba Cloud platform.
  - For instructions on how to create a message queue, see Queue Operations at the Alibaba Cloud site.
- You have a business role that contains the following business catalogs:

<table>
<thead>
<tr>
<th>Business Catalog</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security (SAP_CORE_BC_SEC)</td>
<td>This business catalog is required for importing SSL certificates into SAP Marketing Cloud. You can use the standard business role Administrator (SAP_BR_ADMINISTRATOR), which contains this business catalog and other administration-related catalogs.</td>
</tr>
</tbody>
</table>
### Business Catalog

<table>
<thead>
<tr>
<th>Catalog</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Management (SAP_CORE_BC_COM)</td>
<td>This business catalog is required for creating communication systems and communication arrangements. You can use the standard business role <strong>Administrator</strong> (SAP_BR_ADMINISTRATOR), which contains this business catalog and other administration-related catalogs.</td>
</tr>
<tr>
<td>Marketing – Segmentation and Campaign Configuration (SAP_CEC_BC_MKT_CPC_PC)</td>
<td>This business catalog is required for maintaining sender profiles. You can use the standard business role <strong>Administrator – Marketing</strong> (SAP_BR_ADMINISTRATOR_MKT), which contains this business catalog and other marketing administration-related catalogs.</td>
</tr>
</tbody>
</table>

### Procedure

1. Add the SSL certificates of Alibaba Cloud DirectMail Service and Alibaba Cloud Message Service to the trust list of SAP Marketing Cloud. For more information, see **Importing SSL Certificates** [page 138].

2. Create the technical configurations required to establish communication between Alibaba Cloud and SAP Marketing Cloud, including a communication system and a communication arrangement. For more information, see **Creating Communication Configurations** [page 139].

3. Create a sender profile. For more information, see **Creating a Sender Profile** [page 140].

### Related Information

- **Function Documentation: Email Campaigns Using Alibaba Cloud DirectMail Service**

### 4.3.1.5.1 Importing SSL Certificates

Import the SSL certificate for Alibaba Cloud DirectMail Service into SAP Marketing Cloud. If you want to get bounces from the Alibaba Cloud platform, import the SSL certificate for Alibaba Cloud Message Service as well.

Proceed as follows:

1. Download the SSL certificates from the following sites:
   - Certificate for Alibaba Cloud DirectMail Service: [https://dm.aliyuncs.com/](https://dm.aliyuncs.com/)
2. Log into SAP Fiori launchpad with a business role that contains the Security (SAP_CORE_BC_SEC) business catalog.
3. Open the Maintain Certificate Trust List app.
   The Upload Certificate window appears.
5. Upload a certificate.

4.3.1.1.5.2 Creating Communication Configurations

Create the required configurations, including a communication system that represents the Alibaba Cloud platform, and a communication arrangement that describes the communication between SAP Marketing Cloud and Alibaba Cloud DirectMail Service.

Creating a Communication System

1. Log into SAP Fiori launchpad with a business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog.
2. Open the Communication Systems app.
3. Choose New.
   The New Communication System dialog box appears.
4. Create a system ID and a system name, for example, ALIBABA_EMAIL and ALIBABA_EMAIL. Choose Create.
   The editing screen for the communication system appears.
5. In the Host Name field in the Technical Data section, enter aliyun.com, which is the host name of Alibaba Cloud services. Choose Save.
6. Configure the access key and secret key, as follows:
   1. In the User for Outbound Communication section, choose + (Add).
      The New Outbound User dialog box appears.
   2. Select the authentication method User Name and Password.
   3. Enter the access key in the User Name field and secret key in the Password field.
   4. Choose Create.
7. Save the communication system.
   Do not exit SAP Fiori launchpad.

Creating a Communication Arrangement

1. Open the Communication Arrangements app.
2. Choose New.
   The New Communication Arrangement dialog box appears.
3. Enter scenario SAP_COM_0231 and create an arrangement name, for example, ALIBABA EMAIL. Choose Create.
The editing screen for the communication arrangement appears.

4. In the **Communication System** field, enter the communication system that you created earlier.

5. In the **Additional Properties** section, enter the following properties:
   - **Service region code**
     You should enter a service region code defined by Alibaba Cloud. *cn-hangzhou* is an example of a service region code.
   - **Alibaba Cloud account ID and message queue for getting bounces**
     These properties are required only if you want to get bounce data from the Alibaba Cloud platform. You can find the Alibaba Cloud account ID from the Alibaba Cloud Console, under **Account Management > Security Settings**. The message queue for getting bounces is the one that you have created in the Alibaba Cloud Message Service Console under **Message Queue**.
   - **Provider ID**
     You can create your own provider ID. It should be unique in the system.
   - **Sender profile ID**
     You can create your own four-digit sender profile ID. It should be unique in the system.
   - **Marketing area ID**

6. Activate the outbound service **Send Emails Through Alibaba Cloud** by selecting the **Active** checkbox.

7. If you want to get bounce data from the Alibaba Cloud platform, activate the outbound service **Get Bounces from Alibaba Cloud** by selecting the **Active** checkbox.

8. Save the communication arrangement.

### 4.3.1.1.5.3 Creating a Sender Profile

Create a sender profile that contains settings about an email sender (for example, service provider and sender name) using the **Sender Profiles** app.

When you complete creating the required communication arrangement, the system creates a sender profile with the ID you have specified automatically. However, it is incomplete. You should fill in more information, such as sender address and sender name.

To create a sender profile for Alibaba Cloud DirectMail Service, proceed as follows:

1. Log into SAP Fiori launchpad with a business role that contains the Marketing – Segmentation and Campaign Configuration (**SAP_CEC_BC_MKT_CPC_PC**) business catalog.

2. Open the **Sender Profiles** app.

3. Select the sender profile with the ID specified in the communication arrangement from the left pane.

4. Choose **Edit**. You can also create a new sender profile based on it by choosing **Copy**.

5. Enter the required information.
   - The sender address that you enter must have been configured in the Alibaba Cloud DirectMail Service Console.
4.3.1.1.6 Setting Up Alibaba Cloud Short Message Service

Set up Alibaba Cloud Short Message Service (Alibaba Cloud SMS) so that you can use it to send text messages to your customers. Configurations, including RFC destinations, export definitions, and sender profiles, are required.

Prerequisites

You should be familiar with the basics of Alibaba Cloud SMS. For product details and documentation, see Alibaba Cloud SMS at the Alibaba Cloud site.

If you want to get bounces from the Alibaba Cloud platform, you need a basic knowledge of Alibaba Cloud Message Service. For product details and documentation, see Alibaba Cloud Message Service at the Alibaba Cloud site.

The following are concrete prerequisites that you must meet:

- You have an account on the Alibaba Cloud platform (https://www.aliyun.com). You have a business role that contains the following business catalogs:
- You have created a pair of access key and secret key for your Alibaba Cloud account in the Alibaba Cloud Console, under accesskeys. A pair of access key and secret key is required to call Alibaba Cloud APIs. Later you need to configure them in SAP Marketing Cloud.
  For instructions on how to create access keys and secret keys, see Creating an Access Key at the Alibaba Cloud site.
  ○ Text message signatures in the Alibaba Cloud SMS Console refer to sender names in SAP Marketing Cloud. When creating a sender profile in SAP Marketing Cloud, you must provide a sender name (text message signature) that has been approved by Alibaba Cloud. For instructions, see Applying For a Text Message Signature at the Alibaba Cloud site.
  ○ Text message templates. When creating a text message campaign in SAP Marketing Cloud, you must provide a text message template that has been approved by Alibaba Cloud.
  - You have activated Alibaba Cloud SMS and completed the following configurations in the Alibaba Cloud SMS Console:
  - You have activated Alibaba Cloud Message Service and created message queues in the Alibaba Cloud Message Service Console. Use this service only if you want to get bounce data for text message campaigns from the Alibaba Cloud platform.
    For instructions on how to create a message queue, see Queue Operations at the Alibaba Cloud site.
  - You have a business role that contains the following business catalogs:
<table>
<thead>
<tr>
<th>Business Catalog</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security (SAP_CORE_BC_SEC)</td>
<td>This business catalog is required for importing SSL certificates into SAP Marketing Cloud. You can use the standard business role Administrator (SAP_BR_ADMINISTRATOR), which contains this business catalog and other administration-related catalogs.</td>
</tr>
<tr>
<td>Communication Management (SAP_CORE_BC_COM)</td>
<td>This business catalog is required for creating communication systems and communication arrangements. You can use the standard business role Administrator (SAP_BR_ADMINISTRATOR), which contains this business catalog and other administration-related catalogs.</td>
</tr>
<tr>
<td>Marketing – Segmentation and Campaign Configuration (SAP_CEC_BC_MKT_CPC_PC)</td>
<td>This business catalog is required for maintaining sender profiles and export definitions. You can use the standard business role Administrator – Marketing (SAP_BR_ADMINISTRATOR_MKT), which contains this business catalog and other marketing administration-related catalogs.</td>
</tr>
<tr>
<td>Marketing – Business Administration (SAP_CEC_BC_MKT_ADM_PC)</td>
<td>This business catalog is required to run application jobs. To get the export definition predefined by SAP, you run a particular application job. You can use the standard business role Administrator – Marketing (SAP_BR_ADMINISTRATOR_MKT), which contains this business catalog.</td>
</tr>
</tbody>
</table>

**Procedure**

1. Add the SSL certificates of Alibaba Cloud SMS and Alibaba Cloud Message Service to the trust list of SAP Marketing Cloud. For more information, see Importing SSL Certificates [page 143].
2. Create the technical configurations required to establish communication between Alibaba Cloud and SAP Marketing Cloud, including a communication system and a communication arrangement. For more information, see Creating Communication Configurations [page 143].
3. Create a sender profile. For more information, see Creating a Sender Profile [page 145].
4. Create an export definition that contains personalization variables (customer attributes) to be used in campaign text messages. For more information, see Creating an Export Definition [page 145].
Related Information

Function Documentation: Text Message Campaigns Using Alibaba Cloud Short Message Service

4.3.1.1.6.1 Importing SSL Certificates

Import the SSL certificate for Alibaba Cloud SMS into SAP Marketing Cloud. If you want to get bounces from the Alibaba Cloud platform, import the SSL certificate for Alibaba Cloud Message Service as well.

Proceed as follows:

1. Download the SSL certificates from the following sites:
   - Certificate for Alibaba Cloud SMS: https://dysmsapi.aliyuncs.com/
2. Log into SAP Fiori launchpad with a business role that contains the Security (SAP_CORE_BC_SEC) business catalog.
3. Open the Maintain Certificate Trust List app.
5. Upload a certificate.

4.3.1.1.6.2 Creating Communication Configurations

Create the required configurations, including a communication system that represents the Alibaba Cloud platform, and a communication arrangement that describes the communication between SAP Marketing Cloud and Alibaba Cloud SMS.

Creating the Communication System

1. Log into SAP Fiori launchpad with a business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog.
2. Open the Communication Systems app.
4. Create a system ID and a system name, for example, ALIBABA_SMS and ALIBABA SMS. Choose Create. The editing screen for the communication system appears.
5. In the Host Name field in the Technical Data section, enter aliyuncs.com, which is the host name of Alibaba Cloud services. Choose Save.
6. Configure the access key and secret key, as follows:
   1. In the User for Outbound Communication section, choose + (Add).
The New Outbound User dialog box appears.

2. Select the authentication method User Name and Password.
3. Enter the access key in the User Name field and secret key in the Password field.
4. Choose Create.

7. Save the communication system. Do not exit SAP Fiori launchpad.

Creating the Communication Arrangement

1. Open the Communication Arrangements app.
2. Choose New.

The New Communication Arrangement dialog box appears.

3. Enter scenario SAP_COM_0232 and an arrangement name, for example, ALIBABA SMS. Choose Create. The editing screen for the communication arrangement appears.

4. In the Communication System field, enter the communication system that you created earlier.
5. In the Additional Properties section, enter the following properties:
   ○ Service region code
     You should enter a service region code defined by Alibaba Cloud. cn-hangzhou is an example of a service region code.
   ○ Alibaba Cloud account ID and message queue for getting SMS sending reports
     These properties are required only if you want to get bounce data from the Alibaba Cloud platform. The Alibaba Cloud account ID has a fixed value 1943695596114318. It is not the account ID that you can find from the Alibaba Cloud Console.
     You can find the message queue name from the Alibaba Cloud SMS Console, under Application Development > API > SMS Sending Report. The message queue name looks like Alicom-Queue-<a specific ID>-SmsReport.
   ○ Provider ID
     You can create your own provider ID.
   ○ Sender profile ID
     You can create your own sender profile ID.
   ○ Marketing area ID

6. Activate the outbound service Send SMS Messages Through Alibaba Cloud by selecting the Active checkbox.

7. If you want to get bounce data from the Alibaba Cloud platform, activate the outbound service Get Bounces from Alibaba Cloud by selecting the Active checkbox.

8. Save the communication arrangement.
4.3.1.1.6.3 Creating a Sender Profile

Create a sender profile that contains settings about a text message sender (for example, service provider and sender name) using the Sender Profiles app.

When you complete creating the required communication arrangement, the system creates a sender profile with the ID you have specified automatically. However, it is incomplete. You should fill in more information, such as sender address and sender name.

To create a sender profile for Alibaba Cloud SMS, proceed as follows:

1. Log into SAP Fiori launchpad with a business role that contains the Marketing – Segmentation and Campaign Configuration (SAP_CEC_BC_MKT_CPC_PC) business catalog.
2. Open the Sender Profiles app.
3. Select the sender profile with the ID specified in the communication arrangement from the left pane.
4. Choose Edit. You can also create a new sender profile based on it by choosing Copy.
5. Enter the required information.

**i Note**

Sender names in SAP Marketing Cloud refer to text message signatures in the Alibaba Cloud SMS Console. Here you must provide a sender name (text message signature) that has been approved by Alibaba Cloud.

4.3.1.1.6.4 Creating an Export Definition

If you want to use customer attribute variables, such as first name and last name, to personalize your campaign text messages, create an export definition and add the customer attributes that you want to use into it.

To send text messages using Alibaba Cloud SMS, one of the prerequisites is that you create text message templates in the Alibaba Cloud SMS Console. You can include customer attribute variables in text message templates. When setting the parameters for the Send Alibaba Text Message campaign action, you specify a text message template ID and an export definition that contains the customer attributes used in the template. You can use an export definition predefined by SAP or create your own export definition.

**i Note**

If the text message to be sent contains customer attribute variables, then the segmentation profiles of the export definition and target group assigned to the Send Alibaba Text Message campaign action must be the same.

Using the Predefined Export Definition

SAP provides you with a predefined export definition Template_Alibaba_SMS, which contains the customer attribute variables most commonly used in campaign content. To get this export definition, run the application...
job Campaigns: Create Export Definition for Alibaba Cloud SMS using the Marketing Application Jobs app. The predefined export definition contains the following customer attributes:

<table>
<thead>
<tr>
<th>Export Definition</th>
<th>Attribute</th>
<th>Technical Name of Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template_Alibaba_SMS</td>
<td>Region</td>
<td>REGION</td>
</tr>
<tr>
<td></td>
<td>Postal Code</td>
<td>POSTCODE1</td>
</tr>
<tr>
<td></td>
<td>Full Name</td>
<td>NAME_TEXT</td>
</tr>
<tr>
<td></td>
<td>Last Name</td>
<td>NAME_LAST</td>
</tr>
<tr>
<td></td>
<td>First Name</td>
<td>NAME_FIRST</td>
</tr>
</tbody>
</table>

You can use these customer attributes as personalization variables when creating text message templates in the Alibaba Cloud SMS Console.

**i Note**

Segmentation profile SAP_CE_CONTACT is assigned to the predefined export definition Template_Alibaba_SMS. If you specify Template_Alibaba_SMS for the Send Alibaba Text Message campaign action, then you must specify a target group that is assigned the same segmentation profile SAP_CE_CONTACT.

**Creating Your Own Export Definition**

You create your own export definitions using the Export Definitions app. Select the Alibaba SMS usage. When deciding on a segmentation profile, keep in mind that the segmentation profiles of the export definition and target group assigned to the Send Alibaba Text Message campaign action must be the same.

**Using Customer Attribute Variables in a Text Message Template**

To personalize your campaign text message with customer attribute variables, you include the technical names of customer attributes where needed in a text message template in the Alibaba Cloud SMS Console. You get technical names of customer attributes from SAP Marketing Cloud. To find the technical name of an attribute, do the following:

1. Log into SAP Fiori launchpad with a business role that contains the Marketing – Segmentation and Campaign Configuration (SAP_CEC_BC_MKT_CPC_PC) business catalog.
2. Open the Segmentation Configuration app.
4. Select the segmentation profile that is assigned to your export definition.
5. In the Attribute Visibility section, click the attribute you are looking for, for example, Full Name.
   An information box appears. The technical name NAME_TEXT is displayed right under the attribute name.
4.3.1.1.7 Usage of Multiple Service Provider Instances

In case you want to run campaigns for different customers you can use several instances of the same service provider to gain a better overview about your figures and costs.

But when you plan to create several instances of one service provider, you must keep the following in mind:

- For each service provider account, you create a communication system, a communication arrangement, a provider ID, and a sender profile ID.

Recommendation

We recommend that you define all names and IDs upfront, BEFORE you start with the creation of the system connection.

Example

In the following example you got 2 accounts from SAP Digital Interconnect: Both have the same host, but different users and passwords.

You define upfront that the provider IDs shall be sapDI_01 and sapDI_02 and the IDs for the generated sender profiles shall be DI01 and DI02.

You define upfront that the IDs of the communication systems shall be SAP_DI01 and SAP_DI02 with the corresponding names SAP Digital Interconnect 0040-1 and SAP Digital Interconnect 0040-2.

You define upfront that the name of the communication arrangement shall be SAP Digital Interconnect 0040-1 and SAP Digital Interconnect 0040-2.

<table>
<thead>
<tr>
<th>Account of Service Provider</th>
<th>Example Account 1</th>
<th>Example Account 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given by Provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Host</td>
<td>email-eu1.sapdigitalinterconnect.com</td>
<td>email-eu1.sapdigitalinterconnect.com</td>
</tr>
<tr>
<td>User</td>
<td>abc_def1234</td>
<td>xyz_def9876</td>
</tr>
<tr>
<td>Provider ID</td>
<td>sapDI_01</td>
<td>sapDI_02</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Sender Profile ID</td>
<td>DI01</td>
<td>DI02</td>
</tr>
</tbody>
</table>

### Communication System

<table>
<thead>
<tr>
<th>System ID</th>
<th>SAP_DI_01</th>
<th>SAP_DI_02</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Name</td>
<td>SAP Digital Interconnect 1</td>
<td>SAP Digital Interconnect 2</td>
</tr>
</tbody>
</table>

### Assigned by Customer

<table>
<thead>
<tr>
<th>Host (under Outbound Communication)</th>
<th>email-eu1.sapdigitalinterconnect.com</th>
<th>email-eu1.sapdigitalinterconnect.com</th>
</tr>
</thead>
<tbody>
<tr>
<td>User (under Outbound Communication)</td>
<td>abc_def1234</td>
<td>xyz_def9876</td>
</tr>
</tbody>
</table>

| Password | 6T5z)f§45d§ | 98(6/idRt$m |

---

**Communication Arrangement for Scenario SAP_COM_0040**

### Defined by Customer

<table>
<thead>
<tr>
<th>Arrangement Name</th>
<th>SAP Digital Interconnect 0040-1</th>
<th>Digital Interconnect 0040-2</th>
</tr>
</thead>
</table>

### Assigned by Customer

<table>
<thead>
<tr>
<th>Communication System</th>
<th>SAP_DI_01</th>
<th>SAP_DI_02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider ID</td>
<td>sapDI_01</td>
<td>sapDI_02</td>
</tr>
<tr>
<td>Sender Profile ID</td>
<td>DI01</td>
<td>DI02</td>
</tr>
</tbody>
</table>

| Path                  | /in365-api/abc_def1234/notifications | /in365-api/xyz_def9876/notifications |

For every communication arrangement you have to define an unique Provider ID and an unique Sender Profile ID. Unique means:

If you are defining the sending of emails and the collecting of the bounces, for example, using Amazon as service provider, you must use the same Provider ID in all of the related communication scenarios that you want to use: SAP_COM_0016 for sending emails, SAP_COM_0039 for collecting the bounces, and for enabling the unsubscribe using SAP_COM_0289. The same is valid for sending text messages.
and collecting the text message bounces using SAP Digital Interconnect with the scenario IDs SAP_COM_0041 and SAP_COM_0299.

- In the **Communication Systems** app, you create your system instance with the host given by your service provider. For every account of any service provider, you must create a communication system, where you assign the account credentials such as user and password. Depending on the service provider, it can be possible that you use for every account of the same provider the same host.

- In the **Communication Arrangements** app, you create as many communication arrangements for service provider as required. In addition, select also the user you created in the **Communication Systems** app. For each additional arrangement entry of the same scenario, you must enter also new provider and sender profile IDs. That means that you must, in this case, overwrite the proposed ones.

### Note

You cannot use IDs that are reserved for other service providers, such as Alibaba Cloud.

The following provider and sender profile IDs are reserved:

<table>
<thead>
<tr>
<th>Provider ID</th>
<th>Sender Profile ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>aliMail</td>
<td>AM</td>
</tr>
<tr>
<td>aliSMS</td>
<td>AS</td>
</tr>
<tr>
<td>sapGeneric</td>
<td>GNML</td>
</tr>
<tr>
<td>genSmsAdap</td>
<td>GENS</td>
</tr>
<tr>
<td>mobPush</td>
<td>MPN</td>
</tr>
<tr>
<td>sapMS1025</td>
<td>MSTS</td>
</tr>
</tbody>
</table>

Note that the **Provider ID** is case-sensitive and that the IDs are also reserving entries that are starting with these IDs as prefix.

For example, **Provider ID aliMail** reserves also entries starting with **aliMail** (but not **ALIMail**), whereas **Sender Profile ID AM** reserves also entries starting with **AM**.

The steps for the setup itself are the same as described in the chapters Setting Up SAP Digital Interconnect [page 103] and Setting Up Amazon [page 129].
Saving the communication arrangement, the system creates the corresponding providers and sender profiles, and establishes the required system connections.

In the **Sender Profiles** app then you must complete the generated sender profiles, with, for example, a sender address. There you can also change the assigned marketing area and also copy the profiles. But be aware that the copied profile uses the **SAME** provider ID as the source profile.

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Scenario ID</th>
<th>Specifics</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP Digital Interconnect: SAP E-Mail 365</td>
<td>SAP_COM_0040</td>
<td>In the <strong>Communication Systems</strong> app, you enter the user credentials you got from SAP Digital Interconnect: User and Password</td>
</tr>
<tr>
<td>SAP Digital Interconnect: SAP Intelligent Notification 365, SMS API</td>
<td>SAP_COM_0041</td>
<td>In the <strong>Communication Systems</strong> app, you enter the user credentials you got from SAP Digital Interconnect: User and Password</td>
</tr>
</tbody>
</table>
| SAP Digital Interconnect: SAP Intelligent Notification 365, SMS API for Bounces and Unsubscribe | SAP_COM_0299 | In the **Communication Systems** app, you enter the user credentials you got from SAP Live Link 365: User and Password  
In the **Communication Arrangements** app, you must use the same **Provider ID** as in the setup for the related communication arrangement for scenario SAP_COM_0041. |
| Amazon SES for Email | SAP_COM_0016 | In the **Communication Systems** app, you enter the user credentials you got from Amazon, called *Access Key (User)* and *Secret Key (Password)*. |
| Amazon SQS for Bounces | SAP_COM_0039 | In the **Communication Systems** app, you create only a dummy user with a dummy password.  
In the **Communication Arrangements** app, you must use the same **Provider ID** as in the setup for the related communication arrangement for scenario SAP_COM_0016. |
| Amazon SQS for Unsubscribe | SAP_COM_0289 | In the **Communication Systems** app, you do not need to create a new system. You can re-use the system for SAP_COM_0039.  
In the **Communication Arrangements** app, you must use the same **Provider ID** as in the setup for the related communication arrangement for scenario ID SAP_COM_0016 and SAP_COM_0039. But note that the **Path** is different from the setup for scenario SAP_COM_0039. |
4.3.1.8 Campaign Execution Whitelist

You use the Campaign Execution Whitelist app to maintain allowed email addresses and telephone numbers.

You maintain the allowed email addresses and telephone numbers that you want to use, when you create marketing campaigns for test purposes. With the entries, you avoid sending test emails and test text messages to your customers.

**i Note**

- You use this app only in your test system.
- As soon, as you have maintained email addresses or telephone numbers in the app, only those recipients from this list can be contacted.

When you create a whitelist entry, the system checks whether there’s already an existing blacklist entry with the same email address or email domain or mobile phone number. When an entry exists in the blacklist, the system rejects this entry in the whitelist.

This behaviour is also valid for overlapping email domains. For example, if the blacklist has an email entry @example.org, you can’t add the email address joe.public@example.org to the whitelist.

4.3.1.9 Unsubscribe for Emails and Text Messages

In the following, you learn about the possibilities to unsubscribe from emails and text messages.

**Automatic Unsubscribe for Emails (List Unsubscribe)**

With the automatic unsubscribe, you don’t need to

- maintain the unsubscribe email
- collect the unsubscribe information provided from email client.
- handle the permissions based on an email unsubscribe

All these steps are automatically done by the system.

To enable the automatic unsubscribe, you have created the required communication arrangements for SAP Digital Interconnect (SAP_COM_0040) and/or Amazon (SAP_COM_0289) for unsubscribe. To get also the bounces, we recommend to also set up the communication scenario (SAP_COM_0039).

For the setup, you must enter an Email Address for Unsubscribing in the Sender Profiles app and the system adds the unsubscribe information to the email header. Most email clients then show an unsubscribe button at the very top of the email.

**i Note**

For SAP Digital Interconnect, the email address is preset and can be changed.
For Amazon, the email address must be added manually as the address is account-specific.
After the recipient has unsubscribed, the email client sends an email with the information back to the service provider. The SAP system collects the data from the service provider and maintains the marketing permissions (Opt-out) automatically.

In a newsletter campaign, the unsubscribe also contains the communication category. With the communication category and contact data, the unsubscribe from a newsletter can be realized and the system knows that this unsubscribe is one for a newsletter.

For more information, see:
- Opting-Out and Unsubscribing by Email
- Enabling Automatic Unsubscribe for Emails by Amazon [page 134]

**Automatic Unsubscribe for Text Messages (STOP Trigger)**

To enable the automatic unsubscribe for text messages, you have created the required communication arrangements for SAP Digital Interconnect (SAP_COM_0041 and SAP_COM_0299).

After the recipient has unsubscribed by sending back the word **STOP**, the SAP system collects the data from the service provider and maintains the marketing permissions (opt-out) automatically.

For more information, see Bounces and Unsubscribe for Text Messages [page 105].

**Manual Unsubscribe for Emails**

For the manual unsubscribe, you don't need any configuration, beside of adding an **Email Address for Unsubscribing** and/or a **Follow-Up Page for Unsubscribing** to the used sender profile in the **Sender Profiles** app.

Using the **Email Address for Unsubscribing** or the **Follow-Up Page for Unsubscribing** you can collect the required data and update your subscriptions and permissions (opt-out) manually in the **Contacts** app.

**Easy Opting-Out and Easy Unsubscribe for Email**

With this option, you add a link to the email body that triggers the unsubscribe.

The option is independent from any service provider.

For more information, see Opting-Out and Unsubscribing by Email.

**Unsubscribe and Marketing Areas**

The following explains in more detail how the system behaves, whether marketing areas are activated for campaign execution or not.
• **SAP Digital Interconnect: Unsubscribe from Text Messages Sending Back** `STOP`
  From text messages sent by SAP Digital Interconnect can be unsubscribed by sending back the word `STOP`, also when marketing areas are activated for campaign execution. The system uses the mobile number to determine the contacts.
  If the text message with the word `STOP` contains also a valid campaign ID, the marketing area of this campaign is used for the opt-out of the corresponding contact mobile number. For this scenario it is irrelevant whether the marketing areas are activated for campaign execution or not.
  Only for the case no campaign ID has been sent back with the `STOP` trigger:
  ○ If marketing area is not activated in the configuration, the system looks for all marketing areas that are assigned to sender profiles for sending text messages and creates an opt-out for one marketing area of the contact(s) related to the mobile number.
  ○ If marketing area is activated, the system looks for all marketing areas that are assigned to sender profiles for sending text messages and creates opt-outs for each found marketing area of the contact(s) related to the mobile number.

• **Email Unsubscribe by Amazon**
  Amazon provides an identification with which the outgoing email can be identified, and campaign, contact, and marketing area are determined.
  The system creates one opt-out (independent whether the separation is activated or not) with the data determined from the outgoing email.

• **Email Unsubscribe by SAP Digital Interconnect**
  SAP Digital Interconnect provides an identification with which the outgoing email can be identified, and campaign, contact, and marketing area are determined.
  The system creates one opt-out (independent whether the separation is activated or not) with the data determined from the outgoing email.

For more information, see [Marketing Area for Campaigns](#).
4.3.1.10 Complaints for Emails

Complaints for Emails mean that an email recipient classifies emails from dedicated senders as spam. For classifying emails as spam, the email recipient either drops the email to the spam folder of the email provider or declares the email as spam. This technology is also known as email feedback loops.

**Process**

1. Email recipient classifies a received campaign email as spam.
2. The classification is sent to the email service provider (ESP).
3. The ESP sends complaint information to the SAP system, and the complaint information is stored in the system and visible for the marketer.
4. Depending on the campaign scenario, a complaint will have the following results:
   - If the email has been sent by a subscription-based campaign, the SAP system does an unsubscribe for the email address of the recipient/contact and for the corresponding communication category. The global opt-in for marketing permission is not changed.
   - If the email has been sent by a non-subscription-based campaign, the SAP system does a permission opt-out for the email address of the recipient/contact.

**Note**

The described complaint handling is only possible if the email provider of the recipient sends a notification back to SAP, which means the provider supports email feedback loops. Not all email providers support this technology.

The email service provider you used to send the emails out of the SAP system (SAP Digital Interconnect, Amazon SES, or the generic email interface) stores the returned complaint information on a suppression list. If you use another campaign to send again an email to the recipient that sent a complaint, the email is not delivered to this recipient even if the marketing subscription or permission is still Opted-In in the SAP system. The email is not delivered by the email service provider because the email address is part of the suppression list of the email service provider.
Note that your used ESP in your generic email adapter can have such a suppression list and collect the emails with complaints. But that’s not certain and there can be ESPs without that complaint process.

**Performance Tab**

To see the number of email complaints, open the corresponding campaign in the Campaigns app. On the Performance tab, you see the actuals in the Email Complaints tile.

**Related Information**

Enabling Complaints [page 155]
Removing a Contact from Suppression List [page 156]

### 4.3.1.10.1 Enabling Complaints

The steps guide you to enable complaint handling in your SAP system.

**Prerequisites**

This function is available if you are using the email services from SAP Digital Interconnect or Amazon SES. In case you are using the generic email service provider interface, the availability of the functionality depends on the capabilities of the email service provider behind the interface.

**Procedure**

Create an incident for the SAP component CEC-MKT-CFG-EXE and request the activation for one of the following options:

- Update of marketing permission during processing of complaints for email
- Update of marketing subscription during processing of complaints for email
- Update of marketing permission and subscription during processing of complaints for email

**Results**

After the enabling the system updates the marketing permissions or subscriptions during the processing of complaints for email.
4.3.1.10.2 Removing a Contact from Suppression List

In case, your customer wants to be contacted again, you must remove the email address of the contact again from the suppression list.

Procedure

To remove a contact again from the service provider's suppression list, you do the following steps.

1. For SAP Digital Interconnect, you create an incident for the SAP component CEC-DI-IN and ask SAP Digital Interconnect to remove the contact again from the suppression list.
2. For Amazon, log on at your AWS Management Console and remove the customer manually. For more information, see Removing an Email Address from the Amazon SES Suppression List.

4.3.1.11 Troubleshooting for Campaigns

In case you have issues with the execution of your campaigns, we recommend to read also the troubleshooting in the Administration Guide.

Related Information

Troubleshooting Campaigns

4.3.1.12 Sender Profiles

A sender profile allows you to carry out campaigns for different channels in different markets. You can maintain sender profiles for channels, such as email, text message, and mobile push notifications.

Prerequisites

- You have set up the service provider for emails and text messages and you have maintained the communication arrangements before creating sender profiles. For more information, see Setting Up Service Provider for Emails and Text Messages [page 100].
- You have registered the Sender Address and the Reply-To Address at SAP Digital Interconnect and/or Amazon.
Note
Note that the registered email address is case-sensitive for Amazon and SAP Digital Interconnect.

Recommendation: Test Sender Profiles

To test the maintained sender profiles, we recommend to use Send Test Email or Send Test Text Message to ensure that the settings are working. Otherwise the issues can appear during campaign execution.

Related Information

Mobile Campaigns
Opting-Out and Unsubscribing by Email

4.3.2 Setting Up External Campaign Execution

SAP Marketing Cloud allows you to execute campaigns in an external system, and to request the success data for further processing in the marketing edition. Perform the following tasks to enable external campaign execution.

Implement Interfaces

Optionally implement a set of interfaces, either directly in the external system, or using a suitable middleware, such as SAP HANA Cloud Integration, to map the interfaces in SAP Marketing Cloud to the interfaces of the external system. For the implementation details, see Implementing Interfaces for External Campaign Execution [page 158].

Set up a Communication Arrangement

Finally, set up a communication arrangement for the external campaign execution, and the success data requests. For the details, see Communication Arrangement for External Campaign Execution [page 195].
Process

Once you have set up your system for external campaign execution, executing the campaigns occurs as follows:

1. **Plan Campaign**
   In SAP Marketing Cloud, plan your campaigns from program down to detailed spend (optional).

2. **Release Campaign**
   In SAP Marketing Cloud, create and release your campaign. A corresponding campaign is created automatically in the external system. You can optionally assign a target group to the campaign and schedule the transfer of the target group to the external system. Once the campaign is activated, your target group will be updated periodically according to the schedule you set. Alternatively, you can link an existing campaign manually from the external system.

3. **Execute Campaign**
   In the external system, execute the campaign.
   If you choose to use a marketing agency, they can execute the campaign in the external system without needing users in SAP Marketing Cloud. You need technical users in the external system to set up the connectivity.
   Targeting can be done in the external system, or you can transfer a target group as described in the Release Campaign step. Once the target group is in the external system, the marketing agency, if you choose to use one, can use it for targeting.

4. **Track Success**
   In SAP Marketing Cloud, you can track the success of your campaign. Success data is automatically retrieved from the external system. You also can upload success data manually as a CSV file.

4.3.2.1 Implementing Interfaces for External Campaign Execution

You implement a set of interfaces to enable the creation of campaigns in the external system, and to obtain the success data for the executed campaigns.

Overview

Executing campaigns in an external system is set up as follows:

- The user creates a campaign for external execution in SAP Marketing Cloud. As a result, your system calls the external system for a list of parameters (including possible values) required for the creation of the campaign in the external system.
- The application displays the received parameters allowing the user to specify the parameter values.
- The user releases the campaign. As a result, the corresponding campaign is created in the external system and any assigned target group is transferred to the external system.
- Once the campaign is created in the external system, your system requests success data for the campaign. The request is repeated every 4 hours, until the external system indicates that no more success data is expected.
The services available with SAP Marketing Cloud, are based on OData Version 2.0. The OData messages are sent in the JSON format. In the communication, the marketing edition system acts as a client. The server side implementation of the services is done by the external system, or a middleware, such as SAP Cloud Platform Integration.

For the server side implementation, the required methods and entity sets are specified in the following sections, and it is explained how to use OData features, such as filtering, sorting, or paging. For the responses, the metadata ("__metadata") is optional.

The following types are included in the list of required entity types:

<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign</td>
<td>The campaign, as required to integrate with an external system executing the campaign</td>
</tr>
<tr>
<td>CampaignParameter</td>
<td>A generic parameter of a campaign that is specific to an external system, and not known to your system in detail</td>
</tr>
<tr>
<td>CampaignParameterCodeListValue</td>
<td>A code list value of a campaign parameter for parameters that have the type CODE_LIST</td>
</tr>
<tr>
<td>CampaignParameterValue</td>
<td>A value of a campaign parameter, for example, the selected code list value for a parameter of the type CODE_LIST</td>
</tr>
<tr>
<td>MarketingSuccess</td>
<td>All marketing success KPIs for a given set of characteristics including campaign, date, gender, and age</td>
</tr>
<tr>
<td>ExtTargetGroup</td>
<td>The target group, as needed to integrate with an external system executing a campaign</td>
</tr>
<tr>
<td>ExtTargetGroupParameterValue</td>
<td>A value of a target group parameter, for example, the selected code list value for a parameter of the type CODE_LIST</td>
</tr>
<tr>
<td>ExtTargetGroupSupportedIdOrigin</td>
<td>An ID origin requested by the external system executing a campaign</td>
</tr>
<tr>
<td>ExtTargetGroupMemberFacet</td>
<td>A member of the target group</td>
</tr>
<tr>
<td>ExtTGContactTransferHeaderSet</td>
<td>The personalized attributes of a target group member</td>
</tr>
</tbody>
</table>

The identification of an externally executed campaign by SAP Marketing Cloud can require additional parameters, for example, when the externally assigned campaign ID is not unique. In this case, the external system can indicate that certain parameters, specifically ADVERTISER and EXT_CAMPAIGN_MANAGING_PARTY, are included in the campaign key. Then, your system can use the additional parameters when filtering for a set of campaigns.

Example: Advertiser is an additional key, the combination of Advertiser and Campaign ID makes a unique key of an external campaign. During the GetEntitySet request of an external campaign, the client sends the additional key in the request filters like below:

```sql
((Filter/KeyPart2Id eq 'ADVERTISER') and (Filter/KeyPart2Value eq 'SAP_GLOBAL_MARKETING'))
```
### Additional Filter Parameters

<table>
<thead>
<tr>
<th>ServerCampaignIDContextCT (Complex Type)</th>
<th>Used for filtering in GetEntitysetMethods</th>
</tr>
</thead>
<tbody>
<tr>
<td>KeyPart2Id (Edm.String, length-50)</td>
<td>ID of the first parameter marked to be part of the campaign key</td>
</tr>
<tr>
<td>KeyPart2Value (Edm.String, length-50)</td>
<td>Value of the first additional parameter</td>
</tr>
<tr>
<td>KeyPart3Id (Edm.String, length-50)</td>
<td>ID of the second parameter marked to be part of the campaign key</td>
</tr>
<tr>
<td>KeyPart3Value (Edm.String, length-50)</td>
<td>Value of the second additional parameter</td>
</tr>
</tbody>
</table>

For more information about OData Version 2.0, see [http://www.odata.org/documentation/odata-version-2-0/](http://www.odata.org/documentation/odata-version-2-0/)

### 4.3.2.1.1 Requesting Parameters for Campaign Creation

The request for campaign parameters is triggered when the user creates an externally executed campaign.

For the parameter retrieval, SAP Marketing Cloud calls the GetEntitySet method of the CampaignParameterSet entity set with an expand to the CampaignParameterCodeListValueSet without any filter. As a result, the following list of the parameters is expected:

<table>
<thead>
<tr>
<th>CampaignParameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CampaignParameter (Entity Type)</strong></td>
</tr>
<tr>
<td><strong>Properties and Data Type</strong></td>
</tr>
<tr>
<td>Id (Edm.String, length-50)</td>
</tr>
<tr>
<td>For Type ADVERTISER the ID must be set to ADVERTISER</td>
</tr>
<tr>
<td>For Type EXT_CAMPAIGN_MANAGING_PARTY the ID must be set to EXT_CAMPAIGN_MANAGING_PARTY</td>
</tr>
<tr>
<td>ADVERTISER and EXT_CAMPAIGN_MANAGING_PARTY are key parameters</td>
</tr>
<tr>
<td>Mandatory in response</td>
</tr>
<tr>
<td>Name (Edm.String, length-255)</td>
</tr>
<tr>
<td>Optional in response (ID is displayed when name is missing)</td>
</tr>
</tbody>
</table>
### CampaignParameter (Entity Type)

**Usage in GetEntitySet Method**

- **Type (Edm.String, length: 30)**
  - Supported types: CODE_LIST, TEXT, AMOUNT, NUMBER, ADVERTISER, EXT_CAMPAIGN_MANAGING_PARTY
  - Mandatory in response

**Navigation Properties**

- **CampaignParamCodeListValues**
  - List of possible values for parameters of type CODE_LIST

For parameters of the types CODE_LIST, ADVERTISER and EXT_CAMPAIGN_MANAGING_PARTY, the following additional list of possible values is required.

#### i Note

For amount parameters, a list of supported currencies can be provided. If no list of currencies is given, the user can select from all currencies available in SAP Marketing Cloud.

### Additional Code List Parameters

**CampaignParameterCodeListValue (Entity Type)**

**Usage in GetEntitySet Method**

<table>
<thead>
<tr>
<th>Properties and Data Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code (Edm.String, length: 50)</strong></td>
<td>Stable (language independent) code</td>
</tr>
<tr>
<td></td>
<td>Mandatory in response</td>
</tr>
<tr>
<td><strong>Description (Edm.String, length: 255)</strong></td>
<td>Potentially language dependent description of the code displayed in SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Indicates (true or false) whether the type parameter is included</td>
</tr>
<tr>
<td></td>
<td>Optional in response – Code is displayed when description is missing</td>
</tr>
<tr>
<td><strong>CampaignParameterId (Edm.String, length: 50)</strong></td>
<td>Reference to the campaign parameter</td>
</tr>
<tr>
<td></td>
<td>Mandatory in response</td>
</tr>
</tbody>
</table>

An example as sent by SAP Marketing Cloud:

- **Request URL**: https://<HostName>.../<YourService>/CampaignParameterSet?
  - $expand=CampaignParamCodeListValues&$format=json
- **HTTP Method**: GET

### Sample Response, as sent by the external system:

```json
{
    "d": {
        "results": [{
            "Id": "ADVERTISER",
            "Name": "Advertiser",
            "Type": "ADVERTISER",
            "CampaignParamCodeListValues": {
```
"results": [{
  "CampaignParameterId": "ADVERTISER",
  "Code": "SAP_GLOBAL_MARKETING",
  "Description": "SAP Global Marketing"
},
{  
  "CampaignParameterId": "ADVERTISER",
  "Code": "SAP_GERMANY",
  "Description": "SAP Germany"
}]}
},
{  
  "Id": "METRIC",
  "Name": "Metric",
  "Type": "CODE_LIST",
  "CampaignParamCodeListValues": {
    "results": [{
      "CampaignParameterId": "METRIC",
      "Code": "CLICKS",
      "Description": "Number of Clicks"
    },
    {  
      "CampaignParameterId": "METRIC",
      "Code": "IMPRESSIONS",
      "Description": "Number of Impressions"
    }
  }
},
{  
  "Id": "CAMPAIGN_DESC",
  "Name": "Campaign description",
  "Type": "TEXT",
},
{  
  "Id": "DAILY_BUDGET",
  "Name": "Daily Budget",
  "Type": "AMOUNT",
  "CampaignParamCodeListValues": {
    "results": [{
      "CampaignParameterId": "DAILY_BUDGET",
      "Code": "EUR",
      "Description": "Euro"
    },
    {  
      "CampaignParameterId": "DAILY_BUDGET",
      "Code": "USD",
      "Description": "American Dollars"
    }
  }
},
{  
  "Id": "DAILY_IMPRESSIONS",
  "Name": "Target Daily Impressions",
  "Type": "NUMBER",
}]
}
### Handling Campaigns in the External System

The user releases the externally executed campaign. As a result, SAP Marketing Cloud calls the `Create` method of the `CampaignSet` entity set including a deep create of the `CampaignParameterValueSet`. 
For the campaign ID value help, available in the Campaigns app, the GET method is used to retrieve the relevant information. CampaignName must be enabled for filtering.

Create Campaign Method

<table>
<thead>
<tr>
<th>Campaign (Entity Type)</th>
<th>Usage in Create Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Properties and Data Type</strong></td>
<td></td>
</tr>
<tr>
<td>ClientCampaignId (Edm.String, length-10)</td>
<td>ID of the campaign as provided by SAP Marketing Cloud Ignored in response</td>
</tr>
<tr>
<td>CampaignName (Edm.String, length-40)</td>
<td>Name of the campaign as provided by SAP Marketing Cloud Needs to be enabled for filtering Ignored in response</td>
</tr>
<tr>
<td>startDate (Edm.DateTime)</td>
<td>Start date of the campaign as provided by SAP Marketing Cloud Ignored in response</td>
</tr>
<tr>
<td>endDate (Edm.DateTime)</td>
<td>End date of the campaign as provided by SAP Marketing Cloud Ignored in response EndDate &gt;= StartDate; no further constraints</td>
</tr>
<tr>
<td>ServerCampaignId (Edm.String, length-32)</td>
<td>ID of the externally created campaign as provided by the external system Mandatory in response</td>
</tr>
<tr>
<td>ServerCampaignUrl (Edm.String)</td>
<td>Link to the external campaign, optionally provided by the external system Enables navigation from SAP Marketing Cloud to the campaign Optional in response</td>
</tr>
<tr>
<td>MainKPI (Edm.String, length-50)</td>
<td>Main KPI displayed in SAP Marketing Cloud, such as IMPRESSIONS, or CLICKS Optional in response Can be provided with success data</td>
</tr>
<tr>
<td>SuccessDataEndDate (Edm.DateTime)</td>
<td>Last date by which SAP Marketing Cloud requests administrative, and success data for the campaign Can be changed until the date is reached, and can be provided with success data retrieval Optional in response If not provided in response, the campaign end date is used</td>
</tr>
</tbody>
</table>
**Campaign (Entity Type)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Usage in Create Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuccessDataTimeZone (Edm.String, length-6)</td>
<td>Not used, ignored in response</td>
</tr>
<tr>
<td></td>
<td>Not provided by SAP Marketing Cloud</td>
</tr>
</tbody>
</table>

**Navigation Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CampaignParameterValues</td>
<td>List of parameters with corresponding values</td>
</tr>
</tbody>
</table>

**Campaign Creation OData Request**

An example of a campaign creation request, as sent by SAP Marketing Cloud:

- **Request URL**: `https://<HostName>/.../<YourService>/CampaignSet`
- **HTTP Method**: POST

**Sample Request Payload:**

```json
{
    "ClientCampaignId" : "12345",
    "CampaignName" : "My Test Campaign",
    "StartDate" : "~/Date(1452470400000)/",
    "EndDate" : "~/Date(1454112000000)/",
    "CampaignParameterValues" : [
        {
            "ClientCampaignId" : "12345",
            "Id" : "ADVERTISER",
            "Value" : "SAP_GLOBAL_MARKETING"
        },
        {
            "ClientCampaignId" : "12345",
            "Id" : "METRIC",
            "Value" : "IMPRESSIONS"
        },
        {
            "ClientCampaignId" : "12345",
            "Id" : "DAILY_BUDGET",
            "AmountValue" : "100.00",
            "CurrencyValue" : "EUR"
        },
        {
            "ClientCampaignId" : "12345",
            "Id" : "DAILY_IMPRESSIONS",
            "NumberValue" : 100000
        }
    ]
}
```

**Sample Response Payload:**

```json
{
    "d" : {
        "ServerCampaignId" : "54321",
        "ServerCampaignUrl" : "www.example.com/54321",
        "MainKPI" : "CLICKS",
        "SuccessDataEndDate" : "~/Date(1455494400000)/"
    }
}
```
For each parameter required by the external system, a value is sent with the creation of the external campaign:

### Create Campaign Method

<table>
<thead>
<tr>
<th>CampaignParameterValue (Entity Type)</th>
<th>Usage in Create Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Properties and Data Type</strong></td>
<td></td>
</tr>
<tr>
<td>ClientCampaignId (Edm.String, length-10)</td>
<td>Reference to the campaign as provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>Id (Edm.String, length-50)</td>
<td>Stable ID of the parameter as provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>Value (Edm.String, length-256)</td>
<td>Value the user specifies in SAP Marketing Cloud; provided by SAP Marketing Cloud (all parameters assumed to be mandatory)</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td></td>
<td>For code lists the code is provided, but not the description.</td>
</tr>
<tr>
<td>NumberValue (Edm.Int32, length 10)</td>
<td>Value entered by the user in SAP Marketing Cloud for the parameter of the type CODE_LIST or TEXT</td>
</tr>
<tr>
<td></td>
<td>For code lists, the code is provided but not the description.</td>
</tr>
<tr>
<td></td>
<td>Provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>AmountValue (Edm.Decimal, Precision: 31, scale: -2)</td>
<td>Value entered by the user in SAP Marketing Cloud for the parameter of the type AMOUNT</td>
</tr>
<tr>
<td></td>
<td>Provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>CurrencyValue (Edm.String, length 5)</td>
<td>Currency selected by the user in SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
</tbody>
</table>

### Note

Some servers expect a CSRF token for modifying requests, such as POST. Send a non-modifying request, such as GET from the client to retrieve the token. If the server does not support CSRF token mechanism, the client sends POST requests without a token header.

### Campaign ID Value Help OData Request

An example of a campaign ID value help request follows, as sent by SAP Marketing Cloud. This example corresponds with the outbound service in the communication arrangement that retrieves information for the value help for campaign assignment (**CampaignValueHelpSet**):

- **Request URL**: https://<HostName>/../<YourService>/CampaignSet?
  $\{'filter'='CampaignNameeq'Summer Campaign’and ((Filter/KeyPart2Id eq

Integration Guide
Integration Scenarios
4.3.2.1.3 Creating an External Target Group

To create a target group in the external system, SAP Marketing Cloud calls the create method of the ExtTargetGroup entity.

You can create a target group in the external system by transferring member IDs, using an export definition, which allows you to transfer contact attributes, or a combination of both. If you choose to use both target group transfer options simultaneously, please keep in mind that the transfer can only occur once, as the contact attribute transfer cannot run periodically.

Target Group Entity Types

<table>
<thead>
<tr>
<th>ExtTargetGroup (Entity Type)</th>
<th>Usage in Create Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties</td>
<td></td>
</tr>
<tr>
<td>TargetGroupId (Edm.String, length-10)</td>
<td>ID of the target group in SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Always provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>ExtTargetGroupId (Edm.String, length-32)</td>
<td>ID of the created external target group</td>
</tr>
<tr>
<td></td>
<td>Never provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Mandatory in response</td>
</tr>
<tr>
<td><strong>ExtTargetGroup (Entity Type)</strong></td>
<td><strong>Usage in Create Method</strong></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>ExtTargetGroupUrl (Edm.String)</strong></td>
<td>Link to the external target group</td>
</tr>
<tr>
<td></td>
<td>Never provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Optional in the response – if not provided there is no navigation from the UI in SAP Marketing Cloud to the external target group</td>
</tr>
<tr>
<td><strong>ExtTargetGroupName (Edm.String, length-255)</strong></td>
<td>Name of the external target group as entered on the UI in SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Always provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td><strong>TransferMaxBatchSize (Edm.Int32, length-10)</strong></td>
<td>The maximum number of target group member facets bundled in one batch</td>
</tr>
<tr>
<td></td>
<td>Never provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Optional in response – with this parameter the external system can limit the batch size to a suitable value down to 1 in case that no batches are supported at all</td>
</tr>
<tr>
<td><strong>TransferMethod (Edm.String, length-10)</strong></td>
<td>The way target group member facets are transferred: Must be FULL or DELTA</td>
</tr>
<tr>
<td></td>
<td>In case of FULL, each update of the target group (re) creates all member facets</td>
</tr>
<tr>
<td></td>
<td>In case of DELTA, facets of joiners to the target group are created, facets of leavers are deleted</td>
</tr>
<tr>
<td></td>
<td>Never provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Optional in response – DELTA is assumed as default</td>
</tr>
<tr>
<td><strong>MktPermissionCommMedium (Edm.String, length-20)</strong></td>
<td>The communication medium to check marketing permissions for</td>
</tr>
<tr>
<td></td>
<td>Only contacts with valid marketing permissions for the communication medium are transferred from SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Never provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Optional in response – if no communication medium is provided no marketing permissions are checked.</td>
</tr>
</tbody>
</table>

**Navigation Properties**

<table>
<thead>
<tr>
<th><strong>ExtTargetGroupParameterValues</strong></th>
<th><strong>List of campaign parameters with corresponding values</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always provided by SAP Marketing Cloud if requested</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
</tbody>
</table>
Target Group Parameter Entity Types

<table>
<thead>
<tr>
<th>ExtTargetGroupParameterValue (Entity Type)</th>
<th>Usage in Create Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties</td>
<td></td>
</tr>
<tr>
<td>TargetGroupId (Edm.String, length-10)</td>
<td>ID of the SAP Marketing Cloud target group</td>
</tr>
<tr>
<td></td>
<td>Always provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>Id (Edm.String, length-50)</td>
<td>Stable ID of the parameter</td>
</tr>
<tr>
<td></td>
<td>Always provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>If the type is ADVERTISER, the ID must be set to ADVERTISER</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>Value (Edm.String, length-255)</td>
<td>Value entered by the user in SAP Marketing Cloud for the parameter; for code lists the code list ID is provided (and not the name)</td>
</tr>
<tr>
<td></td>
<td>Always provided by SAP Marketing Cloud as all parameters are assumed to be mandatory</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
<tr>
<td>ExtTargetGroupDescription (Edm.String)</td>
<td>Description of the external target group as entered in SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Optional field provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Ignored in response</td>
</tr>
</tbody>
</table>

For the creation of an external target group, arbitrary parameters are not supported. The only supported parameter is the **Advertiser**.

If in the step **Requesting Parameters for Campaign Creation** a parameter of the type ADVERTISER is requested, this advertiser becomes a mandatory field on the campaign UI. The entered value is then provided with the OData request creating the external target group.

Any other parameter from the step **Requesting Parameters for Campaign Creation** will be ignored for the external target group creation and is only available for external campaign creation.

**OData Request**

An example of an external target group creation request, as sent by SAP Marketing Cloud:

- **Request URL**: https://<HostName>/.../<YourService>/ExtTargetGroupSet
- **HTTP Method**: POST
Sample Request Payload:

```json
{
    "TargetGroupId": "123",
    "ExtTargetGroupName": "Customers Germany",
    "ExtTargetGroupParameterValues": [
        {
            "TargetGroupId": "123",
            "Id": "ADVERTISER",
            "Value": "GLOBAL_MARKETING"
        }
    ]
}
```

Sample Response Payload:

```json
{
    "d": {
        "ExtTargetGroupId": "Ext123",
        "ExtTargetGroupUrl": "https://www.example.com/TG/Ext123",
        "TransferMaxBatchSize": 500,
        "TransferMethod": "DELTA",
        "MktPermissionCommMedium": "DISPLAY_ADS"
    }
}
```

### 4.3.2.1.3.1 Requesting ID Origins

After creating the external target group the needed ID origins are requested by SAP Marketing Cloud with a GetEntitySet call for the ExtTargetGroupSupportedIdOrigin.

**Target Group ID Origin Entity Types**

<table>
<thead>
<tr>
<th>Property</th>
<th>Usage in GetEntitySet Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>IdOrigin (Edm.String, length-10)</td>
<td>ID origin to transfer IDs for (e.g. request transfer of email addresses and phone numbers)</td>
</tr>
<tr>
<td></td>
<td>Never provided by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Mandatory in response</td>
</tr>
</tbody>
</table>
### ExtTargetGroupSupportedIdOrigin (Entity Type)

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HashingMethod (Edm.String, length-10)</td>
<td>Hashing algorithm to hash the IDs to be transferred. Supported methods: SHA256 Never provided by SAP Marketing Cloud Optional in response - if no hashing method is provided the IDs of the target group members are transferred without hashing</td>
</tr>
</tbody>
</table>

### OData Request

An example of a target group ID origins request as sent by SAP Marketing Cloud:

- **Request URL:** `https://<HostName>/.../<YourService>/ExtTargetGroupSupportedIdOriginSet?$format=json`
- **HTTP Method:** GET

**Sample Response Payload:**

```json
{
    "d": {
        "results": [
            {
                "IdOrigin": "EMAIL",
                "HashingMethod": "SHA256"
            },
            {
                "IdOrigin": "PHONE",
                "HashingMethod": ""
            }
        ]
    }
}
```

### 4.3.2.1.3.2 Transferring Contact IDs

The Target Group Members are transferred either as a single member or in batch. This depends on the parameter `TransferMaxBatchSize`. With this parameter the external system can limit the batch size to a suitable value down to 0 or 1 in case that no batches are supported at all. The default maximum batch size is 10,000 members. If the external system sends a larger batch number, it will be reduced to 10,000.
### Target Group Contact ID Entity Types

<table>
<thead>
<tr>
<th>ExtTargetGroupMemberFacet (Entity Type)</th>
<th>Usage in Create method / Delete Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Properties</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| ExtTargetGroupId (Edm.String, length-50)| ID of the external target group to add the member to  
Always provided by SAP Marketing Cloud 
Ignored in response |
| ExtTGKeyPart2Id (Edm.String, length-50)| The ADVERTISER parameter  
Or for compatibility: ID of the first parameter marked to be part of the external target group key  
Provided by SAP Marketing Cloud if available 
Ignored in response |
| ExtTGKeyPart2Value (Edm.String, length-50)| Value of this first parameter  
Provided by SAP Marketing Cloud if available 
Ignored in response |
| ExtTGKeyPart3Id (Edm.String, length-50)| The EXT_CAMPAIGN_MANAGING_PARTY parameter  
Or for compatibility: ID of the second parameter marked to be part of the external target group key  
Provided by SAP Marketing Cloud if available 
Ignored in response |
| ExtTGKeyPart3Value (Edm.String, length-50)| Value of this second parameter  
Provided by SAP Marketing Cloud if available 
Ignored in response |
| IdOrigin (Edm.String, length-20)       | Origin of the target group member ID (EMAIL, PHONE, …)  
Always provided by SAP Marketing Cloud 
Ignored in response |
| Id (Edm.String, length-100)            | ID of the target group member to be created (the actual email address, the phone number, …), hashed if hashing was requested  
Always provided by SAP Marketing Cloud 
Ignored in response |

There are 4 different types of call that are sent from SAP Marketing Cloud for external member transfer.

- Single Creation
- Batch Creation
- Single Deletion
Batch Deletion

Example of Single Creation of External Target Group Member

OData Request
An example of a single creation request as sent by SAP Marketing Cloud:

- **Request URL**: `https://<HostName>/.../<YourService>/ExtTargetGroupMemberFacetSet`
- **HTTP Method**: POST

**Request Payload**

Sample Request Payload

```json
{
  "ExtTargetGroupId": "Ext123",
  "ExtTGKeyPart2Id": "ADVERTISER",
  "ExtTGKeyPart2Value": "SAP_GLOBAL_MARKETING",
  "ExtTGKeyPart3Id": "",
  "ExtTGKeyPart3Value": "",
  "IdOrigin": "EMAIL",
  "Id": "75304ebddec51e37966325d7950229110177ec502248d106cc29ccd8612bb75f"
}
```

**Response Payload**

It is mandatory that the http header contains the value (~status_code: 201 ~status_reason: Created) after successful creation of members in external system.

Sample Response Payload

```json
{
  "d": {
    "results": [{
      "ExtTargetGroupId": "Ext123",
      "ExtTGKeyPart2Id": "ADVERTISER",
      "ExtTGKeyPart2Value": "SAP_GLOBAL_MARKETING",
      "ExtTGKeyPart3Id": "",
      "ExtTGKeyPart3Value": "",
      "IdOrigin": "EMAIL",
      "id": "75304ebddec51e37966325d7950229110177ec502248d106cc29ccd8612bb75f"
    }]
  }
}
```

Example of Batch Creation of External Target Group Member

OData Request
An example of a batch creation request as sent by SAP Marketing Cloud:

- **Request URL**: `https://<HostName>/.../<YourService>/$batch.`
HTTP Method: POST
HEADERS: Content-Type: multipart/mixed;boundary=batch_01869434-0008

i Note
Please be aware of the blank lines in the sample batch payloads, they must be maintained and kept empty.

Request Payload

Sample Batch Request Payload

```
--batch_01869434-0008
Content-Type: multipart/mixed; boundary=changeset_01869434-0005-0002

--changeset_01869434-0005-0002
Content-Type: application/http

POST ExtTargetGroupMemberFacetSet HTTP/1.1
Accept-Language: en
Accept: application/json
MaxDataServiceVersion: 2.0
DataServiceVersion: 2.0
Content-Type: application/json

{"ExtTargetGroupId":"Ext123","ExtTGKeyPart2Id":"ADVERTISER","ExtTGKeyPart2Value": "SAP_GLOBAL_MARKETING","ExtTGKeyPart3Id":null,"ExtTGKeyPart3Value":null,"IdOrigin":"EMAIL","Id":"75304ebddec51e37966325d7950229110177cc502248d106cc29cc8612bb75e"}

--changeset_01869434-0005-0002--

--changeset_01869434-0005-0002
Content-Type: application/http

POST ExtTargetGroupMemberFacetSet HTTP/1.1
Accept-Language: en
Accept: application/json
MaxDataServiceVersion: 2.0
DataServiceVersion: 2.0
Content-Type: application/json

{"ExtTargetGroupId":"Ext123","ExtTGKeyPart2Id":"ADVERTISER","ExtTGKeyPart2Value": "SAP_GLOBAL_MARKETING","ExtTGKeyPart3Id":null,"ExtTGKeyPart3Value":null,"IdOrigin":"EMAIL","Id":"76304ebddec51e37966325d7950229110177cc502248d106cc29cc8612bb75e"}

--changeset_01869434-0005-0002--

--batch_01869434-0008--
```

Response Payload

The batch request response headers should contain ~status_reason: Accepted, ~status_code: 202 for a valid request.

It’s mandatory to maintain the order of response on batch response payload to match with the requests in request payload. For every request there is a response expected in the response payload.
The value ‘201 Created’ in response is mandatory which denotes the status code and status reason of a successful response.

In case of error suitable error message and status code, should be available in response. Please check odata documentation for batch handling. [http://www.odata.org/documentation/odata-version-2-0/batch-processing/](http://www.odata.org/documentation/odata-version-2-0/batch-processing/)

**Sample Batch Response Payload**

```plaintext
--8ECFC9976DBAAC45349E7A1DAC19BE200
Content-Type: multipart/mixed; boundary=8ECFC9976DBAAC45349E7A1DAC19BE201
Content-Length: 2995

--8ECFC9976DBAAC45349E7A1DAC19BE201
Content-Type: application/http
Content-Length: 1348
content-transfer-encoding: binary

HTTP/1.1 201 Created
Content-Type: application/json
Content-Length: 927

--8ECFC9976DBAAC45349E7A1DAC19BE201
Content-Type: application/http
Content-Length: 1348
content-transfer-encoding: binary

HTTP/1.1 201 Created
Content-Type: application/json
Content-Length: 927

--8ECFC9976DBAAC45349E7A1DAC19BE201--
--8ECFC9976DBAAC45349E7A1DAC19BE200--
```

**Example of Single Deletion of External Target Group Member**

**OData Request**

An example of a single deletion request as sent by SAP Marketing Cloud:

- **Request URL:** [https://<HostName>/.../YourService/>](https://<HostName>/.../YourService/)
  - `ExtTargetGroupMemberFacetSet(ExtTargetGroupId='Ext123',ExtTGKeyPart2Id='ADVERTISER',ExtTGKeyPart2Value='SAP_GLOBAL_MARKETING',ExtTGKeyPart3Id='',ExtTGKeyPart3Value='',IdOrigin='EMAIL',Id='75304ebddec51e37966325d79502291101177ec502248d106cc29ccd8612bb75f')`.  
- **HTTP Method:** DELETE

There is no request payload, and no response payload is returned from the external system. The HTTP response header field (~status_code:204, ~status_reason: No Content) represents successful deletion of member at the external system and it is mandatory.
Response Payload

Example of Batch Deletion of External Target Group Member

OData Request

An example of a batch deletion request as sent by SAP Marketing Cloud:

- **Request URL:** `https://<HostName>/.../<YourService>/$batch`
- **HTTP Method:** POST
- **HEADERS:** `Content-Type: multipart/mixed;boundary=batch_01869434-0008`

**i Note**

Please be aware of the blank lines in the sample batch payloads, they must be maintained and kept empty.

Request Payload

Sample Batch Request Payload

```
--batch_01869434-0008
Content-Type: multipart/mixed; boundary=changeset_01869434-0005-0002

--changeset_01869434-0005-0002
Content-Type: application/http
Content-Transfer-Encoding: binary

DELETE
ExtTargetGroupMemberFacetSet(ExtTargetGroupId='Ext123',ExtTGKeyPart2Id='ADVERTISE
R',ExtTGKeyPart2Value='SAP_GLOBAL_MARKETING',ExtTGKeyPart3Id='',ExtTGKeyPart3Value='
',IdOrigin='EMAIL',Id='75304ebddec51e37966325d7950229110177ec502248d106cc29ccd8612bb75f')
HTTP/1.1

--changeset_01869434-0005-0002
Content-Type: application/http
Content-Transfer-Encoding: binary

DELETE
ExtTargetGroupMemberFacetSet(ExtTargetGroupId='Ext123',ExtTGKeyPart2Id='ADVERTISE
R',ExtTGKeyPart2Value='SAP_GLOBAL_MARKETING',ExtTGKeyPart3Id='',ExtTGKeyPart3Value='
',IdOrigin='EMAIL',Id='76304ebddec51e37966325d7950229110177ec502248d106cc29ccd8612bb75e')
HTTP/1.1

--changeset_01869434-0005-0002--

--batch_01869434-0008--
```

Response Payload

The batch response headers should contain `status_reason: Accepted`, `status_code: 202` for a valid request.

It’s mandatory to maintain the order of response in the batch response payload to match with the requests in the request payload. For every request there is a response expected in the response payload.

The value ‘204 No Content’ in the response is mandatory which denotes the status code and status reason of a successful response.
In case of error, a suitable error message and status code should be available in the response. Please check OData documentation for batch handling: http://www.odata.org/documentation/odata-version-2-0/batch-processing/

Sample Batch Response Payload

```plaintext
--5113C8BC9FF8909118DE29520A93D9430
Content-Type: multipart/mixed; boundary=5113C8BC9FF8909118DE29520A93D9431
Content-Length: 437

--5113C8BC9FF8909118DE29520A93D9431
Content-Type: application/http
Content-Length: 71
content-transfer-encoding: binary
HTTP/1.1 204 No Content
Content-Length: 0
dataserviceversion: 2.0

--5113C8BC9FF8909118DE29520A93D9431
Content-Type: application/http
Content-Length: 71
content-transfer-encoding: binary
HTTP/1.1 204 No Content
Content-Length: 0
dataserviceversion: 2.0

--5113C8BC9FF8909118DE29520A93D9431--
--5113C8BC9FF8909118DE29520A93D9430--
```

4.3.2.1.3.3 Transferring Contact Attributes (Deprecated)

⚠️ Caution

This feature has been deprecated. To transfer contact attributes to external systems, we recommend that you set up an Open Channel Integration.

For more information, see Open Channel Integration [page 197].

4.3.2.1.4 Requesting Campaign Success Data

The periodic request for success data consists of two steps:

- The call for campaign-related administrative data
- The call for success data

The call for success data can result in either a synchronous transfer of data or an asynchronous transfer using a ReportID.
Calling Administrative Data

The administrative data includes the following:

- The date up to which SAP Marketing Cloud is supposed to request success data for the campaign. Typically, the date differs from the campaign termination date since the success data is collected after the campaign has ended, based on an attribution window, or because a terminated campaign is resumed for a certain period of time.

- Indication of the most important KPI for the campaign, which is displayed in SAP Marketing Cloud. Since the KPI may not yet be determined when the campaign is created, it is requested with the success data.

For the administrative data, SAP Marketing Cloud calls the `GetEntitySet` method of the `CampaignSet` entity set to filter for a list of campaigns (see the following table).

Note that each additional part of the campaign key (from `ServerCampaignIDContextCT`) is called separately (no filtering for multiple key parts in one `GetEntitySet` call).

Starting in 1611, there are different calls for `ADVERTISER` and `EXT_CAMPAIGN_MANAGING_PARTY`.

**GetEntitySet Method**

<table>
<thead>
<tr>
<th>Campaign (Entity Type)</th>
<th>Usage in GetEntitySet Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>ClientCampaignId</td>
<td>Not used, ignored in response</td>
</tr>
<tr>
<td>CampaignName</td>
<td>Not used, ignored in response</td>
</tr>
<tr>
<td></td>
<td>No update of the campaign name in SAP Marketing Cloud from the external campaign</td>
</tr>
<tr>
<td>StartDate</td>
<td>Not used, ignored in response</td>
</tr>
<tr>
<td></td>
<td>No update of the campaign start date in SAP Marketing Cloud from the external campaign</td>
</tr>
<tr>
<td>EndDate</td>
<td>Not used, ignored in response</td>
</tr>
<tr>
<td></td>
<td>No update of the campaign end date in SAP Marketing Cloud from the external campaign</td>
</tr>
<tr>
<td>ServerCampaignId</td>
<td>ID of the campaign in the external system; used as filter by SAP Marketing Cloud</td>
</tr>
<tr>
<td></td>
<td>Mandatory in response</td>
</tr>
<tr>
<td></td>
<td>The ID is considered to be the first part of the campaign key on server side.</td>
</tr>
<tr>
<td>ReportId</td>
<td>ID used for asynchronous data transfer</td>
</tr>
<tr>
<td></td>
<td>Combination of ReportId, ServerCampaignId, and Advertiser must be unique</td>
</tr>
<tr>
<td></td>
<td>Optional in response, not needed for synchronous transfer</td>
</tr>
<tr>
<td>Campaign (Entity Type)</td>
<td>Usage in GetEntitySet Method</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>ServerCampaignUrl</td>
<td>Not used, ignored in response</td>
</tr>
<tr>
<td></td>
<td>Link to the external campaign</td>
</tr>
<tr>
<td></td>
<td>No update of the link to the external campaign in the campaign in SAP Marketing Cloud</td>
</tr>
<tr>
<td><strong>Campaign (Entity Type)</strong></td>
<td><strong>Usage in GetEntitySet Method</strong></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>MainKPI</strong></td>
<td>Most important KPI, displayed in SAP Marketing Cloud Determines the first measure tiles on the <em>Performance</em> tab of the campaign.</td>
</tr>
</tbody>
</table>

**Main KPI Options**

<table>
<thead>
<tr>
<th><strong>Main KPI</strong></th>
<th><strong>First Tiles</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NumberOfAppEngagements</td>
<td>NumberOfAppEngagements, AdServingCostAppEngagementInDC</td>
</tr>
<tr>
<td>NumberOfAppInstalls</td>
<td>NumberOfAppInstalls, AdServingCostPerAppInstallInDC</td>
</tr>
<tr>
<td>NumberOfClicks</td>
<td>NumberOfClicks, AdServingCostPerClickInDC, AdServingCostPer1000ClicksInDC, ClickThroughRateInPercent</td>
</tr>
<tr>
<td>NumberOfDownloads</td>
<td>NumberOfDownloads, AdServingCostPerDownloadInDC</td>
</tr>
<tr>
<td>NumberOfEventResponses</td>
<td>NumberOfEventResponses, AdServingCostPerEventRspInDC</td>
</tr>
<tr>
<td>NumberOfImpressions</td>
<td>NumberOfImpressions, AdServingCost1000ImpressionsInDC</td>
</tr>
<tr>
<td>NumberOfLeads</td>
<td>NumberOfLeads, AdServingCostPerLeadInDC</td>
</tr>
<tr>
<td>NumberOfMktgOfferClaims</td>
<td>NumberOfMktgOfferClaims, AdServingCostPerOfferClaimInDC</td>
</tr>
<tr>
<td>NumberOfOrders</td>
<td>NumberOfOrders, AdServingCostPerOrderInDC, OrderAmountInDC</td>
</tr>
<tr>
<td>NumberOfPageLikes</td>
<td>NumberOfPageLikes, AdServingCostPerPageLikeInDC</td>
</tr>
<tr>
<td>NumberOfPostEngagements</td>
<td>NumberOfPostEngagements, AdServingCostPerPostEngagementInDC</td>
</tr>
<tr>
<td>NumberOfRegistrations</td>
<td>NumberOfRegistrations, AdServingCostRegistrationInDC</td>
</tr>
<tr>
<td>NumberOfVideoViews</td>
<td>NumberOfVideoViews, AdServingCostPerVideoViewInDC, AdServingCost1000VideoViewsInDC, VideoViewedAverageInPercent</td>
</tr>
<tr>
<td>NumberOfWebsiteConversions</td>
<td>NumberOfWebsiteConversions, AdServingCostWebsiteConversionInDC</td>
</tr>
</tbody>
</table>

Optional in response

If main KPI is not provided, *NumberOfImpressions* is the default.
<table>
<thead>
<tr>
<th>Campaign (Entity Type)</th>
<th>Usage in GetEntitySet Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SuccessDataEndDate</td>
<td>Last date by which SAP Marketing Cloud requests administrative and success data for the campaign. Mandatory in response. The date can be changed until it is reached. The date can be provided some time after the creation of the campaign, however, it is required to prevent endless success data requests.</td>
</tr>
</tbody>
</table>
| SuccessDataTimeZone   | The time zone for which the success data is requested. Optional in response. If the time zone is missing, the success data is requested for UTC. Examples:  
  ● For timezone UTC+05:30, the expected value from the SuccessDataTimeZone field is UTC+53  
  ● For timezone UTC-8:30, the expected the value from the SuccessDataTimeZone field is UTC-83 |
| Filter                | Filter by ServerCampaignIDContextCT |
| CampaignParameterValues | Not used |

An example of a request without additional parameters in the campaign key, as sent by SAP Marketing Cloud:

- **Request URL**: https://<HostName>/../<YourService>/CampaignSet? $filter=(ServerCampaignId eq '54321' or ServerCampaignId eq '54322')& $format=json
- **HTTP Method**: GET

An example of a request including the parameter ADVERTISER in the campaign key, as sent by SAP Marketing Cloud:

- **Request URL**: https://<HostName>/../<YourService>/CampaignSet? $filter=(ServerCampaignId eq '54321' or ServerCampaignId eq '54322') and ((Filter/KeyPart2Id eq 'ADVERTISER') and (Filter/KeyPart2Value eq 'SAP_GLOBAL_MARKETING'))&$format=json
- **HTTP Method**: GET

Note that "Filter": {...} is optional for the SAP Marketing Cloud, and is therefore omitted after the following example.

Sample Response Payload:

```
{  
    "d": {  
```
Calling Actual Success Data

For the actual success data, SAP Marketing Cloud calls the GetEntitySet method of the MarketingSuccessSet to filter for a list of campaigns, and a date range (see the following table).

Note that each additional part of the campaign key is called separately.

The success data is requested for all relevant campaigns, for today, and for yesterday (as today’s data still may change). If the success data changes for a longer period, it can be returned in addition (beyond the requested dates). SAP Marketing Cloud can request success data for the past to recover from errors, or to reconcile historic data in case of data inconsistencies.

SAP Marketing Cloud requests success data using paging. The number of pages (data) is specified in $top and $skip of a request. If the call for one page fails, the already received success data for all campaigns and dates is completely persisted, the partially retrieved data, such as the data for one gender, is discarded. To enable this procedure, SAP Marketing Cloud requests the success data sorted by ServerCampaignId and Date.

SAP Marketing Cloud stores the success data completely per campaign, and per date, and it overwrites existing success data completely even when more data is returned than actually requested.

Synchronous and Asynchronous Response

The external system can respond with the success data immediately (synchronous response) or with a ReportID (asynchronous response). If a ReportID is received, a second GET request will be sent with ReportID. This process repeats every four hours.
### GetEntitySet Method

<table>
<thead>
<tr>
<th>MarketingSuccess (Entity Type)</th>
<th>Usage in GetEntitySet Method</th>
</tr>
</thead>
</table>
| ServerCampaignId (Edm.String, length-32) | ID of the campaign in the external system. The ID is expected to be the first part of the campaign key on server side.  
Semantic key (characteristic)  
Used as filter by SAP Marketing Cloud  
Mandatory in response; to be sorted |
| Date (Edm.DateTime) | Date of the success data  
Semantic key (characteristic)  
Used as filter by SAP Marketing Cloud  
Mandatory in response, to be sorted  
YearWeek or YearMonth may be used instead. However, only one of the three is allowed in a single record. |
| YearWeek (Edm.String, length-6) | The year and week associated with the success data.  
Semantic key (characteristic)  
Used as filter by SAP Marketing Cloud  
Mandatory in response, to be sorted  
Date or YearMonth may be used instead. However only one of the three is allowed in a single record. |
| YearMonth (Edm.String, length-6) | The year and month associated  
Semantic key (characteristic)  
Used as filter by SAP Marketing Cloud  
Mandatory in response, to be sorted  
Date or YearWeek may be used instead. However only one of the three is allowed in a single record. |
<table>
<thead>
<tr>
<th>MarketingSuccess (Entity Type)</th>
<th>Usage in GetEntitySet Method</th>
</tr>
</thead>
</table>
| TimeZone (Edm.String, length-6) | Time zone to which the date refers  
Time zone is not characteristic (not part of semantic success data key)  
Used as filter by SAP Marketing Cloud  
Optional in response. If no time zone is provided, UTC is used.  
Examples:  
- For timezone UTC+05:30, the expected value from the TimeZone field is **UTC +53**  
- For timezone UTC-8:30, the expected value from the TimeZone field is **UTC-83**  
A filter for TimeZone is set when a **SuccessDataTimeZone** is provided with Campaign/GetEntitySet |
| CommunicationMedium (Edm.String, length-20) | The communication medium  
Semantic key (characteristic)  
Mandatory in response  
Relevant communication media: **DISPLAY_ADS** **MOBILE_ADS** |
| Gender (Edm.String, length-1) | Gender to which the success data is related  
SAP Marketing Cloud provides a mapping of external to internal gender codes.  
Standard: FEMALE | MALE  
Semantic key (characteristic)  
Optional in response; if not provided, the gender is considered as unknown |
| Country(Edm.String, length 40) | Country that the success data is related to  
SAP Marketing Cloud provides a mapping of external to internal country codes.  
Semantic key (characteristic)  
Optional in response; if not provided, the country is considered as unknown |
| Region(Edm.String, length 40) | Region that the success data is related to  
SAP Marketing Cloud provides a mapping of external to internal region codes.  
Semantic key (characteristic)  
Optional in response; if not provided, the region is considered as unknown |
### MarketingSuccess (Entity Type) | Usage in GetEntitySet Method
--- | ---
AgeRangeLow (Edm.Byte, length-3) | Lower boundary of age
AgeRangeLow and AgeRangeHigh specify the age range to which the success data is related. The age ranges should not differ for all success data from the same external system. If data is available for each exact age, set AgeRangeLow and AgeRangeHigh to the same value.
Semantic key (characteristic)
Optional in response; if not provided, the age is considered as unknown

AgeRangeHigh (Edm.Byte, length-3) | Higher boundary of age
Semantic key (characteristic)
Optional in response; if not provided the age is considered as unknown

CampaignContentLinkName (Edm.String) | Name of the link in the campaign content that the success data refers to
Typically only provided for the KPIs "Clicks" and "UniqueClicks"
Semantic key (characteristic)
Optional in response

SpendAmount (Edm.Decimal, Precision-31, scale-2) | Amount spend for the campaign on the external platform
KPI
Optional in response

SpendCurrency (Edm.String, length-5) | Currency of SpendAmount
One currency per campaign is supported
Mandatory in response when SpendAmount is provided

UniqueImpressions (Edm.Int32, length-10) | Number of unique impressions
KPI
Optional in response

Impressions (Edm.Int32, length-10) | Number of impressions
KPI
Optional in response

UniqueClicks (Edm.Int32, length-10) | Number of unique clicks
KPI
Optional in response
<table>
<thead>
<tr>
<th>MarketingSuccess (Entity Type)</th>
<th>Usage in GetEntitySet Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clicks (Edm.Int32, length-10)</td>
<td>Number of clicks KPI Optional in response</td>
</tr>
<tr>
<td>Orders (Edm.Int32, length-10)</td>
<td>Number of orders KPI Optional in response</td>
</tr>
<tr>
<td>OrderAmount (Edm.Decimal, Precision-31, scale-2)</td>
<td>Monetary value of the orders KPI Optional in response</td>
</tr>
<tr>
<td>OrderAmountCurrency (Edm.String, length-5)</td>
<td>Currency of OrderAmount KPI Optional in response</td>
</tr>
<tr>
<td>VideoViews (Edm.Int32, length-10)</td>
<td>Number of video views KPI Optional in response</td>
</tr>
<tr>
<td>VideoViewedAverageInPercent (Edm.Decimal, Precision-5, scale-2)</td>
<td>Average percentage of video viewed KPI Optional in response</td>
</tr>
<tr>
<td>Registrations (Edm.Int32, length-10)</td>
<td>Number of registrations KPI Optional in response</td>
</tr>
<tr>
<td>Downloads (Edm.Int32, length-10)</td>
<td>Number of downloads KPI Optional in response</td>
</tr>
<tr>
<td>SentMessages (Edm.Int32, length-10)</td>
<td>Number of sent messages KPI Optional in response</td>
</tr>
<tr>
<td>RejectedMessages (Edm.Int32, length-10)</td>
<td>Number of rejected messages KPI Optional in response</td>
</tr>
<tr>
<td>MarketingSuccess (Entity Type)</td>
<td>Usage in GetEntitySet Method</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DeliveredMessages (Edm.Int32, length-10)</td>
<td>Number of delivered messages KPI Optional in response</td>
</tr>
<tr>
<td>OpenedMessages (Edm.Int32, length-10)</td>
<td>Number of opened messages KPI Optional in response</td>
</tr>
<tr>
<td>HardBounces (Edm.Int32, length-10)</td>
<td>Number of hard bounces KPI Optional in response</td>
</tr>
<tr>
<td>SoftBounces (Edm.Int32, length-10)</td>
<td>Number of soft bounces KPI Optional in response</td>
</tr>
<tr>
<td>PageLikes (Edm.Int32, length-10)</td>
<td>Number of page likes KPI Optional in response</td>
</tr>
<tr>
<td>PostEngagements (Edm.Int32, length-10)</td>
<td>Number of post engagements KPI Optional in response</td>
</tr>
<tr>
<td>OfferClaims (Edm.Int32, length-10)</td>
<td>Number of offer claims KPI Optional in response</td>
</tr>
<tr>
<td>WebsiteConversions (Edm.Int32, length-10)</td>
<td>Number of website conversions KPI Optional in response</td>
</tr>
<tr>
<td>AppInstalls (Edm.Int32, length-10)</td>
<td>Number of app installs KPI Optional in response</td>
</tr>
<tr>
<td>AppEngagements (Edm.Int32, length-10)</td>
<td>Number of app engagements KPI Optional in response</td>
</tr>
<tr>
<td><strong>MarketingSuccess (Entity Type)</strong></td>
<td><strong>Usage in GetEntitySet Method</strong></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td><strong>Filter</strong></td>
<td>Filter by <code>ServerCampaignIDContextCT</code></td>
</tr>
<tr>
<td><strong>GrossRatingPoints (Edm.Decimal, Precision: 15, scale: 2)</strong></td>
<td>The number of impressions for a defined population in relation to the size of this population. Gross rating points are defined as (100 \times \text{impressions} / \text{size of defined population}) KPI Optional in response</td>
</tr>
<tr>
<td><strong>GrossRatingPointBase (Edm.String, length: 80)</strong></td>
<td>The population the gross rating points relate to – for example, “US M18-39”, which indicates that the gross rating points relate to male adults from 18 to 39 in the US. Semantic key (characteristic) Optional in response; it’s recommended to always provide a gross rating point base together with gross rating points.</td>
</tr>
<tr>
<td><strong>InteractionReason (Edm.String, length: 20)</strong></td>
<td>Reason for the interaction Possible values can be found in configuration. For more information, see Managing Interaction Content. Semantic key (characteristic) Optional in response</td>
</tr>
<tr>
<td><strong>InteractionType (Edm.String, length: 20)</strong></td>
<td>Type of interaction Possible values can be found in configuration. For more information, see Managing Interaction Content. Semantic key (characteristic) Optional in response</td>
</tr>
</tbody>
</table>
| **InteractionStatus (Edm.String, length: 2)** | Status of interaction Possible values:  
- **01** (In Process)  
- **02** (Released)  
- **03** (Completed)  
- **04** (Canceled)  
- **05** (Converted)  
- **06** (Successful)  
- **07** (Unsuccessful)  
- **00** (New) Semantic key (characteristic) Optional in response |
<table>
<thead>
<tr>
<th>MarketingSuccess (Entity Type)</th>
<th>Usage in GetEntitySet Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeviceType (Edm.String, length-60)</td>
<td>The type of device, for example tablet or desktop</td>
</tr>
<tr>
<td></td>
<td>Semantic key (characteristic)</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>AdNetwork (Edm.String, length-60)</td>
<td>The company that connects advertisers to the websites that host advertisements</td>
</tr>
<tr>
<td></td>
<td>Semantic key (characteristic)</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>CampaignContentName (Edm.String, length-100)</td>
<td>Name of the campaign content that the success data refers to</td>
</tr>
<tr>
<td></td>
<td>Semantic key (characteristic)</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>ExecutedInteractions (Edm.Int64, length-10)</td>
<td>Number of executed interactions</td>
</tr>
<tr>
<td></td>
<td>KPI</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>EventResponses (Edm.Int64, length-10)</td>
<td>Number of event responses</td>
</tr>
<tr>
<td></td>
<td>KPI</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>Leads (Edm.Int64, length-10)</td>
<td>Number of leads</td>
</tr>
<tr>
<td></td>
<td>KPI</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>Opportunities (Edm.Int64, length-10)</td>
<td>Number of opportunities</td>
</tr>
<tr>
<td></td>
<td>KPI</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>PhoneCalls (Edm.Int64, length-10)</td>
<td>Number of phone calls</td>
</tr>
<tr>
<td></td>
<td>KPI</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>Appointments (Edm.Int64, length-10)</td>
<td>Number of appointments</td>
</tr>
<tr>
<td></td>
<td>KPI</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>FailedInteractions (Edm.Int64, length-10)</td>
<td>Number of failed interactions</td>
</tr>
<tr>
<td></td>
<td>KPI</td>
</tr>
<tr>
<td></td>
<td>Optional in response</td>
</tr>
<tr>
<td>MarketingSuccess (Entity Type)</td>
<td>Usage in GetEntitySet Method</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>OfferViews (Edm.Int64, length-10)</td>
<td>Number of offer views KPI Optional in response</td>
</tr>
<tr>
<td>EmailComplaints (Edm.Int64, length-10)</td>
<td>Number of email complaints KPI Optional in response</td>
</tr>
<tr>
<td>Tasks (Edm.Int64, length-10)</td>
<td>Number of Tasks KPI Optional in response</td>
</tr>
<tr>
<td>UniqueImpressionsInPercent (Edm.Decimal, Precision-5, scale-2)</td>
<td>Reach in percent KPI Optional in response</td>
</tr>
<tr>
<td>OpportunityAmount (Edm.Decimal, Precision-31, scale-2)</td>
<td>Monetary value of the opportunity KPI Optional in response</td>
</tr>
<tr>
<td>OpportunityAmountCurrency (Edm.String, length-5)</td>
<td>Currency for opportunity value Semantic key (characteristic) Mandatory in response when OpportunityAmount is provided</td>
</tr>
</tbody>
</table>

An example of a campaign success data request, with no additional parameters in the campaign key, as sent by SAP Marketing Cloud:

**Note**

Certain aggregated KPIs don’t have values for "Date" or "Timezone". To support , the OData request calls have additional filters in the request: `((TimeZone eq '') or (Date eq null))`.

- **Request URL**: https://<HostName>/>.../<YourService>/MarketingSuccessSet? $filter=((ServerCampaignId eq '54321') or (ServerCampaignId eq '54322')) and ((TimeZone eq 'UTC') or (TimeZone eq '')) and ((Date ge datetime'2016-01-27T00:00:00' and Date le datetime'2016-01-28T00:00:00') or (Date eq null))&$top=50&$skip=50&$format=json&$orderby=ServerCampaignId,Date desc
- **HTTP Method**: GET

An example of a campaign success data request, including the parameter `ADVERTISER` in the campaign key, as sent by SAP Marketing Cloud:
Request URL: https://<HostName>/.../<YourService>/MarketingSuccessSet?
$filter=((ServerCampaignId eq '54321') or (ServerCampaignId eq '54322')) and
(Filter/KeyPart2Id eq 'ADVERTISER' and Filter/KeyPart2Value eq
'SAP_GLOBAL_MARKETING')and ((TimeZone eq 'UTC') or (TimeZone eq ' ')) and ((Date
greaterThan datetime'2016-01-27T00:00:00' and Date lessThan datetime'2016-01-28T00:00:00') or
(Date eq null))&$top=50&$skip=50&$format=json&$orderby=ServerCampaignId,Date
desc

HTTP Method: GET

Sample Response Payload (Synchronous):

```

{   "d": {
        "results": [{
            "ServerCampaignId": "54321",
            "Date": "\\/Date(1487635200000)\\/",
            "CommunicationMedium": "DISPLAY_ADS",
            "CampaignContentLinkName": "",
            "TimeZone": "UTC",
            "Gender": "2",
            "Country": "",
            "Region": "",
            "AgeRangeLow": 55,
            "AgeRangeHigh": 64,
            "SpendAmount": "60.00",
            "SpendCurrency": "USD",
            "UniqueImpressions": 0,
            "Impressions": 511,
            "Clicks": 5660,
            "UniqueClicks": 0,
            "Orders": 0,
            "OrderCurrency": "USD",
            "OrderAmount": "70.00",
            "Registrations": 0,
            "Downloads": 0,
            "HardBounces": 0,
            "SoftBounces": 0,
            "SentMessages": 0,
            "RejectedMessages": 0,
            "DeliveredMessages": 0,
            "PageLikes": 0,
            "PostEngagements": 0,
            "OfferClaims": 0,
            "VideoViews": 0,
            "VideoViewedAverageInPercent": "0.00",
            "WebsiteConversions": 0,
            "AppEngagements": 0,
            "GrossRatingPoints": "0.00",
            "GrossRatingPointBase": "",
            "YearWeek": "201751",
            "YearMonth": "",
            "InteractionReason": "",
            "InteractionType": "",
            "InteractionStatus": "06",
            "DeviceType": "DESKTOP",
            "AdNetwork": "GOOGLE_SEARCH",
            "CampaignContentName": "",
            "ExecutedInteractions": 0,
            ... (more fields) ...
        }
    ...
```
```
Sample Response Payload with Report ID (Asynchronous):

```
{  
  "d": {
    "results": [{
      "ServerCampaignId": "54321",
      "ReportId": "4711"
    },
    {
      "ServerCampaignId": "54322",
      "ReportId": "4711"
    }
  ]
}
```

An example of a campaign success data request with ReportId:

- **Request URL:**
  ```
  https://<HostName>/.../<YourService>/MarketingSuccessSet?
  $filter=( ReportId eq '4711') and (Filter/KeyPart2Id eq 'ADVERTISER' and Filter/KeyPart2Value eq 'SAP_GLOBAL_MARKETING') &$top=50&$skip=50&$format=json
  ```
- **HTTP Method:** GET

Sample Response Payload:

```
{  
  "d": {
    "results": [{
      "ServerCampaignId": "54321",
      "Date": "/Date(1474588800000)/",
      "CommunicationMedium": "DISPLAY_ADS",
      "SpendAmount": "60.00",
      "SpendCurrency": "USD",
      "UniqueImpressions": 0,
      "Impressions": 511,
      "Clicks": 32,
      "ReportId": "4711"
    },
    {  
      "ServerCampaignId": "54322",
      "Date": "/Date(1474588800000)/",
      "CommunicationMedium": "DISPLAY_ADS",
      "AppEngagements": 300,
      ``
If no data is available, an empty response will be received. It may also be the case that there is not data available for all campaigns with the ReportID, and the response will only contain campaigns for which there is data available.

**Related Information**

Creating Custom OData Fields for Campaign Success Data [page 193]

### 4.3.2.1.4.1 Creating Custom OData Fields for Campaign Success Data

**Prerequisites**

- Define the custom field in the *Custom Fields and Logic* with the business context *Marketing: Campaign Performance Actual Measure*.
  
  For more information about setting up custom fields, see *Creating Custom Fields*.
  
  For more information about custom fields for campaign performance, including dimensions and target measures in addition to actual measures, see *Custom Fields for Campaign Performance*.
  
  When you enter a label, an identifier is automatically generated.
  
  - Example custom field label: Tickets Sold
  
  - Generated identifier: YY1_TicketsSold_MCS
    
    The prefix YY1 and suffix MCS are automatically generated.

- In the external campaign interface, add the custom field under *MarketingSuccess Entity* as a property.
  
  The field name must be the same throughout. Example: YY1_TicketsSold_MCS

Once defined, the external interface can send the value for the new field.

Sample OData response with the custom field YY1_TicketsSold_MCS:

```json
{
    "d": {
        "results": [{
            "ServerCampaignId": "54321",
            "Date": "1/1/2017",
            "CommunicationMedium": "DISPLAY_ADS",
            "SpendAmount": "60.00",
            "SpendCurrency": "USD",
            "Impressions": 511,
            "YY1_TicketsSold_MCS": 100
        }]
    }
}
```
4.3.2.1.5 Handling Errors

If an error occurs when retrieving the required parameters, or when creating the campaign in the external system, SAP Marketing Cloud blocks the process until the error is resolved. The error messages are displayed in your application.

If an error occurs when transferring target group members, the error log can be accessed on the Automation panel, in the Create External Target Group section.

If an error occurs when retrieving the success data, a red status for the success data retrieval is displayed in your application. Clicking the red status provides the detailed error messages. If one request for success data fails, the already retrieved success is still available. If requests for success data fail, the requests are automatically repeated with the next success data retrieval.

For the error response, error-code, and error-message-value are mandatory. Further error messages can be returned as error-innererror.

Example of an error response:

```json
{
  "error":{
    "code":"123",
    "message":{
      "lang":"en",
      "value":"Your error message describing the issue"
    },
    "innererror":{
      "errordetails":[
        {"code":"234",
        "message":"Your description for the error resolution",
        "severity":"error"}
      ]
    }
  }
}
```

For more information about error handling, see http://www.odata.org/documentation/odata-version-2-0/operations/.


4.3.2.2 Communication Arrangement for External Campaign Execution

You set up a communication arrangement to enable the external campaign execution, and the requesting of success data from the external system. To set up a communication arrangement, you require the business catalog role Marketing – Business Administration (SAP_BCR_CEC_MKTADM_PC).

To set up a communication arrangement for external campaign execution you create a communication system, and a communication arrangement.

Communication System

Create the communication system as follows:

2. In the New Communication System dialog, define the ID for the communication system, for example, Z_CUAN_ECPG. Define a System Name. You can freely define a name; note that the name is used when you create the communication arrangement. Click Create.
3. Under Technical Data, Host Name, specify the external system you want to use for the campaign execution, such as Facebook, or Twitter. Indicate the pure host name, no path, no port. Note that Log System ID, Client Name, and Business System are not relevant for the external campaign execution.
4. Optionally, you can provide your Contact Information for the communication system you are defining.
5. Under User for Outbound Communication, click + to add a set of access details for the external server. One option is to use the Authentication Method user and password by entering the information in the corresponding fields. Alternatively, you can use authentication via an SSL client certificate. For this option, you need to select Default Client Certificate as the certificate type and then download the certificate before creating the outbound user.
6. Click Save to save the new or edited communication system in an active status.

If you chose the SSL client certificate as your authentication method, you will need to upload the certificated you downloaded to your external server. For example, if you have implemented the interface for externally executed campaigns on SAP Cloud Platform Integration, the certificate has to be uploaded to the HTTP channel of your integration flow.

Communication Arrangement for Use of External Platforms in Multichannel Campaigns

Create the communication arrangement as follows:

1. In the SAP Fiori launchpad, click Communication Arrangement. In Maintain Communication Arrangement, click New.
2. In the New Communication Arrangement dialog, under Scenario, use the value help to select the predefined scenario Marketing - External Campaign Execution Integration (SAP_COM_0037). Under Arrangement Name, define a name.
3. Under Common Data, Communication System, use the value help to select the communication system you have created (see section Communication System). Note that My System is not relevant for external campaign execution.

4. Under Outbound Communication, use the value help to select the relevant system access details, which you have specified in the communication system you are using for the communication arrangement. For multichannel campaigns, OAuth authentication is not supported.

5. Under Additional Properties, define an External Campaign System ID. If you are setting up a communication for Google Campaign Manager, use the code SDM. For other external platforms, use a three letter code that starts with Z. This ID cannot be changed later. Here you can also define an action name. This name will be used for the multichannel action in the campaign designer.

6. Under Outbound Services, specify the paths for the predefined outbound services using the following pattern: /<your_service>/<your_entity>. The predefined services map to the following actions (specified as entity):

   ○ Request campaign parameters (CampaignParameterSet)
   ○ Create campaign (CampaignSet)
   ○ Request success data for the executed campaign (MarketingSuccessSet)
   ○ Transferring external target group (ExtTargetGroupSet)
   ○ Transferring external target group members (ExtTargetGroupMemberFacetSet)
   ○ Read supported ID origins for external system (ExtTargetGroupSupportedIdOriginSet)
   ○ Retrieve information for the value help for campaign assignment (CampaignValueHelpSet)

   Note that the outbound services are defined in the Scenario you have selected when creating the communication arrangement.

7. Click Save to save the new or edited communication arrangement in an active status.

---

### Communication Arrangement for External-Only Campaigns

You require a campaign category for campaigns that are externally executed only. Your system comes with a general category that can be set up for use with the external system of your choice. Only one external campaign category is available, but may be edited using the configuration app Define Campaign Categories and Actions. If you need more external campaign categories, you will need to open a ticket with the component XX-S4C-SRV-CON. You will need to provide the desired ID and name for the new category.

Typically, one campaign category corresponds to one external campaign execution system. For authorization purposes, you can optionally add a marketing area per communication arrangement.

---

**i Note**

To perform HTTP calls to an external system from SAP Marketing Cloud, a trust relationship with the external system is required. If this relationship is not established by default, such as when using SAP Cloud Platform Integration, you have to upload the root certificate of the external system’s host in the Maintain Certificate Trust List app in SAP Marketing Cloud.

Create the communication arrangement as follows:

1. In the SAP Fiori launchpad, click Communication Arrangement. In Maintain Communication Arrangement, click New.
2. In the New Communication Arrangement dialog, under Scenario, use the value help to select the predefined scenario Marketing - External Campaign Execution Integration (SAP_COM_0037). Under Arrangement Name, define a name using the following pattern: ExtCampaignExec_<campaign_category>, for example, ExtCampaignExec_EEC. For authorization purposes, you can optionally include a marketing area in the arrangement name. To include the marketing area, extend the pattern as follows: ExtCampaignExec_<campaign_category>_<marketing_area>.

3. Under Common Data, Communication System, use the value help to select the communication system you have created (see section Communication System). Note that My System is not relevant for external campaign execution.

4. Under Outbound Communication, use the value help to select the relevant system access details, which you have specified in the communication system you are using for the communication arrangement.

5. Do not define an External Campaign System ID under Additional Properties. This will mark the communication arrangement for use in multichannel campaigns and not external-only campaigns.

6. Under Outbound Services, specify the paths for the predefined outbound services using the following pattern: /<your_service>/<your_entity>. The predefined services map to the following actions (specified as entity):
   - Request campaign parameters (CampaignParameterSet)
   - Create campaign (CampaignSet)
   - Request success data for the executed campaign (MarketingSuccessSet)
   - Transferring external target group (ExtTargetGroupSet)
   - Transferring external target group members (ExtTargetGroupMemberFacetSet)
   - Read supported ID origins for external system (ExtTargetGroupSupportedIdOriginSet)
   - Retrieve information for the value help for campaign assignment (CampaignValueHelpSet)

   Note that the outbound services are defined in the Scenario you have selected when creating the communication arrangement.

7. Click Save to save the new or edited communication arrangement in an active status.

4.3.3 Open Channel Integration

With this integration you create own actions that send data for further processing to an external system, such as SAP Cloud Platform, when the campaign has been executed. But you can also just implement the inbound side of this integration to get external data in your campaigns.

Technology: OData Service using SAP Cloud Platform

Benefits

Develop custom logic for the campaign automation in SAP Marketing Cloud:

- Programmatically connect external applications using SAP Cloud Platform by developing custom actions in the campaign automation.
- Automatically provide follow-up data for any external system such as lettershop, mobile app, web shop, or service portal.
- Pass over all personalization data automatically for each contact using SAP Cloud Platform.
In-place analytics for outbound and inbound interactions
- Campaign (with all actions) is executed in the SAP system
- Targeted contact is known.
- Guaranteed delivery.
- You can use SAP or partner infrastructure, as Amazon or SAP Cloud for Customer.
- Content needs to be provided by receiving system (not part of SAP Marketing)

System Setup and Integration Steps

For setting up the Open Channel Integration you walk through the following steps:

1. Check that the business catalog role **Marketing - Segmentation and Campaign Configuration** (SAP_CEC_BC_MKT_CPC_PC) has been assigned to your user.
2. Adapt Enhancements [page 208] (mandatory for outbound)
   For a minimal integration you have to implement only the enhancement (1) **Open Channel: Define Implementations** and define an **Implementation ID**.
4. Create Communication Systems and Arrangements [page 213] (mandatory for outbound)
5. Setup SAP Cloud Platform according to your needs. (mandatory for outbound)
   For more information for this step and the following ones, see Inbound Service Settings API [page 224].
6. Then adapt the enhancement (5) Open Channel: Define Template for Outbound Interaction. (mandatory for inbound)
   For more information, see Processing Details [page 200] and Inbound Service Settings API [page 224].
7. Create communication systems and arrangements for the inbound side. (mandatory for inbound)
8. Dependent on how you set up your integration and to be able to use the Open Channel action in your system, you create an export definition:
   1. Choose the Export Definitions app and under Details choose New.
   2. Then enter a Definition. You can freely define a name; note that the name is used when you assign the Open Channel action in the campaign user interface (UI).
   3. Select Usage Open Channel.
   4. Select a Segmentation Profile, for example, All Contacts.
   5. Select an Export Profile, for example, File Export.
   6. Under Available select these attributes you want to use in your export definition and bring them to the list Selected for Export Definition.
   7. Choose Save to save the new export definition.

   **i Note**
   This step is optional.

In the following you find some useful thoughts for the implementation:

- We recommend to plan the integration flow beforehand, because at least you need to implement the Processing integration flow, which is mandatory, and you can do everything in this implementation. But you can also do all three or only two of the offered open channel implementations, just depending of your needs.
- Preprocessing and Processing send their data in the deep create format that means the whole data structure is created directly.
- All processing steps of the integration send messages by HTTP Post method, but only the creation mode is supported which means this integration enforces the creation of new object instances in the external system, but not any updates and deletions.
- We recommend to use the HTTP sender channel at least for the processing step, because scripting might be required anyway for transforming the attribute IDs and values of the TargetGroupMemberAttributeData entity set into a new message.
- Read the information about the message choreography and the error handling in chapter OData Service Settings for Outbound [page 215].

Create a Campaign

Now you can create a campaign and use the action Open Channel.

For more information about the general handling, see Creating a Campaign under Use Cases.
4.3.3.1 Processing Details

With the implementation, you can execute a campaign and send outbound objects also to an external system using SAP Cloud Platform.

When the work has been done in the external system, you can get back data to analyze your success and create follow-up triggers in your system, for example, by using a trigger-based campaign. The selection of transferred data is done by using an export definition.
The graphic shows the process steps and the systems that are involved:

**SAP Marketing Cloud**
- Create Campaign
- Execute Campaign
- System Creates Outbound Interactions
- System Creates Inbound Interactions for Campaign Success

**SAP Cloud Platform Integration**
- iFlow
- Requests X-CSRF Token (optional)
- Send Data
- Requests X-CSRF Token
- Send Data

**External System**
- Create Outbound Objects
- Follow-up Processing
- Builds OData Service Message

---

Integration Guide
Integration Scenarios
PUBLIC 201
The following description is an example and demonstrates the steps and the data required to link outbound and inbound records for open channel processing.

Campaign Execution

The campaign has a target group with the following members:

- Julie Armstrong
- John Miller
- Michael Adams

The campaign executes the open channel action. The action transfers data using the OData service `CUAN_CAMPAIGN_OPEN_CHANNEL` and the entity sets `CampaignExecutionRunPackages`, `CampaignTargetGroupMembers`, and `TargetGroupMemberAttributeData`:

```
{ "d": { "Campaign": {  "CampaignId": "0000381379",  "Name": "Open Channel Demo 1",  "MarketingAreaId": "CXXGLOBAL",  "SegmentationObject": "SAP_CONTACT_ENGAGEMENT_SIN",  "ImplementationId": "ZOC_EXPORT" },  "PackageId": 1,  "ExecutionStartDateTime": "2016-07-07T07:44:40Z",  "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",  "CampaignTargetGroupMembers": [ {  "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10",  "PackageId": 1,  "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",  "TargetGroupMemberAttributeData": [ {  "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_FIRST",  "Value": "Julie",  "EdmTypeId": "Edm.String",  "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10" },  {  "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_LAST",  "Value": "Armstrong",  "EdmTypeId": "Edm.String",  "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10" },  {  "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-CONTACT_KEY",  "Value": "005056AC4A181ED59B8D20A84B8A6C6E9",  "EdmTypeId": "Edm.Binary",  "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10" } ] } ] }
```
"AttributeId": "OUTBOUND_INTERACTION",
"Value": "8CDCD4A847681EE69182D4A1498E1EF5",
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "ZOC_EXPORT_DESCRIPTION",
"Value": "Open Channel Demo 1",
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "OUTBOUND_INTERACTION",
"Value": "8CDCD4A847681EE69182D4A1498E1EF5",
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "ZOC_EXPORT_DATE",
"Value": "2016-07-07",
"EdmTypeId": "Edm.Date",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "ZOC_EXPORT_PRIORITY",
"Value": "PRIORITY_1",
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
}]
],

"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23",
"PackageId": 1,
"ExecutionRunKey": "8CDDC4A847681EE69182D4B8A1C39EF3",
"TargetGroupId": "EDM_STRING",
"TargetGroupIdMemberAttributes": [

"AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_FIRST",
"Value": "John",
"EdmTypeId": "Edm.String",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23"
},

"AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_LAST",
"Value": "Miller",
"EdmTypeId": "Edm.String",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23"
},

"AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-CONTACT_KEY",
"Value": "005056AC4A181ED598D20A84AB8B06E9",
"EdmTypeId": "Edm.Binary",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23"
},

"AttributeId": "OUTBOUND_INTERACTION",
"Value": "8CDDC4A847681EE69182D4A1498E1EF5",
"EdmTypeId": "Edm.String",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23"
},

"AttributeId": "ZOC_EXPORT_DESCRIPTION",
"Value": "Open Channel Demo 1",
"EdmTypeId": "Edm.String",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23"
},

"AttributeId": "ZOC_EXPORT_DATE",
"Value": "2016-07-07",
"EdmTypeId": "Edm.Date",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23"}
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23" }, { "AttributeId": "ZOC_EXPORT_PRIORITY", "Value": "PRIORITY_1", "EdmTypeId": "Edm.String", "OutboundId": "EA297547B0DBBDF81C308FD14A3757C1420ABB23" } ], "OutboundId": "CA5F1FE120237480E6054B06D61371081AE095DF", "PackageId": 1, "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3", "TargetGroupMemberAttributeData": [ { "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_FIRST", "Value": "Michael", "EdmTypeId": "Edm.String", "OutboundId": "CA5F1FE120237480E6054B06D61371081AE095DF" }, { "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_LAST", "Value": "Adams", "EdmTypeId": "Edm.String", "OutboundId": "CA5F1FE120237480E6054B06D61371081AE095DF" }, { "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-CONTACT_KEY", "Value": "40F2E93065BD1ED598D1DCFDB65F97C0", "EdmTypeId": "Edm.Binary", "OutboundId": "CA5F1FE120237480E6054B06D61371081AE095DF" }, { "AttributeId": "OUTBOUND_INTERACTION", "Value": "8CDCD4A847681EE69182D4A149B85F3EF5", "EdmTypeId": "Edm.String", "OutboundId": "CA5F1FE120237480E6054B06D61371081AE095DF" }, { "AttributeId": "ZOC_EXPORT_DESCRIPTION", "Value": "Open Channel Demo 1", "EdmTypeId": "Edm.String", "OutboundId": "CA5F1FE120237480E6054B06D61371081AE095DF" } ]}
**i Note**
The transferred **OutboundId** is kept by the external system because this ID serves as external anchor to link outbound and inbound records.

## Outbound Interactions

The campaign must create outbound interactions, otherwise the inbound data cannot be linked to the campaign.

To create outbound interactions you implement the enhancement (5) **Open Channel: Define Template for Outbound Interaction**.

### Sample Code

```plaintext
template-id_origin            = 'SAP_HYBRIS_MKT_IC'.
template-interaction_type     = 'ZOC_CALL_CENTER_OUTB'.
template-communication_medium = 'BUSINESS_DOCUMENT'.
```

The following outbound interactions have been created:

<table>
<thead>
<tr>
<th>DB KEY</th>
<th>ID_ORIGIN</th>
<th>ID</th>
<th>COMM_MEDI</th>
<th>SOURCE_OB</th>
<th>SOURCE_OB</th>
<th>INITIATIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SAP_HYBRIS_MKT_IC</td>
<td>005056AC4</td>
<td>BUSINESS_DOCUMENT</td>
<td>ZOC_CALL_CENTER_OTBU</td>
<td>CUAN_MARK</td>
<td>1202654B2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A181ED598</td>
<td>D20A84AB8</td>
<td>AC6E9 =</td>
<td>contact key of Julie Armstrong</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAP_HYBRIS_MKT_IC</td>
<td>005056AC4</td>
<td>BUSINESS_DOCUMENT</td>
<td>ZOC_CALL_CENTER_OTBU</td>
<td>CUAN_MARK</td>
<td>EA297547B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A181ED598</td>
<td>D20A84AB8</td>
<td>B06E9 =</td>
<td>contact key of John Miller</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SAP_HYBRIS_MKT_IC</td>
<td>40F2E9306</td>
<td>BUSINESS_DOCUMENT</td>
<td>ZOC_CALL_CENTER_OTBU</td>
<td>CUAN_MARK</td>
<td>CAF51FE12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5BD1ED598</td>
<td>D1CDCFDB657</td>
<td>F97C0 =</td>
<td>contact key of Michael Adams</td>
<td></td>
</tr>
</tbody>
</table>
Meaning of the attributes:

- **ID_ORIGIN**: set by enhancement coding, see template-id_origin
- **ID**: key of contact, set by campaign execution
- **COMM_MEDIUM**: set by enhancement coding, see template-communication_medium
- **IA_TYPE**: set by enhancement coding, see template-interaction_type
- **SOURCE_OBJECT_TYPE**: always CUAN_MARKETING_ORCHESTRATION, set by campaign execution
- **SOURCE_OBJECT_ID**: this ID is the OutboundId, set by campaign execution
- **TIMESTAMP**: time stamp when outbound happened, set by campaign execution
- **INITIATIVE_ID**: ID of the campaign, set by campaign execution

### Inbound Interactions

In the external system, the transferred data is processed and the processing of the data for the contact **Michael Adams** results into an inbound interaction.

**Note**

Before calling the import service, the external system must request the X-CSRF-token: `/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/InteractionsDeepInsert`

The external system uses the OData service API_MKT_INTERACTION and transfers the following data using the entity set ImportHeaders:

```json
{
  "UUID": "32575914-a9db-476c-a51a-2b0d4a899b95",
  "Interactions": [
    {
      "InteractionUUID": "00000000-0000-0000-0000-000000000000",
      "InteractionType": "ZOC_CALL_CENTER_INB",
      "InteractionSourceObjectType": "CUAN_CAMPAIGN_OUTBOUND",
      "InteractionSourceObject": "18D3620CC1DBAEB8E5F97AFB922E84E092F271F0",
      "InteractionTimeStampUTC": "2019-06-13T08:55:00"
    },
    {
      "InteractionUUID": "00000000-0000-0000-0000-000000000000",
      "InteractionType": "ZOC_CALL_CENTER_INB",
      "InteractionSourceObjectType": "CUAN_CAMPAIGN_OUTBOUND",
      "InteractionSourceObject": "0FB6D7D9DCDB8616A4A39D0E931C01DA57B5E48F",
      "InteractionTimeStampUTC": "2019-06-13T08:55:00"
    }
  ]
}
```

The **OutboundId** is transferred with the **SourceObjectId**. By setting **SourceObjectType** to **CUAN_CAMPAIGN_OUTBOUND** the OData service knows that the given **OutboundId** belongs to an open channel.
scenario and copies data from the outbound to the inbound record: InteractionContact, Campaign, CampaignExecutionRun, and so on, are determined by the OutboundId and therefore not provided by the external system.

For more information, see Inbound Service Settings API [page 224].

After a successful processing of the OData service, the interaction table contains the following outbound (DB_KEY: 1 - 3) and inbound (DB_KEY: 4) records:

<table>
<thead>
<tr>
<th>DB_KEY</th>
<th>ID_ORIGIN</th>
<th>ID</th>
<th>COMM_MEDI</th>
<th>IA_TYPE</th>
<th>JECT_TYPE</th>
<th>JECT_ID</th>
<th>TIMESTAMP</th>
<th>INITIATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SAP_HYBRI</td>
<td>005056AC4</td>
<td>BUSINESS_</td>
<td>ZOC_CALL_</td>
<td>CUAN_MARK</td>
<td>1202654B2</td>
<td>2016-07-0</td>
<td>381379</td>
</tr>
<tr>
<td></td>
<td>S_MKT_IC</td>
<td>A181ED958</td>
<td>DOCUMENT</td>
<td>CENTER_OUTBND</td>
<td>ETING_ORECTSTRATION</td>
<td>1C72A50A0</td>
<td>7T07:48:4</td>
<td>04E5CB35E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D20A84AB8</td>
<td>TB</td>
<td></td>
<td>HESTRATIO</td>
<td>N</td>
<td>6D2FBE916</td>
<td>EA10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AC6E9</td>
<td>contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>key of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Julie</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Armstrong</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAP_HYBRI</td>
<td>005056AC4</td>
<td>BUSINESS_</td>
<td>ZOC_CALL_</td>
<td>CUAN_MARK</td>
<td>EA297547B</td>
<td>2016-07-0</td>
<td>381379</td>
</tr>
<tr>
<td></td>
<td>S_MKT_IC</td>
<td>A181ED958</td>
<td>DOCUMENT</td>
<td>CENTER_OUTBND</td>
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<td>0DBD81C</td>
<td>7T07:48:4</td>
<td>308FD14A3</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>TB</td>
<td></td>
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<td>N</td>
<td>757C1420A</td>
<td>BB23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B06E9</td>
<td>contact</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>key of</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>John</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Miller</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SAP_HYBRI</td>
<td>40F2E9306</td>
<td>BUSINESS_</td>
<td>ZOC_CALL_</td>
<td>CUAN_MARK</td>
<td>CA55F1E12</td>
<td>2016-07-0</td>
<td>381379</td>
</tr>
<tr>
<td></td>
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<td>5BD1ED958</td>
<td>DOCUMENT</td>
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<tr>
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<td></td>
<td>HESTRATIO</td>
<td>N</td>
<td>371081AE0</td>
<td>95DF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F97C0</td>
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<td>key of</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Michael</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SAP_HYBRI</td>
<td>40F2E9306</td>
<td>BUSINESS_</td>
<td>ZOC_CALL_</td>
<td>CUAN_MARK</td>
<td>CA55F1E12</td>
<td>2016-07-2</td>
<td>381379</td>
</tr>
<tr>
<td></td>
<td>S_MKT_IC</td>
<td>5BD1ED958</td>
<td>DOCUMENT</td>
<td>CENTER_INB</td>
<td>ETING_ORECTSTRATION</td>
<td>0237480E6</td>
<td>3T19:56:2</td>
<td>054B06D61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D1DCFD8B65</td>
<td>TB</td>
<td></td>
<td>HESTRATIO</td>
<td>N</td>
<td>371081AE0</td>
<td>95DF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F97C0</td>
<td>contact</td>
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<td>key of</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Michael</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adams</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

The OData service API_MKT_INTERACTION changes the source object type from CUAN_CAMPAIGN_OUTBOUND back to CUAN_MARKETING_ORCHESTRATION. CUAN_MARKETING_ORCHESTRATION is the source object type of the corresponding outbound record.
4.3.3.2 Adapt Enhancements

You define an implementation for an enhancement to enable the campaign execution to use the open channel action.

To define an implementation, you require the business catalog role Communication Management (SAP_CORE_BC_COM).

Create the implementation as follows:

1. Open the Custom Fields and Logic app.
2. Under Custom Logic choose Create (+ icon).
3. In the New Enhancement Implementation dialog select Marketing: Campaign as Business Context and as Enhancement Option the following enhancements depending of what you want to do:
   - (1) Open Channel: Define Implementations (mandatory)
   - (2) Open Channel: Define Parameters for Implementation (optional)
   - (3) Open Channel: Define Global Settings for Execution (optional)
   - (4) Open Channel: Enhance Payload for Data Transfer (optional)
   - (5) Open Channel: Define Template for Outbound Interaction (mandatory)

   i Note
   The implementation of this enhancement is mandatory for creating any kind of interactions such as contact has been rejected by permission checks, and for processing inbound interactions. But it is optional for the outbound interactions.

4. Then enter a name and choose Create.
5. The example coding is automatically used in the draft version. You can use this coding or modify it.
6. Choose Test to test the coding.
7. Choose Publish to release your coding.

   i Note
   The Implementation ID, such as ZOC_EXPORT, will be used in the communication arrangement as property value.

For more information, see:

Data Flow [page 228]

   Enhancement Details [page 209]
   Here you find additional information about the offered enhancements for the open channel integration.

   Activating Marketing Permissions [page 210]
   With the following adaptations in the example coding of the enhancements you can activate marketing permissions for your open channel integration.

   Get Deviating Communication ID Based on Origin ID [page 212]
   You can get deviating communication IDs based on origin IDs, doing some coding in enhancements.
   You need this switch, in case you have activated the enhancement (5) Open Channel: Define Template for Outbound Interaction. If the communication ID does not fit to the origin ID, the system cannot create interactions.
4.3.3.2.1 Enhancement Details

Here you find additional information about the offered enhancements for the open channel integration.

→ Recommendation

We recommend to adapt the enhancements according the given numbering.

- **(1) Open Channel: Define Implementations**
  This enhancement is mandatory. You have to define an **Implementation ID** which represents your open channel action. Once activated, you will see your open channel action in the campaign automation user interface (UI), for example **Open Channel: Letter Export** in the **Add Action** value help.
  In the background you create with this enhancement the the action name and the icon as well as the **Implementation ID** that itself is required as filter value for the enhancements (2) to (5) and in the communication arrangements as property value.

- **(2) Open Channel: Define Parameters for Implementation**
  This enhancement is optional and you can use it to add additional parameters for your open channel action (defined in **(1) Open Channel: Define Implementations**) to the campaign automation UI, such as **Description**, **Date** or **Priority**.
  Without this implementation your open channel action will offer only the **Export Definition** as action parameter.

<table>
<thead>
<tr>
<th>i Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ In case you implemented this enhancements with additional parameters and these parameters shall also appear in the payload, you must also implement <strong>(4) Open Channel: Enhance Payload for Data Transfer</strong> and add the parameters in the payload.</td>
</tr>
<tr>
<td>○ The parameters are also optional.</td>
</tr>
</tbody>
</table>

- **(3) Open Channel: Define Global Settings for Execution**
  This enhancement is optional and you can use it for activating the marketing permission check of open channel actions.

<table>
<thead>
<tr>
<th>i Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>But keep in mind, the checkbox <strong>Ignore Marketing Permission</strong> in the campaign automation user interface under <strong>Marketing Information</strong> skips the marketing permission checks also for open channel actions.</td>
</tr>
</tbody>
</table>

  In addition, you can also check and change, for example, the values of the action parameter or scale the package size that is used during the parallel processing of the campaign execution.
  For more information, see also **Activating Marketing Permissions [page 210]**.

- **(4) Open Channel: Enhance Payload for Data Transfer**
  This enhancement is optional and you can use it to check, change and enhance the data of the target group members that shall be transferred.

- **(5) Open Channel: Define Template for Outbound Interaction**
  This enhancement is optional and you can use it to write interactions for your target group members. This enables you to contact only target group members with a campaign restart whose have not any interaction.
iNote

- Note that the enhancements (1) Open Channel: Define Implementations and (2) Open Channel: Define Parameters for Implementation are required to enhance the campaign user interface (UI) with the Open Channel action.
- You can find the technical details and examples in the example coding of the enhancements.
- If you want to use more than one Implementation ID which means you want to have more than one open channel action,
  - you have to define all of them in one implementation of enhancement (1) Open Channel: Define Implementations.
  - you have to separate implementations for the other enhancements (2-5) and use the Implementation ID as filter.

Related Information

Data Flow [page 228]

4.3.3.2.2 Activating Marketing Permissions

With the following adaptations in the example coding of the enhancements you can activate marketing permissions for your open channel integration.

- **(1) Open Channel: Define Implementations**
  You set the communication medium to run the permission checks. The following example checks email-based marketing permissions.

  ```
  "Sample Code

  APPEND VALUE #( implementation = 'ZOC_MKTG_PRMSSN'
      implementation_name = 'Check Marketing Permission (Email)'
      icon_name = 'email'
      icon_url = ''
      communication_medium = 'EMAIL' ) TO implementations.

  " Sample Code
  ```

- **(2) Open Channel: Define Parameters for Implementation**
  No code adaptations necessary.

- **(3) Open Channel: Define Global Settings for Execution**
  Activate the marketing permission checks.

  ```
  "Sample Code

  check_permission = abap_true.

  " Sample Code
  ```

- **(4) Open Channel: Enhance Payload for Data Transfer**
Determine the communication identifier for running the permission checks. The communication identifier depends on the communication medium. In the example code, the email address is taken from the contact details under *Email* as communication identifier.

### Sample Code

```abap
LOOP AT target_group_member_status ASSIGNING FIELD-SYMBOL(<ls_target_group_member_stat>)
  WHERE TG_MEMBER_INTERACTION_CONTACT IS NOT INITIAL.
  CL_CUAN_INTERACT_CNTCT_HELPER=>GET_CONTACT_FACETS(
    EXPORTING IT_CONTACT_KEYS  = value #( ( conv
      #( <ls_target_group_member_stat>-TG_MEMBER_INTERACTION_CONTACT ) ) )
    IMPORTING ET_CONTACT_FACET = data(lt_contact_facet) ).
  READ TABLE lt_contact_facet ASSIGNING FIELD-SYMBOL(<ls_contact_facet>)
  WITH KEY id_origin = 'EMAIL'.
  IF SY-SUBRC EQ 0.
    <ls_target_group_member_stat>-communication_id = <ls_contact_facet>-id.
  ENDIF.
ENDLOOP.
```

### (5) Open Channel: Define Template for Outbound Interaction

Set the interaction attributes and the origin ID (contact). Enter the same origin ID (*ID_ORIGIN*) as used for retrieving the communication identifier in the enhancement *Enhance Payload for Data Transfer*. Both interaction attributes *INTERACTION_TYPE* and *COMMUNICATION_MEDIUM* are used for interaction creation of all contacts that passed the permission check successfully.

### Sample Code

```abap
template-id_origin            = 'EMAIL'.
template-interaction_type     = 'Z_OPEN_CHANNEL'. " Example for a customer defined interaction_type.
template-communication_medium = 'BUSINESS_DOCUMENT'.
```

### Note

The implementation of this enhancement is **mandatory** for creating any kind of interactions such as contact has been rejected by permission checks, and for processing inbound interactions. But it is **optional** for the outbound interactions.

### Example

The following table shows the written interactions in your system: the first row shows an entry of a refused permission whereas the entries of the second and third row are granted permissions.

<table>
<thead>
<tr>
<th>ID_ORIGIN</th>
<th>ID</th>
<th>COMMUNICATION_MEDIUM</th>
<th>INTERACTION_TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMAIL</td>
<td><a href="mailto:j.armstrong@example.com">j.armstrong@example.com</a></td>
<td>BUSINESS_DOCUMENT</td>
<td>OUTBOUND_CHK_FAILED</td>
</tr>
<tr>
<td>EMAIL</td>
<td><a href="mailto:j.miller@example.com">j.miller@example.com</a></td>
<td>BUSINESS_DOCUMENT</td>
<td>Z_OPEN_CHANNEL</td>
</tr>
<tr>
<td>EMAIL</td>
<td><a href="mailto:m.adams@example.com">m.adams@example.com</a></td>
<td>BUSINESS_DOCUMENT</td>
<td>Z_OPEN_CHANNEL</td>
</tr>
</tbody>
</table>
4.3.3.2.3 Get Deviating Communication ID Based on Origin ID

You can get deviating communication IDs based on origin IDs, doing some coding in enhancements. You need this switch, in case you have activated the enhancement (5) Open Channel: Define Template for Outbound Interaction. If the communication ID does not fit the origin ID, the system cannot create interactions.

Example

Example 1

You have done an example implementation for the enhancement (4) Open Channel: Enhance Payload for Data Transfer as described in Activating Marketing Permissions [page 210].

In the enhancement (5) Open Channel: Define Template for Outbound Interaction, the template-id_origin is EMAIL.

Example 2

In the enhancement (5) Open Channel: Define Template for Outbound Interaction, the template-id_origin is SAP_C4C_BUPA.

For this origin ID you need the following example coding in the enhancement (4) Open Channel: Enhance Payload for Data Transfer:

Sample Code

```java
LOOP AT target_group_member_status ASSIGNING FIELD-SYMBOL(<ls_target_group_member_stat>) WHERE tg_member_interaction_contact IS NOT INITIAL.
  CL_CUAN_INTERACT_CNTCT_HELPER=>GET_CONTACT_FACETS( EXPORTING
    IT_CONTACT_KEYS = value #( ( conv #( <ls_target_group_member_stat>-
      tg_member_interaction_contact ) ) )
  IMPORTING
    ET_CONTACT_FACET = data(lt_contact_facet) ).
  READ TABLE lt_contact_facet ASSIGNING FIELD-SYMBOL(<ls_contact_facet>)
  WITH KEY id_origin = 'SAP_C4C_BUPA'.
  IF SY-SUBRC EQ 0.
    <ls_target_group_member_stat>-communication_id = <ls_contact_facet>-id.
  ENDIF.
```

4.3.3.3 Setting Up SAP Cloud Platform

In the following you find some further information about an integration example using SAP Cloud Platform.

Keep the following hints and recommendations in mind when you are using SAP Cloud Platform:

- HTTP status code shall be 200 (OK) and 201 (Created) for a successful processing in SAP Cloud Platform. Other HTTP status codes of the group Success will lead to a warning with a lower priority in the application log. That means it is not visible in the execution log of the campaign user interface (UI).
- Structure of the export definition and implementation of the enhancement (4) Open Channel: Enhance Payload for Data Transfer defines the content of the OData entity TargetGroupMemberAttributeData.
The type of property `Value` of the OData entity `TargetGroupMemberAttributeData` is always `Edm.String` and the property `EdmTypeId` defines the type for formatting property `Value`. Example for the formatting:

```plaintext
Edm.String: "Value": "Jane", "Value": "0002", "Value": "047D788BF411EE5960E1512A2367",
Edm.Date: "Value": "2016-09-23",
Edm.Guid: "Value": "8cdcd4a8-4768-1ed6-87ca-79a6c5f0f291",
Edm.Int16: Value": "-255"
Edm.Boolean: "Value": "false", "Value": "true",
Edm.Double: "Value": "-2345.66",
```

### Related Information

**OData Service Settings for Outbound** [page 215]

### 4.3.3.4 Create Communication Systems and Arrangements

After you have set up your enhancements and the SAP Cloud Platform you have to create a communication system. With the communication system and the communication arrangements you create your **Implementation IDs**.

#### Prerequisite

To set up a communication system and communication arrangement, you require the business catalog role **Communication Management (SAP_CORE_BC_COM)**. You require HTTPS 1.1 for your HTTP requests.

#### Communication System

1. Choose the **Communication Systems** app and then **New**.
2. In the popup enter a system ID, such as `Z_HCI_CPG_OPEN_CHANNEL`, and system name. You can freely define a name; but note that the name is used when you create the communication arrangement. Then choose **Create**.
3. Under **Technical Data** enter the SAP Cloud Platform instance you want to use for the campaign execution as **Host Name**. Enter only the pure host name without any path and port. Note that **Log System ID**, **Client Name**, and **Business System** are not relevant for the campaign execution.
4. Optionally, you can provide your contact information.
5. Under *User for Outbound Communication*, choose *Add (+)* to add a set of access details for the external server. Select *SSL Client Certificate* as *Authentication Method* and *Default Client Certificate* as *Certificate Type*. To finish choose *Create*.

6. Choose *Save* to save the new or edited communication system in an active status.

**Communication User**

→ Recommendation

We recommend to use certificates instead of communication users.

But in case you are using your own communication users, please take care that the communication user is not longer then 32 characters.

**Communication Arrangement**

You set up a communication arrangement to enable the campaign execution.

1. Choose *Communication Arrangement* app and then *New*.
2. In the *New Communication Arrangement* dialog use the predefined scenario *Marketing - Campaign Open Channel Integration (SAP_COM_0049)* from the value help of the *Scenario* define an *Arrangement Name* using the following pattern: `SAP_COM_0049_<Implementation_ID>`, for example, `SAP_COM_0049_ZOC_EXPORT`.
3. Under *Common Data*, select a *Communication System* from the value help that you have created in the *Communication System* app. Note that *My System* is filled automatically. You will need this entry later in your mapping script in SAP Cloud Platform.
4. Under *Additional Properties*, select the *Implementation ID* of your enhancement from the value help.

i Note

Note that -as a mandatory prerequisite- you have to define the *Implementation ID* in the mandatory enhancement *(1) Open Channel: Define Implementations*. For more information, see *Adapt Enhancements* [page 208] and *Enhancement Details* [page 209].

5. Optionally you can set *Retry Send Active* to *True (X)* which enables your system to resend the requests in case of fails. For more information, see *Retry Sending Using Idempotency* [page 229].

6. Under *Outbound Communication* all required fields are filled automatically from the selected *Communication System* above.

7. Under *Outbound Services*, enter the paths for the predefined outbound services using the following pattern: `/<your_service>/<your_entity>` and the corresponding *Service URL* for the following steps of the open channel action:
   - *Preprocessing* (optional)
   - *Processing* (mandatory)
   - *Postprocessing* (optional)

You can find the required data in the iFlow of the SAP Cloud Platform system that you want to connect.
For each outbound service you must set the Service Status to Active at least for the outbound service Processing.

8. Choose Save to save the new or edited communication arrangement in an active status.
9. Now you can download the certificate to your local machine and upload it to use it in SAP Cloud Platform.
10. After you have entered the required settings and uploaded the certificate in SAP Cloud Platform, you can proof your connection by choosing Check Connection under Outbound Services.

Related Information

Data Flow [page 228]

4.3.3.5 OData Service Settings for Outbound

Here you can find more information about the settings in the OData service CUAN_CAMPAIGN_OPEN_CHANNEL that are required for the outbound of an open channel integration.

Prerequisite

You have implemented the enhancement (5) Open Channel: Define Template for Outbound Interaction in addition to the mandatory enhancement (1) Open Channel: Define Implementations.
About the OData

SAP Marketing Cloud

Create Campaign

Execute Campaign

System Creates Outbound Interactions

SAP Cloud Platform Integration

Requests X-CSRF Token (optional)

iFlow

Create Outbound Objects

Follow-up Processing

Builds OData Service Message

Requests X-CSRF Token

Send Data

System Creates Inbound Interactions for Campaign Success

Inbound Interaction Can Start Trigger-Start Services

Integration Guide
Integration Scenarios
From the communication point of view the system for SAP Marketing Cloud acts as a client and the server side implementation of the services is done in external systems using SAP Cloud Platform as a middleware.

Please keep the following things in mind:

- Communication format for requests and responses shall be formatted in JSON only and not in Atom.
- Data protocol of the communication is (almost) OData V2.
- Only code and message object of the OData V2 error response is saved, but not any deeper errors of the OData error document.
- Each processing step requires an active outbound node in the communication arrangement, customers could drop processing of the Pre- and Post-Processing steps by leaving the active flag empty, but data transfer for the processing step is mandatory.
- **Cross-Site Request Forgery (CSRF) Protection**
  - (SAP Cloud Platform) HTTP sender channel supports the cross-site request forgery (CSRF) protection.
  - When CSRF protection is activated, it is used in the preprocessing, processing, and postprocessing step. Though the communication with SAP Cloud Platform is CSRF protected.
  - We recommend to activate CSRF protection for each integration flow separately.
  - Integration flow must be capable to respond on HTTP HEAD (check communication in communication arrangements, CSRF Protection) and POST (open channel outbound) requests.
- **Restarting a Campaign**
  - In case the an existing campaign has written outbound interactions and you restart your campaign only those members of the used target group are contacted again for whom no outbound interaction exist.
  - In case the an existing campaign has *not* written outbound interactions and you restart your campaign, the campaign sends out emails to all members of the target group again. Therefore we recommend to check your iFlow to prevent duplicates.

**OData Entity Types**

<table>
<thead>
<tr>
<th>Entity Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign</td>
<td>An entity representing the campaign business object.</td>
</tr>
<tr>
<td>CampaignExecutionRun</td>
<td>An entity representing a campaign execution run. Each send process belongs to one execution run.</td>
</tr>
<tr>
<td>CampaignExecutionRunPackage</td>
<td>An entity representing a package that is processed by an execution run.</td>
</tr>
<tr>
<td>CampaignTargetGroupMember</td>
<td>An entity representing a target group member.</td>
</tr>
<tr>
<td>TargetGroupMemberAttributeDatum</td>
<td>An entity representing the attributes and attributes values of a target group member.</td>
</tr>
</tbody>
</table>

Note that the entity set is named TargetGroupMemberAttributeData.

The names of the entity sets are the plural form of the entities.
# Entity Properties

The names of the properties are almost the same names as used for OData services located in the package `CUAN_COMMON`.

## Campaign Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CampaignId</td>
<td>String</td>
<td>An identifier of a campaign key of the entity type.</td>
</tr>
<tr>
<td>Name</td>
<td>String</td>
<td>A name of a campaign.</td>
</tr>
<tr>
<td>MarketingAreaId</td>
<td>String</td>
<td>An identifier of an marketing area.</td>
</tr>
<tr>
<td>SegmentationObject</td>
<td>String</td>
<td>An identifier of a segmentation object.</td>
</tr>
<tr>
<td>ImplementationId</td>
<td>String</td>
<td>An identifier of a customer-specific action implementation.</td>
</tr>
</tbody>
</table>

## Campaign Execution Run Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExecutionRunKey</td>
<td>String</td>
<td>An globally unique identifier of an execution run key of the entity type.</td>
</tr>
<tr>
<td>ProcessingStepCode</td>
<td>String</td>
<td>A coded representation of the processing step.</td>
</tr>
<tr>
<td>CampaignId</td>
<td>String</td>
<td>An identifier of the campaign business object, used as reference to the parent entity type <code>Campaign</code>.</td>
</tr>
</tbody>
</table>

## Campaign Execution Run Package Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PackageId</td>
<td>String</td>
<td>An identifier of the package key of the entity type.</td>
</tr>
<tr>
<td>Campaign</td>
<td>String</td>
<td>A complex data type representing the entity type <code>Campaign</code>.</td>
</tr>
<tr>
<td>ExecutionStartDate</td>
<td>String</td>
<td>A timestamp at which the execution run is started.</td>
</tr>
</tbody>
</table>
### Campaign Target Group Member Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExecutionRunKey</td>
<td>String</td>
<td>An globally unique identifier of an execution run, used as reference to the parent entity type CampaignExecutionRun key of the entity type.</td>
</tr>
</tbody>
</table>

### OutboundId

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OutboundId</td>
<td>String</td>
<td>A globally unique identifier of the outbound interaction key of the entity type.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PackageId</td>
<td>String</td>
<td>An identifier of the package, used as reference to the parent entity type CampaignExecutionRunPackage.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExecutionRunKey</td>
<td>String</td>
<td>An globally unique identifier of an execution run, used as reference to the parent entity type CampaignExecutionRunPackage.</td>
</tr>
</tbody>
</table>

For more information about the interaction key, see *Interactions [page 605]*.

### Campaign Target Group Member Attribute Datum

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AttributeId</td>
<td>String</td>
<td>An identifier of an attribute key of the entity type.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>String</td>
<td>A value of the attribute.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EdmTypeId</td>
<td>String</td>
<td>An identifier of the OData type.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OutboundId</td>
<td>String</td>
<td>A globally unique identifier of the outbound interaction, used as reference to the parent entity type CampaignTargetGroupMember.</td>
</tr>
</tbody>
</table>

### Note

Structure of the export definition and implementation of the enhancement *(4) Open Channel: Enhance Payload for Data Transfer* defines the content of the OData entity *TargetGroupMemberAttributeData*. 
Preprocessing

One deep create message consisting of the entity sets Campaigns and CampaignExecutionRuns is send.

Example Payload:

```
{ "d": {   "Campaign": {   "CampaignId": "0000381379",   "Name": "Open Channel Demo 1",   "MarketingAreaId": "CXXGLOBAL",   "SegmentationObject": "SAP_CONTACT_ENGAGEMENT_SIN",   "ImplementationId": "ZOC_EXPORT",   "CampaignExecutionRuns": {     "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",     "ProcessingStepCode": "1",     "CampaignId": "0000381379"   }  },   "PackageId": 1,   "ExecutionStartDateTime": "2016-07-07T07:44:40Z",   "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",   "CampaignTargetGroupMembers": [     {       "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10",       "PackageId": 1,       "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",       "TargetGroupMemberAttributeData": [         {           "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_FIRST",           "Value": "Julie",           "EdmTypeId": "Edm.String",           "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"         },         {           "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_LAST",           "Value": "Armstrong",           "EdmTypeId": "Edm.String",           "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"         }       ]     }   ] }}
```

Processing

Multiple deep create messages consisting of the entity sets CampaignExecutionRunPackages, CampaignTargetGroupMembers and TargetGroupMemberAttributeData are send. Each message belongs to one execution package.

```
{ "d": {   "Campaign": {     "CampaignId": "0000381379",     "Name": "Open Channel Demo 1",     "MarketingAreaId": "CXXGLOBAL",     "SegmentationObject": "SAP_CONTACT_ENGAGEMENT_SIN",     "ImplementationId": "ZOC_EXPORT"   }  },   "PackageId": 1,   "ExecutionStartDateTime": "2016-07-07T07:44:40Z",   "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",   "CampaignTargetGroupMembers": [     {       "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10",       "PackageId": 1,       "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",       "TargetGroupMemberAttributeData": [         {           "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_FIRST",           "Value": "Julie",           "EdmTypeId": "Edm.String",           "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"         },         {           "AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_LAST",           "Value": "Armstrong",           "EdmTypeId": "Edm.String",           "OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"         }       ]     }   ] }
```
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_FIRST",
"Value": "John",
"EdmTypeId": "Edm.String",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C142OABB23"
},

"AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-NAME_LAST",
"Value": "Miller",
"EdmTypeId": "Edm.String",
"OutboundId": "EA297547B0DBBDF81C308FD14A3757C142OABB23"
},

"AttributeId": "DA-SAP_CE_CONTACT_IA_ERP_CUSTOMER-CONTACT_KEY",
"Value": "005056AC4A181ED598D20A84AB8AC689",
"EdmTypeId": "Edm.Binary",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "OUTBOUND_INTERACTION",
"Value": "8CDC4A847681EE69182D4A1498E1EF5",
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "ZOC_EXPORT_DESCRIPTION",
"Value": "Open Channel Demo 1",
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "ZOC_EXPORT_DATE",
"Value": "2016-07-07",
"EdmTypeId": "Edm.Date",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
},

"AttributeId": "ZOC_EXPORT_PRIORITY",
"Value": "PRIORITY_1",
"EdmTypeId": "Edm.String",
"OutboundId": "1202654B21C72A50A0D4E5CB35E6D2FBE916EA10"
}
Postprocessing

One message consisting of the entity set “Campaign Execution Runs” is send.

Example Payload:
Message Choreography Between the OData and SAP Cloud Platform

Notes regarding the message choreography:

- The system for SAP Marketing Cloud saves all error messages in the application log, and also the information with lower severity.
- The system for SAP Marketing Cloud does not require responses that are send after creation of entities (status code 201).
- The calls are synchronous calls for data transfer between SAP Marketing Cloud and SAP Cloud Platform.
- The receiving system should process the data asynchronously to get a be better error handling and performance.

Error Handling

In the following you will find useful remarks about the error handling of this OData service:

- Errors in the Preprocessing phase stops all further processing steps.
- Errors during the Processing step marks the entire package as erroneous.
- Business errors in the SAP Cloud Platform mapping shouldn’t occur. We recommend to implement all checks in the enhancements because SAP Cloud Platform rejects the entire package.
- We recommend to set an appropriate HTTP status code and send an OData V2 error document formatted as JSON in case of errors.
- Content of code and value are saved in the application log as error and will be visible in the campaign UI execution log. But note that the content of the inner-error-node is not parsed.
- Content of all error messages not send as OData V2 error document is also saved in the application log as it is.
- Content of the HTTP responses of HTTP status codes of the group Success is not saved in the application log.
- All HTTP status code greater or equal than 300 mark the actual execution package as erroneous. All erroneous packages can be restarted again.

OData V2 Error Document Example (Inner Error Node Is Not Shown)

```
Sample Code

{  
  "d": {  
    "ExecutionRunKey": "8CDCD4A847681EE69182D1BBA1C39EF3",  
    "ProcessingStepCode": "3",  
    "CampaignId": "0000381379"  
  }  
}
```

```
Sample Code

{  
  "error": {  
    "code": "CUAN_MKT_ORCH_ODATA/001",  
    "message": {  
      "lang": "en",  
      "value": "Determination of the key failed for campaign ID "0000032784" version \"1\"."  
    }  
  }  
}```
Related Information

Open Channel Integration [page 197]

4.3.3.6 Inbound Service Settings API

Here you can find more information about the settings in the API that are required for the inbound of an open channel integration.

The inbound comprises the creation of interactions (only creation) by using the deep-inserts of the OData service API_MKT_INTERACTION.

Endpoint OData Service Deep Insert: `/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/InteractionsDeepInsert`

You need this path to create the service URL to your external system. In addition it tells you how the `InteractionsDeepInsert` data is structured.

<table>
<thead>
<tr>
<th>Entity Property of OData Service</th>
<th>Mandatory (must be filled by the OData service)</th>
<th>Copy (data is taken over from the outbound)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entity InteractionsDeepInsert</strong> (This data is part of the interaction API.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>UUID</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child Entity baseInteraction</strong> (This data is part of the import data.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>InteractionUUID</td>
<td>X</td>
<td>X</td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>InteractionContactOrigin</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>InteractionContactId</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>Entity Property of OData Service</td>
<td>Mandatory (must be filled by the OData service)</td>
<td>Copy (data is taken over from the outbound)</td>
<td>Remarks</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>InteractionType</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InteractionSourceObject</td>
<td>X</td>
<td></td>
<td>Passes property</td>
</tr>
<tr>
<td>InteractionSourceObjectId</td>
<td>X</td>
<td></td>
<td>SourceObjectId is empty.</td>
</tr>
<tr>
<td>InteractionSourceObjectType</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InteractionTimeStampUTC</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SourceSystemType</td>
<td>X</td>
<td></td>
<td>Both properties SourceSystemType and SourceSystemId are optional, but helpful values and therefore should be passed for describing the origin of the interaction.</td>
</tr>
<tr>
<td>SourceSystemId</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CampaignID</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>Entity Property of OData Service</td>
<td>Mandatory (must be filled by the OData service)</td>
<td>Copy (data is taken over from the outbound)</td>
<td>Remarks</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CampaignContent</td>
<td>X</td>
<td>X</td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>InteractionAdditionalObject</td>
<td>X</td>
<td>X</td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>InteractionIsAnonymous</td>
<td></td>
<td>X</td>
<td>There will be an error in case IsAnonymous has the value X.</td>
</tr>
</tbody>
</table>

Child Entity **InteractionAdditionalObject** *(optional, child of Interaction)*

Child Entity **InteractionProduct** *(optional, child of Interaction)*

Child Entity **InteractionInterest** *(optional, child of Interaction)*

The inbound processing retrieves all outbound interactions of the campaign by using the `SourceObjectId` and takes over data (X in column Copy) from the outbound interaction.

The OData entity **InteractionAdditionalObject** is always be copied from the outbound interaction.

The following example coding shows the minimum payload required:

```json
{  
  "UUID": "32575914-a9db-476c-a5la-2b0d4a899b95",
  "Interactions": [  
    {  
      "InteractionUUID": "00000000-0000-0000-0000-000000000000",
      "InteractionType": "ZOC_CALL_CENTER_INB",
      "InteractionSourceObjectType": "CUAN_CAMPAIGN_OUTBOUND",
      "InteractionSourceObject": "18D3620CC1DBAEB8E5F97AFB922E84E092F271F0",
      "InteractionTimeStampUTC": "2019-06-13T08:55:00"
    },  
    {  
      "InteractionUUID": "00000000-0000-0000-0000-000000000000",
      "InteractionType": "ZOC_CALL_CENTER_INB",
      "InteractionSourceObjectType": "CUAN_CAMPAIGN_OUTBOUND",
      "InteractionSourceObject": "0FB6D7D9DC816A4A39D0E931C01DA57B5E48F",
      "InteractionTimeStampUTC": "2019-06-13T08:55:00"
    }
  ]
}
```
Interaction Type Configuration

After you have implemented the OData service you need to check whether the interaction types are created properly in the configuration.

1. To do so, open the Manage Your Solution app and choose Configure Your Solution.
2. Then search for the configuration user interface Manage Interaction Content.
3. There you must have two entries for each of your interactions: One with the Direction Outbound and one with the Direction Inbound and with the corresponding interaction channel and communication media assigned.
4. Then you have to implement the enhancement (5) Open Channel: Define Template for Outbound Interaction that is mandatory for inbound interactions.

**Sample Code**

```
template-id-origin = 'SAP_HYBRIS_MKT_IC'.
template-interaction_type = 'ZOC_CALL_CENTER_OUTB'.
template-communication_medium = 'BUSINESS_DOCUMENT'.
```

Communication Arrangement

Now you have to setup inbound communication arrangement for integration scenarios Business Data Integration SAP_COM_0206

The path will be filled automatically with /sap/opu/odata/sap/API_MKT_INTERACTION_SRV. You need only to enter the prefix.
### 4.3.3.7 Data Flow

In the overview below you can see how the different pieces of enhancements, outbound OData and communication arrangement are used during the execution of the campaign action **Open Channel**:

<table>
<thead>
<tr>
<th>Action Open Channel</th>
<th>Enhancement</th>
<th>Outbound OData</th>
<th>Communication Arrangement</th>
<th>HCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preprocessing</td>
<td>(3) Define global Settings for Execution (Filter is the ID of implementation) Central settings for processing (such as package size)</td>
<td>CUAN_CAMPAIGN_OPEN_CHANNEL</td>
<td>Outbound Service Preprocessing HCI endpoint determined by ID of implementation</td>
<td>Integration Flow</td>
</tr>
<tr>
<td></td>
<td>Inform HCI about start of processing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processing</td>
<td>(4) Enhance Payload for Data Transfer (Filter is the ID of implementation) Adjustment of data to be transferred</td>
<td>CUAN_CAMPAIGN_OPEN_CHANNEL</td>
<td>Outbound Service Processing HCI endpoint determined by ID of implementation</td>
<td>Integration Flow</td>
</tr>
<tr>
<td></td>
<td>Read values of target group members (such as Name, City)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allow adjustments of data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transfer data to HCI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get interaction type of interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Write interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postprocessing</td>
<td>(5) Define Template for Outbound Interaction (Filter is the ID of implementation) Defaulting of attributes of interactions to be action</td>
<td>CUAN_CAMPAIGN_OPEN_CHANNEL</td>
<td>Outbound Service Postprocessing HCI endpoint determined by ID of implementation</td>
<td>Integration Flow</td>
</tr>
<tr>
<td></td>
<td>Inform HCI about end of processing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The campaign execution calls the action **Open Channel** in 3 steps.

1. **Preprocessing**
   - In this step the enhancement **(3) Open Channel: Define global Settings for Execution** is called. The implementation of this enhancement is optional. The filter of the enhancement is the ID of the implementation which was defined in the enhancement **(1) Open Channel: Define Implementations**. In the enhancement some global settings can be made like the package size or whether marketing permissions shall be checked.
   - Please check the example coding for this enhancement in order to get more details.
   - If the outbound service **Preprocess** has been activated for the communication arrangement the campaign execution informs the SAP Cloud Platform by using the OData **CUAN_CAMPAIGN_OPEN_CHANNEL**. In this call the payload consists of the following OData entities:
     - Campaigns
     - CampaignExecutionRuns
   - Note that the outbound service **Preprocess** is optional.

2. **Processing**
   - The campaign execution transfers the data in parallel processed packages.
   - In every package the action **Open Channel** reads the values of the target group members, for example, `<Name>, <City>`, as defined in the assigned export definition.
   - Now it calls the enhancement **(4) Open Channel: Enhance Payload for Data Transfer**. The implementation of this enhancement is optional. The filter of the enhancement is the ID of the implementation which was defined in the enhancement **(1) Open Channel: Define Implementations**. In the enhancement the data that shall be transferred can be checked, such as sort out an entry if `<Name>` and `<City>` is empty, and changed and enhanced, for example, calculate a value and append it.
Please check the example coding for this enhancement in order to get more details. If the outbound service Process has been activated for the communication arrangement the campaign execution informs the SAP Cloud Platform by the usage of the OData CUAN_CAMPAIGN_OPEN_CHANNEL. In this call the payload consists of the following OData entities:

- Campaigns (Campaign is part of the CampaignExecutionRunPackages)
- CampaignExecutionRunPackages
- CampaignTargetGroupMembers
- TargetGroupMemberAttributeData

The OData creates one service call with the following entity sets: CampaignExecutionRunPackages, CampaignTargetGroupMembers, and TargetGroupMemberAttributeData.

Note that the outbound service Process is mandatory.

After the OData call has been finished the action calls the enhancement (5) Open Channel: Define Template for Outbound Interaction. The implementation of this enhancement is optional. The filter of the enhancement is the ID of the implementation which was defined in the enhancement (1) Open Channel: Define Implementations.

In the enhancement an interaction type can be set which is used in order to write outbound interactions for all target group members which have been transferred successfully.

Please check the example coding for this enhancement in order to get more details.

Finally the action Open Channel writes interactions. If in the enhancement (4) Open Channel: Enhance Payload for Data Transfer some target group members have been sorted out, corresponding interactions with a reason code will be written. For all other target group members successful outbound interactions will be written in case the enhancement (5) Open Channel: Define Template for Outbound Interaction has been implemented.

3. Postprocessing

After all packages have been processed the campaign execution calls the post processing of the action Open Channel. If the outbound service Process has been activated for the communication arrangement the campaign execution informs the SAP Cloud Platform using OData CUAN_CAMPAIGN_OPEN_CHANNEL. In this call the payload contains the OData entity CampaignExecutionRuns. Note that the outbound service Post Process is optional.

Related Information

OData Service Settings for Outbound [page 215]

4.3.3.8 Retry Sending Using Idempotency

With idempotency the system repeats a failed request up to five times to an external system using the connecting iFlow.

When the system sends the request to the external system things can go wrong either on the outbound or the inbound side. The system tries to resend up to five times. Only if all tries fail, the system throws an error message on the user interface and in the application log.

After you have set Retry Send Active property to True (X) in the setup of your communication arrangement, you have the following to do: Check your iFlow and enable it to accept several requests with the same key and
take care that the repetition sends always the same answer. This means that the same answer is sent only if the request has been processed properly by SAP Cloud Platform.

**Example**

- **First Attempt:** An error happens during send and SAP Cloud Platform isn’t reached.
- **Second Attempt:** An error occurs during receiving in SAP Marketing Cloud. The request has been processed properly and SAP Cloud Platform saves the response.
- **Third Attempt:** An error occurs during receiving in SAP Marketing Cloud. The request has been already processed properly in the second trial. Though SAP Cloud Platform sends again the saved response.
- **Fourth Attempt:** An error happens during send and SAP Cloud Platform isn’t reached.
- **Fifth Attempt:** No error, because the request has been already processed properly in the second trial. Though SAP Cloud Platform sends again the saved response.

The keys in question are:

- **Preprocessing:** ExecutionRunKey(CampaignExecutionRuns)
- **Processing:** ExecutionRunKey and PackageID
- **Postprocessing:** ExecutionRunKey

**Related Information**

Create Communication Systems and Arrangements [page 213]

### 4.3.3.9 Questions and Answers

**Q:** I implemented the enhancement (5) Open Channel: Define Template for Outbound Interaction, but the interactions are not written. What could be gone wrong?

**A:** It might be that the ID is wrong, because the ID used for writing the interactions has to be the ID as specified by the ID_ORIGIN.

For example, when your enhancement contains the following line, the framework expects ERP customer identifier:

```
Sample Code

template-id_origin = 'SAP_ERP_CUSTOMER'
```
You could try to implement the enhancement *(4) Open Channel: Enhance Payload for Data Transfer* to set the right identifier:

**Sample Code**

```plaintext
LOOP AT target_group_member_status ASSIGNING FIELD-SYMBOL(<ls_target_group_member_stat>).
  " Replace the given identifier by ID_ORIGIN specific identifiers
  CL_CUAN_INTERACT_CNTCT_HELPER=>GET_CONTACT_FACETS( EXPORTING
  IT_CONTACT_KEYS = value #( ( conv #( <ls_target_group_member_stat>-
  TG_MEMBER_INTERACTION_CONTACT ) ) )
  IMPORTRING
  ET_CONTACT_FACET = data(lt_contact_facet) ).
  READ TABLE lt_contact_facet ASSIGNING FIELD-SYMBOL(<ls_contact_facet>)
  WITH KEY id_origin = 'SAP_ERP_CUSTOMER'.
  IF SY-SUBRC EQ 0.
    <ls_target_group_member_stat>-communication_id = <ls_contact_facet>-id.
  ENDIF.
ENDLOOP.
```

The code snippet demonstrates only how to replace the identifiers!

Another solution would be the following coding:

**Sample Code**

```plaintext
LOOP AT target_group_member_status ASSIGNING FIELD-SYMBOL(<ls_target_group_member_stat>).
  READ TABLE target_group_member_data ASSIGNING FIELD-SYMBOL(<ls_target_group_member_data>)
  WITH KEY tg_member_key = <ls_target_group_member_stat>-tg_member_key.
  IF SY-SUBRC EQ 0.
    ELSE. "// No dynamic content found
    <ls_target_group_member_stat>-interaction_type = <your interaction type>.
    <ls_target_group_member_stat>-failure_reason  = <your reason>.
  ENDIF.
```

**Explanation:**

- Interactions are only written when the enhancement *(5) Open Channel: Define Template for Outbound Interaction* has been implemented.
- If you have NOT implemented the ELSE loop, keep the following in mind:
  - The business logic sets the interaction types and optionally also the reasons.
  - The process message only contains the node `TargetGroupMemberAttributeData`. It might happen that the figures under, if dynamic content has been found based on an assigned export definition.
- If you have implemented the ELSE loop, keep the following in mind:
  - Interactions are written with the interaction type and reason defined in the coding (ELSE loop) if dynamic content was not found.
  - In case dynamic content has been found, the business logic sets the interaction types and optionally also the reasons.
  - The process message only contains the node `OutboundId` (and subsequent nodes) if dynamic content is found based on an assigned export definition. Only target group members with dynamic content are send.
Q: How to process interactions in the SAP system using the Open Channel integration combined with trigger-based campaigns?

A: With this code snippet you can, for example, access any interaction columns in the open channel integration and process them further by forwarding the information to SAP Cloud Platform.

Note that you use any further descriptive information for trigger-based campaigns, such as column INTERACTIONCONTENT, in the enhancement (4) Open Channel: Enhance Payload for Data Transfer.

```
Sample Code
" Define some new fields to the message
APPEND VALUE #( attribute_id   = 'TRIGGER_INTERACTION'
attribute_name = 'Trigger Interaction'
attribute_type = 'Edm.String' ) TO target_group_member_attributes.
APPEND VALUE #( attribute_id   = 'INTERACTION_CONTENT'
attribute_name = 'Interaction Content'
attribute_type = 'Edm.String' ) TO target_group_member_attributes.

" Add the content for both fields
APPEND VALUE #( tg_member_key      = <ls_target_group_member_data>-tg_member_key
    tg_member_interaction_contact = <ls_target_group_member_data>-tg_member_interaction_contact
    tg_member_interaction          = <ls_target_group_member_data>-tg_member_interaction
    attribute_id                  = 'TRIGGER_INTERACTION'
    attribute_value               = <ls_target_group_member_stat>-tg_member_interaction ) TO target_group_member_data.
IF <ls_target_group_member_stat>-tg_member_interaction IS NOT INITIAL.
    SELECT SINGLE interactioncontent FROM i_mkt_interaction INTO
    @DATA(lv_content_data) WHERE interaction = @<ls_target_group_member_stat>-tg_member_interaction.
    IF sy-subrc EQ 0.
        APPEND VALUE #( tg_member_key      = <ls_target_group_member_data>-tg_member_key
            tg_member_interaction_contact = <ls_target_group_member_data>-tg_member_interaction_contact
            tg_member_interaction          = <ls_target_group_member_data>-tg_member_interaction
            attribute_id                  = 'INTERACTION_CONTENT'
            attribute_value               = lv_interaction_content )
        TO target_group_member_data.
    ENDIF.
ENDIF.
```

Q: What went wrong, when the figures of the campaign performance don’t match?

A: Performance for your open channel campaign don’t match. A reason for this mismatch could be that the interaction types aren’t used in a consistent way.
The Open Channel Interactions tile represents the sum of all outbound and inbound interactions. For example, you have sent out 156 emails and 134 of them are opened. The figures shown are then as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivered Messages</td>
<td>156</td>
</tr>
<tr>
<td>Opened Messages</td>
<td>134</td>
</tr>
<tr>
<td>Open Channel Interactions</td>
<td>290</td>
</tr>
</tbody>
</table>

To get consistent figures for your open channel campaign performance, such as the delivered messages, we recommend using also the interaction types in a consistent way. When you use, for example, the interaction types EMAIL_OUTBOUND and EMAIL_OPENED in your integration, the tiles Delivered Messages and Opened Messages show the correct numbers. This is also valid for tiles with calculated figures, such as Opened Messages in %.

For more information about the calculated figures, see Aggregated Success Data from Interactions [page 882].

**Q: Which URL shall I use for SAP Cloud Platform integration flow?**

**A:** Each SAP Cloud Platform system provides multiple nodes. It is important to select the runtime node and not the tenant management node. The URL is visible in [CPI Operations View](#)  [Manage Integration Content](#). Then select the integration flow.

For more information, see also Runtime in Detail.

**Q: Why do not I see any error messages for my wrongly implemented HEAD and GET requests?**

**A:** The open channel functionality sends a http HEAD request followed by an http POST request. It depends on the implementation of the integration flow, whether the HEAD and GET requests are handled properly and doesn’t lead to any error messages while running the iFlow.

**Q: Can I change the Multiple Value Separator for export definitions with Open Channel usage?**

**A:** No. You may only overwrite the Multiple Value Separator in export definitions using the Export usage type.

Open Channel execution uses the export definition to retrieve the attributes to be sent to the Open Channel interface. The attributes are retrieved from calling the segmentation API as other actions such as Email or SMS. If you use a multiple-value personalization attribute, such as an item of interest, during the execution, the attribute is replaced with its characteristics (such as golf, football, swimming), separated by commas as the Multiple Value Separator.
4.3.3.10 DEPRECATED: Inbound Service Settings Using Import Service

Here you can find more information about the settings in the OData service that are required for the inbound of an open channel integration.

**i Note**

The inbound of the open channel integration has been deprecated as of SAP Marketing Cloud 1908. Please use as of 1908 Inbound Service Settings API [page 224].

The inbound comprises the creation of interactions (only creation) by using the deep-inserts of the OData service CUAN_IMPORT.

**Endpoint OData Service Deep Insert**:

/sap/opu/odata/sap/cuan_import_srv/ImportHeaders

You need this path to create the service URL to your external system. In addition it tells you how the ImportHeader data is structured.

<table>
<thead>
<tr>
<th>Entity Property of OData Service</th>
<th>Mandatory (must be filled by the OData service)</th>
<th>Copy (data is taken over from the outbound)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entity ImportHeader</strong> (This data is part of the import data.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Id</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SourceSystemType</strong> (optional)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SourceSystemId</strong> (optional)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child Entity Interaction</strong> (This data is part of the import data.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ContactIdOrigin</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>ContactId</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>Entity Property of OData Service</td>
<td>Mandatory (must be filled by the OData service)</td>
<td>Copy (data is taken over from the outbound)</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InteractionType</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="https://example.com" alt="i Note" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SourceObjectType</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SourceObjectId</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SourceSystemType</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SourceSystemId</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CampaignId</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InitiativeId</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entity Property of OData Service</td>
<td>Mandatory (must be filled by the OData service)</td>
<td>Copy (data is taken over from the outbound)</td>
<td>Remarks</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>InitiativeVersion</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>MarketingOrchestration Id</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>AdditionalObjectReferences</td>
<td>X</td>
<td></td>
<td>There will be an error in case the inbound and outbound data of this property is not identical.</td>
</tr>
<tr>
<td>IsAnonymous</td>
<td></td>
<td></td>
<td>There will be an error in case IsAnonymous has the value X.</td>
</tr>
</tbody>
</table>

**Child Entity** **Product** *(optional, child of Interaction)*

**Child Entity** **Interest** *(optional, child of Interaction)*

The inbound processing retrieves all outbound interactions of the campaign by using the SourceObjectId and takes over data (X in column Copy) from the outbound interaction.

The OData entity `InteractionAdditionalObjectReference` is always be copied from the outbound interaction.

The following example coding shows the minimum payload required:

```json
{
    "Id" : "",
    "SourceSystemType" : "",
    "SourceSystemId" : "32168",
    "Interactions" : [
            {
                "InteractionType" : "ZOC_CALL_CENTER_INB",
                "SourceObjectType" : "CUAN_CAMPAIGN_OUTBOUND",
                "SourceObjectId" : "CA5F1FE120237480E6054B06D61371081AE095DF",
                "SourceSystemType" : "",
                "SourceSystemId" : "32168"
            }
    ]
}
```
Interaction Type Configuration

After you have implemented the OData service you need to check whether the interaction types are created properly in the configuration.

1. To do so, open the Manage Your Solution app and choose Configure Your Solution.
2. Then search for the configuration user interface Manage Interaction Content
3. There you must have two entries for each of your interactions: One with the Direction Outbound and one with the Direction Inbound and with the corresponding interaction channel and communication media assigned.
4. Then you have to implement the enhancement (5) Open Channel: Define Template for Outbound Interaction that is mandatory for inbound interactions.

    ```
    $\text{Sample Code}$
    template-id_origin = 'SAP_HYBRIS_MKT_IC'.
    template-interaction_type = 'ZOC_CALL_CENTER_OUTB'.
    template-communication_medium = 'BUSINESS_DOCUMENT'.
    ```

Communication Arrangement

Now you have to setup inbound communication arrangement for integration scenarios Business Data Integration SAP_COM_0004

The path will be filled automatically with /sap/opu/odata/sap/cuan_import_srv. You need only to enter the prefix.

4.3.4 Mobile, Social, and Digital Channel

With the integrations below you can interact with your customers and communities using social media.

Integration with Google Ads [page 238]
Overview of the integration scenario.

Mobile App Integration with Google Firebase [page 239]
This section describes how you can integrate SAP Marketing Cloud with Google Firebase for sending push notifications of mobile campaigns to a mobile app.

Social Campaigns Using Facebook and Instagram [page 245]
With this integration, you can plan and create campaigns in Facebook, and then use Facebook Ads Manager to push ads to Facebook and Instagram via Facebook. The actual spend and campaign success data from Facebook is pulled into SAP Marketing Cloud for analysis.

WeChat Integration [page 249]
With this integration, you can synchronize the followers of your WeChat official accounts as well as the follower interactions to SAP Marketing Cloud. What's more, you can create and carry out WeChat
campaigns through SAP Marketing Cloud. Analytical reports about WeChat followers and interactions are available as well.

LINE Integration [page 249]
With this integration, you can synchronize the followers of your LINE accounts as well as the follower interactions to SAP Marketing Cloud. What’s more, you can create and carry out LINE campaigns through SAP Marketing Cloud. Analytical reports about LINE followers and interactions are available as well.

Integration with Baidu Paid Search Campaigns (To Be Deprecated) [page 250]
With integration of Baidu paid search campaigns, you can view an analytics story named Campaign Success for Baidu Paid Search in SAP Marketing Cloud. This analytics story contains a comprehensive analytical report for Baidu paid search campaigns.

Integration with Google Campaign Manager [page 254]
Overview of the integration scenario.

Integration with Adform [page 256]
With this integration, you can send target groups that you created in SAP Marketing Cloud as custom audiences to Adform and use them in your Adform campaigns.

4.3.4.1 Integration with Google Ads

Overview of the integration scenario.

The integration with Google Ads allows you to create, read, and assign Google Ads campaigns, then analyze the performance of these campaigns from SAP Marketing Cloud.

For more information about the Google Ads Integration with SAP Marketing/SAP Marketing Cloud integration package, see Google Ads Integration with SAP Marketing Cloud/SAP Marketing.

For more information about Google Ads Campaigns, see Google Ads Campaigns.

The following diagram provides an overview of the main components involved in the integration with Google Ads. SAP Cloud Platform Integration is used as a middleware between SAP Marketing Cloud and Google Ads. It is responsible for the account authentication with OAuth 2.0 and any other API communication routing between the two involved systems.
**Configuration Settings**

To run the integration scenario, make settings in the following systems:

- Google Ads
- SAP Cloud Platform Integration
- SAP Marketing Cloud

For a complete description of the configuration settings required for the scenario, see the Integration Guide.

### 4.3.4.2 Mobile App Integration with Google Firebase

This section describes how you can integrate SAP Marketing Cloud with Google Firebase for sending push notifications of mobile campaigns to a mobile app.

The following graphic illustrates the end-to-end flow for enabling the mobile channel feature. You can create a mobile campaign in the SAP Marketing Cloud system. To this campaign, you can assign an offer or a notification. The offers and notifications are sent as mobile push notifications to either Android or iOS devices. The mobile push notifications are routed via the Google Firebase.

For the mobile device to connect to a SAP Marketing Cloud system, you must use SAP Cloud Platform Integration. SAP Cloud Platform Integration iFlows can be leveraged to connect your mobile app to SAP Marketing Cloud via your mobile app's backend system. SAP recommends not to connect the mobile app directly to the SAP Cloud Platform Integration for security reasons. After you’ve deployed the iFlows, you must set up the communication scenarios for inbound and outbound communication.

For more information, see Mobile App Integration with SAP Marketing Cloud.
Transport Layer Security (TLS) version 1.2 or higher is required if you’re using a servlet instead of the CPI iFlow for inbound communication from the Customer Mobile Backend.

### 4.3.4.2.1 Configuring Firebase

**Procedure**

1. Create a google account.
2. Log in to Firebase Console using the google account.
3. Create a new project in Firebase.
4. Follow steps provided in this [link](#) to add iOS and Android apps.

**i Note**

For Android devices, SAP uses the data message format provided by Firebase instead of the standard notification message format. User applications have to handle the notifications appropriately. For more
4.3.4.2.2 Configuring Inbound Communication

Create the communication user, communication system, and communication arrangement required for the inbound communication.

Prerequisites

- You have configured Firebase.
- The following communication scenarios are available in the system:
  - SAP_COM_0206 (Marketing - Interaction UI Integration)
  - SAP_COM_0207 (Marketing - Interaction Contact UI Integration)
  - SAP_COM_0169 (Marketing - Mobile Push Notification Events Integration)

Context

For inbound communication, you first create a communication user, then a communication system and communication arrangement.

Creating the Communication User

To add a communication user, proceed as follows:

1. Log on to SAP Marketing Cloud with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose Communication Management ➤ Communication User ➤ New.
3. Enter the user name and password for your communication user.
4. Choose Save.

Note

You can use the communication user information for setting up communication with communication scenarios SAP_COM_0206, SAP_COM_0207, and SAP_COM_0169.

Creating the Communication System

The purpose of this communication system is to bind the communication user that you created earlier with the communication arrangement that you will create later.
To create the communication system, proceed as follows:

1. Open the Communication Systems app.
3. Enter a system ID and its name.
4. Choose Create.
5. A host is irrelevant to the inbound communication. Enter dummy in the Host Name field to assign a dummy host.
6. Assign the communication user created earlier to this communication system, as follows:
   1. In the User for Inbound Communication section, choose + (Add). The New Inbound Communication User dialog box appears.
   2. Select the authentication method as User Name and Password and enter the user created earlier.
7. Save and activate the communication system.

Creating the Communication Arrangement

To create a communication arrangement, proceed as follows:

1. Open the Communication Arrangements app.
2. Choose New.
3. Enter scenario SAP_COM_0206 and an arrangement name. Choose Create.
4. In the Communication System field, enter the communication system created earlier.
5. Save and activate the communication arrangement.
6. Similarly, create communication arrangement for the following scenarios:
   ○ SAP_COM_0207
   ○ SAP_COM_0169

Next Steps

Configuring Outbound Communication [page 242]

4.3.4.2.3 Configuring Outbound Communication

Create the communication system and communication arrangement required for the outbound communication.

Context

For outbound communication, you first create a communication system and then a communication arrangement.

Creating the Communication System

Proceed as follows:
1. Log on to SAP Marketing Cloud with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose Communication Management Communication Systems.
3. Choose New.
4. Enter an ID and a system name for your communication system.
5. Choose Create.
6. In the Communication System Draft screen, enter the host name as fcm.googleapis.com.
7. Choose the + button in the User for Outbound Communication section.
8. In the New Outbound Communication user dialog, choose the Authentication Method as SSL Client Certificate.
9. Set the Certificate Type to Default Client Certificate.
10. Choose Create in the popup.
11. Save and activate the communication system.

Creating the Communication Arrangement

Proceed as follows:
1. Log on to SAP Marketing Cloud with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose the Communication Arrangements app.
3. Create a new communication arrangement.
4. Choose the scenario SAP_COM_0061 (Marketing - Campaign Mobile Channel Integration).
5. Enter the arrangement name SAP_COM_0061.
6. Choose Create.
7. In the Communication Arrangement screen for Mobile Campaign, choose the communication system that you created previously.

**Note**

All the outbound service URLs are populated in the Path field automatically. For Mobile Campaign, please enter the value /fcm/send. Also, ensure the Service URL is https://fcm.googleapis.com/fcm/send.

8. In the additional properties section, enter an appropriate value for Firebase API Key.
9. Save and activate the communication arrangement.

**Note**

Ensure that there is only one communication arrangement for scenario SAP_COM_0061 and it is active.

4.3.4.2.4 Sample Payload of Mobile Push Notification

After successful set-up, the SAP Marketing Cloud system sends push notification to the mobile device. A sample payload of mobile push notification received on an iOS device is illustrated below.
The following are the parameter descriptions:

- **deeplinkTarget**: The URL that points to the exact link that is relevant for the mobile app user. You can direct your mobile app users to the relevant destination using this link.
- **imageUrl**: The relevant image URL for the notification.
- **type**: The type of the data intention. The different types of data supported are:
  - offer: Payload contains the details of an offer.
  - coupon: Payload contains the details of an offer that has a coupon.
  - text: Payload won’t contain any offer details as there’s no offer associated with this notification.
- **trackingURL**: You can use the URL to track whether the user has viewed the mobile notification. When the link is opened, the system creates an interaction in the SAP Marketing Cloud system.
- **mutable_content**: This field allows the notification received on the device to be modified before displaying it to the user. This can be done by adding a notification service to the application. You can handle rich notifications here.
iNote

For Android devices, notifications must be explicitly handled irrespective of whether the app is in the foreground, background, or killed. The app must implement the `onMessageReceived()` method of the `FirebaseMessagingService`. For more information, see Receive Messages in an Android App.

### 4.3.4.2.5 Maintaining the Certificate Trust List

To add the SSL certificate of Firebase to the trust list of SAP Marketing Cloud, perform the following steps:

**Procedure**

2. Double-click on the lock to view the certificate.
3. Choose View Certificate and choose the Certification Path tab.
4. Select Google Trust Services - GlobalSign Root CA-R2 and choose View Certificate.
5. Choose the Details tab.
6. Choose Copy to File.
7. Follow the steps in the wizard and save the certificate file.
8. In SAP Marketing Cloud, choose the Maintain Certificate Trust List app.
9. Choose +.
10. Upload the certificate file saved earlier.

### 4.3.4.3 Social Campaigns Using Facebook and Instagram

With this integration, you can plan and create campaigns in Facebook, and then use Facebook Ads Manager to push ads to Facebook and Instagram via Facebook. The actual spend and campaign success data from Facebook is pulled into SAP Marketing Cloud for analysis.

iNote

Please note that SAP Marketing Cloud doesn’t support direct integration with Instagram.
**Prerequisites on Facebook**

Before you begin, a few things need to be done:

- You need your own Facebook app that must be reviewed and released for productive usage by Facebook. When starting the review process, mention that you are using SAP Marketing Cloud. You can only use one Facebook app with this integration.

  **Note**

  A prerequisite for the approval is a link to a data privacy policy that is visible to every user of the app. Ensure that your company has such a policy in place.

- Look up the application ID (**App ID**) and client secret (**App Secret**) in Facebook for later use when configuring the communication arrangement.

- To actually do advertising on Facebook you need a Facebook ad account and a user that has been assigned either the **Ad Account Admin** or **Ad Account Advertiser** permissions for at least one ad account in Facebook. If you work together with a marketing agency you have to clarify who owns and manages this account. It is recommended to use **Facebook Business Manager**. For details refer to the Facebook documentation. In any case your users need marketer permissions on the ad account. You can also work with multiple ad accounts (such as one account per marketing area).

  **Note**

  When you create a Facebook campaign in SAP Marketing Cloud, you need to select an ad account from the **Advertiser** dropdown. This dropdown displays all available Facebook ad accounts, regardless of the type of permission. Only ad accounts with **Admin** or **Advertiser** permissions can be used to create campaigns.

  When creating a campaign, selecting an ad account with only **Analyst** permissions will result in an error and you will need to choose a different ad account to continue. When transferring a custom audience, using an ad account with only **Analyst** permission will result in an error, and you may need to discard that campaign and start again.

Facebook also requires a check for marketing permissions when using their custom audiences, a check that is done by default in SAP Marketing Cloud. In SAP Marketing Cloud, if the user has not given their permission for their data to be used for advertising purposes it can not be used in campaigns created either for Facebook custom audiences or third-parties. However, some countries have implicit opt-in permission. This means that if the user does not specifically forbid SAP Marketing Cloud from using their user for advertising purposes, the user information can be transferred to a custom audience in Facebook.

Your marketing ad account manager and system administrators can assist you with any questions about these prerequisites.

**Creating a Facebook App**

You must request a Facebook app to access the Facebook APIs. This app must be reviewed by Facebook in order to get full API access. Please keep in mind that Facebook can reject your app, and the review process belongs solely to Facebook. SAP is not involved in this process.
Permissions Needed

The following permissions are necessary to integrate your Facebook campaigns with SAP Marketing Cloud.

- Facebook Login
- Ads_management (Standard Access)

To gain these permissions, you will need to provide videos to Facebook as part of the app review process. These videos should show how certain features of the Facebook API are used in SAP Marketing Cloud.

You must produce these videos yourself, and they will need to show your Facebook app when demonstrating login steps.

Facebook Login Permission

You need to create a video to demonstrate how the Facebook Login is used in SAP Marketing Cloud. To do this, create a Facebook campaign and choose Authenticate to trigger the user authentication flow to Facebook. It is important to show that the login uses your Facebook app.

Ad_management Permission

You need to create a video to demonstrate how the Ads_management feature is used in SAP Marketing Cloud. You will need to create another video demonstrating the Facebook campaign creation and authentication process, as well as showing the Performance tab with analytics available. You can use a CSV upload to add data to this campaign if you do not have a real example of a Facebook campaign yet.

Additional Notes

For the App Domains of your app, you should use your company-specific tenant which can be copied from your browser.

For the review process, and later for productice usage, you will need to turn on the Live mode of your app. When you switch to Live mode, all of the permissions allowed in Development mode are removed. Until those permissions are restored, some features, such as Facebook login in SAP Marketing Cloud, may not work. After the app is reviewed an approved, these permissions will be restored and the features will work again.

Additional Information

For an example about how to create a Facebook app which can be used for SAP Marketing Cloud, see the following blog: How to Create a Facebook App for Campaign and Custom Audience Integration.

i Note

The SAP blog is not part of the official documentation of SAP Marketing Cloud and some of the information may be outdated.

Setting Up Communication Arrangement

For more information, see Setting Up a Communication Arrangement with Facebook [page 248].
4.3.4.3.1 Setting Up a Communication Arrangement with Facebook

In SAP Marketing Cloud, you can create and track the success and actual spend of your Facebook campaigns and create Facebook custom audiences for your target groups to be used in either one-time or periodic campaigns.

You set up a communication system and communication arrangement to enable the Facebook execution, and the requesting of success data from Facebook. Only one communication arrangement is needed.

The authentication with Facebook is done with OAuth authorization code grant flow and there is no setup of a technical user for communication. Instead an SAP Marketing Cloud user grants SAP Marketing Cloud the permission to manage ads on Facebook on behalf of his personal Facebook user from the SAP Marketing Cloud Campaigns app.

Prerequisites

You need your App ID and App Secret from Facebook.

You also require the business catalog role SAP_BR_ADMINISTRATOR in SAP Marketing Cloud.

You require at least one Facebook user with "Ad Account Admin" or "Ad Account Advertiser" permissions for at least one Facebook ad account. Permissions can be granted, for example, by using the Facebook Business Manager.

Redirect URL

In order to make your OAuth client known to the OAuth authorization server on Facebook, you’ll need to enter a redirect URL in your Facebook app. Your company-specific tenant can be extracted from your browser and put together as follows: https://<your domain>:443/sap/public/bc/sec/oauth2/client/redirect? sap-client=100.

Communication System

Create the communication system as follow:

2. In the New Communication System dialog, define the ID for the communication system. Define a System Name. You can freely define a name; note that the name is used when you create the communication arrangement. Click Create.
3. Under Technical Data Host Name, specify the host system for Facebook, which is facebook.com.

   i Note

   Log System ID, Client Name, and Business System are not relevant for Facebook campaign execution.

4. Optionally, you can provide your Contact Information for the communication system you are defining.
5. Under **User for Outbound Communication**, click + to add a set of access details for the Facebook server. You have to use the Authentication Method OAuth 2.0 and provide the **App ID** and **App Secret** that you have obtained before. Click **Create**.

6. Save the communication system.

**Maintain Communication Arrangement for Facebook**

1. From the launchpad, choose **Communication Management ➔ Communication Arrangements**.
2. From the **Communication Arrangement** screen, choose **New** and enter the following information in the New Communication Arrangement dialog:
   - **Communication Scenario ID**: SAP_COM_0031 (*Marketing - Campaign Execution Facebook Integration*)
   - **Communication Arrangement Name**: Enter a name of your choice, for example "Facebook"
3. Select the communication system you created under Communication System.
4. Make sure that the **OAuth 2.0 Client ID** matches the ID you wish to use for your Facebook campaign.
5. Enter a / or other data of your choice in the **Path** field.
6. Save your communication arrangement.

**Related Information**

Social Campaigns Using Facebook and Instagram [page 245]

### 4.3.4.4 WeChat Integration

With this integration, you can synchronize the followers of your WeChat official accounts as well as the follower interactions to SAP Marketing Cloud. What’s more, you can create and carry out WeChat campaigns through SAP Marketing Cloud. Analytical reports about WeChat followers and interactions are available as well.

For more information, see WeChat Integration [page 55].

### 4.3.4.5 LINE Integration

With this integration, you can synchronize the followers of your LINE accounts as well as the follower interactions to SAP Marketing Cloud. What’s more, you can create and carry out LINE campaigns through SAP Marketing Cloud. Analytical reports about LINE followers and interactions are available as well.

For more information, see LINE Integration [page 67].
4.3.4.6 Integration with Baidu Paid Search Campaigns (To Be Deprecated)

With integration of Baidu paid search campaigns, you can view an analytics story named Campaign Success for Baidu Paid Search in SAP Marketing Cloud. This analytics story contains a comprehensive analytical report for Baidu paid search campaigns.

**Customer Implementation**

The following diagram provides an architecture overview of the integration with Baidu paid search campaigns:

![Architecture Diagram]

The system generates the analytics story based on paid search campaigns and campaign success data replicated from Baidu. You have to create your own implementation that replicates data from Baidu to SAP Marketing Cloud.

→ Recommendation

We recommend that you use integration flows on SAP Cloud Platform Integration to replicate data from Baidu to SAP Marketing Cloud.
What SAP Provides

SAP provides the following that is essential for the integration with Baidu paid search campaigns:

- **OData services** `API_MKT_CAMPAIGN_SRV` and `API_MKT_CMPGN_SUCCESS_IMPORT`  
  Your customer implementation should get Baidu paid search campaigns and their success data via Baidu APIs and push the replicated data to SAP Marketing Cloud via these OData services.
- **Communication scenario** `SAP_COM_0270`  
  Create technical configurations for the OData communication using this communication scenario.
- **Campaign category** *Baidu Paid Search* *(BDA)*  
  The system assigns this campaign category to the replicated Baidu paid search campaigns automatically.

Related Information

- OData Service: `API_MKT_CAMPAIGN_SRV` [page 767]
- OData Service: `API_MKT_CMPGN_SUCCESS_IMPORT` [page 812]
- Documentation for Baidu Paid Search APIs

4.3.4.6.1 Configuration

Create the configurations that are required for the integration with Baidu paid search campaigns.

4.3.4.6.1.1 Setting Up Baidu Paid Search

There are no configurations that you need to create specifically for the integration on the Baidu paid search platform. Simply apply for a Baidu paid search account, and create and carry out paid search campaigns through the Baidu paid search platform.

4.3.4.6.1.2 Setting Up SAP Marketing Cloud

You should use OData services `API_MKT_CAMPAIGN_SRV` and `API_MKT_CMPGN_SUCCESS_IMPORT` to replicate Baidu paid search campaigns and campaign success data into SAP Marketing Cloud. For this OData communication, you need to create some technical configurations on your SAP Marketing Cloud tenant.

The configuration tasks that you need to perform include the following:

- Create a communication user.  
  When calling the OData services, your customer implementation for data replication needs to authenticate itself with this communication user first. You need to configure the same user in your customer implementation.
Create a dummy communication system.
A communication system is irrelevant to inbound communication. The only purpose of this communication system is to bind the communication user with the communication arrangement that you will create later.

Create a communication arrangement.
This communication arrangement defines the OData communication.

### 4.3.4.6.1.2.1 Creating a Communication User

Create a communication user for the OData communication.

**Procedure**

1. Log into SAP Fiori launchpad of SAP Marketing Cloud with a business role that contains the `Communication Management (SAP_CORE_BC_COM)` business catalog.
2. Open the Maintain Communication Users app.
3. Choose New.
   The Create Communication User dialog box appears.
4. Fill in the following fields:
   - User Name
   - Description
   - Password
   Note down the user name and password. Later you need to configure the same user name and password in your customer implementation.
5. Save the communication user.
   Do not exit SAP Fiori launchpad.

### 4.3.4.6.1.2.2 Creating a Dummy Communication System

Create a dummy communication system, the only purpose of which is to bind the communication user that you created earlier with the communication arrangement that you will create later.

**Procedure**

1. Open the Communication Systems app.
2. Choose New.
   The New Communication System dialog box appears.
3. Enter a system ID and its name. Choose Create.
   The editing screen for the communication system appears.
4. Since a host is irrelevant to the OData communication, enter dummy in the Host Name field to assign a dummy host.

5. Assign the communication user created earlier to this communication system, as follows:
   1. In the User for Inbound Communication section, choose + (Add).
      The New Inbound Communication User dialog box appears.
   2. Enter the user created earlier and select the authentication method User Name and Password.

6. Save and activate the communication system.
   Do not exit SAP Fiori launchpad.

### 4.3.4.6.1.2.3 Creating a Communication Arrangement

Create a communication arrangement with communication scenario SAP_COM_0270 that defines the OData communication.

**Procedure**

1. Open the Communication Arrangements app.
2. Choose New.
   The New Communication Arrangement dialog box appears.
3. Enter scenario SAP_COM_0270 and an arrangement name. Choose Create.
   The editing screen for the communication arrangement appears.
4. In the Communication System field, enter the communication system created earlier.
5. Save and activate the communication arrangement.

### 4.3.4.6.1.3 Creating Customer Implementation for Data Replication

The system generates the analytics story based on paid search campaigns and campaign success data replicated from Baidu. You have to create your own implementation that replicates data from Baidu to SAP Marketing Cloud.

> **Recommendation**

We recommend that you use integration flows on SAP Cloud Platform Integration to replicate data from Baidu to SAP Marketing Cloud.
4.3.4.6.2 Finish the Setup

Learn about the post-setup activities that you need to carry out for the integration with Baidu paid search campaigns.

4.3.4.6.2.1 Configuring Marketing Plans in SAP Marketing Cloud

To view analytical data about budgets and spends in the analytics story Campaign Success for Baidu Paid Search, you need to configure marketing plans in SAP Marketing Cloud first.

Related Information

Planning

4.3.4.7 Integration with Google Campaign Manager

Overview of the integration scenario.

This integration allows you to transfer performance data from Google Campaign Manager to SAP Marketing Cloud.

The following diagram provides an overview of the main components involved in the system integration of SAP Marketing Cloud with Google Campaign Manager. SAP Cloud Platform Integration is used as a middleware between SAP Marketing Cloud and Google Campaign Manager. It is responsible for the account authentication with OAuth 2.0 and any other API communication routing between the two involved systems.
Configuration

To run the integration scenario, you make settings in the following systems:

- Google Campaign Manager
4.3.4.8 Integration with Adform

With this integration, you can send target groups that you created in SAP Marketing Cloud as custom audiences to Adform and use them in your Adform campaigns.

Prerequisites

Before you can use this integration, you must do the following:

- Set up your data provider account on the Adform platform.
  Only one data provider account should be assigned to your Adform platform. You choose the data provider account in the ADFORM AUDIENCES node in the Campaigns app.
- Create categories in your data provider account.
- Download the Adform server certificate (api.adform.com).

Configuration

To use this integration you must set up the communication system and communication arrangement in your SAP Marketing Cloud system and import the Adform server certificate into SAP Marketing Cloud.

Related Information

- Configuring SAP Marketing Cloud [page 257]
- Import the Certificate [page 259]
- Adform Audiences Campaign
4.3.4.8.1 Configuring SAP Marketing Cloud

To establish communication with the OData service, you perform procedures in SAP Marketing Cloud. The overall process is as follows:

1. Set Up the Communication System [page 257]
   Set up a communication system for the Adform integration scenario.
2. Set Up the Communication Arrangement [page 258]
   After setting up the communication system, set up the communication arrangement for the Adform integration scenario.

4.3.4.8.1.1 Set Up the Communication System

Set up a communication system for the Adform integration scenario.

Prerequisites

To set up a communication system and communication arrangement, you require the Communication Management (SAP_CORE_BC_COM) business catalog role.

Procedure

1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose the Communication Systems app.
3. Choose New.
4. Enter a system ID and name for your communication system.
5. Choose Create.
6. On the Communication System page, enter the following:
   a. Under Technical Data, enter dummy as the Host Name to assign a dummy host.
      This is a dummy communication system as its only purpose is to bind the communication user that you previously created to the communication arrangement that you will create in the next step.
   b. Under User for Outbound Communication, choose (+).
   c. For Authentication Method, select OAuth 2.0.
   d. Enter your client ID and client secret you received from Adform.
7. Save your changes and exit the app.

Task overview: Configuring SAP Marketing Cloud [page 257]
4.3.4.8.1.2 Set Up the Communication Arrangement

After setting up the communication system, set up the communication arrangement for the Adform integration scenario.

Prerequisites

To set up a communication system and communication arrangement, you require the Communication Management (SAP_CORE_BC_COM) business catalog role.

Procedure

1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose the Communication Arrangements app.
3. Create a new communication arrangement.
4. Select scenario SAP_COM_0496.
5. Choose Create.
6. In the Communication Arrangements screen, do the following:
   a. Under Common Data, choose the communication system that you created previously.
   b. Under User for Outbound Communication, choose the user name you assigned to the communication system.
7. Save your changes and exit the app.

Task overview: Configuring SAP Marketing Cloud [page 257]

Previous task: Set Up the Communication System [page 257]
4.3.4.8.2 Import the Certificate

Import the server certificate for Adform into SAP Marketing Cloud.

Prerequisites

You already downloaded the certificate from Adform.

Procedure

1. Log into the SAP Fiori launchpad with a business role that contains the security (SAP_CORE_BC_SEC) business catalog.
2. Open the Maintain Certificate Trust List app.
3. Use (+) to add a certificate.
4. Upload the certificate.

4.3.5 Setting Up Captcha Configuration for Forms

Use captcha configuration to enhance the security of your forms and decrease vulnerability to malicious attacks by bots that send fraudulent contact data into your system.

SAP Marketing Cloud integrates with Google reCAPTCHA v3 and provides a Captcha element in the Form editor allowing you to set up captchas for your forms, analyze form traffic, and take action to ensure your forms are secure.

To set up the communication between your SAP Marketing Cloud system and Google reCAPTCHA v3, you do the following:

- Download the GlobalSign certificate from Google Admin Console.
- Upload the GlobalSign certificate to the Maintain Certificate Trust List app.
- Register your domain on the Google Admin Console for Google reCAPTCHA v3.
- Create a communication system.
- Create a communication arrangement using the Marketing - Captcha Integration (SAP_COM_0584) communication scenario. The scenario is used to store the site and secret keys that are generated when you register your domain.
**Download the GlobalSign Certificate**

You must download the GlobalSign certificate to ensure that the Captcha communication works as required. You perform the following steps:

1. Open the Google Admin Console in a browser window.

   *Note*
   The steps for downloading the certificate will differ depending on the device and browser you use. For example, the certificate can be copied either directly to your desktop or you may encounter a step-by-step wizard to support you with the download.

2. Click the small lock icon in the address bar. This is located either to the left or right of the URL.
3. Select the GlobalSign certificate and drag and drop it to your local computer or follow the steps to copy the file to your local computer. Again, how you perform this step depends on the device and browser you are using.

**Upload the GlobalSign Certificate**

To upload the GlobalSign certificate, you perform the following steps:

1. Open the Maintain Certificate Trust List app.
2. Choose +.
3. Browse your computer for the certificate file you saved by following the steps in the previous section.
4. Select the file and choose *Upload*.

**Register Your Domain**

**Prerequisites**

To register your domain for Google reCAPTCHA v3, you must have your own Google account.

You register your domain with Google reCAPTCHA v3 as follows:

1. Log in to your Google account.
2. Open the Google Admin Console: https://www.google.com/recaptcha/admin/create
3. Enter a label for your form or landing page where the form is embedded. Use a label that’s easy to remember.
4. Select reCAPTCHA v3 for the type.
5. Add the domain of your form or landing page where the form is embedded.

   *Note*
   The domain must be that of the published form or landing page.

6. Add the domain of your SAP Marketing Cloud system, for example *my1234567.s4hana.ondemand.com*. This ensures that your form captchas will work correctly when opening your form in test mode.
Select the checkbox to accept the reCAPTCHA terms of service and choose Submit. A Site Key and a Secret Key are created and saved in the Admin console settings. These keys are necessary when creating the communication arrangement. The site key is used to call the reCAPTCHA service on your form. The secret key authorizes communication between your SAP Marketing Cloud system and the reCAPTCHA server to verify the user’s response.

Create a Communication System

You create the communication system as follows:

1. In the SAP Fiori launchpad, open the Communication Management group.
2. Open the Communication Systems app and choose New.
3. In the New Communication System dialog, enter names for the system ID and system name. For example, GOOGLE_CAPTCHA_v3. You can freely define a system name. It is used when you create the communication arrangement.
4. Choose Create.
5. In the Technical Data section, enter www.google.com for the host name.
6. In the Users for Outbound Communication section, choose the plus icon to define the outbound authentication method.
7. Select None for the authentication method and choose Create.
8. Choose Save.

Create a Communication Arrangement

You create the communication arrangement as follows:

1. Open the Communication Arrangements app and choose New.
2. In the New Communication Arrangement dialog, search for the Marketing - Captcha Integration (SAP_COM_0584) communication scenario.
3. Enter a name for the communication arrangement.
4. Choose Create.
5. In the Communication System field, open the value help to search for and select the communication system you created.
6. In the Additional Properties section, verify that the correct property value is set for the type. The default is set at 10, which is Google reCAPTCHA v3.
7. Open the settings of the Google Admin Console and copy and paste the site and secret keys into the communication arrangement.
8. Choose Save.

You have set up the captcha configuration for your forms. When you create a new form and add a Captcha element, you can select the configured captchas in the Captcha Configuration list. For more information, see Enhancing Form Security.
4.4 Application-Enabling Integrations

The section provides information about integration options that enable specific applications of SAP Marketing Cloud, such as geospatial segmentation, or analyzing marketing data based on the analytic capabilities of SAP BusinessObjects Cloud.

- **Integrating Custom Themes** [page 262]
  - Set a custom company theme in the SAP Fiori launchpad.

- **Integration with SAP Analytics Cloud (1SO)** [page 263]
  - Set up the Integration of SAP Analytics Cloud (1SO) with SAP Marketing Cloud

- **Content Studio Integrations** [page 300]
  - Lists the Content Studio integrations with SAP Marketing Cloud

- **Enabling Geospatial Segmentation with here.com** [page 313]
  - Use the integration option to translate addresses to geo-coordinates and reverse, and to enable geospatial analysis for segmentation based on the connected maps.

- **Integration with Baidu Maps for Geospatial Segmentation** [page 314]
  - The integration of Baidu Maps into Segmentation enables you to segment contacts in China by geographic location in a visualized way.

- **SAP Jam Integration for Collaboration** [page 316]
  - The integration enables using SAP JAM in SAP Marketing Cloud to facilitate the collaboration when planning and executing marketing campaigns.

- **Verifying Email Addresses Using a Partner Solution** [page 316]
  - Accurate email addresses are vital for email marketing campaigns. To verify email addresses you can use partner services, such as Neverbounce or others.

- **Integration with an External Coupon Service System** [page 317]
  - Integrate SAP Marketing Cloud with an external coupon service system. To use this integration, you must use the communication arrangement: SAP_COM_0086.

- **Partner Extension: Integrate with Digital Market Intelligence** [page 325]
  - With the partner integration of SimilarWeb, you can see the web no app traffic of your competitors for each channel, such as direct, email, social. These insights help you to make better strategic decisions with regard to your own campaigns. Note that the extension is an offering from a partner of SAP.

**Marketing Events** [page 325]

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### 4.4.1 Integrating Custom Themes

Set a custom company theme in the SAP Fiori launchpad.

The **Scope Item: UI Theme Designer (2TV)** enables you to set a custom company theme for the SAP Fiori launchpad in the SAP Marketing Cloud. For example, a company color scheme and a company logo.

To integrate a custom theme in SAP Marketing Cloud, do the following:

1. Create a custom theme on your SAP Cloud Platform (Neo) account.
2. Set up a communication arrangement in SAP Marketing Cloud that uses the SAP_COM_0086 communication scenario.
3. Set as an SAP Marketing Cloud default theme.
For more information, see Scope Item: UI Theme Designer (2TV).

**i Note**
The Scope Item: UI Theme Designer (2TV) is excluded from default activation. To activate the scope item, submit a request to BCP – Ticket Component: XX-S4C-OPR-SRV. The activation of this scope item requires an additional SAP Cloud Platform (Neo) account.

### 4.4.2 Integration with SAP Analytics Cloud (1SO)

Set up the Integration of SAP Analytics Cloud (1SO) with SAP Marketing Cloud

**i Note**
This section is not relevant for SAP Analytics Cloud, embedded edition. You check in the Set Up Your Marketing Solution application to see if you have the embedded edition. For more information, see Setup of SAP Analytics Cloud, Embedded Edition/SAP Analytics Cloud.

**Use**

Integrating SAP Marketing Cloud with SAP Analytics Cloud allows you to make full use of the analytic capabilities of SAP Analytics Cloud to explore marketing data. You can, for example, build analytics stories based on CDS views and use them in the Analytics and Reporting Gallery. The Live Data Connection allows users to run SAP Marketing Cloud CDS query views without data replication. The analytical query is delivered as CDS content and is exposed via the analytical engine and the InA protocol via the REST services under /sap/bw/ina/ to SAP Analytics Cloud.
Prerequisites

To integrate the SAP Marketing Cloud data into SAP Analytics Cloud, ensure the following:

- You have the necessary access data (URL, user, and password, authorizations) for the SAP Cloud Identity Provider (IdP) system and the SAP Analytics Cloud system.
- Both applications must use the same SAP Cloud Identity Provider (IdP).
- The IdP user is authorized for both applications.

More Information

SAP Analytics Cloud

Complete the following steps to integrate SAP Analytics Cloud with SAP Marketing Cloud.

1. Connecting SAP Analytics Cloud to SAP Marketing Cloud Identity Provider [page 265]
   Connect your SAP Analytics Cloud to SAP Marketing Cloud Identity Provider.
2. Create the Live Data Connection to SAP Marketing Cloud [page 267]
Creating the live data connection allows you to run SAP Marketing Cloud CDS query views without data replication.

3. Renewal of Signing Certificates [page 296]
   Renew signing certificates.

4. Selecting SAP Marketing Cloud Content Packages to Add to Your Tenant [page 297]
   Choose and then import SAP Marketing Cloud content to your SAP Analytics Cloud system to improve your analytics scenarios.

4.4.2.1 Connecting SAP Analytics Cloud to SAP Marketing Cloud Identity Provider

Connect your SAP Analytics Cloud to SAP Marketing Cloud Identity Provider.

Prerequisites

1. You need to have the role **System Owner** in SAP Analytics Cloud to set up the SSO integration.

2. If you have previously set up an SAML SSO live connection with the check box **Identity Provider will also be used for Live Data connections with SAML Single Sign On to S/4HANA Cloud Edition** enabled, then you need to do the following steps first:
   1. In the SAP Analytics Cloud menu, select **System > Administration** and switch to the **Security** tab. Edit the settings.
   2. In the section **Authentication Method**, change the setting from **SAML Single Sign-On (SSO)** to **SAP Cloud Identity (Default)**, and save the settings. Continue with the following steps.

⚠️ Caution

It is important to base the SAML assertion on **Login name**, in order to ensure a smooth integration. Support for other configurations is not guaranteed.

Procedure

1. In your SAP Cloud Platform Identity Authentication Service system, open the administration console. Go to **Application & Resources > Tenant Settings > SAML 2.0 Configuration** and download the identity provider’s metadata file.

2. Start the SAP Analytics Cloud application in a separate window as **System Owner**.

3. From the menu, select **System > Administration** and switch to the **Security** tab. Edit the settings.

4. In the section **Authentication Method**, change the setting to **SAML Single Sign-On (SSO)**.

5. Go to the section **SAML Single Sign-On (SSO) Configuration**. In **Step 1: Download Service Provider metadata**, download the metadata.xml file.
The downloaded file initially has the same name as the metadata file of the identity provider. Make sure that you rename the metadata file.

6. In Step 2: Upload Identity Provider metadata, upload the metadata.xml file that you’ve previously downloaded from SAP Marketing Cloud identity provider (not the file from SAP Analytics Cloud).

7. In Step 3: Choose a user attribute to map to your identity provider, select Custom SAML User Mapping.

⚠️ Caution

Custom SAML User Mapping with the SAML assertion based on Login name is the only out of the box supported configuration for this step. Support for other configurations is not guaranteed.


9. On the Trust tab, select SAML 2.0 Configuration. In the section Define from Metadata, upload the metadata.xml file that you downloaded from earlier.

10. Return to the Trust tab. Choose the entry Name ID Attribute and change the setting to Login Name. Save your settings.

11. In the SAP Cloud Platform Identity Authentication Service system, under Users & Authorizations User Management search for the user that you want to map to your existing account. Note the login name of the user for the SAP Marketing Cloud system.

12. In the SAP Analytics Cloud system, you can now verify that all settings are correct. In the section SAML Single Sign-On (SSO) Configuration, in Step 4: Verify your account with the identity provider, provide the login name of your SAP Marketing Cloud user in the Login Credential (Custom SAML User Mapping) and click Verify Account.

13. From the upcoming popup, copy the URL.

ℹ️ Note

Use a private session to open the URL, such as incognito mode in the Google Chrome browser. Doing so ensures that when you log on to SAP Analytics Cloud, you’re prompted to log on and don’t reuse an existing browser session. You will log in with the SAML_VERIFY user.

14. In the SAP Analytics Cloud system, return to the Security settings page, where you now should get a message that your account has been verified. Save your settings.

15. In the popup, click Convert and confirm the message.

After some minutes, your tenant is connected to the SAP Marketing Cloud identity provider. The SAML user mapping for your user that carried out the conversion was already changed.

16. Ensure that you adjust the SAML user mappings of all existing users manually to the new identity provider. First, ensure that you created all users in the identity provider.

17. Navigate to Security Users. In the column SAML User Mapping, enter the corresponding login name of the SAP Marketing Cloud system for all other users. Save the changes.

Task overview: Integration with SAP Analytics Cloud (ISO) [page 263]

Next: Create the Live Data Connection to SAP Marketing Cloud [page 267]
4.4.2.2  Create the Live Data Connection to SAP Marketing Cloud

Creating the live data connection allows you to run SAP Marketing Cloud CDS query views without data replication.

Before you create the live data connection to SAP Marketing Cloud, you must identify the environment where SAP Analytics Cloud is hosted. The following environments are available:

- SAC Neo Tenant [page 267]
- SAP Cloud Foundry Tenant [page 280]

If the tenant ID is visible as a part of the SAP Analytics Cloud URL, then SAP Analytics Cloud is hosted on the SAC Neo environment. For example, https://xxx.sapanalytics.cloud/sap/fpa/ui/tenants/<tenant ID>/app.html

If the tenant ID is not visible as a part of the SAP Analytics Cloud URL, then SAP Analytics Cloud is hosted on the SAP Cloud Foundry environment. For example, https://xxx.sapanalytics.cloud/sap/fpa/ui/tenants/app.html

Once you identify the environment, ensure that you complete the tasks in the sequence they’re listed to create the live data connection to SAP Marketing Cloud.

Parent topic: Integration with SAP Analytics Cloud (ISO) [page 263]

Previous task: Connecting SAP Analytics Cloud to SAP Marketing Cloud Identity Provider [page 265]

Next: Renewal of Signing Certificates [page 296]

4.4.2.2.1  SAC Neo Tenant

Identify if the SAC Neo tenant is the environment where SAP Analytics Cloud is hosted.

If the tenant ID is visible as a part of the SAP Analytics Cloud URL, then SAP Analytics Cloud is hosted on the SAC Neo environment. For example, https://xxx.sapanalytics.cloud/sap/fpa/ui/tenants/<tenant ID>/app.html

Now that you’ve identified the environment where SAP Analytics Cloud is hosted, to create the live data connection with the SAC Neo tenant, complete the tasks in the following sequence:

1. Adding a New OAuth Client [page 268]
2. Adding a New Live Data Connection [page 269]
3. Setting Up a Communication System [page 270]
4. Setting Up a Communication Arrangement [page 272]
5. Completing the Setup of the Live Data Connection [page 275]
6. Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud [page 277]
7. Whitelisting SAP Marketing Cloud to SAP Analytics Cloud [page 278]

Whitelist and then access the analytics stories embedded in SAP Marketing Cloud.
4.4.2.2.1.1 Adding a New OAuth Client

Prerequisites

For the steps in the SAP Analytics Cloud system, the Admin or System Owner role is required.

Procedure

1. In the SAP Analytics Cloud system, navigate to System ➤ Administration ➤ App Integration ➤ OAuth Clients and note down the authorization URL and the token URL.

2. Under Configured Clients, add a new OAuth Client with the following properties:
   1. **Name**, for example “SAP HMC System”
   2. **OAuth Client ID**, for example “my300xxx”.
   3. **Purpose**: “Interactive Usage”.
   4. **Security ➤ Authorization Grant ➤ Client Credentials**
   5. **Security ➤ Secret** chosen by you (like a password). Don’t specify a lifetime for the secret.
   6. **Token Details ➤ Token Lifetime** 60 minutes (suggested value).

3. Press Add.
Task overview: SAC Neo Tenant [page 267]

Next task: Adding a New Live Data Connection [page 269]

4.4.2.2.1.2 Adding a New Live Data Connection

Procedure

1. In the SAP Analytics Cloud system, navigate to Connection and press the Plus (+) icon to add a new connection.

2. Select Live Data Connection SAP S/4HANA

3. In the dialog New S/4HANA Live Connection, enter a Name and Description.
   In order to use SAP Marketing Cloud sample content, the name has to be SAPMKTNW.

4. Select Connection Type SAP S/4HANA Cloud.

5. Under Host, enter the host name of the SAP Marketing Cloud tenant. For example, my300xxx.s4hana.ondemand.com.

6. Note down the provider name that is displayed under Authentication Method OAuth 2 SAML. Bearer Assertion and download the signing certificate.
Notes
No need to save at this point. We make the required configurations in SAP Marketing Cloud and return to this setup for saving.

Task overview: SAC Neo Tenant [page 267]

Previous task: Adding a New OAuth Client [page 268]

Next task: Setting Up a Communication System [page 270]

4.4.2.2.1.3 Setting Up a Communication System

Prerequisites
For the steps in the SAP Marketing Cloud system, the Administrator role is required.

Procedure

1. Open SAP Marketing Cloud in a new browser window. In the app Communication Systems, click New to create a new communication system.

2. Under Technical Data General Host Name, enter the host name of the SAP Analytics Cloud tenant.

3. Under Technical Data OAuth 2.0 Settings, enter the authorization endpoint `oauthasservices-<SAP CP account ID>.int.sap.hana.ondemand.com/oauth2/api/v1/authorize` and token endpoint `oauthasservices-<SAP CP account ID>.int.sap.hana.ondemand.com/oauth2/api/v1/token` when you added the new OAuth client. For more information, see Adding a New OAuth Client [page 268].
4. Under OAuth 2.0 Identity Provider, select Enabled. Enter the provider name and upload the signing certificate that you obtained in Adding a New Live Data Connection [page 269].

5. Create a user for Inbound Communication with the Authentication Method User Name and Password and note down the user name and password.

6. To create a user for Outbound Communication, enter the following details:
   1. In Authentication Method, choose OAuth 2.0.
   2. Add the OAuth 2.0 client ID and the client secret that you defined in Adding a New OAuth Client [page 268].
7. Save the communication system.

Task overview: SAC Neo Tenant [page 267]

Previous task: Adding a New Live Data Connection [page 269]

Next task: Setting Up a Communication Arrangement [page 272]

4.4.2.2.1.4 Setting Up a Communication Arrangement

Procedure

1. In the SAP Marketing Cloud system, choose Communication Arrangements app, click New to create a new arrangement.

2. In the New Communication Arrangement pop-up screen, enter the scenario SAP_COM_0065 and click Create.

3. Enter the Communication System that you defined in Setting Up a Communication System [page 270].
4. Under Additional Properties Tenant ID (SAP Analytics Cloud tenant), maintain the tenant ID that is visible in the URL of SAP Analytics Cloud. When calling up https://xxx.sapanalytics.cloud, you'll be redirected to the full URL where you can find the tenant ID as shown in this example: https://xxx.sapanalytics.cloud/sap/fpa/ui/tenants/<tenant ID>/app.html.

5. Under Inbound Communication User Name Authentication Method, select Authentication with OAuth 2.0 using the input help of the User Name field.

7. Ensure that under Outbound Services, both UI Link Navigation and Retrieve Stories have Service Status checked (= Active).
8. Save the communication arrangement.

**Task overview:** SAC Neo Tenant [page 267]

**Previous task:** Setting Up a Communication System [page 270]

**Next task:** Completing the Setup of the Live Data Connection [page 275]

### 4.4.2.2.1.5 Completing the Setup of the Live Data Connection

**Procedure**

1. Switch back to the browser window with the SAP Analytics Cloud Live Data connection definition.
   1. Enter the token service user and token service password that you defined in Setting Up a Communication System [page 270].
   2. Enter the following space-separated list as OAuth scope:
      - SAP_BW_INA_BATCHPROCESSING_HTTP
      - SAP_BW_INA_GETCATALOG_HTTP
      - SAP_BW_INA_GETRESPONSE_HTTP
      - SAP_BW_INA_GETSERVERINFO_HTTP
      - SAP_BW_INA_LOGOFF_HTTP
      - SAP_BW_INA_VALUEHELP_HTTP
   2. Click OK.
Task overview: SAC Neo Tenant [page 267]

Previous task: Setting Up a Communication Arrangement [page 272]

Next task: Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud [page 277]
4.4.2.2.1.6 Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud

Procedure

1. In the SAP Analytics Cloud system, select System ➔ Administration ➔ App Integration ➔ Configured Clients.
2. To add a trusted identity provider, enter the following details:
   1. A name chosen by you.
   2. A provider name that is equal to the SAML 2 Issuer and to the signing certificate obtained in Setting Up a Communication Arrangement [page 272].
   3. The contents of the text file signing_pse.crt into Signing Certificate.

   ![Add a Trusted Identity Provider](image)

   Task overview: SAC Neo Tenant [page 267]

   Previous task: Completing the Setup of the Live Data Connection [page 275]

   Next task: Whitelisting SAP Marketing Cloud to SAP Analytics Cloud [page 278]
4.4.2.2.1.7 Whitelisting SAP Marketing Cloud to SAP Analytics Cloud

Whitelist and then access the analytics stories embedded in SAP Marketing Cloud.

Context

Analytics stories use charts, visualizations, texts, and pictograms to describe data.

Before you can view your embedded SAP Analytics Cloud stories, you must first whitelist your SAP Marketing Cloud system by adding the host name of the connected SAP Marketing Cloud system to SAP Analytics Cloud.

Procedure

1. Log on to SAP Analytics Cloud and select System > Administration.

2. Navigate to the tab App Integration.
3. In the **Trusted Origins** section, click **Add a Trusted Origin**.

4. Enter the host name of the connected SAP Marketing Cloud system. For example, **https://myXXXX.s4hana.ondemand.com**.

5. Click **Save**.

**Note**

If the third-party cookie isn’t enabled in your browser, you could get the following logon error after clicking **Analyze** to display the embedded analytics stories in SAP Marketing Cloud.

To resolve this error, go to your Chrome browser, open **Advanced Settings** > **Privacy and Security** > **Content settings** > **Cookies**, and add **sapbusinessobjects.cloud** and **sapanalytics.cloud** to the allowed list of third-party cookies.

Clear your browser cache and log in again. You can now see the analytics stories when you click **Analyze**.
You can click Analyze, for example in Campaigns and Spotlighting Accounts, to find the analytics stories.

**Task overview:** SAC Neo Tenant [page 267]

**Previous task:** Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud [page 277]

### Related Information

Analytics Stories

### 4.4.2.2.2  SAP Cloud Foundry Tenant

Identify if the SAP Cloud Foundry tenant is the environment where SAP Analytics Cloud is hosted.

If the tenant id is not visible as a part of the SAP Analytics Cloud URL, then SAP Analytics Cloud is hosted on the SAP Cloud Foundry environment. For example, https://xxx.sapanalytics.cloud/sap/fpa/ui/tenants/app.html

Now that you’ve identified the environment where SAP Analytics Cloud is hosted, create the live data connection with SAP Cloud Foundry. Complete the tasks in the following sequence:

1. Adding a New OAuth Client [page 280]
2. Adding a New Live Data Connection [page 283]
3. Setting Up a Communication System [page 284]
4. Setting Up a Communication Arrangement [page 288]
5. Completing the Setup of the Live Data Connection [page 291]
6. Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud [page 293]
7. Whitelisting SAP Marketing Cloud to SAP Analytics Cloud [page 294]
   - Whitelist and then access the analytics stories embedded in SAP Marketing Cloud.

### 4.4.2.2.2.1  Adding a New OAuth Client

#### Prerequisites

For the steps in the SAP Analytics Cloud system, the Admin or System Owner role is required.
Procedure

1. In the SAP Analytics Cloud system, navigate to **System** > **Administration** > **App Integration** > **OAuth Clients** and note down the authorization URL, OAuth2SAML Token URL, and OAuth2SAML Audience.

2. Under **Configured Clients**, add a new OAuth Client with the following properties:
   1. **Name**, for example "SAP SMC System"
   2. The **OAuth Client ID** will generate upon saving.
   3. **Purpose**: "Interactive Usage".
   4. The **Security Secret** will auto-generate.

3. Press **Add**.
4. Once the OAuth Client is created, note down the **OAuth Client ID** and **Secret** (click on the **Show Secret** button to note down the generated secret).
4.4.2.2.2  Adding a New Live Data Connection

Procedure

1. In the SAP Analytics Cloud system, navigate to Connection and press the Plus (+) icon to add a new connection.
2. Select Live Data Connection SAP S/4HANA.

3. In the dialog New S/4HANA Live Connection, enter a Name and Description.
   In order to use SAP Marketing Cloud sample content, the name has to be SAPMKTNW.

4. Select Connection Type SAP S/4HANA Cloud.

5. Under Host, enter the host name of the SAP Marketing Cloud tenant. For example, my300xxx.s4hana.ondemand.com.

6. Note down the provider name that is displayed under Authentication Method OAuth 2 SAML. Bearer Assertion and download the signing certificate.

   Note
   No need to save at this point. We make the required configurations in SAP Marketing Cloud and return to this setup for saving.

Task overview: SAP Cloud Foundry Tenant [page 280]

Previous task: Adding a New OAuth Client [page 280]

Next task: Setting Up a Communication System [page 284]

### 4.4.2.2.2.3 Setting Up a Communication System

**Prerequisites**

For the steps in the SAP Marketing Cloud system, the Administrator role is required.

**Procedure**

1. Open SAP Marketing Cloud in a new browser window. In the app Communication Systems, click New to create a new communication system.

2. Under Technical Data General Host Name, enter the host name of the SAP Analytics Cloud tenant.
3. Under **Technical Data** > **OAuth 2.0 Settings**, enter the authorization endpoint, oAuth2SAML Token endpoint, and oAuth2SAML Audience from when you added the new OAuth client. For more information, see Adding a New OAuth Client [page 280].

**i Note**

Enter the authorization endpoint and the oAuth2SAML Token endpoint without the \https://\ prefix.

The oAuth2SAML Audience must be entered exactly as it appears in the SAP Analytics Cloud systems.
4. Under OAuth 2.0 Identity Provider select Enabled. Enter the provider name and upload the signing certificate that you obtained in Adding a New Live Data Connection [page 283].

5. Create a Token Service User for Inbound Communication with the Authentication Method User Name and Password and note down the user name and password.
6. To create a user for Outbound Communication, enter the following details:
   1. In **Authentication Method**, add **OAuth 2.0**.
   2. Add the OAuth 2.0 client ID and the client secret that you defined in **Adding a New OAuth Client** [page 280].

7. Save the communication system.

**Task overview**: SAP Cloud Foundry Tenant [page 280]

**Previous task**: Adding a New Live Data Connection [page 283]

**Next task**: Setting Up a Communication Arrangement [page 288]
4.4.2.2.4 Setting Up a Communication Arrangement

Procedure

1. In the SAP Marketing Cloud system app Communication Arrangements, click New to create a new arrangement.
2. Enter the Scenario SAP_COM_0065 and click Create.
3. Enter the Communication System that you defined in Setting Up a Communication System [page 284].
4. Under Additional Properties Tenant ID (SAP Analytics Cloud tenant), maintain the SAP Analytics Cloud tenant ID. In the SAP Analytics Cloud system, you can find the tenant ID under Menu System About. The value displayed under System Name is the tenant ID.

i Note

Please maintain the alpha part of the value in lower case. Even if you see the system name as “91B6F”, the right value to enter is “91b6f”.
5. Under **Inbound Communication > User Name > Authentication Method**, select **Authentication with OAuth 2.0** using the input help of the **User Name** field.
6. Under **Outbound Communication**, set **SAML2 Identifier** to **User Name**. Note down the **SAML2 Issuer**. For example, https://my300xxx.s4hana.ondemand.com/oa2cs. Download the signing certificate (the text file `signing_pse.crt`).

7. Ensure that under **Outbound Services**, both **UI Link Navigation** and **Retrieve Stories** have **Service Status** checked (= **Active**).
8. Save the communication arrangement.

**Task overview:** SAP Cloud Foundry Tenant [page 280]

Previous task: Setting Up a Communication System [page 284]

Next task: Completing the Setup of the Live Data Connection [page 291]

### 4.4.2.2.2.5 Completing the Setup of the Live Data Connection

**Procedure**

1. Switch back to the browser window with the SAP Analytics Cloud Live Data connection definition.
   1. Enter the token service user and token service password that you defined in Setting Up a Communication System [page 270].
   2. Enter the following space-separated list as OAuth scope:
      - SAP_BW_INA_BATCHPROCESSING_HTTP
      - SAP_BW_INA_GETCATALOG_HTTP
      - SAP_BW_INA_GETRESPONSE_HTTP
      - SAP_BW_INA_GETSERVERINFO_HTTP
      - SAP_BW_INA_LOGOFF_HTTP
      - SAP_BW_INA_VALUEHELP_HTTP
   2. Click OK.
New S/4HANA Live Connection

*Name:*
SAPMKTNW

*Description:*
SAP Marketing Cloud

**Datasource Configuration**

*Additional components or configuration may be required for this connection type. See our Help Center to find out what’s required.*

**Connection Details**

*Connection Type:*
SAP S/4HANA Cloud

*Host:*
my_demandcloud.com

*Default Language:*
User's preferred language

**Credentials**

*Authentication Method:*
OAuth 2.0 Identity Provider Configuration

**OAuth 2.0 Identity Provider Configuration**

*Copy the Provider name below and download the signing certificate. You will need this information to configure your S/4HANA Cloud system.*

*Provider Name:*
SAC

*Download Signing Certificate*

*SAC Token Service User:*
SAC

*SAC Token Service Password:*\n
*OAuth Scope:*
SAP_BW_INA_BATCHPROCESSING_HTTP SAP_BW_INA_GETCATALOG_HTTP

**Task overview:** SAP Cloud Foundry Tenant [page 280]

**Previous task:** Setting Up a Communication Arrangement [page 288]

**Next task:** Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud [page 293]
4.4.2.2.6 Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud

Procedure

1. In the SAP Analytics Cloud system, select System > Administration > App Integration > Configured Clients.
2. To add a trusted identity provider, enter the following details:
   1. A name chosen by you.
   2. A provider name that is equal to the SAML 2 Issuer and to the signing certificate obtained in Setting Up a Communication Arrangement [page 272].
   3. The contents of the text filesigning_pse.crt into Signing Certificate.

Task overview: SAP Cloud Foundry Tenant [page 280]

Previous task: Completing the Setup of the Live Data Connection [page 291]

Next task: Whitelisting SAP Marketing Cloud to SAP Analytics Cloud [page 294]
4.4.2.2.2.7 Whitelisting SAP Marketing Cloud to SAP Analytics Cloud

Whitelist and then access the analytics stories embedded in SAP Marketing Cloud.

Context

Analytics stories use charts, visualizations, texts, and pictograms to describe data.
Before you can view your embedded SAP Analytics Cloud stories, you must first whitelist your SAP Marketing Cloud system by adding the host name of the connected SAP Marketing Cloud system to SAP Analytics Cloud.

Procedure

1. Log on to SAP Analytics Cloud and select System Administration.

2. Navigate to the tab App Integration.
3. In the Trusted Origins section, click Add a Trusted Origin.

4. Enter the host name of the connected SAP Marketing Cloud system. For example, https://myXXXX.s4hana.ondemand.com.

5. Click Save.

**Note**

If the third-party cookie isn’t enabled in your browser, you could get the following logon error after clicking Analyze to display the embedded analytics stories in SAP Marketing Cloud.

To resolve this error, go to your Chrome browser, open Advanced Settings > Privacy and Security > Content settings > Cookies, Add sapbusinessobjects.cloud and sapanalytics.cloud to the allowed list of third-party cookies.

Clear your browser cache and log in again. You can now see the analytics stories when you click Analyze.
You can click Analyze, for example in Campaigns and Spotlighting Accounts, to find the analytics stories.

Task overview: SAP Cloud Foundry Tenant [page 280]

Previous task: Setting Up the Outbound Connections from SAP Marketing Cloud to SAP Analytics Cloud [page 293]

Related Information

Analytics Stories

4.4.2.3 Renewal of Signing Certificates

Renew signing certificates.

When you log on to SAP Analytics Cloud, you are notified if the service provider certificate is about to expire. If you then decide to renew the signing certificate, you must download the signing certificate again. For more information about how to download the signing certificate, see:

- Adding a New Live Data Connection [page 269] if SAP Analytics Cloud is hosted on the SAC Neo tenant.
- Adding a New Live Data Connection [page 269] if SAP Analytics Cloud is hosted on the SAP Cloud Foundry tenant.

Afterwards, upload the signing certificate to your communication system. For more information about how to upload the signing certificate, see:

- Setting Up a Communication System [page 270] if SAP Analytics Cloud is hosted on the SAC Neo tenant.
- Setting Up a Communication System [page 284] if SAP Analytics Cloud is hosted on the SAP Cloud Foundry tenant.

Parent topic: Integration with SAP Analytics Cloud (ISO) [page 263]

Previous: Create the Live Data Connection to SAP Marketing Cloud [page 267]

Next task: Selecting SAP Marketing Cloud Content Packages to Add to Your Tenant [page 297]
4.4.2.4 Selecting SAP Marketing Cloud Content Packages to Add to Your Tenant

Choose and then import SAP Marketing Cloud content to your SAP Analytics Cloud system to improve your analytics scenarios.

Procedure

1. As an administrator, log on to your SAP Analytics Cloud system.
2. From the top-left menu, select **Browse Files**.
3. On the left pane, choose **Content Library**.
4. Choose the type of content that you want to add. You can choose either Samples or Business Content. Select **Business Content**.
5. Select the SAP Marketing Cloud package.

**Note**

If you’re an upgrade customer, please note that in your system has the old package *SAP Hybris Marketing Cloud*. When you do the import, the new package SAP Marketing Cloud is added to your system. Check the What’s New document for a description of the updates. Now, you have to move all the existing stories (SAP-delivered plus any stories you created yourself) from the old package into the new package. To select the target folder when moving the existing stories, choose the path **Public → SAP_Content → SAP_Marketing** and then the appropriate folder. Please follow the existing folder structure. For every folder, you have to do this step separately. After you’ve moved all the stories, please delete the old package.

6. A popup comes up with the details of the content in the package. Choose **Import** to get the content.
The import process can take a while. The system notifies you when it’s done, or if an error occurs.
The following video shows the process:

**Task overview:** Integration with SAP Analytics Cloud (ISO) [page 263]

**Previous:** Renewal of Signing Certificates [page 296]

### 4.4.3 Content Studio Integrations

Lists the Content Studio integrations with SAP Marketing Cloud

- **Simple Content Repository** [page 301]
  
  Simple Content Repository, based on SAP Document Center, is available as an out-of-box feature for all users.

- **Landing Page Publication** [page 301]
  
  Landing Page Publication allows you to use your own company or brand domain name for landing pages published in SAP Marketing Cloud.
Integrate with Content Management Systems or Digital Asset Management Systems [page 302]
Integrate a Content Management System (CMS) or Digital Asset Management (DAM) system with the Content Studio app.

Integrate with SAP Document Center [page 308]
Integrate an SAP Document Center system with the Content Studio app.

Integration with SAP Product Content Management [page 310]
Use the integration with SAP Product Content Management to easily incorporate product pictures from SAP Product Content Management in your marketing messages. To use this integration, you must also use the communication arrangement: SAP_COM_0051.

Integration with Return Path for Marketing Emails [page 312]
You can use this integration to find out whether email providers would categorize emails that you want to send with a campaign as spam. You can also see if your email is displayed correctly on various devices, email programs and browsers.

Integration with Litmus for Marketing Emails [page 313]
You can use this integration to see if your email is displayed correctly on various devices, email clients and browsers.

4.4.3.1 Simple Content Repository

Simple Content Repository, based on SAP Document Center, is available as an out-of-box feature for all users. It allows you to select images from and upload images to the Content Studio.

You can activate this feature in your tenant using the Content Repository Configuration app. For more information, see Configure Content Repositories.

4.4.3.2 Landing Page Publication

Landing Page Publication allows you to use your own company or brand domain name for landing pages published in SAP Marketing Cloud.

You can activate this feature and configure the required CDN domain name using the Content Repository Configuration app. For more information, see Configure Content Repositories.
4.4.3.3 Integrate with Content Management Systems or Digital Asset Management Systems

Integrate a Content Management System (CMS) or Digital Asset Management (DAM) system with the Content Studio app.

Use

CMS or DAM systems provide catalogs of digital images, videos, documents, music, and so on. You can search for digital assets by keywords. You can integrate CMS or DAM systems with SAP Marketing Cloud to access images for use in the Content Studio app.

The SAP Marketing Cloud Integration with Content Management System integration package is available on the SAP API Business Hub. For more information, see: https://api.sap.com

Prerequisites

- To set up a communication system and communication arrangement, ensure that the business catalog role Communication Management (SAP_CORE_BC_COM) is assigned to your SAP Marketing Cloud user.
- To configure and deploy the integration package in SAP Marketing Cloud, assign the roles mentioned in the following guide: Persona

Configure and Deploy the Integration Flows

The following artifacts are available in the SAP Marketing Cloud Integration with Content Management System package:

- Template for CMS or DAM Integration
  Use this integration flow template to develop an integration flow. You can use the developed integration flow to integrate digital assets of any CMS or DAM system with SAP Marketing Cloud.

- OpenText DAM System Integration
  Use this integration flow to integrate digital assets of the OpenText DAM system with SAP Marketing Cloud.

To configure and deploy the integration flows:

1. From your development tenant of your CPI account, choose Discover, and then select and copy the SAP Marketing Cloud Integration with Content Management System package. The copied package appears in the Design view in your tenant.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can use SAP Marketing Cloud to configure and deploy the integration package. For more information, see SAP Cloud Platform Integration.</td>
</tr>
</tbody>
</table>

302 PUBLIC Integration Guide Integration Scenarios
2. Select the required artifact.
3. Modify the integration flow of the selected artifact.
4. Configure the following blocks in the Upload integration flow:
   For more information on modifying externalized parameters in integration flows, see Externalize Parameters of an Integration Flow.

Externalized parameters for integration flows

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Entry Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAM_CREDENTIAL</td>
<td>Enter the name of the deployed credential artifact.</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
</tr>
<tr>
<td></td>
<td>This credential is required to connect to the CMS or DAM system.</td>
</tr>
<tr>
<td></td>
<td>For information on deploying the User Credential Artifact, see Deploying or Editing a User Credentials Artifact.</td>
</tr>
<tr>
<td>IFLOW_ENDPOINT</td>
<td>Enter the relative path of the integration flow endpoint. The SAP Marketing Cloud system invokes the IFLOW_ENDPOINT endpoint by using the keyword_QUERY parameter along with toGET access the search endpoint.</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
</tr>
<tr>
<td></td>
<td>If keyword_QUERY parameter is not passed, connect is executed.</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
</tr>
<tr>
<td></td>
<td>Use this path in the Communication Arrangements app with the prefix /http as follows: /http&lt;relative_path&gt;</td>
</tr>
<tr>
<td></td>
<td>For example, if you specify the value in this field as /OpenText, then use the following path in the Communication Arrangements app: /http/OpenText</td>
</tr>
<tr>
<td>DAM_ACCESS_URL</td>
<td>Enter the address of the CMS or DAM endpoint to check or establish the connectivity with the CMS or DAM system.</td>
</tr>
<tr>
<td></td>
<td>For example, use the following URL in the OpenText DAM System Integration integration flow: https://&lt;OpenText Host&gt;/otmmapi/v3/sessions</td>
</tr>
<tr>
<td>DAM_SEARCH_URL</td>
<td>Enter the address of the CMS or DAM endpoint to search the images in the CMS or DAM system.</td>
</tr>
<tr>
<td></td>
<td>For example, use the following URL in the OpenText DAM System Integration integration flow: https://&lt;OpenText Host&gt;/otmmapi/v3/search/text</td>
</tr>
</tbody>
</table>
**Field Name** | **Entry Value**
---|---
**DAM_ACCESS_QUERY** | Enter the value of the query parameter in DAM_ACCESS_QUERY of the URL to check or establish the connectivity with CMS or DAM system.

**<DAM_ACCESS_URL>?<DAM_ACCESS_QUERY>**

For example, there is no value for the query parameter and URL in the OpenText DAM System Integration integration flow.

**DAM_SEARCH_QUERY** | Enter the value of the query parameter in DAM_SEARCH_QUERY of the URL to search images in the CMS or DAM system.

**<DAM_SEARCH_URL>?<DAM_SEARCH_QUERY>**

For example, use the following URL in the OpenText DAM System Integration integration flow:

https://<OpenText Host>/otmmapi/v3/search/text?keyword_query='(*${header.keyword_query}*)'&load_type=metadata&metadata_to_return=ARTESIA.FIELD.ASSET.DESCRIPTION

**DAM_RESULTLIST_XPATH** | XPath to split the response structure and get a series of digital assets.

For example, use the following XPath in the OpenText DAM System Integration integration flow:

/search_result_resource/asset_list

**DAM_SUGGESTION_URL** | Enter the address of the CMS or DAM endpoint to read the suggested keywords in the CMS or DAM system.

For example, use the following URL in the OpenText DAM System Integration integration flow:

https://<OpenText Host>/otmmapi/v4/search/text/suggestions

**DAM_SUGGESTION_QUERY** | Enter the value of the query parameter in DAM_SUGGESTION_QUERY of the URL to read the suggested keywords in the CMS or DAM system.

**<DAM_SUGGESTION_URL>?<DAM_SUGGESTION_QUERY>**

For example, use the following URL in the OpenText DAM System Integration integration flow:

https://<OpenText Host>/otmmapi/v4/search/text/suggestions? input=${header.keyword_suggestions}&search_plugin_id=ARTESIA.PLUGIN.SEARCH.SOLR.V1&max_suggestions=${header.top}
5. Configure the following blocks in Integration Process:

i Note
For more information on configuring integration flow blocks, see Configure Integration Flow Components.

1. (Optional) In the Content Modifier block, enter the header parameters, which are required to call the CMS or DAM system. The Content Modifier block is placed after the Router search route and the Start Event block.

2. Add the $\{header.keyword_query\} != null and $\{header.CamelHttpMethod\} = 'GET' condition to switch between connect and search logic. Ensure that connect logic is the default logic. The search logic is executed only when both the conditions are true.

3. You can define the required parameters to modify the request, which connects and searches the CMS or DAM system.

6. Configure the following information in Local Integration (Handle Search Response from DAM):

   ○ In the Content Modifier block, enter the following Properties to map the image metadata between SAP Marketing Cloud and the required CMS or DAM system. The Content Modifier block is placed after the Generic Splitter block.

i Note
By default, the Content Modifier supports the following rendition types:

○ Preview
○ Thumbnail

You can add or remove the required rendition types as follows:

Add or remove the DIGITALASSETFILE node inside the node ASSET in Content Modifier body. The structure of DIGITALASSETFILE node is as follows:

```
<DIGITALASSETFILE>
<ASSET_ID></ASSET_ID>
<FILE_ID></FILE_ID>
<MIME_TYPE></MIME_TYPE>
<RENDITION></RENDITION>
<URL></URL>
<WIDTH></WIDTH>
<HEIGHT></HEIGHT>
```
<FILE_ID> accepts only numeric value. This value which must be unique for both Preview and Thumbnail renditions.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Entry Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSET_ID</td>
<td>ID of image</td>
</tr>
<tr>
<td>CONTENT_TYPE</td>
<td>Type of content</td>
</tr>
<tr>
<td>PREVIEW_FILE_ID</td>
<td>ID of image preview</td>
</tr>
<tr>
<td>THUMBNAIL_FILE_ID</td>
<td>ID of image thumbnail</td>
</tr>
<tr>
<td>PREVIEW_MIME_TYPE</td>
<td>MIME type of preview</td>
</tr>
<tr>
<td>THUMBNAIL_MIME_TYPE</td>
<td>MIME type of thumbnail</td>
</tr>
<tr>
<td>THUMBNAIL_RENDITION</td>
<td>Name of the rendition. For example, <strong>Preview</strong>, <strong>Thumbnail</strong>, <strong>Original</strong>, and so on.</td>
</tr>
<tr>
<td>PREVIEW_RENDITION</td>
<td>Name of the rendition. For example, <strong>Preview</strong>, <strong>Thumbnail</strong>, <strong>Original</strong>, and so on.</td>
</tr>
<tr>
<td>PREVIEW_URL</td>
<td>URL of image preview</td>
</tr>
<tr>
<td>THUMBNAIL_URL</td>
<td>URL of image thumbnail</td>
</tr>
<tr>
<td>TITLE</td>
<td>Title of image</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>Description of image</td>
</tr>
<tr>
<td>ACCESS_DATA</td>
<td>This field does not require an entry value</td>
</tr>
<tr>
<td>PREVIEW_WIDTH</td>
<td>The width of the preview rendition image</td>
</tr>
<tr>
<td>PREVIEW_HEIGHT</td>
<td>The height of the preview rendition image</td>
</tr>
<tr>
<td>THUMBNAIL_WIDTH</td>
<td>The width of the thumbnail rendition image</td>
</tr>
<tr>
<td>THUMBNAIL_HEIGHT</td>
<td>The height of the thumbnail rendition image</td>
</tr>
</tbody>
</table>

**i Note**

The following properties are sent by SAP Marketing Cloud to the integration flow as headers. These parameters are used while searching the CMS or DAM system.

- **keyword_query**: returns the search keywords entered in Content Studio.
- **top**: number of search results to be fetched as a part of the request.
7. Deploy the integration package.
8. Set up the communication system.
   Create a communication system, which you can later use to establish communication arrangements.
   1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
   2. Launch the Communication Systems app, and choose New.
   3. Enter a System ID and the System Name in the New Communication System window, and choose Create.
   4. In the Communication System page, enter the following:
      1. Under Technical Data, enter the details of either SCI or middleware that you want to connect to.
      2. Under User for Outbound Communication section, choose + to create a New Outbound User, which can connect to the configured SCI or middleware:
         a. If you choose Authentication Method: User Name and Password from the dropdown, enter the following:
            ○ User Name: <your communication user name>
            ○ Password: <your communication user password>
         b. If you choose Authentication Method: SSL Client Certificate from the dropdown, choose either Default Client Certificate or Trusted Third-Party Key Pair.
         c. If you choose Trusted Third-Party Key Pair as authentication method, you have to browse to the Third-Party Key Pair and provide a password.
      For more information, see: Enabling Client Certificate Authentication
   5. Choose OK.

   **iNote**
   You can now establish a communication arrangement with the created system. Use the Maintain Communication Arrangements app for this purpose.

9. Set up the communication arrangement.
   1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
   2. In the SAP Fiori launchpad, choose the Communication Arrangements app.
   3. Create a communication arrangement.
   4. Choose the scenario SAP_COM_0050 (Marketing - Generic DAM Integration).
   5. Enter the required arrangement name.
   6. Choose Create.
   7. In the Communication Arrangements screen, do the following:
      1. Under Common Data, choose the communication system that you defined in Communication Systems app.
      2. Under Additional Properties, choose the following:
         1. CMS/DAM Name: Enter the name of the CMS or DAM system. For example, OpenText.
         2. Implementation Mode: Choose 01 for SCI/Any Middleware.
         3. Allow content upload: Choose Empty. If you select SCI/Any Middleware implementation mode, you cannot upload images. You can use SAP Document Center to upload images.
4. **Folder for Upload**: If you select SCI/Any Middleware implementation mode, you cannot upload images. You can use SAP Document Center to upload images.

5. **Origin Domain Name and Path for CDN**: Enter the domain name and the path of the Origin system that you have configured in the Content Delivery Network (CDN). For example, `<Origin Domain Name>/Path`.

6. **CDN Domain Name**: Enter the domain name generated during CDN configuration.

8. Under **Outbound Communication**, select the communication user name, which you previously defined.

9. Under **Outbound Services**:
   - Enter the path to access the deployed integration flow. The path contains the value of the externalized parameter `IFLOW_ENDPOINT` with the `http` prefix. For example, if you specify the value of the externalized parameter as `IFLOW_ENDPOINT/OpenText`, then use the following path in the Communication Arrangements app: `/http/OpenText`

10. Choose **Save**.

### 4.4.3.4 Integrate with SAP Document Center

Integrate an SAP Document Center system with the **Content Studio** app.

**Use**

SAP Document Center provides anytime, anywhere access to view, edit, and collaborate on personal and corporate content in an easy-to-use mobile app. You can integrate SAP Document Center with SAP Marketing Cloud to access images for use in **Content Studio** app. This integration enables a user to search for content using keywords and also to upload content.

**Prerequisites**

- To set up a communication system and the communication arrangement, ensure that the business catalog role Communication Management (**SAP_CORE_BC_COM**) is assigned to your SAP Marketing Cloud user.
- To configure SAP Document Center in SAP Cloud Platform Cockpit, you must have an SAP Cloud Platform account, enabled with SAP Document Center.

**Configure SAP Document Center in SAP Cloud Platform Cockpit**

1. Launch SAP Cloud Platform.
2. Choose **account** → **subaccount**.
3. Choose **Services**.
4. Enable the administrator role for your user in SAP Document Center. For more information, see https://help.sap.com/viewer/p/SAP_Document_Center.

5. Choose \(\text{Service Configuration} \rightarrow \text{Configure SAP Document Center}\).

   **i Note**
   
   Note down the domain name from the SAP Document Center popup. This is the host name of the system. You need this information to update the Technical Data section of the Communication System page in the Communication Systems app.

6. Choose \(\text{Settings} \rightarrow \text{Shared documents}\).
   1. Select the Allow Sharing checkbox. The minimum password length should be 0, which is required for anonymous access.
   2. Select the Allow Upload checkbox.

**Configuration in the SAP Marketing Cloud**

1. Define the communication user for Outbound Integration.
   Create a new communication system, which you can later use to establish communication arrangements.
   1. Log on to your SAP Marketing Cloud system with a user that has administrator authorizations.
   2. Launch the Communication Systems app, and choose New.
   3. Enter a System ID and the System Name in the New Communication System window, and choose Create.
   4. In the Communication System page, enter the following:
      1. Under Technical Data section, enter the details of the system that you want to connect to.
         
         **i Note**
         
         Enter the domain name from the SAP Document Center popup here.

         2. Under User for Outbound Communication section, choose + to create a New Outbound User, which can connect to the SAP Document Center:
            ○ Authentication Method: Choose User Name and Password from the dropdown.
            ○ User Name: <your communication user name>
            ○ Password: <your communication user password>

         **i Note**
         
         The digital assets uploaded from the Content Studio app is available in the shared repository of the user.

      3. Choose Create.

5. Choose Save.

   **i Note**
   
   You can now establish a communication arrangement with the created system.

2. Set up the communication arrangement for SAP\_COM\_0050 scenario.
   Use the Communication Arrangements app for this purpose.
1. In the SAP Fiori launchpad, choose the Communication Arrangements app.
2. Choose New to create a new communication arrangement.
3. Choose the scenario SAP_COM_0050 (Marketing - Generic DAM Integration), enter an appropriate arrangement name, and choose Create.
4. In the Communication Arrangements page, do the following:
   1. Under the Common Data section, choose the Communication System that you defined in the Communication Systems app.
   2. Under Additional Properties section, choose the following:
      - CMS/DAM Name: Enter the name of the CMS/DAM system. This name is displayed in the Image Storage dropdown under the Upload New Image tab in the Content Studio app.
      - Implementation Type: Choose 02 for SAP Document Center.
      - Allow content upload: Choose X to allow content upload.
      - Folder for Upload: Enter the folder name where you want to save the uploaded digital assets in the SAP Document Center.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the folder name entered by the user is unavailable, a new folder with the entered name is created.</td>
</tr>
</tbody>
</table>

   - Origin Domain Name and Path for CDN: Enter the domain name and the path of the Origin system that you have configured in the Content Delivery Network (CDN). For example, "<Origin Domain Name>/<Path>"
   - CDN Domain Name: Enter the domain name generated during CDN configuration.

3. Under Outbound Communication section, enter the following path: /mcm/b/json
4. Under Outbound Services section, enter the following path: /mcm/b/json
5. Choose Save.

### 4.4.3.5 Integration with SAP Product Content Management

Use the integration with SAP Product Content Management to easily incorporate product pictures from SAP Product Content Management in your marketing messages. To use this integration, you must also use the communication arrangement: SAP_COM_0051.

#### Use

In SAP Marketing Cloud, you can create marketing emails using the Content Studio. A marketing email can contain digital assets, such as images. Digital assets are usually stored in an external Digital Asset Management (DAM) system. The DAM system also provides search capabilities for the media files. You can integrate SAP Product Content Management with the Communication Systems app as a DAM system.
New Communication System

To add a new communication system, proceed as follows:

1. Open the Communication Systems app and choose New to create a new communication system. Make the following entries on the dialog box:
   - System ID: HYBRIS_COMMERCE_PCM
   - System Name: HYBRIS_COMMERCE_PCM
2. Choose Create.
3. On the following window, enter the host name of your SAP Product Content Management server in the Host Name field.
4. Add a User for Outbound Communication and choose None as Authentication Method in the New Outbound User dialog box.
5. Choose Create.

Communication Arrangement

To add a new communication arrangement, proceed as follows:

1. Open the Communication Arrangements app and choose New to create a new communication arrangement.
2. On the dialog box, choose the scenario SAP_COM_0051 and then choose Create.
3. On the following window, choose the communication system created above and None as the User Name in the area Outbound Communication. Make the following entries for Retrieve product images from SAP Commerce PCM:
   - Port: Enter the port number that is setup on the server for HTTPS (SSL)
   - Path: Enter the path to the V1 REST API of the Omni Commerce Channel (OCC)
   - Service URL: Enter the service URL
4. Choose Save.

More Information

- Using Image Links in Emails and Email Templates
- Creating a Personalized Email or Email Template
4.4.3.6 Integration with Return Path for Marketing Emails

You can use this integration to find out whether email providers would categorize emails that you want to send with a campaign as spam. You can also see if your email is displayed correctly on various devices, email programs and browsers.

Use

To check an email, its content is sent to the email address of an external service provider. For more information about the function, see Using the Spam Filter and Email Previews.

This function is available if you have signed a separate contract with the external service provider Return Path. To do so, contact Return Path at https://returnpath.com/request-a-demo/ or email sap@returnpath.com.

Procedure

1. Request API credentials from Return Path.
   To do so, contact your Return Path account team or submit a support ticket. Make sure you specify that you are using SAP Marketing Cloud as your provider in the ticket.
   SAP currently supports the following Return Path features with SAP Marketing Cloud:
   ○ Inbox Preview
   ○ Spam Filter Check
   Once Return Path has created the account, you receive the following information:
   ○ API Key
   ○ API Secret

2. Create an incident for the system in which you want to activate the email content check and enter the SAP component CEC-MKT-MEM.
   Enter the following information:
   ○ Description: Request for individual activation of SAP_COM_1035
   ○ Your credential data, which you received from Return Path (API Key and API Secret, ideally via Secure Store)
   For information about securely transferring your Return Path credentials, see SAP Note 1773689.
4.4.3.7 Integration with Litmus for Marketing Emails

You can use this integration to see if your email is displayed correctly on various devices, email clients and browsers.

Use

To check an email, its content is sent to the external service provider Litmus. If you want to use the feature, you need a separate contract with Litmus, which you can apply directly from inside the Content Studio app or from the SAP App Center.

For more information about the function, see **Use Previews for an “Email Lite”**.

For new customers from release 2005, the selection **Litmus Preview** is automatically displayed in the Content Studio app.

Procedure

Proceed as follows to make the selection visible to your users:

1. Log on as administrator.
2. Choose the **Maintain Business Role** tile.
3. Search for the role for which you want to enable access to the **Litmus Preview** function.
4. Choose the **Assigned Business Catalogs** tab and ensure the business catalog **Marketing - Content** (ID: SAP_CEC_BC_MKT_LIB1_PC) is assigned.
5. Only if that business catalog is assigned, you can now add the new business catalog **Marketing - Content with Litmus** (ID: SAP_CEC_BC_MKT_CNT_LTM_PC).

   i Note

   If this business catalog **Marketing - Content with Litmus** is already assigned, delete it to remove the selection in the Content Studio app.

4.4.4 Enabling Geospatial Segmentation with here.com

Use the integration option to translate addresses to geo-coordinates and reverse, and to enable geospatial analysis for segmentation based on the connected maps.

For more information, see **Setting up the Geospatial Segmentation and Map Preview**.

i Note

SAP only provides the interfaces and configuration options that allow you to connect the map visualization and geocoding services. The usage of here.com is not part of your end-user license agreement with SAP. It is your responsibility to check and/or adapt the default configuration.
4.4.5 Integration with Baidu Maps for Geospatial Segmentation

The integration of Baidu Maps into Segmentation enables you to segment contacts in China by geographic location in a visualized way.

Note
To use this function, you must have contact location data in the form of geographic coordinates in SAP Marketing Cloud.

For a description of the function, see Using Geospatial Segmentation with Baidu Maps.
For setup instructions, see Setting Up the Integration with Baidu Maps for Geospatial Segmentation [page 314].

4.4.5.1 Setting Up the Integration with Baidu Maps for Geospatial Segmentation

Set up the integration of Baidu Maps into Segmentation.

Prerequisites

- You have applied for a Baidu account key to use Baidu Maps APIs through Baidu Maps Platform at http://lbsyun.baidu.com.
- You have a business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog. This business catalog is required for creating the communication system and communication arrangement.
  You can use the standard business role Administrator (SAP_BR_ADMINISTRATOR), which contains the Communication Management business catalog and other administration-related catalogs. Alternatively, you can create custom business roles using the Maintain Business Roles app.
- You have a business role that contains the Marketing - Segmentation and Campaign Configuration (SAP_CEC_BC_MKT_CPC_PC) business catalog. This business catalog is required for activating the relevant segmentation profile in the Segmentation Configuration app.
  You can use the standard business role Administrator - Marketing (SAP_BR_ADMINISTRATOR_MKT), which contains the Marketing - Segmentation and Campaign Configuration business catalog and other configuration-related catalogs. Alternatively, you can create custom business roles using the Maintain Business Roles app.
Procedure

1. Create a communication system that represents the Baidu Maps system, as follows:
   a. Log into SAP Fiori launchpad with a business role that contains the Communication Management (SAP_CORE_BC_COM) business catalog.
   b. Open the Communication Systems app.
   c. Choose New.
      The New Communication System dialog box appears.
   d. Enter a system ID and a system name. Choose Create.
      Examples:
      ○ System ID: BAIDU_MAP
      ○ System name: Baidu Map
      The editing screen for the communication system appears.
   e. In the Host Name field, enter www.baidu.com, which is the host name of the Baidu Maps server. Choose Save.
   f. Create a user for the outbound communication, as follows:
      1. In the User for Outbound Communication section, choose + (Add).
      2. Set the authentication method to None. Choose Create.
   g. Save and activate the communication system.
   Do not exit SAP Fiori launchpad.

2. Create a communication arrangement for communicating with Baidu Maps, as follows:
   a. Open the Communication Arrangements app.
   b. Choose New.
      The New Communication Arrangement dialog box appears.
   c. Enter scenario SAP_COM_0075 and an arrangement name. Choose Create.
      The editing screen for the communication arrangement appears.
   d. In the Communication System field, enter the communication system that you have created.
   e. In the Baidu Account Key field, enter your Baidu account key.
   f. In the Baidu Map API section, enter the required information, such as the path.
   g. Save and activate the communication arrangement.
   h. Exit SAP Fiori launchpad.

3. Activate the All China Consumers (B2C) segmentation profile, as follows:
   a. Log into SAP Fiori launchpad with a business role that contains the Marketing - Segmentation and Campaign Configuration (SAP_CEC_BC_MKT_CPC_PC) business catalog.
   b. Open the Segmentation Configuration app.
   c. Choose Segmentation Profiles.
   d. Select All China Consumers (B2C) from the left pane.
   e. Choose Edit in the Use in Applications section in the right pane.
   f. Select the Use checkbox for the Segmentation Model application.
   g. Choose Save.
4.4.6 SAP Jam Integration for Collaboration

The integration enables using SAP JAM in SAP Marketing Cloud to facilitate the collaboration when planning and executing marketing campaigns.

**i Note**

Keep in mind that you need the Social Collaboration Integration (SAP_COM_0026) for this integration. For more information, see SAP Jam Collaboration under Administration.

For information about how to set up the integration, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_JAM_COLLABORATION, Administration > Administrator Guide (HTML) > Integrations.

**Prerequisites**

- SAP Jam is installed.
- SAP Jam server is defined in the configuration of the system.
- System user is also a Jam user.

**Features**

- Create campaigns.
- Create and link SAP Jam group or assign existing group.
- Post status changes to SAP Jam group.
- Automatic upload of export files to SAP Jam group.
- Display SAP Jam feed in a campaign.

4.4.7 Verifying Email Addresses Using a Partner Solution

Accurate email addresses are vital for email marketing campaigns. To verify email addresses you can use partner services, such as Neverbounce or others.

For more information, see the blog SAP Marketing Cloud – Verifying E-Mail addresses with Neverbounce.
4.4.8 Integration with an External Coupon Service System

Integrate SAP Marketing Cloud with an external coupon service system. To use this integration, you must use the communication arrangement: SAP_COM_0286.

Use

SAP Marketing Cloud allows you to integrate with an external coupon management service. Such a service is responsible for coupon code creation, validation and redemption. The offer and coupon functionality in SAP Marketing Cloud is also responsible for consistently publishing offers with and without assigned coupons using the different digital marketing channels.

Perform the following tasks to set up an external coupon service.

Implement Outbound Interface

Implement the external coupon outbound interface, either directly in the external system, or by using a suitable integration middleware, such as SAP Cloud Platform Integration (https://cloudplatform.sap.com/capabilities/product-info.SAP-Cloud-Platform-Integration.cceaaf2b-8ceb-4773-9044-6d8dad7a12eb.html), to map the SAP Marketing Cloud interface to the external system interface. The external coupon service must follow the REST application protocol via HTTPS and must accept JSON.

Set Up a Communication Arrangement

1. Set up the communication system to define the endpoint of the external coupon service.
   Create a new communication system, which you can later use to establish communication arrangements.
   1. In the SAP Fiori launchpad, log on with a user that has administrator authorizations.
   2. Launch the Communication Systems app, and choose New.
   3. In the New Communication System window, define the System ID for the communication system, for example, Z_EXTERNAL_COUPON_SRV. Define a System Name. You can freely define a name; note that the name is used when you create the communication arrangement. Choose Create.
   4. In the Communication System page, enter the following:
      1. Under Technical Data, specify the external system you want to use for the external coupon service. Indicate the pure host name, no path, no port. Define the HTTPS Port, default is 443. Note that the other properties under Technical Data are not relevant.
      2. Optionally, you can provide your contact information for the communication system you are defining.
      3. Define the users to be used for the communication: Under User for Inbound Communication, create a new technical user. This user will be able to access the corresponding inbound APIs to write Coupon Codes and Redemption Interactions. Under User for Outbound Communication, define the user to be used to access your external coupon service.
5. Choose **Save** to save the new or edited communication system in an active status.

**i Note**

You can now establish a communication arrangement with the created system. Use the **Maintain Communication Arrangements** app for this purpose.

2. Set up the communication arrangement.
   Create a communication arrangement and reference the communication system created in the first step.
   1. In the SAP Fiori launchpad, choose the **Communication Arrangements** app.
   2. Create a new communication arrangement.
   3. In the **New Communication Arrangement** dialog, under **Scenario**, use the value help to select the predefined scenario **Marketing - External Coupon Management Service Integration (SAP_COM_0286)**.
   4. Enter the required arrangement name.
   5. Choose **Create**.
   6. In the **Communication Arrangements** screen, do the following:
      1. Under **Common Data**, use the value help to select the communication system you have created in the **Communication Systems** app.
      2. Under **Outbound Services**, specify the relative path for the outbound service. The host name is already defined in the communication system. The resulting URL to connect to the external service via HTTPS will be https://<service_url>/<path>:<port>:
   7. Choose **Save** to save the new or edited communication arrangement in an active status.

**i Note**

You should only maintain one communication arrangement for the scenario **SAP_COM_0286**. Although you can create multiple communication arrangements, only the most recently activated communication arrangement is used when replicating coupons.

### Process Overview

Once you have setup your external coupon service and the connection to it, the external coupon management process is performed as follows. You require the business catalog role Marketing Recommendation (SAP_CEC_BC_MKT_REC_PC) to work with offers and coupons.

1. **Plan your offer with coupon**
   In the **Manage Offers** app, create an offer with a coupon feature. Maintain your offer details.

2. **Create and assign a coupon for your offer**
   In the coupon tab for an offer, assign an existing coupon by searching the coupon value help or create a new coupon directly by choosing **Create**. This creates a default coupon, navigates you to the coupon details and assigns the coupon to the offer in a single step.

3. **Release the coupon and replicate it to the external system**
   In the **Manage Coupons** app, in the section **General Information**, maintain the integration property. Set the value for **Replicate to External Coupon Service** to **Yes**.
   Choose **Release** and then **Replicate** to transfer the coupon and assigned offer information to the external system. In the dialog, define the initial number of coupon codes to be created by the external system.

4. **Release the offer and use it in your execution process (such as in an email campaign)**
Navigate back to the offer and choose Release. You can now use the offer in execution processes. For example, you can run an email campaign with an email message that contains the offer. Note that the offer needs to have coupon codes and needs to also be visible during campaign execution.

5. Changes made to your offer are communicated to the external system
   If you change the offer (either in the preparation phase of the offer or after setting the status to Paused), these changes are also communicated to the external coupon service.

6. If needed, request more coupon codes during the lifetime of your offer
   During the lifetime of the offer with coupon, you can request additional coupon codes from the external coupon system. Open the app Manage Coupons and navigate to the details for the coupon object. In the section Coupon Codes, you can choose Request Additional Codes. On the dialog box, define the number of additional codes to be added to the existing number of codes. The properties Total Number of Requested Codes and Number of Pending Codes in the Integration section of the coupon header give an overview about replication progress.

For information about the overall process of offers with coupon and external coupon service, see Offers with External Coupon Service.

Implementing the External Coupon Service

To replicate coupon and offer information to an external coupon service, SAP Marketing Cloud calls a defined REST endpoint with a JSON payload via HTTPS. The payload is structured into four different objects, as you see in the following figure:

As long as the offer can be changed, SAP Marketing Cloud calls the REST endpoint.

A detailed overview about the properties, their data types and semantics can be found in the following table:

<table>
<thead>
<tr>
<th>Object</th>
<th>Property</th>
<th>Data Type</th>
<th>Size</th>
<th>Semantic</th>
<th>Example Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupon</td>
<td>CouponUUID</td>
<td>UUID</td>
<td>36</td>
<td>Internal identifier of the coupon header</td>
<td>6c0b84b7-5523-1e8-9689-445f06b876e8</td>
</tr>
<tr>
<td>Coupon</td>
<td>String</td>
<td>32</td>
<td>User-defined identifier of the coupon</td>
<td>CPN_201835_000</td>
<td></td>
</tr>
<tr>
<td>Object</td>
<td>Property</td>
<td>Data Type</td>
<td>Size</td>
<td>Semantic</td>
<td>Example Value</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------</td>
<td>-----------</td>
<td>------</td>
<td>-----------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>CouponOrigin</td>
<td>String</td>
<td>30</td>
<td></td>
<td>User-defined origin of the coupon identifier</td>
<td>DEMO</td>
</tr>
</tbody>
</table>
| CouponType                       | String               | 10        |      | Indicates the type of the coupon              | SINGLE – Single Coupon Code  
|                                  |                      |           |      |                                              | MULTI – Multiple Coupon Codes |
| CouponContact RelationshipType   | String               | 2         |      | Indicates the relationship between a coupon code and the contact | 01 – No Contact Assigned  
|                                  |                      |           |      |                                              | 03 – Contact Assigned Dynamically |
| CouponStatus                     | String               | 2         |      | Status of the coupon code                     | 01 – In Preparation  
<p>|                                  |                      |           |      |                                              | 02 – Released |
| CouponCodeValidityDuration       | Decimal              | 15/0      |      | Duration of the validity of an individual code. | 14                 |
| CouponCodeValidityDurationUnit   | String               | 3         |      | Unit of the duration, defaulted to days       | DAY                |
| CpnCodeValidityStartDelay        | Decimal              | 15/0      |      | Validity start delay of an individual code    | 1                  |
| CpnCodeValidityStartDelayUnit    | String               | 3         |      | Unit of the validity start delay, defaulted to days | DAY                |
| TotalNumberOfRedemption          | Integer              | --        |      | Total number of redemptions possible for this coupon | 1.000              |
| TotalNumberOfRdmptnPerContact    | Integer              | --        |      | Number of redemptions possible for each contact or code. | 1                  |
| NumberOfRequestedCouponCodes     | Integer              | --        |      | Number of codes to be generated by the external coupon system. | 50.000             |</p>
<table>
<thead>
<tr>
<th>Object</th>
<th>Property</th>
<th>Data Type</th>
<th>Size</th>
<th>Semantic</th>
<th>Example Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SingleCoupon-Code</td>
<td>String</td>
<td>128</td>
<td></td>
<td>SUMMER-SALE</td>
</tr>
<tr>
<td>Coupon Texts</td>
<td>Language</td>
<td>String</td>
<td>2</td>
<td>ISO code of the language-dependent name and description</td>
<td>EN</td>
</tr>
<tr>
<td></td>
<td>CouponName</td>
<td>String</td>
<td>120</td>
<td>Name of the coupon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CouponDescription</td>
<td>String</td>
<td>512</td>
<td>Description of the coupon</td>
<td></td>
</tr>
<tr>
<td>Assigned Offer</td>
<td>MarketingOffer</td>
<td>String</td>
<td>10</td>
<td>Internal identifier of the offer</td>
<td>00000000815</td>
</tr>
<tr>
<td></td>
<td>ExternalOffer</td>
<td>String</td>
<td>60</td>
<td>External identifier of the offer if it was created externally and not within SAP Marketing Cloud</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ExternalOfferOrigin</td>
<td>String</td>
<td>30</td>
<td>Origin of the external offer identifier</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OfferStatus</td>
<td>String</td>
<td>2</td>
<td>Status of the offer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OfferValidity Start</td>
<td>Date Time</td>
<td>--</td>
<td>ISO 8601-compliant timestamp in UTC</td>
<td>2018-06-13T22:00:00.000+0000</td>
</tr>
<tr>
<td></td>
<td>OfferVisibility Start</td>
<td>Date Time</td>
<td>--</td>
<td>ISO 8601-compliant timestamp in UTC</td>
<td>2018-06-13T22:00:00.000+0000</td>
</tr>
<tr>
<td></td>
<td>OfferVisibility End</td>
<td>Date Time</td>
<td>--</td>
<td>ISO 8601-compliant timestamp in UTC</td>
<td>2018-06-13T22:00:00.000+0000</td>
</tr>
</tbody>
</table>
In the lifecycle of the offer with coupon, the following requests will be sent to the external coupon service. All requests always contain the complete set of properties with their current values.

1. A HTTP POST request for the initial replication of the coupon with the assigned offer data.
2. A HTTP PUT request for any changes to the assigned offer (such as adding assigned marketing locations, extending the validity period of the offer). The property NumberOfRequestedCouponCodes is 0 in this case.
3. A HTTP PUT request to request additional codes. The property NumberOfRequestedCouponCodes contains the actual number of requested codes and not the overall number of codes to be generated. If for example the initial replication requests 50,000 codes and an additional request for 10,000 codes is issued, the NumberOfRequestedCouponCodes is 10,000 for the second request for additional codes.

Example payload for the initial replication request for a coupon with 50,000 codes. The URL of the endpoint is defined in the communication arrangement / RFC destination.

```sample code
POST /coupons
{
  CouponUUID: "6c0b84b7-5523-1ee8-9add-d272824ef884",
  Coupon: "CPN ID 4711",
  NumberOfRequestedCouponCodes: 50000,
  ...
  CouponTexts: [{
    Language: "EN",
    CouponName: "Coupon Name",
    CouponDescription: "Coupon Description"
  }]
  AssignedOffer: {
    MarketingOffer: "OFFER ID 4711",
    ExternalOffer: "PMR ID 4711",
    ExternalOfferOrigin: "SAP_PMR",
  ...
  AssignedLocations: [{
    MarketingLocation: "LOC ID 4711",
    MarketingLocationOrigin: "SAP_RETAIL_STORE"
  }]
}
}
```

Example payload for a subsequent request of 10,000 additional codes. The complete payload is sent again. The only difference here is the value of the NumberOfRequestedCouponCodes property.

```sample code
PUT /coupons
{
  CouponUUID: "6c0b84b7-5523-1ee8-9add-d272824ef884",
  Coupon: "CPN ID 4711",
  NumberOfRequestedCouponCodes: 10000,
  ...
}
```
CSRF protection

We provide CSRF protection according to the standard implemented at SAP: Any modifying request is rejected unless the header attribute x-xsrf-token is added with a valid token value. The client must be able to obtain a valid token using the following procedure:

- The token will be requested by a HTTP HEAD request to the default endpoint URL.
- This call will include the name/value pair “x-csrf-token/fetch” in the request header.
- The response includes the name/value pair “x-xsrf-token/<validToken>”. The valid token will be used for subsequent requests.

It is not mandatory for an external coupon service to implement CSRF protection as long as the HTTP HEAD request to fetch the CSRF token will not fail.

Handling Errors

If an error occurs when communicating with the external coupon service, SAP Marketing Cloud expects a corresponding HTTP status code. Furthermore, details about the source of the error can be included as JSON in the body of the HTTP response. The JSON is parsed and processed further, for example the error message is shown in the Manage Coupon user interface when the replication of the coupon fails.

Example of an error response:

```json
{
  "error": {
    "status": 404,
    "message": "Coupon not found",
    "target": "/path_to_api_endpoint/object_id",
    "details": {
      "message": "Detailed error message goes here"
    }
  }
}
```
Implementing Inbound Interfaces

In addition to the outbound interface used to create a coupon with offer information in an external coupon management system, the following SAP Marketing Cloud inbound APIs are also relevant to the overall process:

- Importing coupon codes into SAP Marketing Cloud
- Importing redemption interactions into SAP Marketing Cloud

Importing Coupon Codes

The external coupon management service is responsible for generating coupon codes and transferring them back to SAP Marketing Cloud for distribution in the digital channels. This can be done using the Coupon OData API. For more information, see Coupons [page 1028].

**Sample Code**

Example payload to create a single coupon code for a given coupon UUID

```plaintext
POST /sap/opu/odata/sap/API_MKT_COUPN_SRV/Coupons(guid'<coupon_uuid>')/
to_CouponCode
{
  "CouponCode": "Coupon Code, e.g. Web-Code",
  "CouponCodeSerialNumber": "Coupon Code Serial Number",
  "EANCodeImageURL": "Image URL to EAN code",
  "QRCodeImageURL": "Image URL to QR code"
}
```

Importing Redemption Interactions

One integral part of an external coupon management service is the redemption of coupon codes. SAP Marketing Cloud can also use this information to optimize the distribution and communication of offers with coupons. For example, the offer recommendation will only recommend offers with assigned coupons when the redemption limit has not yet been reached.

The interaction API can be used to inform SAP Marketing Cloud about offer redemption events. For more information, see Interactions [page 605].

The following pre-defined interaction type is delivered with SAP Marketing Cloud:

OFFER_REDEMPTION: Inform about a redemption of an offer with assigned coupon. The redemption counter in SAP Marketing Cloud will be increased in this use case.

**Sample Code**

Example payload for an anonymous offer redemption interaction from an online shop

```plaintext
POST /API_MKT_INTERACTION_SRV/Interactions
{
  "InteractionTimeStampUTC": "/Date(1530626397595)/",
  "CommunicationMedium": "ONLINE_SHOP",
  "InteractionType": "OFFER_REDEMPTION",
  "InteractionIsAnonymous": true,
  "InteractionOffers": 
  {
    "MarketingOffer": "0000000815",
  }
}```
4.4.9 Partner Extension: Integrate with Digital Market Intelligence

With the partner integration of SimilarWeb, you can see the web no app traffic of your competitors for each channel, such as direct, email, social. These insights help you to make better strategic decisions with regard to your own campaigns. Note that the extension is an offering from a partner of SAP.

To add the partner extension in SAP Marketing Cloud, do the following steps:

1. Open your system of SAP Marketing Cloud and go to the Extensions under your user details.
2. Add an extension with
   ○ a section
   ○ a title, for example, SimilarWeb
   ○ and a URL. For an overview of all available URLs, see Widgets Demo of SimilarWeb.

Now, you should see an additional tab in the Marketing Plans app, when you open a single plan.

For more information, see SimilarWeb.

Related Information

UI Extensions

4.4.10 Marketing Events

This section for marketing events explains the following:

- How to integrate events, registrants, and participants data from third-party event provider platforms, such as ON24 platform with SAP Marketing Cloud using integration flows. For more information, see Integration with Marketing Events [page 326].
- How to integrate events, registrants, and participants data from GoToWebinar platform with SAP Marketing Cloud using integration flows. For more information, see Integration with GoToWebinar using SAP Cloud Platform Open Connectors [page 327].
4.4.10.1 Integration with Marketing Events

The integration of events data from event provider platform, such as ON24 platform with SAP Marketing Cloud enables promotion of these events via campaigns and analysis of their success rate after event completion. This integration fetches and stores event data easily from the event provider platforms into SAP Marketing Cloud system.

To achieve this integration the following iFlows are provided:

- **Fetch Marketing Events Data from Event Provider Platforms**
  This integration flow calls the endpoints from the ON24 platform to fetch the events data and maps it to SAP Marketing Cloud format. If the iFlow is run in full mode `header value delta = false`, then all the events from the specified start date plus 180 days is pulled and updated in SAP Marketing Cloud system. If the iFlow is run in delta mode `header value delta = true`, then all the events updated from the `lastrundatet ime`, that is, header value plus 180 days will be pulled and updated in SAP Marketing Cloud.

- **Fetch Registrant Data from Event Provider Platforms**
  This integration flow calls the endpoints from ON24 platform to get the registrants’ data for an event and maps it to SAP Marketing Cloud format. The registrants are created as new interaction contacts and are used for event promotions and follow-up marketing activities in SAP Marketing Cloud. An `EVENT_REGISTERED` interaction is created.

- **Fetch Participant Data from Event Provider Platforms**
  This integration flow calls the endpoints from the ON24 platform to get the participants (attendee) data for an event and maps it to SAP Marketing Cloud format. The participants are created as new interaction contacts and are used for event promotions and follow-up marketing activities in SAP Marketing Cloud. An `EVENT_ATTENDED` interaction is created. The participant details will also contain engagement data like polls and surveys. The engagement data of participants is created as interaction activities in SAP Marketing Cloud system.

- **Fetch Participant Engagement Data from Event Provider Platforms**
  With this integration flow, you can import engagement data of participants such as polls and surveys metadata from external event provider platform to SAP Marketing Cloud system. This metadata is used to create the poll or survey Business Object in SAP Marketing Cloud. The responses to these will be captured in the participants iflow.

The integration package runs on the SAP Cloud Platform Integration (former name: HCI) tenant and fetches events data from event provider platforms and transform it into SAP Marketing Cloud format. The Network Security team takes responsibility for preparing the network environment across different systems and related security aspects.
The integration of events data from GoToWebinar platform with SAP Marketing Cloud enables promotion of these events via campaigns and analysis of their success rate after event completion. This integration fetches and stores event data easily from the event provider platforms into SAP Marketing Cloud system.

To achieve this integration the following iFlows are provided:

- **Fetch Marketing Events Data from GoToWebinar Platform** - Events data is fetched from the GoToWebinar platform.
- **Fetch Registration Data from GoToWebinar Platform** - Registrants' information is fetched from the GoToWebinar platform, and registrants are created as interaction contacts on SAP Marketing Cloud system.
- **Fetch Participation Data from GoToWebinar Platform** - Participant data is fetched from the GoToWebinar platform. The participants are created as new interaction contacts. The participant details will also contain engagement data like polls and surveys. The engagement data of participants is created as interaction activities in SAP Marketing Cloud system.

The integration package runs on the SAP Cloud Platform Integration (former name: HCI) tenant and fetches events data from event provider platforms and transform it into SAP Marketing Cloud format. The Network Security team takes responsibility for preparing the network environment across different systems and related security aspects.

SAP Cloud Platform Open Connectors are used to simplify the connectivity and provide seamless integration with GoToWebinar platform. If there are any updates from the event provider platform, they will be handled by SAP Cloud Platform Open Connectors.
Limitations on GotoWebinar Integration

Functional Limitations

The following data is not supported by GotoWebinar platform as their APIs do not fetch these details for a specific event or a participant:

- On-demand Duration: The time during which a participant viewed the recording of the event.
- Content Downloads: The number of different types of content downloaded by a participant.
- Participation Score: A measure for a participant’s engagement in an event. This score is determined by comparing and rating concrete KPI values of a participant in an event.
- On-demand Recording Available From: The date from which the recording of the event is available for viewing.
- On-demand Recording Available Until: The date until which the recording of the event will be available for viewing.

**i Note**

GoToWebinar allows recurring events with multiple sessions, but multiple sessions are not supported with this integration. You should set up a single session between each SAP Marketing Cloud event and GoToWebinar webinar.

Technical Limitations

The following technical limitations are found with integrating GoToWebinar platform data using SAP Cloud Platform Open Connector:

- The data being fetched from GoToWebinar platform and integrated in SAP Marketing Cloud by marketing application job cannot effectively run in incremental mode. Event data that is within the application job date range will be fetched irrespective of whether data has been changed since the last run or not. Due to this, the number of data fetch calls made using SAP Cloud Platform Open Connector increases and the performance for application job execution is suboptimal.
- The registrant or participant details are fetched and integrated by calling the participant API individually for each registrant or participant. Due to this, the number of data fetch calls made using SAP Cloud Platform Open Connector increases depending on the number of registrants or participants.
For more information, see Integrating GoToWebinar Data with SAP Marketing Cloud using SAP Cloud Platform Open Connectors.

### 4.5  Suite-Enabling Integrations

This section contains details of integration with applications in the SAP Suite, such as SAP Customer Experience, S/4HANA, CRM, ERP, and includes inbound, outbound, and bidirectional integration.

- Accounts and Contacts [page 329]
- Sales and Service (Inbound) [page 331]
- Sales Automation (Outbound) [page 347]
  
Set up the integration of a sales system with SAP Marketing Cloud
- Financial Data [page 374]
- Survey Data [page 378]
- Personalized Commerce [page 379]

### 4.5.1  Accounts and Contacts

SAP Customer Data Cloud and SAP Marketing Cloud [page 329]

SAP Customer Data Cloud is a provider of customer identity management. With its solutions SAP Customer Identity, SAP Customer Consent, and SAP Customer Profile you can collect and replicate contact profiles to SAP Marketing Cloud.

Integration of Business Partners and Business Partner Relationships [page 330]

SOA-Based Integration of Business Partners and Business Partner Relationships to SAP Marketing Cloud.

### 4.5.1.1  SAP Customer Data Cloud and SAP Marketing Cloud

SAP Customer Data Cloud is a provider of customer identity management. With its solutions SAP Customer Identity, SAP Customer Consent, and SAP Customer Profile you can collect and replicate contact profiles to SAP Marketing Cloud.

The integration enables you to add SAP Customer Data Cloud first-party, permission-based user information into the SAP Marketing Cloud platform, and turn it into actionable data for audience segmentation, targeted marketing, and more. The integration is based on exporting data from SAP Customer Data Cloud, using IdentitySync, its ETL (extract, transform, load) platform. SAP Customer Identity manages the customers, SAP Customer Consent manages the consent, SAP Customer Profile connects this data into various channels, including SAP Marketing Cloud.
For more information, see Complete Setup Documentation Offered by SAP Customer Data Cloud.

**Note**

The following blog isn’t part of the official documentation of SAP Marketing Cloud, and some of the information may be outdated.

The blog SAP Marketing Cloud Integration with SAP Customer Data Cloud aka Gigya – Step by Step provides an example scenario of how you can integrate SAP Marketing Cloud with SAP Customer Data Cloud.

---

### 4.5.1.2 Integration of Business Partners and Business Partner Relationships

SOA-Based Integration of Business Partners and Business Partner Relationships to SAP Marketing Cloud.

**Note**

We recommend to use the integration with SAP Cloud Platform Master Data for Business Partners instead of the SOA-Based Integration. For more information, see SAP Cloud Platform Master Data for Business Partners [page 344].

This integration supports advanced B2B Marketing using business partner and business partner relationships between corporate contacts and accounts. It loads the business partner data from an SAP S/4HANA system or an SAP Cloud for Customer system into SAP Marketing Cloud, extracting the local business partners and business partner relationships into interaction contacts. In addition, the following features are offered:

- Postal address of a contact within a company that is updated on a daily basis. If a contact has more than one relationship defined, for example marketing lead and president of DSAG, the relationship with the highest ID is selected.
- Extraction of future time slices of time-dependent business partner data. This allows you to target marketing activities like campaigns only at contacts that are relevant at that specific point in time.
- Several Extensibility Options Extensibility for SAP Business Partner Integration
The following graphic shows an overview of the integration:

For a full description of how to set up and integration with SAP S/HANA, see SAP Business Partner Integration with S/4HANA Cloud.

For a full description of how to set up and integration with SAP Cloud for Customer, see Purpose.

### 4.5.2 Sales and Service (Inbound)

The integrations below enable you to integrate sales and service data with your system:

- **SAP ERP**
  For more information, see Integration with SAP ERP [page 346].

- **SAP Customer Relationship Management (CRM) and SAP Cloud for Customer**
  Enables you, for example, to replicate SAP CRM and SAP Cloud for Customer business partners and business documents.
  For information about how to set up the integration, see Integration with SAP CRM - Inbound Channel [page 337] and Integration with SAP Cloud for Customer - Inbound Channel [page 333].

- **External Sales Systems**
  Depending on the data model of the external sales system, business partners and business documents can be replicated.
  For more information, see Integration with External Sales Systems - Inbound Channel [page 340].

- **SAP Customer Activity Repository retail applications bundle**
  For more information, see SAP Customer Activity Repository retail applications bundle [page 345].

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Business Partner Transfer</th>
<th>Set-Up Guide</th>
<th>Integration Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Collaboration with Sales Cloud</td>
<td></td>
<td>Setting Up SAP Marketing Cloud Integration with SAP Cloud for Customer (LI9)</td>
<td>SOAP</td>
</tr>
</tbody>
</table>
**4.5.2.1  Presales / Sales**

Set up the integration of a sales system with SAP Marketing Cloud

SAP Marketing Cloud can be integrated with SAP CRM, SAP Cloud for Customer, or an external sales system via SAP Cloud Platform Integration, formerly known as SAP HANA Cloud Integration (SAP HCI).

**Parallel Integration of Presales/Sales Systems**

> **Note**
>
> You can set up the integration with SAP CRM, SAP Cloud for Customer, and an external sales system simultaneously, but only with one system of a target system type at a time. That is, you can integrate one system for SAP CRM, one for SAP Cloud for Customer, and one external sales system.
>
> In case you have activated more than one communication arrangement, that is, you have configured more than one target system, the Business Add-In (BAdI) *Lead Management: Determine Target System Type* is performed. With the *Custom Fields and Logic* app, you can implement the BAdI. You define the target system type (either SAP_C4C or SAP_CRM or SALES_EXT) depending on different attributes of the contact that is currently in process. The BAdI is performed once for each member of the target group. That is, you define in which target system the correspondings leads or activities are created. For more information, see *Custom Logic*.

The following graphic provides you with an overview of the parallel integration options:

- Target Group members can be of different origin, that is, some from SAP Cloud for Customer, others from SAP Customer Relationship Management or External Sales Systems.
- BAdI:
  - During campaign execution, the BAdI determines the target system in which a lead and/or activity shall be created according to the implemented default or custom logic.
  - The BAdI default implementation has to be replaced by custom logic.
Integration takes place in two directions:

- Inbound, from presales / sales to marketing
- Outbound, from marketing to presales / sales

For more information, see:

- Integration with SAP CRM - Inbound Channel [page 337]
- Integration with SAP Cloud for Customer - Inbound Channel [page 333]
- Integration with External Sales Systems - Inbound Channel [page 340]
- Integration with SAP CRM - Outbound Channel [page 349]
- Integration with SAP Cloud for Customer - Outbound Channel [page 356]
- Integration with External Sales Systems - Outbound Channel [page 369]

For more information about the integration setup of SAP Cloud for Customer with SAP Marketing Cloud, see the Integration Guide on SAP API Hub at SAP Cloud for Customer Integration with SAP Marketing, or Purpose.

For more information about the integration setup of SAP Marketing Cloud and SAP CRM, see the Set-Up Instructions on SAP API Hub at SAP CRM Integration or Overview.

### 4.5.2.1.1 Integration with SAP Cloud for Customer - Inbound Channel

Data transfer from sales to marketing.

By integrating SAP Marketing Cloud, and SAP Cloud for Customer, the bridge between marketing and sales is built so that processes can be harmonized across marketing and sales channels. With sharing the same business partner, and business document data. Marketing is able to deeper support sales in the process of converting potential buyers and interested persons to real buyers. The integration between SAP Marketing Cloud, and SAP Cloud for Customer supports the following business scenarios:

- Lead Transfer
- Call Qualification
- Marketing-Driven Sales Enablement

In addition, the transfer of campaign data is possible for started campaigns.
Data Replication from Sales to Marketing (Inbound)

From SAP Cloud for Customer, the system replicates the following data to SAP Marketing Cloud via initial and delta load:

- **Business Partners**
  - Contacts
  - Accounts
  - Individual Customers
  - Business Partner Relationships

- **Business Documents**
  - Leads including product items
  - Opportunities including product items, and product categories
  - Activities of type **Phone Call**, **Appointment**, **Task**, and **Visit**

**i Note**

In SAP Marketing Cloud, interactions are stored for tasks. So, from SAP Cloud for Customer, the replication of marketing-driven tasks is enabled. Tasks created in the sales system, cannot be replicated.

- **Marketing Attribute Categories**
  - Master data (marketing attribute sets and marketing attributes)
  - Assignments of marketing attribute sets including attribute values and attribute value descriptions to business partners
  
  For more information about the transfer of marketing attributes from SAP Cloud for Customer to marketing, see **Transferring Marketing Attributes** [page 336].

- **Marketing Permissions**

  In marketing, the permissions are stored on contact and account level. The replication takes place once via initial load. For more information about the processing of marketing permissions, see **Permission Marketing**.

- **Custom Fields for Interactions**

  Custom fields for interactions that are created in SAP Cloud for Customer can also be transferred to marketing. To learn more about how to create custom fields in SAP Cloud for Customer, see **How to Extend SAP Cloud Platform Integration**. For more information on how to extend SAP Marketing Cloud, see the extensibility guide, **Custom Fields for the Integration with SAP Cloud for Customer**.

- **Custom Fields for Business Partners and Interaction Contacts**

  In marketing, you can analyze data imports via the **Import Monitor** [page 397].

Integration

You can set up the integration between SAP Marketing Cloud with SAP Cloud for Customer via **SAP Cloud Platform Integration**.

For more information about the integration setup of SAP Cloud for Customer with SAP Marketing Cloud, see **SAP Cloud for Customer Integration with SAP Marketing** or **Purpose**.
The following figure shows an overall integration overview:

Integration of SAP Marketing Cloud with Presales or Sales for Marketing-Driven Leads, Call Center Campaigns, and Activities

For more information about the campaign-based lead creation process, see Handling Leads.

For more information about the process of lead creation via a call center campaign, see Telephone Campaigns in SAP Cloud for Customer.

For more information about the process of campaign-based activity creation, see Handling Activities.

Navigation, and Display Options

- In SAP Marketing Cloud
  Information about leads, activities, and phone calls created in SAP Cloud for Customer via marketing campaigns, and replicated data from SAP Cloud for Customer is displayed in marketing on the corresponding contact, or account in Interactions.
  Leads and opportunities, both marketing-driven and sales-created, are additionally visible on contact, and account level under Leads \> Sales Pipeline. The system provides you with navigation links to SAP Cloud for Customer for the corresponding objects.
  On the related campaign, the system displays the marketing-driven objects created in SAP Cloud for Customer under Performance.
  In the Lead Dashboard, KPIs for marketing-driven, and sales-created objects are displayed.

- In SAP Cloud for Customer
  In SAP Cloud for Customer, you can display campaign data. For more information, see Sales Insights on Marketing Campaigns [page 358]

Related Information

Lead Campaigns
4.5.2.1.11 Business Partner Replication

i Note

You can replicate the business partners in two different ways:

1. The replication can be done based on SOA.
   For more information about SOA-based replication of Business Partners and Business Partner Relationships, see Replicating Business Partner with SOAP.

2. You can use the integration with SAP Cloud Platform Master Data for Business Partners. For more information, see Integration of SAP Marketing Cloud with SAP Cloud Platform Master Data for Business Partners.

You can also extend the SAP business partner integration. For more information, see Extensibility for SAP Business Partner Integration.

4.5.2.1.12 Transferring Marketing Attributes

Transfer of marketing attributes and business partner assignments from SAP Cloud for Customer to SAP Marketing Cloud.

Marketing attributes and their assignments to business partners are transferred from SAP Cloud for Customer to SAP Marketing Cloud in two steps, as described in the following table:

Transfer of Marketing Attributes

<table>
<thead>
<tr>
<th>Transfer of</th>
<th>From SAP Cloud for Customer</th>
<th>To SAP Marketing Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Data</td>
<td>• Marketing Attribute Sets</td>
<td>Marketing Attribute Categories</td>
</tr>
<tr>
<td></td>
<td>• Marketing Attributes</td>
<td></td>
</tr>
<tr>
<td>Business Partner Assignments</td>
<td>Marketing Attribute Sets, including:</td>
<td>Marketing Attribute Values</td>
</tr>
<tr>
<td></td>
<td>• Marketing Attribute Values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Marketing Attribute Value Descriptions</td>
<td></td>
</tr>
</tbody>
</table>
Integration

In Marketing, marketing attributes categories and marketing attribute values are visible in *Personal Data* of contacts, accounts, or individual customers. Marketing attribute categories, and marketing attribute values can be used in segmentation.

**Note**

- Marketing attribute categories always have a text in the system language. If no text is transferred from SAP Cloud for Customer the system automatically creates a text in the system language from the ID.
- Ensure that all attributes in SAP Cloud for Customer are named differently. Attributes with the same name cause an error that can be monitored in the Import Monitor [page 397].
- To prevent from overwriting attribute values, do not use the same attribute in different attribute sets in SAP Cloud for Customer.

Changes of master data and business partner assignments in Sales are automatically transferred to Marketing.

Related Information

- Segmentations
- Contacts

### 4.5.2.1.2 Integration with SAP CRM - Inbound Channel

Data transfer from sales to marketing.

By integrating SAP Marketing Cloud with SAP CRM, you can trigger the creation of leads and activities in SAP CRM via a marketing campaign. Furthermore this integration enables the replication of business partner, and business document data from SAP CRM to SAP Marketing Cloud.

You can set up the integration of SAP CRM with SAP Marketing Cloud via SAP Cloud Platform Integration.

The integration between SAP Marketing Cloud, and SAP CRM supports the following business scenarios:

- Lead Transfer
- Marketing-Driven Sales Enablement

**Data Replication from Sales to Marketing (Inbound)**

From SAP CRM, the system replicates the following data to SAP Marketing Cloud via initial and delta load:

- Business Partners
  - Accounts
  - Contacts
Individual Accounts

Business Documents
- Leads
- Opportunities

Activities of type Planned Call, Appointment, and Task (marketing-driven tasks only)

Leads, and activities created in SAP CRM via marketing campaign are created as business documents in SAP CRM.

**Note**

In SAP Marketing Cloud, interactions are stored for tasks. So, from SAP CRM, the replication of marketing tasks is enabled. Tasks created in the sales system, are not replicated.

Marketing Attributes
For more information about the configuration, see Configuration of CRM Marketing Attribute Replication Integration Flow.

Custom fields
Custom fields created in SAP CRM can also be transferred to marketing. To learn more about how to create custom fields in SAP CRM, see How to Extend SAP CRM: Purpose of this Document. For more information on how to extend SAP Marketing Cloud, see the extensibility guide, Custom Fields for the Integration with SAP CRM.

Marketing Permissions
In marketing, the permissions are stored on contact and account level. The replication takes place once via initial load. For more information about the processing of marketing permissions, see Permission Marketing.

For information on how to set up the transfer of marketing permissions from SAP CRM, see Initial Load of Marketing Permissions from SAP Customer Relationship Management to SAP Marketing Cloud in the SAP Community.

In marketing, you can analyze data imports by the Import Monitor [page 397].

**Integration**

The following figure shows an overall integration overview:

Integration of SAP CRM with SAP Marketing Cloud

For a full description of the integration setup of SAP Marketing Cloud and SAP CRM, see the Set-Up Instruction on SAP API Hub at SAP CRM Integration or Overview.
Navigation, and Display Options

In SAP Marketing Cloud, information about leads, and activities created in SAP CRM via marketing campaigns, and replicated data from SAP CRM is displayed in Marketing on the corresponding contact, or account in Interactions.

Leads and opportunities, both marketing-driven and sales-created, are additionally visible on contact, and account level under Leads > Sales Pipeline. The system provides you with navigation links to SAP CRM for the corresponding objects.

On the related campaign, the system displays the marketing-driven objects created in SAP CRM under Performance.

In the Lead Dashboard, KPIs for marketing-driven, and sales-created objects are displayed.

Related Information

Lead Campaigns
Marketing-Driven Sales Enablement
Displaying Lead Information for Contacts
Displaying Lead Information for Accounts
Lead Dashboard
Handling Leads
Handling Activities
Business Documents [page 661]

4.5.2.1.2.1 Business Partner Replication

The replication of business partners and relations from SAP CRM to SAP Marketing Cloud is processed by the following principle:

- Initial load of all SAP CRM accounts, contacts, individual accounts person to SAP Marketing Cloud according to your selection with the initial setup of the integration.
- Delta load of new SAP CRM accounts, contacts, individual accounts to SAP Marketing Cloud as soon as those objects are created.
- Delta load of changed SAP CRM accounts, contacts, individual accounts to SAP Marketing Cloud as soon as those objects are changed.

4.5.2.1.2.2 Transferring Marketing Attributes

Transfer of marketing attributes and business partner assignments from SAP CRM to marketing.

Marketing attributes and their assignments to business partners are transferred from SAP CRM to SAP Marketing Cloud in two steps, as described in the following table:
Transfer of Marketing Attributes

<table>
<thead>
<tr>
<th>Transfer of</th>
<th>From SAP CRM</th>
<th>To SAP Marketing Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Data</td>
<td>● Marketing Attributes</td>
<td>Marketing Attribute Categories</td>
</tr>
<tr>
<td>Business Partner Assignments</td>
<td>Marketing Attributes, including:</td>
<td>Marketing Attribute Values</td>
</tr>
<tr>
<td></td>
<td>● Marketing Attribute Values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Marketing Attribute Value Descriptions</td>
<td></td>
</tr>
</tbody>
</table>

Integration

In Marketing, marketing attributes categories and marketing attribute values are visible in Personal Data of contacts, accounts, or individual customers. Marketing attribute categories, and marketing attribute values can be used in segmentation.

Changes of master data and business partner assignments in Sales are automatically transferred to Marketing.

4.5.2.1.3 Integration with External Sales Systems - Inbound Channel

Data transfer from external sales systems to marketing.

By integrating SAP Marketing Cloud with external sales systems, the bridge between marketing and sales is built so that processes can be harmonized across marketing and sales channels.

⚠️ Caution

For the integration of SAP Marketing Cloud with external sales systems, we do not deliver standard content.

ℹ️ Note

You can also use the integration with Salesforce offered by Advantco International LLC. For more information, see SAP Marketing Cloud Integration with Salesforce 📺.

Inbound Processes from an External Sales System to Marketing

Depending on the data model of an external sales system, the following data can be replicated to SAP Marketing Cloud.

- Business Partners
- Business Documents, such as leads, opportunities, or activities
Business documents can be imported from external sales systems to SAP Marketing Cloud via the standard OData service *Import of Business Documents (Interactions)* (CUAN_BUSINESS_DOCUMENT_IMP_SRV).

Business partners can be imported from external sales systems to SAP Marketing Cloud via the standard OData services *Marketing - Interaction Contacts* (API_MKT_INTERACTION_CONTACT_SRV), *Marketing - Contacts* (API_MKT_CONTACT_SRV), and *Marketing - Corporate Accounts* (API_MKT_CORPORATE_ACCOUNT_SRV). For more information on OData services, see SAP API Business Hub under Artifacts.

In marketing, you can analyze data imports via the Import Monitor [page 397].

**Integration**

You can set up the integration between SAP Marketing Cloud with an external sales system via SAP Cloud Platform Integration.

The following figure shows a possible overall integration overview based on a customer-owned integration setup:

![Integration of SAP Marketing Cloud with External Sales Systems](image)

### 4.5.2.1.3.1 Setting Up the Connection Between Marketing and an External Sales System

Connect SAP Marketing Cloud with an external sales system.

Before doing the configuration in SAP Marketing Cloud, you need the administrator business user, which contains the business catalog SAP_CORE_BC_COM (Communication Management), for example the business role SAP_BR_ADMINISTRATOR (Administrator).

As an administrator, you maintain the setup via the following apps under Communication Management:

- Maintain Communication User
  - For more information, see Creating a Communication User for Inbound Communication [page 371].
- Communication Systems
  - For more information, see Setting Up a Communication System for the Integration of an External Sales System [page 372].
4.5.2.2 Integrating Service Tickets

Replicate Service Tickets from SAP Service Cloud to SAP Marketing Cloud.

By replicating service tickets from SAP Service Cloud to interactions in SAP Marketing Cloud, marketers can use them as signals in marketing. Via the replicated interactions, actions can be triggered in marketing, such as inviting people to surveys, safeguarding the overall customer satisfaction by awards or compensations. Furthermore, they can be used as interruption pointer for campaigns. Service tickets in marketing are important to understand your customer’s business needs, for example to trigger campaigns for a new product launch or product replacements.

Prerequisites

The integration of service tickets requires the following preliminary steps:

- Perform the integration scenario SAP Cloud for Customer Integration with SAP Marketing Cloud. For more information about the integration setup of SAP Cloud for Customer with SAP Marketing Cloud, see SAP Cloud for Customer Integration with SAP Marketing Cloud. For setup instructions, see Service Ticket Integration.
- In the Manage Interaction Content configuration app, define a new Interaction Channel for service tickets, named Service. Assign the Communication Medium BUSINESS_DOCUMENT and the Interaction Type SERVICE_TICKET to the interaction channel Service. For more information, see Managing Interaction Content.

Process

Customers can submit requests for service, for example to address a problem in SAP Service Cloud. These service tickets can be replicated to SAP Marketing Cloud and saved in interactions for further marketing actions.

The following graphic provides you with an overview about the necessary steps.
To integrate service tickets in SAP Marketing Cloud, perform the following steps:

- Download the service category catalog in SAP Service Cloud via Microsoft Excel® file download and upload it in SAP Marketing Cloud as product hierarchy using the Data File Load app. For more information about the import, see Data File Load.
- Deploy the standard iFlow on SAP Cloud Platform Integration that service tickets are mapped and loaded as interactions into SAP Marketing Cloud.

The following attributes of service tickets are replicated to marketing:

Mapping of Service Ticket Attributes from SAP Service Cloud to Properties of OData Service CUAN_BUSINESS_DOCUMENT_IMP_SRV of SAP Marketing Cloud

<table>
<thead>
<tr>
<th>Service Ticket Attribute in SAP Service Cloud</th>
<th>Property in SAP Marketing Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ticket Buyer Party</td>
<td>Contact ID</td>
</tr>
<tr>
<td>Ticket Creation Date Time</td>
<td>Time Stamp</td>
</tr>
<tr>
<td>Ticket ID</td>
<td>External ID</td>
</tr>
<tr>
<td>Ticket Priority Code</td>
<td>Interaction Priority</td>
</tr>
<tr>
<td>The Internal Object Type is not mapped to an attribute in SAP Service Cloud. It has the hard-coded value SERVICE_TICKET. In the integration scenario SAP Cloud for Customer Integration with SAP Marketing Cloud, this value can be adapted in the corresponding iFlow Replicate Service Ticket to SAP Marketing.</td>
<td>Internal Object Type</td>
</tr>
<tr>
<td>Confirmation Issuing Status Code</td>
<td>Status Code</td>
</tr>
<tr>
<td>Information Life Cycle Status Code</td>
<td>External Status Code</td>
</tr>
<tr>
<td>Service Category</td>
<td>Product Category of type Process Category</td>
</tr>
<tr>
<td>Incident Category</td>
<td>Product Category of type Incident Category</td>
</tr>
<tr>
<td>Object Category</td>
<td>Product Category of type Object Category</td>
</tr>
<tr>
<td>Cause Category</td>
<td>Product Category of type Cause Category</td>
</tr>
<tr>
<td>Resolution Category</td>
<td>Product Category of type Solution Category</td>
</tr>
<tr>
<td>○ Ticket Completion Time Point</td>
<td>Interaction Processing Duration</td>
</tr>
<tr>
<td>○ Ticket Creation Date Time</td>
<td>Is calculated from TicketCompletionTimePoint minus CreationDateTime and converted into seconds.</td>
</tr>
</tbody>
</table>

For more information about the structure of this service, see Structure of OData Service CUAN_BUSINESS_DOCUMENT_IMP_SRV [page 666].

Product hierarchies can be classified in terms of their usage in marketing, that is, whether they are defined for product categories or service categories.
The service categories of the service tickets are included as product categories in SAP Marketing Cloud. They can be classified with category types, that is, to distinguish service processes, root causes, or service solutions.
For more information about the attributes on product hierarchies and product categories, see Product Hierarchies and Categories [page 594].

4.5.2.3 SAP Cloud Platform Master Data for Business Partners

Integration of SAP Marketing Cloud with SAP Cloud Platform Master Data for Business Partners
You can use SAP Cloud Platform Master Data for Business Partners for storing all your business partners and their master data.
With the integration of SAP Cloud Platform Master Data for Business Partners, you can not only replicate business partners and their relationship to SAP Marketing Cloud, but also to other systems like SAP Cloud for Customer.
With SAP Cloud Platform Master Data for Business Partners, you can also leverage the multiple relationships a contact can have within or across different companies.

For more information about the integration, see Purpose.
4.5.2.4 SAP Customer Activity Repository retail applications bundle

The integration of SAP Customer Activity Repository enables you to import of POS transactions, such as sales order and sales returns as interactions.

You can use then this data in various process steps like segmentation, customer fact sheet, product recommendation, and trigger based campaigns.

As a prerequisite you have uploaded the relevant master data to SAP Marketing Cloud, such as contacts, products, and marketing locations.

**i Note**

Keep in mind that this integration works only with SAP Customer Activity Repository retail applications bundle (CARAB) 2.0 FP1.

For more information, see:
- SAP Customer Activity Repository applications bundle
- Integration with SAP ERP [page 346]
- OData services
  - Products [page 577]
  - Product Hierarchies and Categories [page 594]
  - Contacts [page 408]
  - Import Business Partners [page 569]

4.5.2.5 Order Management

Order Management Data Replication to SAP Marketing Cloud [page 345]
Integration with SAP S/4HANA Cloud and SAP S/4HANA

Integration with SAP ERP [page 346]
Integration of SAP ERP with SAP Marketing Cloud using SAP Cloud Platform Integration

4.5.2.5.1 Order Management Data Replication to SAP Marketing Cloud

Integration with SAP S/4HANA Cloud and SAP S/4HANA

By integrating SAP Marketing Cloud and SAP S/4HANA Cloud or SAP S/4HANA, customers can use customer and contact data, as well as their relations and address data for Marketing campaigns.

Using the SAP Cloud Platform as standard middleware content, customers benefit from SAP cloud integration standards for security, performance, data integrity, and robustness.
On SAP S/4HANA-side the exchange is done via Business Partner SOA services `MDG_BP_RPLCTRQ` and `MDG_BP_RELATIONSHIP_OUT`.

On Marketing-side the interface `CUAN_BUSINESS_PARTNER_IMPORT` is used, see Import Business Partners [page 569].

**Note**

If you have an integration of SAP S/4HANA Enterprise with SAP Marketing Cloud in place, deletion or the end of purpose of a customer or corporate contact on the SAP S/4HANA Enterprise side is not automatically replicated to SAP Marketing Cloud. To ensure deletion in SAP Marketing Cloud, you have to do the following:

1. Run the application job `Flag Contact IDs for Deletion` with the following parameters: specify the Origin of Contact and the ID of Contact, and select the parameter Origin IDs with Dep. IDs Too.
2. Finally, you also have to run the application job `Delete Flagged Contact IDs`.

You can find a full description of how to set up this integration for S/4HANA Cloud in: Setting Up SAP S/4HANA Cloud Integration with SAP Marketing Cloud (1UG).

You can find a full description of how to set up this integration for S/4HANA in: Setting Up SAP S/4HANA Integration with SAP Marketing Cloud (23L).

### 4.5.2.5.2 Integration with SAP ERP

Integration of SAP ERP with SAP Marketing Cloud using SAP Cloud Platform Integration

By integrating SAP Marketing Cloud and SAP ERP, customers can use valuable data from the on-premise SAP ERP system in Business-To-Business (B2B) and Business-To-Customer (B2C) business scenarios. This
includes customer, contact and product data, as well as sales volume data like quotes, orders, and returns. Customers can, for example, launch campaigns for the customers and contacts, or use information on sales volume to determine the best customers for campaigns.

If specific contacts, customers, and consumers are set to blocked in the source system, the respective customers, contacts, and consumers are flagged with end of purpose in the marketing system.

They are then no longer visible and cannot be used in business processes in marketing.

Integration is done using SAP Cloud Platform Integration middleware and the OData service CUAN_BUSINESS_PARTNER_IMPORT_SRV, see Import Business Partners [page 569].

Extensibility enables customers to transfer additional data of customers, contacts, and sales orders from SAP ERP to SAP Marketing Cloud. Additional fields for this purpose must be enabled in the Custom Fields and Logic app for the service CUAN_BUSINESS_PARTNER_IMPORT_SRV.

You can find a full description of how to set up this integration in: Setting Up SAP ERP Integration with SAP Marketing Cloud (IKW).

### 4.5.3 Sales Automation (Outbound)

Set up the integration of a sales system with SAP Marketing Cloud

SAP Marketing Cloud can be integrated with SAP CRM, SAP Cloud for Customer, or an external sales system via SAP Cloud Platform Integration, formerly known as SAP HANA Cloud Integration (SAP HCI).

**Parallel Integration of Presales/Sales Systems**

i Note

You can set up the integration with SAP CRM, SAP Cloud for Customer, and an external sales system simultaneously, but only with one system of a target system type at a time. That is, you can integrate one system for SAP CRM, one for SAP Cloud for Customer, and one external sales system.

In case you have activated more than one communication arrangement, that is, you have configured more than one target system, the Business Add-In (BAdI) Lead Management: Determine Target System Type is performed. With the Custom Fields and Logic app, you can implement the BAdI. You define the target...
system type (either SAP_C4C or SAP_CRM or SALES_EXT) depending on different attributes of the contact that is currently in process. The BAdI is performed once for each member of the target group. That is, you define in which target system the correspondings leads or activities are created. For more information, see **Custom Logic**.

The following graphic provides you with an overview of the parallel integration options:

- **Target Group** members can be of different origin, that is, some from SAP Cloud for Customer, others from SAP Customer Relationship Management or External Sales Systems.
- **BAdI**: During campaign execution, the BAdI determines the target system in which a lead and/or activity shall be created according to the implemented default or custom logic.
- The BAdI default implementation has to be replaced by custom logic.

Integration takes place in two directions:

- Inbound, from presales / sales to marketing
- Outbound, from marketing to presales / sales

For more information, see:

- Integration with SAP CRM - Inbound Channel [page 337]
- Integration with SAP Cloud for Customer - Inbound Channel [page 333]
- Integration with External Sales Systems - Inbound Channel [page 340]
- Integration with SAP CRM - Outbound Channel [page 349]
- Integration with SAP Cloud for Customer - Outbound Channel [page 356]
- Integration with External Sales Systems - Outbound Channel [page 369]

For more information about the integration setup of SAP Cloud for Customer with SAP Marketing Cloud, see the Integration Guide on SAP API Hub at [SAP Cloud for Customer Integration with SAP Marketing](#), or [Purpose](#).

For more information about the integration setup of SAP Marketing Cloud and SAP CRM, see the Set-Up Instructions on SAP API Hub at [SAP CRM Integration](#) or [Overview](#).
4.5.3.1 Integration with SAP CRM - Outbound Channel

Data transfer from marketing to sales.

Data Replication from Marketing to Sales (Outbound)

From SAP Marketing Cloud, the system triggers the creation of the following data in SAP CRM:

- Business Partners
  If the business partner is not known in SAP CRM, the system creates a business partner, account, contact, individual customer, in SAP CRM.

  **Note** Only during the process of lead creation via marketing campaign, business partners are created in sales. Ensure that business partners in Marketing that are part of the lead creation process, the Country is filled. Otherwise, no business partner, and no lead is created in SAP CRM.

  The address of a contact is not replicated into SAP CRM. The system uses the standard address of the related account.

  Before creating business documents, the system creates accounts, and contacts in SAP CRM with the origin ID from Marketing.

- Business Documents
  - Leads
    The system enriches the transferred marketing data during each lead transfer. For more information see Augmented Lead Context [page 350].
  - Activities of type Planned Call, Appointment, and Task
    The system enriches the transferred marketing data during each activity transfer. For more information see Augmented Activity Context [page 354].

  **Note** For leads and activities transferred to SAP CRM, the system also sends out the assigned marketing area. As no mapping is performed in SAP Cloud Platform Integration, the marketing area gets lost during the confirmation process from SAP CRM to SAP Marketing Cloud.

- Custom Fields Created in Marketing.
  Custom fields created in marketing can also be transferred to SAP CRM. For more information on how to extend SAP Marketing Cloud, see the extensibility guide, Custom Fields for the Integration with SAP CRM. To make marketing-created custom fields available in SAP CRM, you have to ensure that the standard mapping is extended in SAP Cloud Platform Integration.
Integration

The following figure shows an overall integration overview:

For a full description of the integration setup of SAP Marketing Cloud and SAP CRM, see the Set-Up Instruction on SAP API Hub at SAP CRM Integration or Overview.

Related Information

Lead Campaigns
Marketing-Driven Sales Enablement
Displaying Lead Information for Contacts
Displaying Lead Information for Accounts
Lead Dashboard
Handling Leads
Handling Activities
Business Documents [page 661]

4.5.3.11 Augmented Lead Context

Enhancement of lead information to be transferred to sales.

Via augmented lead context, sales representatives are provided with context-related lead information that helps to prioritize the sequence of lead processing, and that allows more specified follow-up activities.

Augmented lead context is relevant for the integration with SAP CRM and SAP Cloud for Customer.

For a lead triggered by marketing, the sales representative wants to know the context of this creation, that can be a product:

- Requested as a sample by an interested party
- Clicked on by an interested party in a marketing email
The following use case illustrates the dependencies:

A customer requests a sample, or adds a product to a wishlist. In marketing, you can trigger lead creation in sales, including the product information (product item). The transfer of product information is based on the product of the trigger event of the marketing campaign for lead creation in sales.

**i Note**

During an integration with SAP Cloud for Customer, the system only transfers product items for product origin `SAP_C4C_PRODUCT`.

To drive lead acceptance and conversion probability in sales, during lead transfers, additional and custom attributes from the following objects are transferred together with the lead:

- Predecessor interaction
- Business partner
- Campaign
- Lead score
  
  The system transfers `Score Builder` scores that you can create by yourself, and the delivered `Account Engagement Score` based on a predictive model.

**Predecessor Interaction Information**

During each transfer of leads to sales via marketing campaign, the system enriches the transferred content by predecessor interaction information.

This interaction contains a range of attributes listed below. Additionally, it contains the subnodes `Products` and `Item Of Interest` with a table of attributes each.

- Attributes
  - `Origin of Interaction Contact Data`
  - `External ID of Interaction Contact Data`  
    Can contain the email address of a contact
  - `Interaction Reason`
  - `Description of Interaction Reason`
  - `Marketing Area ID`
  - `Communication Medium`
  - `Interaction Type`
  - `Description of Interaction Type`
  - `Interaction Content`
  - `Campaign ID`
  - `Interaction Content Subject`
  - `Object Type`
  - `Generic Object ID`
  - `Interaction Source System Type`
  - `Interaction Source System ID`
  - `Generic Object ID`
Subnodes

- **Products**
  Contains the attributes `ProductId` and `ProductOrigin`; it can contain 0 to N values of this attribute combination.

- **Item of interest**
  Contains the attributes `ItemOfInterest` and `ItemOfInterestName`; it can contain 0 to N values of this attribute combination.

**i Note**

Predecessor interaction information of products is transferred with the lead depending on the assigned sales system type:

- Products of SAP CRM are replicated to SAP CRM.
- Products of SAP Cloud for Customer are replicated to SAP Cloud for Customer.
- For external systems, products to be transferred are not filtered. That is, all products, such as ERP products, are replicated to an external system.

As a prerequisite, there is a predecessor action, or trigger defined to the action `Create Lead`. The following options are possible:

- The predecessor interaction contains additional existing fields, such as `Product`. The system replicates additional fields during lead transfer, together with the lead. To add those fields to applicable fields in sales, mapping to sales fields must be defined.
- The predecessor interaction contains custom fields. The system replicates the custom fields during lead transfer. To add those fields to applicable fields in sales, mapping to sales fields must be defined.

**i Note**

Only the attributes and **not the subnodes** can be extended by custom fields in SAP Marketing Cloud.

**Business Partner Information**

For lead transfers where no corresponding business partner exists in sales, the system transfers additional existing, and custom fields of the account, contact, or consumer.

During an integration with SAP Cloud for Customer, also for the creation of call qualification leads in sales, the system transfers additional existing, and custom fields of the account, contact, or consumer.

To add those fields to applicable fields in sales, mapping to sales fields must be defined.
Campaign Information

The system replicates custom fields on campaigns to the outbound message of the lead, so that this information can be mapped to the business document in sales. To add those fields to applicable fields in sales, mapping to sales fields must be defined.

Lead Scores

During each transfer of leads to sales via marketing campaign, or via lead transfer, the system enriches the transferred content for leads by lead score information (ID, name, value) for each contact of the assigned target group. That is, scores are added to the lead outbound message.

During an integration with SAP Cloud for Customer, the system also enriches the transferred content for call qualification leads by lead score information (ID, name, value) for each contact of the assigned target group.

To add those fields to applicable fields in sales, mapping to sales fields must be defined.

Lead scores can be calculated regularly. As an administrative user or analyst, you can determine in the Rule Model how often a score is persisted, how many versions exist, when to delete older versions. The system replicates the most recent persisted version.

**Note**

As a prerequisite for transfer of scores, in the Score Builder, ensure the following:

- Set Client Application to Augmented Lead Context
- In the rule set of the score, leave Applicable For empty.
- The score must be persisted. This means the score must be saved either daily, weekly, or monthly.
- In case there is more than one rule model for a score, the system considers the last changed rule model.

Related Information

Score Builder
Custom Fields in Campaign
Custom Fields
Integration with SAP CRM - Outbound Channel [page 349]
Integration with SAP Cloud for Customer - Outbound Channel [page 356]
4.5.3.1.2 Augmented Activity Context

Enhancement of activity information to be transferred to sales.

Via augmented activity context, sales representatives are provided with context-related activity information that helps to prioritize the sequence of activity processing, and that allows more specified follow-up actions.

For an activity triggered by marketing, the sales representative wants to know the context of this creation that can be a product:

- Requested as a sample by an interested party
- Clicked on by an interested party in a marketing email

To drive activity acceptance in sales, during activity transfers, additional, and custom attributes from the following objects are transferred together with the activity:

- Predecessor interaction
- Campaign

Predecessor Interaction Information

During each transfer of leads to sales via marketing campaign, the system enriches the transferred content by predecessor interaction information.

This interaction contains a range of attributes listed below. Additionally, it contains the subnodes Products and Item Of Interest with a table of attributes each.

- Attributes
  - Interaction Contact Origin
  - Interaction Contact ID
    - Can contain the email address of a contact
  - Interaction Reason
  - Interaction Reason Name
  - Interaction Contact Marketing Area
  - Communication Medium
  - Interaction Type
  - Interaction Type Name
  - Content Data
  - Campaign ID
  - Interaction Content Subject
  - Interaction Content Object Source
  - Interaction Content Object ID
  - Source System Type
  - Source System
  - Interaction Source Object Additional ID
  - Interaction Source Object Status
  - Interaction Source Data URL
  - Interaction Source Time Stamp UTC
• Subnodes
  ○ Products
    Contains the attributes ProductId and ProductOrigin; it can contain 0 to N values of this attribute combination.
  ○ Item of interest
    Contains the attributes ItemOfInterest and ItemOfInterestName; it can contain 0 to N values of this attribute combination.

**i Note**

Predecessor interaction information of products is transferred with the activity depending on the assigned sales system type:

- Products of SAP CRM are replicated to SAP CRM.
- Products of SAP Cloud for Customer are replicated to SAP Cloud for Customer.
- For external systems, products to be transferred are not filtered. That is, all products, such as ERP products, are replicated to an external system.

As a prerequisite, there is a predecessor action, or trigger defined to the action for activity creation, such as Create Task. The following options are possible:

- The predecessor interaction contains additional existing fields.
  The system replicates additional fields during activity transfer, together with the activity. So, the sales representative is provided with additional information and is enabled to take further actions on customers. For more information, see also the use case description Creating Tasks in Sales for Missing Marketing Permissions.
  To add those fields to applicable fields in sales, mapping to sales fields must be defined in SAP Cloud Platform Integration.

- The predecessor interaction contains custom fields.
  The system replicates the custom fields during activity transfer. To add those fields to applicable fields in sales, mapping to sales fields must be defined in SAP Cloud Platform Integration.

  **i Note**

  Only the attributes and **not the subnodes** can be extended by custom fields in SAP Marketing Cloud.

**Campaign Information**

The system replicates custom fields on campaigns to the activity outbound message, so that this information can be mapped to the business document in sales. To add those fields to applicable fields in sales, mapping to sales fields must be defined in SAP Cloud Platform Integration.

**Related Information**

Custom Fields in Campaign
Custom Fields
4.5.3.2 Integration with SAP Cloud for Customer - Outbound Channel

Data transfer from marketing to sales.

Data Replication from Marketing to Sales (Outbound)

From SAP Marketing Cloud the creation of the following data in SAP Cloud for Customer can be triggered:

- **Business Partners**
  
  If the business partner is not known in SAP Cloud for Customer business partner in status *In Preparation* (account, contact, individual customer) is created.

  **Note**
  
  Business partners in status *In Preparation* are only created in sales during the process of lead creation via marketing campaign.

  Before creating business documents, the system creates accounts and contacts in SAP Cloud for Customer with the origin ID from marketing.

- **Business Documents**
  
  - **Leads**
    
    The system enriches the transferred marketing data during each lead transfer. For more information see Augmented Lead Context [page 350].

  **Note**
  
  For leads and activities transferred to SAP Cloud for Customer, the system also sends out the assigned marketing area. As no mapping is performed in SAP Cloud Platform Integration, the marketing area gets lost when a change in sales is replicated back to marketing.

- **Campaigns**
  
  The system transfers basic campaign data to SAP Cloud for Customer for started campaigns. With the Custom Fields and Logic app, you can implement the Business Add-In (BAdI) BAdI: Filter for Campaigns to Be Replicated to SAP Cloud for Customer (BAdI CUAN_LM_CAMPAIGN_REPLICATION) to adapt the delivered filters of campaign selection for the transfer to SAP Cloud for Customer.
  
  For the initial load of campaigns to SAP Cloud for Customer, you define an application job in the Marketing Application Jobs app. With the application job template Campaigns: Transfer Campaigns to Sales, you specify filters to select campaigns for the transfer to SAP Cloud for Customer. After a downtime in the running system, you can also perform this job.
  
  For more information, see Campaigns: Transfer Campaigns to Sales.
  
  Filtering of campaigns is done automatically by the system configuration in the Business Add-In (BAdI) BAdI: Filter for Campaigns to Be Replicated to SAP Cloud for Customer (BAdI...
The standard implementation in the BAdI permits the transfer of Blank Campaigns, Email Campaigns, and Mobile Campaigns. The implementation rejects, for example, Transfer Leads Campaigns, Facebook Campaigns and Trigger-Based Campaigns.

- Custom Fields Created in Marketing
  Custom fields created in marketing can also be transferred to SAP Cloud for Customer. For more information on how to extend SAP Marketing Cloud, see the extensibility guide, Custom Fields for the Integration with SAP Cloud for Customer. To make marketing-created custom fields available in SAP Cloud for Customer, you have to ensure that the standard mapping is extended in SAP Cloud Platform Integration.

**Integration**

You can set up the integration between SAP Marketing Cloud with SAP Cloud for Customer via SAP Cloud Platform Integration.

For more information about the integration setup of SAP Cloud for Customer with SAP Marketing Cloud, see SAP Cloud for Customer Integration with SAP Marketing, or Purpose.

The following figure shows an overall integration overview:

Integration of SAP Marketing Cloud with Presales or Sales for Marketing-Driven Leads, Call Center Campaigns, and Activities

For more information about the campaign-based lead creation process, see Handling Leads.

For more information about the process of lead creation via a call center campaign, see Telephone Campaigns in SAP Cloud for Customer.

For more information about the process of campaign-based activity creation, see Handling Activities.
Business Partner Replication

SAP Marketing Cloud is able to trigger the creation of business partners of type Account, Contact and Individual Customer in SAP Cloud for Customer via lead creation. In case no corresponding business partner exists in SAP Cloud for Customer, a new business partner with the status In Preparation is created.

Related Information

Lead Campaigns
Handling Leads
Marketing-Driven Sales Enablement
Call Qualification
Displaying Lead Information for Contacts
Displaying Lead Information for Accounts
Lead Dashboard
Business Documents [page 661]

4.5.3.2.1 Sales Insights on Marketing Campaigns

Provide campaign data to sales representatives in SAP Cloud for Customer.

Use Case

As a sales representative, you want to prepare for a dedicated customer visit, and get an overview about those campaigns that affect your area of responsibility. Therefore, you want to see all campaigns that include at least one of the accounts, or contacts you are responsible for to be able to reinforce the message of the campaigns. Furthermore, you are interested in collaboration with marketing to share campaign-related information.

The following pieces of information coming from a campaign may be valuable for you:

- Which campaigns are stopped, or ongoing?
  You can display details of marketing campaigns, such as name, description, type, and status.
- Which accounts, and contacts of my area of responsibility are targeted by those campaigns?
  You can display those contacts, and accounts that are affected by a dedicated marketing campaign.
- Which information is sent by email to a contact?
  You can open emails a contact has received.
- Which campaign-related information is provided by marketing experts?
  SAP Jam allows you to support online communication, such as discussions with marketing, or other sales people, or sharing collaterals for example. During campaign replication, the system also transfers the ID of the attached SAP Jam group to SAP Cloud for Customer. As a sales representative, you can access the group in the sales system.
Prerequisites

To provide sales representatives with marketing information on campaigns ensure the following:

- Integration with SAP Cloud for Customer, that is the transfer of contacts and accounts, is set up.
- Campaign data is transferred to SAP Cloud for Customer.
- You have configured SAP Jam. For more information see https://help.sap.com/viewer/user_help.
- You have integrated the relevant campaign with SAP Jam. In SAP Jam, you have invited additional users to your group to share information with them.

Navigation to Marketing

In SAP Cloud for Customer, the replicated campaign with the addressed contacts or account is displayed. As a sales representative, you can navigate to:

- Contacts in marketing
- Campaign in marketing

Collaboration via SAP Jam

Sales representatives and marketing experts collaborate via the same SAP Jam group, that is, they can share campaign collaterals on the SAP Jam group.

In the relevant marketing campaign, under Collaboration SAP Jam the marketing expert creates or assigns an SAP Jam group. Per campaign, only one group can be assigned, but a group can be reused in multiple campaigns.

- The feed of the SAP Jam group is displayed on the marketing campaign in SAP Cloud for Customer.
- Sales representatives and marketing experts can create posts from within the feed.

New SAP Jam groups, posts, and feeds created in marketing, sales, or directly in SAP Jam, are always synchronous in those systems.

Display of Emails in Browser

In SAP Cloud for Customer, the sales representative can display individual emails including personalization attributes that are sent to a contact via a marketing email campaign. That is, as a sales representative you have the same view on the emails as the addressee. So, you are enabled to trigger suitable further sales actions.

For more information about how to insert the View in Browser link in email templates, see Using Links in Emails and Email Templates.
4.5.3.2.2 Augmented Lead Context

Enhancement of lead information to be transferred to sales.

Via augmented lead context, sales representatives are provided with context-related lead information that helps to prioritize the sequence of lead processing, and that allows more specified follow-up activities.

Augmented lead context is relevant for the integration with SAP CRM and SAP Cloud for Customer.

For a lead triggered by marketing, the sales representative wants to know the context of this creation, that can be a product:

- Requested as a sample by an interested party
- Clicked on by an interested party in a marketing email

The following use case illustrates the dependencies:

A customer requests a sample, or adds a product to a wishlist. In marketing, you can trigger lead creation in sales, including the product information (product item). The transfer of product information is based on the product of the trigger event of the marketing campaign for lead creation in sales.

During an integration with SAP Cloud for Customer, the system only transfers product items for product origin SAP_C4C_PRODUCT.

To drive lead acceptance and conversion probability in sales, during lead transfers, additional and custom attributes from the following objects are transferred together with the lead:

- Predecessor interaction
- Business partner
- Campaign
- Lead score
  - The system transfers Score Builder scores that you can create by yourself, and the delivered Account Engagement Score based on a predictive model.

Predecessor Interaction Information

During each transfer of leads to sales via marketing campaign, the system enriches the transferred content by predecessor interaction information.
This interaction contains a range of attributes listed below. Additionally, it contains the subnodes Products and Item Of Interest with a table of attributes each.

- **Attributes**
  - Origin of Interaction Contact Data
  - External ID of Interaction Contact Data
    - Can contain the email address of a contact
  - Interaction Reason
  - Description of Interaction Reason
  - Marketing Area ID
  - Communication Medium
  - Interaction Type
    - Description of Interaction Type
  - Interaction Content
  - Campaign ID
  - Interaction Content Subject
  - Object Type
  - Generic Object ID
  - Interaction Source System Type
  - Interaction Source System ID
  - Generic Object ID
  - Business Document Status Code
  - Uniform Resource Identifier
  - UTC Time Stamp in Long Form (YYYYMMDDhhmmssmmmuun)

- **Subnodes**
  - **Products**
    - Contains the attributes ProductId and ProductOrigin; it can contain 0 to N values of this attribute combination.
  - **Item of interest**
    - Contains the attributes ItemOfInterest and ItemOfInterestName; it can contain 0 to N values of this attribute combination.

### Note

Predecessor interaction information of products is transferred with the lead depending on the assigned sales system type:

- Products of SAP CRM are replicated to SAP CRM.
- Products of SAP Cloud for Customer are replicated to SAP Cloud for Customer.
- For external systems, products to be transferred are not filtered. That is, all products, such as ERP products, are replicated to an external system.

As a prerequisite, there is a predecessor action, or trigger defined to the action Create Lead. The following options are possible:

- The predecessor interaction contains additional existing fields, such as Product. The system replicates additional fields during lead transfer, together with the lead. To add those fields to applicable fields in sales, mapping to sales fields must be defined.
- The predecessor interaction contains custom fields.
The system replicates the custom fields during lead transfer. To add those fields to applicable fields in sales, mapping to sales fields must be defined.

**i Note**

Only the attributes and *not the subnodes* can be extended by custom fields in SAP Marketing Cloud.

**Business Partner Information**

For lead transfers where no corresponding business partner exists in sales, the system transfers additional existing, and custom fields of the account, contact, or consumer.

During an integration with SAP Cloud for Customer, also for the creation of call qualification leads in sales, the system transfers additional existing, and custom fields of the account, contact, or consumer.

To add those fields to applicable fields in sales, mapping to sales fields must be defined.

**Campaign Information**

The system replicates custom fields on campaigns to the outbound message of the lead, so that this information can be mapped to the business document in sales. To add those fields to applicable fields in sales, mapping to sales fields must be defined.

**Lead Scores**

During each transfer of leads to sales via marketing campaign, or via lead transfer, the system enriches the transferred content for leads by lead score information (ID, name, value) for each contact of the assigned target group. That is, scores are added to the lead outbound message.

During an integration with SAP Cloud for Customer, the system also enriches the transferred content for call qualification leads by lead score information (ID, name, value) for each contact of the assigned target group.

To add those fields to applicable fields in sales, mapping to sales fields must be defined.

Lead scores can be calculated regularly. As an administrative user or analyst, you can determine in the *Rule Model* how often a score is persisted, how many versions exist, when to delete older versions. The system replicates the most recent persisted version.

**i Note**

As a prerequisite for transfer of scores, in the *Score Builder*, ensure the following:

- Set Client Application to Augmented Lead Context
- In the rule set of the score, leave Applicable For empty.
- The score must be persisted. This means the score must be saved either daily, weekly, or monthly.
• In case there is more than one rule model for a score, the system considers the last changed rule model.

Related Information

Score Builder
Custom Fields in Campaign
Custom Fields
Integration with SAP CRM - Outbound Channel [page 349]
Integration with SAP Cloud for Customer - Outbound Channel [page 356]

4.5.3.2.3 Augmented Activity Context

Enhancement of activity information to be transferred to sales.

Via augmented activity context, sales representatives are provided with context-related activity information that helps to prioritize the sequence of activity processing, and that allows more specified follow-up actions.

For an activity triggered by marketing, the sales representative wants to know the context of this creation that can be a product:

• Requested as a sample by an interested party
• Clicked on by an interested party in a marketing email

To drive activity acceptance in sales, during activity transfers, additional, and custom attributes from the following objects are transferred together with the activity:

• Predecessor interaction
• Campaign

Predecessor Interaction Information

During each transfer of leads to sales via marketing campaign, the system enriches the transferred content by predecessor interaction information.

This interaction contains a range of attributes listed below. Additionally, it contains the subnodes Products and Item Of Interest with a table of attributes each.

• Attributes
  ○ Interaction Contact Origin
  ○ Interaction Contact ID
    Can contain the email address of a contact
  ○ Interaction Reason
  ○ Interaction Reason Name
- **Interaction Contact Marketing Area**
- **Communication Medium**
- **Interaction Type**
- **Interaction Type Name**
- **Content Data**
- **Campaign ID**
- **Interaction Content Subject**
- **Interaction Content Object Source**
- **Interaction Content Object ID**
- **Source System Type**
- **Source System**
- **Interaction Source Object Additional ID**
- **Interaction Source Object Status**
- **Interaction Source Data URL**
- **Interaction Source Time Stamp UTC**

- **Subnodes**
  - **Products**
    Contains the attributes `ProductId` and `ProductOrigin`; it can contain 0 to N values of this attribute combination.
  - **Item of interest**
    Contains the attributes `ItemOfInterest` and `ItemOfInterestName`; it can contain 0 to N values of this attribute combination.

**Note**

Predecessor interaction information of products is transferred with the activity depending on the assigned sales system type:

- Products of SAP CRM are replicated to SAP CRM.
- Products of SAP Cloud for Customer are replicated to SAP Cloud for Customer.
- For external systems, products to be transferred are not filtered. That is, all products, such as ERP products, are replicated to an external system.

As a prerequisite, there is a predecessor action, or trigger defined to the action for activity creation, such as **Create Task**. The following options are possible:

- The predecessor interaction contains additional existing fields.
  The system replicates additional fields during activity transfer, together with the activity. So, the sales representative is provided with additional information and is enabled to take further actions on customers. For more information, see also the use case description Creating Tasks in Sales for Missing Marketing Permissions.
  To add those fields to applicable fields in sales, mapping to sales fields must be defined in SAP Cloud Platform Integration.
- The predecessor interaction contains custom fields.
  The system replicates the custom fields during activity transfer. To add those fields to applicable fields in sales, mapping to sales fields must be defined in SAP Cloud Platform Integration.
**Campaign Information**

The system replicates custom fields on campaigns to the activity outbound message, so that this information can be mapped to the business document in sales. To add those fields to applicable fields in sales, mapping to sales fields must be defined in SAP Cloud Platform Integration.

**Related Information**

- Custom Fields in Campaign
- Custom Fields
- Integration with SAP CRM - Outbound Channel [page 349]
- Integration with SAP Cloud for Customer - Outbound Channel [page 356]

**4.5.3.2.4 Sales Insights on Marketing Permissions and Subscriptions**

Provide marketing permissions and subscriptions and enable editing in SAP Cloud for Customer.

**Use Case**

As a sales representative, you want to access and change marketing permissions and subscriptions that are created in marketing.

For presales and sales employees, when contacting potential and existing customers via phone or email, it is important to know for which address it is allowed to reach the customers. Especially for call center activities, the knowledge about the permissions is essential.

**Note**

This scenario is only supported for desktops computers and notebooks. Smartphones are not supported and there can be restrictions on tablets.
Permission Marketing in SAP Marketing Cloud

As a marketing expert, you can maintain permissions and subscriptions on contacts or accounts on the respective user interface, on the Permission Marketing tab.

In an integrated system landscape, a sales person can edit marketing permissions, in SAP Cloud for Customer. For this use case, SAP Cloud for Customer requests the marketing permissions from SAP Marketing Cloud and provides the corporate account or contact user interface from marketing for editing marketing permissions by a sales person.

Marketing Permission in SAP Cloud for Customer

In SAP Cloud for Customer, marketing permissions are displayed on SAP Cloud for Customer contacts or accounts under MARKETING PERMISSIONS.

By Edit Permissions and Subscriptions, on a sales contact or account, you can navigate to the corresponding marketing contact or account user interface, to the Permission Marketing tab. You can edit the marketing permission in the marketing system. The system updates the permission in sales, accordingly.

**Note**

By default, in SAP Cloud for Customer the MARKETING PERMISSIONS facet does not show the General section and the URL for editing the permissions. To make it visible, proceed as follows:

1. Choose Edit Master Layout.
2. Go to MARKETING PERMISSIONS.
3. Add section General.
4. In section General, choose mashup Edit Permissions and Subscriptions.
5. Choose End Layout Changes.

So, permissions in SAP Cloud for Customer and in SAP Marketing Cloud are synchronous. Sales employees in SAP Cloud for Customer are provided with the same view at the permissions as their marketing counterparts.

**Tip**

It might be required to replicate existing permissions via initial load from SAP Cloud for Customer to SAP Marketing Cloud, and after that, editing permissions shall only be done in marketing.

Related Information

Permission Marketing in the Contact Profile
Integration with SAP Cloud for Customer - Inbound Channel [page 333]
Integration with SAP Cloud for Customer - Outbound Channel [page 356]
4.5.3.2.5  Sales Insights on Marketing Account and Contact Factsheet

Define a HTML or URL mashup to embed the apps Contact Profile and Spotlighting Accounts in an iFrame in SAP Cloud for Customer.

Use Case

As a sales representative, you want to get insights about the engagement and activities of your accounts and contacts across multiple communication channels.

Prerequisites

To provide sales representatives with marketing information on accounts and contacts, ensure the following:

- Integration with SAP Cloud for Customer, that is the transfer of contacts and accounts, is set up.
- Sales representatives must have a user in SAP Marketing Cloud and the authorizations to display the factsheets.

Navigation to SAP Marketing Cloud information in SAP Cloud for Customer

1. In SAP Cloud for Customer navigate to an account or contact.
2. Navigate to your custom tab, for example the Marketing Factsheet.
3. Log on to the SAP Marketing Cloud to display the account or contact factsheet.

Set-up Procedure for Mashup

The following steps have to be performed in the SAP Marketing Cloud and the SAP Cloud for Customer in order to enable Sales Insights on Marketing Account and Contact Factsheet.

Settings in SAP Cloud for Customer

Settings in SAP Cloud for Customer for HTML or URL Mashup

1. Navigate to ➤ Administrator ➤ Mashup Authoring ➤.
2. Choose ➤ New ➤ HTML Mashup ➤.
   If you want to create a URL mashup, choose ➤ New ➤ URL Mashup ➤.
In the **General Information** section, verify that **With Port Binding** is preselected.

4. Choose **Port Binding Type** > **Additional Account Information**.
5. Enter a name and a description for the mashup, for example **Marketing Factsheet**.
6. Under **Configuration Information**, select **Type URL**.
   Host here refers to the SAP Marketing Cloud host.

   **i Note**
   Do not select **Extract Parameter**.

8. Under **Request Parameters**, choose **Add Row**.
9. As Parameter, enter **InteractionContactID**.
10. Open the value help and select **Parameter Binding AccountInternalID** and set the request parameter to **Mandatory**.
11. Click **Preview** to display the end result of the mashup.
    To test the mashup, you can enter sample values for the parameters, and click **Update Parameter Values** to the right of the **HTML Code Editor**.

   **i Note**
   If you change the code, you need to click **Preview** again to display the updated result of the mashup.

12. Specify the **Height** with the recommended value **600 px** accordingly.
13. **Save** and **Activate** the mashup.

For more information about creating HTML mashups, see **Create HTML Mashups**.

### Adding the Mashup to the Account and Contact UI

1. Go to your user profile, and from the dropdown list select **Start Adaptation**. The system opens in the **Adaptation Mode**.
2. Open an account. In the side pane, select **Add Tab**.
3. Go to the tab bar of the main screen and select the tab you just created.
4. Select the blue icon on the new tab. The system highlights the area with a red border to indicate that you can make changes.
5. In the side pane, click the reverse arrow icon twice to navigate from the **Form Pane** to the **UI Component** view.
6. Select **Add Mashup** to open a new window.
7. Depending on your selection in step 2, set the filter to **HTML Mashups** or **URL Mashup**.
   For the **HTML Mashups**, carry out the following additional steps:
   1. Select the row that contains the required mashup to display the **Properties** header.
   2. Tick the checkbox for the same mashup to make the **Properties** editable.
   3. Tick the checkbox **Full Width in Properties** and set the **Height(%)** to 100. The newly added mashup will occupy the full height of the screen.
8. Choose Apply.
9. To save your settings, go to your profile and select **End Adaptation**.

**Add mashup to contact UI**: If you want to add the marketing factsheet to the contact UI, start the **Adaptation Mode**, open a **Contact** and add a new tab. Then repeat the steps 3 to 12.
For more information about adding mashups on screen, see Add Mashups on Screens

Settings in SAP Marketing Cloud

1. Assign the business catalog SAP_CEC_BC_MKT_CFS2_PC to your user.
   With this catalog, you can access the apps Contact Profile and Spothousing Accounts. As a reference, have a look at the user SALES_REP_MKT_INFO, that has the Business Role SAP_BR_SALES_REP_MKT_INFO and the Business Catalog SAP_CEC_BC_MKT_CFS2_PC assigned.

2. As an administrator, check if the SAP Cloud for Customer UI host is added in the app Maintain Clickjacking Protection Whitelist in SAP Marketing Cloud.
   The host is required to be able to click inside the Marketing UI in the iFrame in SAP Cloud for Customer.

3. If the host is not listed, add it.

Technical Background

Using this URL will automatically navigate to/embed either the contact or account UIs in their legacy or Fiori incarnation depending on the business role catalog that is assigned to the user.

4.5.3.3 Integration with External Sales Systems - Outbound Channel

Data transfer from marketing to external sales systems.

By integrating SAP Marketing Cloud with external sales systems, the bridge between marketing and sales is built so that processes can be harmonized across marketing and sales channels.

⚠️ Caution

For the integration of SAP Marketing Cloud with external sales systems, we do not deliver standard content.

ℹ️ Note

- You can set up the integration with internal and an external sales system simultaneously, but only with one system of a target system type at a time. That is, you can integrate one system for SAP CRM, one for SAP Cloud for Customer, and one external sales system.
- In case you have activated more than one communication arrangement, that is, you have configured more than one target system, the Business Add-In (BAI) Lead Management: Determine Target System Type is performed. With the Custom Fields and Logic app, you can implement the BAI. You define in which target system the corresponding leads are created.
- You can also use the integration with Salesforce offered by Advantco International LLC. For more information, see SAP Marketing Cloud Integration with Salesforce.
Outbound Processes from Marketing to an External Sales System

Depending on the data model of an external sales system, the following data can be replicated to an external sales system:

- **Business Documents**
  Leads are transferred to the external sales system. The system enriches the transferred marketing data during each lead transfer. For more information see [Augmented Lead Context](#)[page 350].

  **Note**
  For leads transferred to an external sales system, the system also sends out the assigned marketing area. As no mapping is performed in SAP Cloud Platform Integration, the marketing area gets lost when a change in sales is replicated back to marketing.

- **Custom fields created in marketing**
  Custom fields created in marketing can be transferred to the external sales system within the lead creation process.

Integration

You can set up the integration between SAP Marketing Cloud with an external sales system via SAP Cloud Platform Integration.

The following figure shows a possible overall integration overview based on a customer-owned integration setup:
4.5.3.3.1 Setting Up the Connection Between Marketing and an External Sales System

Connect SAP Marketing Cloud with an external sales system.

Before doing the configuration in SAP Marketing Cloud, you need the administrator business user, which contains the business catalog SAP_CORE_BC_COM (Communication Management), for example the business role SAP_BR_ADMINISTRATOR (Administrator).

As an administrator, you maintain the setup via the following apps under Communication Management:

- Maintain Communication User
  For more information, see Creating a Communication User for Inbound Communication [page 371].
- Communication Systems
  For more information, see Setting Up a Communication System for the Integration of an External Sales System [page 372].
- Communication Arrangements
  For more information, see Setting Up a Communication Arrangement for the Integration of an External Sales System [page 373].

4.5.3.3.1.1 Creating a Communication User for Inbound Communication

Define a user for inbound communication.

The communication user defined in the SAP Marketing Cloud system is used for inbound communication and for the processing of messages in the system. Technically the user is needed to call OData services in SAP Marketing Cloud from SAP Cloud Platform Integration.

1. Log on to your SAP Marketing Cloud system.
2. On the launchpad, select the Maintain Communication Users tile
3. Choose New to create a new user (for example, MKT_COM_USR) or select an existing user.
4. Assign a password for the user if you would like to use the basic authentication, or assign SAP Cloud Platform Integration, integration service public client certificate to the user for certificate-based authentication:
   1. Basic authentication: Enter password in the Password field
   2. Certificate based authentication: Choose Upload Certificate (exported from SAP Cloud Platform Integration, integration service keystore. The link to download certificate is provided by SAP Operations in the initial tenant provisioning mail).
5. Choose Save.
6. Note down the user data for further steps.
4.5.3.3.1.2 Setting Up a Communication System for the Integration of an External Sales System

Connect the communication user with the communication arrangement.

The Communication System is used to define the host name of the SAP Cloud Platform Integration tenant and to assign users for the inbound (from SAP Cloud Platform Integration to SAP Marketing Cloud) and outbound (from SAP Marketing Cloud to SAP Cloud Platform Integration) communication.

To create the communication system for SAP Cloud Platform Integration, proceed as follows:

1. Log on to your SAP Marketing Cloud system.
2. On the launchpad, open the Communication Systems app.
3. To create a new system, choose New.
4. In New Communication System, enter a system ID and its name, and choose Create.
5. In the Technical Data section, enter the details of your SAP Cloud Platform Integration tenant in the Host Name field (see SAP Cloud Platform Integration tenant provisioning email).
   As a host is irrelevant to the inbound communication, enter dummy to assign a dummy host.
6. Assign the communication user created earlier to this communication system, as follows:
   ○ In the User for Inbound Communication section, choose + (Add).
   ○ In New Inbound Communication User, select the authentication method as User Name and Password and enter the user created earlier.
7. To create a new outbound user, in the User for Outbound Communication section, choose + (Add).
   In New Outbound User, select the authentication method:
   ○ Basic Authentication
   ○ Certificate-Based Authentication

<table>
<thead>
<tr>
<th>Authentication Method</th>
<th>Username and Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Name</td>
<td>P-user that has access to the SAP Cloud Platform, integration service tenant.</td>
</tr>
<tr>
<td>Password</td>
<td>Password for the user</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Authentication Method</th>
<th>SSL Client Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate Type</td>
<td>Exported from SAP Cloud Platform Integration, integration service keystore. The link to download certificate would be provided by SAP Operations in initial tenant provisioning mail.</td>
</tr>
</tbody>
</table>
Choose Create.

8. Choose Create.

9. Save and activate the communication system.

4.5.3.3.1.3 Setting Up a Communication Arrangement for the Integration of an External Sales System

Set up the communication with SAP Cloud Platform Integration.

Communication Arrangements need to be activated in SAP Marketing Cloud for communication with OData APIs. The communication arrangement in the SAP SAP Marketing Cloud defines all relevant information for the communication with SAP Cloud Platform Integration. It contains the communication system, and inbound and outbound authentication.

The communication arrangement SAP_COM_0017: Marketing - Presales/Sales Integration needs to be activated.

To set up the communication arrangement, proceed as follows:

1. Log on to SAP Marketing Cloud with a user that has administrator authorizations.
2. From the SAP Fiori launchpad, choose the Communication Arrangements app.
3. To create a new communication arrangement for the communication scenario SAP_COM_0017 (Marketing - Presales/Sales Integration), choose New. Select the scenario and enter an arrangement name. Choose Create.
4. In the Common Data, choose the communication system that you created previously.
5. In Additional Properties, select the Target System Type. Choose SALES_EXT.

i Note

In case a communication arrangement with Target System Type SALES_EXT already exists, you cannot activate another one.

6. Select values for First Origin of Contact ID, Second Origin of Contact ID, Third Origin of Contact ID.

New additional properties are defined to be able to configure Origins of Contact IDs for target system type SAP_EXTERNAL. The combination of ID_ORIGIN and ID must uniquely identify a contact in SAP Marketing Cloud. Depending on the usage of number ranges assigned to business partners in the external sales system, more than one ID_ORIGIN can be necessary.

Valid values can be defined in the Origin of Contact app under Implementation Cockpit Manage Your Solution Configure Your Solution Marketing/Contacts and Profiles OriginContactID Configure. The rules above are effective independent of the existence of communication arrangements with different target system types.

i Note

It is only possible to activate a communication arrangement with Target System Type = SALES_EXT, if the following Additional Properties or Outbound Services are maintained as follows:

- The additional property Campaign Transfer to Sales is inactive.
- The additional property First Origin of Contact ID is vailable.
- The outbound service Export of Activities is inactive.
- The outbound service Export of Campaigns is inactive.
7. In **Inbound Communication**, enter the previously created user. The authentication method is filled automatically.

8. In **Outbound Communication**, the SAP Cloud Platform Integration service user that was assigned to **Communication System** is automatically added or the default client certificate with certificate download link is displayed.
   ○ in **Outbound Services**, ensure that only **Export of Leads** is activated.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Status</td>
<td>Checked (Active)</td>
</tr>
<tr>
<td>Application Protocol</td>
<td>SOAP</td>
</tr>
<tr>
<td>Port</td>
<td>443</td>
</tr>
<tr>
<td>Path</td>
<td>/ctx/‌&lt;ExternalSalesSystemService&gt;</td>
</tr>
<tr>
<td>Service URL</td>
<td>Will be automatically populated.</td>
</tr>
</tbody>
</table>

9. Choose **Save**.

### 4.5.4 Financial Data

**Integration with SAP ERP for Spend Planning** [page 374]

With the following instructions you are able to integrate spend data from your system with SAP ERP. A campaign is represented by a project and a spend item as a WBS element. You use these WBS elements as account reference for further processing within SAP ERP.

### 4.5.4.1 Integration with SAP ERP for Spend Planning

With the following instructions you are able to integrate spend data from your system with SAP ERP. A campaign is represented by a project and a spend item as a WBS element. You use these WBS elements as account reference for further processing within SAP ERP.

**Prerequisites**

- You have SAP ERP 6.0 EHP 4 or higher.
- You have set up the SAP Marketing Cloud - **SAP ERP Actual and Committed Spend** integration package. For more information, see [https://api.sap.com/package/SAPS4HANAMarketingCloudSAPERPActualandCommittedSpendIntegration](https://api.sap.com/package/SAPS4HANAMarketingCloudSAPERPActualandCommittedSpendIntegration).
Setting Up the Communication with SAP ERP

To set up the communication between SAP Marketing Cloud and SAP ERP, perform the following steps:

1. Create the system for outbound communication using the Communication Systems configuration application. Enter the following data:

<table>
<thead>
<tr>
<th><strong>System Name</strong></th>
<th>Name of the SAP ERP system, for example, ABC.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Host Name</strong></td>
<td>Host address of the SAP ERP system, for example, ldiabc.corp.com.</td>
</tr>
<tr>
<td><strong>Authentication Method</strong></td>
<td>Select an authentication method.</td>
</tr>
</tbody>
</table>

2. Create a communication arrangement with a certificate-based authentication for the outbound scenario.

3. Create a communication arrangement for the Marketing - Planning Spend Integration (SAP_COM_0018) scenario using the Communication Arrangements configuration application. Enter the following data:

<table>
<thead>
<tr>
<th><strong>Common Data</strong> &gt; <strong>Arrangement Name</strong></th>
<th>SAP_COM_0018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common Data</strong> &gt; <strong>Communication System</strong></td>
<td>The SAP ERP system created in the Communication Systems configuration application in the previous step.</td>
</tr>
<tr>
<td><strong>Outbound Communication</strong> &gt; <strong>User Name/Certificate</strong></td>
<td>Select certificate-based authentication for the outbound scenario. Download the certificate. It will be used later while setting up SAP ERP and configuring the security.</td>
</tr>
<tr>
<td><strong>Outbound Services</strong> &gt; <strong>Port</strong></td>
<td>Port for the communication.</td>
</tr>
</tbody>
</table>
You must set up the following SOAP services in the order defined below and specify the path for each of them:

1. Create service, for example,
   ```
   /sap/bc/srt/xip/sap/
   ecc_projecterpcrtrc1/<client of SAP ERP system>/<name of service/binding that will be used when configuring Web Services>/<name of service/binding that will be used when configuring Web Services>
   ```

2. Update service, for example,
   ```
   /sap/bc/srt/xip/sap/ecc_projectupdrc/
   <client of SAP ERP system>/<name of service/binding that will be used when configuring Web Services>/<name of service/binding that will be used when configuring Web Services>
   ```

3. Get service, for example,
   ```
   /sap/bc/srt/xip/sap/
   ecc_projecterpidqr1/<client of SAP ERP system>/<name of service/binding that will be used when configuring Web Services>/<name of service/binding that will be used when configuring Web Services>
   ```

The path for each service is defined during the SAP ERP setup.

For example, <client of SAP ERP system> could be 100, <name of service/binding that will be used when configuring Web Services> could be cuan_msm. The name you define in this step must be the same as the name defined during the SAP ERP setup.


---

### Setting Up SAP ERP

1. Configure the Web service runtime as target system connection. For more information, search for Configuring the Web Service Runtime on SAP Help Portal at http://help.sap.com under the SAP NetWeaver product.

2. Configure your security settings for the service provider and service consumer using the SOA Manager. For more information, search for Runtime Configuration with the SOA Manager on SAP Help Portal at http://help.sap.com under the SAP NetWeaver product.

3. Configure service definitions in the Web service configuration transaction (SOAMANAGER) for the following:
   - ProjectERPCreateRequestConfirmation_In_V1(ECC_PROJECTERPCRTRC1)
Configure the services as follows:

1. In the Service and Binding Name step, enter the same name in the Service Name and New Binding Name fields. This must be the same name as the one defined in step 3 of the communication setup with SAP ERP under Outbound Services Path.

2. In the Provider Security step, under Transport Level Security, select the SSL (https) radio button, and under Transport Channel Authentication, select X.509 SSL Client Certificate.

3. Go through the other steps without specifying any values and complete the configuration. You will find the WSDL URL for Binding in the WSDL Generation for Binding of each service. For more information, search for Configuring a Service Provider on SAP Help Portal at http://help.sap.com under the SAP NetWeaver product.

As in SAP Marketing Cloud, prefix 1_CUAN_MSM_<CampaignID> is given for creation of projects and 1/<CampaignID> for WBS elements in SAP ERP, no predefined coding mask is required for project coding key 1.

Project profile CUAN01 has to be configured in SAP ERP.

Checking for Errors

You can use the Application Log application to check if there are errors with the integration. You can use the CUAN category and the Marketing Spend Integration in External System (CUAN_MSM_SPEND_DISTR) subcategory.

You can also use the Message Dashboard application to monitor if there are errors with the integration and to reprocess the integration. For more information, see Data Exchange Messages for Spend Planning Integration.

For a complete description of the configuration settings required for the integration scenario, see the setup guide at https://api.sap.com/shell/discover/contentpackage/SAPS4HANAMarketingCloudSAPERPActualandCommittedSpendIntegration?section=DOCUMENTS.

4.5.4.1.1 Importing Actual and Committed Spend from SAP ERP

You can import actual and committed spend associated to campaigns from SAP ERP and make it available in the Spend area of the Campaigns application.

Prerequisites

- You have enabled the integration of spend data with SAP ERP. For more information, see Integration with SAP ERP for Spend Planning [page 374].
You have set up the SAP Marketing Cloud - *SAP ERP Actual and Committed Spend* integration package. For more information, see [https://api.sap.com/package/SAPS4HANAMarketingCloudSAPERPActualandCommittedSpendIntegration](https://api.sap.com/package/SAPS4HANAMarketingCloudSAPERPActualandCommittedSpendIntegration).

You have configured the communication scenario *Marketing - Business Data Integration* in SAP Marketing Cloud.

You have installed the latest version of the *SAP HYBRIS C4C ERP INTEGR* product in SAP ERP that contains the `COD_ERP_INT 6.00` component. For information about this product and the `CODERINT 600` add-on, see the corresponding documentation on SAP Support Portal at [http://support.sap.com](http://support.sap.com).

You have the authorization to run the `CUAN_ERP_MSM_EXTRACT_ACTUAL` report in SAP ERP.

---

**Context**

You can import actual and committed spend data from SAP ERP using this integration.

**Procedure**

To import the actual and committed spend, run the `CUAN_ERP_MSM_EXTRACT_ACTUAL` report.

**Results**

The actual and committed spend associated to campaigns are shown in the *Spend* area of the *Campaigns* application.


4.5.5 **Survey Data**

The documentation explains the following topic:

- How to integrate survey metadata and survey responses from SAP Qualtrics Surveys into SAP Marketing Cloud using integration flows. For more information, see *Integration with SAP Qualtrics Surveys* [page 379].

Integration with SAP Qualtrics Surveys [page 379]
4.5.5.1 Integration with SAP Qualtrics Surveys

Integration of SAP Qualtrics Surveys with SAP Marketing Cloud using SAP Cloud Platform Integration: [SAP Qualtrics Surveys Integration with SAP Marketing Cloud](#).

By supporting the integration of SAP Qualtrics Surveys with SAP Marketing Cloud, customers can benefit from the features of Qualtrics. This integration fetches and stores data easily from SAP Qualtrics Surveys into SAP Marketing Cloud system.

To achieve this integration, the following iFlows are provided:

- Create Survey Data in SAP Marketing Cloud.
- Create Survey Subscription in Qualtrics.
- Mapping Qualtrics Surveys Data for SAP Marketing Cloud.

For more information, see [Integrating SAP Qualtrics Surveys with SAP Marketing Cloud](#).

4.5.6 Personalized Commerce

With the following personalized Commerce options, you can tailor your Commerce implementation to suite your customers.

- **Integration with SAP Commerce [page 379]**
  Support omnichannel activities by integrating SAP Marketing Cloud with SAP Commerce Cloud.

- **Consuming Recommendation Models Using an OData Service [page 380]**
  The API_MKT_RECOMMENDATION_SRV and PROD_RECO_RUNTIME_SRV public OData services enable customer channels to receive recommendations generated by Recommendation.

- **Offer Discovery [page 380]**
  Discover suitable offer content for consumers.

- **Exporting Offline Sales Data [page 381]**
  Export offline sales data from SAP Marketing Cloud and make it available in other applications.

4.5.6.1 Integration with SAP Commerce

Support omnichannel activities by integrating SAP Marketing Cloud with SAP Commerce Cloud.

For more information, see [Integration with SAP Commerce Cloud [page 51].](#)
### 4.5.6.2 Consuming Recommendation Models Using an OData Service

The API_MKT_RECOMMENDATION_SRV and PROD_RECO_RUNTIME_SRV public OData services enable customer channels to receive recommendations generated by Recommendation.

You can enable customer channels to receive recommendations generated by Recommendation using the following services:

**API_MKT_RECOMMENDATION_SRV**

The API_MKT_RECOMMENDATION_SRV public OData service for Recommendations allows a client system to obtain product or offer recommendations from the SAP Marketing Cloud using the SAP Cloud Platform. The service is easy to consume and enables you to benefit from the following:

- **Built-in redundancy in the event of SAP Marketing Cloud unavailability.**
  If the SAP Marketing Cloud is unresponsive when a request for a recommendation is submitted, a comprehensive fallback process is initiated. The process begins by trying to retrieve a personalized recommendation from the cache using the user’s ID (if available) and the leading items associated with the request. If that fails, a second restricted attempt is made using similar users (for example, a target group) and the leading items associated with the request. If that fails, a third generic request is submitted using the leading items exclusively. This process of submitting personalized, restricted, and generic requests continues using subsets of the leading items from the most to least recent until a recommendation is returned.

- **Enriched recommendation results.**
  The API retrieves product master data from the SAP Marketing Cloud. The data enriches the recommendation results obtained, for example, by providing product images and descriptions.

For more information, see [Recommendations (SAP Cloud Platform)](page 927).

**PROD_RECO_RUNTIME_SRV**

The PROD_RECO_RUNTIME_SRV public OData service for Recommendations allows a client system to obtain product recommendations from the SAP Marketing Cloud.

For more information, see [Recommendations](page 943).

### 4.5.6.3 Offer Discovery

Discover suitable offer content for consumers.

The personalized offer recommendations are based on eligibility and validity. The personalization is determined by geo location, offer attributes, and scores.

For more information, see:
4.5.6.4 Exporting Offline Sales Data

Export offline sales data from SAP Marketing Cloud and make it available in other applications.

This integration provides a foundation for repurposing offline sales data from SAP Marketing Cloud. SAP Cloud Platform Integration acts as middleware, using the API_MKT_INTERACTION_SRV and API_MKT_CONTACT_SRV services to retrieve information from SAP Marketing Cloud. The integration flow exports the data in a comma-separated value (CSV) file, and then sends it to an SFTP server. From there, you can perform custom development in your target system to upload and use the data.

For a complete description of the configuration settings required for integration, see the Introduction.

For more information, see the offline sales Integration package.
5 Integration APIs

Are you trying to pull or push information for individual marketing entities such as campaigns, target groups, or contacts? There is a wide range of public APIs available to enable you to integrate with SAP Marketing Cloud. Refer to the following table to quickly find the information that will help you get started, no matter what your level of knowledge.

⚠️ Caution

The API services available in SAP Marketing Cloud must not be used for mass read (GET) operations. In other words, you cannot use them for extracting all available data, for example, to extract millions of contacts or interactions from your marketing system.

<table>
<thead>
<tr>
<th>Questions This Guide Answers</th>
<th>Read Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which API should I use if I want to integrate a third-party data source that provides, for example, agreement, campaign, or contact information.</td>
<td>Quick Guide - Which API for Which Entity [page 384]</td>
</tr>
<tr>
<td>What do I need to know before using the marketing APIs?</td>
<td>Getting Started [page 382]</td>
</tr>
<tr>
<td>What are SAP APIs?</td>
<td><a href="https://developers.sap.com/topics/api.html">https://developers.sap.com/topics/api.html</a></td>
</tr>
<tr>
<td>I’m new to OData. How does it work?</td>
<td><a href="http://www.odata.org">http://www.odata.org</a></td>
</tr>
</tbody>
</table>

5.1 Getting Started

This section contains information to help you get started quickly, including communication prerequisites for integrating with APIs, deep-dive videos that will help you find your way around the SAP API Business Hub and understand the data load concepts, as well as some useful best practices and recommendations for efficient integration and data load.

Videos - Best Practices for Data Load [page 383]

These short videos provide valuable insight into the data load concepts, and include useful tips for before and after you load data into your marketing system. The videos are available in English only.

Quick Guide - Which API for Which Entity [page 384]

SAP Marketing Cloud offers a wide range of services. But which one is right for your purposes? Take a few minutes to browse this table according to the entity type you want to import.

Consuming the Integration APIs [page 390]
Optimize Performance During OData Service Calls [page 391]
This section describes how to call an OData service in a way that ensures a high degree of system security and performance. The description uses API_MKT_INTERACTION_SRV as an example, but the method applies to all OData services in SAP Marketing Cloud.

Best Practices and Recommended Package Sizes [page 393]
This section contains best practices for optimizing data load of master data entities, recommended package sizes, and some troubleshooting tips.

Import Monitor [page 397]
Monitor and explore data imports that are triggered by OData or upload services from external systems.

Data Load Monitor [page 400]
Monitor all import messages and keep track of their status.

HTTP Response Status Codes [page 402]
Every HTTP request that is received by a server is responded to with a 3-digit HTTP status code. They are grouped into five classes.

Open Marketing Connectors (OMC) [page 403]
Open Marketing Connectors (OMC) from SAP Marketing Cloud make integrating with the marketing solution easy for the outside world.

5.1.1 Videos - Best Practices for Data Load

These short videos provide valuable insight into the data load concepts, and include useful tips for before and after you load data into your marketing system. The videos are available in English only.

Data Load Videos (English Only)

Planning and Configuring the Contact Data Load
This 5-minute video explains what origin IDs are, the significance of the configuration settings you can make, and how these affect the contact match and merge process.

How to Plan and Configure the Contact Data Load

Configuring Origins
This 2-minute video explains important points to consider when you configure your data sources and why it is important to have one origin per data source.

Understanding Origins

How Imported Data Is Processed
This 6-minute video explains the match and merge process that contact data undergoes whenever new data is uploaded.

How Imported Data Is Processed
Checking the Correctness of Imported Data

This 5-minute video introduces you to some of the tools provided in the Marketing Data Stewardship app, which you can use to check that your imports are correct and whether the results meet your expectations.

Checking Your Data Load

Data Lifecycle Management - Decluttering Your System

This 5-minute video explains how and why you should declutter your system regularly of marketing data that no longer serves any useful purpose.

Data Lifecycle Management

Analytical List Pages in SAP Marketing Cloud

This 3-minute video walks you through the highly-configurable functions of analytical list pages (ALPs). Based on the example of the Browse Contact Origin Data app, explore the insights you can gain from ALPs.

Analytical List Pages in SAP Marketing Cloud

Data Load Monitor

This 3-minute video explains the importance of monitoring imports, and of regularly analyzing and fixing common error causes. It shows how the Data Load Monitor can support you in safeguarding the quality of data imports.

Data Load Monitor - Improving the Quality of Your Data Load

Related Information

Video Library

5.1.2 Quick Guide - Which API for Which Entity

SAP Marketing Cloud offers a wide range of services. But which one is right for your purposes? Take a few minutes to browse this table according to the entity type you want to import.

Quick Guide - Which API Should I Use?

You can search, sort, and filter the table to view the data as best suits your requirements. For example, you can quickly search by Entity Type to find the recommended service or other import options, which you can use in exceptional cases, for example for a one-time import for test purposes.
<table>
<thead>
<tr>
<th>Area</th>
<th>Entity Type</th>
<th>Recommended Service</th>
<th>Other Import Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts and Profiles</td>
<td>Contacts</td>
<td>Public OData API (API_MKT_CONTACT) for reading and writing master data about Contacts. Contacts are natural persons who interact with your company. Contacts [page 408]</td>
<td>Data File Load · Contacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>i Note</strong> You must use version 4 of this API service if you implement Contact-to-Account Relationships.</td>
<td></td>
</tr>
<tr>
<td>Contacts and Profiles</td>
<td>Interaction Contacts</td>
<td>Public OData API (API_MKT_INTERACTION_CONTACT) for Interaction Contacts. Interaction Contact is a generic term to group all natural persons (contacts, consumers, or suspects), companies and “unknowns”, who interact with your company. Interaction Contacts [page 465]</td>
<td></td>
</tr>
<tr>
<td>Contacts and Profiles</td>
<td>Corporate Accounts</td>
<td>Public OData API (API_MKT_CORPORATE_ACCOUNT) for reading and writing master data about Corporate Accounts only. Corporate accounts are companies or organizations that interact with your company. Corporate Accounts [page 508]</td>
<td>Data File Load · Corporate Accounts</td>
</tr>
<tr>
<td>Contacts and Profiles</td>
<td>Products</td>
<td>Public OData API (API_MKT_PRODUCT_SRV) for Products. Products [page 577]</td>
<td>Data File Load · Products</td>
</tr>
<tr>
<td>Contacts and Profiles</td>
<td>Product Hierarchies and Categories</td>
<td>Public OData API (API_MKT_PRODCAT_HIERARCHY_SRV) for Product Hierarchies and Categories. Product Hierarchies and Categories [page 594]</td>
<td>Data File Load · Product Categories</td>
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<tr>
<td>Area</td>
<td>Entity Type</td>
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<tr>
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<td>Public OData API (<a href="#">API_MKT_INTERACTION_SRV</a>) for Interactions. Interactions [page 605]</td>
<td>• Business Documents [page 661]</td>
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<td></td>
<td><strong>Note</strong></td>
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<td>For business documents (leads, opportunities, sales orders and so on), we recommend that you use the API Service <code>CUAN_BUSINESS_DOCUMENT_IMP_SRV</code> since it provides an upsert function and updates an already existing entry depending on timestamp information.</td>
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<td><strong>Import Business Partners [page 569]</strong></td>
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<tr>
<td>Contacts and Profiles</td>
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<td>Public OData API (<a href="#">CUAN_BUSINESS_DOCUMENT_IMP_SRV</a>) for importing business documents from external SAP or Non-SAP systems to marketing. Business Documents [page 661]</td>
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<tr>
<td>Contacts and Profiles</td>
<td>Contacts, Corporate Accounts or Relationships from SAP ERP, SAP CRM, or S/4HANA On Premise</td>
<td><code>CUAN_BUSINESS_PARTNER_IMPORT_SRV</code> for importing business partner data from external source systems, like, for example, SAP ERP, SAP CRM, SAP S/4HANA On Premise. Import Business Partners [page 569]</td>
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<tr>
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<td>Public OData API (<a href="#">API_MKT_CORPORATE_ACCOUNT</a>) for reading and writing master data about Corporate Accounts only. Corporate accounts are companies or organizations that interact with your company. Corporate Accounts [page 508]</td>
<td>• Data File Load - Account Team Members</td>
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<td>Contacts and Profiles</td>
<td>Account Team Members (for Contacts)</td>
<td>Public OData API (<a href="#">API_MKT_CONTACT</a>) for reading and writing master data about Contacts. Contacts are natural persons who interact with your company. Contacts [page 408]</td>
<td>• Data File Load - Account Team Members</td>
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<tr>
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<tr>
<td>Contacts and Profiles</td>
<td>Interests</td>
<td>Public OData API API_MKT_INTEREST_SRV Interest Items [page 649]</td>
<td>Manage Interests app · Manage Interests</td>
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<tr>
<td>Contacts and Profiles</td>
<td>Agreements</td>
<td>Public OData API (API_MKT_AGREEMENT_SRV) for agreements. An agreement can be any kind of customer contract, for example, a sales contract or a contract that comprises specific services. Agreements [page 682]</td>
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<tr>
<td>Contacts and Profiles</td>
<td>Marketing Locations</td>
<td>Public OData API (API_MKT_LOCATION) for Marketing Locations. A marketing location is any physical or virtual location where a marketing activity can be conducted. Marketing Locations [page 706]</td>
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<td>Contacts and Profiles</td>
<td>Scores</td>
<td>Public OData API (API_MKT_SCORE_SRV) for Scores Scores [page 696]</td>
<td>Data File Load · Import Marketing Locations</td>
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<td>Contacts and Profiles</td>
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<td>Public OData API (API_MKT_CONTACT) for reading and writing master data about Contacts. Contacts are natural persons who interact with your company. Contacts [page 408]</td>
<td>Data File Load · Permissions and Subscriptions</td>
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<tr>
<td>Contacts and Profiles</td>
<td>Marketing Permissions</td>
<td>Public OData API (API_MKT_INTERACTION_CONTACT) for Interaction Contacts. Interaction Contact is a generic term to group all natural persons (contacts, consumers, or suspects), companies and “unknowns”, who interact with your company. Interaction Contacts [page 465]</td>
<td>Data File Load · Permissions and Subscriptions</td>
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<tr>
<td>Contacts and Profiles</td>
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<td>Data File Load · Permissions and Subscriptions</td>
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<td>Commerce Marketing</td>
<td>Offers</td>
<td>Use the public OData API CUAN_OFFER_IMPORT_SRV to upload (import) offers from external sources. Import Offers [page 977]</td>
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<td>Commerce Marketing</td>
<td>Read Offers</td>
<td>Public OData API (API_MKT_OFFER_SRV) for Offers Read Offers [page 1006]</td>
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<td>Commerce Marketing</td>
<td>Discover Offers</td>
<td>Use the API OData service CUAN_OFFER_DISCOVERY_SRV for SAP Marketing Cloud Offers to find suitable offers for a consumer.</td>
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<td>Discover Offers [page 1012]</td>
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<td>Public OData API (API_MKT_COUPON_SRV) for Coupons.</td>
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<td>Coupons [page 1028]</td>
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<td>Commerce Marketing</td>
<td>Recommendations Interaction Data</td>
<td>OData service (PROD_RECO_RUNTIME_SRV) for posting interactions to an SAP HANA database.</td>
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<td>Recommendations Interaction Data [page 975]</td>
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<td>Custom Business Objects</td>
<td>Import data into a Custom Business Object by using an OData service</td>
<td>Data File Load - Custom Business Objects</td>
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<td>Import of Data into Custom Business Object [page 1056]</td>
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<td>Marketing Planning</td>
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<td>Financial Data [page 374] - SAP ERP Integration is the preferred method wherever possible.</td>
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<td>Data File Load - Actual and Committed Spend</td>
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<tr>
<td>Marketing Planning</td>
<td>Actual and Committed Spend</td>
<td>Actual and Committed Spend Data [page 1039] You can upload actual and committed spend data from an external ERP system into SAP Marketing Cloud using the CUAN_ACTUAL_IMPORT_SRV OData service.</td>
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<td>Campaign Management</td>
<td>Campaigns</td>
<td>Public OData API (API_MKT_CAMPAIGN_SRV) for Campaigns</td>
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<td>Campaigns [page 767]</td>
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<td>Campaign Execution Plans</td>
<td>CUAN_MPO_IMPORT_SRV</td>
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<td>Campaign Execution Plans [page 764]</td>
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<td>Area</td>
<td>Entity Type</td>
<td>Recommended Service</td>
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<td>Campaign Management</td>
<td>Campaign Message Content</td>
<td>Public OData API (API_MKT_CAMPAIGN_MESSAGE_SRV) for exporting and importing message content in multiple languages.</td>
<td>Campaign Message Content and Personalized Email Content [page 793]</td>
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<td>Campaign Performance</td>
<td>Public OData API (API_MKT_CMPGN_SUCCESS_IMPORT) for importing aggregated success data for Campaigns.</td>
<td>Campaign Success Data [page 812]</td>
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<td>Survey</td>
<td>(CUAN_SURVEY_IMPORT_SRV)</td>
<td>Data File Load - Survey Metadata</td>
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<td>Data File Load - Survey Response</td>
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<td>External Landing Pages</td>
<td>Public OData API (API_MKT_LANDING_PAGE) for writing external landing pages to the SAP Marketing Cloud system.</td>
<td>External Landing Pages [page 742]</td>
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<td>External Landing Pages</td>
<td>Public OData API (API_MKT_LANDING_PAGE) for writing external forms to the SAP Marketing Cloud system.</td>
<td>External Landing Pages [page 742]</td>
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<td>External Landing Page Value</td>
<td>Public OData API (API_MKT_LANDING_PAGE_VALUEHELP) for retrieving attribute values used in landing pages.</td>
<td>External Landing Page Value Help [page 748]</td>
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<td>Marketing Analytics</td>
<td>Audiences</td>
<td>Cluster reporting results or assign budgets to audiences.</td>
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<tr>
<td>Marketing Analytics</td>
<td>Brands</td>
<td>Add and edit brands, and import brand data from a comma-separated value (CSV) file. You can also delete values of brands that are not used in any business objects, such as budget plans.</td>
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<tr>
<td>Segmentation</td>
<td>Target Groups</td>
<td>Public OData API (API_MKT_TARGET_GROUP_SRV) for Target Groups</td>
<td>Export Target Groups and Target Group Member Data [page 760]</td>
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</tbody>
</table>
5.1.3 Consuming the Integration APIs

Overview

The SAP Marketing Cloud public APIs conform to the OpenAPI specifications. All the OData APIs are listed on the SAP API Business Hub at https://api.sap.com/. You can test these APIs on the SAP API Business Hub.

Setting Up Communication with SAP Marketing Cloud

To set up a communication system and communication arrangement, you require the business catalog role Communication Management (SAP_CORE_BC_COM) assigned to your user. For more information, see:

- Communication Management
- How to Create Communication Users
- How to Create Communication Systems
- How to Create a Communication Arrangement

Extending SAP Marketing Cloud

SAP S/4 HANA Cloud extension procedures are applicable for extension of SAP Marketing Cloud as well. For more information, see Extending SAP S/4HANA Cloud.
Configuring the Extension Application Connectivity to SAP Marketing Cloud

The following SAP S/4 HANA Cloud extension procedures are applicable for SAP Marketing Cloud as well.

- Using Basic Authentication
- Using Client Certificate Authentication
- Using SAML Bearer Assertion Authentication

5.1.4 Optimize Performance During OData Service Calls

This section describes how to call an OData service in a way that ensures a high degree of system security and performance. The description uses API_MKT_INTERACTION_SRV as an example, but the method applies to all OData services in SAP Marketing Cloud.

Importing Data into SAP Marketing Cloud

1. Request an x-CSRF token and a session cookie by calling the metadata document, for example, https://<mkt.com>/sap/opu/odata/sap/api_mkt_interaction_srv/$metadata.
2. In the get request header, you must add the parameter name x-csrftoken and the value 'Fetch', as shown in the code snippet. This get request returns the x-CSRF token and session cookie in the response.
3. Create the payload with the data you want to post.
4. Post the data via the corresponding endpoint and send the x-CSRF token and the session cookie that you received in step 1.
   In the post request:
   - In the parameter x-csrftoken enter the value from the token you received in step 1.
   - In the parameter Content-type, enter the value application/json.
   - Add the session cookie you received from the get metadata request, for example https://<mkt.com>/sap.opu.odata/sap/api_mkt_interactions_srv/InteractionsDeepInsert.
5. You should terminate the session cookie by calling the logoff service. For example, https://<mkt.com>/sap/public/bc/icf/logoff. By doing this, you ensure that the session cookie and the x-CSRF token are no longer valid. In this get request, you have to add:
   - The parameter ‘x-csrftoken’ and the value you received in step 1.
   - The session cookie you received from the get metadata request.

Important Points to Note

- The session cookie will automatically terminate after 30 minutes idle time.
- You should reuse the session cookie and the x-CSRF token for as long as you can. In other words, you should try to avoid exceeding 30 minutes idle time.
- By reusing the session cookie, you avoid having additional calls to generate a new cookie every time. This leads to improved performance because you have to execute the get call only once.
- By terminating the session cookie, you secure the system because the cookie and CSRF token can no longer be used.
Establish the connection
* get request to fetch the CSRF Token and session cookie

```abap
lv_header_field-name = 'x-csrf-token'.
lv_header_field-value = 'Fetch'.
INSERT lv_header_field INTO TABLE lt_header_fields.
TRY.
  IF ( lt_cookies IS INITIAL ).
    cl_cuan_http_helper=>s_get_instance( )->http_call(
      EXPORTING
      iv_destination   = '<SM59_ENTRY>'
      iv_url           = '/sap/opu/odata/sap/api_mkt_interaction_srv/
      $metadata'
      iv_method        = 'GET'
      it_header_fields = lt_header_fields
      IMPORTING
      ev_status_code   = lv_status_code
      ev_x_csrf_token  = lv_x_csrf_token
      et_cookies       = lt_cookies
    )
    CLEAR lt_header_fields.
    lv_header_field-name = 'x-csrf-token'.
    lv_header_field-value = lv_x_csrf_token.
    INSERT lv_header_field INTO TABLE lt_header_fields.
  ENDIF
CATCH cx_cuan_cpred_error INTO exc_cpred_error.
* Error handling
ENDTRY.
```

Create payload and
* send it via post request to SAP Marketing Cloud

```abap
WHILE lv_true = abap_true.
  TRY.
    cl_cuan_http_helper=>s_get_instance( )->http_call(
      EXPORTING
      iv_destination   = '<SM59_ENTRY>'
      iv_url           = '/sap/opu/odata/sap/api_mkt_interaction_srv/
      InteractionsDeepInsert'
      iv_method        = 'POST'
      iv_body_send     = lv_body
      it_header_fields = lt_header_fields
      it_cookies       = lt_cookies
      IMPORTING
      ev_body_receive  = lv_body_receive
      ev_status_code   = lv_status_code
    ).
    CATCH cx_cuan_cpred_error INTO exc_cpred_error.
    * Error handling
    ENDTry.
  ....
  ....
```
IF ( lv_status_code = '403' )
*   generate new CSRF-Token and session cookie and try again go to step 1
*...
*...
ENDIF.
ENDWHILE.

```
5.1.5 Best Practices and Recommended Package Sizes

This section contains best practices for optimizing data load of master data entities, recommended package sizes, and some troubleshooting tips.

General Recommendations

<table>
<thead>
<tr>
<th>Object Type</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| All entities | • When you upload entities synchronously, parallel upload of entities is not allowed since this can lead to data inconsistencies.  
• As a general principle, upload master data object types before transactional data object types. For example, when you upload data for multiple object types initially, you should do so in the following upload sequence:  
  1. Product categories  
  2. Products  
  3. Interaction Contacts  
  4. Interactions  
  5. Marketing Permissions  
  6. Marketing Subscriptions |

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## Object Type

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td><strong>Synchronous and Asynchronous Processing</strong></td>
<td>When you import contacts using an OData service, the data is processed <strong>asynchronously</strong> by default. This means that when you trigger a contact import, in most cases an OK response, such as a receipt notification, is returned almost immediately. An exception to this are data uploads that might contain severe errors, such as parse or format errors. These do not return an OK response but an error message. The data you upload lands in a staging area, where it is then further processed. To view the processing status of data uploads and to check for errors or success messages, you must open the Import Monitor app. In the event of errors, you can restart or discard the import from the import log. For more information, see Import Monitor [page 397].</td>
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<tr>
<td>● You can force imports to be processed synchronously by selecting the flag <strong>SAP-CUAN-ForceSynchronousProcessing</strong>. In this case, if an error is detected, an error message is returned immediately.</td>
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<td>● In a synchronous import of contacts, only contacts with errors are aborted. All contacts within the same package without errors are imported successfully. You should refer to the Import Monitor to check for errors, correct the errors and post these contacts again.</td>
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<tr>
<td>● In an asynchronous import of contacts, in the event of errors, you can correct the errors and restart the import from the Import Monitor directly.</td>
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<tr>
<td>● Do not mix different types of services for operations involving the same data source for the same business entity. For example, when importing contacts from a web shop, do not use one service for a PUT operation and a different service to PATCH contacts. You should, however, migrate from CUAN_IMPORT to the API* services.</td>
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</table>

## Interactions

<table>
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<tr>
<th>Interactions</th>
<th>Synchronous and Asynchronous Processing</th>
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<tbody>
<tr>
<td><strong>Import packages that contain up to 999 interactions are processed synchronously.</strong> Packages with <strong>1000 interactions or more</strong> are typically posted to the staging area and are processed asynchronously.</td>
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<tr>
<td>● In a synchronous import of interactions, success notifications are returned immediately. In the event of errors, only a warning notification is returned, indicating that there were problems. To see exact details of any errors that occurred, you must open the Import Monitor app.</td>
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<tr>
<td>● In an asynchronous import of interactions, processing is done via the staging area. An OK response is returned in most cases, indicating that the import has landed in the staging area. To see exact details of the import status, that is, whether there were errors or whether the import was successful, you must open the Import Monitor app. An exception to this are data uploads that might contain severe errors, such as parse or format errors. These immediately return an error message from Gateway.</td>
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</table>

### Note

The system automatically tries to restart the import of any interactions that have been blocked and written to the staging area. This takes place every minute for up to 9999 attempts, taking roughly one week. You can manually process interactions with errors by correcting the errors, for example, by changing the configuration. For more information, see Import Monitor [page 397].
### Object Type: Recommendations

- The entity `InteractionDeepInsert` is available to enable better performance for mass imports. We recommend that you use this entity when importing interaction data. For more information, see [Interactions](#) [page 605].

### MarketingPermissions and MarketingSubscriptions

- When you import marketing permissions or marketing subscriptions using the OData services `API_MKT_CONTACT` (version 0004), `API_MKT_CORPORATE_ACCOUNT` (version 0003) or `API_MKT_INTERACTION_CONTACT` (version 0003), data is processed asynchronously by default. During asynchronous processing, you will receive an OK response, such as a receipt notification. Only in the event that the payload is not supplied correctly, an error message and an http code > 400 is returned. Such errors are:
  - Payload cannot be parsed because of an error
  - Format errors
  - Key fields are not supplied properly

  You can monitor the asynchronous processing by launching the `Import Monitor` App. In the case of errors, you can restart or discard the messages from the import log.

- When you use synchronous processing and the data could not be processed properly, error messages are returned immediately to the caller. An error message is returned and the http code will be larger than 400. You will not find these entries in the `Import Monitor` app.

  **Note**
  
  Be aware that in case of errors, the whole payload is rejected and nothing is posted. If you want to use synchronous processing, you have to set the field `SAP-CUAN-ForceSynchronousProcessing` to true. You also have to take into account that there might be timeout when sending large payloads with synchronous calls, resulting in data loss. This is avoided during asynchronous processing.

  - **Recommendation**

    We recommend asynchronous processing for mass data.

- As marketing permissions and marketing subscriptions are separate entities as of version 0003 of the API services, you have to populate both nodes if you want to send marketing permissions and marketing subscriptions.

  - **Recommendation**

    For the initial load, we recommend that you choose a two-step approach: Loading contacts in a first step and loading marketing permissions and marketing subscriptions in a second step after the initial load of contacts has been finished. If you want to send contacts and marketing permissions and marketing subscriptions at the same time, ensure that you send all entities within one request, which will ensure the processing in a proper sequence.

  - To avoid locking problems, all marketing permissions and marketing subscriptions belonging to a contact should be part of one package.
# Recommended Package Sizes

<table>
<thead>
<tr>
<th>Object Type</th>
<th>Package Sizes</th>
</tr>
</thead>
</table>
| All entities  | - The maximum supported OData request size is **100** megabytes.  
            | - Depending on your package size, we recommend using at most 5 parallel sessions to load the data. If you load asynchronously, try increasing the number of concurrent sessions incrementally. Start with just two, then three, and so on. |
| Contacts      | OData         |
|               | - The recommended package size is 1000 entities per request. |
|               | i Note        |
|               |   - If you send contacts together with their marketing permissions and subscriptions (which is what we recommend), you have to make sure that the sum of all entities does not exceed 1000. For example, 100 contacts with their 900 permissions/subscriptions amounts to 1000 entities. Therefore, you should calculate the average number of permissions and subscriptions per contact in advance. |
|               |   - More than 10000 will result in error.  
            |   - We recommend to use the default **asynchronous** processing mode for initial loads. |
| Interactions  | OData API_MKT_INTERACTION |  
|               |   - Without subnodes or long Edm Strings: Max. 50000 |
|               | i Note        |
|               |   - You can check the content of Edm Strings in the metadata. |
|               |   - Without products, 2 interests (on average): 20000  
            |   - With 5 products, 5 Interests (no long Edm Strings): 5000  
            |   - With 5 products, 5 Interests (with long Edm Strings): 1000 - 2000 |
|               | CSV           |
|               |   - Max. 10000 (memory restricted)  
            |   - Recommended 5000 |
| Products      | Maximum package size: 10000 |
| Product Categories | Maximum package size: 10000 |
| Interests     | 500 (2 Languages) |
Object Type | Package Sizes
--- | ---
Marketing Permissions and Marketing Subscriptions | i Note

Performance basically depends on which other processes are running in parallel in marketing.

- Do not use a packages size that exceed 1000 data sets.
- Use parallel processing. Sending multiple requests in parallel will increase the performance. We recommend sending 10 to 20 parallel requests.
- More than 10000 entries per package will result in an error.

Related Information

Import Monitor [page 397]

5.1.6 Import Monitor

Monitor and explore data imports that are triggered by OData or upload services from external systems.

With this app, administrative users can monitor the data import from outside SAP Marketing Cloud. You can import data via upload services, or OData services.

Within the integration of marketing with sales, data are transferred from SAP Cloud for Customer, and SAP CRM to SAP Marketing Cloud via SAP Cloud Platform Integration. The data import into SAP Marketing Cloud is done by OData services.

As a marketing administrative user, you can handle import notifications that are caused by the import of business partner or business document data from SAP Cloud for Customer, and SAP CRM to SAP Marketing Cloud. SAP Marketing Cloud generates a list of notifications with the related status that denotes the progress of a data import:

Notifications

You can select an import notification from a list that provides all notifications including important metadata, such as service name, date, size, status.

The system lists all import notifications grouped by their status:

- **In Process**: The notification is not yet finalized. Data import is not complete so far.
- **Error**: The import notification has caused an error, for example because of mapping errors. Data import has not taken place.
- **Success**: The notification is processed. Data import is finalized.
## Details of an Import Notification

For each import notification, the system provides the following detailed grouped information for the File Import:

- **Import Notification**
  - **Size**: The number of data records processed in an import notification
  - **Interface**: The interface that has triggered the data import
  - **Service Name**: The service, for example an OData service that has triggered the import of data, such as business partners, business documents, or marketing attributes
  - **Source System**: Source system of the data records to be transferred
  - **Created By**: The technical user used for import processing.
  - **Force Synchronous Processing**: Indicates whether data is stored for the import notification or not, and whether a restart of the notification is possible or not:
    - **Yes**: No data is available to inspect and a restart is not possible
    - **No**: Data is available to inspect and a restart is possible.
  - Reference message that allows you to identify the message in all involved systems, such as middleware or sending system, with different monitoring tools:
    - **SAP Cloud Platform Integration (Middleware)**
      - In SAP Cloud Platform Integration, choose **Operations**, and under **Monitor Message Processing** click on **All Integration Flows**. Enter the Reference Message ID under **Application Message ID**. The system displays the message. If **Message Tracing** is activated, you can also display the message payload.
    - **Source system SAP Cloud for Customer**
      - In SAP Cloud for Customer, navigate to the **Web Service Message Monitoring** under **Administration**. Open the Advanced Search, enter the Reference Message ID in search field **Message ID**, and choose **Go**. The system displays the original message.
    - **Source System SAP CRM**
      - To find the original message in source system SAP CRM you have to carry out multiple steps:
        - In SAP Cloud Platform Integration, choose **Operations**, and under **Monitor Message Processing** click on **All Integration Flows**. Enter the Reference Message ID under **Application Message ID**. The system displays the message.
        - Click on **Message Processing Log** and search for string `com.sap.sod.utils.idoc.soap.idocassign`. The system displays one or more entries, as follows: `com.sap.sod.utils.idoc.soap.idocassign= [000000000006115,0000000000081447]` The second number displayed in the square brackets is the IDoc number.
        - In the SAP CRM system, call transaction **IDoc List (WE05)**, and search for the corresponding IDoc with the IDoc number copied from SAP Cloud Platform Integration.

- **Timestamps**
  - Date and time, when the notification was generated or changed.
    - **External**: Timestamp of the arrived import notification as set from sender system; Local time of the sender.
○ **External (UTC):** Timestamp of the arrived import notification as set from sender system; Universal date and time.

○ **Created:** Timestamp of the arrived import notification as set from receiving system; Local time of the user.

○ **Changed:** Timestamp of the latest change of the import notification as set from the receiving system; Local time of the user.

- **Status**
  ○ Status of the notification
  ○ Number of messages

- **Messages** about the performed notification

- **Data** for all import notifications with status **Error**.

### Note

Errors, that is, data records that cannot be saved in SAP Marketing Cloud, can be caused by the following reasons:

- Data is locked by another user
- Customizing data is missing, such as origins of contact IDs, because the relevant BC set was not unpacked
- Mapping errors occurred in SAP Cloud Platform Integration

By restarting or discarding, the notification errors can be resolved. For mapping errors, you can only discard the notification, because the error must be resolved in the relevant SAP Cloud Platform Integration system.

### Features

The following features are available:

#### Features Overview of Import Monitor

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Selection</td>
<td>You can select several import notifications, and restart or discard them in one step.</td>
</tr>
<tr>
<td>Search</td>
<td>You can search for import notifications by entering the user name, or the notification ID.</td>
</tr>
<tr>
<td>Sort</td>
<td>You can sort the import notifications by:</td>
</tr>
<tr>
<td></td>
<td>- Service name</td>
</tr>
<tr>
<td></td>
<td>- Source system</td>
</tr>
<tr>
<td></td>
<td>- Data and time, ascending, or descending</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Restart</td>
<td>You can select a notification, and <strong>Restart</strong> it to recheck to processed data. <strong>Example:</strong> For notifications with status <strong>Error</strong> you can trigger actions to resolve the error. After the correction, you can restart the notification, that is, the processing of the imported data, to check whether your correction was successful. The notification status then turns to <strong>Successful</strong>. <strong>i Note</strong> If no restart is possible for the current import notification you can correct error only externally, that is, in the source system, or in the middleware system.</td>
</tr>
<tr>
<td>Discard</td>
<td>You can <strong>Discard</strong> a notification that is no longer necessary or valid.</td>
</tr>
<tr>
<td>Share</td>
<td>You can share the notification via email, or on SAP Jam.</td>
</tr>
<tr>
<td>Data</td>
<td>You find data records of the current data import, with status <strong>Error</strong>. By <strong>Show Full Record</strong>, all fields of a data record are revealed. You can switch between the different data records using <strong>Previous Record</strong>, and <strong>Next Record</strong>.</td>
</tr>
<tr>
<td>Messages</td>
<td>You find all messages generated by the current import notification. The messages contain descriptions of the activities performed for a notification, classified by their severity: <strong>Information</strong>, <strong>Warning</strong>, or <strong>Error</strong>. You find detailed information for a message, if available, under <strong>More Information</strong>.</td>
</tr>
</tbody>
</table>

### 5.1.7 Data Load Monitor

Monitor all import messages and keep track of their status.

The **Data Load Monitor** app enables you to optimize your data imports by enabling you to:

- View import messages across the landscape and decide what action to take.
- Correct errors in the Marketing or in the source systems in a timely fashion and restart imports.
- Analyze imports and messages by multiple dimensions, and quickly resolve issues.
- Identify system issues that may have been previously hidden.
• View various status messages such as success messages, errors, and warnings to identify issues with data mapping or system configuration.

**Video (English Only)**

This short video shows how the Data Load Monitor can support you in safeguarding the quality of data imports.

Open this video in a new window

**Analyzing Import Errors**

The Data Load Monitor collects all import messages (errors, warnings, and success messages) and displays the number of times individual messages occur across all imports. We recommend that you use the app to preform error analysis on a regular basis, eliminate frequent causes of error, and so optimize the quality of your data imports. Error analysis can be done in 4 simple steps:

1. Gain an overview of the errors and warning occurring in your imports by setting the filter options according to your requirements.

   **Note**
   There are a large number of filter options available in the Compact Filters, for example, import header, import service used, or source system ID. Note, however, that you cannot search on individual payload content. Use the **Import Monitor** app if you want to analyze specific payloads.

2. Analyze the list of errors and warnings and decide which errors can be fixed in the Marketing system, and which errors must be fixed in the source system.

3. When you have fixed all possible errors, filter the list for all messages that have been fixed and choose **Restart All** to restart these imports.

4. You can then use the **Discard All** function to discard all other entries in the list.

**Related Information**

Best Records
Videos - Best Practices for Data Load [page 383]
5.1.8 HTTP Response Status Codes

Every HTTP request that is received by a server is responded to with a 3-digit HTTP status code. They are grouped into five classes.

The class of a status code can be quickly identified by its first digit:

- 1xx: Informational
- 2xx: Success
- 3xx: Redirection
- 4xx: Client Error
- 5xx: Server Error

**Note**

HTTP errors are often caused by incorrect URLs, interconnected proxy servers, or by slow processing in a system. Some typical 4xx and 5xx error codes are described in the next section.

5.1.8.1 Client Errors (4xx)

Client errors, or HTTP status codes from 400 to 499, are the result of HTTP requests sent by a HTTP client. Even though these types of errors are client-related, it is often useful to know which error code a user is encountering to determine if the potential issue can be fixed by server configuration.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 Bad Request</td>
<td>The 400 status code, or Bad Request error, means the HTTP request that was sent to the server has invalid syntax.</td>
</tr>
<tr>
<td>401 Unauthorized</td>
<td>The 401 status code, or an Unauthorized error, means that the user trying to access the resource has not been authenticated or has not been authenticated correctly. This means that the user must provide credentials to be able to view the protected resource. An example scenario where a 401 Unauthorized error would be returned is if a user tries to access a resource that is protected by HTTP authentication if enters invalid username and password.</td>
</tr>
<tr>
<td>403 Forbidden</td>
<td>The 403 status code, or a Forbidden error, means that the user made a valid request but the server is refusing to serve the request, due to a lack of permission to access the requested resource.</td>
</tr>
<tr>
<td>404 Not Found</td>
<td>The 404 status code, or a Not Found error, means that the user is able to communicate with the server but it is unable to locate the requested resource.</td>
</tr>
</tbody>
</table>
5.1.8.2 Server Errors (5xx)

Server errors, or HTTP status codes from 500 to 599, are returned by server when it is aware that an error has occurred or is otherwise not able to process the request.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 Internal Server Error</td>
<td>The 500 status code, or Internal Server Error, means that server cannot process the request for an unknown reason.</td>
</tr>
<tr>
<td>502 Bad Gateway</td>
<td>The 502 status code, or Bad Gateway error, means that the server is a gateway or proxy server, and it is not receiving a valid response from the backend servers that should actually fulfill the request.</td>
</tr>
<tr>
<td>503 Service Unavailable</td>
<td>The 503 status code, or Service Unavailable error, means that the server is overloaded or under maintenance. This error implies that the service should become available at some point.</td>
</tr>
<tr>
<td>504 Gateway Timeout</td>
<td>The 504 status code, or Gateway Timeout error, means that the server is a gateway or proxy server, and it is not receiving a response from the backend servers within the allowed time period.</td>
</tr>
</tbody>
</table>

5.1.9 Open Marketing Connectors (OMC)

Open Marketing Connectors (OMC) from SAP Marketing Cloud make integrating with the marketing solution easy for the outside world.

Open Marketing Connectors describe business-relevant use cases that cover holistic business processes. They comprise multiple APIs that support the steps of the business process. Partners and third-party solution providers who want to connect their solution with SAP Marketing Cloud can easily identify which APIs they have to use and how to implement them.

5.2 Contacts and Profiles

5.2.1 OMC: Contacts and Profiles

The Open Marketing Connector for Contacts and Profiles aims to provide you with end-to-end guidance for the smooth integration of contact data, marketing permissions, and interactions derived from external sources, such as from data providers, with your SAP Marketing Cloud solution. This document presents three sample business scenarios to illustrate the end-to-end process. This should enable you to set up your own integration, no matter what your scenario is.
Business Scenarios

The following sample business scenarios are described:

1. **Lead Processing at Trade Fair**
   A professional agency handles lead processing for your company at a trade fair, including collection of contact data and marketing permissions.

2. **Service Provider for Online Events**
   A service provider hosts your online customer events, such as webinars, and handles lead collection, registration, and records attendance.

3. **Data Provider**
   You search a data provider's database to expand and enrich your customer pool.

Integration Points and Process Steps

**Scenario 1: Lead Processing at Trade Fair by Agency**

An external agency creates an app specifically for entering data collected at trade fairs.

The sales professional uses the app to enter data on leads and collect permissions for follow-up activities, such as event attended and opt-in for phone calls, or invitations to marketing or sales events, and sends the data to SAP Marketing Cloud to trigger follow-on activities.

---

**Process Steps**
1. An external marketing agency creates an app for entering data collected from leads at trade fairs.
2. A sale professional enters the lead data, any related marketing permission data, and info on follow-up activities, such as phone calls, into the app.
3. He then sends the data to SAP Marketing Cloud to trigger the follow-on actions.
   ○ This triggers the creation of contacts with marketing permissions in SAP Marketing Cloud using the API Service API_MKT_CONTACT using a PATCH operation on the entities Contacts and Marketing Permissions.
   ○ It also creates interactions for the follow-on actions, such as phonecalls, using the API Service API_MKT_INTERACTION and a PATCH operation.

**Scenario 2: Service Provider for Online Events**

A company’s online customer events are hosted on a service provider’s platform.

The service provider sets up the online event, for example a webinar, on their platform according to the company’s specifications, handles registrations, and records attendance.

Customers register on the provider platform and participate in the webinar. The app records attendance and sends the data to SAP Marketing Cloud.

**Process Steps**

1. A service provider sets up and hosts an online customer event. Their platform handles registration and attendance.
2. A contact registers on the platform and enters some personal data.
   This triggers the creation of a contact in SAP Marketing Cloud using the API Service API_MKT_CONTACT and a PATCH operation.
3. The contact attends the online event.
   This triggers the creation of an interaction to record the event attendance using the API Service API_MKT_INTERACTION using PATCH.

**Scenario 3: Contact Enrichment via Data Provider**

A data provider continuously collects and enriches contact data and makes it available for sales and marketing purposes.
Your company wants to expand its contact database to include all corporate accounts, including their main contact persons, in a specific geographical region and industry size. The search returns a list of corporate accounts and contacts according to the segmentation parameters.

Your company regularly searches the data provider’s database for updates to existing contact profiles and also to enrich their customer base with new contacts.

**Process Steps**

1. A data provider offers a searchable database of companies and their main contacts.
2. The company using the data provider’s database searches for corporate accounts and contacts and then imports the data into SAP Marketing Cloud.
   This triggers the creation of contacts and corporate accounts in SAP Marketing Cloud using the API Services `API_MKT_CONTACT` and `API_MKT_CORPORATE_ACCOUNT`, and a `PATCH` operation.
3. The company regularly searches the data provider’s database to enrich their own database.
   This triggers the update of contacts and corporate accounts in SAP Marketing Cloud using the API Services `API_MKT_CONTACT` and `API_MKT_CORPORATE_ACCOUNT` using `PATCH`.

**Prerequisites**

Now you’ve explored the possible business scenarios, you might be interested in which prerequisites need to be fulfilled.

- **Scope Items**
  The following scope items are relevant and are included in the base scope:
  - Consumer and Customer Profiling (JC1)
  - Permission Marketing (IT1)
- **Business Catalogs**
The following business catalogs are relevant for authorization for the API services:

<table>
<thead>
<tr>
<th>Business Catalog Name</th>
<th>Required for API</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_CEC_BC_MKT_API_IC2_PC</td>
<td>API_MKT_CONTACTS</td>
</tr>
<tr>
<td></td>
<td>API_MKT_CORPORATE_ACCOUNTS</td>
</tr>
<tr>
<td>SAP_CEC_BC_MKT_API_IA_PC</td>
<td>API_MKT_INTERACTIONS</td>
</tr>
</tbody>
</table>

For more information, see: Business Catalogs for Business Scenarios.

- **Communication Scenario**
  To integrate with Public APIs, you must start by configuring communication between your SAP Marketing Cloud solution and the Public APIs. This includes assigning the following communication scenario IDs to communication users to enable communication between systems:

<table>
<thead>
<tr>
<th>Communication Scenario ID</th>
<th>Scenario Name</th>
<th>Required if you want to integrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_COM_0207</td>
<td>Marketing – Interaction Contact Integration</td>
<td>Contacts and Corporate Accounts</td>
</tr>
<tr>
<td>SAP_COM_0206</td>
<td>Marketing – Interactions Integration</td>
<td>Interactions</td>
</tr>
</tbody>
</table>

For more information, see Consuming the Integration APIs [page 390].

- **Configuration Activities**
  SAP Marketing Cloud delivers preconfigured content but the configuration activities in the Contacts and Profiles [page 403] section may also be relevant. We recommend that you at least have a close look at the configuration activity Origin of Contact IDs.
  For more information, see Configuration Apps - Manage Your Solution.

### How to Implement the API Services

If you are unfamiliar with the data load concepts in SAP Marketing Cloud, the following resources will help you get up to speed more quickly:

1. If you want to know what happens to contact data in SAP Marketing Cloud, have a look at these short Deep Dive into Data Load videos Contact Data.
2. It is a good idea to familiarize yourself with the OD ata Service Metadata to get an overview of the available fields, standard entities, and properties. A link to the metadata is provided in the documentation for each service. Search the documentation for service metadata URI to find this quickly.
3. Read the Basic Concepts topic for the service you want to use and take note of any warnings or additional notes.
4. Use the sample payloads provided.

The following API services are relevant for the scenarios described in this guide:

- **API_MKT_CONTACT**
  Contacts [page 408]
5.2.2 Contacts

Public OData API (API_MKT_CONTACT) for reading and writing master data about Contacts. Contacts are natural persons who interact with your company.

**Note**

We recommend that you use the current version 0004 of this service. Do not revert to using version 0003, once you start using version 0004 since this may result in data inconsistencies. However, if you want to continue using one of the previous versions, you’ll find the help links here:

- Contacts API, Version 0003: Contacts API, Version 0003
- Version 0002: Contact, Interaction Contact, Corporate Account API, Version 0002

**Technical Data**

**Caution**

The API services available in SAP Marketing Cloud must not be used for mass read (GET) operations. In other words, you cannot use them for extracting all available data, for example, to extract millions of contacts or interactions from your marketing system.

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorizations</td>
<td>The following business catalog roles are required:</td>
</tr>
<tr>
<td></td>
<td>- For version 4: SAP_CEC_BC_MKT_API_IC4_PC</td>
</tr>
<tr>
<td></td>
<td>- For version 3: SAP_CEC_BC_MKT_API_IC3_PC</td>
</tr>
<tr>
<td></td>
<td>- For version 2: SAP_CEC_BC_MKT_API_IC2_PC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Scenario ID</th>
<th>SAP_COM_0207</th>
</tr>
</thead>
</table>
Component for Incidents

- CEC-MKT-DM-IC (Interaction Contacts)
- CEC-MKT-DM-PER (Permissions and Subscriptions)

**i Note**
Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](#) [page 402].

**OData Version**
2.0

**Root URI**
https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004

**Service Metadata URI**
https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$metadata

**Field Extensibility Supported**
Yes. For more information, search for **extensibility** in Structure of OData Service API_MKT_CONTACTS [page 414].

**i Note**
You need to open the collapsible sections of the document first.

---

**Technical Field Documentation**

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://%3CServer%3E:%3CPort%3E/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$metadata?sap-documentation=all">https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$metadata?.sap-documentation=all</a></td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**Marketing - Contacts Details Page**

- General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.
  1. On the Details page, click Download Specification and download as EDMX.
  2. Specify which application you want to use to open the EDMX file type.

**Contacts API**

- General access link takes you directly to the Contacts metadata file. One-time registration or logon is required.
Basic Concepts

The public API for Contacts API_MKT_CONTACT_SRV supports operations on the Interaction Contact Business Object and the Marketing Permissions Business Object. There is no separate public OData API for marketing permissions. The corresponding entity is part of this service since marketing permissions are always stored for a certain interaction contact.

Structure of OData Service API_MKT_CONTACTS

This document describes the structure of the Public OData API service API_MKT_CONTACT.

Payload Examples

Payload examples for API_MKT_CONTACT.

Function Imports

Function imports are used to perform custom operations on an entity, which are typically not provided by OData operations. This section contains payload examples for the following function imports:

5.2.2.1 Basic Concepts

The public API for Contacts API_MKT_CONTACT_SRV supports operations on the Interaction Contact Business Object and the Marketing Permissions Business Object. There is no separate public OData API for marketing permissions. The corresponding entity is part of this service since marketing permissions are always stored for a certain interaction contact.

Switching to Version 4

Version 0004 of API_MKT_CONTACT_SRV is the prerequisite if you implement the B2B function Contact-to-Account Relationships. Regardless of whether you implement Contact-to-Account Relationships, we strongly recommend that you use version 0004 of this service for importing contacts.

If you switch from a lower version of the service to version 0004, please note the following:

- If you migrate from API_MKT_CONTACT_SRV_0002 to API_MKT_CONTACT_SRV_0004, be aware that version 0002 had only one entity MarketingPermission for both Permissions and Subscriptions, whereas in version 0004 there are separate entities for Permissions and Subscriptions.
Email, phone, mobile and fax IDs can now only be imported as AdditionalID entities. In previous versions, these sub-entities were imported as part of the OriginData entity. So what happens to existing IDs that you previously loaded using another service? The table explains what happens to existing email, fax, phone, and mobile IDs when you start importing data with version 0004.

### Operations with API_MKT_CONTACT_0004

<table>
<thead>
<tr>
<th>If You Perform This Operation</th>
<th>Are Existing IDs Deleted?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUT on OriginData</td>
<td>Yes</td>
</tr>
<tr>
<td>PUT on OriginData and AdditionalIDs</td>
<td>Yes</td>
</tr>
<tr>
<td>PUT on OriginData and AdditionalIDs and Function Import ContactOriginDeleteAdditionalIDs</td>
<td>Yes</td>
</tr>
<tr>
<td>PUT on AdditionalIDs</td>
<td>No</td>
</tr>
<tr>
<td>PUT on AdditionalIDs and Function Import ContactOriginDeleteAdditionalIDs</td>
<td>Yes</td>
</tr>
<tr>
<td>PATCH on OriginData</td>
<td>No</td>
</tr>
<tr>
<td>PATCH on OriginData and AdditionalIDs</td>
<td>No</td>
</tr>
<tr>
<td>PATCH on OriginData and AdditionalIDs and Function Import ContactOriginDeleteAdditionalIDs</td>
<td>Yes</td>
</tr>
<tr>
<td>PATCH on AdditionalIDs</td>
<td>No</td>
</tr>
<tr>
<td>PATCH on AdditionalIDs and Function Import ContactOriginDeleteAdditionalIDs</td>
<td>Yes</td>
</tr>
<tr>
<td>Function Import ContactOriginDeleteAdditionalIDs</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Sample Use Cases

<table>
<thead>
<tr>
<th>If You Want To</th>
<th>The Recommended Method Is</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform a full update of a contact in a running system</td>
<td>PATCH on OriginData, Function Import ContactOriginDeleteAdditionalIDs, and PATCH on AdditionalIDs</td>
</tr>
<tr>
<td>Add an additional ID to an existing contact, for example, a cookie ID</td>
<td>PUT on AdditionalID</td>
</tr>
<tr>
<td>Read contact data out of the system</td>
<td>GET Request on relevant entity</td>
</tr>
</tbody>
</table>

### Processing Info and Best Practices

- **When to use PUT and PATCH:**
  - PUT requests are most suitable for an initial data import, for example, when you want to create a new contact. A PUT request requires that you always send all properties. Any properties that you omit are overwritten by blank entries. That is, any existing entries are deleted. If no record is found, a new record is created. In other words, the PUT request functions as a full upsert.
We recommend that you use PATCH requests for all other imports. A PATCH request updates only the properties provided in the request body and leaves everything untouched that was not provided. So, you can omit all properties that are not to be changed. Like the PUT request, if no record is found, a new record is created with the available properties. In other words, the PATCH request functions as a delta upsert.

An additional advantage of using PATCH is that you specify your own sequence ID. For this reason, it is more flexible than a PUT operation, where the sequence ID is set by default and cannot be changed.

Basically, since you can use PATCH with the same payload as you would use for PUT, the PATCH operation is more universal and you can work with it exclusively.

We recommend that you don’t mix PUT and PATCH operations. Doing so can lead to unwanted results since a PUT operation is processed before a PATCH.

- **Do not combine a DELETE operation with other OData operations in one changeset.**
  
  We recommend that you do not combine the OData operations PUT, PATCH, POST, with a DELETE operation in the same changeset. For example, let’s say you want to update data for Contact A by adding an additional email address and at the same time delete a mobile number that is no longer valid. So, you send a PUT operation on the AdditionalId entity with the new email address and a DELETE operation within the same changeset. One of these operations could cancel out the other and the resulting dataset will not be as intended.

  **Recommended Practice:** For such combined operations including a DELETE operation, we recommend that you always use the relevant function import, which allows deletion of specific entities, together with the appropriate OData operation PUT, PATCH, or POST within the same changeset.

- **Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](https://docs.oasisopen.org/odata/odata/v4.0/cts/).** The batch request must contain a header parameter `content-type` specifying the value `multipart/mixed` and `boundary=batch`.

- **Use of codes versus free text:** The properties listed in the left column of the table require code values. Incorrect codes will result in import errors, indicating that the corresponding code is not valid. If you are not thoroughly familiar with the internal codes available in SAP Marketing for these properties, you should use properties that allow a free text. For example, if you do not know that DE is the country code for Germany, you can use Germany as the free text.

<table>
<thead>
<tr>
<th>Code in SAP Marketing</th>
<th>Free Text Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>CountryName</td>
</tr>
<tr>
<td>Industry</td>
<td>IndustryName</td>
</tr>
<tr>
<td>Department</td>
<td>DepartmentName</td>
</tr>
<tr>
<td>Function</td>
<td>ContactFunctionName</td>
</tr>
<tr>
<td>GenderCode</td>
<td>GenderCodeName</td>
</tr>
<tr>
<td>Language</td>
<td>LanguageName</td>
</tr>
<tr>
<td>MaritalStatus</td>
<td>MaritalStatusName</td>
</tr>
<tr>
<td>AddressRegion</td>
<td>RegionName</td>
</tr>
<tr>
<td>FormOfAddress</td>
<td>FormOfAddressName</td>
</tr>
</tbody>
</table>

You must map your free text names to the available codes in the Map Free Text app. For more information, see Map Free Texts.
- Do not mix different types of services for operations involving the same data source. For example, when importing contacts from a web shop, do not use the CUAN_IMPORT service for a PUT operation and then the API_MKT_CONTACT service to PATCH contacts. You can, however, migrate from CUAN_IMPORT to the API* services.

- The origin that you pass via the property `ContactOrigin` cannot be shareable. If the `main` origin is set to `Shareable`, this will trigger an error. For more information, see Configuring Origins. You can view sample payloads and test the API at https:\/\api.sap.com/api/API_MKT_CONTACT_SRV/resource.

- **UTC Timestamp of Permissions:**
  The UTC timestamp of permissions cannot lie in the future.
  When you import permissions, they must not have a timestamp that lies in the future. The timestamp of imported permissions is always in UTC. The field name in the OData service is called `PermissionUTCDateTime`. If you want to use your local timestamp, you have to add the time zone information, that is, your local time zone together with the time zone offset or enter a timestamp that is converted to UTC.

  ❖ Example
  
  The date and time information is adapted by the standard time difference (offset) with +01:00 for Central European Time (CET) or -05:00 for Eastern Standard Time (EST). For example:
  
  2019-01-01T12:00:00+01:00
  
  If you live east of UTC and enter your timestamp in your local time zone without time zone offset, this will result in a future timestamp. For example, you live in Germany and your local time is 8 a.m on November, 28. If you enter this as the UTC timestamp without a time zone offset, the UTC permission timestamp will show as 8 a.m., November 28, while in the UTC time zone it is 7 a.m., November 28. You have created a UTC permission timestamp that lies in the future and is invalid.

**Error Messages**

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 204 is returned. Any processing errors are recorded in the SAP Marketing Cloud system in the `Import Monitor` app, where they can be monitored, restarted and discarded.

By default, data processing for contacts, interaction contacts, corporate accounts, or marketing permissions is asynchronous. In most cases an OK response, such as a receipt notification, is returned almost immediately. An exception to this would be data uploads that might contain severe errors, such as parse or format errors, and so would not return an OK response but an error message. The data you upload lands in a staging area, where it is then further processed. You can change the default setting to synchronous processing by setting the property `Sap-Cuan-ForceSynchronousProcessing` to `True`. In this case, any error messages are returned as soon as they are detected.

To view the processing status and to check for errors or success messages, you must launch the `Import Monitor` app. Messages for marketing permissions in this app are displayed under the API for Contact, API for Interaction Contacts, or API for Corporate Accounts depending on the API OData service you use. In the event of errors, you can restart or discard the import in the `Import Monitor`.

For more information, see HTTP Response Status Codes [page 402].
Field Extensibility

You can add customer-specific fields using the Custom Fields and Logic app. For more information about how to do this, see Custom Fields and Logic.

Please enable the Data Source under UIs and Reports: API_MKT_CONTACT_SRV 0004

Parent topic: Contacts [page 408]

Related Information

Structure of OData Service API_MKT_CONTACTS [page 414]
Payload Examples [page 441]
Function Imports [page 460]
Best Practices and Recommended Package Sizes [page 393]

5.2.2.2 Structure of OData Service API_MKT_CONTACTS

This document describes the structure of the Public OData API service API_MKT_CONTACT.

Make sure you read these topics before you start:

- Best Practices and Recommended Package Sizes [page 393]
- Basic Concepts [page 410]

Request Header

The request header contains the additional header fields listed in the table. Remember to include at least the mandatory request header fields in each payload.

<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
<th>Description</th>
<th>Max.Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-RequestTimestamp</td>
<td>'2017-09-28T12:13:14'</td>
<td>Timestamp of the import run in this format.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Example</td>
<td>Description</td>
<td>Max. Length</td>
<td>Mandatory</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Sap-Cuan-SequenceId</td>
<td>PatchAddress</td>
<td>This defines a set of fields that are to be updated, for example, address fields, which can be interpreted as a field group. The combination of the header fields Sap-Cuan-Sequenceld and Sap-Cuan-RequestTimestamp is used to check the sequence of the data received. If the data that is received has a timestamp older than already imported data, it is ignored.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemType</td>
<td>EXT</td>
<td>Type of source system. This is a free text field.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemId</td>
<td>HYBRIS</td>
<td>Identifier of source system. This is a free text field.</td>
<td>255</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-ForceSynchronousProcessing</td>
<td>X</td>
<td>This flag is deselected by default, which means that uploaded data is processed asynchronously. On upload, a success message is output immediately, unless there are errors such as authorization issues or bad requests. Objects are uploaded to the staging area and processed successively from there. All status messages can be displayed in the Import Monitor app. You can force imports to be processed synchronously by setting this flag. In this case, an error message will be returned as soon as an error is detected. Such error messages are output in the Import Monitor app.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-ReferenceId</td>
<td>345g67980907</td>
<td>External reference of the inbound message</td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>
## Entity Sets

The Contact OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts</td>
<td>This entity contains all contact information from the contact’s best record.</td>
<td>/Contacts</td>
</tr>
<tr>
<td>AccountTeamMembers</td>
<td>This entity contains information about the account team members.</td>
<td>/AccountTeamMembers</td>
</tr>
<tr>
<td>AdditionalIDs</td>
<td>This entity contains information about contacts’ additional IDs.</td>
<td>/AdditionalIDs</td>
</tr>
<tr>
<td>ContactOriginData</td>
<td>This entity contains contact origin data.</td>
<td>/ContactOriginData</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The property OriginDataLastChgUTCDateTime is mandatory. It must be specified.</td>
<td></td>
</tr>
<tr>
<td>ContactRelationData</td>
<td>This entity contains information about contacts’ relationship data.</td>
<td>/ContactRelationData</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The property RelationDataLastChgUTCDateTime is mandatory. It must be specified.</td>
<td></td>
</tr>
<tr>
<td>ContactRelationAdditionalIDs</td>
<td>This entity contains information about additional IDs of contact relationships.</td>
<td>/ContactRelationAdditionalIDs</td>
</tr>
<tr>
<td>MarketingAttributes</td>
<td>This entity contains information about marketing attributes.</td>
<td>/MarketingAttributes</td>
</tr>
<tr>
<td>MarketingAreas</td>
<td>This entity contains information about marketing areas.</td>
<td>/MarketingAreas</td>
</tr>
<tr>
<td>MarketingPermissions</td>
<td>This entity contains information about marketing permissions.</td>
<td>/MarketingPermissions</td>
</tr>
<tr>
<td>MarketingSubscriptions</td>
<td>This entity contains information about marketing subscriptions.</td>
<td>/MarketingSubscriptions</td>
</tr>
</tbody>
</table>
### MarketingLocations

This entity contains information about marketing locations.

**Path:** /MarketingLocations

---

### Contacts

**GET: Entity Path:** /Contacts

**Field Extensibility:** The following business contexts are relevant: Marketing: Contact and Marketing: Contact and Corporate Account

You can perform the following operations on the Contacts entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of contacts. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Contacts?$top=1</td>
</tr>
</tbody>
</table>

**Note**
- A maximum of 5000 contacts can be fetched in a single request
- Specification of TOP is mandatory.

Get the details of a specific contact using the Contact UUID.

**Path:** /Contacts(guid'Contact UUID')

---

### AccountTeamMembers

You can perform the following operations on the AccountTeamMember entity set:

- **GET:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AccountTeamMembers
- **PUT, PATCH, or DELETE in batch:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch
- **PUT, PATCH, or DELETE in a single operation:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AccountTeamMembers(ContactID='ContactID', ContactOrigin='ContactOrigin', TeamMemberID='TeamMemberID', Role='Role')
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of account team members.</td>
<td>/AccountTeamMembers?$top=1</td>
</tr>
</tbody>
</table>

This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby

**i Note**
- A maximum of 5000 account team members can be fetched in a single request
- Specification of TOP is mandatory.

<table>
<thead>
<tr>
<th>GET</th>
<th>Get the details of a specific account team member.</th>
<th>This operation is not supported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST (Batch)</td>
<td>Update or create an account team member in batch mode.(Full Update)</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</td>
</tr>
</tbody>
</table>

**i Note**
- The maximum number of requests in a changeset is 10000 (ten thousand).

| POST (Batch)| Delete an account team member in batch mode. | https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch |

| POST (Batch)| Add one new account team member. | https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch |

<p>| PUT         | Update or create an account team member. | https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AccountTeamMembers(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',TeamMemberID='&lt;TeamMemberID&gt;',Role='&lt;Role&gt;') |</p>
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATCH</td>
<td>Add one new account team member.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AccountTeamMembers(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',TeamMemberID='&lt;TeamMemberID&gt;',Role='&lt;Role&gt;')</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete an account team member.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AccountTeamMembers(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',TeamMemberID='&lt;TeamMemberID&gt;',Role='&lt;Role&gt;')</td>
</tr>
</tbody>
</table>

### AdditionaIDs

You can perform the following operations on the AdditionalIDs entity set:

- **GET**: [URL](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AdditionalIDs)
- **PUT, PATCH in batch**: [URL](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT.Contact_SRV;v=0004/$batch)
- **PUT, PATCH in a single operation**: [URL](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AdditionalIDs(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',ContactAdditionalOrigin='<ContactAdditionalOrigin>',ContactAdditionalID='<ContactAdditionalID>')
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of additional IDs by Contact ID and ID Origin.</td>
<td>/AdditionalIDs?$top=1</td>
</tr>
<tr>
<td></td>
<td>This method supports standard OData parameters such as $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A maximum of 5000 additional IDs can be fetched in a single request.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $filter is not supported for additional IDs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific additional ID.</td>
<td>/AdditionalIDs('&lt;ContactID&gt;,&lt;ContactOrigin&gt;,&lt;ContactAdditionalOrigin&gt;,&lt;ContactAdditionalID&gt;')</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The maximum number per changeset is 10000 (ten thousand) entities.</td>
<td></td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create an additional ID in batch mode.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The maximum number of requests in a changeset is 10000 (ten thousand).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Add one new additional ID.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</td>
</tr>
</tbody>
</table>
### HTTP Method

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create an additional ID.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AdditionalIDs(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',ContactAdditionalOrigin='&lt;ContactAdditionalOrigin&gt;',ContactAdditionalID='&lt;ContactAdditionalID&gt;')</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Add one new additional ID.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/AdditionalIDs(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',ContactAdditionalOrigin='&lt;ContactAdditionalOrigin&gt;',ContactAdditionalID='&lt;ContactAdditionalID&gt;')</td>
</tr>
</tbody>
</table>

### ContactOriginData

You can perform the following operations on the ContactOriginData entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactOriginData
- **PUT, PATCH in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch
- **PUT, PATCH in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactOriginData(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>')

**Field Extensibility**: The following business contexts are relevant: **Marketing: Contact** and **Marketing: Contact and Corporate Account**
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of Contact Origin Data.</td>
<td><code>/ContactOriginData?$top=1</code>&lt;br&gt;This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
</tr>
<tr>
<td>POST (Batch)</td>
<td>Update or create contact origin data in batch mode. This creates a contact if the contact not exist.</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</code>&lt;br&gt;i Note&lt;br&gt;• A maximum of 5000 contact origin data entities can be fetched in a single request&lt;br&gt;• Specification of TOP is mandatory.</td>
</tr>
<tr>
<td>PUT</td>
<td>Update or create contact origin data. This creates a contact if the contact not exist.</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</code>&lt;br&gt;i Note&lt;br&gt;The property OriginDataLastChgUTCDateTime is mandatory and must be specified.</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>PATCH</td>
<td>Delta Update PATCH attributes of the entity ContactOriginData.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactOriginData(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;')</td>
</tr>
</tbody>
</table>

**Note**
The property OriginDataLastChgUTCDateTime is mandatory and must be specified.

---

**ContactRelationData**

You can perform the following operations on the ContactRelationData entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactRelationData
- **PUT, PATCH and DELETE in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch
- **PUT, PATCH and DELETE in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactRelationData(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',RelationshipCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>')

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of contact relationship data by Contact ID and ID Origin.</td>
<td>/ContactRelationData?$top=1</td>
</tr>
</tbody>
</table>

This method supports standard OData parameters such as $select, $top, $skip, $count, $inlinecount, and $orderby

**i Note**
- A maximum of 5000 entities can be fetched in a single request.
- Specification of TOP is mandatory.
- $filter is not supported for additional IDs.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the details of a specific additional ID.</td>
<td>/ContactRelationData(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',RelationshipCategory='&lt;RelationshipCategory&gt;',ReltdIntactnContactID='&lt;ReltdIntactnContactID&gt;',ReltdIntactnContactOrigin='&lt;ReltdIntactnContactOrigin&gt;')</td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create contact relationship data in batch mode.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>i Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The property RelationDataLastChgUTCDateTime is mandatory and must be specified.</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create contact relationship data.</td>
<td>/ContactRelationData(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',RelationshipCategory='&lt;RelationshipCategory&gt;',ReltdIntactnContactID='&lt;ReltdIntactnContactID&gt;',ReltdIntactnContactOrigin='&lt;ReltdIntactnContactOrigin&gt;')</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>i Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The property RelationDataLastChgUTCDateTime is mandatory and must be specified.</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>PATCH</td>
<td>Add one new contact relationship data.</td>
<td>/ContactRelationData(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',RelationshipCategory='&lt;RelationshipCategory&gt;',ReltdIntactnContactID='&lt;ReltdIntactnContactID&gt;',ReltdIntactnContactOrigin='&lt;ReltdIntactnContactOrigin&gt;')</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete contact relationship data.</td>
<td>/ContactRelationData(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',RelationshipCategory='&lt;RelationshipCategory&gt;',ReltdIntactnContactID='&lt;ReltdIntactnContactID&gt;',ReltdIntactnContactOrigin='&lt;ReltdIntactnContactOrigin&gt;')</td>
</tr>
</tbody>
</table>

**ContactRelationAdditionalIDs**

You can perform the following operations on the ContactRelationAdditionalIDs entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactRelationAdditionalIDs
- **PUT, PATCH in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch
- **PUT, PATCH in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactRelationAdditionalIDs(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',RelationshipCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>',CntctRelationAdditionalID='<CntctRelationAdditionalID>',CntctRelationAdditionalOrigin='<CntctRelationAdditionalOrigin>')

Integration Guide

Integration APIs
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| GET         | Get a list of additional IDs of a contact relationship. | `/ContactRelationAdditionalIDs?$top=1`  
This method supports standard OData parameters such as `$select`, `$top`, `$skip`, `$count`, `$inlinecount`, and `$orderby` |

**i Note**
- A maximum of 5000 additional IDs can be fetched in a single request.
- Specification of TOP is mandatory.

| POST (Batch) | Update or create an additional ID of a contact relationship in batch mode. | `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch`  
Add one new additional ID of a contact relationship. | `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch` |
**HTTP Method** | **Description** | **Path**
---|---|---
**PUT** | Update or create an additional ID of a contact relationship. | https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactRelationAdditionalIDs(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',RelationCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>',CntctRelationAdditionalID='<CntctRelationAdditionalID>',CntctRelationAdditionalOrigin='<CntctRelationAdditionalOrigin>')

**PATCH** | Add one new additional ID of a contact relationship. | https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactRelationAdditionalIDs(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',RelationCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>',CntctRelationAdditionalID='<CntctRelationAdditionalID>',CntctRelationAdditionalOrigin='<CntctRelationAdditionalOrigin>')

**Projections**

You can perform the following operation on the **Projections** entity set:

**GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/Projections

**HTTP Method** | **Description** | **Path**
---|---|---
**GET** | Get a list of projections. | /Projections?$top=2

This method supports standard OData parameters such as $select, $top, $skip, $count, $inlinecount, and $orderby.
You can perform the following operations on the MarketingAttributes entity set:

- **GET:**
  
  ```
  https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/
  MarketingAttributes
  ```

- **PUT, PATCH, or DELETE in batch:**
  
  ```
  https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_CONTACT_SRV;v=0004/$batch
  ```

- **PUT, PATCH, or DELETE in a single operation:**
  
  ```
  https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_CONTACT_SRV;v=0004/
  MarketingAttributes(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',
  MarketingAttributeCategory='<MarketingAttributeCategory>',MarketingAttributeValue='<MarketingAttributeValue>')
  ```

**Field Extensibility:** The following business context is relevant: **Marketing: Marketing Attributes for Contacts**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| **GET**     | Get a list of marketing attributes by Contact ID and ID Origin. | /MarketingAttributes?$top=1  
  This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $-inlinecount, and $orderby |
|             | Get the details of a specific marketing attribute. | /MarketingAttributes('<ContactID>','<ContactOrigin>','<MarketingAttributeCategory>','<MarketingAttributeValue>') |
| **POST (Batch)** | Update or create marketing attributes in batch mode. | https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_CONTACT_SRV;v=0004/$batch |
  API_MKT_CONTACT_SRV;v=0004/$batch |
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Add one new marketing attribute.</strong></td>
<td></td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create marketing attributes.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingAttributes(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',MarketingAttributeCategory='&lt;MarketingAttributeCategory&gt;',MarketingAttributeValue='&lt;MarketingAttributeValue&gt;')</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Add one new marketing attribute.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingAttributes(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',MarketingAttributeCategory='&lt;MarketingAttributeCategory&gt;',MarketingAttributeValue='&lt;MarketingAttributeValue&gt;')</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete marketing attributes.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingAttributes(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',MarketingAttributeCategory='&lt;MarketingAttributeCategory&gt;',MarketingAttributeValue='&lt;MarketingAttributeValue&gt;')</td>
</tr>
</tbody>
</table>

**MarketingAreas**

You can perform the following operations on the MarketingAreas entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004
- **PUT, PATCH in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch
- **PUT, PATCH in a single operation:** [https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingAreas(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',InteractionContactMktgArea='<InteractionContactMktgArea>')](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingAreas(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',InteractionContactMktgArea='<InteractionContactMktgArea>'))

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing areas by Contact ID and ID Origin.</td>
<td>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/Contacts?$expand=MarketingAreas&amp;$top=2</td>
</tr>
</tbody>
</table>

This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby.

- **Note**
  - A maximum of 5000 marketing areas can be fetched in a single request
  - Specification of TOP is mandatory.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create marketing areas in batch mode.</td>
<td>[https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch/MarketingAreas('&lt;ContactID&gt;',&lt;ContactOrigin&gt;,InteractionContactMktgArea&gt;')](https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch/MarketingAreas('&lt;ContactID&gt;',&lt;ContactOrigin&gt;,InteractionContactMktgArea&gt;')</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create marketing areas.</td>
<td>[https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingAreas(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',InteractionContactMktgArea='&lt;InteractionContactMktgArea&gt;')](https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingAreas(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',InteractionContactMktgArea='&lt;InteractionContactMktgArea&gt;')</td>
</tr>
</tbody>
</table>
### MarketingLocations

You can perform the following operations on the MarketingAreas entity set:

- **GET**: `/MarketingAreas('https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingLocations`  
  This method supports standard OData parameters such as `$filter`, `$select`, `$top`, `$skip`, `$count`, `$inlinecount`, and `$orderby`

- **PUT, PATCH in batch**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch`

- **PUT, PATCH in a single operation**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/MarketingLocations(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',MarketingLocationExternalID='<MarketingLocationExternalID>')`

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing locations by Contact ID and ID Origin.</td>
<td><code>/MarketingLocations?$top=1</code></td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create marketing areas in batch mode.</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</code></td>
</tr>
<tr>
<td></td>
<td>Add one new marketing area</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/$batch</code></td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create marketing locations</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/Mktlocations(ContactID='ContactID',ContactOrigin='ContactOrigin',MarketingLocationExternalID='MarketingLocationExternalID')</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Add one new marketing location</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/Mktlocations(ContactID='ContactID',ContactOrigin='ContactOrigin',MarketingLocationExternalID='MarketingLocationExternalID')</td>
</tr>
</tbody>
</table>

### MarketingPermissions

**Entity Path:** /MarketingPermissions

**Field Extensibility:** The following business context is relevant: **Marketing: Marketing Permissions**. Custom fields for business object **MKT_PERMISSION** (Marketing: Permission) are only supported if you use version 2 or version 3 of the API_MKT_CONTACT service.

**i Note**

- For all HTTP operations both $batch requests and single requests can be used.
- Interactions are assigned when marketing permissions are created or updated to allow for analysis of contacts.
You can perform the following operations on the **MarketingPermissions** entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing permissions by Contact ID and ID Origin. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby.</td>
<td>/MarketingPermissions?$top=1</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update or create marketing permissions. This creates a marketing permission if the permission does not exist. Delta Update of PATCH attributes of the entity MarketingPermission.</td>
<td>MarketingPermissions(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',ContactPermissionID='&lt;ContactPermissionID&gt;',ContactPermissionOrigin='&lt;ContactPermissionOrigin&gt;',MarketingArea='&lt;MarketingArea&gt;',CommunicationMedium='&lt;CommunicationMedium&gt;' )</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create marketing permissions. This creates a marketing permission if the permission does not exist.</td>
<td>MarketingPermissions(ContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',ContactPermissionID='&lt;ContactPermissionID&gt;',ContactPermissionOrigin='&lt;ContactPermissionOrigin&gt;',MarketingArea='&lt;MarketingArea&gt;',CommunicationMedium='&lt;CommunicationMedium&gt;' )</td>
</tr>
</tbody>
</table>

### Note
- A maximum of 5000 marketing permissions can be fetched in a single request.
- Specification of TOP is mandatory.

---

**Marketing Permission Property Descriptions**

The table describes the properties for the **MarketingPermissions** entity.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContactID</td>
<td>The ContactID and ContactOrigin identify the contact uniquely.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> a business partner ID from the CRM system.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>ContactOrigin</td>
<td>The ContactID and ContactOrigin identify the contact uniquely.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ContactID will not be saved to the MarketingPermission but is only used to derive a unique ContactUUID. This data will not be returned in GET requests.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> SAP_CRM_BUPA</td>
<td></td>
</tr>
<tr>
<td>ContactPermissionID</td>
<td>The ContactPermissionID and ContactPermissionOrigin store marketing permissions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> <a href="mailto:first.lastname@mail.de">first.lastname@mail.de</a></td>
<td></td>
</tr>
<tr>
<td>ContactPermissionOrigin</td>
<td>The ContactPermissionID and ContactPermissionOrigin store marketing permissions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>ContactPermissionOrigin is the origin of a contact ID that stores marketing permissions. The origin indicates the source of an ID. By defining the origin, you determine that a contact with an ID associated to a source can be analyzed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> EMAIL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can configure origins of contact IDs in the Configuring Origins configuration app.</td>
<td></td>
</tr>
<tr>
<td>ContactPermissionOriginName</td>
<td>Description of property ContactPermissionOrigin</td>
<td>Read-Only</td>
</tr>
<tr>
<td>MarketingArea</td>
<td>Identifies an area of responsibility or an organizational unit.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>You use a marketing area to restrict access to instances of an object, such as campaign, email message, email template, target group, or permission.</td>
<td></td>
</tr>
<tr>
<td>MarketingAreaName</td>
<td>Description of property MarketingArea</td>
<td>Read-Only</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Represents the type of permission, for example, EMAIL or PHONE. You can configure communication media in the Managing Interaction Content configuration app.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Communication Medium Name</td>
<td>Description of property CommunicationMedium</td>
<td>Read-Only</td>
</tr>
<tr>
<td>ContactUUID</td>
<td>Unique ID of a contact in SAP Marketing Cloud .</td>
<td>Read-Only</td>
</tr>
<tr>
<td>Permission Granted</td>
<td>The permission can be YES (Y) or NO (N).</td>
<td>Mandatory</td>
</tr>
<tr>
<td>PermissionUTCDateTime</td>
<td>This is the timestamp for when the permission was given or removed.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The timestamp must not be initial or null.</td>
<td></td>
</tr>
<tr>
<td>PermissionUUID</td>
<td>Unique ID of a permission in SAP Marketing Cloud .</td>
<td>Read-Only</td>
</tr>
<tr>
<td>PermissionSourceObject</td>
<td>This field provides information on the source of the permission, that is, where it came from. For example, the ID of a landing page. This field can be filled with freetext.</td>
<td>If you enter a value for the PermissionSourceObject property, you must also specify a value for the PermissionSourceObjectType. Both fields must be filled or left empty.</td>
</tr>
<tr>
<td>PermissionSourceObjectType</td>
<td>This field provides information on the source of the permission and its type. For example, the business object name of a landing page. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>PermissionSourceSystem</td>
<td>This is the system that stores the permission. For example, your local system ID. This field can be filled with freetext.</td>
<td>If you enter a value for the PermissionSourceSystem property, you must also specify a value for the PermissionSourceSystemType. Both fields must be filled or left empty.</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PermissionSourceSystemType</td>
<td>This is the type of system where the permission is stored. For example, SAP_CEI. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>PermissionSourceCommMedium</td>
<td>Indicates where the permission comes from, such as WEB, EMAIL, or PHONE. In case PermissionSourceCommMedium is not filled, this property is set to WEB.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>PermissionSourceCommMediumName</td>
<td>Description of property PermissionSourceCommMedium</td>
<td>Read-Only</td>
</tr>
<tr>
<td>PermissionIsImplicit</td>
<td>If the system sets this field to TRUE, then it is an implicit permission, which is determined by country-specific regulation. If the system sets this field to FALSE, the contact has given this permission explicitly.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>IsConfirmationRequired</td>
<td>This is a boolean parameter. If the parameter is set to TRUE, the permission is stored using the double opt-in or opt-out process. If the property is not specified in the payload or it is set to FALSE the permission is directly stored.</td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who has changed the permissions last.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>Date and time of the last permission change.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>PermissionNoteText</td>
<td>A text to describe a permission change.</td>
<td></td>
</tr>
</tbody>
</table>

**MarketingSubscriptions**

**Entity Path:** `/MarketingSubscriptions`

**Field Extensibility:** The following business context is relevant: *Marketing: Marketing Permissions*. Custom fields for business object MKT_PERMISSION (Marketing: Permission) are only supported if you use version 2 or version 3 of the API_MKT_CONTACT service.
You can perform the following operations on the **MarketingSubscriptions** entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of marketing subscriptions by Contact ID and ID Origin. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/MarketingSubscriptions?$top=1</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A maximum of 5000 marketing subscriptions can be fetched in a single request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td>PATCH</td>
<td>Update or create subscriptions. This creates a subscription if the subscription does not exit.</td>
<td>/MarketingSubscriptions(ContactID='&lt;ContactID&gt;', ContactOrigin='&lt;ContactOrigin&gt;', ContactPermissionID='&lt;ContactPermissionID&gt;', ContactPermissionOrigin='&lt;ContactPermissionOrigin&gt;', CommunicationMedium='&lt;CommunicationMedium&gt;', SubscriptionTopic='&lt;SubscriptionTopic&gt;')</td>
</tr>
<tr>
<td>PUT</td>
<td>Update or create subscriptions. This creates a subscription if the subscription does not exit. Delta Update of PATCH attributes of the entity MarketingSubscriptions.</td>
<td>/MarketingSubscriptions(ContactID='&lt;ContactID&gt;', ContactOrigin='&lt;ContactOrigin&gt;', ContactPermissionID='&lt;ContactPermissionID&gt;', ContactPermissionOrigin='&lt;ContactPermissionOrigin&gt;', CommunicationMedium='&lt;CommunicationMedium&gt;', SubscriptionTopic='&lt;SubscriptionTopic&gt;')</td>
</tr>
</tbody>
</table>

**Marketing Subscription Property Descriptions**

The table describes the properties for the **MarketingSubscription** entity.
<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContactID</td>
<td>The ContactID and ContactOrigin identify the contact uniquely.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> a business partner ID from the CRM system.</td>
<td></td>
</tr>
<tr>
<td>ContactOrigin</td>
<td>The ContactID and ContactOrigin identify the contact uniquely.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ContactID will not be saved to the MarketingSubscription but is only used to derive a unique ContactUUID. This data will not be returned in GET requests.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> SAP_CRM_BUPA</td>
<td></td>
</tr>
<tr>
<td>ContactSubscriptionID</td>
<td>The ContactPermissionID and ContactSubscriptionOrigin store marketing subscription.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>ContactSubscriptionOrigin</td>
<td>The ContactSubscriptionID and ContactSubscriptionOrigin store marketing subscriptions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong></td>
<td></td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Represents the type of subscription, for example, EMAIL or PHONE.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>You can configure communication media in the Managing Interaction Content configuration app.</td>
<td></td>
</tr>
</tbody>
</table>

**ContactSubscriptionOriginName**

Description of property ContactSubscriptionOrigin

**Read-Only**
<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CommunicationMediumName</td>
<td>Description of property CommunicationMedium</td>
<td>Read-Only</td>
</tr>
<tr>
<td>ContactUUID</td>
<td>Unique ID of a contact in SAP Marketing Cloud.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>SubscriptionUUID</td>
<td>Unique ID of a subscription in SAP Marketing Cloud.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionUTCDateTime</td>
<td>This is the timestamp for when the subscription was given or removed.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The time stamp must not be initial or null.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSignUpExists</td>
<td>The subscription can be YES (Y) or NO (N).</td>
<td>Mandatory</td>
</tr>
<tr>
<td>SubscriptionTopic</td>
<td>Represents a newsletter in SAP Marketing Cloud.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>The SubscriptionTopic property field must be passed, but can be left empty.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you want to create a newsletter subscription, you must specify the SubscriptionTopic.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionTopicName</td>
<td>Name of the subscription topic.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceObject</td>
<td>This field provides information on the source of the subscription, that is, where it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>came from. For example, the ID of a landing page.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceObjectT ype</td>
<td>This field provides information on the source of the subscription and its type. For example, the business object name of a landing page.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceSystem</td>
<td>This is the system that stores the subscription. For example, your local system ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>SubscriptionSourceSystemType</td>
<td>This is the type of system where the subscription is stored. For example, SAP_CEI.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceCommMedium</td>
<td>Indicates where the subscription comes from, such as WEB, EMAIL, or PHONE. In case SubscriptionSourceCommMedium is not filled, this property is set to WEB.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceCommMedium-</td>
<td>Description of property SubscriptionSourceCommMedium</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsConfirmationRequired</td>
<td>This is a boolean parameter. If the parameter is set to TRUE, the subscription is stored using the double opt-in or opt-out process. If the property is not specified in the payload or it is set to FALSE the subscription is directly stored.</td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who has changed the subscription last.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>Date and time of the last permission change.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>SubscriptionNoteText</td>
<td>A text to describe a subscription change.</td>
<td></td>
</tr>
</tbody>
</table>

Parent topic: Contacts [page 408]

Related Information

Basic Concepts [page 410]
Payload Examples [page 441]
Function Imports [page 460]
5.2.2.3 Payload Examples

Payload examples for API_MKT_CONTACT.

**i Note**
- Before you start, please read the **Processing Info and Best Practices** section in [Basic Concepts](#) [page 410].
- Ensure that you include at least the mandatory request header fields in each payload and that you use the syntax as indicated in the examples for the different entries.

Available Payload Examples

- [Contacts, Marketing Permissions, and Marketing Subscriptions](#) [page 441]
- [GET Requests](#) [page 449]
- [Account Team Members](#) [page 451]
- [Additional IDs](#) [page 452]
- [Contact Origin Data](#) [page 453]
- [Contact Relation Data](#) [page 455]
- [Contact Relation Additional IDs](#) [page 456]
- [Marketing Attributes](#) [page 457]
- [Marketing Areas](#) [page 459]

Contacts, Marketing Permissions, and Marketing Subscriptions

Create Contacts with Additional IDs

```java
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT ContactOriginData(ContactID='4711',ContactOrigin='SAP_HYBRIS_CONSUMER') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
  "OriginDataLastChgUTCDateTime" : "2017-10-01T13:13:14Z",
  "CityName" : "Kiel",
  "Country" : "DE",
  "FirstName" : "Otto",
  "LastName" : "Normalverbraucher",
```
"FullName" : "Otto Normalverbraucher",
"BirthDate" : "1961-10-28T00:00:00",
"GenderCode" : "1",
"AddressHouseNumber" : "1",
"IsConsumer" : false,
"IsContactPerson" : true,
"Language" : "DE",
"MaritalStatus" : "2",
"MaritalStatusName" : "Married",
"IsObsolete" : false,
"ContactPostalCode" : "24105",
"AddressRegion" : "01",
"StreetName" : "Hauptstrasse"
}

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

content-type: application/http
content-transfer-encoding: binary
PUT
AdditionalIDs(ContactID='4711',ContactOrigin='SAP_HYBRIS_CONSUMER',ContactAddi-
tionalOrigin='EMAIL',ContactAdditionalID='otto.normalverbraucher@company.de')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

content-type: application/http
content-transfer-encoding: binary
PUT
AdditionalIDs(ContactID='4711',ContactOrigin='SAP_HYBRIS_CONSUMER',ContactAddi-
tionalOrigin='EMAIL',ContactAdditionalID='otto.normalverbraucher5@company.de')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAttributes(ContactID='4711',ContactOrigin='SAP_HYBRIS_CONSUMER',Market-
ingAttributeCategory='HOBBY',MarketingAttributeValue='Soccer') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAttributes(ContactID='4711',ContactOrigin='SAP_HYBRIS_CONSUMER',Market-
ingAttributeCategory='HOBBY',MarketingAttributeValue='Volleyball') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
PUT
MarketingAttributes(ContactID='4711', ContactOrigin='SAP_HYBRIS_CONSUMER', MarketingAttributeCategory='Spoken_Language', MarketingAttributeValue='English')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json

PUT
MarketingAttributes(ContactID='4711', ContactOrigin='SAP_HYBRIS_CONSUMER', MarketingAttributeCategory='Spoken_Language', MarketingAttributeValue='Romanian')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json

PUT ContactOriginData(ContactID='4712', ContactOrigin='SAP_HYBRIS_CONSUMER')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-ForceSynchronousProcessing: X
Content-Type: application/json

"OriginDataLastChgUTCDateTime" : "2017-10-01T13:13:14Z",
"CityName" : "Walldorf",
"Country" : "DE",
"Department" : "",
"FirstName" : "Erika",
"LastName" : "Mustermann",
"Full Name" : "Erika Mustermann",
"BirthDate": "1961-10-28T00:00:00",
"GenderCode" : "2",
"AddressHouse Number" : "1",
"Industry" : "",
"IsConsumer" : true,
"IsContactPerson" : false,
"Language" : "DE",
"MaritalStatus" : "1",
"IsObsolete" : false,
"ContactPostalCode" : "69190",
"AddressRegion" : "08",
"StreetName" : "Hauptstrasse"
Delete Contact

**Note**
A PUT request is executed to set the `IsEndOfPurposeBlocked` flag.

**Sample Code**
```perl
--batch
Content-Type: multipart/mixed; boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
AdditionalIDs(ContactID='4712',ContactOrigin='SAP_HYBRIS_CONSUMER',ContactAdditionalOrigin='EMAIL',ContactAdditionalID='erika.mustermann4@privat.de')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--batch--
```
Create Contacts with Marketing Permissions and Marketing Subscriptions

### Note

The batch request is sent via http method POST containing PUT requests to create a new contact, marketing permission and marketing subscription. To update single attributes, you must use the PATCH request.

### Sample Code

```bash
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT ContactOriginData(ContactID='C98979992',ContactOrigin='SAP_C4C_BUPA') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-03-27T07:14:34'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
    "OriginDataLastChgUTCDateTime" : "2019-07-01T13:04:46.000",
    "CityName" : "Walldorf",
    "Country" : "DE",
    "FirstName" : "Max",
    "LastName" : "Mustermann",
    "FullName" : "Max Mustermann",
    "GenderCode" : "1",
    "AddressHouseNumber" : "99",
    "Language" : "DE",
    "MaritalStatus" : "2",
    "MaritalStatusName" : "Married",
    "ContactPostalCode" : "24105",
    "StreetName" : "Dietmar-Hopp-Allee"
}
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
AdditionalIDs(ContactID='C98979992',ContactOrigin='SAP_C4C_BUPA',ContactAdditionalOrigin='EMAIL',ContactAdditionalID='max.mustermann@mail.de') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.001'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
Content-Type: application/json
{
}
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingPermissions(ContactID='C98979992',ContactOrigin='SAP_C4C_BUPA',ContactPermissionID='max.mustermann@mail.de',ContactPermissionOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
Sap-Cuan-referenceid: REQ1
```
PATCH: Update Marketing Permissions and Marketing Subscriptions for a Contact

Sample Code

```plaintext
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PATCH MarketingPermissions(ContactID='C98979992',ContactOrigin='SAP_C4C_BUPA',ContactPermissionID='max.mustermann@mail.de',ContactPermissionOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "PermissionUTCDateTime" : "2019-07-01T13:04:46.003",
  "PermissionGranted" : "Y"
}
--changeset_01869434-0010-0001--

--batch--
```
PUT: Update or Create Marketing Permissions and Marketing Subscriptions for a Contact

NOTE

The sample code has a PUT request that updates marketing permissions and marketing subscriptions, or creates new marketing permissions and marketing subscriptions if they do not exist. To update single attributes, you must use the PATCH request. In addition, if the value of the property `IsConfirmationRequired` is set to true, a double opt-in is executed.

```
PUT MarketingPermissions(ContactID='C98979992',ContactOrigin='SAP_C4C_BUPA',ContactPermissionID='max.mustermann@mail.de',ContactPermissionOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "PermissionUTCDateTime" : "2019-07-01T13:04:46.002",
  "PermissionGranted" : "Y",
  "PermissionSourceCommMedium" : "WEB",
  "IsConfirmationRequired" : false,
  "PermissionNoteText" : "Sample Permission"
}
PUT MarketingSubscriptions(ContactID='C98979992',ContactOrigin='SAP_C4C_BUPA',ContactSubscriptionID='max.mustermann@mail.de',ContactSubscriptionOrigin='EMAIL',CommunicationMedium='EMAIL',SubscriptionTopic='1') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.005'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "SubscriptionUTCDateTime" : "2019-07-01T13:04:46.005",
  "SubscriptionSignUpExists" : "N",
  "SubscriptionSourceCommMedium" : "WEB",
}
```
PUT: Update Additional IDs and their Permissions and Subscriptions Within One Changeset

Example Use Case:

1. A contact is created with opt-ins for email a@b.c and mobile +12345.
2. You want to change the email to d@e.f but retain the mobile number and the opt-ins for both.
3. To ensure that you do not lose the mobile opt-in, steps 4 and 5 must be in the same changeset.
4. To delete the email a@b.c, you use the Function Import.
5. You send all IDs, including the new email ID and the mobile ID.

Sample Code

```bash
--batch

Content-Type: multipart/mixed; boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  content-type: application/http
  content-transfer-encoding: binary
  POST ContactOriginDeleteAdditionalIDs? ContactID='98979992'&ContactOrigin='SAP_HYBRIS_CONSUMER' HTTP/1.1
  Content-Length: 1035
  Accept: application/json
  Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
  Sap-Cuan-SourceSystemType: EXT
  Sap-Cuan-SourceSystemId: HYBRIS
  Content-Type: application/json
  {

  }--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  content-type: application/http
  content-transfer-encoding: binary
  PUT
  AdditionalIDs(ContactID='98979992',ContactOrigin='SAP_HYBRIS_CONSUMER',ContactAdditionalOrigin='EMAIL',ContactAdditionalID='tobias.tester@company.de') HTTP/1.1
  Content-Length: 1035
  Accept: application/json
  Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
  Sap-Cuan-SourceSystemType: EXT
  Sap-Cuan-SourceSystemId: HYBRIS
  Content-Type: application/json
  {

  }--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  content-type: application/http
  content-transfer-encoding: binary
  PUT
  AdditionalIDs(ContactID='98979992',ContactOrigin='SAP_HYBRIS_CONSUMER',ContactAdditionalOrigin='EMAIL',ContactAdditionalID='peter.tester@company.de') HTTP/1.1
  Content-Length: 1035
  Accept: application/json
  Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
  Sap-Cuan-SourceSystemType: EXT
  Sap-Cuan-SourceSystemId: HYBRIS
  Content-Type: application/json
  {

```
GET Requests

Get contact origin data for a specific contact from one origin
/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactOriginData(ContactOrigin='SAP_CRM_BUPA',ContactID='5320174712')

Get additional IDs of a contact from a specific origin

iNote
$filter is not supported for additional IDs.

/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/ContactOriginData(ContactOrigin='SAP_CRM_BUPA',ContactID='5320174712')/AdditionalIDs
Get the first 500 contacts created on or after a given date
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/Contacts?$format=json&
$filter=CreationDateTime ge datetimeoffset'2018-10-01T00:00:00'&$top=500

Get the first 500 contacts whose first name is Walter
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/Contacts?$format=json&
$filter=FirstName eq 'Walter'&$top=500

Get the first five contacts related to a specific corporate account
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/Contacts?$format=json&
$filter=CorporateAccountUUID eq (guid'6c0b84b7-5523-1ed8-b1b8-34d75322d097')&$top=5

Get all explicit marketing permissions for a specific ContactUUID
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/
ContactOriginData(ContactID='C98979992 ' ,ContactOrigin='SAP_C4C_BUPA')/
MarketingPermissions?$filter=PermissionIsImplicit eq false&$top=10

Get all marketing permissions and marketing subscriptions for a contact with a certain ID and origin
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/
ContactOriginData(ContactID='C98979992 ' ,ContactOrigin='SAP_C4C_BUPA')/
$expand=MarketingPermissions,MarketingSubscriptions

Get all marketing permissions and marketing subscriptions for a ContactUUID
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/
Contacts(ContactUUID=guid'6c0b84b7-5523-1ed9-a780-e4f6f36b1bfe')/
$expand=MarketingPermissions,MarketingSubscriptions

Get contact data via ID and origin together with its marketing permissions and marketing subscriptions
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/
ContactOriginData(ContactID='C98979992 ' ,ContactOrigin='SAP_C4C_BUPA')/
MarketingPermissions

Get all marketing subscriptions for a contact with a certain ID and origin
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/
ContactOriginData(ContactID='C98979992 ' ,ContactOrigin='SAP_C4C_BUPA')/
MarketingSubscriptions

Get a contact via ContactUUID together with its marketing permissions and marketing subscriptions
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/MarketingSubscriptions?
$filter=ContactUUID eq guid'6c0b84b7-5523-1ed9-a780-e4f6f36b1bfe'&$top=20

Get all marketing permissions for a specific email address of a contact
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/MarketingPermissions?
$filter=ContactPermissionID eq 'max.mustermann@mail.de' and ContactPermissionOrigin eq 'EMAIL' &$top=20
Get the first 500 contacts that subscribed to newsletter Fashion

/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/MarketingSubscriptions?$top=500&$filter=SubscriptionTopicName eq 'Fashion'

Get the first 100 marketing permissions that are newer than a certain date and time

/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0004/MarketingPermissions?$top=10&$filter=PermissionUTCDateTime gt datetimeoffset'2019-01-01T00:00:00.001'

Get the first 100 projections (relationship best record)

/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/Projections?$top=100

Account Team Members

PUT

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
AccountTeamMembers(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',TeamMemberID='<TeamMemberID>',Role='<Role>') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

DELETE

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE
AccountTeamMembers(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',TeamMemberID='<TeamMemberID>',Role='<Role>') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
```
PATCH

```
Sample Code

```-batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

PATCH
AccountTeamMembers (ContactID='<ContactID>', ContactOrigin='<ContactOrigin>', TeamMemberID='<TeamMemberID>', Role='<Role>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
  "ContactID": "<ContactID>
}

PUT

```-batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

PUT
AdditionalIDs (ContactID='<ContactID>', ContactOrigin='<ContactOrigin>', ContactAdditionalOrigin='<ContactAdditionalOrigin>', ContactAdditionalID='<ContactAdditionalID>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}

Additional IDs

```-batch
PATCH

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
AdditionalIDs(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',ContactAdditionalOrigin='<ContactAdditionalOrigin>',ContactAdditionalID='<ContactAdditionalID>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
  "ContactID": "<ContactID>"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Contact Origin Data

PUT - Batch

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
ContactOriginData(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
  "OriginDataLastChgUTCDateTime": "2017-10-01T13:13:14"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

PATCH - Batch

```plaintext
--batch
```

Integration Guide
Integration APIs
PUT Single Entity (with ForceSync flag in Request Header)

**Note**

When you import single entities, the response body is empty. You can read the status of the import only in the **response header** in the attributes **Status** and **Sap-Message**.

**Sample Code**

```json
Request: PUT: /sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/
ContactOriginData(ContactID='C_20180828_00008',ContactOrigin='SAP_ERP_CONTACT')
{
  "OriginDataLastChgUTCDateTime": "2017-10-01T13:13:14Z",
  "CityName": "Kiel",
  "Country": "DE",
  "FirstName": "Otto",
  "LastName": "Normalverbraucher",
  "FullName": "Otto Normalverbraucher",
  "GenderCode": "1",
  "AddressHouseNumber": "1",
  "IsConsumer": false,
  "IsContactPerson": true,
  "Language": "DE",
  "MaritalStatus": "2",
  "MaritalStatusName": "Married",
  "IsObsolete": false,
  "ContactPostalCode": "24105",
  "AddressRegion": "01",
  "StreetName": "Hauptstrasse",
}
```
Contact Relation Data

PATCH

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761649b6-3146-4a57-8d10-15816fb9c75a
--changeset_761649b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
ContactRelationData(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',RelationshipCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
  "ContactID": "<ContactID>",
  "RelationshipCategory": "<RelationshipCategory>",
  "ReltdIntactnContactID": "<ReltdIntactnContactID>",
  "ReltdIntactnContactOrigin": "<ReltdIntactnContactOrigin>",
  "RelationDataLastChgUTCDateT"ime": "2017-09-29T12:13:14"
}
--changeset_761649b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

PUT

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761649b6-3146-4a57-8d10-15816fb9c75a
--changeset_761649b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
ContactRelationData(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',RelationshipCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
  "RelationDataLastChgUTCDateT"ime": "2017-09-29T12:13:14"
}
--changeset_761649b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
## Contact Relation Additional IDs

### PATCH

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
ContactRelationAdditionalIDs(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',RelationshipCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
PUT

Sample Code

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
ContactRelationAdditionalIDs(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',
RelationshipCategory='<RelationshipCategory>',ReltdIntactnContactID='<ReltdIntactnContactID>',
ReltdIntactnContactOrigin='<ReltdIntactnContactOrigin>',CntctRelationAdditionalID='<CntctRelationAdditionalID>',CntctRelationAddi-
talOrigin='<CntctRelationAdditionalOrigin>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

GET (Projections)

Get the first 100 projections

Sample Code

```
/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0004/Projections?$top=100
```

Marketing Attributes

PUT

Sample Code

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAttributes(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',
MarketingAttributeCategory='<MarketingAttributeCategory>',MarketingAttributeValue='<MarketingAttributeValue>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
```
DELETE

```sh
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE
MarketingAttributes(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',MarketingAttributeCategory='<MarketingAttributeCategory>',MarketingAttributeValue='<MarketingAttributeValue>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

PATCH

```sh
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
MarketingAttributes(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',MarketingAttributeCategory='<MarketingAttributeCategory>',MarketingAttributeValue='<MarketingAttributeValue>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
"ContactID": "<ContactID>"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Marketing Areas

PUT

Sample Code

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAreas(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',InteractionContactMktgArea='<InteractionContactMktgArea>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp:'2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

PATCH

Sample Code

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
MarketingAreas(ContactID='<ContactID>',ContactOrigin='<ContactOrigin>',InteractionContactMktgArea='<InteractionContactMktgArea>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp:'2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
"ContactID": "<ContactID>"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Parent topic: Contacts [page 408]
5.2.2.4 Function Imports

Function imports are used to perform custom operations on an entity, which are typically not provided by OData operations. This section contains payload examples for the following function imports:

- Set Main Contact [page 460]
- Delete Relationship Additional IDs [page 461]
- Delete Marketing Area [page 461]
- Delete All Marketing Areas from Origin [page 462]
- Delete Account Team Members [page 463]
- Delete Marketing Attribute [page 463]
- Delete Additional IDs [page 464]
- Delete Marketing Locations [page 464]

Set Main Contact

**HTTP Method**: POST

**Function Import**: ContactRelationDataSetMainContact

Flags (when **true**) a contact relationship as the main contact for an account. Setting the value to **false** unflags a main contact.

---

**Sample Code**

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST ContactRelationDataSetMainContact?
ContactID='DEV_TEST'&ContactOrigin='SAP_ERP_CONTACT'&RelationshipCategory='BUR001'&ReltdIntactnContactID='DEV_TEST'&ReltdIntactnContactOrigin='SAP_CRM_BUPA'&IsMainContact=true HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
```
Delete Relationship Additional IDs

HTTP Method | Function Import
-------------|------------------------
POST         | ContactRelationDataDeleteAdditionalIDs

Deletes all additional IDs belonging to one contact relation data.

Payload Example POST

```plaintext
--batch
Content-Type: multipart/mixed; boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

Content-Type: application/http
content-transfer-encoding: binary
POST ContactRelationDataDeleteAdditionalIDs?
ContactID='DEV_TEST'&ContactOrigin='SAP_ERP_CONTACT'&RelationshipCategory='BUR001'&ReltdIntactnContactID='DEV_TEST'&ReltdIntactnContactOrigin='SAP_CRM_BUPA'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Delete Marketing Area

HTTP Method | Function Import
-------------|------------------------
POST         | ContactDeleteMarketingArea

Deletes all occurrences of a marketing area from a contact.
Delete All Marketing Areas from Origin

HTTP Method | Function Import
---|---
POST | ContactOriginDeleteAllMktgAreas

Deletes all marketing areas from one origin.

Payload Example

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST ContactOriginDeleteAllMktgAreas?
ContactID='DEV_TEST'&ContactOrigin='SAP_ERP_CONTACT'&InteractionContactMktgArea='GLOBAL' HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Delete Account Team Members

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>ContactDeleteAllAccountTeamMembers</td>
</tr>
</tbody>
</table>

Deletes all account team members for one contact.

**Payload Example**

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST ContactDeleteAllAccountTeamMembers?
ContactID='DEV_TEST'&ContactOrigin='SAP_ERP_CONTACT' HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Delete Marketing Attribute

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>ContactOriginDeleteAllMktgAttributes</td>
</tr>
</tbody>
</table>

Deletes all marketing attributes from one origin.

**Payload Example**

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST ContactOriginDeleteAllMktgAttributes?
ContactID='DEV_TEST'&ContactOrigin='SAP_ERP_CONTACT' HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Delete Additional IDs

HTTP Method | Function Import
---|---
POST | ContactOriginDeleteAdditionalIDs

Deletes all additional IDs from one origin except for IDs that come from the origin data.

<table>
<thead>
<tr>
<th>Sample Code</th>
</tr>
</thead>
</table>
|--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST ContactOriginDeleteAdditionalIDs?
ContactID='DEV_TEST'&ContactOrigin='SAP_ERP_CONTACT' HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--

Delete Marketing Locations

HTTP Method | Function Import
---|---
POST | ContactOriginDeleteAllMktgLocations

Deletes all marketing locations from one origin.

<table>
<thead>
<tr>
<th>Sample Code</th>
</tr>
</thead>
</table>
|--batch
Function Import Parameters

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContactID</td>
<td>ID of Contact</td>
<td>Edm. String</td>
<td>255</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ContactOrigin</td>
<td>Origin of Contact</td>
<td>Edm. String</td>
<td>20</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Parent topic: Contacts [page 408]

Related Information

- Basic Concepts [page 410]
- Structure of OData Service API_MKT_CONTACTS [page 414]
- Payload Examples [page 441]

5.2.3 Interaction Contacts

Public OData API (API_MKT_INTERACTION_CONTACT) for Interaction Contacts. Interaction Contact is a generic term to group all natural persons (contacts, consumers, or suspects), companies and “unknowns”, who interact with your company.

**i Note**

We recommend that you use the current version 0003 of this service. If you want to use the previous version, you’ll find the help links here:
Version 0002: Contact, Interaction Contact, Corporate Account API, Version 0002

**Note**
This is a generic API Service. It should only be used in exceptional cases, as it has a limited subset of attributes, common to both natural persons and corporate contacts. Such an exceptional use case could be reading stored cookie IDs or reading “unknowns”, that is, entities for whom it could not be determined whether they are natural persons or corporate accounts.

**Technical Data**

**Caution**
The API services available in SAP Marketing Cloud must not be used for mass read (GET) operations. In other words, you cannot use them for extracting all available data, for example, to extract millions of contacts or interactions from your marketing system.

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_INTERACTION_CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorizations</td>
<td>The following business catalog roles are required:</td>
</tr>
<tr>
<td></td>
<td>- For version 2: SAP_CEC_BC_MKT_API_IC2_PC</td>
</tr>
<tr>
<td></td>
<td>- For version 3: SAP_CEC_BC_MKT_API_IC3_PC</td>
</tr>
</tbody>
</table>

| Communication Scenario ID   | SAP_COM_0207 |

| Component for Incidents     | CEC-MKT-DM-IC (Interaction Contacts)  |
|                            | CEC-MKT-DM-PER (Permissions and Subscriptions) |

**Note**
Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](#) [page 402].

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003</code></td>
</tr>
</tbody>
</table>

| Service Metadata URI:       | `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$metadata` |
Field Extensibility Supported: Yes

For more information, see the Field Extensibility section for marketing permissions in Structure of API_MKT_INTERACTION_CONTACT [page 470].

**i Note**

You need to open the collapsible sections of the document first.

---

**Technical Field Documentation**

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV:v=0003/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**Interaction Contacts Details Page**

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

**Marketing - Interaction Contacts API**

General access link takes you directly to the Contacts metadata file. One-time registration or logon is required.

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:createable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

---

Basic Concepts [page 468]
Public OData API (API_MKT_INTERACTION_CONTACT) for Interaction Contacts. Interaction Contact is a generic term to group all natural persons (contacts, consumers, or suspects), companies and “unknowns”, who interact with your company.

Structure of API_MKT_INTERACTION_CONTACT [page 470]
This document describes the structure of the Public OData API API_MKT_INTERACTION_CONTACT.

Payload Examples [page 491]
Payload examples for API_MKT_INTERACTION_CONTACT.

Function Imports [page 504]
Function imports are used to perform custom operations on an entity, which are typically not provided by OData operations. This section contains payload examples for the following function imports:

5.2.3.1 Basic Concepts

Public OData API (API_MKT_INTERACTION_CONTACT) for Interaction Contacts. Interaction Contact is a generic term to group all natural persons (contacts, consumers, or suspects), companies and “unknowns”, who interact with your company.

Overview

The public API for Interaction Contact supports operations on the Interaction Contact Business Object and the Marketing Permissions Business Object.

Note
There is no separate public OData API for marketing permissions. The corresponding entity is part of this service since marketing permissions are always stored for a certain interaction contact.

Processing Info and Best Practices

- **When to use PUT and PATCH:**
  - PUT requests are most suitable for an initial data import, for example, when you want to create a new contact. A PUT request requires that you always send all properties. Any properties that you omit are overwritten by blank entries. That is, any existing entries are deleted. If no record is found, a new record is created. In other words, the PUT request functions as a full upsert.
  - We recommend that you use PATCH requests for all other imports. A PATCH request updates only the properties provided in the request body and leaves everything untouched that was not provided. So, you can omit all properties that are not to be changed. Like the PUT request, if no record is found, a new record is created with the available properties. In other words, the PATCH request functions as a delta upsert.
  - An additional advantage of using PATCH is that you specify your own sequence ID. For this reason, it is more flexible than a PUT operation, where the sequence ID is set by default and cannot be changed.
○ Basically, since you can use PATCH with the same payload as you would use for PUT, the PATCH operation is more universal and you can work with it exclusively.

○ We recommend that you don’t mix PUT and PATCH operations. Doing so can lead to unwanted results since a PUT operation is processed before a PATCH.

- Do not combine a DELETE operation with other OData operations in one changeset.
  We recommend that you do not combine the OData operations PUT, PATCH, POST, with a DELETE operation in the same changeset. For example, let’s say you want to update data for Contact A by adding an additional email address and at the same time delete a mobile number that is no longer valid. So, you send a PUT operation on the AdditionalId entity with the new email address and a DELETE operation within the same changeset. One of these operations could cancel out the other and the resulting dataset will not be as intended.

  Recommended Practice: For such combined operations including a DELETE operation, we recommend that you always use the relevant function import, which allows deletion of specific entities, together with the appropriate OData operation PUT, PATCH, or POST within the same changeset.

- Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI]. The batch request must contain a header parameter content-type, specifying the value multipart/mixed and boundary=batch.

- Do not mix different types of services for operations involving the same data source. For example, when importing contacts from a web shop, do not use the CUAN_IMPORT service for a PUT operation and then the API_MKT_INTERACTION_CONTACT service to PATCH contacts. You can, however, migrate from CUAN_IMPORT to the API* services.

- The origin that you pass via the property ContactOrigin cannot be shareable. If the main origin is set to Shareable, this will trigger an error. For more information, see Configuring Origins. You can view sample payloads and test the API at https://api.sap.com/api/API_MKT_INTERACTION_CONTACT_SRV/resource.

- SAP internal codes: If you are not thoroughly familiar with the internal codes used by SAP for the following entities, you should use a free text version of these instead to avoid errors during import: Ad Network, Country, Customer Industry Code, Department, Device Type, Function, Gender, Language, Marital Status, Region, and Title. You should then map your free text name to the SAP internal code in the Map Free Text app. For more information, see Map Free Texts.

**Note**

The UTC timestamp of permissions can’t lie in the future.

When you import permissions, they must not have a timestamp that lies in the future. The timestamp of imported permissions is always in UTC. The field name in the OData service is called PermissionUTCDateTime.

If you want to use your local timestamp, you have to add the time zone information, that is, your local time zone together with the time zone offset or enter a timestamp that is converted to UTC.

The date and time information is adapted by the standard time difference (offset) with +01:00 for Central European Time (CET) or -05:00 for Eastern Standard Time (EST). For example: 2019-01-01T12:00:00+01:00

If you live east of UTC and enter your timestamp in your local time zone without time zone offset, this will result in a future timestamp. For example, you live in Germany and your local time is 8 a.m on November 28. If you enter this as the UTC timestamp without a time zone offset, the UTC permission timestamp will show as 8 a.m., November 28, while in the UTC time zone it’s 7 a.m., November 28. You’ve created a UTC permission timestamp that lies in the future and is invalid.
**Error Messages**

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 204 is returned. Any processing errors are recorded in the SAP Marketing Cloud system in the Import Monitor app, where they can be monitored, restarted and discarded.

By default, data processing for contacts, interaction contacts, corporate accounts, or marketing permissions is asynchronous. In most cases an OK response, such as a receipt notification, is returned almost immediately. An exception to this would be data uploads that might contain severe errors, such as parse or format errors, and so would not return an OK response but an error message. The data you upload lands in a staging area, where it is then further processed. You can change the default setting to synchronous processing by setting the property `Sap-Cuan-ForceSynchronousProcessing` to True. In this case, any error messages are returned as soon as they are detected.

To view the processing status and to check for errors or success messages, you must launch the Import Monitor app. Messages for marketing permissions in this app are displayed under the API for Contact, API for Interaction Contacts, or API for Corporate Accounts depending on the API OData service you use. In the event of errors, you can restart or discard the import in the Import Monitor.

**Parent topic:** Interaction Contacts [page 465]

**Related Information**

- Structure of API_MKT_INTERACTION_CONTACT [page 470]
- Payload Examples [page 491]
- Function Imports [page 504]

### 5.2.3.2 Structure of API_MKT_INTERACTION_CONTACT

This document describes the structure of the Public OData API `API_MKT_INTERACTION_CONTACT`.

Make sure you read these topics before you start:

- Best Practices and Recommended Package Sizes [page 393]
- Basic Concepts [page 468]

**Request Header**

The request header contains the additional header fields listed in the table. Remember to include at least the mandatory request header fields in each payload.
<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
<th>Description</th>
<th>Max. Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-RequestTimestamp</td>
<td>'2017-09-28T12:13:14'</td>
<td>Timestamp of the import run in this format.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-SequenceId</td>
<td>PatchAddress</td>
<td>This defines a set of fields that are to be updated, for example, address fields, which can be interpreted as a field group. The combination of the header fields Sap-Cuan-Sequenceld and Sap-Cuan-RequestTimestamp is used to check the sequence of the data received. If the data that is received has a timestamp older than already imported data, it is ignored.</td>
<td></td>
<td>X (only mandatory for Patch Mode)</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemType</td>
<td>EXT</td>
<td>Type of source system. This is a free text field.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemId</td>
<td>HYBRIS</td>
<td>Identifier of source system. This is a free text field.</td>
<td>255</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-ForceSynchronousProcessi ng</td>
<td>X</td>
<td>This flag is deselected by default, which means that uploaded data is processed asynchronously. On upload, a success message is output immediately, unless there are errors such as authorization issues or bad requests. Objects are uploaded to the staging area and processed successively from there. All status messages can be displayed in the <strong>Import Monitor</strong> app. You can force imports to be processed <em>synchronously</em> by setting this flag. In this case, an error message will be returned as soon as an error is detected. Such error messages are output in the <strong>Import Monitor</strong> app.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-ReferenceId</td>
<td>345g67980907</td>
<td>External reference of the inbound message</td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>
## Entity Sets

The Interaction Contact OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionContacts</td>
<td>This entity contains all interaction contact information from the root.</td>
<td>/InteractionContacts</td>
</tr>
<tr>
<td>AccountTeamMembers</td>
<td>This entity contains information about the account team members.</td>
<td>/AccountTeamMembers</td>
</tr>
<tr>
<td>AdditionalIDs</td>
<td>This entity contains information about additional IDs.</td>
<td>/AdditionalIDs</td>
</tr>
<tr>
<td>InteractionContactOriginData</td>
<td>This entity contains interaction contact origin data.</td>
<td>/InteractionContactOriginData</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The property <code>OriginDataLastChgUTCDateTime</code> is mandatory and must be specified.</td>
<td></td>
</tr>
<tr>
<td>MarketingAttributes</td>
<td>This entity contains information about marketing attributes.</td>
<td>/MarketingAttributes</td>
</tr>
<tr>
<td>MarketingAreas</td>
<td>This entity contains information about marketing areas.</td>
<td>/MarketingAreas</td>
</tr>
<tr>
<td>MarketingPermissions</td>
<td>This entity contains information about marketing permissions.</td>
<td>/MarketingPermissions</td>
</tr>
<tr>
<td>MarketingSubscriptions</td>
<td>This entity contains information about marketing subscriptions.</td>
<td>/MarketingSubscriptions</td>
</tr>
</tbody>
</table>

### InteractionContacts

**GET: Entity Path:** `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV/v=0003/InteractionContacts`

You can perform the following operations on the `InteractionContacts` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of interaction contacts. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td>/InteractionContacts?<code>$top=1</code></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- A maximum of 5000 interaction contacts can be fetched in a single request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Specification of TOP is mandatory.</td>
<td></td>
</tr>
</tbody>
</table>
### HTTP Method

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the details of a specific contact using the <code>InteractionContact UUID</code>.</td>
<td><code>/InteractionContacts(guid'&lt;InteractionContact UUID&gt;')</code></td>
</tr>
</tbody>
</table>

### AccountTeamMembers

You can perform the following operations on the **AccountTeamMember** entity set:

- **GET**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/AccountTeamMembers`
- **PUT, PATCH, or DELETE in batch**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch`
- **PUT, PATCH, or DELETE in a single operation**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/AccountTeamMembers(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>',TeamMemberID='<TeamMemberID>',Role='<Role>')`

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of account team members.</td>
<td><code>/AccountTeamMembers?$top=1</code></td>
</tr>
<tr>
<td></td>
<td></td>
<td>This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- A maximum of 5000 account team members can be fetched in a single request</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Specification of TOP is mandatory.</td>
</tr>
</tbody>
</table>

- Get the details of a specific account team member. This operation is not supported.

**POST (Batch)**

Update or create an account team member in batch mode

`https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch`
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete account team member in batch mode</td>
<td><strong>DELETE</strong></td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td>Append one new account team member</td>
<td><strong>PUT</strong></td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td>Update or create an account team member.</td>
<td><strong>PATCH</strong></td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/AccountTeamMembers(InteractionContactID='InteractionContactID',InteractionContactOrigin='InteractionContactOrigin',TeamMemberID='TeamMemberID',Role='Role'))</td>
</tr>
<tr>
<td>Add one new account team member.</td>
<td><strong>DELETE</strong></td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/AccountTeamMembers(InteractionContactID='InteractionContactID',InteractionContactOrigin='InteractionContactOrigin',TeamMemberID='TeamMemberID',Role='Role'))</td>
</tr>
<tr>
<td>Delete an account team member.</td>
<td><strong>DELETE</strong></td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/AccountTeamMembers(InteractionContactID='InteractionContactID',InteractionContactOrigin='InteractionContactOrigin',TeamMemberID='TeamMemberID',Role='Role'))</td>
</tr>
</tbody>
</table>
### AdditionalIDs

You can perform the following operations on the AdditionalIDs entity set:

- **GET**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/AdditionalIDs`
- **PUT, PATCH in batch**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch`
- **PUT, PATCH in a single operation**: `https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/AdditionalIDs(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>',InteractionContactAdditionalOrigin='<InteractionContactAdditionalOrigin>',InteractionContactAdditionalExternalID='<InteractionContactAdditionalExternalID>')`

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| GET         | Get a list of additional IDs by Interaction Contact ID and ID Origin. | `/AdditionalIDs?$top=1`  
This method supports standard OData parameters such as `$select`, `$top`, `$skip`, `$count`, `$inlinecount`, and `$orderby`  |
|             | Get the details of a specific additional ID. | `/AdditionalIDs('<InteractionContactID>',<InteractionContactOrigin>,<InteractionContactAdditionalOrigin>,<InteractionContactAdditionalExternalID>')` |
| POST (Batch)| Update or create an additional ID in batch mode | Add one new Additional ID  
`https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch` |
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create an additional ID.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/Addition IDs(InteractionContactID='&lt;InteractionContactID&gt;',InteractionContactOrigin='&lt;InteractionContactOrigin&gt;',InteractionContactAdditionalOrigin='&lt;InteractionContactAdditionalOrigin&gt;',InteractionContactAdditionalExternalID='&lt;InteractionContactAdditionalExternalID&gt;')</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Add one new additional ID.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/Addition IDs(InteractionContactID='&lt;InteractionContactID&gt;',InteractionContactOrigin='&lt;InteractionContactOrigin&gt;',InteractionContactAdditionalOrigin='&lt;InteractionContactAdditionalOrigin&gt;',InteractionContactAdditionalExternalID='&lt;InteractionContactAdditionalExternalID&gt;')</td>
</tr>
</tbody>
</table>

**InteractionContactOriginData**

You can perform the following operations on the InteractionContactOriginData entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/InteractionContactOriginData
- **PUT, PATCH in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch
- **PUT, PATCH in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/InteractionContactOriginData(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>')
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of Interaction Contact Origin Data.</td>
<td><code>/InteractionContactOriginData? $top=1</code>&lt;br&gt;This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>i Note</strong>&lt;br&gt;• A maximum of 5000 interaction contact origin data entities can be fetched in a single request&lt;br&gt;• Specification of TOP is mandatory.</td>
</tr>
<tr>
<td>POST (Batch)</td>
<td>Get the details of specific interaction contact origin data.</td>
<td><code>/InteractionContactOriginData('&lt;InteractionContactID&gt;',&lt;InteractionContactOrigin&gt;')</code>&lt;br&gt;<strong>i Note</strong>&lt;br&gt;The property <code>OriginDataLastChgUTCDateTime</code> is mandatory and must be specified.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch</code>&lt;br&gt;Delta update: PATCH attributes of the entity <code>InteractionContactOriginDataUpdate</code> or create interaction contact origin data in batch mode; (creates a contact if the contact not exist)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch</code></td>
</tr>
<tr>
<td>GET</td>
<td>Update or create interaction contact origin data. This creates an interaction contact if the contact not exist.</td>
<td><code>/InteractionContactOriginData('&lt;InteractionContactID&gt;',&lt;InteractionContactOrigin&gt;')</code>&lt;br&gt;<strong>i Note</strong>&lt;br&gt;The property <code>OriginDataLastChgUTCDateTime</code> is mandatory and must be specified.</td>
</tr>
<tr>
<td>PUT</td>
<td></td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/InteractionContactOriginData('&lt;InteractionContactID&gt;','&lt;InteractionContactOrigin&gt;')</code></td>
</tr>
</tbody>
</table>
### HTTP Method | Description | Path
--- | --- | ---

### MarketingAttributes

You can perform the following operations on the MarketingAttributes entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/MarketingAttributes
- **PUT, PATCH, or DELETE in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch
- **PUT, PATCH, or DELETE in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/MarketingAttributes(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>',MarketingAttributeCategory='<MarketingAttributeCategory>',MarketingAttributeValue='<MarketingAttributeValue>')

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| **GET** | Update or create interaction contact origin data in batch mode; Get a list of marketing attributes by Interaction Contact ID and Origin. | /MarketingAttributes?$top=1

Note
- A maximum of 5000 marketing attributes can be fetched in a single request
- Specification of TOP is mandatory.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the details of a specific marketing attribute.</td>
<td>/MarketingAttributes('&lt;InteractionContactID&gt;,&lt;InteractionContactOrigin&gt;,&lt;MarketingAttributeCategory&gt;,&lt;MarketingAttributeValue&gt;')</td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create marketing attributes in batch mode</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td></td>
<td>Append one new marketing attribute</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create marketing attributes.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0003/MarketingAttributes(InteractionContactID='&lt;ContactID&gt;',ContactOrigin='&lt;ContactOrigin&gt;',MarketingAttributeCategory='&lt;MarketingAttributeCategory&gt;',MarketingAttributeValue='&lt;MarketingAttributeValue&gt;')</td>
</tr>
</tbody>
</table>
## Marketing Areas

You can perform the following operations on the `MarketingAreas` entity set:

- **GET**: 
  ```
  https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_INTERACTION_CONTACT_SRV;v=0003
  ```

- **PUT, PATCH in batch**: 
  ```
  https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch
  ```

- **PUT, PATCH in a single operation**: 
  ```
  https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_INTERACTION_CONTACT_SRV;v=0003/
  MarketingAreas(InteractionContactID='InteractionContactID', InteractionContactOrigin='InteractionContactOrigin', InteractionContactMktgArea='InteractionContactMktgArea')
  ```

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| **GET**     | Get a list of marketing areas by Interaction Contact ID and Origin. | /sap/opu/odata/SAP/
  API_MKT_CONTACT_SRV;v=0003/Contacts?
  $expand=MarketingAreas&$top=2
  This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby |

  **Note**
  - A maximum of 5000 marketing areas can be fetched in a single request
  - Specification of TOP is mandatory.

| POST (Batch) | Update or create marketing areas in batch mode | https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch |

Append one new marketing area 

https://<Server>:<Port>/sap/opu/odata/SAP/
  API_MKT_INTERACTION_CONTACT_SRV;v=0003/$batch
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUT</td>
<td>Update or create marketing areas.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_SRV/v=0003/MarketingAreas(InteractionContactID='&lt;InteractionContactID&gt;',InteractionContactOrigin='&lt;InteractionContactOrigin&gt;',InteractionContactMktgArea='&lt;InteractionContactMktgArea&gt;')</td>
</tr>
<tr>
<td>PATCH</td>
<td>Add one new marketing area.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV/v=0003/MarketingAreas(InteractionContactID='&lt;InteractionContactID&gt;',InteractionContactOrigin='&lt;InteractionContactOrigin&gt;',InteractionContactMktgArea='&lt;InteractionContactMktgArea&gt;')</td>
</tr>
</tbody>
</table>

**MarketingPermissions**

**Entity Path:** /MarketingPermissions

**Field Extensibility:** The following business context is relevant: Marketing: Marketing Permissions. Custom fields for business object MKT_PERMISSION (Marketing: Permission) are only supported if you use version 3 of the API_MKT_INTERACTION_CONTACT service.

**Note**

Please note the following:

- For all HTTP operations both $batch requests and single requests can be used.
- Interactions are assigned when marketing permissions are created or updated to allow for analysis of interaction contacts.
You can perform the following operations on the **MarketingPermissions** entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing permissions by Interaction Contact ID and ID Origin. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td><code>/MarketingPermissions?$top=1</code></td>
</tr>
</tbody>
</table>

**i Note**
- A maximum of 5000 marketing permissions can be fetched in a single request
- Specification of TOP is mandatory.

| **PATCH** | Update or create marketing permissions. This creates a marketing permission if the permission does not exist. | `/MarketingPermissions(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>',InteractionContactPermissionID='<InteractionContactPermissionID>',InteractionContactPermissionOrigin='<InteractionContactPermissionOrigin>',MarketingArea='<MarketingArea>',CommunicationMedium='<CommunicationMedium>')` |
HTTP Method | Description | Path
---|---|---
PUSH | Update or create marketing permissions. This creates a marketing permission if the permission does not exist.
 | Delta Update of PATCH attributes of the entity MarketingPermission.
| /MarketingPermissions(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>',InteractionContactPermissionID='<InteractionContactPermissionID>',InteractionContactPermissionOrigin='<InteractionContactPermissionOrigin>',MarketingArea='<MarketingArea>',CommunicationMedium='<CommunicationMedium>')

The table below describes the properties for the entity MarketingPermissions.

MarketingPermissions Property Names and Descriptions

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionContactID</td>
<td>The InteractionContactID and InteractionContactOrigin identify the contact uniquely. Example: a business partner ID from the CRM system</td>
<td>Mandatory</td>
</tr>
<tr>
<td>InteractionContactOrigin</td>
<td>The InteractionContactID and InteractionContactOrigin identify the contact uniquely. Example: SAP_CRM_BUPA</td>
<td>Mandatory</td>
</tr>
<tr>
<td>InteractionContactPermissionID</td>
<td>The InteractionContactPermissionID and InteractionContactPermissionOrigin store marketing permissions. Example: <a href="mailto:first.lastname@mail.de">first.lastname@mail.de</a></td>
<td>Mandatory</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>IntactnCntctPermissionOrigin</td>
<td>The InteractionContactPermissionID and IntactnCntctPermissionOrigin store marketing permissions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>IntactnCntctPermissionOrigin is the origin of the interaction contact ID that stores marketing permissions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The origin indicates the source of an ID. By defining the origin, you determine that an interaction contact with an ID associated to a source is eligible to be analyzed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can configure origins of contacts IDs in the Configuring Origins configuration app.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> EMAIL</td>
<td></td>
</tr>
<tr>
<td>IntactnCntctPrmssnOriginName</td>
<td>Description of property IntactnCntctPermissionOrigin</td>
<td>Read-Only</td>
</tr>
<tr>
<td>MarketingArea</td>
<td>Identifies an area of responsibility or an organizational unit.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>You use a marketing area to restrict access to instances of an object, such as campaign, email message, email template, target group, or permission.</td>
<td></td>
</tr>
<tr>
<td>MarketingAreaName</td>
<td>Description of property MarketingArea.</td>
<td></td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Represents the type of permission, for example, EMAIL or PHONE.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>You can configure communication media in the Managing Interaction Content configurati</td>
<td></td>
</tr>
<tr>
<td>CommunicationMediumName</td>
<td>Description of property CommunicationMedium</td>
<td></td>
</tr>
<tr>
<td>InteractionContactUUID</td>
<td>Unique ID of an interaction contact in SAP Marketing Cloud.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>PermissionUTCDateTime</td>
<td>This is the timestamp for when the permission was given or removed.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The time stamp must not be initial or null.</td>
<td></td>
</tr>
<tr>
<td>PermissionUUID</td>
<td>Unique ID of a permission in SAP Marketing Cloud.</td>
<td></td>
</tr>
<tr>
<td>PermissionGranted</td>
<td>The permission can be YES (Y) or NO (N).</td>
<td>Mandatory</td>
</tr>
<tr>
<td>PermissionSourceObject</td>
<td>This field provides information on the source of the permission, that is, where it came from. For example, the ID of a landing page.</td>
<td>If you enter a value for the PermissionSourceObject property, you must also specify a value for the PermissionSourceType.</td>
</tr>
<tr>
<td>PermissionSourceObjectType</td>
<td>This field can be filled with freetext.</td>
<td>Both fields must be filled or left empty.</td>
</tr>
<tr>
<td>PermissionSourceSystem</td>
<td>This is the system that stores the permission. For example, ABD client 100.</td>
<td>If you enter a value for the PermissionSourceSystem property, you must also specify a value for the PermissionSourceSystemType.</td>
</tr>
<tr>
<td>PermissionSourceSystemType</td>
<td>This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>PermissionSourceCommMedium</td>
<td>Indicates where the permission comes from, such as WEB, EMAIL, or PHONE. In case PermissionSourceCommMedium is not filled, this property is set to WEB.</td>
<td></td>
</tr>
<tr>
<td>PermissionSourceCommMediumName</td>
<td>Description of property PermissionSourceCommMedium</td>
<td>Read-Only</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>PermissionIsImplicit</td>
<td>If the system sets this field to <code>TRUE</code>, then it is an implicit permission, which is determined by country-specific regulation. If the system sets this field to <code>FALSE</code>, the contact has given this permission explicitly.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>PermissionNoteText</td>
<td>A text to describe a permission change.</td>
<td></td>
</tr>
<tr>
<td>IsConfirmationRequired</td>
<td>This is a boolean parameter. If the parameter is set to <code>TRUE</code>, the permission is stored using the double opt-in or opt-out process. If the property is not specified in the payload or it is set to <code>FALSE</code> the permission is directly stored.</td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who has changed the permissions last.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>Date and time of the last permission change.</td>
<td>Read-Only</td>
</tr>
</tbody>
</table>

**MarketingSubscriptions**

**Entity Path:** /MarketingSubscriptions

**i Note**
- For all HTTP operations both `$batch` requests and single requests can be used.
- Interactions are assigned when marketing permissions are created or updated to allow for analysis of contacts.
You can perform the following operations on the `MarketingSubscriptions` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing subscriptions by Contact ID and ID Origin. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td><code>/MarketingSubscriptions?$top=1</code></td>
</tr>
</tbody>
</table>

**Note**
- A maximum of 5000 marketing subscriptions can be fetched in a single request
- Specification of TOP is mandatory.

| PATCH       | Update or create subscriptions. This creates a subscription if the subscription does not exist. | `/MarketingSubscriptions(ContactID='ContactID',ContactOrigin='ContactOrigin',ContactPermissionID='ContactPermissionID',ContactPermissionOrigin='ContactPermissionOrigin',CommunicationMedium='CommunicationMedium',SubscriptionTopic='SubscriptionTopic')` |

| PUT         | Update or create subscriptions. This creates a subscription if the subscription does not exit. Delta Update of PATCH attributes of the entity MarketingSubscriptions. | `/MarketingSubscriptions(ContactID='ContactID',ContactOrigin='ContactOrigin',ContactPermissionID='ContactPermissionID',ContactPermissionOrigin='ContactPermissionOrigin',CommunicationMedium='CommunicationMedium',SubscriptionTopic='SubscriptionTopic')` |

**Marketing Subscription Property Descriptions**

The table describes the properties for the `MarketingSubscription` entity.
### MarketingSubscription Property Names and Descriptions

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionContactID</td>
<td>The InteractionContactID and InteractionContactOrigin identify the contact uniquely.</td>
<td>Example: a business partner ID from the CRM system.</td>
</tr>
<tr>
<td>InteractionContactOrigin</td>
<td>The InteractionContactID and InteractionContactOrigin identify the contact uniquely.</td>
<td>Example: SAP_CRM_BUPA</td>
</tr>
<tr>
<td>IntactnCntctSubscriptionID</td>
<td>The InteractionContactPermissionID and InteractionContactSubscriptionOrigin store marketing subscription.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>IntactnCntctSubscriptionOrigin</td>
<td>The InteractionContactSubscriptionID and InteractionContactSubscriptionOrigin store marketing subscriptions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>InteractionContactSubscriptionOrigin is the origin of an interaction contact ID that stores marketing subscriptions. The origin indicates the source of an ID. By defining the origin, you determine that an interaction contact with an ID associated to a source can be analyzed.</td>
<td>Example: EMAIL</td>
</tr>
<tr>
<td></td>
<td>You can configure origins of contact IDs in the Configuring Origins configuration app.</td>
<td></td>
</tr>
<tr>
<td>InteractionContactSubscriptionOrigin-Name</td>
<td>Description of property Interaction-ContactSubscriptionOrigin</td>
<td>Read-Only</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Represents the type of subscription, for example, EMAIL or PHONE. You can configure communication media in the Managing Interaction Content configuration app.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>CommunicationMediumName</td>
<td>Description of property CommunicationMedium</td>
<td>Read-Only</td>
</tr>
<tr>
<td>InteractionContactUUID</td>
<td>Unique ID of an interaction contact in SAP Marketing Cloud.</td>
<td>Read-Only</td>
</tr>
<tr>
<td></td>
<td>The field value is returned internally.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionUUID</td>
<td>Unique ID of a subscription in SAP Marketing Cloud.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionUTCDateTime</td>
<td>This is the timestamp for when the subscription was given or removed.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The time stamp must not be initial or null.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSignUpExists</td>
<td>The subscription can be YES (Y) or NO (N).</td>
<td>Mandatory</td>
</tr>
<tr>
<td>SubscriptionTopic</td>
<td>Represents a newsletter in SAP Marketing Cloud.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>The SubscriptionTopic property field must be passed, but can be left empty.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you want to create a newsletter subscription, you must specify the SubscriptionTopic.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionTopicName</td>
<td>Name of the subscription topic.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceObject</td>
<td>This field provides information on the source of the subscription, that is, where it came from. For example, the ID of a landing page. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceObject</td>
<td>This field provides information on the source of the subscription and its type. For example, the business object name of a landing page. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceSystem</td>
<td>This is the system that stores the subscription. For example, your local system ID. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>SubscriptionSourceSystemType</td>
<td>This is the type of system where the subscription is stored. For example, SAP_CEI. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceCommMedium</td>
<td>Indicates where the subscription comes from, such as WEB, EMAIL, or PHONE. In case SubscriptionSourceCommMedium is not filled, this property is set to WEB.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceCommMedium-Name</td>
<td>Description of property SubscriptionSourceCommMedium</td>
<td></td>
</tr>
<tr>
<td>IsConfirmationRequired</td>
<td>This is a boolean parameter. If the parameter is set to TRUE, the subscription is stored using the double opt-in or opt-out process. If the property is not specified in the payload or it is set to FALSE the subscription is directly stored.</td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who has changed the subscription last.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>Date and time of the last permission change.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>SubscriptionNoteText</td>
<td>A text to describe a subscription change.</td>
<td></td>
</tr>
</tbody>
</table>

Parent topic: Interaction Contacts [page 465]

Related Information

Basic Concepts [page 468]
Payload Examples [page 491]
Function Imports [page 504]
### 5.2.3.3 Payload Examples

Payload examples for API_MKT_INTERACTION_CONTACT.

---

**Note**

- Before you start, please read the **Processing Info and Best Practices** section in Basic Concepts [page 468].
- Remember to include at least the mandatory request header fields in each payload.

---

#### Available Payload Examples

- Interaction Contacts, Marketing Permissions, and Marketing Subscriptions [page 491]
- GET Requests [page 497]
- Account Team Members [page 498]
- Additional IDs [page 499]
- Interaction Contact Origin Data [page 500]
- Marketing Attributes [page 502]
- Marketing Areas [page 503]

---

#### Interaction Contacts, Marketing Permissions, and Marketing Subscriptions

Create Interaction Contacts with Additional IDs

---

**Sample Code**

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
InteractionContactOriginData(InteractionContactID='4711',InteractionContactOrigin='SAP_HYBRIS_CONSUMER') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
  "OriginDataLastChgUTCDateTime":"2017-10-01T13:13:14Z",
  "CityName": "Kiel",
  "Country": "DE",
  "EmailAddress": "otto.normalverbraucher@company.de",
  "FullName": "Normalverbraucher",
  "AddressHouseNumber": "1",
  "MobileNumber": "+4911920142191",
  "PhoneNumber": "+49115",
  "ContactPostalCode": "24105",
```
"AddressRegion": "01",
"StreetName": "Hauptstrasse"

Delete Interaction Contact

**iNote**

A PUT request is executed to set the `IsEndOfPurposeBlocked` flag.

**>&, Sample Code**

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT InteractionContactOriginData(InteractionContactID='AB20180612001-P',InteractionContactOrigin='SAP_ERP_BUPA') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-07-23T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
  "IsEndOfPurposeBlocked": true,
  "OriginDataLastChgUTCDateTime": "2018-07-23T12:13:14"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Create Interaction Contacts with Marketing Permissions and Marketing Subscriptions

iNote
The batch request is sent via http method POST containing PUT requests to create a new interaction contact, marketing permission and marketing subscription. To update single attributes, you must use the PATCH request.

Sample Code
```bash
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
InteractionContactOriginData(InteractionContactID='IC98979992',InteractionContactOrigin='SAP_C4C_BUPA') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-03-27T07:14:34'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "OriginDataLastChgUTCDateTime" : "2019-07-01T13:04:46.000",
  "CityName" : "Walldorf",
  "Country" : "DE",
  "EmailAddress" : "max.mustermann@mail.de",
  "PhoneNumber" : "+619022580475611",
  "MobileNumber" : "+622485500519911",
  "FullName" : "Max Mustermann",
  "AddressHouseNumber" : "99",
  "Language" : "DE",
  "ContactPostalCode" : "24105",
  "StreetName" : "Dietmar-Hopp-Allee"
}
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingPermissions(InteractionContactID='IC98979992',InteractionContactOrigin='SAP_C4C_BUPA',InteractionContactPermissionID='max.mustermann@mail.de',InteractionContactOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "PermissionUTCDateTime" : "2019-07-01T13:04:46.002",
  "PermissionGranted" : "Y",
  "PermissionSourceCommMedium" : "WEB",
  "IsConfirmationRequired" : false,
  "PermissionNoteText" : "Sample Permission"
}
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingSubscriptions(InteractionContactID='IC98979992',InteractionContactOrigin='SAP_C4C_BUPA',InteractionContactPermissionID='max.mustermann@mail.de',InteractionContactOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "SubscriptionUTCDateTime" : "2019-07-01T13:04:46.002",
  "SubscribedState" : "Y",
  "SubscriptionSourceCommMedium" : "WEB",
  "IsConfirmationRequired" : false,
  "SubscriptionNoteText" : "Sample Subscription"
}
```
PATCH: Update Marketing Permissions and Marketing Subscriptions for an Interaction Contact

Sample Code

```plaintext
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001

Content-Type: application/http
content-transfer-encoding: binary
PATCH MarketingPermissions(InteractionContactID='IC98979992',InteractionContactOrigin='SAP_C4C_BUPA',InteractionContactPermissionID='max.mustermann@mail.de',InteractionCntctPermissionOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.005'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
    "PermissionUTCDateTime" : "2019-07-01T13:04:46.005",
    "PermissionGranted" : "N"
}

--changeset_01869434-0010-0001--

Content-Type: application/http
content-transfer-encoding: binary
PATCH MarketingSubscriptions(InteractionContactID='IC98979992',InteractionContactOrigin='SAP_C4C_BUPA',InteractionCntctSubscriptionID='max.mustermann@mail.de',InteractionCntctSubscriptionOrigin='EMAIL',CommunicationMedium='EMAIL',SubscriptionTopic='1') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.007'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
    "SubscriptionUTCDateTime" : "2019-07-01T13:04:46.007",
    "SubscriptionSignUpExists" : "Y"
}
```

PUT: Update or Create Marketing Permissions and Marketing Subscriptions for an Interaction Contact

**Note**

The sample code has a PUT request that updates marketing permissions and marketing subscriptions, or creates new marketing permissions and marketing subscriptions if they do not exist. To update single attributes, you must use the PATCH request. In addition, if the value of the property `IsConfirmationRequired` is set to true, a double opt-in is executed.

### Sample Code

```plaintext
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingPermissions(InteractionContactID='IC98979992',InteractionContactOrigin='SAP_C4C_BUPA',InteractionContactPermissionID='max.mustermann@mail.de',InteractionCntctPermissionOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
    "PermissionUTCDateTime" : "2019-07-01T13:04:46.002",
    "PermissionGranted" : "Y",
    "PermissionSourceCommMedium" : "WEB",
    "IsConfirmationRequired" : false,
    "PermissionNoteText" : "Sample Permission"
}
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingSubscriptions(InteractionContactID='IC98979992',InteractionContactOrigin='SAP_C4C_BUPA',InteractionCntctSubscriptionID='max.mustermann@mail.de',InteractionCntctSubscriptionOrigin='EMAIL',SubscriptionTopic='1') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.005'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
    "SubscriptionUTCDateTime" : "2019-07-01T13:04:46.005",
    "SubscriptionSignUpExists" : "N",
    "SubscriptionSourceCommMedium" : "WEB",
    "IsConfirmationRequired" : false,
    "SubscriptionNoteText" : "Sample Subscription"
}
--changeset_01869434-0010-0001--
--batch--
**GET Requests**

**Get all explicit marketing permissions for a specific InteractionContactUUID**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/MarketingPermissions?
$filter=InteractionContactUUID eq guid'6c0b84b7-5523-1ed9-a792-18a320d91baf' and
PermissionIsImplicit eq false&$top=10
```

**Get all marketing permissions and marketing subscriptions for an interaction contact with a certain ID and origin**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/
InteractionContactOriginData(InteractionContactID='IC98979992 
',InteractionContactOrigin='SAP_C4C_BUPA')?
$expand=MarketingPermissions,MarketingSubscriptions
```

**Get all marketing permissions and marketing subscriptions for an InteractionContactUUID**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/
InteractionContacts(InteractionContactUUID=guid'6c0b84b7-5523-1ed9- 
a792-18a320d91baf')?$expand=MarketingPermissions,MarketingSubscriptions
```

**Get all marketing permissions for an interaction contact with a certain ID and origin**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/
InteractionContactOriginData(InteractionContactID='IC98979992 
',InteractionContactOrigin='SAP_C4C_BUPA')/MarketingPermissions
```

**Get interaction contact data via ID and origin together with its marketing permissions and marketing subscriptions**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/
InteractionContactOriginData(InteractionContactID='IC98979992 
',InteractionContactOrigin='SAP_C4C_BUPA')/MarketingSubscriptions
```

**Get an interaction contact via InteractionContactUUIDID together with its marketing permissions and marketing subscriptions**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/MarketingSubscriptions?
$filter=InteractionContactUUID eq guid'6c0b84b7-5523-1ed9-a792-18a320d91baf'&
$top=20
```

**Get all marketing permissions for a specific email address of an interaction contact**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/MarketingPermissions?
$filter=InteractionContactPermissionID eq 'max.mustermann@mail.de' and
IntactnCntctPermissionOrigin eq 'EMAIL' &$top=20
```

**Get the first 500 interaction contacts that subscribed to newsletter Fashion**

```
/sap/opu/odata/sap/API_MKT_INTERACTION_CONTACT_SRV;v=0003/MarketingSubscriptions?
$top=500&$filter=SubscriptionTopicName eq 'Fashion'
```
Get the first 100 marketing permissions that are newer than a certain date and time

```
/sap/opu/odata/sap/API_MKT_CONTACT_SRV;o=0003/MarketingPermissions?$top=100&
$filter=PermissionUTCDateTime gt datetimeoffset'2019-01-01T00:00:00.001'
```

**Account Team Members**

**PUT**

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
AccountTeamMembers(InteractionContactID='<InteractionContactID>',InteractionCo
ntactOrigin='<InteractionContactOrigin>',TeamMemberID='<TeamMemberID>',Role='<
Role>') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```

**DELETE**

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE
AccountTeamMembers(InteractionContactID='InteractionContactID',InteractionCo
ntactOrigin='InteractionContactOrigin',TeamMemberID='TeamMemberID',Role='<
Role>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```

---

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PATCH

```plaintext
--batch
Content-Type: multipart/mixed; boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
AccountTeamMembers(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>',TeamMemberID='<TeamMemberID>',Role='<Role>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
  "InteractionContactID": "<InteractionContactID>
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Additional IDs

PUT

```plaintext
--batch
Content-Type: multipart/mixed; boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
AdditionalIDs(InteractionContactID='<InteractionContactID>',InteractionContactOrigin='<InteractionContactOrigin>',InteractionContactAdditionalOrigin='<InteractionContactAdditionalOrigin>',InteractionContactAdditionalExternalID='<InteractionContactAdditionalExternalID>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
PATCH

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
AdditionalIDs(InteractionContactID='InteractionContactID',InteractionContactOrigin='InteractionContactOrigin',InteractionContactAdditionalOrigin='InteractionContactAdditionalOrigin',InteractionContactAdditionalExternalID='InteractionContactAdditionalExternalID') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
  "InteractionContactID": "<InteractionContactID>
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Interaction Contact Origin Data

PUT

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
InteractionContactOriginData(InteractionContactID='InteractionContactID',InteractionContactOrigin='InteractionContactOrigin') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
PATCH

---

Note

When you import single entities, the response body is empty. You can read the status of the import only in the response header in the attributes Status and Sap-Message.

---

PUT Single Entity (with ForceSync flag in Request Header)

---

Sample Code

Request: PUT: /sap/opu/odata/SAP/API_MKT_INTERACTION_CONTACT_SRV;v=0002/InteractionContactOriginData(ContactID='C_20180828_00008',InteractionContactOrigin='SAP_ERP_CONTACT')

{
    "OriginDataLastChgUTCDate-Time": "2017-10-01T13:13:14Z",
    "CityName": "Kiel",
    "Country": "DE",
    "EmailAddress": "otto.normalverbraucher@company.de",
    "FirstName": "Otto",
    "LastName": "Normalverbraucher",
    "FullName": "Otto Normalverbraucher",
    "GenderCode": "1",
    "AddressHouseNumber": "1",
    "IsContactPerson": true,
    "IsConsumer": false,
    "Language": "DE",
    "MaritalStatus": "2",
    "MaritalStatusName": "Married",
    "MobileNumber": "+49119201412191",
    "IsObsolete": false,
    "PhoneNumber": "+49115",
    "ContactPostalCode": "24105",
    "AddressRegion": "01",
    "StreetName": "Hauptstrasse",
}
Marketing Attributes

**PUT**

```bash
"--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
Content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAttributes(InteractionContactID='\<InteractionContactID\>', InteractionContactOrigin='\<InteractionContactOrigin\>', MarketingAttributeCategory='\<MarketingAttributeCategory\>', MarketingAttributeValue='\<MarketingAttributeValue\>')</HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{

}--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

**DELETE**

```bash
"--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
Content-type: application/http
content-transfer-encoding: binary
DELETE
MarketingAttributes(InteractionContactID='\<InteractionContactID\>', InteractionContactOrigin='\<InteractionContactOrigin\>', MarketingAttributeCategory='\<MarketingAttributeCategory\>', MarketingAttributeValue='\<MarketingAttributeValue\>')</HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{

}--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
### Marketing Areas

**PUT**

`Sample Code`

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAreas(InteractionContactID='\'InteractionContactID\'\', InteractionContactOrigin='\'InteractionContactOrigin\'\', InteractionContactMktgArea='\'InteractionContactMktgArea\'\') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
    "InteractionContactID": "\'InteractionContactID\'"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Parent topic: Interaction Contacts [page 465]

Related Information

Basic Concepts [page 468]
Structure of API_MKT_INTERACTION_CONTACT [page 470]
Function Imports [page 504]

5.2.3.4 Function Imports

Function imports are used to perform custom operations on an entity, which are typically not provided by OData operations. This section contains payload examples for the following function imports:

- Delete Marketing Areas [page 505]
- Delete All Marketing Areas from Origin [page 505]
- Delete Account Team Members [page 506]
- Delete Marketing Attributes [page 506]
- Delete Additional IDs [page 507]
### Delete Marketing Areas

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>InteractionContactDeleteMarketingArea</td>
</tr>
</tbody>
</table>

Deletes all occurrences of a marketing area from an interaction contact.

**Payload Example**

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InteractionContactDeleteMarketingArea?
InteractionContactID='DEV_TEST'&InteractionContactOrigin='SAP_ERP_CONTACT'&InteractionContactMktgArea='GLOBAL'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

### Delete All Marketing Areas from Origin

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>InteractionContactOriginDeleteAllMktgAreas</td>
</tr>
</tbody>
</table>

Deletes all marketing areas from one origin.

**Payload Example**

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InteractionContactOriginDeleteAllMktgAreas?
InteractionContactID='DEV_TEST'&InteractionContactOrigin='SAP_ERP_CONTACT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
```
Delete Account Team Members

HTTP Method | Function Import
---|---
POST | IntactnCntctDeleteAllAccountTeamMembers

Deletes all account team members for one interaction contact.

Payload Example

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InteractionContactDeleteAllAccountTeamMembers?
InteractionContactID='DEV_TEST'&InteractionContactOrigin='SAP_ERP_CONTACT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Delete Marketing Attributes

HTTP Method | Function Import
---|---
POST | IntactnCntctOriginDeleteAllMktgAttributes

Deletes all marketing attributes from one origin.
Payload Example

'Sample Code

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST IntactnCntctOriginDeleteAllMktgAttributes?
InteractionContactID='DEV_TEST'&InteractionContactOrigin='SAP_ERP_CONTACT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Delete Additional IDs

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>IntactnCntctOriginDeleteAdditionalIDs</td>
</tr>
</tbody>
</table>

Deletes all additional IDs from one origin except for IDs that come from the origin data.

Payload Example

'Sample Code

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST IntactnCntctOriginDeleteAdditionalIDs?
InteractionContactID='DEV_TEST'&InteractionContactOrigin='SAP_ERP_CONTACT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
### Function Import Parameters

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionContactID</td>
<td>ID of Interaction Contact</td>
<td>Edm. String</td>
<td>255</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>InteractionContactOrigin</td>
<td>Origin of Interaction Contact</td>
<td>Edm. String</td>
<td>20</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>InteractionContactMktgArea</td>
<td>Marketing Area</td>
<td>Edm. String</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**Parent topic:** Interaction Contacts [page 465]

### Related Information

- Basic Concepts [page 468]
- Structure of API_MKT_INTERACTION_CONTACT [page 470]
- Payload Examples [page 491]

### 5.2.4 Corporate Accounts

Public OData API (API_MKT_CORPORATE_ACCOUNT) for reading and writing master data about Corporate Accounts only. Corporate accounts are companies or organizations that interact with your company. The public API for Corporate Account supports operations on the **Corporate Account Business Object** and the **Marketing Permissions Business Object**.

**iNote**

We recommend that you use the current version 0003 of this service. If you want to use the previous version, you'll find the help links here:

- Version 0002: Contact, Interaction Contact, Corporate Account API, Version 0002
## Technical Data

**Caution**

The API services available in SAP Marketing Cloud must not be used for mass read (GET) operations. In other words, you cannot use them for extracting all available data, for example, to extract millions of contacts or interactions from your marketing system.

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_CORPORATE_ACCOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorizations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The following business catalog roles are required:</td>
</tr>
<tr>
<td></td>
<td>- For version 2: SAP_CEC_BC_MKT_API_IC2_PC</td>
</tr>
<tr>
<td></td>
<td>- For version 3: SAP_CEC_BC_MKT_API_IC3_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0207</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- CEC-MKT-DM-IC (Interaction Contacts)</td>
</tr>
<tr>
<td></td>
<td>- CEC-MKT-DM-PER (Permissions and Subscriptions)</td>
</tr>
</tbody>
</table>

**Note**

Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](#).

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003</code></td>
</tr>
<tr>
<td>Service Metadata URI:</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$metadata</code></td>
</tr>
</tbody>
</table>

**Field Extensibility Supported**

Yes. For more information, search for `extensibility` in [Structure of API_MKT_CORPORATE_ACCOUNT](#).

**Note**

You need to open the collapsible sections of the document first.
Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

Corporate Account Details Page

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.
1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

Marketing - Corporate Accounts API

General access link takes you directly to the Contacts metadata file. One-time registration or logon is required.

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

Basic Concepts [page 511]

Public OData API (API_MKT_CORPORATE_ACCOUNT) for reading and writing master data about Corporate Accounts only. Corporate accounts are companies or organizations that interact with your company.

Structure of API_MKT_CORPORATE_ACCOUNT [page 513]

This document describes the structure of the Public OData API API_MKT_CORPORATE_ACCOUNT.

Payload Examples [page 534]

Payload examples for API_MKT_CORPORATE_ACCOUNT.

Function Imports [page 547]

Function imports are used to perform custom operations on an entity, which are typically not provided by OData operations. This section contains payload examples for the following function imports:
5.2.4.1 Basic Concepts

Public OData API (API_MKT_CORPORATE_ACCOUNT) for reading and writing master data about Corporate Accounts only. Corporate accounts are companies or organizations that interact with your company.

Processing Info and Best Practices

- **When to use PUT and PATCH:**
  - **PUT** requests are most suitable for an initial data import, for example, when you want to create a new contact. A **PUT** request requires that you always send all properties. Any properties that you omit are overwritten by blank entries. That is, any existing entries are deleted. If no record is found, a new record is created. In other words, the **PUT** request functions as a full upsert.
  - We recommend that you use **PATCH** requests for all other imports. A **PATCH** request updates only the properties provided in the request body and leaves everything untouched that was not provided. So, you can omit all properties that are not to be changed. Like the **PUT** request, if no record is found, a new record is created with the available properties. In other words, the **PATCH** request functions as a delta upsert.
  - An additional advantage of using **PATCH** is that you specify your own sequence ID. For this reason, it is more flexible than a **PUT** operation, where the sequence ID is set by default and cannot be changed.
  - Basically, since you can use **PATCH** with the same payload as you would use for **PUT**, the **PATCH** operation is more universal and you can work with it exclusively.
  - We recommend that you don't mix **PUT** and **PATCH** operations. Doing so can lead to unwanted results since a **PUT** operation is processed before a **PATCH**.

- **Do not combine a DELETE operation with other OData operations in one changeset.**
  We recommend that you do not combine the OData operations **PUT**, **PATCH**, **POST**, with a DELETE operation in the same changeset. For example, let's say you want to update data for Contact A by adding an additional email address and at the same time delete a mobile number that is no longer valid. So, you send a **PUT** operation on the AdditionalId entity with the new email address and a DELETE operation within the same changeset. One of these operations could cancel out the other and the resulting dataset will not be as intended.
  
  **Recommended Practice:** For such combined operations including a DELETE operation, we recommend that you always use the relevant function import, which allows deletion of specific entities, together with the appropriate OData operation **PUT**, **PATCH**, or **POST** within the same changeset.

- **Batch requests** are submitted as a single **HTTP POST** request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a header parameter **content-type**, specifying the value `multipart/mixed` and `boundary=batch`.

- **Use of codes versus free text:** The properties listed in the left column of the table require code values. Incorrect codes will result in import errors, indicating that the corresponding code is not valid. If you are not thoroughly familiar with the internal codes available in SAP Marketing for these properties, you should use properties that allow a free text. For example, if you do not know that **DE** is the country code for **Germany**, you can use **Germany** as the free text.
You must map your free text names to the available codes in the Map Free Text app. For more information, see Map Free Texts.

- Do not mix different types of services for operations involving the same data source. For example, when importing contacts from a web shop, do not use the CUAN_IMPORT service for a PUT operation and then the API_MKT_CORPORATE_ACCOUNTS service to PATCH contacts. You can, however, migrate from CUAN_IMPORT to the API* services.
- One contact can be assigned to a maximum of one corporate account, while one corporate account can have more than one contact.
- The origin that you pass via the property ContactOrigin cannot be shareable. If the main origin is set to Shareable, this will trigger an error. For more information, see Configuring Origins. You can view sample payloads and test the API at https://api.sap.com/api/API_MKT_CORPORATE_ACCOUNT_SRV/resource.

**i Note**

The UTC timestamp of permissions can’t lie in the future.

When you import permissions, they must not have a timestamp that lies in the future. The timestamp of imported permissions is always in UTC. The field name in the OData service is called PermissionUTCDateTime.

If you want to use your local timestamp, you have to add the time zone information, that is, your local time zone together with the time zone offset or enter a timestamp that is converted to UTC.

The date and time information is adapted by the standard time difference (offset) with +01:00 for Central European Time (CET) or -05:00 for Eastern Standard Time (EST). For example: 2019-01-01T12:00:00+01:00

If you live east of UTC and enter your timestamp in your local time zone without time zone offset, this will result in a future timestamp. For example, you live in Germany and your local time is 8 a.m on November, 28. If you enter this as the UTC timestamp without a time zone offset, the UTC permission timestamp will show as 8 a.m., November 28, while in the UTC time zone it’s 7 a.m., November 28. You’ve created a UTC permission timestamp that lies in the future and is invalid.
Error Messages

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 204 is returned. Any processing errors are recorded in the SAP Marketing Cloud system in the Import Monitor app, where they can be monitored, restarted and discarded.

By default, data processing for contacts, interaction contacts, corporate accounts, or marketing permissions is asynchronous. In most cases an OK response, such as a receipt notification, is returned almost immediately. An exception to this would be data uploads that might contain severe errors, such as parse or format errors, and so would not return an OK response but an error message. The data you upload lands in a staging area, where it is then further processed. You can change the default setting to synchronous processing by setting the property Sap-Cuan-ForceSynchronousProcessing to True. In this case, any error messages are returned as soon as they are detected.

To view the processing status and to check for errors or success messages, you must launch the Import Monitor app. Messages for marketing permissions in this app are displayed under the API for Contact, API for Interaction Contacts, or API for Corporate Accounts depending on the API OData service you use. In the event of errors, you can restart or discard the import in the Import Monitor.

Field Extensibility

In addition to the pre-delivered attributes, you can add customer-specific fields using the Custom Fields and Logic app. For more information about how to do this, see Custom Fields and Logic.

Please enable the Data Source under UIs and Reports: API_MKT_CORPORATE_ACCOUNT_SRV 0002

Parent topic: Corporate Accounts [page 508]

Related Information

Structure of API_MKT_CORPORATE_ACCOUNT [page 513]
Payload Examples [page 534]
Function Imports [page 547]

5.2.4.2 Structure of API_MKT_CORPORATE_ACCOUNT

This document describes the structure of the Public OData API API_MKT_CORPORATE_ACCOUNT.

Make sure you read these topics before you start:

- Best Practices and Recommended Package Sizes [page 393]
Request Header

The request header contains the additional header fields listed in the table. Remember to include at least the mandatory request header fields in each payload.

<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
<th>Description</th>
<th>Max. Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-RequestTimestamp</td>
<td>'2017-09-28T12:13:14'</td>
<td>Timestamp of the import run in this format.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-SequenceId</td>
<td>PatchAddress</td>
<td>This defines a set of fields that are to be updated, for example, address fields, which can be interpreted as a field group. The combination of the header fields Sap-Cuan-SequenceId and Sap-Cuan-RequestTimestamp is used to check the sequence of the data received. If the data that is received has a timestamp older than already imported data, it is ignored.</td>
<td></td>
<td>X (only mandatory for Patch Mode)</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemType</td>
<td>EXT</td>
<td>Type of source system. This is a free text field.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemId</td>
<td>HYBRIS</td>
<td>Identifier of source system. This is a free text field.</td>
<td>255</td>
<td></td>
</tr>
</tbody>
</table>
**Property** | **Example** | **Description** | **Max. Length** | **Mandatory**
---|---|---|---|---
Sap-Cuan-ForceSynchronousProcessing | X | This flag is deselected by default, which means that uploaded data is processed asynchronously. On upload, a success message is output immediately, unless there are errors such as authorization issues or bad requests. Objects are uploaded to the staging area and processed successively from there. All status messages can be displayed in the Import Monitor app. You can force synchronous processing of imports by setting this flag. In this case, an error message will be returned as soon as an error is detected. Such error messages are output in the Import Monitor app. |  |  |

| **Sap-Cuan-ReferenceId** | 345g67980907 | External reference of the inbound message | 32 |  |

### Entity Sets

The Corporate OData API provides the following entity sets:

<table>
<thead>
<tr>
<th><strong>Entity Set</strong></th>
<th><strong>Description</strong></th>
<th><strong>Path</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CorporateAccount</td>
<td>This entity contains all contact information from the root.</td>
<td>/CorporateAccount</td>
</tr>
<tr>
<td>AccountTeamMembers</td>
<td>This entity contains information about the account team members.</td>
<td>/AccountTeamMembers</td>
</tr>
</tbody>
</table>

**i Note**

As TeamMemberID, you must enter the employee ID.

| AdditionalIDs | This entity contains information about additional IDs. | /AdditionalIDs |
### Corporate Accounts

**GET:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/CorporateAccount

**Field Extensibility:** The following business contexts are relevant: **Marketing: Corporate Account** and **Marketing: Contact and Corporate Account**

You can perform the following operations on the Corporate Account entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of corporate accounts. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/CorporateAccount? $top=1</td>
</tr>
</tbody>
</table>

**i Note**
- A maximum of 5000 corporate accounts can be fetched in a single request
- Specification of TOP is mandatory.

Get the details of a specific corporate accounts using the Corporate Account UUID. | /Corporate Accounts(guid'<CorporateAccount UUID>') |

### AccountTeamMembers

You can perform the following operations on the AccountTeamMember entity set:

- **GET:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/AccountTeamMembers
- **PUT, PATCH, or DELETE in batch:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch
- **PUT, PATCH, or DELETE in a single operation**: [https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/ AccountTeamMembers](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/ AccountTeamMembers)  
  (CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>',TeamMemberID='<TeamMemberID>',Role='<Role>')

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of account team members.</td>
<td>/AccountTeamMembers?$top=1</td>
</tr>
<tr>
<td></td>
<td>This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- A maximum of 5000 account team members can be fetched in a single request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create an account team member in batch mode.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Delete an account team member in batch mode.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Add one new account team member</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create an account team member.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/ AccountTeamMembers(CorporateAccountID='&lt;CorporateAccountID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',TeamMemberID='&lt;TeamMemberID&gt;',Role='&lt;Role&gt;')</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>PATCH</td>
<td>Add one new account team member.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/AccountTeamMembers(CorporateAccountID='&lt;CorporateAccountID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',TeamMemberID='&lt;TeamMemberID&gt;',Role='&lt;Role&gt;')</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete an account team member.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/AccountTeamMembers(CorporateAccountID='&lt;CorporateAccountID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',TeamMemberID='&lt;TeamMemberID&gt;',Role='&lt;Role&gt;')</td>
</tr>
</tbody>
</table>

**AdditionalIDs**

You can perform the following operations on the AdditionalIDs entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/AdditionalIDs
- **PUT, PATCH in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch
- **PUT, PATCH in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/AdditionalIDs(CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>',InteractionContactAdditionalOrigin='<InteractionContactAdditionalOrigin>',InteractionContactAdditionalExternalID='<InteractionContactAdditionalExternalID>')
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of additional IDs by Account ID and ID Origin.</td>
<td>/AdditionalIDs?$top=1</td>
</tr>
<tr>
<td></td>
<td>This method supports standard OData parameters such as $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A maximum of 5000 additional IDs can be fetched in a single request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $filter is not supported for additional IDs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific additional ID.</td>
<td>/AdditionalIDs('&lt;CorporateAccountID&gt;',&lt;CorporateAccountOrigin&gt;,&lt;InteractionContactAdditionalOrigin&gt;,&lt;InteractionContactAdditionalExternalID&gt;')</td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create an additional ID in batch mode.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td></td>
<td>Append one new additional ID</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create an additional ID.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/AdditionalIDs(CorporateAccountID='&lt;CorporateAccountID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',InteractionContactAdditionalOrigin='&lt;InteractionContactAdditionalOrigin&gt;',InteractionContactAdditionalExternalID='&lt;InteractionContactAdditionalExternalID&gt;')</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>PATCH</td>
<td>Add one new additional ID.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/AdditionalIDs(CorporateAccountID='&lt;CorporateAccountID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',InteractionContactAdditionalOrigin='&lt;InteractionContactAdditionalOrigin&gt;',InteractionContactAdditionalExternalID='&lt;InteractionContactAdditionalExternalID&gt;')</td>
</tr>
</tbody>
</table>

**CorporateAccountOriginData**

You can perform the following operations on the CorporateAccountOriginData entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/CorporateAccountOriginData
- **PUT, PATCH in batch**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch
- **PUT, PATCH in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/CorporateAccountOriginData(CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>')

**Field Extensibility**: The following business contexts are relevant: Marketing: Corporate Account and Marketing: Contact and Corporate Account
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of Corporate Account Origin Data.</td>
<td>/CorporateAccountOriginData? $top=1</td>
</tr>
<tr>
<td></td>
<td>This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- A maximum of 5000 corporate account origin data entities can be fetched in a single request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get the details of specific corporate account origin data.</td>
<td>/CorporateAccountOriginData('&lt;CorporateAccountID&gt;', '&lt;CorporateAccountOrigin&gt;')</td>
</tr>
<tr>
<td><strong>POST (Batch)</strong></td>
<td>Update or create contact origin data in batch mode. Creates a CorporateAccount if the CorporateAccount not exist.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The property OriginDataLastChgUTCDateTime is mandatory and must be specified.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delta Update PATCH attributes of the entity CorporateAccountOriginData</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create corporate account origin data. This creates a contact if the corporate account not exist.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/CorporateAccountOriginData(CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;')</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The property OriginDataLastChgUTCDateTime is mandatory and must be specified.</td>
<td></td>
</tr>
</tbody>
</table>
HTTP Method | Description | Path
---|---|---

MarketingAttributes

You can perform the following operations on the MarketingAttributes entity set:

- **GET**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingAttributes
- **PUT, PATCH, or DELETE in BATCH**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch
- **PUT, PATCH, or DELETE in a single operation**: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingAttributes(CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>',MarketingAttributeCategory='MarketingAttributeCategory',MarketingAttributeValue='MarketingAttributeValue')

**Field Extensibility**: The following business contexts are relevant: *Marketing: Marketing Attributes for Contacts.*

HTTP Method | Description | Path
---|---|---
GET | Get a list of marketing attributes by Contact ID and ID Origin. | /MarketingAttributes?$top=1

This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby

**i Note**
- A maximum of 5000 marketing attributes can be fetched in a single request
- Specification of TOP is mandatory.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the details of a specific marketing attribute.</td>
<td>/MarketingAttributes('CorporateAccountID', 'CorporateAccountOrigin', 'MarketingAttributeCategory', 'MarketingAttributeValue')</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Update or create marketing attributes in batch mode.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Delete marketing attributes in batch mode.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Append one new Marketing Attribute</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create marketing attributes.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingAttributes(ContactID='CorporateAccountID', CorporateAccountOrigin='CorporateAccountOrigin', MarketingAttributeCategory='MarketingAttributeCategory', MarketingAttributeValue='MarketingAttributeValue')</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Add one new marketing attribute.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingAttributes(CorporateAccountID='CorporateAccountID', CorporateAccountOrigin='CorporateAccountOrigin', MarketingAttributeCategory='MarketingAttributeCategory', MarketingAttributeValue='MarketingAttributeValue')</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete marketing attributes.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingAttributes(CorporateAccountID='CorporateAccountID', CorporateAccountOrigin='CorporateAccountOrigin', MarketingAttributeCategory='MarketingAttributeCategory', MarketingAttributeValue='MarketingAttributeValue')</td>
</tr>
</tbody>
</table>
# MarketingAreas

You can perform the following operations on the MarketingAreas entity set:

- **GET:** [https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003)
- **PUT, PATCH in BATCH:** [https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch)
- **PUT, PATCH in a single operation:** [https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingAreas(CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>',InteractionContactMktgArea='<InteractionContactMktgArea>')](https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingAreas(CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>',InteractionContactMktgArea='<InteractionContactMktgArea>')

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing areas by Contact ID and ID Origin.</td>
<td><a href="https://%3CServer%3E:%3CPort%3E/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0003/Contacts?$expand=MarketingAreas&amp;$top=2">https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0003/Contacts?$expand=MarketingAreas&amp;$top=2</a></td>
</tr>
<tr>
<td></td>
<td>This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- A maximum of 5000 marketing areas can be fetched in a single request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific marketing area.</td>
<td><a href="https://%3CServer%3E:%3CPort%3E/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch">https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</a></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Update or create marketing areas in batch mode.</td>
<td><a href="https://%3CServer%3E:%3CPort%3E/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch">https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</a></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Append one new Marketing Area</td>
<td><a href="https://%3CServer%3E:%3CPort%3E/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch">https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/$batch</a></td>
</tr>
</tbody>
</table>
### MarketingPermissions

**Entity Path:** /MarketingPermissions

**Field Extensibility:** The following business context is relevant: Marketing: Marketing Permissions. Custom fields for business object MKT_PERMISSION (Marketing: Permission) are only supported if you use version 2 of the API_MKT_CORPORATE_ACCOUNT service.

#### i Note
- For all HTTP operations both $batch requests and single requests can be used.
- Interactions are assigned when marketing permissions are created or updated to allow for analysis of corporate accounts.

#### You can perform the following operations on the **MarketingPermissions** entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing permissions by Corporate Account. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/MarketingPermissions?$top=1</td>
</tr>
</tbody>
</table>

#### i Note
- A maximum of 5000 marketing permissions can be fetched in a single request
- Specification of TOP is mandatory.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATCH</td>
<td>Update or create marketing permissions. This creates a marketing permission if the permission does not exit.</td>
<td>/MarketingPermissions(CorporateAccountID='&lt;CorporateAccountID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',CorporateAccountPermissionID='&lt;CorporateAccountPermissionID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',MarketingArea='&lt;MarketingArea&gt;',CommunicationMedium='&lt;CommunicationMedium&gt;')</td>
</tr>
<tr>
<td>PUT</td>
<td>Update or create marketing permissions. This creates a marketing permission if the permission does not exit.</td>
<td>/MarketingPermissions(CorporateAccountID='&lt;CorporateAccountID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',CorporateAccountPermissionID='&lt;CorporateAccountPermissionID&gt;',CorporateAccountOrigin='&lt;CorporateAccountOrigin&gt;',MarketingArea='&lt;MarketingArea&gt;',CommunicationMedium='&lt;CommunicationMedium&gt;')</td>
</tr>
</tbody>
</table>

The table below describes the properties for the entity MarketingPermissions.
### MarketingPermissions Property Names and Descriptions

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CorporateAccountID</td>
<td>The CorporateAccountID and CorporateAccountOrigin identify the corporate account uniquely.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> a business partner ID from the CRM system.</td>
<td></td>
</tr>
<tr>
<td>CorporateAccountUUID</td>
<td>Unique ID of a corporate account in SAP Marketing Cloud</td>
<td>Read-Only</td>
</tr>
<tr>
<td>CorporateAccountOrigin</td>
<td>The CorporateAccountID and CorporateAccountOrigin identify the contact uniquely.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> SAP_CRM_BUPA</td>
<td></td>
</tr>
<tr>
<td>CorporateAccountPermissionID</td>
<td>The CorporateAccountPermissionID and CorporateAccountPermissionOrigin store marketing permissions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> <a href="mailto:first.lastname@company.de">first.lastname@company.de</a></td>
<td></td>
</tr>
<tr>
<td>CorpAcctPermissionOrigin</td>
<td>The CorporateAccountPermissionID and CorporateAccountPermissionOrigin store marketing permissions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>CorpAcctPermissionOrigin is the origin of the corporate account ID that stores marketing permissions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>By defining the origin, you determine that a corporate account with an ID associated to a source is eligible to be analyzed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can configure origins of contacts IDs in the Configuring Origins configuration app.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> EMAIL</td>
<td></td>
</tr>
<tr>
<td>CorpAcctPermissionOriginName</td>
<td>Description of property CorpAcctPermissionOrigin</td>
<td>Read-Only</td>
</tr>
<tr>
<td>MarketingArea</td>
<td>Identifies an area of responsibility or an organizational unit.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>You use a marketing area to restrict access to instances of an object, such as campaign, email message, email template, target group, or permission.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>MarketingAreaName</td>
<td>Description of property MarketingArea</td>
<td>Read-Only</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Represents the type of permission, for example, EMAIL or PHONE. You can configure communication media in the Managing Interaction Content configuration app.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>CommunicationMediumName</td>
<td>Description of property CommunicationMedium</td>
<td></td>
</tr>
<tr>
<td>PermissionUUID</td>
<td>Unique ID of a permission in SAP Marketing Cloud.</td>
<td></td>
</tr>
<tr>
<td>PermissionUTCDateTime</td>
<td>This is the timestamp for when the permission was given or removed.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>PermissionSourceObject</td>
<td>This field provides information on the source of the permission, that is, where it came from. For example, the ID of a landing page. This field can be filled with freetext.</td>
<td>If you enter a value for the PermissionSourceObject property, you must also specify a value for the PermissionSourceObjectType. Both fields must be filled or left empty.</td>
</tr>
<tr>
<td>PermissionSourceObjectType</td>
<td>This field provides information on the source of the permission and its type. For example, the business object name of a landing page. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>PermissionSourceSystem</td>
<td>This is the system that stores the permission. For example, ABD client 100. This field can be filled with freetext.</td>
<td>If you enter a value for the PermissionSourceSystem property, you must also specify a value for the PermissionSourceSystemType.</td>
</tr>
<tr>
<td>PermissionSourceSystemType</td>
<td>This is the type of system where the permission is stored. For example, SAP_CEI. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>PermissionSourceCommMedium</td>
<td>Indicates where the permission comes from, such as WEB, EMAIL, or PHONE. In case PermissionSourceCommMedium is not filled, this property is set to WEB.</td>
<td></td>
</tr>
<tr>
<td>PermissionSourceCommMediumName</td>
<td>Description of property PermissionSourceCommMedium</td>
<td></td>
</tr>
<tr>
<td>PermissionIsImplicit</td>
<td>If the system sets this field to TRUE, then it is an implicit permission, which is determined by country-specific regulation. If the system sets this field to FALSE, the contact has given this permission explicitly.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>PermissionNoteText</td>
<td>A text to describe a permission change.</td>
<td></td>
</tr>
<tr>
<td>IsConfirmationRequired</td>
<td>This is a boolean parameter. If the parameter is set to TRUE, the permission is stored using the double opt-in or opt-out process. If the property is not specified in the payload or it is set to FALSE the permission is directly stored.</td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who has changed the permissions last.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>Date and time of the last permission change.</td>
<td>Read-Only</td>
</tr>
</tbody>
</table>

**MarketingSubscriptions**

**Entity Path:** /MarketingSubscriptions

**Field Extensibility:** The following business context is relevant: *Marketing: Marketing Permissions*. Custom fields for business object MKT_PERMISSION (Marketing: Permission) are only supported if you use version 2 or version 3 of the API_MKT_CONTACT service.

**i Note**
- For all HTTP operations both $batch requests and single requests can be used.
- Interactions are assigned when marketing permissions are created or updated to allow for analysis of contacts.
You can perform the following operations on the `MarketingSubscriptions` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of marketing subscriptions by Contact ID and ID Origin. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td><code>/MarketingSubscriptions?$top=1</code></td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A maximum of 5000 marketing subscriptions can be fetched in a single request</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update or create subscriptions. This creates a subscription if the subscription does not exit.</td>
<td><code>/MarketingSubscriptions(CorporateAccountId='&lt;CorporateAccountId&gt;',CorporateAccountOrigin='&lt;ContactOriginCorporateAccount&gt;',CorporateAccountPermissionID='&lt;CorporateAccountPermissionID&gt;',CorporateAccountPermissionOrigin='&lt;CorporateAccountPermissionOrigin&gt;',CommunicationMedium='&lt;CommunicationMedium&gt;',SubscriptionTopic='&lt;SubscriptionTopic&gt;')</code></td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update or create subscriptions. This creates a subscription if the subscription does not exit. Delta Update of PATCH attributes of the entity MarketingSubscriptions.</td>
<td><code>/MarketingSubscriptions(CorporateAccountId='&lt;CorporateAccountId&gt;',CorporateAccountOrigin='&lt;ContactOriginCorporateAccount&gt;',CorporateAccountPermissionID='&lt;CorporateAccountPermissionID&gt;',CorporateAccountPermissionOrigin='&lt;CorporateAccountPermissionOrigin&gt;',CommunicationMedium='&lt;CommunicationMedium&gt;',SubscriptionTopic='&lt;SubscriptionTopic&gt;')</code></td>
</tr>
</tbody>
</table>
# Marketing Subscription Property Descriptions

The table describes the properties for the `MarketingSubscription` entity.

## MarketingSubscription Property Names and Descriptions

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CorporateAccountID</td>
<td>The CorporateAccountID and CorporateAccountOrigin identify the contact uniquely.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> a business partner ID from the CRM system.</td>
<td></td>
</tr>
<tr>
<td>CorporateAccountOrigin</td>
<td>The CorporateAccountID and CorporateAccountOrigin identify the contact uniquely.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The CorporateAccountID will not be saved to the MarketingSubscription but is only used to derive a uniqueCorporateAccountUUID. This data will not be returned in GET requests.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> SAP_CRM_BUPA</td>
<td></td>
</tr>
<tr>
<td>CorporateAccountSubscriptionID</td>
<td>The InteractionContactPermissionID and InteractionContactSubscriptionOrigin store marketing subscription.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>CorpAcctSubscriptionOrigin</td>
<td>The CorporateAccountSubscriptionID and CorpAcctSubscriptionOrigin store marketing subscriptions.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>CorpAcctSubscriptionOrigin is the origin of a corporate account ID that stores marketing subscriptions. The origin indicates the source of an ID. By defining the origin, you determine that a corporate account with an ID associated to a source can be analyzed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> EMAIL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>You can configure origins of contact IDs in the Configuring Origins configuration app.</td>
<td></td>
</tr>
<tr>
<td>CorpAcctSubscriptionOriginName</td>
<td>Description of property CorpAcctSubscriptionOriginName</td>
<td>Read-Only</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Represents the type of subscription, for example, EMAIL or PHONE. You can configure communication media in the Managing Interaction Content configuration app.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>CommunicationMediumName</td>
<td>Description of property CommunicationMedium</td>
<td>Read-Only</td>
</tr>
<tr>
<td>CorporateAccountUUID</td>
<td>Unique ID of a corporate account in SAP Marketing Cloud.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>SubscriptionUUID</td>
<td>Unique ID of a subscription in SAP Marketing Cloud.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionUTCDateTime</td>
<td>This is the timestamp for when the subscription was given or removed. i Note: The time stamp must not be initial or null.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>SubscriptionSignUpExists</td>
<td>The subscription can be YES (Y) or NO (N).</td>
<td>Mandatory</td>
</tr>
<tr>
<td>SubscriptionTopic</td>
<td>Represents a newsletter in SAP Marketing Cloud.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>SubscriptionTopicName</td>
<td>Name of the subscription topic.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceObject</td>
<td>This field provides information on the source of the subscription, that is, where it came from. For example, the ID of a landing page. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>SubscriptionSourceObjectType</td>
<td>This field provides information on the source of the subscription and its type. For example, the business object name of a landing page. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceSystem</td>
<td>This is the system that stores the subscription. For example, your local system ID. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceSystemType</td>
<td>This is the type of system where the subscription is stored. For example, SAP_CE1. This field can be filled with freetext.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceCommMedium</td>
<td>Indicates where the subscription comes from, such as WEB, EMAIL, or PHONE. In case SubscriptionSourceCommMedium is not filled, this property is set to WEB.</td>
<td></td>
</tr>
<tr>
<td>SubscriptionSourceCommMedium-Name</td>
<td>Description of property SubscriptionSourceCommMedium</td>
<td></td>
</tr>
<tr>
<td>IsConfirmationRequired</td>
<td>This is a boolean parameter. If the parameter is set to TRUE, the subscription is stored using the double opt-in or opt-out process. If the property is not specified in the payload or it is set to FALSE the subscription is directly stored.</td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who has changed the subscription last.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>Date and time of the last permission change.</td>
<td>Read-Only</td>
</tr>
<tr>
<td>SubscriptionNoteText</td>
<td>A text to describe a subscription change.</td>
<td></td>
</tr>
</tbody>
</table>

Parent topic: Corporate Accounts [page 508]
5.2.4.3 Payload Examples

Payload examples for API_MKT_CORPORATE_ACCOUNT.

**i Note**

- Before you start, please read the *Processing Info and Best Practices* section in *Basic Concepts* [page 511].
- Remember to include at least the mandatory request header fields in each payload.

Available Payload Examples

- Corporate Accounts, Marketing Permissions, and Marketing Subscriptions [page 534]
- GET Requests [page 540]
- Account Team Members [page 541]
- Additional IDs [page 542]
- Corporate Account Origin Data [page 543]
- Marketing Attributes [page 544]
- Marketing Areas [page 546]

Corporate Accounts, Marketing Permissions, and Marketing Subscriptions

**Create Corporate Accounts with Additional IDs**

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
CorporateAccountOriginData(CorporateAccountID='47110815',CorporateAccountOrigin='SAP_ERP_CUSTOMER') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
```
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
  "OriginDataLastChgUTCDate-Time": "2017-10-01T13:13:14Z",
  "CityName": "Walldorf",
  "Country": "DE",
  "EmailAddress": "info.germany@sap.de",
  "FullName": "SAP SE",
  "AddressHouseNumber": "16",
  "Language": "EN",
  "PhoneNumber": "+496227747474",
  "ContactPostalCode": "69190",
  "StreetName": "Dietmar-Hopp-Allee"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
AdditionalIDs(CorporateAccountID='47110815',CorporateAccountOrigin='SAP_ERP_CUSTOMER',InteractionContactAdditionalOrigin='EMAIL',InteractionContactAdditionalExternalID='info2.germany@sap.de') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
AdditionalIDs(CorporateAccountID='47110815',CorporateAccountOrigin='SAP_ERP_CUSTOMER',InteractionContactAdditionalOrigin='SAP_CRM_BUPA',InteractionContactAdditionalExternalID='47110815') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAttributes(CorporateAccountID='47110815',CorporateAccountOrigin='SAP_ERP_CUSTOMER',MarketingAttributeCategory='Company_Size',MarketingAttributeValue='Big') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingAttributes(CorporateAccountID='47110815',CorporateAccountOrigin='SAP_ERP_CUSTOMER',MarketingAttributeCategory='Spoken_Language',MarketingAttributeValue='English') HTTP/1.1
Content-Length: 1035
Accept: application/json

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Delete Corporate Account

**Note**

A PUT request is executed to set the `IsEndOfPurpose Blocked` flag.

**Sample Code**

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT CorporateAccountOriginData(CorporateAccountID='AB20180612001-P',CorporateAccountOrigin='SAP_ERP_BUPA') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-07-23T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{


}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Create Corporate Accounts with Marketing Permissions and Marketing Subscriptions

**Note**

The batch request is sent via http method **POST** containing **PUT** requests to create a new corporate account, marketing permission and marketing subscription. To update single attributes, you must use the **PATCH** request.

**Sample Code**

```bash
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001

--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary

PUT CorporateAccountOriginData(CorporateAccountID='A98979992',CorporateAccountOrigin='SAP_C4C_BUPA') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-03-27T07:14:34'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "OriginDataLastChgUTCDateTime" : "2019-07-01T13:04:46.000",
  "CityName" : "Walldorf",
  "Country" : "DE",
  "EmailAddress" : "info@company.de",
  "PhoneNumber" : "+619022580475611",
  "MobileNumber" : "+622485500519911",
  "FullName" : "Company GmbH",
  "AddressHouseNumber" : "99",
  "Language" : "DE",
  "ContactPostalCode" : "24105",
  "StreetName" : "Dietmar-Hopp-Allee"
}

--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary

PUT MarketingPermissions(CorporateAccountID='A98979992',CorporateAccountOrigin='SAP_C4C_BUPA',CorporateAccountPermissionID='info@company.de',CorpAcctPermissionOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "CorporateAccountID" : "A98979992",
  "CorporateAccountOrigin" : "SAP_C4C_BUPA",
  "CorpAcctPermissionID" : "info@company.de",
  "CorpAcctPermissionOrigin" : "EMAIL",
  "PermissionUTCDateTime" : "2019-07-01T13:04:46.001",
  "PermissionGranted" : "Y",
  "PermissionSourceCommMedium" : "WEB",
  "IsConfirmationRequired" : false,
```
PATCH: Update Marketing Permissions and Marketing Subscriptions for a Corporate Account

Sample Code

```
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001
content-transfer-encoding: binary

--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingSubscriptions(CorporateAccountID='A98979992',CorporateAccountOrigin='SAP_C4C_BUPA',CorporateAccountSubscriptionID='info@company.de',CorpAcctSubscriptionOrigin='EMAIL',CommunicationMedium='EMAIL',SubscriptionTopic='1') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.005'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Length: 1021
{
"SubscriptionUTCDateTime" : "2019-07-01T13:04:46.001",
"SubscriptionSignUpExists" : "N",
"SubscriptionSourceCommMedium" : "WEB",
"IsConfirmationRequired" : false,
"SubscriptionNoteText" : "Sample Subscription"
}
--changeset_01869434-0010-0001--
--batch--
```

```
PUT: Update or Create Marketing Permissions and Marketing Subscriptions for a Corporate Account

**i Note**

The sample code has a PUT request that updates marketing permissions and marketing subscriptions, or creates new marketing permissions and marketing subscriptions if they do not exist. To update single attributes, you must use the PATCH request. In addition, if the value of the property IsConfirmationRequired is set to true, a double opt-in is executed.

### Sample Code

```
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0010-0001
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingPermissions(CorporateAccountID='A98979992',CorporateAccountOrigin='SAP_C4C_BUPA',CorporateAccountPermissionID='info@company.de',CorpAcctPermissionOrigin='EMAIL',MarketingArea='',CommunicationMedium='EMAIL') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.002'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "PermissionUTCDateTime" : "2019-07-01T13:04:46.201",
  "PermissionGranted" : "Y",
  "PermissionSourceCommMedium" : "WEB",
  "IsConfirmationRequired" : false,
  "PermissionNoteText" : "Sample Permission"
}
--changeset_01869434-0010-0001
content-type: application/http
content-transfer-encoding: binary
PUT
MarketingSubscriptions(CorporateAccountID='A98979992',CorporateAccountOrigin='SAP_C4C_BUPA',CorporateAccountSubscriptionID='info@company.de',CorpAcctSubscriptionOrigin='EMAIL',CommunicationMedium='EMAIL',SubscriptionTopic='1') HTTP/1.1
Accept: application/json
Sap-Cuan-RequestTimestamp: '2019-07-01T13:04:46.005'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: C4C
sap-cuan-referenceid: REQ1
Content-Type: application/json
Content-Length: 1021
{
  "SubscriptionUTCDateTime" : "2019-07-01T13:04:46.201",
  "SubscriptionSignUpExists" : "N",
  "SubscriptionSourceCommMedium" : "WEB",
  "IsConfirmationRequired" : false,
  "SubscriptionNoteText" : "Sample Subscription"
}
```
GET Requests

Get all explicit marketing permissions for a specific CorporateAccountUUID

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingPermissions?
$filter=CorporateAccountUUID eq guid'6c0b84b7-5523-1ed9-a791-f00f93927b51' and
PermissionIsImplicit eq false&$top=10

Get all marketing permissions and marketing subscriptions for a corporate account with a
certain ID and origin

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/
CorporateAccountOriginData(CorporateAccountID='A98979992
',CorporateAccountOrigin='SAP_C4C_BUPA')?
$expand=MarketingPermissions,MarketingSubscriptions

Get all marketing permissions and marketing subscriptions for a CorporateAccountUUID

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/
CorporateAccounts(CorporateAccountUUID=guid'6c0b84b7-5523-1ed9-a791-f00f93927b51')?
$expand=MarketingPermissions,MarketingSubscriptions

Get all marketing permissions for a corporate account with a certain ID and origin

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/
CorporateAccountOriginData(CorporateAccountID='A98979992
',CorporateAccountOrigin='SAP_C4C_BUPA')/MarketingPermissions

Get corporate account data via ID and origin together with its marketing permissions and
marketing subscriptions

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/
CorporateAccountOriginData(CorporateAccountID='A98979992
',CorporateAccountOrigin='SAP_C4C_BUPA')/MarketingSubscriptions

Get a corporate account via CorporateAccountUUID together with its marketing permissions
and marketing subscriptions

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingSubscriptions?
$filter=CorporateAccountUUID eq guid'6c0b84b7-5523-1ed9-a791-f00f93927b51'&$top=20

Get all marketing permissions for a specific email address of a corporate account

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingPermissions?
$filter=CorporateAccountPermissionID eq 'info@company.de' and
CorpAcctPermissionOrigin eq 'EMAIL' &$top=20
Get the first 500 a corporate accounts that subscribed to newsletter Fashion

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingSubscriptions?$top=500&$filter=SubscriptionTopicName eq 'Fashion'

Get the first 100 marketing permissions that are newer than a certain date and time

/sap/opu/odata/sap/API_MKT_CORPORATE_ACCOUNT_SRV;v=0003/MarketingPermissions?$top=100&$filter=PermissionUTCDateTime gt datetimeoffset'2019-01-01T00:00:00.001'

Account Team Members

PUT

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT AccountTeamMembers(CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>',TeamMemberID='<TeamMemberID>',Role='<Role>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

DELETE

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE AccountTeamMembers(CorporateAccountID='<CorporateAccountID>',CorporateAccountOrigin='<CorporateAccountOrigin>',TeamMemberID='<TeamMemberID>',Role='<Role>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
PATCH

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH AccountTeamMembers(CorporateAccountID='<CorporateAccountID>',
CorporateAccountOrigin='<CorporateAccountOrigin>',TeamMemberID='<TeamMemberID>'
',Role='<Role>' HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-10-02T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
  "CorporateAccountID": "<CorporateAccountID>"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Additional IDs

PUT

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT AdditionalIDs(CorporateAccountID='<CorporateAccountID>',
CorporateAccountOrigin='<CorporateAccountOrigin>',InteractionContactAdditional
Origin='<InteractionContactAdditionalOrigin>',InteractionContactAdditionalExte
rnalID='<InteractionContactAdditionalExternalID>' HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
### PATCH

Sample Code

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH AdditionalIDs(CorporateAccountID='\$CorporateAccountID',
CorporateAccountOrigin='\$CorporateAccountOrigin',InteractionContactAdditionalOrigin='\$InteractionContactAdditionalOrigin',InteractionContactAdditionalExternalID='\$InteractionContactAdditionalExternalID') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
"CorporateAccountID": "\$CorporateAccountID"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

### Corporate Account Origin Data

#### PUT - Batch

Sample Code

```bash
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PUT CorporateAccountOriginData(CorporateAccountID='\$AccountID',
CorporateAccountOrigin='\$CorporateAccountOrigin') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-28T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

#### PATCH - Batch

Sample Code

```bash
--batch
```
PUT Single Entity (use the same request header attributes as for batch)

**Note**
When you import single entities, the response body is empty. You can read the status of the import only in the response header in the attributes **Status** and **Sap-Message**.

**Sample Code**
```
Request: PUT: /sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0002/
CorporateAccountOriginData(CorporateAccountID='C_20180828_00008',CorporateAccountOrigin='SAP_ERP_CUSTOMER')
{
  "OriginDataLastChgUTCDateTime" : "2017-10-01T13:13:14Z",
  "CityName" : "Walldorf",
  "Country" : "DE",
  "EmailAddress" : "info.germany@sap.de",
  "Full Name" : "SAP SE",
  "AddressNumber" : "16",
  "Language" : "EN",
  "PhoneNumber" : "+496227747474",
  "PostalCode" : "69190",
  "StreetName" : "Dietmar-Hopp-Allee"
}
```

Marketing Attributes

**PUT**

**Sample Code**
```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
```
DELETE

Sample Code

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE MarketingAttributes(CorporateAccountID='<CorporateAccountID>',
CorporateAccountOrigin='<CorporateAccountOrigin>',MarketingAttributeCategory=''
<MarketingAttributeCategory>',MarketingAttributeValue='<MarketingAttributeValue'>)
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

PATCH

Sample Code

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH MarketingAttributes(CorporateAccountID='<CorporateAccountID>',
CorporateAccountOrigin='<CorporateAccountOrigin>',MarketingAttributeCategory=''
<MarketingAttributeCategory>',MarketingAttributeValue='<MarketingAttributeValue'>)
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2017-09-29T12:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
"CorporateAccountID": "<CorporateAccountID>"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--

Marketing Areas

PUT

```
PUT MarketingAreas(CorporateAccountID='<CorporateAccountID>', CorporateAccountOrigin='<CorporateAccountOrigin>', InteractionContactMktgArea='<InteractionContactMktgArea>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp:'2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

PATCH

```
PATCH MarketingAreas(CorporateAccountID='<CorporateAccountID>', CorporateAccountOrigin='<CorporateAccountOrigin>', InteractionContactMktgArea='<InteractionContactMktgArea>') HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp:'2017-10-01T13:13:14'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Sap-Cuan-SequenceId: UpdatePatch
Content-Type: application/json
{
"CorporateAccountID": "<CorporateAccountID>"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
5.2.4.4 Function Imports

Function imports are used to perform custom operations on an entity, which are typically not provided by OData operations. This section contains payload examples for the following function imports:

- Delete Marketing Area [page 547]
- Delete All Marketing Areas from Origin [page 548]
- Delete Account Team Members [page 548]
- Delete Marketing Attribute [page 549]
- Delete Additional IDs [page 550]

Delete Marketing Area

HTTP Method | Function Import
---|---
POST | CorporateAccountDeleteMarketingArea

Deletes all occurrences of a marketing area from a corporate account.

Payload Example

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST CorporateAccountDeleteMarketingArea?
CorporateAccountID='DEV_TEST'&CorporateAccountOrigin='SAP_ERP_CONTACT'&InteractionContactMktgArea='GLOBAL' HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
```
Delete All Marketing Areas from Origin

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>CorpAcctOriginDeleteAllMktgAreas</td>
</tr>
<tr>
<td></td>
<td>Deletes all marketing areas from one origin.</td>
</tr>
</tbody>
</table>

Payload Example

```batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST CorporateAccountOriginDeleteAllMktgAreas?
CorporateAccountID='DEV_TEST'&CorporateAccountOrigin='SAP_ERP_CONTACT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
```

Delete Account Team Members

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>CorpAcctDeleteAllAccountTeamMembers</td>
</tr>
<tr>
<td></td>
<td>Deletes all account team members from one corporate account.</td>
</tr>
</tbody>
</table>

Payload Example

```batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```
Delete Marketing Attribute

**HTTP Method**
POST

**Function Import**
CorpAcctOriginDeleteAllMktgAttributes

Deletes all marketing attributes for one origin.

**Payload Example**

```plaintext
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
Content-Type: application/http
content-transfer-encoding: binary
POST CorporateAccountDeleteAllAccountTeamMembers?
CorporateAccountID='DEV_TEST'&CorporateAccountOrigin='SAP_ERP_CONTACT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Delete Additional IDs

HTTP Method | Function Import |
-------------|----------------|
POST         | CorpAcctOriginDeleteAdditionalIDs |

Deletes all additional IDs from one origin except the IDs that come from the origin data.

Payload Example

```
--batch
Content-Type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST CorpAcctOriginDeleteAdditionalIDs?
CorporateAccountID='DEV_TEST'&CorporateAccountOrigin='SAP_ERP_CONTACT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-RequestTimestamp: '2018-11-02T09:19:12'
Sap-Cuan-SourceSystemType: EXT
Sap-Cuan-SourceSystemId: HYBRIS
Content-Type: application/json
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Function Import Parameters

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>CorporateAccountID</td>
<td>ID of Corporate Account</td>
<td>Edm. String</td>
<td>255</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CorporateAccountOrigin</td>
<td>Origin of Corporate Account</td>
<td>Edm. String</td>
<td>20</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CorporateAccountMktgArea</td>
<td>Marketing Area</td>
<td>Edm. String</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Parent topic: Corporate Accounts [page 508]
5.2.5 Business Partners from SAP Cloud for Customer

Import business partners from SAP Cloud for Customer via CUAN_BUSINESS_PARTNER_IMP_SRV to marketing.

5.2.5.1 Overview

OData service CUAN_BUSINESS_PARTNER_IMP_SRV is used for standard SAP Marketing Cloud integration with SAP Cloud for Customer. It is used to replicate SAP Cloud for Customer business partners to SAP Marketing Cloud interaction contacts. For details of standard SAP Marketing Cloud integration with SAP Cloud for Customer see Technical Prerequisites [page 552].

Related Information

Technical Prerequisites [page 552]
Basic Concepts [page 552]
Structure of OData Service CUAN_BUSINESS_PARTNER_IMP_SRV [page 554]
Payload Examples for CUAN_BUSINESS_PARTNER_IMP_SRV [page 562]
5.2.5.2 Technical Prerequisites

OData service CUAN_BUSINESS_PARTNER_IMP_SRV is available as part of standard integration with SAP Cloud for Customer.

For more information about the integration setup of SAP Cloud for Customer with SAP Marketing Cloud, see SAP Cloud for Customer Integration with SAP Marketing, or Purpose.

Parent topic: Business Partners from SAP Cloud for Customer [page 551]

Related Information

Overview [page 551]
Basic Concepts [page 552]
Structure of OData Service CUAN_BUSINESS_PARTNER_IMP_SRV [page 554]
Payload Examples for CUAN_BUSINESS_PARTNER_IMP_SRV [page 562]

5.2.5.3 Basic Concepts

Calling the OData Service

To import persons, companies, or relationships, a deep insert on entity Import Headers with HTTP method POST has to be performed; other methods like create, update, or delete on any other entity are not supported. You find code snippets under Structure of OData Service CUAN_BUSINESS_PARTNER_IMP_SRV [page 554] and the subordinated chapters.

i Note

We recommend that you do not use batch processing ($batch) because error handling is more complex with batch processing. A batch request can return an OK code and still have errors that have to be checked in the response body. It is still possible to send multiple entities in one POST request without using batch processing.

Id and IdOrigin

The Id and the IdOrigin define the external key of an interaction contact in the source system. The IdOrigin indicates the source origin of the ID. It is either defined and delivered by SAP or can be maintained in
the Self-Service Configuration app *Define Origins of Contact ID*. The attribute `InternalId` defines the ID of the company or person in SAP Marketing Cloud. The `InternalId` corresponds to a GUID of `IdOrigin SAP_HYBRIS_MKT_IC`.

**Update Behavior**

The source system must always provide a whole snapshot of the object as the system of SAP Marketing Cloud always updates a complete person, company or relationship; partial update of an entity is not supported. This means that it is not possible to update only two attributes of a person, for example, as the empty attributes of the update would overwrite the existing attribute entries.

If a facet or marketing area is not provided anymore in the update case the system sets this facet or marketing area to obsolete.

**Sequence Handling with Attribute LastChangeDate**

Attribute `LastChangeDate` of the entities `Company`, `Person`, or `Relationship` defines the last change in the source system. The timestamp is used to ensure that different requests are processed in the correct sequence. An incoming request is always validated against the last saved timestamp for the respective entity and checked, whether the provided `LastChangeDate` is newer than the saved one. Requests which contain an outdated `LastChangeDate` are discarded as a more recent snapshot of the entity has already been saved.

**Code Values**

Attributes based on codes can only process valid code values. If a request provides an invalid code value the request will result in an error. The error can be checked in the *Import Monitor* app. For more information, see *Import Monitor* [page 397].

**Error Handling**

Technical errors are returned to the sender with the corresponding HTTP error code.

Application inbound errors are recorded in the system of SAP Marketing Cloud and can be monitored, restarted, and discarded in the *Import Monitor* app. For more information, see *Import Monitor* [page 397].

### Note

If you encounter issues with the OData service `CUAN_BUSINESS_PARTNER_IMP_SRV`, create a support ticket under component `CEC-MKT-DM-IC` (Interaction Contacts).

The component is not to be used for HTTP errors. For more information, see *HTTP Response Status Codes* [page 402].
Extensibility

All custom fields registered with app Custom Fields and Logic will automatically appear in the OData service. It is not necessary to enable the usage for a specific field for that OData service.

The entity Company has the following business contexts assigned: Marketing: Corporate Account and Marketing: Contact and Corporate Account.

The entity Person has the following business context assigned: Context Marketing: Contact and Marketing: Contact and Corporate Account.

The entity Relationship is not extensible.

Parent topic: Business Partners from SAP Cloud for Customer [page 551]

Related Information

Overview [page 551]
Technical Prerequisites [page 552]
Structure of OData Service CUAN_BUSINESS_PARTNER_IMP_SRV [page 554]
Payload Examples for CUAN_BUSINESS_PARTNER_IMP_SRV [page 562]

5.2.5.4 Structure of OData Service
CUAN_BUSINESS_PARTNER_IMP_SRV

The CUAN_BUSINESS_PARTNER_IMP_SRV OData service consists of the following entity sets and entity types:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Entity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImportHeaders</td>
<td>ImportHeader</td>
<td>Technical Import Message Header</td>
</tr>
<tr>
<td>Companies</td>
<td>Company</td>
<td>Company</td>
</tr>
<tr>
<td>Persons</td>
<td>Person</td>
<td>Person</td>
</tr>
<tr>
<td>Relationships</td>
<td>Relationship</td>
<td>Relationship (from contact person to corporate account)</td>
</tr>
<tr>
<td>Facets</td>
<td>Facet</td>
<td>Facet</td>
</tr>
<tr>
<td>MarketingAreas</td>
<td>MarketingArea</td>
<td>Marketing Area</td>
</tr>
</tbody>
</table>
The metadata structure of the service is read by means of the OData call:

- **Request URI:** https://<server>:<port>/sap/opu/odata/sap/CUAN_BUSINESS_PARTNER_IMP_SRV/$metadata
- **HTTP Method:** GET

**Parent topic:** Business Partners from SAP Cloud for Customer [page 551]

## Related Information

- Overview [page 551]
- Technical Prerequisites [page 552]
- Basic Concepts [page 552]
- Payload Examples for CUAN_BUSINESS_PARTNER_IMP_SRV [page 562]

### 5.2.5.4.1 ImportHeader

The entity type ImportHeader describes the technical header of an import of multiple business partners. The properties `Id` and `Timestamp` are used for logging the external data request. If an error occurs during the posting of the business partner, in addition to the import header data the error message and the failed record are saved. This data can be checked with the Import Monitor app. For more information, see Import Monitor [page 397].

For every service request, a new, unique ID is required. If no ID value is provided it is defaulted internally. In the Import Monitor app, the ID is used as search field and the status of the import is shown for the request. If no timestamps is provided it is defaulted to the time of import processing. If the timestamp is provided it is stored at the import header and displayed in the Import Monitor as date/time of the import notification.

The `SourceSystemId` and `SourceSystemType` property allows you to distinguish between different source systems. The `SourceSystemId` and `SourceSystemType` are mandatory attributes.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>Unique technical identifier of import run.</td>
<td>Edm.String</td>
<td>32</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
### Property Description Edm Core Type Max Length Mandatory Key

**Timestamp**  
Timestamp of the run in the format: number of milliseconds since midnight Jan 1, 1970. For example: /
Date(1406014140922)/  
Edm.DateTime  
0  

**SourceSystemType**  
Type of the source system, such as C4C  
Edm.String  
20  
X  

**SourceSystemId**  
Identifier of the source system  
Edm.String  
20  
X  

---

### 5.2.5.4.2 Company

The entity type Company contains all attributes that are required to create a corporate account with its main origin data. The ID of the company has to be provided by the external source system to perform later updates.

This entity is used in standard SAP Marketing Cloud integration with SAP Cloud for Customer for replicating accounts.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>Id of the Company in the external system</td>
<td>Edm.String</td>
<td>100</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>IdOrigin</td>
<td>Origin or source of ID of companies from external sys-</td>
<td>Edm.String</td>
<td>20</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>InternalId</td>
<td>ID of the company on SAP Marketing Cloud integration</td>
<td>Edm.String</td>
<td>100</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>LastChangeDate</td>
<td>Timestamp</td>
<td>Edm.DateTime</td>
<td>0</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format: number of milliseconds since midnight Jan 1, 1970. For example: /Date(1406014140922)/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CompanyName</td>
<td>Company Name</td>
<td>Edm.String</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RegionCode</td>
<td>Region Code</td>
<td>Edm.String</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CityName</td>
<td>City Name as part of the postal address</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PostalCode</td>
<td>Postal Code</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street</td>
<td>Street as part of postal address</td>
<td>Edm.String</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HouseNumber</td>
<td>House number as part of postal address</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EmailAddress</td>
<td>E-mail Address</td>
<td>Edm.String</td>
<td>241</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhoneNumber</td>
<td>Phone number for mobile</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format: +country code region code + phone number, such as +49151123456</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FaxNumber</td>
<td>Fax number</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format: +country code region code + fax number such as +49 6227 123456</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebSite</td>
<td>Web URI</td>
<td>Edm.String</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------</td>
<td>-----------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>IndustryCode</td>
<td>Industry Code</td>
<td>Edm.String</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LanguageCode</td>
<td>Preferred communication Language Code</td>
<td>Edm.String</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MobileNumber</td>
<td>Mobile Number</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latitude</td>
<td>Latitude</td>
<td>Edm.Decimal</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longitude</td>
<td>Longitude</td>
<td>Edm.Decimal</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SpatialReferenceSystem</td>
<td>Spatial Reference System</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5.2.5.4.3 Person

This entity is used in standard SAP Marketing Cloud integration with SAP Cloud for Customer for replicating contacts and individual customers.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>ID of the person in the external system</td>
<td>Edm.String</td>
<td>100</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>IdOrigin</td>
<td>Origin or source of ID of person from external systems</td>
<td>Edm.String</td>
<td>20</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>InternalID</td>
<td>ID of the person in SAP Marketing Cloud integration with SAP Cloud for Customer</td>
<td>Edm.String</td>
<td>100</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>LastChangeDate</td>
<td>Obsolete must be filled for compatibility reasons</td>
<td>Edm.DateTime</td>
<td>0</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>FirstName</td>
<td>First Name</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LastName</td>
<td>Last Name</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>FullName</td>
<td>Full Name</td>
<td>Edm.String</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DateOfBirth</td>
<td>Date of Birth</td>
<td>Edm.DateTime</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenderCode</td>
<td>Gender Code</td>
<td>Edm.String</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MaritalStatusCode</td>
<td>Marital Status Code</td>
<td>Edm.String</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TitleCode</td>
<td>Title Code</td>
<td>Edm.String</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebSite</td>
<td>Web URI</td>
<td>Edm.String</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsConsumer</td>
<td>Person is Consumer</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsContact</td>
<td>Person is Contact</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LanguageCode</td>
<td>Preferred Language</td>
<td>Edm.String</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PostalCode</td>
<td>Postal Code as part of the address; only relevant for consumer</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street</td>
<td>Street as part of the address; only relevant for consumer</td>
<td>Edm.String</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HouseNumber</td>
<td>House Number as part of the address; only relevant for consumer</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EmailAddress</td>
<td>Email Address; only relevant for consumer</td>
<td>Edm.String</td>
<td>241</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhoneNumber</td>
<td>Phone Number; only relevant for consumer</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MobilePhoneNumber</td>
<td>Mobile Phone Number; only relevant for consumer</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------</td>
<td>------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>FaxNumber</td>
<td>Fax Number: only relevant for consumer</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MobileNumber</td>
<td>Mobile Number</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latitude</td>
<td>Latitude</td>
<td>Edm.Decimal</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longitude</td>
<td>Longitude</td>
<td>Edm.Decimal</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SpatialReferenceSystem</td>
<td>Spatial Reference System</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5.2.5.4.4 Relationship

This entity is used in standard SAP Marketing Cloud integration with SAP Cloud for Customer for replicating Is Contact Person for relationships. The relationship type has to be provided. The relationship is directed from a contact person to a corporate account.

It is possible to create or to delete a relationship by providing the correspondingActionCode.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>IdFrom</td>
<td>External ID of contact person</td>
<td>Edm.String</td>
<td>100</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>IdTo</td>
<td>External ID of corporate account</td>
<td>Edm.String</td>
<td>100</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>IdOrigin</td>
<td>Origin or source of ID of From and To Business Partner</td>
<td>Edm.String</td>
<td>20</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>InternalIdFrom</td>
<td>ID of the contact person in SAP Marketing Cloud</td>
<td>Edm.String</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InternalIdTo</td>
<td>ID of the corporate account in SAP Marketing Cloud</td>
<td>Edm.String</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RelationType</td>
<td>Type of the relationship</td>
<td>Edm.String</td>
<td>2</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
</tbody>
</table>
| ActionCode        | The action code controls how the relationship is to be processed in the backend:  
|                   | 1. Create/Change                                                                | Edm.String    | 1          | X         |     |
|                   | 2. Delete                                                                     |               |            |           |     |
| LastChangeDate    | Timestamp of the external object. Timestamp is used to process messages in the right sequence | Edm.DateTime  | 0          |           |     |
| EmailAddress      | Business Email Address of contact person                                       | Edm.String    | 241        |           |     |
| PhoneNumber       | Business Phone Number                                                          | Edm.String    | 30         |           |     |
| MobilePhoneNumber | Business Mobile Phone Number                                                   | Edm.String    | 30         |           |     |
| FaxNumber         | Business Fax Number                                                            | Edm.String    | 30         |           |     |
| DepartmentCode    | Department                                                                     | Edm.String    | 4          |           |     |
| FunctionCode      | Function                                                                       | Edm.String    | 4          |           |     |
| IsMain            | Is main Contact                                                                | Edm.Boolean   |            |           |     |

### 5.2.5.4.5 Facet

Facets can be used to import additional external IDs of a company or a person.

If the facets are used to import those IDs the additional IDs have to be provided in the entity Relationship for consistency reasons. For more information, see section Update Behavior in Basic Concepts [page 552].
## 5.2.5.4.6 Marketing Area

Entity Marketing Area can be used to import marketing area assignments for a person or a company.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>ID from the external system</td>
<td>Edm.String</td>
<td>10</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Origin</td>
<td>Origin of ID from external system</td>
<td>Edm.String</td>
<td>30</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

## 5.2.5.5 Payload Examples for CUAN_BUSINESS_PARTNER_IMP_SRV

This section contains payload examples for replicating business partners from SAP Cloud for Customer to marketing with the OData service CUAN_BUSINESS_PARTNER_IMP_SRV.

Parent topic: Business Partners from SAP Cloud for Customer [page 551]

Related Information

- Overview [page 551]
- Technical Prerequisites [page 552]
- Basic Concepts [page 552]
- Structure of OData Service CUAN_BUSINESS_PARTNER_IMP_SRV [page 554]

### 5.2.5.5.1 Importing Company Data

All attributes of entity Company are relevant for updating a company including all extension fields of business context Marketing: Corporate Account and Marketing: Contact and Corporate Account.
The following code snippet shows an example in JSON format of how to import two corporate accounts, one of them with an additional ERP ID:

- **Request URI:**
  /sap/opu/odata/sap/CUAN_BUSINESS_PARTNER_IMP_SRV/ImportHeaders
- **HTTP Method:** POST

```json
{
  "Id": "",
  "Timestamp": "2016-05-04T14:07:21.6779610",
  "SourceSystemType": "C4C",
  "SourceSystemId": "CLOUDFORCUSTOMER",
  "Companies": [
    {
      "Id": "123456789",
      "IdOrigin": "SAP_C4C_BUPA",
      "LastChangeDate": "2016-05-04T14:07:21.6779610",
      "CompanyName": "SAP Deutschland SE & Co. KG",
      "CountryCode": "DE",
      "RegionCode": "BW",
      "CityName": "Walldorf",
      "PostalCode": "69190",
      "Street": "Hasso-Plattner-Ring",
      "HouseNumber": "7",
      "EmailAddress": "info.germany@sap.com",
      "PhoneNumber": "+496227747474",
      "FaxNumber": "+496227757575",
      "WebSite": "www.sap.com/germany",
      "IndustryCode": "63",
      "LanguageCode": "DE",
      "Facets": [
        {
          "Id": "123456789",
          "IdOrigin": "SAP_ERP_BUPA"
        }
      ]
    },
    {
      "Id": "923456789",
      "IdOrigin": "SAP_C4C_BUPA",
      "LastChangeDate": "2016-05-04T14:07:21.6779610",
      "CompanyName": "OtherCompany",
      "CountryCode": "DE",
      "RegionCode": "BW"
    }
  ]
}
```

During the import of companies, the system determines whether there are relationships to that corporate account. If there are contact persons with an Is Contact Person relation to that account the corporate account’s postal address (street, house number, postal code, city name, region code, country) is copied to all active contact persons. After the import of the corporate account, all contact persons of that account have the same postal address.
5.2.5.5.2  Importing Person Data

During the import of persons via the OData service CUAN_BUSINESS_PARTNER_IMP_SRV, a person can be either a consumer (B2C process) or a contact person (B2B process).

- A consumer is a natural person who generates sales revenue (IS_CONSUMER = X).
- A contact person is a natural person a company interacts in a B2B process (IS_CONTACT = X) with, and which usually has an Is Contact Person relationship to a corporate account. A contact person has workplace-related information, such as function, department or workplace communication data (phone, email, fax etc). A contact person’s postal address is derived from the related company’s postal address.

Dependent on the attribute IsConsumer or IsContact, a different set of attributes is used for updating the interaction contact. A contact person may only have the related company’s postal address. That is why importing a postal address for a person marked as IsContact is not possible, and if attributes are provided they are ignored during import.

The following table provides you with attributes that are relevant for updating a consumer or contact person.

<table>
<thead>
<tr>
<th>Person (consumer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Id</td>
</tr>
<tr>
<td>• IdOrigin</td>
</tr>
<tr>
<td>• InternalId</td>
</tr>
<tr>
<td>• LastChangeDate</td>
</tr>
<tr>
<td>• FirstName</td>
</tr>
<tr>
<td>• LastName</td>
</tr>
<tr>
<td>• FullName</td>
</tr>
<tr>
<td>• DateOfBirth</td>
</tr>
<tr>
<td>• GenderCode</td>
</tr>
<tr>
<td>• MaritalStatusCode</td>
</tr>
<tr>
<td>• TitleCode</td>
</tr>
<tr>
<td>• CountryCode</td>
</tr>
<tr>
<td>• RegionCode</td>
</tr>
<tr>
<td>• CityName</td>
</tr>
<tr>
<td>• PostalCode</td>
</tr>
<tr>
<td>• Street</td>
</tr>
<tr>
<td>• HouseNumber</td>
</tr>
<tr>
<td>• EmailAddress</td>
</tr>
<tr>
<td>• PhoneNumber</td>
</tr>
<tr>
<td>• MobilePhoneNumber</td>
</tr>
<tr>
<td>• FaxNumber</td>
</tr>
<tr>
<td>• WebSite</td>
</tr>
<tr>
<td>• IsConsumer</td>
</tr>
<tr>
<td>• LanguageCode</td>
</tr>
<tr>
<td>• Customer extension fields for Business Context Marketing: Contact and Marketing: Contact and Corporate Account</td>
</tr>
</tbody>
</table>
5.2.5.5.2.1 Consumer

The following code snippet shows an example in JSON format of how to import a consumer with an additional ERP ID:

- Request URI:
  /sap/opu/odata/sap/CUAN_BUSINESS_PARTNER_IMP_SRV/ImportHeaders

- HTTP Method: POST

```json
{
  "Id": "",
  "Timestamp": "2016-05-04T14:07:21.6779610",
  "SourceSystemType": "C4C",
  "SourceSystemId": "CLOUDFORCUSTOMER",
  "Persons": [
    {
      "Id": "223456789",
      "IdOrigin": "SAP_C4C_BUPA",
      "LastChangeDate": "2016-05-04T14:07:21.6779610",
      "FirstName": "Erika",
      "LastName": "Mustermann",
      "FullName": "Erika Mustermann",
      "GenderCode": "2",
      "MaritalStatusCode": "1",
      "CountryCode": "DE",
      "RegionCode": "BW",
      "CityName": "Walldorf",
      "PostalCode": "69190",
      "Street": "Bahnhofstraße",
      "HouseNumber": "1",
      "EmailAddress": "erika.mustermann@privat.de",
    }
  ]
}
```
As a result of this sample request, a consumer will be created with the provided attributes.

### 5.2.5.5.2.2 Contact Person

The following code snippet shows an example in JSON format of how to import a contact person with additional ERP ID:

- **Request URI:**
  `/sap/opu/odata/sap/CUAN_BUSINESS_PARTNER_IMP_SRV/ImportHeaders`

- **HTTP Method:** POST

```
{  
  "Id": "",  
  "Timestamp": "2016-05-04T14:07:21.6779610",  
  "SourceSystemType": "C4C",  
  "SourceSystemId": "CLOUDFORCUSTOMER",  
  "Persons": [  
    {  
      "Id": "323456789",  
      "IdOrigin": "SAP_C4C_BUPA",  
      "LastChangeDate": "2016-05-04T14:07:21.6779610",  
      "FirstName": "Heinz",  
      "LastName": "Müller",  
      "FullName": "Heinz Müller",  
      "GenderCode": "1",  
      "MaritalStatusCode": "2",  
      "DateOfBirth": "1978-05-12T00:00:00.0000000",  
      "IsContact": true,  
      "LanguageCode": "DE",  
      "Facets": [{  
        "Id": "323456789",  
        "IdOrigin": "SAP_ERP_BUPA"  
      }]  
    }]  
}
```

The result of this sample request depends on the data already in the system.

If the contact person is created with this sample request or if the contact person of the request does not exist in the system, the contact person will be created and the contact person will only contain the attributes listed in the request.
If the contact person already has a relationship to an account the contact person will additionally have the following attributes:

- The corporate account’s postal address
- All attributes provided with the relationship request

### 5.2.5.5.3 Importing Relationship Data

#### 5.2.5.5.3.1 Create or Change Relationship

The following code snippet shows an example in JSON format of how to import a relationship between a company and a contact with an additional ERP ID. The contact person’s additional IDs are transferred via the entity `FromFacets`:

- **Request URI:**
  `/sap/opu/odata/sap/CUAN_BUSINESS_PARTNER_IMP_SRV/ImportHeaders`
- **HTTP Method:** POST

```json
{
    "Id": "",
    "Timestamp": "2016-05-04T14:07:21.6779610",
    "SourceSystemType": "C4C",
    "SourceSystemId": "CLOUDFORCUSTOMER",
    "Relationships": [
        {
            "IdOrigin": "SAP_C4C_BUPA",
            "IdFrom": "323456789",
            "IdTo": "123456789",
            "RelationType": "01",
            "ActionCode": "1",
            "LastChangeDate": "2016-05-04T14:07:21.6779610",
            "FunctionCode": "08",
            "DepartmentCode": "0024",
            "PhoneNumber": "+496227712345",
            "FaxNumber": "+4962277612345",
            "EmailAddress": "heinz.mueller@sap.com",
            "FunctionCode": "08",
            "DepartmentCode": "0025",
            "IsMain": false,
            "FromFacets": [
                {
                    "Id": "323456789",
                    "IdOrigin": "SAP_ERP_BUPA"
                }
            ]
        }
    ]
}
```
The result of that request depends on the data already in the system:

- If the contact person is created with this sample request the contact person will contain only the attributes listed in the request and will have no name, title, date of birth, and so on. If the related company has a postal address the contact person will also have that postal address.

- If the company of that sample request does not exist the request will not be saved but forwarded to the Import Monitor app. The request will be automatically reprocessed until the company is successfully imported into the system. Usually, a source system will only allow a relationship to be created if the referenced business partner has been created, so the relationship might reach SAP Marketing Cloud before the corresponding master data requests.

- If the contact person is already in the system and a relationship to a company with postal address exists the contact person will have the attributes sent with the relationship request, the company’s postal address and the contact person’s master data.

### 5.2.5.3.2 Delete Relationship

The following code snippet shows an example in JSON format of how to delete an existing relationship between a company and a contact:

- Request URI: `/sap/opu/odata/sap/CUAN_BUSINESS_PARTNER_IMP_SRV/ImportHeaders`
- HTTP Method: POST

```json

{  
  "Id": "",
  "IdOrigin": "SAP_C4C_BUPA",
  "IdFrom": "323456789",
  "IdTo": "123456789",
  "ActionCode": "2",
  "LastChangeDate": "2017-08-10T14:07:21.6779610"
}
```

As a result of this request, the contact person’s relationship to the company is deleted. Along with that, the following business related attributes are cleared:

- Postal Address
- Communication data (phone, email, fax, mobile)
- Function, department
5.2.6 Import Business Partners

CUAN_BUSINESS_PARTNER_IMPORT_SRV for importing business partner data from external source systems, like, for example, SAP ERP, SAP CRM, SAP S/4HANA On Premise.

OData service CUAN_BUSINESS_PARTNER_IMPORT_SRV is used for standard SAP Marketing Cloud integration. It is used in marketing-driven and sales-driven processes to replicate data from SAP ERP, SAP CRM, or SAP S/4HANA On Premise to SAP Marketing Cloud interaction contacts.

For more information about the integration scenario, see Integration with SAP ERP [page 346] and Order Management Data Replication to SAP Marketing Cloud [page 345].

For more information about external interfaces that SAP Marketing Cloud provides for creating or updating interaction contacts, interactions, interests, corporate accounts, product categories, and products, see Integration APIs [page 382].

OData service CUAN_BUSINESS_PARTNER_IMPORT_SRV can also be used to create SAP Marketing Cloud interaction contacts from any source system. The OData service CUAN_BUSINESS_PARTNER_IMPORT_SRV supports the change of interaction contacts. Each interaction contact is identified by the key of the business partner in the external system.

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you encounter issues with the OData service CUAN_BUSINESS_PARTNER_IMPORT_SRV, create a support ticket under component CEC-MKT-DM-IC (Interaction Contacts). The component is not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].</td>
</tr>
</tbody>
</table>

5.2.6.1 Technical Prerequisites

OData service CUAN_BUSINESS_PARTNER_IMPORT_SRV is available as part of the standard integration with SAP ERP, SAP S/4HANA Cloud, and SAP S/4HANA On Premise.

5.2.6.2 Basic Concepts

OData service CUAN_BUSINESS_PARTNER_IMPORT_SRV supports only batch processing. Within a batch request only the operation PATCH (MERGE) on the entity type InteractionContact, or the operation POST on the entity type MarketingAttribute, or the function import DeleteMarketingAttributes are supported. Other operations, such as update or read are not supported.

Batch requests allow grouping multiple operations into a single HTTP request payload.

Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in OData URI. The batch request must contain a content-type header specifying a content type of multipart/mixed and a boundary specification.
A PATCH (MERGE) request updates only the properties indicated in the request body and leaves everything untouched that was not mentioned.

All properties that are not to be changed, can be omitted. The transmitted properties are merged with the data already stored in SAP Marketing Cloud.

Any processing errors are recorded in the SAP Marketing Cloud system in the Import Monitor app, where they can be monitored, restarted and discarded.

**Note**

If you encounter issues with the OData service `CUAN_BUSINESS_PARTNER_IMPORT_SRV`, create a support ticket under component `CEC-MKT-DM-IC` (Interaction Contacts).

The component is not to be used for HTTP errors. For example, if the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 202 is returned. For more information, see [HTTP Response Status Codes](#) [page 402].

### 5.2.6.3 Structure of OData Service

**CUAN_BUSINESS_PARTNER_IMPORT_SRV**

The `CUAN_BUSINESS_PARTNER_IMPORT_SRV` OData service consists of the following entity sets and entity types:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Entity Type Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionContacts</td>
<td>InteractionContact</td>
<td>Interaction contacts refer to contacts in SAP Marketing Cloud. Interaction Contact is a generic term to group all natural persons (contacts, consumers, or suspects), companies and “unknowns”, who interact with your company. Contact data is collected and merged from several sources into the master data tables within SAP Marketing Cloud. We distinguish between contacts, consumers and suspects to define the business relationship of a contact to a company.</td>
</tr>
<tr>
<td>MarketingAttributes</td>
<td>MarketingAttribute</td>
<td>Marketing attributes are assigned to an interaction contact. The marketing attribute category can be defined per source of the contact data.</td>
</tr>
<tr>
<td>MarketingAreas</td>
<td>MarketingArea</td>
<td>Use marketing areas as organizational units and to determine which interaction contacts a user can access.</td>
</tr>
</tbody>
</table>
The OData service **CUAN_BUSINESS_PARTNER_IMPORT_SRV** supports OData batch processing. Interaction contact data can be transferred by the OData PATCH (MERGE) operation for entity type **InteractionContact**.

Marketing attributes can be transferred by the OData POST operation on the entity type **InteractionContact** via the navigation parameter **MarketingAttributes**. Any operation on the **MarketingAttributes** entity set without navigation from the **InteractionContact** is not supported.

It is expected that all marketing attributes of an interaction contact are transferred via one change set within the batch request. The transmitted marketing attributes overwrite the existing entries imported from the same source.

The deletion of the marketing attributes of an interaction contact can be done via the OData function import **DeleteMarketingAttributes**.

Marketing areas can be transferred by the OData POST operation on the entity type **InteractionContact** via the navigation parameter **MarketingAreas**. The marketing area of the interaction contact can be deleted by the OData DELETE operation on the entity type **MarketingArea**.

### Request Header

The request header contains the following additional header fields:

<table>
<thead>
<tr>
<th>Header Field</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-SequenceId</td>
<td>Unique technical identifier of the imported data.</td>
<td>Edm.String</td>
<td>30</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-RequestTimestamp</td>
<td>Timestamp of the data</td>
<td>Edm.DateTime</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Sap-Cuan-SequenceNumber</td>
<td>Sequence number of the request. This number is normally incremented each time a new request for the same sequence id is created.</td>
<td>Edm.Int16</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemType</td>
<td>Type of the source system</td>
<td>Edm.String</td>
<td>20</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemId</td>
<td>Identifier of the source system. This is a free text field.</td>
<td>Edm.String</td>
<td>255</td>
<td>X</td>
</tr>
<tr>
<td>Header Field</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Sap-Cuan-ExternalReferenceId</td>
<td>External reference of the inbound message</td>
<td>Edm.String</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-ExternalDocumentId</td>
<td>External identifier of the source document</td>
<td>Edm.String</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

The **header fields** **Sap-Cuan-SequenceId** and **Sap-Cuan-RequestTimestamp** or **Sap-Cuan-SequenceNumber** are used to check the sequence of the received data. Data with a timestamp older or sequence number lower than data already imported, is ignored. Data with the same **Sap-Cuan SequenceID** is also ignored.

The **Sap-Cuan-SourceSystemType** and **Sap-Cuan-SourceSystemId** fields allow you to distinguish between different source systems.

*Either **Sap-Cuan-RequestTimestamp** or **Sap-Cuan-SequenceNumber** must be provided together with **Sap-Cuan-SequenceId**.

The **Sap-Cuan-ExternalReferenceId** and **Sap-Cuan-ExternalDocumentId** allow better error analysis because they contain external references to a source SOAP message and/or an IDoc.

### InteractionContact

Only the properties **Id** and **IdOrigin** are mandatory. All properties that are not to be changed can be omitted.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>ID of Interaction Contact</td>
<td>Edm.String</td>
<td>255</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IdOrigin</td>
<td>Origin of Interaction Contact</td>
<td>Edm.String</td>
<td>20</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IsEndOfPurposeBlocked</td>
<td>End of Purpose Reached</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Full Name</td>
<td>Edm.String</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FirstName</td>
<td>First Name</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LastName</td>
<td>Last Name</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TitleCode</td>
<td>Title Code</td>
<td>Edm.String</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RegionCode</td>
<td>Region Code</td>
<td>Edm.String</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Integration APIs
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>City</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PostalCode</td>
<td>Postal Code</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street</td>
<td>Street</td>
<td>Edm.String</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HouseNumber</td>
<td>House Number</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LanguageCode</td>
<td>Language Code</td>
<td>Edm.String</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GenderCode</td>
<td>The following fixed values are supported:</td>
<td>Edm.String</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 - Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 - Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3 - Non-binary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 9 - Not specified</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MaritalStatusCode</td>
<td>Marital Status Code</td>
<td>Edm.String</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IndustryCode</td>
<td>Industry Code</td>
<td>Edm.String</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DepartmentCode</td>
<td>Department Code</td>
<td>Edm.String</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FunctionCode</td>
<td>Function Code</td>
<td>Edm.String</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EmailAddress</td>
<td>E-Mail Address</td>
<td>Edm.String</td>
<td>241</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhoneNumber</td>
<td>Phone Number</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MobilePhoneNumber</td>
<td>Mobile Phone Number</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FaxNumber</td>
<td>Fax Number</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DateOfBirth</td>
<td>Date of Birth</td>
<td>Edm.DateTime</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsContact</td>
<td>Indicates whether person acts as contact for an account</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsMainContact</td>
<td>Indicates a person that acts as a main contact for an account</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------</td>
<td>------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>IsConsumer</td>
<td>Indicates whether person is a consumer</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obsolete</td>
<td>Obsolete</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebUri</td>
<td>Web Site</td>
<td>Edm.String</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latitude</td>
<td>Latitude</td>
<td>Edm.Decimal</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longitude</td>
<td>Longitude</td>
<td>Edm.Decimal</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IcType</td>
<td>Interaction Contact Type: 01 person 02 company</td>
<td>Edm.String</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CompanyId</td>
<td>ID of Company</td>
<td>Edm.String</td>
<td>255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CompanyIdOrigin</td>
<td>Origin of Company</td>
<td>Edm.String</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MatchId</td>
<td>ID of matched Entity</td>
<td>Edm.String</td>
<td>255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MatchIdOrigin</td>
<td>Origin of matched Entity</td>
<td>Edm.String</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The property IdOrigin indicates the source of the Id. It is maintained in the Self-Service Configuration app Define Origins of Contact ID. To replicate SAP ERP data to SAP Marketing Cloud, interaction contacts origin SAP_ERP_CONTACT or SAP_ERP_CUSTOMER is used. To replicate SAP S/4HANA data to SAP Marketing Cloud, SAP_S4_BUPA, an additional facet for customer SAP_S4_CUSTOMER, for contact SAP_S4_CONTACT is used.

CompanyId and CompanyIdOrigin are used to create a relationship between a contact and a company.

MatchId and MatchIdOrigin are used to associate an interaction contact to data already created with different Id and IdOrigin in SAP Marketing Cloud, for example data transmitted from a different source system.

An interaction contact can be classified as contact (property: IsContact = true) for persons acting as contact for an account (B2B), and as a consumer (property: IsConsumer = true) that acts as an account (B2C). A person can be both a contact and a consumer at the same time.

Interaction contacts that are marked as Obsolete or IsEndOfPurposeBlocked are not visible and cannot be used in business processes. The Obsolete indicator can be removed. Setting the IsEndOfPurposeBlocked indicator is permanent.
Marketing Attributes

Marketing attributes can be created only via the navigation property `MarketingAttributes` of the `InteractionContact` entity type.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>CategoryId</td>
<td>ID of Marketing Category</td>
<td>Edm.String</td>
<td>75</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Value</td>
<td>Value of Marketing Attribute</td>
<td>Edm.String</td>
<td>255</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Transferring Marketing Attributes

Marketing attributes and their assignments to business partners are transferred from a source system, for example SAP S/4HANA Enterprise, to SAP Marketing Cloud in two steps, as described in the following table:

**Transfer of Marketing Attributes**

<table>
<thead>
<tr>
<th>Transfer of</th>
<th>From</th>
<th>To SAP Marketing Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Data</td>
<td>• Marketing Attribute Sets</td>
<td>Marketing Attribute Categories</td>
</tr>
<tr>
<td></td>
<td>• Marketing Attributes</td>
<td>For more information, see Marketing Attribute Categories [page 731].</td>
</tr>
<tr>
<td>Business Partner Assignments</td>
<td>Marketing Attributes Sets, including:</td>
<td>Marketing Attribute Values</td>
</tr>
<tr>
<td></td>
<td>• Marketing Attribute Values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Marketing Attribute Value Descriptions</td>
<td></td>
</tr>
</tbody>
</table>

Integration

In Marketing, marketing attributes categories and marketing attribute values are visible in `Personal Data` of contacts, accounts, or individual customers. Marketing attribute categories, and marketing attribute values can be used in segmentation.

**Note**

- Marketing attribute categories always have a text in the system language. If no text is transferred from the source system, the marketing system automatically creates a text in the system language from the ID.
- Ensure that all attributes in the source system are named differently. Attributes with the same name cause an error that can be monitored in the Import Monitor [page 397].
- To prevent from overwriting attribute values, do not use the same attribute in different attribute sets in the source system.

Changes of master data and business partner assignments in the source system are automatically transferred to Marketing.
MarketingArea

Marketing areas can be assigned to the interaction contact via the navigation property `MarketingAreas` of the `InteractionContact` entity type. The marketing area assigned to the interaction contact can be deleted by the OData `DELETE` operation on the entity type `MarketingArea`.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>ID of Interaction Contact</td>
<td>Edm.String</td>
<td>255</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IdOrigin</td>
<td>Origin of Interaction Contact</td>
<td>Edm.String</td>
<td>20</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MarketingAreaId</td>
<td>ID of Marketing Area</td>
<td>Edm.String</td>
<td>40</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Function Imports

Function import `DeleteMarketingAttributes` can be used to delete all marketing attributes of an interaction contact.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>ID of Interaction Contact</td>
<td>Edm.String</td>
<td>255</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IdOrigin</td>
<td>Origin of Interaction Contact</td>
<td>Edm.String</td>
<td>20</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

5.2.6.4 Field Extensibility

In addition to the pre-delivered attributes, you can add customer-specific fields using the Custom Fields and Logic app. For more information about how to do this, see [SAP S/4HANA Cloud <latest version>](http://help.sap.com/s4hana) > [Product Assistance > Generic Information > General Functions for the Key User > Extensibility > Custom Fields and Logic](http://help.sap.com/s4hana).

New fields can be added for the following BusinessContexts:

- Marketing: Interaction Contact
- Marketing Attributes for Contacts
- Marketing: Person
- Marketing: Company
If the field is added to the BusinessContexts Person or Company, the respective IcType (01 for Person and 02 for Company) must be filled in the payload of new interaction contacts.

### 5.2.7 Products

Public OData API (API_MKT_PRODUCT_SRV) for Products.

#### Overview

The OData service API_MKT_PRODUCT_SRV is used for standard SAP Marketing Cloud integration with other systems. It is used in marketing-driven and sales-driven processes to replicate product data to SAP Marketing Cloud.

For more information about the integration scenario, see SAP Marketing Cloud, Integration with SAP ERP [page 346].

For more information about external interfaces that SAP Marketing Cloud provides for creating or updating interaction contacts, interactions, interests, corporate accounts, product categories, and products, see Integration APIs [page 382].

OData service API_MKT_PRODUCT_SRV can be used to create SAP Marketing Cloud products from any source system. OData service API_MKT_PRODUCT_SRV supports the change of products. Each product is identified by the key of the product in the external system.

#### Technical Data

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_PRODUCT_SRV/v=0002</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_PRODUCT_SRV/v=0002/$metadata</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog is required:</td>
</tr>
<tr>
<td></td>
<td>● SAP_CEC_BC_MKT_API_PRD2_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0171</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>● CEC-MKT-DM-PRO (Products and Product Categories)</td>
</tr>
</tbody>
</table>

**Note**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].
Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_PRODUCT_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**Marketing - Product Details Page**

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

**Products (Metadata)**

General access link takes you directly to the Product metadata file. One-time registration or logon is required.

---

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

---

Basic Concepts [page 579]
Structure of OData Service API_MKT_PRODUCT_SRV [page 580]
Payload Examples for Products [page 586]
Demonstrates creation and merge of products.
Extensibility for Products [page 593]
5.2.7.1 Basic Concepts

OData service API_MKT_PRODUCT_SRV supports only batch processing for updates. Batch requests allow grouping multiple operations into a single HTTP request payload.

Within a batch request, the following operations are supported:

- PATCH (MERGE) on the entity type ProductOriginData
- POST on the entity types ProductCategoryAssignment and ProductName
- DELETE on the entity type ProductCategoryAssignment
- and the function IMPORT for ProductOriginData
- GET is supported for all entities.

Other operations, such as CREATE or UPDATE are not supported. Operation DELETE is only supported for entity type ProductCategoryAssignment.

Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a content-type header specifying a content type of multipart/mixed and a boundary specification.

A PATCH (MERGE) request updates only the properties indicated in the request body and leaves everything untouched that was not mentioned. All properties that are not to be changed, can be omitted. The transmitted properties are merged with the data already stored in SAP Marketing Cloud.

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 204 is returned. Potential processing errors are recorded in the SAP Marketing Cloud system in the Import Monitor app, where they can be monitored, restarted and discarded.

Parent topic: Products [page 577]

Related Information

Structure of OData Service API_MKT_PRODUCT_SRV [page 580]
Payload Examples for Products [page 586]
Extensibility for Products [page 593]
5.2.7.2 Structure of OData Service
API_MKT_PRODUCT_SRV

The API_MKT_PRODUCT_SRV OData service consists of the following entity sets and entity types:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Entity Type Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products</td>
<td>Product</td>
<td>The Master Record</td>
</tr>
<tr>
<td>ProductOriginDataSet</td>
<td>ProductOriginData</td>
<td>Product origin data refer to products in SAP Marketing Cloud. Product data is collected and merged from several sources into the master data tables within SAP Marketing Cloud.</td>
</tr>
<tr>
<td>ProductCategoryAssignments</td>
<td>ProductCategoryAssignment</td>
<td>Product categories are assigned to a product.</td>
</tr>
<tr>
<td>ProductNames</td>
<td>ProductName</td>
<td>The product name master record.</td>
</tr>
<tr>
<td>ProductOriginDataNames</td>
<td>ProductOriginDataName</td>
<td>Product name and description can be defined per origin of the product data.</td>
</tr>
<tr>
<td>AdditionalIDs</td>
<td>AdditionalID</td>
<td>Additional ID of the product from a different product origin.</td>
</tr>
</tbody>
</table>

The OData service API_MKT_PRODUCT_SRV supports OData batch processing for updates (i.e. insert, change, delete). Product origin data can be transferred by the OData PATCH (MERGE) operation for entity type ProductOriginData.

Product category assignments can be transferred by the OData POST operation on the entity type ProductCategoryAssignment via the navigation parameter ProductCategoryAssignments. A product category assignment can be deleted by the OData DELETE operation on the entity type ProductCategoryAssignment. Any operation on the ProductCategoryAssignments entity set without navigation from the ProductOriginDataSet is not supported. To delete all product category assignments of a special product category hierarchy the function import DeleteProductCategoryAssignments can be used.

Product name and description can be transferred by the OData POST operation on the entity type ProductOriginDataName via the navigation parameter ProductNames. Any operation on the ProductOriginDataNames entity set without navigation from the ProductOriginDataSet is not supported.

Additional ID can be transferred by the OData PATCH (MERGE) operation for the entity type AdditionalID.

The merge of two products from different source systems to one product within yMKT can be done via the OData function import MergeProductOriginData.

The product master record cannot be transferred by the OData POST/PATCH/MERGE operations. The master record is determined automatically based on the product origin data transferred from the source system and can be accessed via the GET operation.

The product name master record cannot be transferred by the OData POST/PATCH/MERGE operations. The product name master record is determined automatically based on the product origin data names transferred from the source system and can be accessed via the GET operation.
All entities support the OData GET operation to read the data.

Request Header

The request header contains the following additional header fields:

<table>
<thead>
<tr>
<th>Header Field</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-SequenceId</td>
<td>Unique technical identifier of the imported data.</td>
<td>Edm.String</td>
<td>30</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-RequestTimestamp</td>
<td>Timestamp of the data</td>
<td>Edm.DateTime</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Sap-Cuan-SequenceNumber</td>
<td>Sequence number of the request. This number is normally incremented each time a new request for the same sequence id is created.</td>
<td>Edm.Int16</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemType</td>
<td>Type of the source system</td>
<td>Edm.String</td>
<td>20</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemId</td>
<td>Identifier of the source system. This is a free text field.</td>
<td>Edm.String</td>
<td>255</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-ExternalReferenceId</td>
<td>External reference of the inbound message</td>
<td>Edm.String</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-ExternalDocumentId</td>
<td>External identifier of the source document</td>
<td>Edm.String</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

The header fields Sap-Cuan-SequenceId and Sap-Cuan-RequestTimestamp or Sap-Cuan-SequenceNumber are used to check the sequence of the received data. Data with a timestamp older or sequence number lower than data already imported, is ignored.

The Sap-Cuan-SourceSystemType and Sap-Cuan-SourceSystemId fields allow you to distinguish between different source systems.

* Either Sap-Cuan-RequestTimestamp or Sap-Cuan-SequenceNumber must be provided together with Sap-Cuan-SequenceId.

The Sap-Cuan-ExternalReferenceId and Sap-Cuan-ExternalDocumentId allow better error analysis because they contain external references to a source SOAP message and/or an IDoc.
## Product

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductUUID</td>
<td>UUID of the Product</td>
<td>Edm.Guid</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>ProductID</td>
<td>ID of the Product</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductOrigin</td>
<td>Origin of the Product</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductImageURL</td>
<td>Product Image URL</td>
<td>Edm.String</td>
<td>1333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebsiteURL</td>
<td>Website URL</td>
<td>Edm.String</td>
<td>1333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand</td>
<td>Brand ID</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BaseProductID</td>
<td>ID of the Base Product</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BaseProductOrigin</td>
<td>Origin of the Base Product</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductValidEndDate</td>
<td>End Date of Product Validity</td>
<td>Edm.DateTime</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## ProductOriginData

Only the properties `ProductID` and `ProductOrigin` are mandatory. All properties that are not to be changed can be omitted.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductID</td>
<td>ID of the Product</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductOrigin</td>
<td>Origin of the Product</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductImageURL</td>
<td>Product Image URL</td>
<td>Edm.String</td>
<td>1333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebsiteURL</td>
<td>Website URL</td>
<td>Edm.String</td>
<td>1333</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The property \textit{ProductOrigin} indicates the source of the \textit{ProductID}. It is maintained in the Self-Service Configuration app Define Origins of ProductID. To replicate SAP ERP data to SAP Marketing Cloud, product origin \textit{SAP\_ERP\_MATNR} is used.

The property \textit{BaseProductOrigin} indicates the source of the \textit{BaseProductID}. It is maintained in the Self-Service Configuration app Define Origins of Product ID.

Only products marked as base product (Indicator \textit{IsBaseProduct} is True) can be assigned via properties \textit{BaseProductID} and \textit{BaseProductOrigin}. This reference can only be provided for products not marked as base product.

Brands can be maintained in the app \textit{Brands} under \textit{Import Data}

For the \textit{ProductValidEndDate} only the date (without time portion) is relevant.

### ProductCategoryAssignment

Product category assignment can be created only via the navigation property \textit{ProductCategoryAssignments} of the \textit{ProductOriginData} entity type.
## ProductName

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductUUID</td>
<td>UUID of the Product</td>
<td>Edm.Guid</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Language code</td>
<td>Edm.String</td>
<td>2</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Name</td>
<td>Product Name</td>
<td>Edm.String</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductDescription</td>
<td>Product Description</td>
<td>Edm.String</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## ProductOriginDataName

Product name and description can be created only via the navigation property `ProductNames` of the `ProductOriginData` entity type.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductID</td>
<td>ID of the Product</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductOrigin</td>
<td>Origin of the Product</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Language</td>
<td>Language code</td>
<td>Edm.String</td>
<td>2</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Name</td>
<td>Product Name from the source system</td>
<td>Edm.String</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductDescription</td>
<td>Product Description</td>
<td>Edm.String</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With version 2 of `API_MKT_PRODUCT_SRV` you can transfer product descriptions that are longer than 512 characters. Only the first 512 characters are considered in the fuzzy search in the “Products Use and Resonance” Fiori App.

## AdditionalID

Additional IDs can be attached to the product only via the `PATCH/MERGE` operation. In case the product with product origin data identified by `AdditionalProductOrigin` and `AdditionalProductID` is already known
in the system the product will be merged as additional product origin data to the product identified by 
ProductOrigin and ProductID. The processing is then analogue to the Function Import 
MergeProductOriginData.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductOrigin</td>
<td>Origin of the Product</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductID</td>
<td>ID of the Product</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>AdditionalProductOrigin</td>
<td>Origin of the additional ID of the Product</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>AdditionalProductID</td>
<td>Additional ID of the Product</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

**Function Imports**

Function import **MergeProductOriginData** can be used to merge products with different ProductIDs from different origins into one product in SAP Marketing Cloud. Both products need to be already replicated. The ProductOriginData addressed with AdditionalProductID and AdditionalProductOrigin will then be moved as additional product data to product addressed with ProductID and ProductOrigin.

The product master data is determined from the main product origin data (addressed with ProductID and ProductOrigin). The properties not sent from the main origin are taken from the last updated additional origin. Every Update of the ProductOriginData leads to a redetermination of the product master data (golden record).

It is not possible to merge a product as additional product to two different main products.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdditionalProductID</td>
<td>Additional ID of the Product</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>AdditionalProductOrigin</td>
<td>Origin of the additional ID of the Product</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductID</td>
<td>ID of the Product</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductOrigin</td>
<td>Origin of the Product</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Function import **DeleteProductCategoryAssignments** can be used to delete all product category assignments of a special product category hierarchy for a specified product.
### Payload Examples for Products

Demonstrates creation and merge of products.

The following examples show how you can use the products API. Insert your own data to fill the header and the entities.

#### Create 2 Products: Base Product and Product Variant

```bash
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
ProductOriginDataSet(ProductID='CoffeeEspresso',ProductOrigin='SAP_ERP_MATNR')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
```

**Parent topic:** Products [page 577]

**Related Information**

Basic Concepts [page 579]

Payload Examples for Products [page 586]

Extensibility for Products [page 593]
Create Product with 2 Languages

```text
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH ProductOriginDataSet(ProductID='Mocca',ProductOrigin='SAP_ERP_MATNR') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{ "ProductOrigin":"SAP_ERP_MATNR",
"ProductID":"Mocca",
"WebsiteURL":"
"ProductImageURL":"
"Brand":"
"IsBaseProduct":true
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH ProductOriginDataSet(ProductID='CoffeeEspressoDecaf',ProductOrigin='SAP_ERP_MATNR') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{ "ProductOrigin":"SAP_ERP_MATNR",
"ProductID":"CoffeeEspressoDecaf",
"WebsiteURL":"
"ProductImageURL":"
"Brand":"
"BaseProductID":"CoffeeEspresso",
"BaseProductOrigin":"SAP_ERP_MATNR"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Create Product with 2 Product Category Assignments

Sample Code

```bash
--batch
--boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: multipart/mixed;
content-transfer-encoding: binary
PATCH ProductOriginDataSet(ProductID='Mocca',ProductOrigin='SAP_ERP_MATNR')/ProductNames HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711

{ "Language":"DE",
 "Name":"Kaffee Mokka",
 "ProductDescription":"Basis Kaffee - Mokka"
 }
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST ProductOriginDataSet(ProductID='Mocca',ProductOrigin='SAP_ERP_MATNR')/ProductNames HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711

{ "Language":"EN",
 "Name":"Coffee Mocca",
 "ProductDescription":"Ground Coffee - Caffe Mocca"
 }
```

Create Product with 2 Product Category Assignments

Sample Code

```bash
--batch
--boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: multipart/mixed;
content-transfer-encoding: binary
POST ProductOriginDataSet(ProductID='Mocca',ProductOrigin='SAP_ERP_MATNR')/ProductNames HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711

{ "Language":"EN",
 "Name":"Coffee Mocca",
 "ProductDescription":"Ground Coffee - Caffe Mocca"
 }
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST ProductOriginDataSet(ProductID='Mocca',ProductOrigin='SAP_ERP_MATNR')/ProductNames HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711

{ "Language":"DE",
 "Name":"Kaffee Mokka",
 "ProductDescription":"Basis Kaffee - Mokka"
 }
--batch--
```
Create 2 Products and Merge into Golden Record

--- Sample Code

```
--batch
content-type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST  ProductOriginDataSet(ProductID='Mocca',ProductOrigin='SAP_ERP_MATNR')/
ProductCategoryAssignments HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{ "ProductCategoryHierarchyID":"Coffee",
"ProductCategoryID":"FilterCoffee"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST  ProductOriginDataSet(ProductID='Mocca',ProductOrigin='SAP_ERP_MATNR')/
ProductCategoryAssignments HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{ "ProductCategoryHierarchyID":"Coffee",
"ProductCategoryID":"Mocca"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```

--- Sample Code

```
--batch
content-type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
ProductOriginDataSet(ProductID='Cappuccino',ProductOrigin='SAP_ERP_MATNR')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
```

--- Sample Code

```
Create 2 Products and Merge into Golden Record
```
Update Product with Valid End Date

Sample Code

```bash
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
ProductOriginDataSet(ProductID='CoffeeEspressoDecaf',ProductOrigin='SAP_ERP_MATNR') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{
  "ProductOrigin":"SAP_ERP_MATNR",
  "ProductID":"CoffeeEspressoDecaf",
  "WebsiteURL":null,
  "ProductImageURL":null,
  "Brand":null,
  "ProductValidEndDate":"9999-12-31T00:00:00"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```

590  PUBLIC
Merge 2 Existing Products

Sample Code

```plaintext
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST MergeProductOriginData?
ProductID='CoffeeEspresso'&ProductOrigin='SAP_ERP_MATNR'&AdditionalProductID='407901109D5FBCF31500B0E4B2FD1696'&AdditionalProductOrigin='SAP_CRM_PRODUCT'
HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```

Delete Product Category Assignment

Sample Code

```plaintext
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE
ProductCategoryAssignments(ProductID='CoffeeEspressoDecaf',ProductOrigin='SAP_
Add Additional ID for Existing Product

Sample Code

```bash
--batch
content-type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
AdditionalIDs(ProductID='CoffeeEspresso',ProductOrigin='SAP_ERP_MATNR',Additio nalProductOrigin='SAP_C4C_PRODUCT',AdditionalProductID='407901109D5FBCF31500B0 E4B2FD1696') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODUCT
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```

Delete all Product Category Assignments of a Product Category Hierarchy for a Product

Sample Code

```bash
--batch
content-type: multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```
Parent topic: Products [page 577]

Related Information

Basic Concepts [page 579]
Structure of OData Service API_MKT_PRODUCT_SRV [page 580]
Extensibility for Products [page 593]

5.2.7.4 Extensibility for Products

Extending Attributes

In addition to the pre-delivered attributes, you can add customer-specific fields using the Custom Fields and Logic app. For more information about how to do this, see http://help.sap.com/s4hana [SAP S/4HANA Cloud <latest version>]  Product Assistance  Generic Information  General Functions for the Key User  Extensibility  Custom Fields and Logic.

New fields can be added for the following BusinessContext:

- Marketing: Product
Create Extensibility Associations

You as an administrator in Marketing can define an association between a business object and the product or product categories to support customer-specific use cases. Example: Running a campaign for an event, which is defined as a product. You also want to analyze the campaign performance afterwards.

To create an association, proceed as follows:

- Open the app Custom Fields and Logic.
- Create a new field and enter:
  1. Business Context: Marketing Campaign
  2. Label: <Name of the Field>
  3. Identifier <Technical Name of the Field>
  4. Tooltip <Full Name or Help for the Field>
  5. Type Association to Business Object

After you have done this, a reference to the standard product, including a proper value help is available.

For reporting purposes, the product or product category is also available as additional dimension in CDS queries which expose the enhanced business object.

Extensibility associations can also be used for Custom Business Objects, for example to define product-specific discounts or vouchers.

Parent topic: Products [page 577]

Related Information

Basic Concepts [page 579]
Structure of OData Service API_MKT_PRODUCT_SRV [page 580]
Payload Examples for Products [page 586]

5.2.8 Product Hierarchies and Categories

Public OData API (API_MKT_PRODCLASS_HIERARCHY_SRV) for Product Hierarchies and Categories.

The OData service API_MKT_PRODCLASS_HIERARCHY_SRV is used for standard SAP Marketing Cloud integration with SAP Commerce Cloud. It is used in commerce marketing to replicate product hierarchies and product categories to SAP Marketing Cloud.

For more information about the integration scenario, see SAP Marketing Cloud, Integration with SAP Commerce Cloud [page 51].

OData service API_MKT_PRODCLASS_HIERARCHY_SRV can be used to create SAP Marketing Cloud product hierarchies and product categories from any source system.
Note
If you encounter issues with the OData service API_MKT_PRODCAT_HIERARCHY_SRV, create a support ticket under component CEC-MKT-DM-PRO (Products and Product Categories).

The component is not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_PRODCAT_HIERARCHY_SRV/...</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
<tr>
<td><img src="image" alt="Marketing - Product Category and Product Hierarchy Details Page" /></td>
<td>General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.</td>
</tr>
<tr>
<td><img src="image" alt="Product Category and Product Hierarchy API" /></td>
<td>General access link takes you directly to the Product Category and Product Hierarchy metadata file. One-time registration or logon is required.</td>
</tr>
</tbody>
</table>

Note
You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

Basic Concepts [page 596]
Structure of OData Service API_MKT_PRODCAT_HIERARCHY_SRV [page 596]
Payload Example for Product Hierarchies [page 601]
    Demonstrates creation of product hierarchies and categories.
Extensibility for Product Categories [page 604]
5.2.8.1 Basic Concepts

OData service API_MKT_PRODCAT_HIERARCHY_SRV supports batch processing. Within a batch request only the operation PATCH (MERGE) on the entity type ProductCategory or the operation POST on the entity types ProductHierarchy, ProductHierarchyName and ProductCategoryName are supported. Other operations, such as create, update or delete are not supported.

Additionally for all entities the GET operation is supported.

Batch requests allow grouping multiple operations into a single HTTP request payload.

Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a content-type header specifying a content type of multipart/mixed and a boundary specification.

A PATCH (MERGE) request updates only the properties indicated in the request body and leaves everything untouched that was not mentioned. All properties that are not to be changed, can be omitted. The transmitted properties are merged with the data already stored in SAP Marketing Cloud.

If the OData service is not accessible - for example due to missing authorization, or because the system is not available - a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 204 is returned. Potential processing errors are recorded in the SAP Marketing Cloud system in the Import Monitor app, where they can be monitored, restarted and discarded.

**Parent topic:** Product Hierarchies and Categories [page 594]

### Related Information

- Structure of OData Service API_MKT_PRODCAT_HIERARCHY_SRV [page 596]
- Payload Example for Product Hierarchies [page 601]
- Extensibility for Product Categories [page 604]

5.2.8.2 Structure of OData Service

**API_MKT_PRODCAT_HIERARCHY_SRV**

The API_MKT_PRODCAT_HIERARCHY_SRV OData service consists of the following entity sets and entity types:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Entity Type Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductHierarchies</td>
<td>ProductHierarchy</td>
<td>Product Hierarchy entity refers to data kept in the master data tables within SAP Marketing Cloud.</td>
</tr>
</tbody>
</table>
**Entity Set** | **Entity Type** | **Entity Type Description**
--- | --- | ---
ProductHierarchyNames | ProductHierarchyNames | Product Hierarchy Names entity has the related name and description fields and can be maintained for several languages.

ProductCategories | ProductCategory | Product Category entity refers to data kept in the master data tables within SAP Marketing Cloud. The ID, a parent category ID, the type, and the Hierarchy ID are the fields which can be maintained.

ProductCategoryNames | ProductCategoryName | Similar to the hierarchy, the entity Product Category has a related Product Category Name entity which holds the Name and Description in several languages.

The OData service **API_MKT_PRODCAT_HIERARCHY_SRV** supports OData batch processing.

Product hierarchies can be transferred by the OData **POST** operation for entity type **ProductHierarchy**.

Product categories can be transferred by the OData **PATCH (MERGE)** operation on the entity type **ProductCategory**.

Product hierarchy name and description can be transferred by the OData **POST** operation on the entity type **ProductHierarchyName** via the navigation parameter **ProductHierarchyNames**. Any operation on the **ProductHierarchyNames** entity set without navigation from the **ProductHierarchies** is not supported.

Product category name and description can be transferred by the OData **POST** operation on the entity type **ProductCategoryName** via the navigation parameter **ProductCategoryNames**. Any operation on the **ProductCategoryNames** entity set without navigation from the **ProductCategories** is not supported.

All entities support the OData **GET** operation to read the data.

### Request Header

The request header contains the following additional header fields:

<table>
<thead>
<tr>
<th>Header Field</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-SequenceId</td>
<td>Unique technical identifier of the imported data.</td>
<td>Edm.String</td>
<td>30</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-RequestTimestamp</td>
<td>Timestamp of the data</td>
<td>Edm.DateTime</td>
<td>0</td>
<td>*</td>
</tr>
</tbody>
</table>
### ProductHierarchy

ProductHierarchy is the root entity and can be created or updated via the POST operation.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductHierarchyID</td>
<td>ID of the Product Hierarchy</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>SourceSystemType</td>
<td>Type code of the source system</td>
<td>Edm.String</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductHierarchyUsage</td>
<td>Usage Code of the Product Hierarchy</td>
<td>Edm.String</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The allowed code values are:

<table>
<thead>
<tr>
<th>Property</th>
<th>Code Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SourceSystemType</td>
<td>undefined</td>
<td></td>
</tr>
<tr>
<td>CRM</td>
<td>SAP CRM System</td>
<td></td>
</tr>
<tr>
<td>C4C</td>
<td>SAP Cloud for Customer System</td>
<td></td>
</tr>
<tr>
<td>YCOM</td>
<td>SAP Commerce System</td>
<td></td>
</tr>
<tr>
<td>PMR</td>
<td>SAP Promotion Management for Retail</td>
<td></td>
</tr>
<tr>
<td>ERP</td>
<td>SAP ERP System</td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>SAP S4 System</td>
<td></td>
</tr>
<tr>
<td>ProductHierarchyUsage</td>
<td>A</td>
<td>Product Category Hierarchy</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Service Category Hierarchy</td>
</tr>
</tbody>
</table>

**ProductHierarchyName**

Product Hierarchy Name can be created only via the navigation property `ProductHierarchyNames` of the `ProductHierarchy` entity type.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductHierarchyID</td>
<td>ID of the Product Hierarchy</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Language</td>
<td>Language</td>
<td>Edm.String</td>
<td>2</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Name</td>
<td>Name of the Product hierarchy</td>
<td>Edm.String</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Description of the Product Hierarchy</td>
<td>Edm.String</td>
<td>512</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**ProductCategory**

Product Category can be created via the **Merge/Patch** Operation. The corresponding root entity **ProductHierarchy** needs to be created before Product Categories can be created.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductHierarchyID</td>
<td>ID of the Product Hierarchy</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductCategoryID</td>
<td>ID of the Product Category</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ParentProductCategoryID</td>
<td>ID of the superordinate Product Category</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductCategoryType</td>
<td>Type code of the Product Category</td>
<td>Edm.String</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The allowed code values for **ProductCategoryType** are:

<table>
<thead>
<tr>
<th>Property</th>
<th>Code Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductCategoryType</td>
<td>undefined</td>
<td>A Process Category</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>B Incident Category</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>C Object Category</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>D Cause Category</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>E Solution Category</td>
</tr>
</tbody>
</table>

All properties that are not to be changed can be omitted.

**ProductCategoryName**

Product Category Name can be created only via the navigation property **ProductCategoryNames** of the **ProductCategory** entity type.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductHierarchyID</td>
<td>ID of the Product Hierarchy</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ProductCategoryID</td>
<td>ID of the Product Category</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
### Property

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Language</td>
<td>Edm.String</td>
<td>2</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Name</td>
<td>Name of the Product Category</td>
<td>Edm.String</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Description of the Product Category</td>
<td>Edm.String</td>
<td>512</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Related Information

- Basic Concepts [page 596]
- Payload Example for Product Hierarchies [page 601]
- Extensibility for Product Categories [page 604]

## 5.2.8.3 Payload Example for Product Hierarchies

Demonstrates creation of product hierarchies and categories.

The following example shows how you can use the product hierarchies and categories API. Insert your own data to fill the header and the entities.

### Create Product Hierarchy and Product Categories

```csharp
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
```
{ "ParentProductCategoryID": "" }
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST
ProductCategories(ProductHierarchyID='Coffee',ProductCategoryID='Espresso')/
ProductCategoryNames HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{
  "Language": "EN",
  "Name": "Espresso",
  "Description": "Espresso"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
ProductCategories(ProductHierarchyID='Coffee',ProductCategoryID='FilterCoffee') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: YMQCLNT100
Sap-Cuan-SourceSystemType: SAP_ERP
Sap-Cuan-Sequecnid: XXX_PRODHIER
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{
  "ProductHierarchyID": "Coffee",
  "ProductCategoryID": "FilterCoffee",
  "ParentProductCategoryID": ""
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST
ProductCategories(ProductHierarchyID='Coffee',ProductCategoryID='DecafEspresso')/
ProductCategoryNames HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-SourceSystemId: XXXCLNT100
Sap-Cuan-SourceSystemType: XXX_XXX
Sap-Cuan-SequenceId: XXX_PRODHIER
Sap-Cuan-RequestTimestamp: 2017-12-06T08:01:01
Sap-Cuan-ExternalReferenceId: 4711
{
  "Language": "EN",
  "Name": "Filtered Coffee",
  "Description": "Filtered Coffee"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
ProductCategories(ProductHierarchyID='Coffee',ProductCategoryID='DecafEspresso') HTTP/1.1
Extending Attributes

In addition to the pre-delivered attributes, you can add customer-specific fields using the Custom Fields and Logic app. For more information about how to do this, see http://help.sap.com/s4hana.
New fields can be added for the following BusinessContext:

- Marketing: ProductCategory

Parent topic: Product Hierarchies and Categories [page 594]

Related Information

Basic Concepts [page 596]
Structure of OData Service API_MKT_PRODCAT_HIERARCHY_SRV [page 596]
Payload Example for Product Hierarchies [page 601]

5.2.9 Interactions

Public OData API (API_MKT_INTERACTION_SRV) for Interactions.

Overview

**i Note**

For business documents (leads, opportunities, sales orders and so on), we recommend that you use the API Service CUAN_BUSINESS_DOCUMENT_IMP_SRV, since it provides an **upsert** function and updates an already existing entry depending on timestamp information.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_SRV/$metadata</td>
</tr>
<tr>
<td>Authorizations</td>
<td>SAP delivers the following template role, which you can copy: SAP_CEI_API_INTERACTION . The following business catalog role is required: SAP_CEC_BC_MKT_API_IA_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0206</td>
</tr>
</tbody>
</table>
The Interaction OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactions</td>
<td>This entity contains the interaction data.</td>
<td>/Interactions</td>
</tr>
<tr>
<td>InteractionInterests</td>
<td>This entity contains the interests assigned to an interaction.</td>
<td>/InteractionInterests</td>
</tr>
<tr>
<td>InteractionProducts</td>
<td>This entity contains the products in an interaction.</td>
<td>/InteractionProducts</td>
</tr>
<tr>
<td>InteractionProductCategories</td>
<td>This entity contains the product categories in an interaction.</td>
<td>/InteractionProductCategories</td>
</tr>
<tr>
<td>InteractionDigitalAssets</td>
<td>This entity contains the digital assets in an interaction.</td>
<td>/InteractionDigitalAssets</td>
</tr>
<tr>
<td>InteractionOffers</td>
<td>This entity contains the offers in an interaction.</td>
<td>/InteractionOffers</td>
</tr>
<tr>
<td>InteractionTags</td>
<td>This entity contains the tags in an interaction.</td>
<td>/InteractionTags</td>
</tr>
<tr>
<td>InteractionAdditionalObjects</td>
<td>This entity contains the additional objects referred to by an interaction.</td>
<td>/InteractionAdditionalObjects</td>
</tr>
<tr>
<td>InteractionLoyaltyPrograms</td>
<td>This entity contains the Loyalty Program attributes in an interaction.</td>
<td>/InteractionLoyaltyPrograms</td>
</tr>
<tr>
<td>InteractionAdditionalInter-</td>
<td>This entity contains the additional contacts involved in an interaction.</td>
<td>/InteractionAdditionalInteractionContact</td>
</tr>
<tr>
<td>actionContact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InteractionEvent</td>
<td>This entity contains the event referred to by an interaction.</td>
<td>/InteractionEvent</td>
</tr>
</tbody>
</table>

Furthermore, the following entity has the dedicated function of enabling high performance to be maintained when importing large amounts of data:
<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionsDeepInsert</td>
<td>This entity is used to import large amounts of Interactions data.</td>
<td>/InteractionsDeepInsert</td>
</tr>
</tbody>
</table>

**i Note**

The Interactions API is not designed to support the mass extraction of data, and should not be used as such.

**Entity Sets**

**i Note**

To prevent an ODATA error message *(The metadata do not allow a null value.)*, you must set a fixed initial value **00000000-0000-0000-0000-000000000000** for the UUID of all nodes, both root and subnodes.

**InteractionsDeepInsert**

**Entity Path:** /InteractionsDeepInsert

The InteractionsDeepInsert entity enables high performanct import of up to 100,00 interaction’s data per changeset in $batch mode. You can perform the following operations on the InteractionsDeepInsert entity:
### HTTP Method

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POST</strong></td>
<td>You can <strong>create</strong> interactions including one or more of these sub-entities using DEEP INSERT:</td>
<td><em>/InteractionsDeepInsert</em></td>
</tr>
<tr>
<td></td>
<td>• InteractionInterest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionProducts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionProductCategories</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionDigitalAssets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionOffers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionTags</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionAdditionalObjects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionLoyaltyPrograms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionAdditionalContacts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• InteractionEvents</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

This is the recommended method for the mass import of interactions data.

---

### Interactions

**Entity Path:** */Interactions*

You can perform the following operations on the **Interactions entity:**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of interactions. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>*/Interactions?$top=1</td>
</tr>
</tbody>
</table>

Get the details of a specific interaction using the Interaction UUID.  
*/Interactions(guid'"<Interaction UUID>"')*
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POST</strong></td>
<td>Create an interaction. If the interaction already exists, it is not created. An error is returned.</td>
<td>/Interactions</td>
</tr>
</tbody>
</table>

Semantic key: (* = mandatory)
- InteractionContactOrigin *
- InteractionContactId *
- CommunicationMedium*
- InteractionType*
- InteractionSourceObjectType
- InteractionSourceObject
- InteractionTimeStampUTC*

**Note**
- The timestamp must always be UTC time.
- When you **import** data, the local timestamp plus the difference to UTC is also allowed. For example, for New York local time 14:00:00, which is 5 hours before UTC, you could import the timestamp as: 2017-12-18T14:00:00-05:00 or 2017-12-18T19:00:00.
- When data is **read**, the UTC timestamp is always returned.

Batch mode is also supported.

**POST** You can create an interaction including one or more of these sub-entities using DEEP INSERT:
- InteractionInterest
- InteractionProducts
- InteractionProductCategories
- InteractionDigitalAssets
- InteractionOffers
- InteractionTags
- InteractionAdditionalObjects
- InteractionLoyaltyPrograms
- InteractionEvent

Batch mode is also supported.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| PATCH       | Update an interaction.                                                       | /Interactions(guid'\<Interaction UUID>'|)
|             | - If the interaction does not exist, it is not created.                      |                                                                       |
|             |      An error is returned (no **upsert** is supported).                      |                                                                       |
|             | - The interaction key (InteractionUUID) must be provided to check its       |                                                                       |
|             |      existence of the interaction.                                           |                                                                       |
|             | - With the exception of the interaction key, all properties can be updated.  |                                                                       |
|             |      If semantic key fields (see POST) are updated, a check is carried out  |                                                                       |
|             |      to ensure that no duplicate interactions exist after the update.        |                                                                       |
|             |      If duplicates exist, an error is returned.                             |                                                                       |
|             | - Batch mode is also supported.                                              |                                                                       |

**InteractionInterests**

**Entity Path:** `/InteractionInterests`

You can perform the following operations on the InteractionInterest entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| GET         | Get a list of interests assigned to interactions. This method supports        | /Interactions(guid'I

|              | standard OData parameters such as $filter, $select, $top, $skip, $count,     | InteractionInterest

|              | $inlinecount, and $orderby                                                   | s                      |
| POST         | Create an interest assignment to an interaction. If the interaction interest | /InteractionInterest

|              | master data does not already exist, it is not created. An error is returned.   | s                      |
|              | Batch mode is also supported.                                                  |                                                                       |
| PATCH        | Update the assignment of an interest to an interaction.                       | /InteractionInterest

|              | - If the interest assignment does not exist, it is not created. An error is  |                                                                       |
|              |      returned (no **upsert** is supported).                                   |                                                                       |
|              | - The entity key (InteractionInterestUUID) must be provided to check         |                                                                       |
|              |      whether the interest exists.                                            |                                                                       |
|              | - With the exception of the interaction and the entity key, all properties   |                                                                       |
|              |      can be updated.                                                         |                                                                       |
|              | - Batch mode is also supported.                                              |                                                                       |
### InteractionInterest

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete the assignment of an interest to an interaction. If the interest assignment does not exist, it is not deleted. An error is returned.</td>
<td><code>/InteractionInterest</code></td>
</tr>
</tbody>
</table>

Batch mode is also supported.

---

### InteractionProducts

**Entity Path:** `/InteractionProducts`

You can perform the following operations on the `InteractionProducts` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of products assigned to an interaction. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td><code>/Interactions(guid'InteractionUUID')/InteractionProducts</code></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a product assignment to an interaction. If the product master data does not already exist, it is not created. An error is returned.</td>
<td><code>/InteractionProducts</code></td>
</tr>
</tbody>
</table>
| **PATCH**   | Update the assignment of a product to an interaction.  
- If the product assignment does not exist, it is not created. An error is returned (no upsert is supported).  
- The entity key (InteractionProductUUID) must be provided to check its existence.  
- With the exception of the key properties (InteractionUUID, ProductUUID, and InteractionProductUUID), all properties can be updated.  
- Batch mode is also supported. | `/InteractionProducts` |
| **DELETE**  | Delete the assignment of a product to an interaction. If the product assignment does not exist, it is not deleted. An error is returned.  
- The entity key (InteractionProductUUID) must be provided to check its existence.  
- Batch mode is also supported. | `/InteractionProducts` |

---

### InteractionProductCategories

**Entity Path:** `/InteractionProductCategories`
You can perform the following operations on the **InteractionProductCategories** entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of categories assigned to an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions(guid'Interaction UUID')/InteractionProductCategories</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a product category assignment to an interaction. If the product category master data does not already exist, it is not created. An error is returned. Batch mode is also supported.</td>
<td>/InteractionProductCategories</td>
</tr>
</tbody>
</table>
| **PATCH**   | Update the assignment of a product category to an interaction.  
- If the product category assignment does not exist, it is not created. An error is returned (no upsert is supported).  
- The entity key (InteractionProductCategoryUUID) must be provided to check its existence.  
- With the exception of the key properties (InteractionUUID, ProductCategoryUUID and InteractionProductCategoryUUID), all properties can be updated.  
- Batch mode is also supported. | /InteractionProductCategories |
| **DELETE**  | Delete the assignment of a product category to an interaction. If the assignment does not exist, it is not deleted. An error is returned.  
- The entity key (InteractionProductCategoryUUID) must be provided to check its existence.  
- Batch mode is also supported. | /InteractionProductCategories |

### InteractionDigitalAssets

**Entity Path:** /InteractionDigitalAssets

You can perform the following operations on the **InteractionDigitalAssets** entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of digital assets assigned to an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions(guid'Interaction UUID')/InteractionDigitalAssets</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>POST</td>
<td>Create a digital asset assignment to an interaction. Batch mode is also supported.</td>
<td>/InteractionDigitalAssest</td>
</tr>
</tbody>
</table>
| PATCH       | Update the assignment of a digital asset to an interaction.  
- If the assignment does not exist, it is not created. An error is returned (no upsert is supported).  
- The entity key (InteractionDigitalAssetUUID) must be provided to check its existence.  
- With the exception of the interaction and the entity key, all properties can be updated.  
- Batch mode is also supported. | /InteractionDigitalAssest |
| DELETE      | Delete the assignment of a digital asset to an interaction. If the assignment does not exist, it is not deleted. An error is returned.  
Batch mode is also supported. | /InteractionDigitalAssest |

### InteractionOffers

**Entity Path:** /InteractionOffers

You can perform the following operations on the `InteractionOffers` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of offers assigned to an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions(guid'InteractionUUID')/InteractionOffers</td>
</tr>
<tr>
<td>POST</td>
<td>Create an offer assignment to an interaction. Batch mode is also supported.</td>
<td>/InteractionOffers</td>
</tr>
</tbody>
</table>
| PATCH       | Update the assignment of an offer to an interaction.  
- If the assignment does not exist, it is not created. An error is returned (no upsert is supported).  
- The entity key (InteractionOfferUUID) must be provided to check its existence.  
- With the exception of the interaction and the entity key, all properties can be updated.  
- Batch mode is also supported. | /InteractionOffers |
**HTTP Method** | **Description** | **Path**
---|---|---
DELETE | Delete the assignment of an offer to an interaction. If the assignment does not exist, it is not deleted. An error is returned. | /InteractionOffers

**InteractionTags**

**Entity Path:** /InteractionTags

You can perform the following operations on the InteractionTags entity:

**HTTP Method** | **Description** | **Path**
---|---|---
GET | Get a list of tags assigned to an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby. | /Interactions(guid'InteractionUUID')/InteractionTags

POST | Create a tag assignment to an interaction. Batch mode is also supported. | /InteractionTags

PATCH | Update the assignment of a tag to an interaction.
- If the assignment does not exist, it is not created. An error is returned (no upsert is supported).
- The entity key (InteractionTagUUID) must be provided to check its existence.
- With the exception of the interaction, the entity key, and the TagOrigin, all properties can be updated.
- Batch mode is also supported. | /InteractionTags

DELETE | Delete the assignment of an interest to an interaction. If the interest assignment does not exist, it is not deleted. An error is returned. Batch mode is also supported. | /InteractionTags

**InteractionAdditionalObjects**

**Entity Path:** /InteractionAdditionalObjects
You can perform the following operations on the **InteractionAdditionalObjects** entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of additional objects referred to by an interaction. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td>/Interactions(guid'InteractionUUID')/InteractionAdditionalObjects</td>
</tr>
</tbody>
</table>

**POST**

Create an additional object assignment to an interaction.

Batch mode is also supported.

```
/InteractionAdditionalObjects
```

**PATCH**

Update the assignment of an additional object to an interaction.

- If the assignment does not exist, it is not created. An error is returned (no upsert is supported).
- The entity key (InteractionAdditionalObjUUID) must be provided to check its existence.
- With the exception of the interaction and the entity key, all properties can be updated.
- Batch mode is also supported.

```
/InteractionAdditionalObjects
```

**DELETE**

Delete the assignment of an additional object to an interaction. If the assignment does not exist, it is not deleted. An error is returned.

Batch mode is also supported.

```
/InteractionAdditionalObjects
```

---

**InteractionLoyaltyPrograms**

**Entity Path:** /InteractionLoyaltyPrograms

You can perform the following operations on the **InteractionLoyaltyPrograms** entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of tags referred to by an interaction. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td>/Interactions(guid'InteractionUUID')/InteractionLoyaltyPrograms</td>
</tr>
</tbody>
</table>

**POST**

Create a loyalty subnode assignment to an interaction.

- Batch mode is also supported.

```
/InteractionLoyaltyPrograms
```

**PATCH**

Update the assignment of loyalty attributes to an interaction.

- Batch mode is also supported.

```
/InteractionLoyaltyPrograms(guid'InteractionLoyaltyUUIDUUID')
```
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELETE</td>
<td>Delete the assignment of a Loyalty Subnode to an interaction. If the assign-</td>
<td>InteractionLoyaltyPrograms(guid'Interac-</td>
</tr>
<tr>
<td></td>
<td>ment does not exist, it is not deleted. An error is returned.</td>
<td>tionLoyaltyProgramsUIDUUID)</td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>

**InteractionAdditionalInteractionContacts**

**Entity Path:** /InteractionAdditionalInteractionContact

**i Note**

The AdditionalInteractionContact entity is not visible on the UI, however it can still be used to perform the below operations.

**You can perform the following operations on the InteractionAdditionalInteractionContact entity:**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of additional contacts referred to by an interaction. This method</td>
<td>/Interactions(guid'InteractionUUID')/</td>
</tr>
<tr>
<td></td>
<td>supports standard OData parameters such as $filter, $select, $top, $skip,</td>
<td>InteractionAdditionalInteractionCon-</td>
</tr>
<tr>
<td></td>
<td>$count, $inlinecount, and $orderby</td>
<td>tact</td>
</tr>
<tr>
<td>POST</td>
<td>Create an additional contact assignment for an interaction.</td>
<td>/InteractionAdditionalInteractionCon-</td>
</tr>
<tr>
<td></td>
<td>• Unlike on the root entity, if the additional contact does not exist, the</td>
<td>tact</td>
</tr>
<tr>
<td></td>
<td>specified interaction will not be posted. The contact will not be created.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td>PATCH</td>
<td>Update the assignment of additional Contacts to an interaction.</td>
<td>/InteractionAdditionalInteractionCon-</td>
</tr>
<tr>
<td></td>
<td>• If the contact does not exist, the interaction is not created. An error</td>
<td>tact</td>
</tr>
<tr>
<td></td>
<td>is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The entity key (InteractionAdditionalContactUUID) must be provided to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>check its existence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• With the exception of the interaction and the entity key, all properties</td>
<td></td>
</tr>
<tr>
<td></td>
<td>can be updated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>
### InteractionEvents

**Entity Path:** `/InteractionEvent`

#### iNote

You can perform the following operations on the InteractionEvent entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of events referred to by an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td><code>/Interactions(guid'InteractionUUID')/InteractionEvent</code></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an event assignment for an interaction.</td>
<td><code>/InteractionEvent</code></td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update the assignment of an event to an interaction.</td>
<td><code>/InteractionEvent</code></td>
</tr>
<tr>
<td></td>
<td>• If the event does not exist, the interaction is not created. An error is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The entity key (InteractionEventUUID) must be provided to check its existence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• With the exception of the interaction and the entity key, all properties can be updated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete the assignment of an event to an interaction.</td>
<td><code>/InteractionEvent</code></td>
</tr>
<tr>
<td></td>
<td>• If the assignment does not exist, it is not deleted. An error is returned.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>
Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

_iNote_
You can convert the XML file to an XML table to make it easier to read.

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTERACTION_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>
| Marketing - Interaction Integration Page | General access to the Interaction Integration page of the service on SAP API Hub. One-time registration is required for first-time users.  
1. On the Interaction Integration page, click Download Specification and download as EDMX.  
2. Specify which application you want to use to open the EDMX file type. |

Interactions API | General access to the Interactions metadata file. One-time registration or logon is required. |

Basic Concepts [page 618]
The public API for Interactions API_MKT_INTERACTION supports operations on the Interaction Business Object. Interactions refer to communication and information exchange of any kind between a user’s company and a contact, such as emails to a company, phone calls to a contact, and posts written in social networks about a company or the company’s products.

Structure of OData Service API_MKT_INTERACTION [page 622]
This document describes the structure of the Public OData API service API_MKT_INTERACTION. Make sure you read the Basic Concepts topic before you start.

Payload Examples [page 634]
Payload examples for API_MKT_INTERACTION

Error Handling for Interactions [page 648]
This section contains some troubleshooting tips for handling common errors involving interaction imports.

5.2.9.1 Basic Concepts

The public API for Interactions API_MKT_INTERACTION supports operations on the Interaction Business Object. Interactions refer to communication and information exchange of any kind between a user’s company and a contact, such as emails to a company, phone calls to a contact, and posts written in social networks about a company or the company’s products.
Prerequisites

Before interaction data can be imported, the following prerequisites must be met:

- **Upload sequence**: Before you upload interactions, you should upload any related products and product hierarchies first.
- Interaction type and communication medium have been assigned to a channel in the Self-Service Configuration app [Manage Interaction Content](#).
- Interests must be edited or uploaded in [Business Administration > Manage Interests](#).
- The BAdI: Revise Interaction Data Before Import (CUAN_IA_REVISE_FOR_IMPORT) can be used to change data during import.
- The BAdI: Process Follow-Up Steps After Successful Import of Interaction Data (CUAN_IA_IMPORT_FOLLOW_UP) can be used to update your custom business objects (CBOs) based on successfully saved interactions. For example, you can use a custom business object to count a contact’s likes.

Structure

The following fields are mandatory for POST operations of interaction data:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID_ORIGIN</td>
<td>Qualifier for source system</td>
</tr>
<tr>
<td>ID</td>
<td>ID of contact of interaction in source system</td>
</tr>
<tr>
<td>IA_TYPE</td>
<td>Interaction type</td>
</tr>
<tr>
<td>COMM_MEDIUM</td>
<td>Communication medium/place</td>
</tr>
<tr>
<td>TIMESTAMP</td>
<td>UTC time stamp in long form (YYYYMMDDhhmmssmmmuun)</td>
</tr>
</tbody>
</table>

**i Note**

The timestamp must always be provided as UTC time, so you have to adjust your local time accordingly before import. For example, if the timestamp shows New York local time 14:00:00, you have to adjust this to UTC by adding 5 hours to it: 19:00:00.

Examples for OData Format:

- Number of milliseconds since midnight Jan 1, 1970: `/Date(1406014140922)/`
- `YY-MM-DDThh:mm:ss`
Interaction Types That Cannot Be Imported

You cannot import the following interaction types:

- MKT_PERM_OPTIN
- MKT_PERM_OPTIN_PRE
- MKT_PERM_OPTOUT
- MKT_PERM_OPTOUT_PRE
- NEWSLETTER_SUBSCR
- NEWSLETTER_UNSUBSCR
- NEWSL_SUBSCR_PRE
- NEWSL_UNSUBSCR_PRE
- DIG_ACC_SUBSCR
- DIG_ACC_UNSUBSCR
- EMAIL_BOUNCE_HARD
- EMAIL_BOUNCE_SOFT

If you want to import Marketing Permissions and Newsletter Subscriptions, you can use one of these services: API_MKT_CONTACT, API_MKT_INTERACTION_CONTACT, or API_MKT_CORPORATE_ACCOUNT.

For more information about email bounces, see Email: Get Bounces [page 115].

Semantic Key

The semantic key for interactions determines the uniqueness of an interaction record. The semantic key is defined by the following 7 fields, 5 mandatory and 2 optional:

- These 5 fields are **mandatory for POST operations** and are checked during import:
  - **ID_ORIGIN**: Origin of the interaction contact data (except in the case of ANONYMOUS interactions, as described below.)
  - **ID**: External ID of the interaction contact data (except in the case of ANONYMOUS interactions, as described below.)
  - **IA_TYPE**: Interaction type
  - **COMM_MEDIUM**: Communication medium
  - **TIMESTAMP**: UTC time stamp in long form (YYYYMMDDhhmms.mmmuuun)

- These 2 semantic key fields are **optional** and are not checked during import:
  - **SOURCE_OBJECT_TYPE**: Object type of the source object, for example, an opportunity in SAP Cloud for Customer.

  **i Note**

  If the communication medium is a Business Document, the **SOURCE_OBJECT_TYPE** is required. In this case the system checks to see whether the **SOURCE_OBJECT_TYPE** field is filled and returns an error if the field is empty.
- **SOURCE_OBJECT_ID**: Object ID of the source object, for example, the GUID of the SAP Cloud for Customer opportunity or the original post ID of the respective social media network (such as TW or FB).

**Note**

One exception to this is in the case of a social posting. For a social posting, a **SOURCE_OBJECT_ID** is required. In this case the system checks to see whether the **SOURCE_OBJECT_ID** field is filled and returns an error if the field is empty. The check behavior is described in the table.

<table>
<thead>
<tr>
<th>IA_TYPE</th>
<th>SOURCE_OBJECT_ID should be filled with</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIAL_POSTING</td>
<td>Original Post ID of the respective social media network</td>
<td>This is checked during upload.</td>
</tr>
<tr>
<td>SHOP_ITEM_VIEW</td>
<td>WEB_SESSION_ID</td>
<td>For recommendations only. Not checked during upload.</td>
</tr>
<tr>
<td>WEBSITE_SEARCH</td>
<td>WEB_SESSION_ID</td>
<td>For recommendations only. Not checked during upload.</td>
</tr>
<tr>
<td>CLICK_THROUGH</td>
<td>WEB_SESSION_ID</td>
<td>For recommendations only. Not checked during upload.</td>
</tr>
<tr>
<td>SALES_ORDER</td>
<td>SALES_ORDER_ID</td>
<td>For recommendations only. Not checked during upload.</td>
</tr>
</tbody>
</table>

**Anonymous Interactions**

To import anonymous interactions, activate the **IS_ANONYMOUS** field. The system does not create a contact for anonymous interactions.

The system behavior for anonymous interactions is as follows:

- **Usual Case for Anonymous Interactions**: The **ID_ORIGIN** is anonymous and the **IS_ANONYMOUS** indicator is set ("X"). The system stores the interaction as an anonymous one.

- **Deviations from Usual Case**:
  - **Termination of Import if**:
    1. The **ID_ORIGIN** is not anonymous and the **IS_ANONYMOUS** indicator is set ("X"). The system terminates the import with a corresponding notification.
    2. The **ID_ORIGIN** is empty and the **IS_ANONYMOUS** indicator is not set (" "). The system terminates the import with a corresponding notification.
  - **System Correction of Import Data**:
    1. The **ID_ORIGIN** is anonymous and the **IS_ANONYMOUS** indicator is not set (" "). The system sets the **IS_ANONYMOUS** indicator and stores the interaction as an anonymous one.
2. The ID_ORIGIN is anonymous, the IS_ANONYMOUS indicator is set ("X"), and the ID is empty. The system creates a new GUID for field ID.

3. The ID_ORIGIN is empty (and, in addition, the ID is empty) and the IS_ANONYMOUS indicator is set ("X"). The system sets the ID_ORIGIN to anonymous, stores the interaction as an anonymous one, and creates a new GUID for field ID.

Standard Fields and Custom Fields

Custom Fields

- You can add customer-specific fields using the Custom Fields and Logic app. For more information, see Custom Fields. Custom fields are then automatically included during the OData uploads.

  **Note**
  You can see the structure of your data in the OData metadata structure that is displayed when you log onto the system as follows: `https://<server&port>/sap/opu/odata/sap/cuan_import_srv/$metadata`

- You can find a full list of all valid values for interaction types in the Configuration activity Manage Interaction Content. For more information, see Managing Interaction Content.

Parent topic: Interactions [page 605]

Related Information

- Structure of OData Service API_MKT_INTERACTION [page 622]
- Payload Examples [page 634]
- Error Handling for Interactions [page 648]

5.2.9.2 Structure of OData Service API_MKT_INTERACTION

This document describes the structure of the Public OData API service API_MKT_INTERACTION. Make sure you read the Basic Concepts topic before you start.

The Interaction OData API provides the following entity sets:
<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactions</td>
<td>This entity contains the interaction data.</td>
<td>/Interactions</td>
</tr>
<tr>
<td>InteractionInterests</td>
<td>This entity contains the interests assigned to an interaction.</td>
<td>/InteractionInterests</td>
</tr>
<tr>
<td>InteractionProducts</td>
<td>This entity contains the products in an interaction.</td>
<td>/InteractionProducts</td>
</tr>
<tr>
<td>InteractionProductCategories</td>
<td>This entity contains the product categories in an interaction.</td>
<td>/InteractionProductCategories</td>
</tr>
<tr>
<td>InteractionDigitalAssets</td>
<td>This entity contains the digital assets in an interaction.</td>
<td>/InteractionDigitalAssets</td>
</tr>
<tr>
<td>InteractionOffers</td>
<td>This entity contains the offers in an interaction.</td>
<td>/InteractionOffers</td>
</tr>
<tr>
<td>InteractionTags</td>
<td>This entity contains the tags in an interaction.</td>
<td>/InteractionTags</td>
</tr>
<tr>
<td>InteractionAdditionalObjects</td>
<td>This entity contains the additional objects referred to by an interaction.</td>
<td>/InteractionAdditionalObjects</td>
</tr>
<tr>
<td>InteractionLoyaltyPrograms</td>
<td>This entity contains the Loyalty Program attributes in an interaction.</td>
<td>/InteractionLoyaltyPrograms</td>
</tr>
<tr>
<td>InteractionAdditionalInteractionContact</td>
<td>This entity contains the additional contacts involved in an interaction.</td>
<td>/InteractionAdditionalInteractionContact</td>
</tr>
<tr>
<td>InteractionEvent</td>
<td>This entity contains the event referred to by an interaction.</td>
<td>/InteractionEvent</td>
</tr>
</tbody>
</table>

Furthermore, the following entity has the dedicated function of enabling high performance to be maintained when importing large amounts of data:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionsDeepInsert</td>
<td>This entity is used to import large amounts of Interactions data.</td>
<td>/InteractionsDeepInsert</td>
</tr>
</tbody>
</table>

---

**Entity Sets**

**i Note**

To prevent an ODATA error message *(The metadata do not allow a null value.)*, you must set a fixed initial value `00000000-0000-0000-0000-000000000000` for the UUID of all nodes, both root and subnodes.
**InteractionsDeepInsert**

**Entity Path:** /InteractionsDeepInsert

The InteractionsDeepInsert entity enables high performant import of up to 100,000 interaction's data. You can perform the following operations on the InteractionsDeepInsert entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
</table>
| **POST**    | You can create interactions including one or more of these sub-entities using DEEP INSERT:  
  - InteractionInterest  
  - InteractionProducts  
  - InteractionProductCategories  
  - InteractionDigitalAssets  
  - InteractionOffers  
  - InteractionTags  
  - InteractionAdditionalObjects  
  - InteractionLoyaltyPrograms  
  - InteractionAdditionalContacts  
  - InteractionEvents | /InteractionsDeepInsert |

**Note**

This is the recommended method for the mass import of interactions data.

---

**Interactions**

**Entity Path:** /Interactions

You can perform the following operations on the Interactions entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of interactions. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions?$top=1</td>
</tr>
</tbody>
</table>

Get the details of a specific interaction using the Interaction UUID. | /Interactions(guid='<Interaction UUID>') |
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POST</strong></td>
<td>Create an interaction. If the interaction already exists, it is not created. An error is returned.</td>
<td>/Interactions</td>
</tr>
</tbody>
</table>

**Semantic key:** (* = mandatory)
- InteractionContactOrigin *
- InteractionContactId *
- CommunicationMedium*
- InteractionType*
- InteractionTimeStampUTC*

**Note**
- The timestamp must always be UTC time.
- When you **import** data, the local timestamp plus the difference to UTC is also allowed. For example, for New York local time 14:00:00, which is 5 hours before UTC, you could import the timestamp as: **2017-12-18T14:00:00-05:00** or **2017-12-18T19:00:00**.  
- When data is **read**, the UTC timestamp is always returned.

- InteractionSourceObjectType
- InteractionSourceObject

Batch mode is also supported.

<table>
<thead>
<tr>
<th><strong>POST</strong></th>
<th>You can create multiple interactions including one or more of these sub-entities using DEEP INSERT:</th>
<th>/Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- InteractionInterest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionProducts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionProductCategories</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionDigitalAssets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionOffers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionTags</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionAdditionalObjects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionLoyaltyPrograms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- InteractionEvent</td>
<td></td>
</tr>
</tbody>
</table>

Batch mode is also supported.
### PATCH

Update an interaction.
- If the interaction does not exist, it is not created. An error is returned (no upsert is supported).
- The interaction key (InteractionUUID) must be provided to check its existence of the interaction.
- With the exception of the interaction key, all properties can be updated. If semantic key fields (see POST) are updated, a check is carried out to ensure that no duplicate interactions exist after the update. If duplicates exist, an error is returned.
- Batch mode is also supported.

### DELETE

Deletion of interactions is not supported by this service. You must use one of the application jobs to delete interactions. For more information, see [Interactions](#).

---

### InteractionInterests

**Entity Path:** `/InteractionInterests`

You can perform the following operations on the `InteractionInterest` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of interests assigned to interactions. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td><code>/Interactions(guid.'&lt;InteractionUUID&gt;')/InteractionInterests</code></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an interest assignment to an interaction. If the interaction interest master data does not already exist, it is not created. An error is returned. Batch mode is also supported.</td>
<td><code>/InteractionInterests</code></td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update the assignment of an interest to an interaction.</td>
<td><code>/InteractionInterests</code></td>
</tr>
<tr>
<td></td>
<td>- If the interest assignment does not exist, it is not created. An error is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The entity key (InteractionInterestUUID) must be provided to check whether the interest exists.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- With the exception of the interaction and the entity key, all properties can be updated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>
### InteractionProducts

**Entity Path:** /InteractionProducts

You can perform the following operations on the `InteractionProducts` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of products assigned to an interaction. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td><code>/Interactions(guid'InteractionUUID')/InteractionProducts</code></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a product assignment to an interaction. If the product master data does not already exist, it is not created. An error is returned. Batch mode is also supported.</td>
<td><code>/InteractionProducts</code></td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update the assignment of a product to an interaction. If the product assignment does not exist, it is not created. An error is returned (no upsert is supported). The entity key (InteractionProductUUID) must be provided to check its existence. With the exception of the key properties (InteractionUUID, ProductUUID, and InteractionProductUUID), all properties can be updated. Batch mode is also supported.</td>
<td><code>/InteractionProducts</code></td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete the assignment of a product to an interaction. If the product assignment does not exist, it is not deleted. An error is returned. The entity key (InteractionProductUUID) must be provided to check its existence. Batch mode is also supported.</td>
<td><code>/InteractionProducts</code></td>
</tr>
</tbody>
</table>

### InteractionProductCategories

**Entity Path:** /InteractionProductCategories
You can perform the following operations on the **InteractionProductCategories** entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of categories assigned to an interaction. This method supports</td>
<td>/Interactions(guid'InteractionUUID')/</td>
</tr>
<tr>
<td></td>
<td>standard OData parameters such as $filter, $select, $top, $skip, $count,</td>
<td>InteractionProductCategories</td>
</tr>
<tr>
<td></td>
<td>$inlinecount, and $orderby</td>
<td></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a product category assignment to an interaction. If the product</td>
<td>/InteractionProductCategories</td>
</tr>
<tr>
<td></td>
<td>category master data does not already exist, it is not created. An error</td>
<td></td>
</tr>
<tr>
<td></td>
<td>is returned. Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update the assignment of a product category to an interaction.</td>
<td>/InteractionProductCategories</td>
</tr>
<tr>
<td></td>
<td>● If the product category assignment does not exist, it is not created. An</td>
<td></td>
</tr>
<tr>
<td></td>
<td>error is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● The entity key (InteractionProductCategoryUUID) must be provided to check</td>
<td></td>
</tr>
<tr>
<td></td>
<td>its existence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● With the exception of the key properties (InteractionUUID, ProductCategory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UUID, and InteractionProductCategoryUUID), all properties can be updated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete the assignment of a product category to an interaction.</td>
<td>/InteractionProductCategories</td>
</tr>
<tr>
<td></td>
<td>● The entity key (InteractionProductCategoryUUID) must be provided to check</td>
<td></td>
</tr>
<tr>
<td></td>
<td>its existence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>

**InteractionDigitalAssets**

**Entity Path:** /InteractionDigitalAssets

You can perform the following operations on the **InteractionDigitalAssets** entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of digital assets assigned to an interaction. This method</td>
<td>/Interactions(guid'InteractionUUID')/</td>
</tr>
<tr>
<td></td>
<td>supports standard OData parameters such as $filter, $select, $top, $skip,</td>
<td>InteractionDigitalAssets</td>
</tr>
<tr>
<td></td>
<td>$count, $inlinecount, and $orderby</td>
<td></td>
</tr>
</tbody>
</table>
### InteractionDigitalAsset

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Create a digital asset assignment to an interaction. Batch mode is also supported.</td>
<td>/InteractionDigitalAsset</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PATCH</th>
<th>Update the assignment of a digital asset to an interaction.</th>
<th>/InteractionDigitalAsset</th>
</tr>
</thead>
<tbody>
<tr>
<td>●</td>
<td>If the assignment does not exist, it is not created. An error is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td>●</td>
<td>The entity key (InteractionDigitalAssetUUID) must be provided to check its existence.</td>
<td></td>
</tr>
<tr>
<td>●</td>
<td>With the exception of the interaction and the entity key, all properties can be updated.</td>
<td></td>
</tr>
<tr>
<td>●</td>
<td>Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DELETE</th>
<th>Delete the assignment of a digital asset to an interaction. If the assignment does not exist, it is not deleted. An error is returned</th>
<th>/InteractionDigitalAsset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>

### InteractionOffers

**Entity Path:** /InteractionOffers

You can perform the following operations on the `InteractionOffers` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of offers assigned to an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions(guid'InteractionUUID')/InteractionOffers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POST</th>
<th>Create an offer assignment to an interaction.</th>
<th>/InteractionOffers</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PATCH</th>
<th>Update the assignment of an offer to an interaction.</th>
<th>/InteractionOffers</th>
</tr>
</thead>
<tbody>
<tr>
<td>●</td>
<td>If the assignment does not exist, it is not created. An error is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td>●</td>
<td>The entity key (InteractionOfferUUID) must be provided to check its existence.</td>
<td></td>
</tr>
<tr>
<td>●</td>
<td>With the exception of the interaction and the entity key, all properties can be updated.</td>
<td></td>
</tr>
<tr>
<td>●</td>
<td>Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete the assignment of an offer to an interaction. If the assignment does not exist, it is not deleted. An error is returned</td>
<td>/InteractionOffers</td>
</tr>
<tr>
<td></td>
<td>Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>

**InteractionTags**

**Entity Path:** /InteractionTags

You can perform the following operations on the InteractionTags entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of tags assigned to an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions(guid'InteractionUUID')/InteractionTags</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a tag assignment to an interaction.</td>
<td>/InteractionTags</td>
</tr>
<tr>
<td></td>
<td>Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update the assignment of a tag to an interaction.</td>
<td>/InteractionTags</td>
</tr>
<tr>
<td></td>
<td>• If the assignment does not exist, it is not created. An error is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The entity key (InteractionTagUUID) must be provided to check its existence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• With the exception of the interaction, the entity key, and the TagOrigin, all properties can be updated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete the assignment of an interest to an interaction. If the interest assignment does not exist, it is not deleted. An error is returned</td>
<td>/InteractionTags</td>
</tr>
<tr>
<td></td>
<td>Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>

**InteractionAdditionalObjects**

**Entity Path:** /InteractionAdditionalObjects
You can perform the following operations on the `InteractionAdditionalObjects` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of additional objects referred to by an interaction. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td>/Interactions(guid'InteractionUUID')/InteractionAdditionalObjects</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an additional object assignment to an interaction. Batch mode is also supported.</td>
<td>/InteractionAdditionalObjects</td>
</tr>
</tbody>
</table>
| **PATCH**   | Update the assignment of an additional object to an interaction.  
  - If the assignment does not exist, it is not created. An error is returned (no upsert is supported).  
  - The entity key (InteractionAdditionalObjUUID) must be provided to check its existence.  
  - With the exception of the interaction and the entity key, all properties can be updated.  
  - Batch mode is also supported. | /InteractionAdditionalObjects |
| **DELETE**  | Delete the assignment of an additional object to an interaction. If the assignment does not exist, it is not deleted. An error is returned. Batch mode is also supported. | /InteractionAdditionalObjects |

### InteractionLoyaltyPrograms

**Entity Path:** /InteractionLoyaltyPrograms

You can perform the following operations on the `InteractionLoyaltyPrograms` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of tags referred to by an interaction. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, and <code>$orderby</code></td>
<td>/Interactions(guid'InteractionUUID')/InteractionLoyaltyPrograms</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a loyalty subnode assignment to an interaction. Batch mode is also supported.</td>
<td>/InteractionLoyaltyPrograms</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update the assignment of loyalty attributes to an interaction. Batch mode is also supported.</td>
<td>InteractionLoyaltyPrograms(guid'InteractionLoyaltyUUIDUUID')</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete the assignment of a Loyalty Subnode to an interaction. If the assignment does not exist, it is not deleted. An error is returned.</td>
<td>InteractionLoyaltyPrograms(guid&quot;InteractionLoyaltyProgramUUID&quot;)</td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>

**InteractionAdditionalInteractionContacts**

**Entity Path:** /InteractionAdditionalInteractionContact

**i Note**

The AdditionalInteractionContact entity is not visible on the UI, however it can still be used to perform the below operations.

You can perform the following operations on the InteractionAdditionalInteractionContact entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of additional contacts referred to by an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions(guid&quot;InteractionUUID&quot;)/InteractionAdditionalInteractionContact</td>
</tr>
<tr>
<td>POST</td>
<td>Create an additional contact assignment for an interaction.</td>
<td>/InteractionAdditionalInteractionContact</td>
</tr>
<tr>
<td></td>
<td>• Unlike on the root entity, if the additional contact does not exist, an error is returned. The contact will not be created.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
<tr>
<td>PATCH</td>
<td>Update the assignment of additional Contacts to an interaction.</td>
<td>/InteractionAdditionalInteractionContact</td>
</tr>
<tr>
<td></td>
<td>• If the contact does not exist, the interaction is not created. An error is returned (no upsert is supported).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The entity key (InteractionAdditionalContactUUID) must be provided to check its existence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• With the exception of the interaction and the entity key, all properties can be updated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Batch mode is also supported.</td>
<td></td>
</tr>
</tbody>
</table>
### InteractionEvents

**Entity Path:** /InteractionEvent

You can perform the following operations on the InteractionEvent entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of events referred to by an interaction. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/Interactions(guid'InteractionUUID')/InteractionEvent</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an event assignment for an interaction.</td>
<td>/InteractionEvent</td>
</tr>
</tbody>
</table>
| **PATCH**   | Update the assignment of an event to an interaction.  
  - If the event does not exist, the interaction is not created. An error is returned (no upsert is supported).  
  - The entity key (InteractionEventUUID) must be provided to check its existence.  
  - With the exception of the interaction and the entity key, all properties can be updated.  
  - Batch mode is also supported. | /InteractionEvent |
| **DELETE**  | Delete the assignment of an event to an interaction. If the assignment does not exist, it is not deleted. An error is returned | /InteractionEvent |
5.2.9.3 Payload Examples

Payload examples for API_MKT_INTERACTION

i Note
An InteractionUUID value must be included in the payload in cases where the sender checks the metadata (as on HCI/CPI). Otherwise you will get the error message 'The metadata do not allow a null value.'

- JSON version: "InteractionUUID": "00000000-0000-0000-0000-000000000000"
- XML version: <InteractionUUID>00000000-0000-0000-0000-000000000000</InteractionUUID>

Available Payload Examples

<table>
<thead>
<tr>
<th>Entities</th>
<th>Payload Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Interactions Using InteractionsDeepInsert</td>
<td>Mass Import Using InteractionsDeepInsert [page 634]</td>
</tr>
<tr>
<td>General Payload Examples</td>
<td>General Payload Examples [page 637]</td>
</tr>
<tr>
<td>GET Requests</td>
<td>GET Requests [page 642]</td>
</tr>
<tr>
<td>Offer Redemption - Interaction Offers</td>
<td>Offer Redemption - Entity Set: InteractionOffers [page 643]</td>
</tr>
<tr>
<td>Event Subnode</td>
<td>Event Subnode [page 645]</td>
</tr>
</tbody>
</table>

Mass Import Using InteractionsDeepInsert

Importing Interactions Using InteractionsDeepInsert

InteractionsDeepInsert is used only for the mass import of Interactions.

Sample Code

```

POST data:
{"Interactions":
 [
  {"InteractionContactOrigin":"EMAIL",
   "InteractionContactId":"example@email.com",
   
```
"CommunicationMedium":"EMAIL",
"InteractionType":"EMAIL_BOUNCE_SOFT",
"InteractionSourceObjectType":"ERP",
"InteractionSourceObject":"12345678",
"MarketingArea":"ICMA_DRINK",
"CampaignID":"12121212",
"InteractionLanguage":"EN",
"InteractionAmount":"12.34",
"InteractionCurrency":"EUR",
"InteractionLatitude":"49.304864",
"InteractionLongitude":"8.641526",
"InteractionInterests":
  [
    {
      "ItemOfInterest":"DRINK"
    }
  ],
"InteractionProductCategories":
  [
    {
      "ProductCategoryHierarchy":"Prod_Cat_1",
      "ProductCategory":"Product_CAT1"
    }
  ],
"InteractionProducts":
  [
    {
      "ProductOrigin":"SAP_PRODUCT",
      "Product":"Product_1",
      "InteractionProductAmount":"99.99",
      "InteractionProductQuantity":"1",
      "InteractionProductUnit":"m"
    }
  ],
{"InteractionContactOrigin":"EMAIL",
"InteractionContactId":"example2@email.com",
"CommunicationMedium":"EMAIL",
"InteractionType":"EMAIL_BOUNCE_SOFT",
"InteractionTimeStampUTC":"2019-01-21T09:42:50",
"InteractionSourceObjectType":"ERP",
"InteractionSourceObject":"12345679",
"MarketingArea":"ICMA_FOOD",
"CampaignID":"12121212",
"InteractionLanguage":"EN",
"InteractionAmount":"12.34",
"InteractionCurrency":"EUR",
"InteractionLatitude":"49.304864",
"InteractionLongitude":"8.641526",
"InteractionInterests":
  [
    {
      "ItemOfInterest":"FOOD"
    }
  ]}
Sample Code

POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InteractionsDeepInsert HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json

"Interactions":
[
{
  "InteractionUUID":"539968d3-6aa5-f08f-a29a-b71ec6632712",
  "InteractionContactOrigin":"EMAIL",
  "InteractionContactId":"2020012109125288_apitest@teamwdf02.de",
  "CommunicationMedium":"EMAIL",
  "InteractionType":"EMAIL_BOUNCE_SOFT",
  "InteractionTimeStampUTC":"2020-01-21T09:12:52",
  "InteractionSourceObjectType":"ERP",
  "InteractionSourceObject":"12345678",
  "SourceSystemType":"ERP",
  "SourceSystem": "ERP001",
  "InteractionTags":
  [
    {
      "TagOrigin":"INTERNAL",
      "TagName": "geocode:49.3,8.65,10km"
    }
  ],
  "InteractionAdditionalInteractionContacts":
  [
    {
      "InteractionContactOrigin": "SAP_CRM_BUPA",
      "InteractionContactId": "Contact_NB_1_WDF02_apitest@teamwdf02.de"
    }
  ]
},
{
  "InteractionUUID":"ec4d21d9-c42e-2e82-8649-9da266dbafdc",
  "InteractionContactOrigin":"EMAIL",
  "InteractionContactId":"2020012109125288_apitest@teamwdf02.de",
  "CommunicationMedium":"FB",
  "InteractionType": "SOCIAL_POSTING",
  "InteractionTimeStampUTC": "2020-01-21T06:12:52",
  "InteractionSourceObjectType": "ERP",
  "InteractionSourceObject": "12345678",
  "SourceSystemType": "ERP",
  "SourceSystem": "ERP001",
  "InteractionTags":
  [
    {
      "TagOrigin": "INTERNAL",
      "TagName": "geocode:49.3,8.65,10km"
    }
  ],
  "InteractionAdditionalInteractionContacts":
  [
    {
      "InteractionContactOrigin": "SAP_CRM_BUPA",
      "InteractionContactId": "Contact_NB_2_WDF02_apitest@teamwdf02.de"
    }
  ]
]
General Payload Examples

Import 2 Interactions with 3 Products and 3 Interests as Sub-Nodes

Sample Code

```
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST Interactions HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{
"InteractionContactOrigin":"SAP_HYBRIS_CONSUMER",
"InteractionContactId":"4711",
"CommunicationMedium":"ONLINE_SHOP",
"InteractionType":"SHOP_CART_VIEW",
"InteractionTimeStampUTC":"2018-04-25T08:16:53",
"InteractionSourceObjectType":"COMMERCE_SC",
"InteractionSourceObject":"4444",
"MarketingArea":"CXXGLOBAL",
"CampaignID":"12121212",
"MarketingLocationOrigin":"
,"MarketingLocation":"
,"DigitalAccountType":"
,"DigitalAccount":"
,"MKT_AgreementOrigin":"
,"MKT_AgreementExternalID":"
,"InteractionStatus":"
,"InteractionReason":"
,"InteractionLanguage":"EN",
"InteractionAmount":"12.34",
"InteractionCurrency":"EUR",
"InteractionLatitude":"49.304864",
"InteractionLongitude":"8.641526",
"SpatialReferenceSystem":"
,"DeviceType":"
,"InteractionDeviceName":"
,"SourceSystemType":"COMMERCE",
"SourceSystem":"HC121",
"InteractionSourceObjectAddlID":"
}
```

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PUBLIC 637
"InteractionSourceObjectStatus": "",
"InteractionSourceDataURL": "http://www.sap.com/shoppingcartlink",
"CampaignContentLinkURL": "",
"CampaignContentLinkName": "",
"InteractionLastChangedByUser": "",
"InteractionContentSubject": "",
"InteractionContent": "",
"InteractionInterests": [
{
 "ItemOfInterest": "MarketingCloud",
 "InteractionIntrstWeightingFctr": 1,
 "InteractionIntrstSentimentVal": 1
},
{
 "ItemOfInterest": "BigData",
 "InteractionIntrstWeightingFctr": 1,
 "InteractionIntrstSentimentVal": 1
},
{
 "ItemOfInterest": "SAPHana",
 "InteractionIntrstWeightingFctr": 1,
 "InteractionIntrstSentimentVal": 1
}
],
"InteractionProducts": [
{
 "ProductOrigin": "SAP_HYBRIS_PRODUCT",
 "Product": "PRD-0",
 "InteractionProdWeightingFactor": 1,
 "InteractionProductSentimentVal": 1,
 "InteractionProductAmount": "12.12",
 "InteractionProductQuantity": "1",
 "InteractionProductUnit": "m",
 "ProductRecommendationModelType": "",
 "InteractionProductStatus": "",
 "InteractionProductReason": ""
},
{
 "ProductOrigin": "SAP_HYBRIS_PRODUCT",
 "Product": "PRD-1",
 "InteractionProdWeightingFactor": 1,
 "InteractionProductSentimentVal": 1,
 "InteractionProductAmount": "12.12",
 "InteractionProductQuantity": "1",
 "InteractionProductUnit": "m",
 "ProductRecommendationModelType": "",
 "InteractionProductStatus": "",
 "InteractionProductReason": ""
},
{
 "ProductOrigin": "SAP_HYBRIS_PRODUCT",
 "Product": "PRD-2",
 "InteractionProdWeightingFactor": 1,
 "InteractionProductSentimentVal": 1,
 "InteractionProductAmount": "12.12",
 "InteractionProductQuantity": "1",
 "InteractionProductUnit": "m",
 "ProductRecommendationModelType": "",
 "InteractionProductStatus": "",
 "InteractionProductReason": ""
}
]
POST Interactions HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{
  "InteractionContactOrigin":"SAP_HYBRIS_CONSUMER",
  "InteractionContactId": "4712",
  "CommunicationMedium": "ONLINE_SHOP",
  "InteractionType": "SHOP_ITEM_ADD",
  "InteractionTimeStampUTC": "2018-04-25T08:16:53",
  "InteractionSourceObjectType": "COMMERCE_SC",
  "InteractionSourceObject": "55599",
  "MarketingArea": "CXXGLOBAL",
  "CampaignID": "12121212",
  "MarketingLocationOrigin": "",
  "MarketingLocation": "",
  "DigitalAccountType": "",
  "DigitalAccount": "",
  "MKT_AgreementOrigin": "",
  "MKT_AgreementExternalID": "",
  "InteractionStatus": "",
  "InteractionReason": "",
  "InteractionLanguage": "EN",
  "InteractionAmount": "12.34",
  "InteractionCurrency": "EUR",
  "InteractionLatitude": "49.304864",
  "InteractionLongitude": "8.641526",
  "SpatialReferenceSystem": "",
  "DeviceType": "",
  "InteractionDeviceName": "",
  "SourceSystemType": "COMMERCE",
  "SourceSystem": "HC121",
  "InteractionSourceObjectAddlID": "",
  "InteractionSourceObjectStatus": "",
  "InteractionSourceDataURL": "http://www.sap.com/shoppingcartlink",
  "CampaignContentLinkURL": "",
  "CampaignContentLinkName": "",
  "InteractionLastChangedByUser": "",
  "InteractionContentSubject": "",
  "InteractionContent": "",
  "InteractionInterests": [
    {
      "ItemOfInterest": "MarketingCloud",
      "InteractionIntrstWeightingFctr": 1,
      "InteractionIntrstSentimentVal": 1
    },
    {
      "ItemOfInterest": "BigData",
      "InteractionIntrstWeightingFctr": 1,
      "InteractionIntrstSentimentVal": 1
    },
    {
      "ItemOfInterest": "SAPHana",
      "InteractionIntrstWeightingFctr": 1,
      "InteractionIntrstSentimentVal": 1
    }
  ],
  "InteractionProducts": [
    {
      "ProductOrigin": "SAP_HYBRIS_PRODUCT",
      "Product": "PRD-0",
      "InteractionProdWeightingFactor": 1,
      "InteractionProductSentimentVal": 1,
      "InteractionProductAmount": "12.12",
      "InteractionProductQuantity": "1",
      "InteractionProductUnit": "m"
    }]}
Update Interaction 1 Root and Sub-Node Product via BATCH Request

```
Sample Code

POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/$batch
POST data: 
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH Interactions(InteractionUUID='guid'60b1329a-1d04-a325-1600-236ca577cc6a') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json

{ "InteractionSourceObject": "87654321", 
  "InteractionUUID": "60b1329a-1d04-a325-1600-236ca577cc6a", 
  "InteractionContactId": "4711", 
  "MarketingArea": "CXXGLOBAL", 
  "CampaignID": "986532", 
  "InteractionLatitude": "50.304864", 
  "InteractionLongitude": "5.228967", 
  "InteractionLanguage": "DE", 
  "CommunicationMedium": "WEB", 
  "InteractionType": "WEBSITE_REGISTRATION" } 

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
```
PATCH InteractionProducts(InteractionProductUUID=guid'63b1329a-1d04-a325-1600-236ca577cc6a') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{
  "InteractionUUID":"60b1329a-1d04-a325-1600-236ca577cc6a",
  "ProductOrigin":"SAP_HYBRIS_PRODUCT",
  "Product":"PRD-2",
  "InteractionProdWeightingFactor":2,
  "InteractionProductSentimentVal":2
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--

Post New Sub-Node, Update Root and Sub-Nodes and Delete Sub-Node:

`/sample Code`

POST https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InteractionInterests HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{
  "InteractionUUID":"60b1329a-1d04-a325-1600-236ca577cc6a",
  "ItemOfInterest":"HybrisMarketing",
  "InteractionIntrstWeightingFctr":1,
  "InteractionIntrstSentimentVal":1
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH Interactions(InteractionUUID=guid'60b1329a-1d04-a325-1600-236ca577cc6a') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{
  "InteractionSourceObject":"22222",
  "InteractionUUID":"60b1329a-1d04-a325-1600-236ca577cc6a",
  "InteractionContactId":"4711",
  "MarketingArea":"CXXGLOBAL",
  "CampaignID":"0000033333",
  "InteractionLongitude":"7.228967",
  "InteractionLanguage":"DE",
  "CommunicationMedium":"WEB",
  "InteractionType":"WEBSITE_VISIT"
}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH InteractionProducts(InteractionProductUUID=guid'63b1329a-1d04-a325-1600-236ca577cc6a') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
GET Requests

Get the first 10 Interactions sorted by InteractionTime Stamp

/sap/opu/odata/sap/API_MKT_INTERACTION_srv/Interactions?$top=10&$orderby=InteractionTime StampUTC desc

Get the first 3 Interactions sorted by Interaction Type

/sap/opu/odata/sap/API_MKT_INTERACTION_srv/Interactions?$filter=InteractionType eq 'OFFER CLICK'&$top=3

Get Interaction for specific Interaction UUID

<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>This returns the interaction with the specified UUID, however there must be a number provided in the TOP Parameter</td>
</tr>
</tbody>
</table>

/sap/opu/odata/sap/API_MKT_INTERACTION_srv/Interactions?$filter=(InteractionUUID eq guid'00000063-4657-49c8-1500-8f6c10e2ef5b')&$top=10
Get the first 20 Interactions filtered by multiple entity types

You can filter by InteractionType, CommunicationMedium, InteractionSourceObject, InteractionDeviceName, InteractionContactOrigin and InteractionContactId and Interaction. Subnodes such as InteractionInterests, InteractionDigitalAssets, InteractionOffers, InteractionTags and InteractionAdditionalObjects will be expanded.

/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/Interactions?$expand=InteractionInterests,InteractionDigitalAssets,InteractionOffers,InteractionTags,InteractionAdditionalObjects$filter=((InteractionType eq 'EMAIL_OUTBOUND') and (CommunicationMedium eq 'EMAIL') and (InteractionSourceObject eq 'XXX') and (InteractionDeviceName eq 'XXX') and (InteractionContactOrigin eq 'XXX') and (InteractionContactId eq '2612d9ed1631856b'))&$skip=0&$top=20&$orderby=InteractionSourceObject&$inlinecount=allpages

Get the first 10 Interactions within a specific time slot filtered by InteractionTimeStampUTC

/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/Interactions?$filter=((InteractionTimeStampUTC gt datetimeoffset'2010-06-10T22:00:00.165') and (InteractionTimeStampUTC le datetimeoffset'2018-06-10T22:00:00.165'))&$top=10

Offer Redemption - Entity Set: InteractionOffers

---

Note

For an interaction of type OFFER_REDEMPTION it is necessary to fill the InteractionOffers entity. At least one of the following property combinations have to be provided:

<table>
<thead>
<tr>
<th>Single coupon codes</th>
<th>Multi coupon codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MarketingOffer</td>
<td>MarketingOffer, Coupon Code</td>
</tr>
<tr>
<td>ExternalOffer, ExternalOfferOrigin</td>
<td>MarketingOffer, Serial Number</td>
</tr>
<tr>
<td>Coupon</td>
<td>ExternalOffer, ExternalOfferOrigin, CouponCode</td>
</tr>
<tr>
<td></td>
<td>ExternalOffer, ExternalOfferOrigin, SerialNumber</td>
</tr>
<tr>
<td></td>
<td>Coupon, CouponCode</td>
</tr>
<tr>
<td></td>
<td>Coupon, SerialNumber</td>
</tr>
</tbody>
</table>

- There is no dedicated property for the "SerialNumber"; it is imported using the property "CouponCode" with "CouponCodeType" set to "S".
- You can import several redemptions for a dedicated coupon code using the property "NumberOfRedemption". You can also cancel redemptions by setting this property to a negative value.

---

Single Coupon Code, Import with External Offer and External Offer Origin

```
Sample Code

POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/Interactions
POST data:
{
```
"InteractionTimeStampUTC": "2018-10-10T08:15:54",
"InteractionContactId": "john.doe@company.com",
"InteractionContactOrigin": "EMAIL",
"CommunicationMedium": "ONLINE_SHOP",
"InteractionType": "OFFER_REDEMPTION",
"InteractionIsAnonymous": false,
"InteractionOffers": [{
  "ExternalOffer": "offer_3452",
  "ExternalOfferOrigin": "EXT_SYSTEM"
}]
}

Single Coupon Code, Import with Coupon (Redemption Cancellation)

Sample Code

POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/Interactions
POST data:
{
  "InteractionTimeStampUTC": "2018-10-10T07:15:54",
  "InteractionContactId": "john.doe@company.com",
  "InteractionContactOrigin": "EMAIL",
  "CommunicationMedium": "ONLINE_SHOP",
  "InteractionType": "OFFER_REDEMPTION",
  "InteractionIsAnonymous": false,
  "InteractionOffers": [{
    "Coupon": "single_coupon564",
    "NumberOfRedemption": -1
  }]
}

Multi Coupon Code, Import with Coupon and Serial Number

Sample Code

POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/Interactions
POST data:
{
  "InteractionTimeStampUTC": "2018-10-10T08:13:23",
  "InteractionContactId": "john.doe@company.com",
  "InteractionContactOrigin": "EMAIL",
  "CommunicationMedium": "ONLINE_SHOP",
  "InteractionType": "OFFER_REDEMPTION",
  "InteractionIsAnonymous": false,
  "InteractionOffers": [{
    "Coupon": "multi_coupon241",
    "CouponCode": "SN4421",
    "CouponCodeType": "S",
    "NumberOfRedemption": 1
  }]
}

Multi Coupon Code, Import with External Offer, External Offer Origin and Coupon Code

Sample Code

POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/Interactions
Event Subnode

Post Interaction and Event Subnode Non Batch Mode:

Sample Code

```json
POST:
https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/
Interactions
POST data:
{
  "InteractionContactOrigin": "EMAIL",
  "InteractionContactId": "20190927151824_api
test@teamwdf02.de",
  "CommunicationMedium": "EMAIL",
  "InteractionType": "EMAIL_BOUN
CE_SOFT",
  "InteractionSourceObject": "12345678",
  "MarketingArea": "ICMA_DRIN
K",
  "InteractionEvents": [{
    "MktgEventExternalId": "WDF02
1E2019-09-27T15:18:16",
    "MktgEventProvider": "ON24_ID",
    "MktgEventProviderAccount": "123"
  }]
}
```

Post Interaction Event Subnode DeepInsert:

Sample Code

```json
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/
API_MKT_INTERACTION_SRV/InteractionsDeepInsert
POST data:
{
  "Interactions": [
    {
      "InteractionContactOrigin": "EMAIL",
      "InteractionContactId": "20190927151822_api
test@teamwdf02.de",
      "CommunicationMedium": "EMAIL",
      "InteractionType": "EMAIL_BOUN
CE_SOFT",
      "InteractionTimeStampUTC": "2019-09-27T15:18:22",
      "InteractionSourceObject": "12345678",
      "MarketingArea": "ICMA_DRIN
K",
      "InteractionEvents": [{
        "MktgEventExternalId": "WDF02
        "MktgEventProvider": "ON24_ID",
        "MktgEventProviderAccount": "123"
      }]
    }
  ]
}
```

Post Interaction Event Subnode Batch Mode:

Sample Code

```json
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/
API_MKT_INTERACTION_SRV/$batch
```
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InteractionEvents HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{"InteractionUUID":"d11415a6-e69b-64bb-b8d7-1667395b10d6","InteractionEventUUID":"6c0b84b7-5523-1ed9-b8a7-40fa9950e7ce","MktgEventExternalId":"WDF02
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch---

POST Interaction Event Subnode Non Batch Mode

**Sample Code**

POST data:
{"InteractionUUID":"d11415a6-e69b-64bb-b8d7-1667395b10d6","InteractionEventUUID":"6c0b84b7-5523-1ed9-b8a7-40fa9950e7ce","MktgEventExternalId":"WDF02

Update Interaction Event Sub Node Non Batch Mode:

**Sample Code**

PATCH https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/InteractionEvents(InteractionEventUUID=guid'24c63568-4daf-3dd6-1600-236c2e825c
e5')
PATCH data:
{"MktgEventAttendanceType":"01"}

Update Interaction Event Subnode Batch Mode:

**Sample Code**

POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
PATCH
InteractionEvents(InteractionEventUUID=guid'24c63568-4daf-3dd6-1600-236c2e825c
e5') HTTP/1.1
Content-Length: 1035
Delete Interaction Event Subnode Non Batch Mode:

`Sample Code`

DELETE https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/InteractionEvents(InteractionEventUUID=guid'24c63568-4daf-3dd6-1600-236c2e825c85')

Delete Interaction Event Subnode Batch Mode

`Sample Code`

POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTERACTION_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE
InteractionEvents(InteractionEventUUID=guid'24c63568-4daf-3dd6-1600-236c2e825c85') HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
("InteractionUUID":"d11415a6-e69b-64bb-b8d7-1667395b10d6")
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--

Parent topic: Interactions [page 605]

Related Information

Basic Concepts [page 618]
Structure of OData Service API_MKT_INTERACTION [page 622]
Error Handling for Interactions [page 648]
### 5.2.9.4 Error Handling for Interactions

This section contains some troubleshooting tips for handling common errors involving interaction imports.

<table>
<thead>
<tr>
<th>Error / Error Message</th>
<th>What It Means</th>
<th>What You Can Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid entry in column &amp;2: ‘&amp;1’</td>
<td>Either:  ● Configuration is missing  ● Invalid characters have been used  ● The format is incorrect</td>
<td>Maintain Configuration  Correct invalid entries: for example Phone numbers have to start with ‘+’ or ‘00’.</td>
</tr>
<tr>
<td>ODATA error: The metadata do not allow a null value.</td>
<td>The value of the UUID cannot be empty.</td>
<td>To prevent an ODATA error message, you must set a fixed initial value <strong>00000000-0000-0000-0000-0000000000</strong> for the UUID of all nodes, both root and subnodes.</td>
</tr>
<tr>
<td>Timestamp is incorrect</td>
<td>Microsoft Excel formats the timestamp incorrectly when opening the file.</td>
<td>Format the value in Microsoft Excel as follows:  1. Change the type of the field to number.  2. Remove all decimal places.  3. Remove the separator.  4. Enter a valid time (YYYYMMDDhhmmss).  5. Save</td>
</tr>
<tr>
<td>Special characters are not imported</td>
<td>The data is not loaded in utf-8 encoding.</td>
<td>Send data in utf-8 encoding. Use an editor that supports this.</td>
</tr>
</tbody>
</table>

**Note**
Refer to the message long text.

---

**Parent topic:** Interactions [page 605]

**Related Information**

- Basic Concepts [page 618]
- Structure of OData Service API_MKT_INTERACTION [page 622]
- Payload Examples [page 634]
- HTTP Response Status Codes [page 402]
- Best Practices and Recommended Package Sizes [page 393]
- Import Monitor [page 397]
5.2.10 Interest Items

Public OData API (API_MKT_INTEREST_SRV) for InterestItems. An interest represents the content or subject of a contact’s interaction.

Overview

The public API for InterestItems supports operations on the Business Object CUAN_INTEREST.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTEREST_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/$metadata</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required:</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0340</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-DM-IA</td>
</tr>
</tbody>
</table>

Note

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_Interest_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port name</td>
</tr>
</tbody>
</table>

i Note

You can convert the XML file to an XML table to make it easier to read.
5.2.10.1 Structure of API_MKT_INTEREST_SRV

This document describes the structure of the Public OData API service API_MKT_INTEREST. Make sure you read the Basic Concepts topic before you start.

The InterestItem OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterestItems</td>
<td>This entity contains interest items data.</td>
<td>/InterestItems</td>
</tr>
<tr>
<td>InterestItemProdCats</td>
<td>This entity contains the product categories of interest items. Product categories can be assigned to products so related products can be grouped together.</td>
<td>/InterestItemProdCats</td>
</tr>
<tr>
<td>InterestItemTags</td>
<td>This entity contains the tags assigned to interests. Tags are terms or groups of terms assigned to an entity to help classify it's content.</td>
<td>/InterestTags</td>
</tr>
<tr>
<td>InterestItemTexts</td>
<td>This entity contains the language specifications of an interest item text.</td>
<td>/InterestItemTexts</td>
</tr>
</tbody>
</table>

**Entity Sets**

**InterestItems**

**Entity Path:** /InterestItems
You can perform the following operations on the **InterestItem** entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Return a list of InterestItems. This method supports standard OData parameters such as $filter, $select.</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems</code></td>
</tr>
<tr>
<td>GET</td>
<td>Get the top 2 InterestItems</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems?$top=2</code></td>
</tr>
<tr>
<td>GET</td>
<td>Return specific InterestItem &quot;xxx&quot;</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems?$filter=ItemOfInterest eq 'xxx'</code></td>
</tr>
<tr>
<td>GET</td>
<td>Return a list of InterestItems omitting the top 2 InterestItems</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems?$skip=2</code></td>
</tr>
<tr>
<td>GET</td>
<td>Return a list of InterestItemTexts assigned to the specified InterestItem &quot;xxx&quot;</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems('xxx')/InterestItemTexts</code></td>
</tr>
<tr>
<td>GET</td>
<td>Return a list of InterestItemTags assigned to the specified InterestItem &quot;xxx&quot;</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems('xxx')/InterestItemTags</code></td>
</tr>
<tr>
<td>GET</td>
<td>Returns a list of InteresItemProdCats assigned to the specified InterestItem &quot;xxx&quot;</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems('xxx')/InterestItemProdCats</code></td>
</tr>
<tr>
<td>GET</td>
<td>Return details of a specified InterestItem &quot;xxx&quot;</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems('xxx')</code></td>
</tr>
</tbody>
</table>

**InterestItemProdCats**

**Entity Path:** `/InterestItemProdCats`
You can perform the following operations on the `InterestItemProdCat` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Return a list of <code>InterestItemProdCat</code>. This method supports standard OData parameters such as $filter, $select, $top</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItemProdCats/</code></td>
</tr>
</tbody>
</table>

### InterestItemTexts

**Entity Path:** `/InterestItemText`

You can perform the following operations on the `InterestItemText` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Return a list of <code>InterestItemText</code>. This method supports standard OData parameters such as $filter, $select, $top</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItemTexts</code></td>
</tr>
</tbody>
</table>

### InterestItemTags

**Entity Path:** `/InterestItemTags`

You can perform the following operations on the `InterestItemTags` entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Return a list of <code>InterestItemTags</code>. This method supports standard OData parameters such as $filter, $select, $top</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItemTags</code></td>
</tr>
<tr>
<td>GET</td>
<td>Return a list of <code>InterestItemTags</code> with the Tag Type field provided</td>
<td><code>/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItemTags?$select=TagType</code></td>
</tr>
</tbody>
</table>

5.2.10.2 Payload Examples for Interest Items

Payload examples for API_MKT_INTEREST.

The following examples demonstrate how you can use the Interests API.
<table>
<thead>
<tr>
<th>Method</th>
<th>Payload Examples - Batch Mode</th>
<th>Payload Examples - Non-Batch Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep Create Interests</td>
<td>Deep Create Interests Batch Mode [page 653]</td>
<td>Deep Create Interests Non-Batch Mode [page 655]</td>
</tr>
<tr>
<td>Create Interest</td>
<td>Create Interests (Non-Deep) BATCH Mode [page 655]</td>
<td>Create Interests (Non-Deep) Non-BATCH Mode [page 656]</td>
</tr>
<tr>
<td>Create Item of Interest Assignments</td>
<td>Create Text Assignments</td>
<td>Create Interest Item Text Assignments in Batch Mode [page 656]</td>
</tr>
<tr>
<td>Create Tag Assignments</td>
<td>Create Interest Item Tag Assignments in Batch Mode [page 657]</td>
<td>Create Interest Item Tag Assignments in Non-Batch Mode [page 657]</td>
</tr>
<tr>
<td>Create Product Category Assignments</td>
<td>Create Interest Item Product Category Assignments in Batch Mode [page 658]</td>
<td>Create Interest Item Product Category Assignments in Non-Batch Mode [page 658]</td>
</tr>
<tr>
<td>Delete Item Of Interest</td>
<td>Delete Interest items in Batch Mode [page 658]</td>
<td>Delete Interest items in Non-Batch Mode [page 659]</td>
</tr>
<tr>
<td>Delete Item of Interest Assignments</td>
<td>Delete Text Assignments</td>
<td>Delete Interest Items Text Assignment in Batch Mode [page 659]</td>
</tr>
<tr>
<td>Delete Tag Assignments</td>
<td>Delete Interest Item Tag Assignments in Batch Mode [page 660]</td>
<td>Delete Interest Item Tag Assignments in Non-Batch Mode [page 660]</td>
</tr>
<tr>
<td>Delete Product Category Assignments</td>
<td>Delete Interest Item Product Category Assignments in Batch Mode [page 660]</td>
<td>Delete Interest Item Product Category Assignments in Non-Batch Mode [page 661]</td>
</tr>
</tbody>
</table>

### Deep Create Interests Batch Mode

```bash
POST https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data: --batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InterestItems HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{
    "ItemOfInterest":"T220190325153232",
    "InterestItemTexts":
    [  
```
```
"Language": "EN",
"ItemOfInterest": "T220190325153232",
"ItemOfInterestName": "Test API Interest Srv"
],
"Language": "DE",
"ItemOfInterest": "T220190325153232",
"ItemOfInterestName": "Deutsch Test"
],
"InterestItemTags": [
  {
    "TagName": "gullo d'oro",
    "ItemOfInterest": "T220190325153232"
  }
],
"InterestItemProdCats": [
  {
    "ProductCategoryHierarchy": "TEAM_WDF02_JS",
    "ProductCategory": "IOI_API_CAT_EF20190325153225",
    "ItemOfInterest": "T220190325153232"
  }
]

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InterestItems HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{
  "ItemOfInterest": "T320190325153232",
  "InterestItemTexts": [
    {
      "Language": "EN",
      "ItemOfInterest": "T320190325153232",
      "ItemOfInterestName": "Test API Interest Srv"
    },
    {
      "Language": "DE",
      "ItemOfInterest": "T320190325153232",
      "ItemOfInterestName": "Deutsch Test"
    }
  ],
  "InterestItemTags": [
    {
      "TagName": "#taste",
      "ItemOfInterest": "T320190325153232"
    }
  ]
}

--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
Deep Create Interests Non-Batch Mode

Sample Code

POST: https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/InterestItems
POST data:
{
  "ItemOfInterest": "T3320190325153242",
  "InterestItemTexts": [
    {
      "Language": "EN",
      "ItemOfInterest": "T3320190325153242",
      "ItemOfInterestName": "Test API Interest Srv"
    },
    {
      "Language": "DE",
      "ItemOfInterest": "T3320190325153242",
      "ItemOfInterestName": "Deutsch Test"
    }
  ],
  "InterestItemTags": [
    {
      "TagName": "best",
      "ItemOfInterest": "T3320190325153242"
    },
    {
      "TagName": "gallo d'oro",
      "ItemOfInterest": "T3320190325153242"
    }
  ],
  "InterestItemProdCats": [
    {
      "ProductCategoryHierarchy": "TEAM_WDF02_JS",
      "ProductCategory": "IOI_API_CAT_MM20190325153228",
      "ItemOfInterest": "T3320190325153242"
    },
    {
      "ProductCategoryHierarchy": "TEAM_WDF01_JS",
      "ProductCategory": "IOI_API_CAT_oo20190325153229",
      "ItemOfInterest": "T3320190325153242"
    }
  ]
}

Create Interests (Non-Deep) BATCH Mode

Sample Code

Post: https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a

Integration Guide
Integration APIs
Create Interests (Non-Deep) Non-BATCH Mode

POST: https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/InterestItems
POST data:
{"ItemOfInterest":"T9920190325153230"}

Create Interest Item Text Assignments in Batch Mode

**Sample Code**

```plaintext
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InterestItemTexts HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{"ItemOfInterest":"T93220190516122937","Language":"EN","ItemOfInterestName":"English Text Assignment"}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InterestItemTexts HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{"ItemOfInterest":"T93220190516122937","Language":"CS","ItemOfInterestName":"Czech test"}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Create Interest Item Text Assignments in Non-Batch Mode

Sample Code

```plaintext
POST data:
{"ItemOfInterest":"T91720190516123049","Language":"EN","ItemOfInterestName":"English Text Assignment"}
```

Create Interest Item tag Assignments in Batch Mode

Sample Code

```plaintext
POST https://wdciw1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InterestItemTags HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{"ItemOfInterest":"T67620190516123147","TagName":"#sapbyd"}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST InterestItemTags HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{"ItemOfInterest":"T67620190516123147","TagName":"hamburg"}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```
Create Interest Item Product Category Assignments in Batch Mode

**Sample Code**

```plaintext
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data:
  --batch
  content-type:multipart/mixed;
  boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  --changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  content-type: application/http
  content-transfer-encoding: binary
  POST InterestItemProdCats HTTP/1.1
  Content-Length: 1035
  Accept: application/json
  Content-Type: application/json
  {
    "ItemOfInterest":"T60020190516123503","ProductCategoryHierarchy":"TEAM_WDF02_JS","ProductCategory":"IOI_API_CAT_8820190516123502"
  }
  --changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
  --batch--
```

Create Interest Item Product Category Assignments in Non-Batch Mode

**Sample Code**

```plaintext
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/InterestItemProdCats
POST data:
  {
    "ItemOfInterest":"T0020190516123506","ProductCategoryHierarchy":"TEAM_WDF02_JS","ProductCategory":"IOI_API_CAT_9920190516123503"
  }
```

Delete Interest items in Batch Mode

**Sample Code**

```plaintext
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data:
  --batch
  content-type:multipart/mixed;
  boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  --changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  content-type: application/http
  content-transfer-encoding: binary
  DELETE InterestItems(ItemOfInterest='T24420190516122658') HTTP/1.1
  Content-Length: 1035
  Accept: application/json
  Content-Type: application/json
  {}
  --changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
  content-type: application/http
```
Delete Interest items in Non-Batch Mode

**Sample Code**

HTTP Method: DELETE  
http://ldc1abd.wdf.sap.corp:50000/sap/opu/odata/SAP/API_MKT_INTEREST_SRV/InterestItems(ItemOfInterest='T24420190515131554')

Delete Interest Items Text Assignment in Batch Mode

**Sample Code**

Delete IOI- Text Batch Mode:  
POST https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch  
POST data:  
--batch  
content-type:multipart/mixed;  
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a  
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a  
content-type:application/http  
content-transfer-encoding: binary  
DELETE InterestItemTexts(ItemOfInterest='T93220190927151105',Language='EN')  
HTTP/1.1  
Content-Length: 1035  
Accept: application/json  
Content-Type: application/json  
{}  
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--  
--batch--

Delete Interest Item Text Assignment in Non-Batch Mode

**Sample Code**

DELETE https://wdciwe1.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/InterestItemTexts(ItemOfInterest='T887720190927151109', Language='EN')
Delete Interest Item Tag Assignments in Batch Mode

Sample Code

```plaintext
POST https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE
InterestItemTags(ItemOfInterest='T11223320190927151108',TagName='tagtodelete')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
--batch--
```

Delete Interest Item Tag Assignments in Non-Batch Mode

Sample Code

```plaintext
DELETE https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/
InterestItemTags(ItemOfInterest='T887720190927151109',TagName='tagtodelete')
```

Delete Interest Item Product Category Assignments in Batch Mode

Sample Code

```plaintext
POST https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/$batch
POST data:
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
DELETE
InterestItemProdCats(ItemOfInterest='T60020190927151058',ProductCategory='IOI_API_CAT_8820190927151027',ProductCategoryHierarchy='TEAM_WDF02_JS')
HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
{}
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a--
```
Delete Interest Item Product Category Assignments in Non-Batch Mode

Sample Code

DELETE https://wdciwel.wdf.sap.corp:60100/sap/opu/odata/sap/API_MKT_INTEREST_SRV/InterestItemProdCats
(ItemOfInterest='T887720190927151109',ProductCategory='IOI_API_CAT_8820190927151027',ProductCategoryHierarchy='TEAM_WDF02_JS')

5.2.11 Business Documents

Public OData API (CUAN_BUSINESS_DOCUMENT_IMP_SRV) for importing business documents from external SAP or Non-SAP systems to marketing.

Note

We recommend using the current version 0002 of this service. If you want to use version 0001, you'll find more information under: Business Documents API, Version 0001.

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_BUSINESS_DOCUMENT_IMP_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

Import of Business Documents Details Page

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.
### Access Link

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Documents OData API</td>
<td>General access link takes you directly to the Business Documents metadata file. One-time registration or logon is required.</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-DM-IA</td>
</tr>
</tbody>
</table>

### i Note

Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](page 402).

---

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

---

### Overview

Import of business documents to marketing using the OData service `CUAN_BUSINESS_DOCUMENT_IMP_SRV`.

### Technical Prerequisites

- [Communication Scenarios](page 665)
  - Use of OData service `CUAN_BUSINESS_DOCUMENT_IMP_SRV` in communication scenarios.

### Structure of OData Service CUAN_BUSINESS_DOCUMENT_IMP_SRV

- [Basic Concepts](page 674)
- [Modes](page 675)
- [Specifics for SAP Cloud for Customer Integration](page 679)
- [Payload Examples for Business Documents](page 680)

This section contains payload examples for `CUAN_BUSINESS_DOCUMENT_IMP_SRV`.

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### 5.2.11.1 Overview

Import of business documents to marketing using the OData service `CUAN_BUSINESS_DOCUMENT_IMP_SRV`. 

The OData service `CUAN_BUSINESS_DOCUMENT_IMP_SRV` is used to import business documents from external systems, that is SAP systems or non-SAP systems, into SAP Marketing Cloud. Each business document is represented by an interaction and is identified by the key of the business document in the external system. The OData service `CUAN_BUSINESS_DOCUMENT_IMP_SRV` supports the change of interactions.
Furthermore, the OData service CUAN_BUSINESS_DOCUMENT_IMP_SRV is used for standard SAP Marketing Cloud integration with SAP Cloud for Customer. It is used in marketing-driven, and sales-driven processes to replicate SAP Cloud for Customer business documents to SAP Marketing Cloud interactions. For details of standard SAP Marketing Cloud integration with SAP Cloud for Customer, see Technical Prerequisites [page 663].

**i Note**

In standard SAP Marketing Cloud integration with SAP Cloud for Customer OData service CUAN_BUSINESS_PARTNER_IMP_SRV is used to replicate customers of SAP Cloud for Customer to SAP Marketing Cloud contacts.

Within **marketing-driven processes**, SAP Marketing Cloud campaign actions are used to create business documents in SAP Cloud for Customer (leads, appointments, phone calls, and tasks). For each SAP Cloud for Customer business document, an SAP Marketing Cloud interaction is created in the campaign action. The business document of SAP Cloud for Customer is created with reference to the SAP Marketing Cloud interaction, that is, it stores the IDs of the SAP Marketing Cloud interaction and campaign. When an SAP Cloud for Customer business document is created, a **confirmation message** is returned, mapped to OData service CUAN_BUSINESS_DOCUMENT_IMP_SRV, and the SAP Marketing Cloud interaction is updated with the IDs of the SAP Cloud for Customer business document.

Within **sales-driven processes**, SAP Cloud for Customer business documents (leads, opportunities, appointments, visits, and phone calls) can be replicated to SAP Marketing Cloud to create corresponding interactions. Whenever a business document is created, or changed, the Simple Object Access Protocol (SOAP) outbound service **request message** is triggered containing all business document data and mapped in SAP Cloud Platform Integration middleware to OData service CUAN_BUSINESS_DOCUMENT_IMP_SRV. Request messages are also created in marketing-driven processes whenever the business document created via a campaign action is changed afterwards.

Parent topic: Business Documents [page 661]

Related Information

Technical Prerequisites [page 663]
Communication Scenarios [page 665]
Structure of OData Service CUAN_BUSINESS_DOCUMENT_IMP_SRV [page 666]
Basic Concepts [page 674]
Modes [page 675]
Specifics for SAP Cloud for Customer Integration [page 679]
Payload Examples for Business Documents [page 680]

### 5.2.11.2 Technical Prerequisites

OData service CUAN_BUSINESS_DOCUMENT_IMP_SRV is available as part of standard integration with external SAP or Non-SAP systems.
For more information about OData service CUAN_BUSINESS_DOCUMENT_IMP_SRV, see SAP API Business Hub.

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

**i Note**
You can convert the XML file to an XML table to make it easier to read.

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_BUSINESS_DOCUMENT_IMP_SRV;v=0002/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**Import Business Documents Details Page**
General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

**Business Documents API**
General access to the Contacts metadata file. One-time registration or logon is required.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

**Parent topic:** Business Documents [page 661]

Related Information

Overview [page 662]
Communication Scenarios [page 665]
Structure of OData Service CUAN_BUSINESS_DOCUMENT_IMP_SRV [page 666]
Basic Concepts [page 674]
5.2.11.3 Communication Scenarios

Use of OData service CUAN_BUSINESS_DOCUMENT_IMP_SRV in communication scenarios.

CUAN_BUSINESS_DOCUMENT_IMP_SRV can be used in the following communication scenarios:

<table>
<thead>
<tr>
<th>Communication Scenario</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_COM_0017 Marketing</td>
<td>Presales/Sales Integration</td>
</tr>
<tr>
<td>SAP_COM_0060 Marketing</td>
<td>ERP Order and Business Partner Integration</td>
</tr>
<tr>
<td>SAP_COM_0082 Marketing</td>
<td>SAP Commerce Data Integration</td>
</tr>
<tr>
<td>SAP_COM_0329 Marketing</td>
<td>Business Document Interaction Integration</td>
</tr>
</tbody>
</table>

For more information on how to set up the communication scenarios, see Communication Management.

Parent topic: Business Documents [page 661]

Related Information

Overview [page 662]
Technical Prerequisites [page 663]
Structure of OData Service CUAN_BUSINESS_DOCUMENT_IMP_SRV [page 666]
Basic Concepts [page 674]
Modes [page 675]
Specifics for SAP Cloud for Customer Integration [page 679]
Payload Examples for Business Documents [page 680]
5.2.11.4 Structure of OData Service
CUAN_BUSINESS_DOCUMENT_IMP_SRV

The CUAN_BUSINESS_DOCUMENT_IMP_SRV OData service consists of the following entity sets and entity types:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Entity Type Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImportHeaders</td>
<td>ImportHeader</td>
<td>Technical Import Message Header</td>
</tr>
<tr>
<td>ProductItems</td>
<td>ProductItem</td>
<td>Product Items</td>
</tr>
<tr>
<td>Offers</td>
<td>Offer</td>
<td>Offers</td>
</tr>
<tr>
<td>AdditionalObjectReferences</td>
<td>AdditionalObjectReferences</td>
<td>Additional object reference of an interaction</td>
</tr>
<tr>
<td>ProductCategories</td>
<td>ProductCategory</td>
<td>Product Category</td>
</tr>
<tr>
<td>MarketingArea</td>
<td>MarketingArea</td>
<td>Marketing Area</td>
</tr>
<tr>
<td>LoyaltyProgram</td>
<td>LoyaltyProgram</td>
<td>Loyalty Program</td>
</tr>
<tr>
<td>AdditionalInteractionContacts</td>
<td>AdditionalInteractionContact</td>
<td>Additional Interaction Contact</td>
</tr>
</tbody>
</table>

**Note**

If you use OData in SAP Cloud Platform Integration then fill the key fields with an initial value. This is necessary since OData adapter requires to fill mandatory OData fields.

**ImportHeader**

The entity type **ImportHeader** describes the technical header of an import of multiple business documents. The properties **Id** and **Timestamp** are used for logging the external data request. If an error occurs during the posting of the business documents, additionally to the import header data the error message and the failed record are saved. This data can be checked with the Import Monitor app. For more information, see Import Monitor [page 397].

For every service request, a new, unique Id is required. If no Id value is provided it is defaulted internally. The timestamp is defaulted if it is not provided.

The **SourceSystemId** and **SourceSystemType** properties allow you to distinguish between different source systems. The **SourceSystemId** and **SourceSystemType** are mandatory attributes.
### Properties of ImportHeader

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>Unique technical identifier of import run.</td>
<td>Edm.String</td>
<td>32</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Timestamp of the run</td>
<td>Edm.DateTime</td>
<td>0</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>SourceSystemType</td>
<td>Type of the source system, that is ERP</td>
<td>Edm.String</td>
<td>20</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>SourceSystemId</td>
<td>Identifier of the source system</td>
<td>Edm.String</td>
<td>23</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

### BusinessDocument

For each `ImportHeader`, several business documents can be passed. `BusinessDocument` is mapped to interactions.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>Key of the interaction that is updated. Only mandatory when <code>ActionCode</code> = 02</td>
<td>Edm.Guid</td>
<td>0</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ContactIdOrigin</td>
<td>ID origin of the contact. If the ContactID is filled the ID origin from the external system must be set, that is, SAP_C4C_BUPA. Mandatory when <code>ActionCode</code> = 04</td>
<td>Edm.String</td>
<td>20</td>
<td>X1</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>ContactId</td>
<td>Id of the contact in the external system. Mandatory when ActionCode = 04</td>
<td>Edm.String</td>
<td>255</td>
<td>X1</td>
<td></td>
</tr>
<tr>
<td>InternalContactId</td>
<td>obsolete</td>
<td>Edm.String</td>
<td>255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InternalObjectType</td>
<td>Interaction type only mandatory when ActionCode = 04</td>
<td>Edm.String</td>
<td>20</td>
<td>X1</td>
<td></td>
</tr>
<tr>
<td>ExternalObjectType</td>
<td>Type of the external object, that is, MARKETING_LEAD</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>ExternalId</td>
<td>ID of the external object</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>ExternalStatusCode</td>
<td>Status of the external object</td>
<td>Edm.String</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ExternalTimestamp</td>
<td>Timestamp of the external object. Timestamp is used to process messages in the right sequence</td>
<td>Edm.DateTimeOffset</td>
<td>2</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>Long description of the external object</td>
<td>Edm.String</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ExpectedRevenue</td>
<td>Expected revenue of an opportunity</td>
<td>Edm.Decimal</td>
<td>31.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currency</td>
<td>Currency of the amount fields. Must be set if ExpectedRevenue or Amount is filled</td>
<td>Edm.String</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>PredecessorId</td>
<td>Lead predecessor ID can be passed. Campaign is copied from predecessor document. Can only be used on request mode.</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ActionCode</td>
<td>The action code controls how an interaction is posted. The following values are supported: 02 confirmation mode 04 request mode 05 remove</td>
<td>Edm.String</td>
<td>2</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>ContentTitle</td>
<td>Short description of the external object</td>
<td>Edm.String</td>
<td>255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EndTimeStamp</td>
<td>End Time Stamp</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reason</td>
<td>Reason</td>
<td>Edm.String</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ExternalAdditionalId</td>
<td>Additional ID of the external object</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>Amount of the external object. Currency field must be filled if amount is populated.</td>
<td>Edm.Decimal</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>StatusCode</td>
<td>Internal status of the interaction. The following statuses are defined:</td>
<td>Edm.String</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>00 New</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>01 In Process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>02 Released</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>03 Completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>04 Canceled</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>05 Converted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>06 Successful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>07 Unsuccessful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timestamp</td>
<td>Timestamp of external object in the source system, that is, order date.</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Filled with ExternalTimestamp if empty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CampaignId</td>
<td>SAP Marketing Cloud Campaign ID</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If a campaign ID is passed the field PredecessorId is not evaluated. For more information, see Modes [page 675], section PredecessorId (Marketing-Driven Process)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MarketingAreaId</td>
<td>Marketing area ID of the interaction</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MarketingLocation</td>
<td>Marketing location ID of the interaction</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MarketingLocationOrigin</td>
<td>Origin of marketing location ID</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Property** | **Description** | **Edm Core Type** | **Max Length** | **Mandatory** | **Key**
---|---|---|---|---|---
MKT_AgreementOrigin | Agreement Origin | Edm.String | 30 | | |
MKT_AgreementExternalID | Agreement External ID | Edm.String | 80 | | |
InteractionProcessingDuration | Processing time in seconds | Edm.Int32 | 0 | | |
InteractionPriority | Priority | Edm.String | 1 | | |

**Note**
The value \( X1 \) is only mandatory when the field `ActionCode` has the value 04.

**ProductItem**
Several product items can be passed per business document.

**Properties of Entity Type ProductItem**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>Item number for product item from external system</td>
<td>Edm.String</td>
<td>32</td>
<td>( X1 )</td>
<td>x</td>
</tr>
<tr>
<td>ObjectType</td>
<td>Object type from external system, that is, SAP_C4C_PRODUCTION</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ObjectId</td>
<td>Product key from external system</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>ProductName</td>
<td>Product Name</td>
<td>Edm.String</td>
<td>40</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>ProductDesc</td>
<td>Product description</td>
<td>Edm.String</td>
<td>512</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>Amount of product. Currency information is derived from assigned interaction</td>
<td>Edm.Decimal</td>
<td>31.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>Quantity of product</td>
<td>Edm.Decimal</td>
<td>22.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When a product is initially uploaded it is initially created, and the new technical key is stored as a reference at the PRODUCT node of the interaction business object (CUAN_INTERACTION). If the same product is uploaded a second time the system identifies the existing product, and the key is stored again to avoid the creation of duplicates. The existing product is not updated. If you want to update the existing product data you must use the dedicated product upload. A product that is imported via the interaction upload is available in Segmentation. The import of products via interaction upload is not possible using the CSV import but with OData service.

X1 initial value can be passed. The value of the field is not persisted.

**Offer**

Several Offers can be passed per business document.

Properties of Entity Type Offer

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origin</td>
<td>Origin of the offer</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Id</td>
<td>Identifier of the offer</td>
<td>Edm.String</td>
<td>10</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ContentItemId</td>
<td>ID of the content item of the offer</td>
<td>Edm.String</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td>ID of the recommendation scenario</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Object Reference**

With entity type AdditionalObjectReference, several additional object references per business document can be passed.

Properties of Entity Type AdditionalObjectReference

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ObjectType</td>
<td>Type of the object referenced</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ObjectId</td>
<td>ID of the object referenced</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

**Product Category**

With entity type ProductCategory, several product categories per business document can be passed.
Properties of Entity Type ProductCategory

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Id</td>
<td>ID of the product category</td>
<td>Edm.String</td>
<td>50</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>ID of product category hierarchy</td>
<td>50</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Before you can upload references of product categories that are assigned to business documents, the master data of the product category and product category hierarchy must be uploaded.

Marketing Area
This entity can only be used in standard SAP Marketing Cloud integration with SAP Cloud for Customer for replication of leads. For more details see Specifics for SAP Cloud for Customer Integration [page 679]. Several marketing areas per business document can be passed.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>MarketingAreaId</td>
<td>Marketing Area Id</td>
<td>Edm.String</td>
<td>40</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Before you can upload references of product categories that are assigned to business documents the master data of the product category, and product category hierarchy must be uploaded.

Loyalty Program
With entity type LoyaltyProgram, several Loyalty Programs can be passed per business document entity.

Properties of Entity Type LoyaltyProgram

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>LoyaltyGUID</td>
<td>Loyalty Program GUID</td>
<td>Edm.Guid</td>
<td>0</td>
<td>X1</td>
<td>X</td>
</tr>
<tr>
<td>ActivitySubtype</td>
<td>Loyalty Activity Subtype</td>
<td>Edm.String</td>
<td>255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AccruedPoints</td>
<td>Accrued Loyalty Points</td>
<td>Edm.Decimal</td>
<td>31.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RedeemedPoints</td>
<td>Redeemed Loyalty Points</td>
<td>Edm.Decimal</td>
<td>31.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QualifyingPoints</td>
<td>Qualifying Loyalty Points</td>
<td>Edm.Decimal</td>
<td>31.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X1 Initial GUID must be passed "00000000-0000-0000-0000-000000000000".

Additional Interaction Contacts
With entity type AdditionalInteractionContact, several additional interaction contact references can be passed per business document entity. So, several interaction contacts can be assigned to one interaction. The
A referenced interaction contact must exist. If the contact does not exist, the message status is set to blocked and the message is reprocessed. A contact might not exist because the master data message for the interaction contact is delayed.

### Properties of Entity AdditionalObjectReference

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionAdditionalIntContactUUID</td>
<td>Interaction Additional Interaction Contact UUID</td>
<td>Edm.Guid</td>
<td>0</td>
<td>X1</td>
<td>X</td>
</tr>
<tr>
<td>ContactOrigin</td>
<td>Contact Origin</td>
<td>Edm.String</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InteractionContactId</td>
<td>Contact Id</td>
<td>Edm.Decimal</td>
<td>255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InteractionContactUUID</td>
<td>Interaction Contact UUID</td>
<td>Edm.Guid</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X1 Initial GUID must be passed "00000000-0000-0000-0000-000000000000".

**Parent topic:** Business Documents [page 661]

### Related Information

- Overview [page 662]
- Technical Prerequisites [page 663]
- Communication Scenarios [page 665]
- Basic Concepts [page 674]
- Modes [page 675]
- Specifics for SAP Cloud for Customer Integration [page 679]
- Payload Examples for Business Documents [page 680]

#### 5.2.11.5 Basic Concepts

The OData service **CUAN_BUSINESS_DOCUMENT_IMP_SRV** supports only the method deep create on the entity type **ImportHeader** and the dependent entity type **BusinessDocument**. Other methods, such as create, update or delete are not supported. The field **ActionCode** controls how a **BusinessDocument** is processed. For more information, see Modes [page 675].

OData service **CUAN_BUSINESS_DOCUMENT_IMP_SRV** supports one message of the entity type **ImportHeader** with multiple lines of the entity type **BusinessDocument**. Up to 10,000 business documents can be sent at once with the OData service **CUAN_BUSINESS_DOCUMENT_IMP_SRV**.
It is required that always a complete snapshot of the data is provided: It is not supported that only data, which has changed with respect to a previous state is provided. The Attribute `ExternalTimeStamp` of entity `BusinessDocument` defines the last change or the creation of the business document. Before updating, the interaction time stamp (`TIMESTAMP`) of the interaction in SAP Marketing Cloud and of the incoming message are compared (`ExternalTimeStamp`). Outdated messages, where the field `ExternalTimeStamp` is smaller than the field `TIMESTAMP` of the interaction, are ignored since changes are already stored, and the more current interaction carries the complete and most recent snapshot data.

The snapshot must also contain all entries for all sub-entity sets, that is, `ProductItems`, `Offers`, and `AdditionalObjectReferences`. If no entries are provided for a sub-entity set potentially existing entries are deleted.

If the OData service is not accessible (for example no authorization, system not available, too many `BusinessDocuments` sent) a corresponding HTTP status code is returned. After the OData service has been accepted by the Gateway component in SAP Marketing Cloud, the HTTP status code 201 is always returned. Potential processing errors are recorded in the SAP Marketing Cloud system and can be monitored, restarted, and discarded in the `Import Monitor` app. For more information see, `Import Monitor [page 397]`.

The external key of a `BusinessDocument` entity is defined by unique combination of the fields `SourceSystemId`, `SourceSystemType`, `ExternalObjectType`, `ExternalObjectId`.

**Parent topic:** Business Documents [page 661]

**Related Information**

- Overview [page 662]
- Technical Prerequisites [page 663]
- Communication Scenarios [page 665]
- Structure of OData Service `CUAN_BUSINESS_DOCUMENT_IMP_SRV` [page 666]
- Modes [page 675]
- Specifics for SAP Cloud for Customer Integration [page 679]
- Payload Examples for Business Documents [page 680]

### 5.2.11.6 Modes

As described in the overview chapter, the OData service `CUAN_BUSINESS_DOCUMENT_IMP_SRV` supports confirmation and request messages.

In request mode, messages are processed that import (create, update, or delete) interactions. The messages are triggered by changes in the external system.

The confirmation mode is used in marketing-driven scenarios to confirm messages that were sent to external systems. The confirmation message mainly contains the key of the business document in the external system.

The different modes are defined by attribute `ActionCode` in entity `BusinessDocument`. Action code 04 defines creation or update in request mode. Action code 05 defines deletion in request mode. Action code 02 defines the update of an interaction by the external key in confirmation mode.
Customer enhancements are only supported when the field `ActionCode` has the value 04.

See the following chapters for more details.

**Request Mode: Create and Update (ActionCode 04)**

The external key (see table below) of the business document is used to check the existence of an interaction in SAP Marketing Cloud. If an interaction is found it is updated. If no interaction is found an interaction is created.

The `Attribute Id` is optional, and only relevant for marketing-driven processes. For more information, see **Overview [page 662]**.

If additionally the optional `Attribute Id` is provided an additional search step is performed in case no interaction with fitting external key was found. The `Attribute Id` is used to retrieve an interaction by its internal key. If an interaction is found it is updated. If no interaction is found an error is raised and the corresponding message can be found in the **Import Monitor** app.

The following table provides you with an overview of mandatory attributes and the definition of the key of the external business document.

<table>
<thead>
<tr>
<th>Entity</th>
<th>Property</th>
<th>Description</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Header</td>
<td>Id</td>
<td>Unique technical identifier of import run</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Timestamp</td>
<td>Timestamp of the run</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SourceSystemType</td>
<td>Type of the source system, such as ERP</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>SourceSystemId</td>
<td>Identifier of the source system</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>BusinessDocument</td>
<td>Id</td>
<td>Key of the interaction that is updated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ContactIdOrigin</td>
<td>ID origin of the contact. If the ContactId is filled the ID Origin from the external system must be set, such as SAP_C4C_BUPA</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ContactId</td>
<td>Id of the contact in the external system.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>InternalObjectType</td>
<td>Interaction type only mandatory for request mode</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ExternalObjectType</td>
<td>Type of the external object, such as MARKETING_LEAD</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>ExternalId</td>
<td>ID of the external object</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
The main contact of the business document is defined by attribute pair ContactIDOrigin and ContactId. If no contact with this attribute pair (facet) exists in SAP Marketing Cloud a new contact is created. Contact data itself is replicated separately via, for example, OData service CUAN_BUSINESS_PARTNER_IMP_SRV.

**PredecessorId (Marketing-Driven Process)**

The attribute PredecessorId is only relevant for marketing-driven processes.

If it is filled a predecessor lead interaction is determined and the ID of the campaign in which the lead predecessor interaction was created is copied to the current interaction to be created or updated.

The external key of the predecessor lead interaction is defined by attributes SourceSystemType, SourceSystemId, ExternalObjectType, and ExternalId. SourceSystemType and SourceSystemId are taken from entity ImportHeader. ExternalID is given by value of PredecessorId in entity BusinessDocument and ExternalObjectType is fixed to value "MARKETING_LEAD".

If no predecessor lead interaction is found an error is raised which can be seen in the Import Monitor app.

**Request Mode: Delete (ActionCode 05)**

If a business document is deleted in external system then action code “05” has to be used.

An interaction is determined according to the rules described under Request Mode: Create and Update (ActionCode 04).

If an interaction is found the interaction is not removed from database. A so called obsolete flag is set for the interaction. The interaction can then be deleted in a subsequent step by standard deletion reports.

Besides ExternalTimeStamp and the obsolete flag no other interaction data is updated.

If no interaction is found an error is raised which is logged and can be seen in Import Monitor app.

**Note**

A of release 1902, the obsolete flag is not set, but the interaction is deleted physically from the database.
**Confirmation Mode: Set External Keys (ActionCode 02)**

If the field action code has the value “02” the OData service is executed in confirmation message mode. The confirmation mode is only relevant for marketing-driven processes.

The main purpose of the confirmation message process step is to update existing interaction with the external business document key.

Only a small subset of fields contained in table below are taken into account in confirmation message mode.

<table>
<thead>
<tr>
<th>Entity</th>
<th>Property</th>
<th>Description</th>
<th>Mandatory</th>
<th>External Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImporHeader</td>
<td>Id</td>
<td>Unique technical identifier of import run</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TimeStamp</td>
<td>Timestamp of the run</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SourceSystemType</td>
<td>Type of the source system, such as ERP</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>SourceSystemId</td>
<td>Identifier of the source system</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>BusinessDocument</td>
<td>Id</td>
<td>Internal key of the interaction that is to be updated</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ExternalObjectType</td>
<td>Type of the external object, such as MARKETING_LEAD</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>ExternalId</td>
<td>ID of the external object</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>ExternalTimeStamp</td>
<td>Timestamp of the external object. Timestamp is used to process messages in the right sequence</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ActionCode</td>
<td>02</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

The Property Id denoting the internal Id of the interaction is used to retrieve an existing interaction. If the interaction cannot be retrieved an error is raised and logged in the Import Monitor app. If the interaction can be retrieved then the mentioned fields above are updated in the interaction.

**Parent topic:** Business Documents [page 661]
5.2.11.7 Specifics for SAP Cloud for Customer Integration

Some specifics have to be considered for SAP Cloud for Customer Integration. SAP Cloud for Customer integration is defined by SourceSystemType C4C.

**Entity Type ProductItem**

If the field ObjectId is initial the corresponding product item is neglected and no error is raised.

_parent topic: Business Documents [page 661]_

---

**Related Information**

- Overview [page 662]
- Technical Prerequisites [page 663]
- Communication Scenarios [page 665]
- Structure of OData Service CUAN_BUSINESS_DOCUMENT_IMP_SRV [page 666]
- Basic Concepts [page 674]
- Specifics for SAP Cloud for Customer Integration [page 679]
- Payload Examples for Business Documents [page 680]
- Import Monitor [page 397]
5.2.11.8 Payload Examples for Business Documents

This section contains payload examples for `CUAN_BUSINESS_DOCUMENT_IMP_SRV`.

Sales-Driven Process - Create or Change Business Document

```
{  
  "Id": "MSG_20190820_I",  
  "Timestamp": "2019-08-20T12:36:04.0000000",  
  "SourceSystemType": "C4C",  
  "SourceSystemId": "Z123",  
  "BusinessDocuments": [  
    {  
      "Id": "00000000-0000-0000-0000-000000000000",  
      "InternalObjectType": "MARKETING_LEAD",  
      "ExternalObjectType": "MARKETING_LEAD",  
      "ExternalId": "LEAD_20190820_I",  
      "ExternalStatusCode": "1",  
      "ContactId": "IC_20190820_I",  
      "ContactIdOrigin": "SAP_C4C_BUPA",  
      "ActionCode": "04",  
    }  
  ]  
}
```

Sales-Driven Process - Create or Change Business Document with Product Items

```
{  
  "Id": "MSG_20190820_II",  
  "Timestamp": "2019-08-20T12:36:04.0000000",  
  "SourceSystemType": "C4C",  
  "SourceSystemId": "Z123",  
  "BusinessDocuments": [  
    {  
      "Id": "00000000-0000-0000-0000-000000000000",  
      "InternalObjectType": "MARKETING_LEAD",  
      "ExternalObjectType": "MARKETING_LEAD",  
      "ExternalId": "LEAD_20190820_II",  
      "ExternalStatusCode": "1",  
      "ContactId": "IC_20190820_II",  
      "ContactIdOrigin": "SAP_C4C_BUPA",  
      "ActionCode": "04",  
      "ProductItems": [  
      ]  
    }  
  ]  
}
```
Sales Driven Process – Create or Change Business Document with Additional Interaction Contacts

```json
{
  "Id": "MSG_20190820_III",
  "Timestamp": "2019-08-20T12:36:04.0000000",
  "SourceSystemType": "C4C",
  "SourceSystemId": "Z123",
  "BusinessDocuments": [
    {
      "Id": "00000000-0000-0000-0000-000000000000",
      "InternalObjectType": "MARKETING LEAD",
      "ExternalId": "LEAD_20190820_III",
      "ExternalStatusCd": "1",
      "ContactIdOrigin": "SAP_C4C_BUPA",
      "ActionCode": "04",
      "ContactId": "IC_20190820_III",
      "ExternalTimeStamp": "2019-08-02T19:38:16.0000000",
      "TimeStamp": "2019-08-16T16:36:04.0000000",
      "AdditionalInteractionContacts": [
        {
          "InteractionAdditionalIntactnContactUUID": "00000000-0000-0000-0000-000000000000",
          "InteractionContactOrigin": "SAP_C4C_BUPA",
          "InteractionContactId": "IC_20190820_IV"
        },
        {
          "InteractionAdditionalIntactnContactUUID": "00000000-0000-0000-0000-000000000000",
          "InteractionContactOrigin": "SAP_C4C_BUPA",
          "InteractionContactId": "IC_20190820_V"
        }
      ]
    }
  ]
}
```

Parent topic: Business Documents [page 661]
5.2.12 Agreements

Public OData API (API_MKT_AGREEMENT_SRV) for agreements. An agreement can be any kind of customer contract, for example, a sales contract or a contract that comprises specific services.

Overview

The OData service API_MKT_AGREEMENT_SRV is used to replicate agreement data from different source systems into SAP Marketing Cloud (standard integration with other systems). One agreement instance can only have one origin system for its business data. However, to identify business documents from other systems, you can replicate additional external IDs with different origins of an agreement.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://[host]:{port}/sap/opu/odata/sap/API_MKT_AGREEMENT_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://[host]:{port}/sap/opu/odata/sap/API_MKT_AGREEMENT_SRV/$metadata</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0175</td>
</tr>
<tr>
<td>Authorization</td>
<td>The following business catalog is required:</td>
</tr>
<tr>
<td></td>
<td>● SAP_CEC_BC_MKT_API_AGR_PC</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>● CEC-MKT-DM-AGR (Agreement)</td>
</tr>
</tbody>
</table>

**Note**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].
Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_AGREEMENT_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**Marketing · Agreements Details Page**

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

**Agreements API**

General access link takes you directly to the Agreements metadata file. One-time registration or logon is required.

---

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>
5.2.12.1 Structure of OData Service
API_MKT_AGREEMENT_SRV

This document describes the structure of the Public OData API service API_MKT_AGREEMENTS.

Request Header

The request header contains the following additional header fields:

<table>
<thead>
<tr>
<th>Header Field</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-SequenceId</td>
<td>Unique technical identifier of the imported data</td>
<td>Edm.String</td>
<td>30</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-RequestTimestamp</td>
<td>Timestamp of the data</td>
<td>Edm.DateTime</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Sap-Cuan-SequenceNumber</td>
<td>Sequence number of the request. This number is normally incremented each time a new request for the same sequence ID is created.</td>
<td>Edm.Int16</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemType</td>
<td>Type of the source system</td>
<td>Edm.String</td>
<td>20</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-SourceSystemId</td>
<td>Identifier of the source system. This is a free text field.</td>
<td>Edm.String</td>
<td>255</td>
<td>X</td>
</tr>
<tr>
<td>Sap-Cuan-ExternalReferenceId</td>
<td>External reference of the inbound message</td>
<td>Edm.String</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Sap-Cuan-ExternalDocumentId</td>
<td>External identifier of the source document</td>
<td>Edm.String</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

The header fields Sap-Cuan-SequenceId and Sap-Cuan-RequestTimestamp or Sap-Cuan-SequenceNumber are used to check the sequence of the received data. Data with the same Sap-cuan-SequenceID and a timestamp older or sequence number lower than data already imported, is ignored.

The Sap-Cuan-SourceSystemType and Sap-Cuan-SourceSystemId fields allow you to distinguish between different source systems.
Either Sap-Cuan-RequestTimestamp or Sap-Cuan-SequenceNumber must be provided together with Sap-Cuan-SequenceId.

The Sap-Cuan-ExternalReferenceId and Sap-Cuan-ExternalDocumentId allow better error analysis because they contain external references to a source SOAP message or an IDoc.

Structure of OData Service API MKT_Agreement_SRV

The API MKT_Agreement_SRV OData service consists of the following entity sets and entity types:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Entity Type Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreements</td>
<td>Agreement</td>
<td>The independent agreement data.</td>
</tr>
<tr>
<td>AgreementTerms</td>
<td>AgreementTerms</td>
<td>Time dependent data of an agreement.</td>
</tr>
<tr>
<td>AgrmtAdditionalExtIDs</td>
<td>AgrmtAdditionalExtID</td>
<td>Additional external ID of the agreement from a different agreement origin.</td>
</tr>
</tbody>
</table>

Field Extensibility Supported: Yes

Note
You must enable the Data Source under Us and Reports for Data Source API_MKT_AGREEMENT_SRV 0001 (API for Marketing Agreement) and I_MKT_AGREEMENTTP (Marketing: Agreement TP).

Support of OData Features

This OData API only supports $batch processing for updates. Within a batch request, only the following operations are supported:

- PATCH (MERGE) for the entity types Agreement and AgreementTerms
- PUT/DELETE for entity type AgrmtAdditionalExtID

Additionally the operation GET is supported for all entities.

Batch requests allow multiple operations to be grouped into a single HTTP request payload.

Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a content-type header specifying a content type of multipart/mixed as well as a boundary specification.

A PATCH (MERGE) request only updates the properties indicated in the request body and leaves everything which was not mentioned untouched. All properties that are not to be changed can be omitted. The transmitted properties are merged with the data already stored in SAP Marketing Cloud.
i Note

If an agreement cannot be found based on its external key (MKT_AgreementOrigin and MKT_AgreementExternalID), the PATCH request creates a new agreement.

Although it is technically possible to create a root entry /Agreement without the corresponding entry for the /AgreementTerms, this would be semantically incorrect and these entries would not be usable in the segmentation and should therefore be avoided. A root entry without terms can only exist temporarily in the system due to a time lag between the creation of both entities.

Checks

During the creation and changing of an agreement, the system performs checks for mandatory fields, field values and the existence of referenced entities. Failing checks results in an error and the erroneous data sets are displayed in the import monitor.

Agreement

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm. Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_AgreementOrigin</td>
<td>Agreement Origin.</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgreementExternalID</td>
<td>Agreement External ID.</td>
<td>Edm.String</td>
<td>80</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgrmtCancellationReason</td>
<td>The customer or provider reason for canceling the agreement. The reason also encodes which party triggered the cancellation.</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ContactID</td>
<td>External ID of Interaction Contact Data.</td>
<td>Edm.String</td>
<td>255</td>
<td>x*</td>
<td></td>
</tr>
<tr>
<td>ContactOrigin</td>
<td>Origin of Interaction Contact Data.</td>
<td>Edm.String</td>
<td>20</td>
<td>x*</td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementIsBundle</td>
<td>The agreement represents an agreement bundle. An agreement bundle groups multiple agreements. An agreement bundle may contain additional terms and itself have associated interactions.</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementIsBundleMember</td>
<td>Specifies whether this agreement is part of an agreement.</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm. Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>MKT_AgreementType</td>
<td>Used to categorize an agreement. Example agreement types: loan, car insurance, life insurance, mobile phone, electricity supply.</td>
<td>Edm.String</td>
<td>10</td>
<td>x*</td>
<td></td>
</tr>
<tr>
<td>MKT_MarketingArea</td>
<td>Marketing Area of the Agreement, may be used to restrict the access to agreements.</td>
<td>Edm.String</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementStartDateTime</td>
<td>The initial start date of the first version of the agreement. An agreement renewal, for example, does not change this date.</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td>x*</td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementEndDateTime</td>
<td>Date at which the agreement ends. If the contract is open ended, then the date shall be 31.12.9999.</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td>x*</td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementIsCanceled</td>
<td>The agreement is canceled.</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OriginDataLastChangeDateTime</td>
<td>Last Change Timestamp of the source system.</td>
<td>Edm.DateTimeOffset</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementBundleOrigin</td>
<td>Origin of the Agreement Bundle.</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementBundleExternalID</td>
<td>External ID of the Agreement Bundle.</td>
<td>Edm.String</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgrmtBundleStartDateTime</td>
<td>The start date and time of the agreement bundle.</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MarketingLocationOrigin</td>
<td>Origin of Marketing Location</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MarketingLocationExternalID</td>
<td>Id of Marketing Location</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When a new agreement is created, the system checks whether this agreement already exists based on its external keys (MKT_AgreementOrigin and MKT_AgreementExternalID), for example checking if it is already referenced via an additional external ID in another agreement instance (MKT_AgrmtAddlExternalOrigin and MKT_AgreementAddlExternalID).

If you want to control access to agreement information, you must ensure that marketing area information is part of the agreements payload.

*If you update an existing agreement term with the same key, you can omit the properties ContactID, ContactOrigin, MKT_AgreementType, MKT_AgreementStartDateTime, and
MKT_AgreementEndDateTime. In this case, the missing properties will be taken from the existing record. If you create a new agreement you must provide all mandatory properties.

- **Field Value Checks in Agreement** are performed for the following attributes:
  - MKT_AgreementOrigin.
  - MKT_AgreementBundleOrigin for Customizing values.
  - MKT_AgrmtCancellationReason for Customizing values.
  - MKT_AgreementType for Customizing values.
  - MKT_MarketingArea for Customizing values.
  - MKT_AgreementStartDateTime before MKT_AgreementEndDateTime.

- **The following dependencies are verified:**
  - The referenced marketing location has to exist.
  - The referenced interaction contact has to exist.

---

**iNote**

The contact is enhanced with the assignment to the marketing area that is used in the agreement.

---

### Agreement Terms

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>EDM Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_AgreementOrigin</td>
<td>Agreement Origin.</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgreementExternalID</td>
<td>Agreement External ID.</td>
<td>Edm.String</td>
<td>80</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgrmtTermsStartDateTime</td>
<td>The Start DateTime to End Date Time specify the period</td>
<td>Edm.String</td>
<td>0</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgrmtTermsEndDateTime</td>
<td>of which an agreement terms record is valid (agreement terms are time dependent).</td>
<td>Edm.String</td>
<td>0</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgreementStatus</td>
<td>The status of the agreement terms.</td>
<td>Edm.String</td>
<td>1</td>
<td>x*</td>
<td></td>
</tr>
<tr>
<td>ProductOrigin</td>
<td>Product Origin.</td>
<td>Edm.String</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProductID</td>
<td>External ID of the Product.</td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgrmtCanclnConditions</td>
<td>Code describing what conditions must be met to cancel the agreement.</td>
<td>Edm.String</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>EDM Core Type</td>
<td>Max Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>MKT_AgrmtCancInDcsnToDateTim</td>
<td>The Customer must notify the provider about the cancellation before this date. Otherwise the contract will automatically renew when the AgreementEndDateTime is reached.</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementRenewalType</td>
<td>Agreement renewal type.</td>
<td>Edm.String</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgrmtProlngnDcsnFromDateTime</td>
<td>The customer may request a prolongation of their agreement between the dates AgreementProlongationDecisionFromDateTime and AgreementEndDateTime. This is relevant for agreements that do not automatically renew.</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mkt_AgrmtPaymentIsInAdvance</td>
<td>Indicates that the customer makes his payments in advance of the period of service.</td>
<td>Edm.Boolean</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgreementPaymentFrequency</td>
<td>Code describing how often the customer makes payments to the provider. Examples: Yearly, Monthly.</td>
<td>Edm.String</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT_AgrmtBundleProductOrigin</td>
<td>Reference to the Product of an Agreement Bundle.</td>
<td>Edm.String</td>
<td>30</td>
<td>Mkt</td>
<td></td>
</tr>
<tr>
<td>MKT_AgrmtBundleProductID</td>
<td></td>
<td>Edm.String</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OriginDataLastChgUTCDateTime</td>
<td>Last Change Timestamp of the source system in UTC.</td>
<td>Edm.DateTimeOffset</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When a new agreement term is created, the system checks whether this agreement already exists using its external keys (MKT_AgreementOrigin and MKT_AgreementExternalID). You need to create /Agreement (root entry) before you can create /AgreementTerms.

* You can omit the property MKT_AgreementStatus if you update an existing agreement term with the same key. Then the status will be taken from the existing record. If you create a new agreement term you have to provide the agreement status.

- **Field Value checks** in AgreementTerms are performed for the following attributes:
  - MKT_AgrmtTermsStartDateTime before MKT_AgrmtTermsEndDateTime
  - MKT_AgreementStatus for valid values:
    - "A" - Active
- "S" - Suspended
- "Q" - Quote
- "P" - Application
- MKT_AgreementRenewalType for valid values:
  - """ - Unknown
  - "1" - No renewal possible
  - "2" - Customer must request
  - "3" - Automatic
- MKT_AgrmtCanclnConditons for Customizing values
- MKT_AgreementPaymentFrequency for Customizing values

The following dependencies are verified:

- The referenced product has to exist.
- The referenced bundle product has to exist.

Bundle Product can be referenced only if the agreement is a member of an agreement bundle.

**i Note**

There are no checks between the agreement bundle and the members of the agreement bundle. The source system needs to synchronize the data between the agreement bundle and its members if needed. For example, if a reference to a bundle product is replicated via the terms of the members of the agreement bundle, the source system should replicate any change of the product in the agreement bundle and update the terms of the corresponding members of the agreement bundle.

**Update Logic for Agreement Terms**

When an agreement terms record is uploaded, it is compared to the relevant existing agreement terms records on the database. If the imported agreement terms record has the same start and end date as the existing agreement terms record, then the existing record is updated by the new record. Otherwise a new agreement terms record is created.

**i Note**

Note: The PATCH request updates only the properties transmitted in the request body. All properties that are not to be changed can be omitted. The transmitted properties are merged with the data already stored.

Any existing agreement terms record that overlaps with the new record is given the status `deleted`.

**Example**

If the following terms exist for an agreement:

- 01.01.2017 to 31.12.2017
- 01.01.2018 to 31.12.2018
And a new term is uploaded, that is valid from 01.07.2016 to 31.07.2018, then this new term will be created and the overlapping terms 01.01.2017 to 31.12.2017 and 01.01.2016 to 31.12.2016 and 01.01.2018 to 31.12.2018 will be deleted.

**Note**
If you want the agreement to remain valid in the Marketing system for the periods 01.01.2016 to 31.06.2016 and 01.08.2018 to 31.12.2018, then you have to upload new terms for these two periods to the Marketing system.

**Example**

If the following terms exist for an agreement:
- 01.01.2017 to 31.12.2017
And a new term is uploaded, that is valid from 01.07.2016 to 31.07.2017, then this new term invalidates both of the existing terms. This means, the old terms will be deleted.

**Note**
If you want the agreement to remain valid in the Marketing system for the periods 01.01.2016 to 31.06.2016 and 01.08.2017 to 31.12.2017, then you have to upload new terms for these two periods to the Marketing system.

**AgrmtAdditionalExitID**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT_AgreementOrigin</td>
<td>Agreement Origin.</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgreementExternalID</td>
<td>Agreement External ID.</td>
<td>Edm.String</td>
<td>80</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgrmtAddlExternalOrigin</td>
<td>Additional Agreement Origin.</td>
<td>Edm.String</td>
<td>30</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>MKT_AgreementAddlExternalID</td>
<td>Agreement External ID from an Additional Agreement Origin.</td>
<td>Edm.String</td>
<td>80</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

When a new additional external ID is created, the system checks based on its agreement external keys (MKT_AgreementOrigin and MKT_AgreementExternalID) whether this agreement already exists. You need to create `/Agreement (root entry) before you can create `/AgrmtAdditionalExtIDs.

When a new additional external ID is created, the system checks based on its additional external keys (MKT_AgrmtAddlExternalOrigin and MKT_AgreementAddlExternalID) whether this agreement
instance exists (MKT_AgreementOrigin and MKT_AgreementExternalID) or is referenced already in any other agreement as additional external key (MKT_AgrmtAddlExternalOrigin and MKT_AgreementAddlExternalID).

Resources

The service consists of the following types of resources:

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreements</td>
<td>Agreement time independent attributes refer to agreements in SAP Marketing Cloud. Agreement data is collected and merged from several sources into the master data tables within SAP Marketing Cloud.</td>
<td>/Agreements</td>
</tr>
<tr>
<td>AgreementTerms</td>
<td>Agreement time dependent attributes representing agreement terms (conditions) for a particular time slice of an agreement.</td>
<td>/AgreementTerms</td>
</tr>
<tr>
<td>AgrmtAdditionalExtIDs</td>
<td>Agreement additional external IDs. Agreement additional external IDs are optional. They are used in a scenario, when interactions are linked to agreements by using an alternative key (e.g. the agreement additional external ID is stored in the interaction). In this case the mapping of the alternative agreement key to the primary agreement key is done here.</td>
<td>/AgrmtAdditionalExtIDs</td>
</tr>
</tbody>
</table>

This OData API allows updates of agreements from different source systems.

5.2.12.2 Payload Examples for Agreements

Demonstrates creation and change of agreements.

The following examples show how you can use the agreements API. Insert your own data to fill the header and the entities.
Create Agreement with 1 Term

Sample Code

```
--batch
Content-Type: multipart/mixed; boundary=changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
Agreements(MKT_AgreementOrigin='TEST_ORIGIN',MKT_AgreementExternalID='20180410-165542-917') HTTP/1.1
Content-Type: application/json
Content-Length: ###
Sap-Cuan-SourceSystemId: XXXCLN123
Sap-Cuan-SourceSystemType: Sap-Cuan-SequencedId: AGREEMENT_MASTER_DATA
Sap-Cuan-RequestTimestamp: 20170508141617.0000001
Sap-Cuan-ExternalReferenceId: XXXCLN12320170508141617_01
{"MKT_AgreementOrigin":"TEST_ORIGIN","MKT_AgreementIsCanceled":true,
"MKT_AgreementBundleOrigin":null,"MKT_AgreementBundleExternalID":null,
"MKT_AgrmtBundleStartDateTime":null,"MKT_AgrmtBundleEndDateTime":null,
"MKT_AgrmtCancellationReason":null,"ContactID":null,"ContactOrigin":null,
"MKT_AgreementIsBundle":false,"MKT_AgreementIsBundleMember":true,
"MKT_AgreementType":null,"MKT_AgreementRenewalType":null,
"ProductOrigin":null,"ProductID":null,"OriginDataLastChgUTCDateTime":null,
"MKT_AgreementStartDateTime":null,"MKT_AgreementEndDateTime":null,
"MKT_AgrmtCanclnConditions":null,"MKT_AgrmtCanclnDcsnToDateTime":null,
"MKT_AgrmtProlngnDcsnFromDteTme":null,"MKT_AgreementPaymentFrequency":null,
"MKT_AgrmtPaymentIsInAdvance":false,"MKT_AgrmtBundleProductOrigin":null,
"MKT_AgrmtBundleProductID":null,"OriginDataLastChgUTCDateTime":null}
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621--
```

```
--batch
Content-Type: multipart/mixed; boundary=changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
AgreementTerms(MKT_AgreementOrigin='TEST_ORIGIN',MKT_AgreementExternalID='20180410-165542-917',MKT_AgrmtTermsStartDateTime=datetimeoffset'2012-01-01T00:00:00Z',MKT_AgrmtTermsEndDateTime=datetimeoffset'2013-12-31T00:00:00Z') HTTP/1.1
Content-Type: application/json
Content-Length: ###
Sap-Cuan-SourceSystemId: XXXCLN123
Sap-Cuan-SourceSystemType: Sap-Cuan-SequencedId: AGREEMENT_MASTER_DATA
Sap-Cuan-RequestTimestamp: 20170508141617.0000001
Sap-Cuan-ExternalReferenceId: XXXCLN12320170508141617_01
{"MKT_AgreementStatus":"A","MKT_AgreementRenewalType":null,
"ProductOrigin":null,"ProductID":null,"OriginDataLastChgUTCDateTime":null,
"MKT_AgreementStartDateTime":null,"MKT_AgreementEndDateTime":null,
"MKT_AgrmtCanclnConditions":null,"MKT_AgrmtCanclnDcsnToDateTime":null,
"MKT_AgrmtProlngnDcsnFromDteTme":null,"MKT_AgreementPaymentFrequency":null,
"MKT_AgrmtPaymentIsInAdvance":false,"MKT_AgrmtBundleProductOrigin":null,
"MKT_AgrmtBundleProductID":null,"OriginDataLastChgUTCDateTime":null}
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621--
--batch--
Create Agreement with 2 Terms
 Sample Code
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
Agreements(MKT_AgreementOrigin='TEST_ORIGIN',MKT_AgreementExternalID='20180410
-165542-917') HTTP/1.1
Content-Type: application/json
Content-Length: ###
Sap-Cuan-SourceSystemId: XXXCLN123
Sap-Cuan-SourceSystemType:
Sap-Cuan-SequenceId: AGREEMENT_MASTER_DATA
Sap-Cuan-RequestTimestamp: 20170508141617.0000001
Sap-Cuan-ExternalReferenceId: XXXCLN12320170508141617_01
{"MKT_AgreementOrigin":"TEST_ORIGIN","MKT_AgreementIsCanceled":true,
"MKT_AgreementBundleOrigin":"","MKT_AgreementBundleExternalID":"",
"MKT_AgrmtBundleStartDateTime":null,
"MKT_AgreementExternalID":"20180410-165542-917",
"MKT_AgrmtCancellationReason":"",
"ContactID":"20180410-165542-277","ContactOrigin":"SAP_C4C_BUPA",
"MKT_AgreementIsBundle":false,
"MKT_AgreementIsBundleMember":true,
"MKT_AgreementType":"1",
"OriginDataLastChgUTCDateTime":"/Date(1523372142917)/",
"MKT_AgreementStartDateTime":"/
Date(1325376000000+0000)/","MKT_AgreementEndDateTime":"/
Date(1640995200000+0000)/"
}
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
AgreementTerms(MKT_AgreementOrigin='TEST_ORIGIN',MKT_AgreementExternalID='2018
0410-165542-917',MKT_AgrmtTermsStartDateTime=datetimeoffset'2012-01-01T00%3A00
%3A00Z',MKT_AgrmtTermsEndDateTime=datetimeoffset'2013-12-31T00%3A00%3A00Z')
HTTP/1.1
Content-Type: application/json
Content-Length: ###
Sap-Cuan-SourceSystemId: XXXCLN123
Sap-Cuan-SourceSystemType:
Sap-Cuan-SequenceId: AGREEMENT_MASTER_DATA
Sap-Cuan-RequestTimestamp: 20170508141617.0000001
Sap-Cuan-ExternalReferenceId: XXXCLN12320170508141617_01
{"MKT_AgreementStatus":"A",
"MKT_AgreementRenewalType":"1",
"ProductOrigin":"SAP_CRM_PRODUCT",
"ProductID":"CURRACCNTONLINE",
"MKT_AgrmtCanclnConditions":"1",
"MKT_AgrmtCanclnDcsnToDateTime":"2018-01-01T00:00:00Z",
"MKT_AgrmtProlngnDcsnFromDteTme":"2019-01-01T00:00:00Z",
"MKT_AgreementPaymentFrequency":"6",
"MKT_AgrmtPaymentIsInAdvance":true,
"MKT_AgrmtBundleProductOrigin":"TEST_ORIGIN",
"MKT_AgrmtBundleProductID":"TEST_BUNDLE",
"OriginDataLastChgUTCDateTime":"/Date(1523372142917)/"
}
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd621
Content-Type: application/http
Content-Transfer-Encoding: binary

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Change Agreement

```bash
--batch
Content-Type: multipart/mixed; boundary=changeset_77162fcd-b8da-41ac-a9f8-9357efbbd622
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd622
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
Agreements(MKT_AgreementOrigin='TEST_ORIGIN',MKT_AgreementExternalID='20180410-165542-917') HTTP/1.1
Content-Type: application/json
Content-Length: ###
Sap-Cuan-SourceSystemId: XXXCLN123
Sap-Cuan-SourceSystemType: Sap-Cuan-SequenceId: AGREEMENT_MASTER_DATA
Sap-Cuan-RequestTimestamp: 20170508141617.0000001
Sap-Cuan-ExternalReferenceId: XXXCLN12320170508141617_01
{"MKT_AgreementStatus":"S",
"MKT_AgreementRenewalType":"2",
"OriginDataLastChgUTCDateTime":"/Date(1523372142917)/"}
--changeset_77162fcd-b8da-41ac-a9f8-9357efbbd622
--batch

Sample Code

```
5.2.13 Scores

Public OData API (API_MKT_SCORE_SRV) for Scores

Entity Data Model

Service Metadata URI: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_SCORE_SRV/$metadata

Technical Data

<table>
<thead>
<tr>
<th>Field Extensibility</th>
<th>No</th>
</tr>
</thead>
</table>

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

- [HTTP Response Status Codes](#)
### 5.2.13.1 Basic Concepts

The public API for Scores API_MKT_SCORE_SRV supports operations on the Scores Business Object.

#### Score Versioning

The score values for a contact are stored in a version together with the timestamp of their calculation.

Every time scores or predictive models are calculated in the background, the calculated score values are saved under a new version. This version corresponds to the current UTC timestamp. A nightly report deletes all outdated versions. However, at least one version is kept, even if the version is outdated.

When you use scores or predictive models in Segmentation or Customer Profile, the latest version of the score is used.
• If no version exists for a score, the score values are calculated on the fly. If a large number of score values for contacts are calculated on the fly, this can lead to performance issues in the system.

In the Scores API, MarketingScoreDateTime corresponds to the timestamp which is used as version.

• If several score values are uploaded at once, all score values need to have the same timestamp.
• If different uploads use the same version, meaning the same timestamp, the upload will add score values for new contacts and it will overwrite score values of contacts which were already uploaded with this version.
• If a contact is included in an older version, but not in the latest version, their score value will be 0 or No Valuation, depending on the application in which the score value is displayed in.
• The timestamp must not be in the future. The timestamp must not be older than an already existing timestamp of this score.

Processing Info

Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a header parameter content-type, specifying the value multipart/mixed and boundary=batch. The operation header must include the Sap-Cuan-SequenceId.

A PATCH (MERGE) request updates only the properties indicated in the request body and leaves everything untouched that was not mentioned. All properties that are not to be changed can be omitted. The transmitted properties are merged with the data already stored in SAP Marketing Cloud. If the record to be updated is not found, then it is simply created.

Best Practices

• The ContactOrigin cannot be shareable. If the origin is set to Shareable, this will trigger an error. For more information, see Configuring Origins. You can view sample payloads and test the API at https://api.sap.com。<br />
• The ContactOrigin cannot be updated. It’s a key field together with the Interaction Contact ID.

5.2.13.2 Structure of OData Service API_MKT_SCORE_SRV

This document describes the structure of the Public OData API service API_MKT_SCORE_SRV. Make sure you read the Basic Concepts topic before you start.
### Entities

The Scores OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores</td>
<td>This entity contains a persisted score scenario. A persisted score scenario is a scenario for which scores are saved.</td>
<td>/Scores (MarketingScore=&lt;score id&gt;)</td>
</tr>
<tr>
<td>ScoreModels</td>
<td>This entity contains the score model associated with a particular score scenario.</td>
<td>/ScoreModels (MarketingScore=&lt;score id&gt;,MarketingScoreModel=&lt;model id&gt;)</td>
</tr>
<tr>
<td>ScoreValues</td>
<td>This entity contains the score value for a score scenario, score model, and interaction contact.</td>
<td>/ScoreValues (MarketingScore=&lt;score id&gt;,MarketingScoreModel=&lt;model id&gt;,MarketingScoreDateTime=&lt;date&gt;,MarketingScoreObjectUUID=&lt;contact uuid&gt;)</td>
</tr>
<tr>
<td>ScoreTargetObjects</td>
<td>This entity contains the target object for a score scenario.</td>
<td>/ScoreTargetObjects (MarketingScore=&lt;score id&gt;,MarketingScoreModel=&lt;model id&gt;,MtkgScoreTargetObjectType=&lt;target object&gt;)</td>
</tr>
</tbody>
</table>

You can view sample payloads and test the API at [https://api.sap.com](https://api.sap.com).

### Entity Sets

The Scores OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores</td>
<td>This entity contains the persisted type of score scenarios. A persisted score scenario is a scenario for which scores are saved.</td>
<td>/Scores</td>
</tr>
<tr>
<td>ScoreModels</td>
<td>This entity contains the score models associated with a particular score scenario.</td>
<td>/ScoreModels</td>
</tr>
<tr>
<td>ScoreValues</td>
<td>This entity contains the score value for a score scenario, score model, and interaction contact.</td>
<td>/ScoreValues</td>
</tr>
</tbody>
</table>

You can view sample payloads and test the API at [https://api.sap.com](https://api.sap.com).
Scores

You can perform the following operations on the Scores entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Path</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/Scores</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/Scores(&lt;Marketing Score&gt;)</td>
<td></td>
</tr>
</tbody>
</table>

**i Note**

Only persisted scores can be summoned using the Scores API.

ScoreModels

You can perform the following operations on the ScoreModels entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Path</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/ScoreModels</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/ScoreModels(MarketingScore = '{MarketingScore}',MarketingScoreModel = '{MarketingScoreModel}')</td>
<td></td>
</tr>
</tbody>
</table>

| POST        | /ScoreModels                                                          |                                                                          |

ScoreValues

You can perform the following operations on the ScoreValues entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Path</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/ScoreValues</td>
<td>• The option $top is mandatory with maximal 5000.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The option $inlinecount is supported.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The option $filter is valid only for the fields MarketingScore,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MarketingScoreModel.</td>
</tr>
</tbody>
</table>
### HTTP Method

<table>
<thead>
<tr>
<th>Path</th>
<th>Comments</th>
</tr>
</thead>
</table>
| /    | MarketingScoreValue, MarketingScoreDateTime and MarketingScoredObjectUUID and ID/Origin combined. At least MarketingScore or MarketingScoreModel should be referenced in the filter option. If the MarketingScoreModel is not specified in the filter, the result will cover all the models related to this score.  
  - The filtering on MarketingScoreDateTime gives only the latest version.  
  - If the filter is used with MarketingScoredObjectUUID or MarketingScoredID/Origin, the result is the latest score value assigned to this UUID or ID/Origin.  
  - Only the operation `EQ` or `=` is supported when filtering on MarketingScore, MarketingScoreModel, MarketingScoreDateTime and MarketingScoredObjectUUID or MarketingScoredID/Origin. |
| POST | You can only post score values from externally created scores.  
  For best performance, deep insert is supported as illustrated in the payload examples. |

### ScoreTargetObjects

You can perform the following operations on the ScoreTargetObjects entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Path</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/ScoreTargetObjects</td>
<td></td>
</tr>
</tbody>
</table>
HTTP Method | Path | Comments
--- | --- | ---
/ | ScoreTargetObjects {MarketingScore='MarketingScore',MarketingScoreModel='MarketingScoreModel',MtkgScoreTargetObjectType='MtkgScoreTargetObjectType'} | 

**i Note**
Score values can only be imported in models which have an assigned implementation method dedicated for external score values. This is always the case for score models created via this OData.

### 5.2.13.3 Payload Examples

The following examples show how you can use the Scores API.

**Scores**

**GET all scores**

```
'Sample Code

/sap/opu/odata/sap/API_MKT_SCORE_SRV/Scores
```

```
'Sample Code

/sap/opu/odata/sap/API_MKT_SCORE_SRV/Scores?$inlinecount=allpages&$expand=ScoreModels
```

```
'Sample Code

/sap/opu/odata/sap/API_MKT_SCORE_SRV/Scores?$select=MarketingScore
```

**GET one score**

```
'Sample Code

/sap/opu/odata/sap/API_MKT_SCORE_SRV/Scores('CHURN_SCORE')
```
Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/Scores('CHURN_SCORE')?$expand=ScoreModels
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/Scores('CHURN_SCORE')?
$select=MarketingScore,MarketingScoreName,MarketingScorePurpose
```

Score Models

GET all Score Models

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreModels?$top=10&
$filter=(MarketingScoreModel eq '555') and (MarketingScore eq 'CHURN_SCORE')
```

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreModels?$top=10&
$filter=(MarketingScoreModel eq '555')
```

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreModels?$top=10&
$filter=(MarketingScore eq 'CHURN_SCORE')
```

GET one Score Model

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/
ScoreModels (MarketingScore='CHURN_SCORE,MarketingScoreModel='555')
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/
ScoreModels (MarketingScore='CHURN_SCORE,MarketingScoreModel='555')?
$select=MarketingScoreModelUUID
```

POST Score Model

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreModels
```

Sample Code

```
{
   "MarketingScore":"ChurnScore",
   "MarketingScoreModelName":"<model name>"
}
```
Score Values

GET all Score Values

Sample Code

```
GET all Score Values

/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues?$top=20&
$filter=MarketingScore eq 'CHURN_SCORE'
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues?$top=20&
$filter=MarketingScore eq 'CHURN_SCORE' and MarketingScoredObjectUUID eq
guid'00163e34-bda6-1ed7-bf8e-ff79868c52ea'
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues?$top=3000&
$filter=MarketingScore eq 'ChurnScore' and MarketingScoreDateTime gt
datetimeoffset'2019-07-12T07%3A58%3A00.4030000Z'
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues?$top=3000&
$filter=MarketingScore eq 'ChurnScore' and MarketingScoreDateTime eq
datetimeoffset'2019-07-12T07%3A58%3A00.4030000Z'
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues?$top=3000&
$filter=MarketingScore eq 'ChurnScore' and MarketingScoreValue gt 0.33
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues?$top=3000&
$filter=MarketingScore eq 'CHURN_SCORE' and MarketingScoreValue le 0.33
```

Sample Code

```
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues?$skip=2&$top=3000&
$filter=MarketingScore eq 'CHURN_SCORE' and MarketingScoreValue le 0.33&
$orderby=MarketingScoreValue desc
```

GET one Score Value

Sample Code

```
GET one Score Value

/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreValues(MarketingScore='CHURN_SCORE',MarketingScoreModel='555',MarketingScoreD..."}
```
Sample Code

```plaintext
/sap/opu/odata/sap/API_MKT_SCORE_SRV/
ScoreValues(MarketingScore='CHURN_SCORE',MarketingScoreModel='555',MarketingScoreDateTime=datetimeoffset'2019-07-12T07:58:00.4030000Z',MarketingScoredObjectUUID=guid'ffffffff-ffff-ffff-ffff-ffffffffffff')?$select=MarketingScoreValue
```

POST Score Values

```plaintext
/sap/opu/odata/sap/API_MKT_SCORE_SRV/Scores(MarketingScore=<score id >/ScoreModels
```

Sample Code

```plaintext
{ "MarketingScore":"ChurnScore", "MarketingScoreModel":"555", "ScoreValues": [ { "MarketingScoreDateTime":"2017-12-02T14:26:00.9824060", "MarketingScoredObjectUUID":"ffffffff-ffff-ffff-ffff-ffffffffffff", "MarketingScoreValue":"0.60" } ] }
```

Score Target Objects

GET all Target Objects

```plaintext
/sap/opu/odata/sap/API_MKT_SCORE_SRV/ScoreTargetObjects?
$filter=MarketingScore eq 'CHURN_SCORE'
```

GET one Target Object

```plaintext
/sap/opu/odata/sap/API_MKT_SCORE_SRV/
ScoreTargetObjects(MarketingScore='CHURN_SCORE',MarketingScoreModel='555',MtkgScoreTargetObjectType='IP_TARGETPRODUCT')
```

Sample Code

```plaintext
/sap/opu/odata/sap/API_MKT_SCORE_SRV/
ScoreTargetObjects(MarketingScore='CHURN_SCORE',MarketingScoreModel='555',MtkgScoreTargetObjectType='IP_TARGETPRODUCT')?$select=MarketingScore
```
5.2.14 Marketing Locations

Public OData API (API_MKT_LOCATION) for Marketing Locations. A marketing location is any physical or virtual location where a marketing activity can be conducted.

The following diagrams illustrate the business process model for the marketing location API:
# Technical Data

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underlying BO</td>
<td>BO_MARKETING_LOCATION</td>
</tr>
<tr>
<td>Package</td>
<td>CUAN_BO_MARKETING_LOCATION</td>
</tr>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_LOCATION_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_LOCATION_SRV/$metadata</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required:</td>
</tr>
<tr>
<td></td>
<td>● SAP_CEC_BC_MKT_API_LOC_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0305</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>● CEC-MKT-DM-LOC (Marketing Location)</td>
</tr>
<tr>
<td>Field Extensibility Supported</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## Technical Field Documentation

You can access technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_LOCATION_SRV;v=0002/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

---

**i Note**

Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](page 402).

---

**Note**

You can convert the XML file to an XML table to make it easier to read.
General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

General access to the Marketing Locations metadata file. One-time registration or logon is required.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

5.2.14.1 Basic Concepts

The Marketing Location API supports CRUD operations on the Marketing Location Business Object.

Best Practices

You can view sample payloads and test the API at https://api.sap.com.

Field Extensibility

In addition to the predelivered attributes, you can add customer-specific fields using the Custom Fields and Logic app. For more information, see Custom Fields and Logic.
5.2.14.2 Structure of API_MKT_LOCATION

This document describes the structure of the Public OData API service API_MKT_LOCATION. Make sure you read the Basic Concepts topic before you start.

Entity Sets

The Marketing Location OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>This entity contains the list of marketing locations.</td>
<td>/Locations</td>
</tr>
<tr>
<td>LocationInfo</td>
<td>This entity contains the list of marketing locations information.</td>
<td>/LocationsInfo</td>
</tr>
<tr>
<td>LocationOriginData</td>
<td>This entity contains the list of origin data for marketing locations.</td>
<td>/LocationsOriginData</td>
</tr>
<tr>
<td>LocationOriginDataInfo</td>
<td>This entity contains the list of origin data information for marketing locations.</td>
<td>/LocationsOriginDataInfo</td>
</tr>
</tbody>
</table>

Location

Resource Path: /Location

You can perform the following operations on the Location entity:

Operations on the Location entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get the list of marketing locations.</td>
<td>GET /Locations</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details of a marketing location.</td>
<td>GET /Locations('Marketing Location UUID')</td>
</tr>
</tbody>
</table>

LocationsInfo

Resource Path: /LocationsInfo
You can perform the following operations on the LocationsInfo entity:

Operations on the LocationInfo entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get the list of marketing locations information.</td>
<td>GET /LocationsInfo</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details of a marketing location information.</td>
<td>GET /LocationsInfo('Marketing Location UUID')</td>
</tr>
</tbody>
</table>

LocationsOriginData

Resource Path: /LocationOriginData

You can perform the following operations on the LocationOriginData entity:

Operations on the LocationOriginData entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get the list of marketing locations origin data.</td>
<td>GET /LocationsOriginData</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details of a marketing location origin.</td>
<td>GET /LocationsOriginData('Marketing Location ID','Marketing Location Origin')</td>
</tr>
<tr>
<td>POST</td>
<td>Create a marketing location origin.</td>
<td>POST /LocationsOriginData</td>
</tr>
<tr>
<td>PATCH</td>
<td>Update a marketing location origin.</td>
<td>PATCH /LocationsOriginData</td>
</tr>
<tr>
<td>PUT</td>
<td>Update a marketing location origin.</td>
<td>PUT /LocationsOriginData</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete the marketing location.</td>
<td>DELETE /LocationsOriginData('Marketing Location ID','Marketing Location Origin')</td>
</tr>
</tbody>
</table>

LocationsOriginDataInfo

Resource Path: /LocationOriginDataInfo
You can perform the following operations on the `LocationOriginDataInfo` entity:

### Operations on the LocationOriginDataInfo entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the details of a marketing location origin information.</td>
<td>GET / LocationsOriginDataInfo(’Marketing Location ID’,’Marketing Location Origin’)</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a marketing location origin information.</td>
<td>POST / LocationsOriginDataInfo</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update a marketing location origin information.</td>
<td>PATCH / LocationsOriginDataInfo</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update a marketing location origin information</td>
<td>PUT / LocationsOriginDataInfo</td>
</tr>
</tbody>
</table>

### 5.2.14.3 Payload Examples

The following examples show how you can use the Marketing Locations API.

#### Create Marketing Locations

**POST**

```bash
--batch
Content-Type: multipart/mixed; boundary=changeset
--changeset
Content-Type: application/http
Content-Transfer-Encoding: binary
POST LocationsOriginData HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 10000

<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
  <m:properties>
    <d:MarketingLocationID>RDLOC1309</d:MarketingLocationID>
    <d:MarketingLocationOrigin>WECHAT_POI</d:MarketingLocationOrigin>
    <d:MarketingLocationName>Location Name for LOC1409</d:MarketingLocationName>
    <d:CompanyName>CompanyName for RDLOC1409</d:CompanyName>
    <d:MarketingLocationMallName>MallName for LOC1309</d:MarketingLocationMallName>
    <d:MarketingLocationMallOrigin>MallOrigin for LOC1409</d:MarketingLocationMallOrigin>
    <d:MarketingLocationMallOriginName>MallOriginName for LOC1409</d:MarketingLocationMallOriginName>
    <d:MarketingLocationID>RDLOC1409</d:MarketingLocationID>
    <d:MarketingLocationOrigin>WECHAT_POI</d:MarketingLocationOrigin>
    <d:MarketingLocationName>Location Name for LOC1409</d:MarketingLocationName>
    <d:CompanyName>CompanyName for RDLOC1409</d:CompanyName>
    <d:MarketingLocationMallName>MallName for LOC1309</d:MarketingLocationMallName>
    <d:MarketingLocationMallOrigin>MallOrigin for LOC1409</d:MarketingLocationMallOrigin>
    <d:MarketingLocationMallOriginName>MallOriginName for LOC1409</d:MarketingLocationMallOriginName>
  </m:properties>
</atom:entry>
```

---

**Integration Guide**

**Integration APIs**
Create a Marketing Location

Sample Code

```xml
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:MarketingLocationID>RDLOC13095</d:MarketingLocationID>
<d:MarketingLocationOrigin>WECHAT_POI</d:MarketingLocationOrigin>
<d:MarketingLocationName>Location Name for LOC1409</d:MarketingLocationName>
<d:CompanyName>CompanyName for RDLOC1409</d:CompanyName>
<d:MarketingLocationMallName>MallName for LOC1309</d:MarketingLocationMallName>
<d:MarketingArea>GERMANY</d:MarketingArea>
<d:MarketingAreaName>GERMANY</d:MarketingAreaName>
<d:MarketingLocationTypeName>MALL</d:MarketingLocationTypeName>
<d:Country>CA</d:Country>
<d:CountryName>Canada</d:CountryName>
<d:CityName>Montreal</d:CityName>
<d:AddressRegion>QC</d:AddressRegion>
<d:RegionName>QC</d:RegionName>
<d:PostalCode>H9X2R2</d:PostalCode>
<d:AddressStreetName>ROBERT BOURASSA</d:AddressStreetName>
<d:AddressHouseNumber>111</d:AddressHouseNumber>
<d:Building>Building1309</d:Building>
<d:Floor>FOURTH</d:Floor>
<d:RoomNumber>LAGRANGE</d:RoomNumber>
<d:PhoneNumber>5149999999</d:PhoneNumber>
<d:FaxNumber>5149999999</d:FaxNumber>
<d:EmailAddress>LOC1509@example.com</d:EmailAddress>
<d:WebsiteURL>example.com</d:WebsiteURL>
<d:ImageURL>example.com</d:ImageURL>
<d:Longitude>1010</d:Longitude>
<d:Latitude>1020</d:Latitude>
<d:SpatialReferenceSystem>Ref070903</d:SpatialReferenceSystem>
<d:ValidityStartDate>2016-09-13T08:01</d:ValidityStartDate>
<d:ValidityEndDate>2016-09-13T08:01</d:ValidityEndDate>
</m:properties>
</atom:content>
</atom:entry>
```
Delete a Marketing Location

DELETE

`Sample Code`

```bash
--batch
Content-Type: multipart/mixed; boundary=changeset
--changeset
Content-Type: application/http
Content-Transfer-Encoding: binary
DELETE
LocationsOriginData(MarketingLocationID='RDLOC1309',MarketingLocationOrigin='WECHAT_POI') HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 10000
--changeset--
--batch--
```

Get a List of all Marketing Locations

GET

`Sample Code`

```bash
--batch
Content-Type: application/http
Content-Transfer-Encoding: binary
GET LocationsOriginData HTTP/1.1
--batch--
```

Get a List of One Marketing Location

GET

`Sample Code`

```bash
--batch
Content-Type: application/http
Content-Transfer-Encoding: binary
GET
LocationsOriginData(MarketingLocationID='RDLOC1309',MarketingLocationOrigin='WECHAT_POI') HTTP/1.1
--batch
Content-Type: application/http
Content-Transfer-Encoding: binary
GET
LocationsOriginData(MarketingLocationID='RDLOC1509',MarketingLocationOrigin='WECHAT_POI') HTTP/1.1
--batch--
```
Update Several Marketing Locations

PATCH

```bash
---
Sample Code
---

--batch
Content-Type: multipart/mixed; boundary=changeset
--changeset
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
LocationsOriginData(MarketingLocationID='RDLOC1309',MarketingLocationOrigin='WECHAT_POI') HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 10000
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:MarketingLocationID>RDLOC1309</d:MarketingLocationID>
<d:MarketingLocationOrigin>WECHAT_POI</d:MarketingLocationOrigin>
<d:MarketingLocationName>Location Name for LOC1409 Updated</d:MarketingLocationName>
<d:CompanyName>CompanyName for RDLOC1409 Updated</d:CompanyName>
<d:MarketingLocationMallName>MallName for LOC1309 Updated</d:MarketingLocationMallName>
<d:MarketingArea>GERMANY</d:MarketingArea>
<d:MarketingLocationTypeName>MALL</d:MarketingLocationTypeName>
<d:Country>CA</d:Country>
<d:CountryName>Canada</d:CountryName>
<d:CityName>Montreal</d:CityName>
<d:AddressRegion>QC</d:AddressRegion>
<d:RegionName>QC</d:RegionName>
<d:PostalCode>H9X2R2</d:PostalCode>
<d:AddressStreetName>ROBERT BOURASSA</d:AddressStreetName>
<d:AddressHouseNumber>111</d:AddressHouseNumber>
<d:Building>Building1309</d:Building>
<d:Floor>FOURTH</d:Floor>
<d:RoomNumber>LAGRANGE</d:RoomNumber>
<d:PhoneNumber>5149999999</d:PhoneNumber>
<d:FaxNumber>5149999999</d:FaxNumber>
<d:EmailAddress>LOC1509@example.com</d:EmailAddress>
<d:WebsiteURL>example.com</d:WebsiteURL>
<d:ImageURL>example.com</d:ImageURL>
<d:Longitude>1010</d:Longitude>
<d:Latitude>1020</d:Latitude>
<d:ValidityStartDate>2016-09-13T08:01</d:ValidityStartDate>
<d:ValidityEndDate>2016-09-13T08:01</d:ValidityEndDate>
</m:properties>
</atom:content>
</atom:entry>
--changeset
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
LocationsOriginData(MarketingLocationID='RDLOC1509',MarketingLocationOrigin='WECHAT_POI') HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 10000
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
```
5.2.15 Classifications

Public OData API (API_MKT_ML_CLASSIFICATION) for reading and writing data about classifications. A classification is the truth about whether a certain event in the past or not. You define this event yourself.

Entity Data Model

Service Metadata URI: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV;v=0002/$metadata

Technical Data
<table>
<thead>
<tr>
<th><strong>Field</strong></th>
<th><strong>Value</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OData Version</strong></td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Root URI</strong></td>
<td>&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV;v=0002</td>
</tr>
<tr>
<td><strong>Service Metadata URI</strong></td>
<td>&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV;v=0002/$metadata</td>
</tr>
<tr>
<td><strong>Authorizations</strong></td>
<td>The following business catalog role is required: SAP_CEC_BC_MKT_API_IC2_PC</td>
</tr>
<tr>
<td><strong>Communication Scenario ID</strong></td>
<td>SAP_COM_0245</td>
</tr>
<tr>
<td><strong>Component for Incidents</strong></td>
<td>CEC-MKT-ML-CLS</td>
</tr>
<tr>
<td><strong>Field Extensibility</strong></td>
<td>No</td>
</tr>
</tbody>
</table>

### Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

**i Note**

> Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](#page-402).

<table>
<thead>
<tr>
<th><strong>Access Link</strong></th>
<th><strong>Remarks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV;v=0003/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**i Note**

You can convert the XML file to an XML table to make it easier to read.

<table>
<thead>
<tr>
<th><strong>Marketing - Classifications Page</strong></th>
<th><strong>Remarks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.</td>
<td></td>
</tr>
<tr>
<td>1. On the Details page, click Download Specification and download as EDMX.</td>
<td></td>
</tr>
<tr>
<td>2. Specify which application you want to use to open the EDMX file type.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Classifications API</strong></th>
<th><strong>Remarks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>General access to the Contacts metadata file. One-time registration or logon is required.</td>
<td></td>
</tr>
</tbody>
</table>
5.2.15.1 Basic Concepts

The public API for Classifications API_MKT_ML_CLASSIFICATION_SRV supports operations on the Classification Business Object.

Processing Info

Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a header parameter `content-type`, specifying the value `multipart/mixed` and `boundary=batch`. The operation header must include the `Sap-Cuan-SequenceId`.

A PATCH (MERGE) request updates only the properties indicated in the request body and leaves everything untouched that was not mentioned. All properties that are not to be changed can be omitted. The transmitted properties are merged with the data already stored in SAP Marketing Cloud. If the record to be updated is not found, then it is simply created.

Best Practices

- For classifications, batch requests are only supported for GET and PATCH operations. We recommend to use a batch request to update classification values for one classification only and we recommend to restrict a batch request to one predictive scenario only. The batch request is limited to 100,000 classification values. For GET, the batch request is limited to 5000 classifications. For deep create, the request is limited to 50,000 classification values.

- The ContactOrigin cannot be shareable. If the origin is set to Shareable, this will trigger an error. For more information, see Configuring Origins. You can view sample payloads and test the API at [https://api.sap.com](https://api.sap.com).

- The ContactOrigin cannot be updated. It’s a key field together with the Interaction Contact ID.

Error Messages

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 204 is returned. Potential processing errors are recorded in the SAP Marketing Cloud system in the Import Monitor app, where they can be monitored, restarted and discarded.

Data processing for classifications is mostly synchronous. In most cases an OK response, such as a receipt notification, is returned almost immediately. An exception to this would be data uploads that might contain severe errors, such as parse or format errors, and so would not return an OK response but an error message.
### iNote

Data processing for Deep Create and Batch requests is asynchronous. The data you upload lands in a staging area, where it is then further processed. In the response you will get a Reference Message ID.

To view the processing status and to check for errors or success messages, you must launch the Import Monitor app and search for the Reference Message ID. Messages for classifications in this app are displayed under the API for classifications. In the event of errors, you can restart or discard the import in the Import Monitor.

---

### 5.2.15.2 Structure of OData Service

**API_MKT_ML_CLASSIFICATION_SVR**

This document describes the structure of the Public OData API service API_MKT_ML_CLASSIFICATION. Make sure you read the Basic Concepts topic before you start.

### Entity Sets

The Classification OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>ClassificationsType</td>
<td>This entity contains information about the version, target object and predictive scenario of a classification.</td>
<td>/ClassificationsType</td>
</tr>
<tr>
<td>ClassificationsValuesType</td>
<td>This entity contains information about a contact and their classification value.</td>
<td>/ClassificationsValuesType</td>
</tr>
<tr>
<td>MchnLrngScenarios</td>
<td>This entity contains information about the custom predictive scenarios of the type External Score.</td>
<td>/MchnLrngScenarios</td>
</tr>
</tbody>
</table>

---

### ClassificationsType

The table below describes the properties for the entity ClassificationsType.
### ClassificationsType Property Names and Descriptions

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MchnLrngClassificationVersion</td>
<td>Contains the version of the classification.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A classification can only have one version. Different classifications can have different versions.</td>
<td></td>
</tr>
<tr>
<td>MchnLrngClassificationVersText</td>
<td>Contains the freetext name, which you can give to the classification version.</td>
<td></td>
</tr>
<tr>
<td>MchnLrngTargetObject</td>
<td>Contains the target object for which the classification is calculated.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>PredictiveScenario</td>
<td>Contains the custom predictive scenario that is used for storing the classification.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The predictive scenario must exist in the Predictive Scenarios app.</td>
<td></td>
</tr>
</tbody>
</table>

You can perform the following operations on the ClassificationsType entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Read header information for a classification, which includes classification key, predictive scenario, classification version and optionally classification version text.</td>
<td>/Classifications('&lt;PredictiveScenario&gt;,&lt;MchnLrngTargetObject&gt;,&lt;MchnLrngClassificationVersion&gt;')</td>
</tr>
<tr>
<td></td>
<td>Read all classifications</td>
<td>/Classifications</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a new classification with header information about the classification key, predictive scenario, target object and classification version. The classification version text is optional.</td>
<td>/Classifications</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update an existing classification with additional information, namely the classification version text. The PUT request replaces the existing entry, so all property values in the entry either take the values indicated in the request body, or are reset to their default value if not mentioned in the request.</td>
<td>/Classifications('&lt;PredictiveScenario&gt;,&lt;MchnLrngTargetObject&gt;,&lt;MchnLrngClassificationVersion&gt;').'</td>
</tr>
</tbody>
</table>
### HTTP Method

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATCH</td>
<td>Update an existing classification with additional information, namely the classification version text. The PATCH request updates only the properties indicated in the request body, and leaves untouched anything not mentioned in its current state.</td>
<td>/Classifications('&lt;PredictiveScenario&gt;,&lt;MchnLrngTargetObject&gt;,&lt;MchnLrngClassificationVersion&gt;')</td>
</tr>
<tr>
<td>PATCH (Batch)</td>
<td>In your batch request, you can update both different classifications and different classification values. For batch requests, you can only update classification values for one classification. The batch request is limited to 100 000 classification values.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0002/$batch</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete an existing classification and all its classification values.</td>
<td>/Classifications('&lt;PredictiveScenario&gt;,&lt;MchnLrngTargetObject&gt;,&lt;MchnLrngClassificationVersion&gt;')</td>
</tr>
</tbody>
</table>

---

**ClassificationsValuesType**

The table below describes the properties for the entity **ClassificationsValuesType**.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionContactId</td>
<td>Contains the ID of the interaction contact.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ID for the interaction contact must exist in the system.</td>
<td></td>
</tr>
<tr>
<td>InteractionContactOrigin</td>
<td>Contains the origin of the contact.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The origin cannot be shareable.</td>
<td></td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
<td>Usage</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>InteractionContactUUID</td>
<td>Contains the internal ID of an interaction contact in SAP Marketing Cloud. The ID must exist in the system.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>MchnLrngClassificationValue</td>
<td>Contains the classification value for the contact. The classification value can only be 0 or 1.</td>
<td></td>
</tr>
<tr>
<td>MchnLrngClassificationVersion</td>
<td>Contains the version of the classification.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A classification can only have one version.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Different classifications can have different versions.</td>
<td></td>
</tr>
<tr>
<td>MchnLrngCfnEndDateDateTime</td>
<td>Contains the end date of the analysis period.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The end date time of a classification value must be later than the start date time of the same classification value.</td>
<td></td>
</tr>
<tr>
<td>MchnLrngCfnStartDateDateTime</td>
<td>Contains the start date of the analysis period.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The start date time of a classification value must be earlier than the end date time of the same classification value.</td>
<td></td>
</tr>
<tr>
<td>MchnLrngTargetObject</td>
<td>Contains the target object for which the classification is calculated.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>PredictiveScenario</td>
<td>Contains the custom predictive scenario that is used for storing the classifications.</td>
<td>Mandatory</td>
</tr>
<tr>
<td></td>
<td>The predictive scenario must exist in the Predictive Scenarios app.</td>
<td></td>
</tr>
</tbody>
</table>

You can perform the following operations on the ClassificationValuesType entity set:
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Read information for a specific classification value, which includes the interaction contact UUID, predictive scenario, target object, start date time and the optional attributes contact ID, ID origin, end date time and a classification value.</td>
<td><code>/ClassificationValues('&lt;PredictiveScenario,&lt;MchnLrngTargetObject&gt;,&lt;MchnLrngClassificationVersion&gt;,&lt;Interactio nContactUUID=guid&gt;,&lt;MchnLrn gClfnStartDateTime&gt;')</code></td>
</tr>
<tr>
<td></td>
<td>Get a list of classification values. You can read the classification values for one classification or for several different classifications. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td><code>/ClassificationValues</code></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a single classification value, give its five keys, interaction contact UUID, predictive scenario, start date time, Season Ticket, and classification version. Additional attributes are contact ID and ID origin, end date time and a classification value. Instead of the contact UUID, you can also give the contact ID and ID origin.</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV/ClassificationValues</code></td>
</tr>
<tr>
<td><strong>POST</strong> (Deep Create)</td>
<td>Upload multiple classification values belonging to only one classification.</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV/Classifications</code></td>
</tr>
</tbody>
</table>

**i Note**
- A maximum of 5000 machine learning scenarios can be fetched in a single request.
- Specification of TOP is mandatory.
- Batch requests are also supported for GET.
HTTP Method | Description | Path
---|---|---
**PUT** | Update an existing classification value with additional information about end date time and a classification value. The **PUT** request replaces the existing entry, so all property values in the entry either take the values indicated in the request body, or are reset to their default value if not mentioned in the request. | /\ClassificationValues('PredictiveScenario',MchnLrngTargetObject,MchnLrngClassificationVersion,InteractionContactUUID=guid,MchnLrngClfnStartDateTime')

**PATCH** | Update an existing classification value with additional information about end date time and a classification value. The **PATCH** request updates only the properties indicated in the request body, and leaves untouched anything not mentioned in its current state. | /\ClassificationValues('PredictiveScenario',MchnLrngTargetObject,MchnLrngClassificationVersion,InteractionContactUUID=guid,MchnLrngClfnStartDateTime')

**PATCH (Batch)** | In your batch request, you can update both different classifications and different classification values. We recommend to use a batch request to update classification values for one classification only and we recommend to restrict a batch request to one predictive scenario only. The batch request is limited to 100,000 classification values. Add to the batch request header: **Content-Type:** multipart/mixed; boundary=batch. Add to the operation header: **Sap-Cuan-SequenceId:** CLASSIFICATION_BATCH_SINGLE | https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV/$batch

**DELETE** | Delete an existing classification value. | /\ClassificationValues('PredictiveScenario',MchnLrngTargetObject,MchnLrngClassificationVersion,InteractionContactUUID=guid,MchnLrngClfnStartDateTime')

---

**MchnLrngScenarios Property Names and Descriptions**

The table below describes the properties for the entity **MchnLrngScenarios**.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MachineLearningScenario</td>
<td>Contains the ID of the machine learning scenario.</td>
<td></td>
</tr>
</tbody>
</table>
You can perform the following operations on the MchnLrngScenarios entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of machine learning scenarios. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/MchnLrngScenarios</td>
</tr>
</tbody>
</table>

5.2.15.3 Payload Examples

The following examples show how you can use the Classifications API.

**Classifications**

**GET All Classifications**

Annual Sample Code

```plaintext
 GET /sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV/Classifications
```

**GET one Classification**

Annual Sample Code

```plaintext
 /Classifications(PredictiveScenario='CHURN_RENEWAL_SEASON_TICKET',MchnLrngTargetObject='Season Ticket',MchnLrngClassificationVersion=1)
```

**POST one Classification**

Annual Sample Code

```plaintext
{
 "PredictiveScenario": "CHURN_RENEWAL_SEASON_TICKET",
 "MchnLrngTargetObject": "Season Ticket",
 "MchnLrngClassificationVersion": 1,
 "MchnLrngClassificationVersText": "Version 1.0"
}
```
PUT one Classification

```json
{  "MchnLrngClassificationVersText": "Version 2.0" }
```

PATCH one Classification

```json
{  "MchnLrngClassificationVersText": "Version 3.0" }
```

PATCH Several Classifications in a Batch Request

```bash
--batch
Content-Type: multipart/mixed; boundary=changeset
--changeset
Content-Type: application/http
Content-Transfer-Encoding: binary
PATCH
Classifications(PredictiveScenario='CHURN_RENEWAL_SEASON_TICKET',MchnLrngTarge
tObject='Cloud',MchnLrngClassificationVersion=1) HTTP/1.1
Content-Type: application/json
Content-Length: ###
Sap-Cuan-SequenceId: CLASSIFICATION_BATCH_SINGLE
{  "MchnLrngClassificationVersText" : "Version 4.0"
}
--changeset--
--batch--
```

DELETE one Classification

```bash
/Classifications(PredictiveScenario='CHURN_RENEWAL_SEASON_TICKET',MchnLrngTarge
tObject='Season%20Ticket',MchnLrngClassificationVersion=1)
```

Classification Values

GET All Classification Values

```bash
sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV/ClassificationValues?$top=50
```
GET **one Classification Value**

```bash
--batch
Content-Type: application/http
Content-Transfer-Encoding: binary
GET ClassificationValues(PredictiveScenario='CHURN_RENEWAL_SEASON_TICKET','MchnLrngTargetObject='Season %20Ticket','MchnLrngClassificationVersion=1,InteractionContactUUID=guid'0000c9e9-49b6-1ed3-b3dd-ffffffffffff',MchnLrngClfnStartDateTime=datetimeoffset'2017-04-01T00%3A00%3A00Z')
--batch--
```

**Sample Code**

```
/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV/ClassificationValues(PredictiveScenario='CHURN_RENEWAL_SEASON_TICKET','MchnLrngTargetObject='Season %20Ticket','MchnLrngClassificationVersion=1,InteractionContactUUID=guid'0000c9e9-49b6-1ed3-b3dd-ffffffffffff',MchnLrngClfnStartDateTime=datetimeoffset'2017-04-01T00%3A00%3A00Z')
```

POST **Several Classification Values with Deep Create**

```json
{
"PredictiveScenario": "CHURN_RENEWAL_SEASON_TICKET",
"MchnLrngTargetObject": "Season Ticket",
"MchnLrngClassificationVersion": 1,
"MchnLrngClassificationVersText": "Version 1",
"to_ClassificationValue": [
{
"InteractionContactUUID": "00000000-49b6-1ed3-b48c-ffffffffffff",
"PredictiveScenario": "CHURN_RENEWAL_SEASON_TICKET",
"MchnLrngClfnStartDateTime": "2016-04-01T00:00:00",
"MchnLrngTargetObject": "Season Ticket",
"MchnLrngClassificationVersion": 1,
"MchnLrngClfnEndDateTime": "2017-03-31T23:59:59",
"MchnLrngClassificationValue": "1"
}
},
```

**Sample Code**
POST **one Classification Value**

```json
{
    "InteractionContactUUID": "00000000-49b6-1ed3-cccc-ffffffffffff",
    "PredictiveScenario": "CHURN_RENEWAL_SEASON_TICKET",
    "MchnLrngClfnStartDateTime": "2018-04-01T00:00:00",
    "MchnLrngTargetObject": "Season Ticket",
    "MchnLrngClassificationVersion": 1,
    "MchnLrngClfnEndDateTime": "2019-03-31T23:59:59",
    "MchnLrngClassificationValue": "0"
}
```

PUT **one Classification Value**

```json
{
    "MchnLrngClfnEndDateTime": "2019-03-31T00:00:00",
    "MchnLrngClassificationValue": "1"
}
```

PATCH **one Classification Value**

```json
{
    "MchnLrngClfnEndDateTime": "2019-03-31T00:00:00",
    "MchnLrngClassificationValue": "1"
}
```

PATCH **Several Classification Values in a Batch Request**

You can use a batch request to update classification values that are related to one classification only.

```bash
    --batch
    Content-Type: multipart/mixed; boundary=changeset
    --changeset
    Content-Type: application/http
    Content-Transfer-Encoding: binary
    PATCH
    ClassificationValues(PredictiveScenario='CHURN_RENEWAL_SEASON_TICKET',MchnLrngTargetObject='Season
```

---

Integration Guide
Integration APIs
DELETE one Classification Value

Sample Code

```java
// ClassificationValues(PredictiveScenario='CHURN_RENEWAL_SEASON_TICKET',MchnLrngTargetObject='Season %20Ticket',MchnLrngClassificationVersion=1,InteractionContactUUID=guid'0000c9e9-49b6-1ed3-b48c-ffffffffffffff',MchnLrngClfnStartDateTime=datetimeoffset'2016-04-01T00%3A00%3A00 2')
```

Machine Learning Scenarios

GET All Machine Learning Scenarios

Sample Code

```
/sap/opu/odata/SAP/API_MKT_ML_CLASSIFICATION_SRV/MchnLrngScenarios
```

5.2.16 Marketing Attribute Categories

OData API (API_MKT_ATTRIBUTE_CATEGORY) for writing master data about marketing attribute categories. Marketing attribute categories are freely-definable classifications of information that can be assigned to customers, for instance, to store their hobbies or education history.

Technical Data

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_ATTRIBUTE_CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Scenario IDs</td>
<td>SAP_COM_0207 and SAP_COM_0017</td>
</tr>
</tbody>
</table>
5.2.16.1 Basic Concepts

Creating and Updating Marketing Attribute Categories

1. Use the API_MKT_ATTRIBUTE_CATEGORY service to initially create the categories you require. With this service you can also load multiple language translations of the categories.

2. When you want to load individual marketing attribute values for your contacts, for example, to store their hobbies or the languages they speak, use the MarketingAttribute entity in the API_MKT_CONTACT service.

   **Note**
   
   The entity MarketingAttributeCategoryName is an alternative key for a marketing attribute category that can replace the entity MarketingAttributeCategory. In other words, we accept either MarketingAttributeCategory or MarketingAttributeCategoryName. If you send both, the MarketingAttributeCategoryName is ignored. This means:
   
   - If you send only the MarketingAttributeCategoryName, a marketing attribute category is created with a technical key and a description is provided in MarketingAttributeCategoryName.
   - If you send the MarketingAttributeCategory, a marketing attribute category is created with a generated description (a timestamp is added to the name). You can change this name in the app Marketing Attribute Categories.

3. Use the app Marketing Attribute Categories to translate existing marketing attribute categories into different languages. With the app, you can also delete categories.

   **Note**
   
   If multiple origins provide the same marketing attribute categories, these cannot be merged. Separate categories are created for each origin.
Full Update

Blank entries overwrite existing entries. For example, if a marketing attribute category in the marketing system is stored with descriptions in the languages EN, DE, IT, and ES and a subsequent import only contains descriptions in the languages EN, DE, and IT, but not ES, the descriptions in language ES will be deleted.

Consistency Checks

The ODATA Service performs the following consistencies checks:

- Unknown language codes
- Description with language code missing
- Language code sent without a description
- No description sent at all
- Category sent more than once with different timestamps - the data set with the most recent timestamp is taken.
- Entry without an ID
- Entry without an ID Origin

Error Message Handling

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in the SAP Marketing Cloud system, the HTTP status code 201 or 204 is returned. Potential processing errors are recorded in the SAP Marketing Cloud system in the Import Monitor app, where they can be monitored, restarted and discarded.

By default, data processing is asynchronous. In most cases an OK response, such as a receipt notification, is returned almost immediately. An exception to this would be data uploads that might contain severe errors, such as parse or format errors, and so would not return an OK response but an error message. The data you upload lands in a staging area, where it is then further processed.

To view the processing status and to check for errors or success messages, you must launch the Import Monitor app. In the event of errors, you can restart or discard the import in the Import Monitor.
5.2.16.2 Structure of API_MKTATTRIBUTECATEGORY

This document describes the structure of the OData API service API_MKTATTRIBUTECATEGORY. Make sure you read the Basic Concepts topic before you start.

Request Header

The request header contains the following additional header fields:

<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max.Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-Cuan-ReferenceMessage</td>
<td>345g67980907</td>
<td>External reference of the inbound message</td>
<td>Edm.String</td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>

Entity Sets

The MarketingAttributeCategory OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>MarketingAttributeCategories</td>
<td>This entity contains the ID and the Origin of ID.</td>
<td>/MarketingAttributeCategories</td>
</tr>
<tr>
<td></td>
<td>Note: If the same ID comes from multiple different origins, separate IDs are created.</td>
<td></td>
</tr>
<tr>
<td>MarketingAttributeCategoryNames</td>
<td>This entity contains the semantic name of the marketing attribute category in the relevant language.</td>
<td>/MarketingAttributeCategoryNames</td>
</tr>
</tbody>
</table>
MarketingAttributeCategories


You can perform the following operation on the `MarketingAttributeCategories` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Post a list of marketing attribute categories.</td>
<td>/MarketingAttributeCategories?$top=1</td>
</tr>
</tbody>
</table>

MarketingAttributeCategoryNames

**POST:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_ATTRIBUTE_CATEGORY_SRV;v=0002/MarketingAttributeCategoryNames

You can perform the following operation on the `MarketingAttributeCategoryName` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Post a list of marketing attribute category names.</td>
<td>/MarketingAttributeCategoryNames?$top=1</td>
</tr>
</tbody>
</table>

5.2.16.3 Payload Examples

**POST Marketing Attribute Categories**

```
--batch
content-type:multipart/mixed;
boundary=changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
--changeset_761e49b6-3146-4a57-8d10-15816fb9c75a
content-type: application/http
content-transfer-encoding: binary
POST MarketingAttributeCategories HTTP/1.1
Content-Length: 1035
Accept: application/json
Content-Type: application/json
Sap-Cuan-RequestTimestamp: '2018-08-14T12:13:14'
sap-Cuan-ReferenceMessage: '12345678'
{
  "Id":"SH_20181029_001",
  "IdOrigin":"SAP_C4C_BUPA",
```
5.2.17 Import Monitoring

Public OData API (API_MKT_IMPORT_MONITORING) for reading messages output for a specific data import using the import header ID. This service can be used by all API services whose imports are processed via the staging area.

Technical Data

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_IMPORT_MONITORING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorizations</td>
<td>The following business catalog is required: SAP_CEC_BC_MKT_API_IC2_PC</td>
</tr>
<tr>
<td>Communication Scenario IDs</td>
<td>SAP_COM_0003, SAP_COM_0206, SAP_COM_0207, SAP_COM_0264. These are just some of the communication scenarios that implement this service. There may be others.</td>
</tr>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Root URI</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_IMPORT_MONITORING_SRV</code></td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_IMPORT_MONITORING_SRV/$metadata</code></td>
</tr>
<tr>
<td>Field Extensibility Supported</td>
<td>No</td>
</tr>
</tbody>
</table>

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:
### Access Link

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_IMPORT_MONITORING_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketing - Import Monitoring Details Page <img src="https://example.com" alt="image" /></th>
<th>General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. On the Details page, click Download Specification and download as EDMX.</td>
</tr>
<tr>
<td></td>
<td>2. Specify which application you want to use to open the EDMX file type.</td>
</tr>
</tbody>
</table>

| Import Monitoring API ![image](https://example.com)                      | General access link takes you directly to the Import Monitoring metadata file. One-time registration or logon is required. |

### i Note

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

### 5.2.17.1 Basic Concepts

Use this API Service to read the specific messages that are triggered in the staging area when you call other API services. This service returns the notifications that are also output in the Import Monitor app.

### Use

When you send data to the marketing system using a public API service, the import data can sometimes be processed in the staging area. The staging area returns a success message that the imported data is being processed. Using this service, you can query the status of the import, that is, whether import processing has been completed, as well as the status messages that are output, so that you can take prompt action where necessary.

This is a read-only service. You can only perform GET operations with it. With authorization for this service, you have access to all import header messages.
5.2.17.2 Structure of OData Service

API_MKT_IMPORT_MONITORING

This document describes the structure of the Public OData API service API_MKT_IMPORT_MONITORING.

Entities

- **GET: Entity Path:** /ImportHeaders
  You can perform the following operations on the ImportHeader entity set:
  
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of messages output for import headers. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby</td>
<td>/ImportHeaders?$top=1</td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● A maximum of 5000 import headers can be fetched in a single request.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Specification of TOP is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific import header using the ImportHeader UUID.</td>
<td>/ImportHeaders(guid'&lt;ImportHeader UUID&gt;')</td>
</tr>
</tbody>
</table>

- **Entity Path:** /ImportAggregatedMessage
  You cannot perform GET operations on the ImportAggregatedMessage entity, but you can expand from a given import header.

5.2.17.3 Payload Examples

The following examples show how you can use the Import Monitoring API service.

GET Requests

Get all messages for a single import header (XXXX = enter the respective GUID)

/sap/opu/odata/SAP/API_MKT_IMPORT_MONITORING_SRV/ImportHeaders(guid'xxxxx')?
$expand=HeaderToMessage
Get import headers with error messages

/sap/opu/odata/SAP/API_MKT_IMPORT_MONITORING_SRV/ImportHeaders?$expand=HeaderToMessage&$top=2&$filter=Status eq '2'

Get all messages for the top 2 import headers

/sap/opu/odata/SAP/API_MKT_IMPORT_MONITORING_SRV/ImportHeaders?$expand=HeaderToMessage&$top=2

5.3 Landing Pages

The following integration APIs are available for landing pages:

- External Landing Pages [page 742]
- External Landing Page Value Help [page 748]

5.3.1 OMC: External Landing Pages

The Open Marketing Connector for External Landing Pages aims to provide you with end-to-end guidance for the smooth integration of the data collected on external landing pages, such as basic contact data, the related marketing permissions and subscriptions, interactions, and landing page metadata with your SAP Marketing Cloud solution. Integration of external landing page tools, also allows you to use personalization features, which saves time for the customer and reduces the time-to-action for using the collected data in follow-on marketing activities. This document presents sample business scenarios to illustrate the end-to-end process.

SAP Cloud Platform Integration (SAP CPI) Integration Adapter

The SAP CPI integration adapter allows you to submit data in the source system format, without any need for legacy mapping development. Consequently, all mapping of data is maintained and cached in the SAP Cloud Platform Integration tenant. The adapter also offers extensibility options, where additional logic or API calls can be embedded into the requests. For example, an API call to create a marketing account. When there is scheduled downtime for maintenance of the SAP Marketing Cloud backend, the adapter can be configured to buffer all incoming requests and automatically submit them to the backend when it’s available again.

Integration Points and Process Steps

Scenario 1: Landing Page Design in External Tool

Your company hires a marketing agency to design a landing page, where potential contacts and customers can register, enter and update their profiles as required, and edit marketing permissions and subscriptions.
Process Steps
1. An external marketing agency designs a landing page for capturing contact data, including information on their marketing permissions.
2. The agency publishes the external landing page using the integration adapter API and a request through the API_MKT_LANDING_PAGE service is triggered to send the landing page metadata to the SAP Marketing Cloud system.
3. A representation of the published landing page is created in SAP Marketing Cloud and can be accessed in the Content Studio app.

Scenario 2: Landing Page Personalization (Prefill and Submit of Data)
You want to decrease the time-to-action in the marketing process by prefilling contact data in your external landing pages. A contact opens a marketing email and clicks the link of a landing page, which was created externally. The contact is known in the SAP Marketing Cloud system, so fields such as First Name, Last Name, and Email are prefilled with the contact’s data. The contact opts-in for general marketing permissions and submits the landing page. The details are sent to SAP Marketing Cloud where the contact is updated and the data is ready to use in follow-on marketing activities immediately.
Process Steps
1. The link to your external landing page is included in an email marketing campaign in SAP Marketing Cloud.
2. A contact receives the email and opens the link to the external landing page.
3. Using the API service `API_MKT_CONTACT` known contact data in the SAP Marketing Cloud system is requested and prefilled in the external landing page.
4. Since the landing page is personalized, the contact just needs to review the prefilled data, make any necessary changes, for example opt-in for general marketing permissions, and submit the landing page.
5. The data is sent from the external landing page to the SAP Marketing Cloud system using the API services `API_MKT_CONTACT` and `API_MKT_INTERACTION`. Contact-specific data can be analyzed in the Contacts app.

**Note**
For the prefill request and the submission of data, the data is mapped in both directions – from the external landing page tool format to SAP Marketing Cloud and from SAP Marketing Cloud to the external tool.

**Prerequisites**
Now you’ve explored the possible business scenarios, you might be interested in which prerequisites need to be fulfilled.

- **Scope Items**
  The following scope items are relevant and are included in the base scope:
  - Consumer and Customer Profiling (JC1)
  - Permission Marketing (1T1)
**Communication Scenario**

To integrate with Public APIs, you must start by configuring communication between your SAP Marketing Cloud solution and the Public APIs. This includes assigning the following communication scenario ID to communication users to enable communication between systems:

<table>
<thead>
<tr>
<th>Communication Scenario ID</th>
<th>Scenario Name</th>
<th>Required if you want to integrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_COM_0342</td>
<td>Marketing - External Landing Page Data Integration</td>
<td>Landing Pages</td>
</tr>
</tbody>
</table>

For more information, see Consuming the Integration APIs [page 390].

**Configuration Activities**

- To integrate external landing pages data with SAP Marketing Cloud, you must configure the SAP Cloud Platform Integration Package to your needs. For more information, see Setting Up SAP Cloud Platform Integration.
- SAP Marketing Cloud delivers preconfigured content but the configuration activities in the Contacts and Profiles [page 403] section may also be relevant. We recommend that you at least have a close look at the configuration activity Origin of Contact IDs. For more information, see Configuration Apps - Manage Your Solution.

**API Services**

The following API services are relevant for the scenarios described in this document:

<table>
<thead>
<tr>
<th>API Service</th>
<th>Help Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>API_MKT_CONTACT</td>
<td>Contacts [page 408]</td>
</tr>
<tr>
<td></td>
<td>Payload Examples [page 441]</td>
</tr>
<tr>
<td>API_MKT_INTERACTION</td>
<td>Interactions [page 605]</td>
</tr>
<tr>
<td></td>
<td>Payload Examples [page 634]</td>
</tr>
<tr>
<td>API_MKT_LANDING_PAGE</td>
<td>External Landing Pages [page 742]</td>
</tr>
<tr>
<td></td>
<td>Payload Examples [page 746]</td>
</tr>
</tbody>
</table>

### 5.3.2 External Landing Pages

Public OData API (API_MKT_LANDING_PAGE) for writing external landing pages to the SAP Marketing Cloud system.

The API service is part of communication scenario SAP_COM_0342.

⚠️ Caution

It’s possible to maintain two different target objects in the SAP Marketing Cloud system - Forms and Landing Pages. Depending on the target, you have the following options:
To provide your external landing pages as forms, use https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_LANDING_PAGE_SRV/. This is the default.

To provide your external landing pages as landing pages, use https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_LANDING_PAGE_SRV;v=0002/.

**Processing Information**

Requests can be submitted in batch mode or in non-batch mode. Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in https://www.odata.org/documentation/odata-version-2-0/uri-conventions/. The batch request must contain a header parameter content-type, specifying the value multipart/mixed and boundary=batch.

**Root URI:** https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_LANDING_PAGE_SRV/

**Technical Data**

**Technical Data of Service**

<table>
<thead>
<tr>
<th>Name of Service</th>
<th>API_MKT_LANDING_PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0342</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-LPC</td>
</tr>
</tbody>
</table>

**i Note**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

**Field Extensibility Supported**

No

**Technical Field Documentation**

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:
<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target Object: Forms</strong></td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
<tr>
<td><strong>Target Object: Landing Pages</strong></td>
<td></td>
</tr>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_LANDING_PAGE_SRV;v=0002/$metadata?sap-documentation=all</td>
<td></td>
</tr>
</tbody>
</table>

- **External Landing Page Metadata (Forms)**
- **External Landing Page Metadata (Landing Pages)Version 2**

<table>
<thead>
<tr>
<th>Remarks</th>
<th>General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. On the Details page, click Download Specification and download as EDMX.</td>
<td></td>
</tr>
<tr>
<td>2. Specify which application you want to use to open the EDMX file type.</td>
<td></td>
</tr>
</tbody>
</table>

- **External Landing Page Metadata (Forms) API**
- **External Landing Page Metadata (Landing Pages) Version 2 API**

<table>
<thead>
<tr>
<th>Remarks</th>
<th>General access link takes you directly to the External Landing Pages metadata files. One-time registration or logon is required.</th>
</tr>
</thead>
</table>

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

**Related Information**

- Structure of OData Service API_MKT_LANDING_PAGE [page 745]
- Payload Examples [page 746]
## 5.3.2.1 Structure of OData Service API_MKT_LANDING_PAGE

Complete list of entity sets for API_MKT_LANDING_PAGE.

### Structure of OData Service API_MKT_LANDING_PAGE

**OData Service Structure**

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>LandingPage</td>
<td>This entity contains the list of landing pages.</td>
<td>/LandingPages</td>
</tr>
<tr>
<td>Publication</td>
<td>This entity contains the list of publications for a landing page.</td>
<td>/Publications</td>
</tr>
</tbody>
</table>

### LandingPages

**LandingPages Entity**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get the list of landing pages</td>
<td>GET /LandingPages</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details for a landing page</td>
<td>GET /LandingPages('Origin';'External ID')</td>
</tr>
<tr>
<td>POST</td>
<td>Create a landing page</td>
<td>POST /LandingPages</td>
</tr>
<tr>
<td>PATCH</td>
<td>Create or delta update of a landing page. This creates a landing page if it does not exist.</td>
<td>PATCH /LandingPages('Origin';'External ID')</td>
</tr>
<tr>
<td>PUT</td>
<td>Update a landing page</td>
<td>PUT /LandingPages('Origin';'External ID')</td>
</tr>
</tbody>
</table>

### Publications

**Publications Entity**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get the list of publications</td>
<td>GET /Publications</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details for a publication</td>
<td>GET /Publications ('Key')</td>
</tr>
<tr>
<td>POST</td>
<td>Create a publication</td>
<td>POST /Publications</td>
</tr>
</tbody>
</table>
5.3.2.2 Payload Examples

The following examples show how you can use the External Landing Pages API.

GET: Get a Landing Page and its Publications

```
```

POST: Landing Page

Example 1

```
--batch
Content-Type: multipart/mixed; boundary=changeset_1
--changeset_1
content-type: application/http
content-transfer-encoding: binary
POST LandingPages HTTP/1.1
Accept: application/json
Content-Type: application/json
{
    "LandingPageName": "Landing Page Name",
    "LandingPageOrigin": "Z_ORIGIN",
    "LandingPageExternalId": "12345"
}
--changeset_1
content-type: application/http
content-transfer-encoding: binary
POST Publications HTTP/1.1
Accept: application/json
Content-Type: application/json
{
    "LandingPageOrigin": "origin",
    "LandingPageExternalId": "id",
    "LandingPagePublishedURL": "http://www.<yourdomain>.com"
}
--changeset_1--
--batch--
```

Example 2

```
--batch
Content-Type: multipart/mixed; boundary=changeset_1
--changeset_1
content-type: application/http
```
POST LandingPages HTTP/1.1
Accept: application/json
Content-Type: application/json
{
    "LandingPageName": "Landing Page Name",
    "LandingPageOrigin": "origin",
    "LandingPageExternalId": "id",
    "Publications": [
        {
            "LandingPageOrigin": "origin",
            "LandingPageExternalId": "id",
            "LandingPagePublishedURL": "http://www.<yourdomain>.com"
        }
    ]
}
--changeset_1--
--batch--

PATCH

Sample Code

--batch
Content-Type: multipart/mixed; boundary=changeset_1
--changeset_1
content-type: application/http
content-transfer-encoding: binary
PATCH LandingPages(LandingPageOrigin='origin',LandingPageExternalId='id') HTTP/1.1
Accept: application/json
Content-Type: application/json
{
    "LandingPageName": "Landing Page Name",
    "LandingPageOrigin": "origin",
    "LandingPageExternalId": "id"
}
--changeset_1
content-type: application/http
content-transfer-encoding: binary
POST Publications HTTP/1.1
Accept: application/json
Content-Type: application/json
{
    "LandingPageOrigin": "origin",
    "LandingPageExternalId": "id",
    "LandingPagePublishedURL": "http://www.<yourdomain>.com"
}
--changeset_1--
--batch--
5.3.3 External Landing Page Value Help

Public OData API (API_MKT_LANDING_PAGE_VALUEHELP) for retrieving attribute values used in landing pages. The API supports 14 attributes, such as Countries, Communication Categories, Marketing Areas, and Forms of Address.

The API service is part of communication scenario SAP_COM_0342.

Processing Information

For a complete list of all entity sets, see Structure of OData Service API_MKT_LANDING_PAGE_VALUEHELP [page 751].

Technical Data

<table>
<thead>
<tr>
<th>Technical Data of Service</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Service</td>
<td>API_MKT_LANDING_PAGE_VALUEHELP</td>
</tr>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0342</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-LPC</td>
</tr>
</tbody>
</table>

### i Note

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

<table>
<thead>
<tr>
<th>Field Extensibility Supported</th>
<th>No</th>
</tr>
</thead>
</table>

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:
Access Link | Remarks
---|---
https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_LANDING_PAGE_VALUEHELP_SRV/$metadata?sap-documentation=all | Only for internal access. You need to provide the server and port names.

Marketing - Landing Page Value Help | General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.
1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

External Landing Page Value Help API | General access link takes you directly to the External Landing Page Value Help metadata file. One-time registration or logon is required.

**i Note**
You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:createable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

**Overview**

11 of the 14 attributes consist of 3 properties. They follow the pattern: **Code**, **Name/Description**, and **Language**.

Key fields are **Code** and **Language**. For example, the attribute **Industries** has a two-digit code for **Industry** and a name/description for **IndustryName**. The language in which an entry is returned is always called **Language**. The following are examples for the **Industries** attribute:

- Industry = 02
- IndustryName = Financial Services

**i Note**
Name properties always end with **Name**.

- Language = EN

Or an entry as follows:

- Industry = 41
• IndustryName = Iron and Steel
• Language = EN

You can use a GET request with a filter in order to get a list of all industry codes in English:

3 of the 14 attributes supported consist of 4 properties. The following table gives you an overview:

Attributes and Properties

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Properties</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CommunicationCategory</td>
<td>CommunicationCategory</td>
<td>The attribute does not have a Language property. The only key field is the code field CommunicationCategory. To retrieve only communication categories that can be subscribed to, you must set the filter IsNewsletter eq X. Marketing Area is also one of the properties, and there is also an attribute for Marketing Areas. The attribute is used to retrieve all active marketing areas.</td>
</tr>
<tr>
<td>IsNewsletter</td>
<td>Marketing Area</td>
<td></td>
</tr>
<tr>
<td>Marketing Area</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interaction Types</th>
<th>InteractionType</th>
<th>Interaction Types is an attribute that has three key fields. In addition to the code of the interaction and the language, the CommunicationMedium is needed to retrieve a unique interaction type. The communication medium must be set to WEB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>InteractionTypeName</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regions</th>
<th>Region</th>
<th>The attribute for Regions has an additional key field for the country code (two-letter).</th>
</tr>
</thead>
<tbody>
<tr>
<td>RegionName</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Root URI: https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_LANDING_PAGE_VALUEHELP_SRV.

Related Information

Structure of OData Service API_MKT_LANDING_PAGE_VALUEHELP [page 751]
Payload Examples [page 753]
### 5.3.3.1 Structure of OData Service

#### APIMKT_LANDING_PAGE_VALUEHELP

Complete list of entity sets for APIMKT_LANDING_PAGE_VALUEHELP.

#### OData Service Structure

Complete List of Entity Sets

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Category</td>
<td>Contains all communication categories. Newsletters can be retrieved with filter InNewsletter equal to ‘X’.</td>
<td>/CommunicationCategories</td>
</tr>
<tr>
<td>Country</td>
<td>Contains all countries in all available languages. Uses two-digit country code.</td>
<td>/Countries</td>
</tr>
<tr>
<td>Department</td>
<td>Contains company departments, for example Human Resources.</td>
<td>/Departments</td>
</tr>
<tr>
<td>Function</td>
<td>Contains professional functions, for example Marketing Manager.</td>
<td>/Functions</td>
</tr>
<tr>
<td>Gender</td>
<td>Contains the values Gender not known, Female, and Male.</td>
<td>/Genders</td>
</tr>
<tr>
<td>Industry</td>
<td>Contains lines of business, for example Financial Services.</td>
<td>/Industries</td>
</tr>
<tr>
<td>Interest</td>
<td>Contains all interests that can be found in the system.</td>
<td>/ItemsOfInterest</td>
</tr>
<tr>
<td>Language</td>
<td>Contains ISO Code, descriptions in all available languages, and the language of the description.</td>
<td>/Languages</td>
</tr>
<tr>
<td>Marital Status</td>
<td>A marital status can be Single or Married, for example.</td>
<td>/MaritalStatuses</td>
</tr>
<tr>
<td>Marketing Area</td>
<td>Delivers all active marketing areas.</td>
<td>/MarketingAreas</td>
</tr>
<tr>
<td>Region</td>
<td>Contains all regions of countries in all available languages. Due to the large response body, it is recommended to use a filter, for example Language equals EN.</td>
<td>/Regions</td>
</tr>
</tbody>
</table>
### Entity

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form of Address</td>
<td>Contains the salutation, for example Mr. and Mrs. or Company.</td>
<td>/FormsOfAddress</td>
</tr>
<tr>
<td>Origin of ID</td>
<td>Contains the ID origin, for example, Phone Number or Email Address.</td>
<td>/Origins</td>
</tr>
<tr>
<td>Interaction Type</td>
<td>Contains interaction types such as OptOut for Marketing Permission. It must be filtered by CommunicationMedium equals WEB.</td>
<td>/InteractionTypes</td>
</tr>
</tbody>
</table>

Only the HTTP method **GET** is supported. All properties of all entity types can be filtered. The filter for **Language** works with every attribute except **Communication Categories** as it is not translated. You should use the two-letter ISO code for the **Language** field.

### Key Fields

List of Key Fields

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Key Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Category</td>
<td>CommunicationCategory</td>
</tr>
<tr>
<td>Country</td>
<td>Country, Language</td>
</tr>
<tr>
<td>Department</td>
<td>Department, Language</td>
</tr>
<tr>
<td>Function</td>
<td>InteractionContactFunction, Language</td>
</tr>
<tr>
<td>Gender</td>
<td>GenderCode, Language</td>
</tr>
<tr>
<td>Industry</td>
<td>Industry, Language</td>
</tr>
<tr>
<td>Interest</td>
<td>ItemOfInterest, Language</td>
</tr>
<tr>
<td>Language</td>
<td>LanguageISOCode, Language</td>
</tr>
<tr>
<td>Marital Status</td>
<td>MaritalStatus, Language</td>
</tr>
<tr>
<td>Marketing Area</td>
<td>MarketingArea, Language</td>
</tr>
<tr>
<td>Region</td>
<td>Region, Country, Language</td>
</tr>
<tr>
<td>Form of Address</td>
<td>FormOfAddress, Language</td>
</tr>
<tr>
<td>Origin of ID</td>
<td>InteractionContactOrigin, Language</td>
</tr>
</tbody>
</table>

Integration Guide

Integration APIs
5.3.3.2 Payload Examples

The following examples show how you can use the External Landing Page Value Help API.

Example 1


Example 2

https://<Server>:<Port>/sap/opu/odata/sap/API_MKT_LANDING_PAGE_VALUEHELP_SRV/Functions?$filter=InteractionContactFunctionName eq 'Marketing Manager'

Example 3


Example 4


5.4 Segmentation
5.4.1 Target Groups

Public OData API (API_MKT_TARGET_GROUP_SRV) for Target Groups

Overview [page 754]

Overview

The public API for Target Groups supports operations on the Target Group Business Object.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following authorizations are required:</td>
</tr>
<tr>
<td>Business Role</td>
<td>SAP_BCR_CEC_MKT_API_TGP_PC</td>
</tr>
<tr>
<td>Business Catalog</td>
<td>SAP_CEC_BC_MKT_API_TGP_PC</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-TG</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0205</td>
</tr>
<tr>
<td>Field Extensibility Supported</td>
<td>No</td>
</tr>
</tbody>
</table>

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

Note

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].
### Access Link

**Marketing - Target Group Details Page**

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click *Download Specification* and download as **EDMX**.
2. Specify which application you want to use to open the EDMX file type.

**Remarks**

**Target Groups API**

General access link takes you directly to the Target Groups metadata file. One-time registration or logon is required.

### i Note

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

### Related Information

https://api.sap.com

### 5.4.1.1 Structure of OData Service

**API_MKT_TARGET_GROUP_SRV**

This document describes the Public OData API service **API_MKT_TARGET_GROUP_SRV** for Target Groups.

### Entity Sets

The Target Groups OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>TargetGroups</td>
<td>This entity contains target group data</td>
<td>/TargetGroups</td>
</tr>
</tbody>
</table>
You can view sample payloads and test the API at https://api.sap.com.

### TargetGroups

**Resource Path:** `/TargetGroups`

You can perform the following operations on the TargetGroups entity set:

#### Operations on TargetGroups entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of Static, Dynamic, and Live target groups. This method supports standard OData parameters such as $filter, $select, $top, $orderby and $skip.</td>
<td><code>/TargetGroups?$top=&lt;Number of target groups&gt;</code></td>
</tr>
</tbody>
</table>

**i Note**

- The $top parameter is mandatory.
- The $expand parameter is not supported.
- You can get only 100 target groups with each request.
- You can get only the Member Type 03 (Contacts) from a Target Group.

| POST        | Get the details of a specific target group using the Target Group UUID      | `/TargetGroups(guid='<Target Group UUID>')`                         |

| POST        | Create a Static target group                                               | `/TargetGroups`                                                     |

#### Custom operations on TargetGroups entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Rebuild a Dynamic target group using the Target Group UUID</td>
<td><code>/RebuildTargetGroup?TargetGroupUUID=guid='&lt;Target Group UUID&gt;'</code></td>
</tr>
</tbody>
</table>

### TargetGroupInteractionContacts

**Resource Path:** `/TargetGroups(guid='<Target Group UUID>')/TargetGroupInteractionContacts`

You can perform the following operations on the TargetGroupInteractionContacts entity set:
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get Target Group Interaction Contacts of a specific Interaction Contact Origin from the required target group.</td>
<td>URI for <strong>$top</strong> and <strong>$filter</strong> parameters: <code>/TargetGroups(guid'&lt;Target Group UUID&gt;')/TargetGroupInteractionContacts?$top=&lt;Number of interaction contacts&gt; &amp; $filter=InteractionContactOrigin eq 'Channel or Origin of the Interaction Contact'</code></td>
</tr>
</tbody>
</table>

**Note**
- You must pass the **$top** parameter to get the following properties:
  - Target Group Interaction Contacts
  - Interaction Contact Origin
- You can get only 1000 target group interaction contacts with each request.
- The **$expand** parameter is not supported.
- You must pass the **$top** and **$filter** parameters to get the following properties:
  - Interaction Contact ID
  - Interaction Contact Origin
- The **$filter** parameter is not mandatory in the following scenarios:
  - You use the **$select** parameter to get the TargetGroupMemberUUID
  - You use the **$select** parameter to get the InteractionContactUUID
  - You use the **$select** parameter to get the TargetGroupUUID
  - To use the **$filter** parameter with Interaction Contact Origin, the Interaction Contact Origin must not be defined as **Shareable** in the system. |

| **POST**    | Assign an Interaction Contact to a specific target group by using the Interaction Contact UUID. | /TargetGroups(guid'<Target Group UUID>')/TargetGroupInteractionContacts |

**Note**
- You can assign only the Member Type 03 (Contacts) to a Target Group. |

Assign an Interaction Contact to a specific target group by using the Interaction Contact ID and Interaction Contact Origin. | /TargetGroups(guid'<Target Group UUID>')/TargetGroupInteractionContacts |

**Note**
- To assign a contact, the Interaction Contact Origin must not be defined as **Shareable** in your system. |
## 5.4.1.2 Payload Examples

The following examples show how you can use the Target Groups API.

### iNote

Delete request is not supported on Target Groups API.

### GET Requests - Examples

**Get the first 100 Target Groups**

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/TargetGroups?$format=json&$top=100

**Get the first 100 Target Groups filtered by Target Group Type and LifeCycle Status**

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/TargetGroups?
$filter=TargetGroupLifeCycleStatus eq '1' and TargetGroupCategoryName eq 'Static'&
$top=100&$format=json

**Get the first 100 Target Groups filtered by Marketing Area and Segmentation Object**

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/TargetGroups?
$filter=MarketingArea eq 'CXXGLOBAL' and SegmentationObject eq 'SAP_CONTACT.engagement.Sin'&
$top=100&$format=json

**Get the first 1000 Contacts (UUID, Contact ID, and Contact Origin) belonging to a particular Target Group**

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/TargetGroups(guid'9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9')/TargetGroupInteractionContacts?
$filter=InteractionContactOrigin eq 'SAP_CRM_BUPA'&
$select=InteractionContactUUID,TargetGroupUUID,InteractionContactId&$top=1000&$format=json

### POST Requests - Examples

**Create a Static Target Group**

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/TargetGroups

```json
{
    "TargetGroupName" : "DR-TG-2018-04-20T12:36:04.0000000",
    "MarketingArea" : "GLOBAL",
    "TargetGroupDescription" : "This API supports only Static TG creation-2018-04-20T12:36:04.0000000",
    "TargetGroupMainResponsible" : "hsghds",
    "TargetGroupMemberType" : "03"
}
```
Add a Contact, by its UUID to an existing Static Target Group

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/TargetGroups(guid'9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9')/TargetGroupInteractionContacts

**Sample Code**
```
{
    "InteractionContactUUID":"8CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9",
    "TargetGroupUUID":"9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9"
}
```

Add a Contact, by its Contact ID and Contact Origin to an existing Static Target Group

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/TargetGroups(guid'9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9')/TargetGroupInteractionContacts

**Sample Code**
```
{
    "TargetGroupUUID":"9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9",
    "InteractionContactId":"321981",
    "InteractionContactOrigin":"SAP_CRM_BUPA"
}
```

OData Batch Requests - Examples

POST a Target Group and Assign a Contact Using ICID and ICOrigin$_batch

/sap/opu/odata/SAP/API_MKT_TARGET_GROUP_SRV/$batch

**Sample Code**
```
--batch_01869434-0005
Content-Type: multipart/mixed; boundary=changeset_01869434-0005-0001
--changeset_01869434-0005-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST TargetGroups HTTP/1.1
Content-Type: application/json
Content-Length: 1021
Content-ID: 1
{"TargetGroupName":"API TG_BATCH1 _2018-04-20T12:36:04.0000000","MarketingArea":"GLOBAL","TargetGroupMemberType" :
"03"}
--changeset_01869434-0005-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST $1/TargetGroupInteractionContacts HTTP/1.1
Content-Type: application/json
Content-Length: 1021
{"InteractionContactId":"321981","InteractionContactOrigin":"SAP_CRM_BUPA"}
```
5.4.2 Export Target Groups and Target Group Member Data

With this integration you can export target groups to an external system.

For more information on how to export target group data, see:

- Create Export File
- Export Definitions

5.5 Campaign Management

5.5.1 OMC: Email and Text Message Service Provider

The Open Marketing Connector for Email and Text Message Service Provider provides you with a connector to enable easy integration of an external email or text message service provider (SP) with your SAP Marketing Cloud solution.

Business Scenario

For the launch of a new product, the marketing expert runs an email campaign. See the following business scenario for a typical process that can be performed using apps of SAP Marketing Cloud, integrated with external email or text message service providers, such as Amazon or SAP Digital Interconnect.
Integration Points and Steps

**SAP Marketing Cloud**

- **Marketing Expert**: Create and Start Campaign
  - Review Campaign Performance
  - Analyze Reports in Analytics and Report Gallery

**External Systems**

- **Email Service Provider**: Send Emails
  - Rest Service
  - Report Success Data Back to SAP Marketing Cloud

**Customer**: Customer Receives Email

**Integrated Processes**

**Create and Start Campaign**

For more information, see *Segmentation and Campaign Execution by Email*.

**Review Campaign Performance**

You can review the campaign performance directly in the campaign user interface (UI).

For more information, see *Campaign Performance*.

**Analyze Reports in Analytics and Report Gallery**

In addition, you can run reports with detailed insights.

For more information, see *Campaign Success for Messages*.

**How to Implement**

For more information about how to conduct your system with an external service provider, see:

- Setting Up Service Provider for Emails and Text Messages [page 100]
- Setting Up a Generic Email and Text Message Interface [page 107]

With the generic integration possibilities, you integrate your system using a generic JSON interface and the SAP Cloud Platform with your custom service provider API.
5.5.2 Campaign and Target Group Data

With the OData Service CUAN_INITIATIVE_SRV you can retrieve certain attributes of campaigns and target groups, for example, for the recommendation scenario.

Overview

With the OData Service CUAN_INITIATIVE_SRV you can retrieve certain attributes of campaigns and target groups, for example, for the recommendation scenario.

Details of the Service Entity

- **URLs:**
- **Request Mode:** GET
- **Entity Data Model:** CUAN Initiative (CUAN_INITIATIVE)

Support of OData Features: See the following chapters for implementation details and search behavior of the OData services.

Entity Type

**Initiative Entity Type**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the campaign</td>
<td>Edm.String</td>
<td>40</td>
<td>No</td>
</tr>
<tr>
<td>Description</td>
<td>The description of the campaign</td>
<td>Edm.String</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>InitiativeId</td>
<td>The identifier of the campaign</td>
<td>Edm.String</td>
<td>10</td>
<td>Yes</td>
</tr>
<tr>
<td>InitiativeExt</td>
<td>The external identifier of the campaign</td>
<td>Edm.String</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>LifeCycleStatus-StatusCode</td>
<td>The life cycle status code of the campaign</td>
<td>Edm.String</td>
<td>1</td>
<td>No</td>
</tr>
</tbody>
</table>
### Property Description

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>LifeCycleStatus-StatusDescription</td>
<td>The life cycle status description of the campaign</td>
<td>Edm.String</td>
<td>60</td>
<td>No</td>
</tr>
<tr>
<td>Search-SearchTerm</td>
<td>The search term of the campaign</td>
<td>Edm.String</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>Search-TileFilterCategory</td>
<td>The tile filter category of the campaign</td>
<td>Edm.String</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>Category-CategoryCode</td>
<td>The category code of the campaign</td>
<td>Edm.String</td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>Category-CategoryDescription</td>
<td>The category description of the campaign</td>
<td>Edm.String</td>
<td>60</td>
<td>No</td>
</tr>
<tr>
<td>Category-CategoryType</td>
<td>The category type of the campaign</td>
<td>Edm.Int16</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>Filter-InteractionContactId</td>
<td>The interaction contact identifier of the campaign</td>
<td>Edm.String</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>Filter-InteractionContactIdOrigin</td>
<td>The interaction contact identifier origin of the campaign</td>
<td>Edm.String</td>
<td>20</td>
<td>No</td>
</tr>
</tbody>
</table>

### Target Group Entity Type

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>TargetGroupId</td>
<td>The identifier of the target group</td>
<td>Edm.String</td>
<td>10</td>
<td>Yes</td>
</tr>
<tr>
<td>CustomerMemberCount</td>
<td>The customer member count of the target group</td>
<td>Edm.Int32</td>
<td>n.a.</td>
<td>No</td>
</tr>
</tbody>
</table>

### OData Service Call (GET) Examples Used in the Recommendation Scenario

Searching campaigns with a search term and additional filters:

```plaintext
https://<Server>:<Port>/sap/opu/odata/sap/CUAN_INITIATIVE_SRV/Initiatives/?$expand=TargetGroup&$select=Name,Description,InitiativeId,InitiativeIdExt,LifecycleStatus,TargetGroupId,CustomerMemberCount&$filter=Search/SearchTerm eq 'tes' and Category/
```
Selecting a specific campaign to create a customer segment:

Sample Code

https://<Server>:<Port>/sap/opu/odata/sap/CUAN_INITIATIVE_SRV/Initiatives('0000009108')/?$expand=TargetGroup&$select=Name,Description,InitiativeId,InitiativeIdExt,LifecycleStatus,TargetGroup/CustomerMemberCount

Getting campaigns for the current user with the specified filters:

Sample Code

https://<Server>:<Port>/sap/opu/odata/sap/CUAN_INITIATIVE_SRV/Initiatives/?$select=Name,Description,InitiativeId,InitiativeIdExt&$filter=Category/CategoryCode eq '' and Search/TileFilterCategory eq '1' and (Filter/InteractionContactId eq '1d998c85cc3d5205' or Filter/InteractionContactId eq 'john.dempsey@hana.com') and (Filter/InteractionContactIdOrigin eq 'EMAIL' or Filter/InteractionContactIdOrigin eq 'COOKIE_ID')

5.5.3 Campaign Execution Plans

Campaign execution plans can be imported from other systems using a public OData application programming interface (API).

You can use the public CUAN_MPO_IMPORT_SRV OData service to upload (import) campaign execution plans. The upload of campaign execution plans is always started through the ImportHeaders entity and a deep insert on the ExecPlanItem entity.

Entity Data Model

The following tables list the details of the Campaign Execution Plan import service entities.

<table>
<thead>
<tr>
<th>OData Version:</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URL:</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_MPO_IMPORT_SRV/</td>
</tr>
<tr>
<td>Permissions:</td>
<td>PFCG role: SAP_CEI_MPO_EXEC_PLAN_IMPORT</td>
</tr>
<tr>
<td>Support of OData Features:</td>
<td>See the following chapters for implementation details and search behavior of the OData services.</td>
</tr>
</tbody>
</table>
The OData service provides the basic CRUD services as follows:

The upload of data is always started through the `ImportHeader` entity and, in order to provide bulk processing, a deep insert on the `ExecPlanItem` entity (`CREATE_DEEP_ENTITY`).
The fields of the OData entities have the following meaning:

- **ImportHeader**
  - **Id**: A technical ID of one import service execution. In case no value is provided by the caller, an ID is generated by the system.
  - **Timestamp**: Timestamp of the import run. In case no value is provided by the caller, a timestamp is generated by the system.
  - **UserName**: Name of the user who started the import. In case no value is provided by the caller, the system uses system name.
  - **SourceSystemType**: The type of the source system and can be freely defined, for example, **CRM** or **ERP**.
  - **SourceSystemId**: The ID of the source system and can be freely defined.
  - **ProcessAllOrNothing**: In case an error occurs, this flag defines if all imported offers are discarded or only the faulty ones. Default is **true**.

- **ExecPlanItem**
  - **Id**
  - **OptimizationScenarioId**
  - **CampaignId**
  - **Timestamp**
  - **InteractionContactId**

### Calling the OData Service Operation

#### Create Request

The upload of campaign execution plans is started as a post request through the **ImportHeaders** entity and a deep insert on the **ExecPlanItem** entity (CREATE_DEEP_ENTITY). The following example shows the coding for creating a campaign execution plan.

**URL (POST):** /sap/opu/odata/sap/CUAN_MPO_IMPORT_SRV/ImportHeaders

**Sample Code**

```json
POST data: 
{
    "Id" : "",
    "Timestamp" : "2016-07-01T08:10:12",
    "SourceSystemType" : "EXT",
    "SourceSystemId" : "JMeter_Auto",
    "ExecPlanItems" : [
        {
            "Id" : "",
            "OptimizationScenarioId" : "PHONE",
            "CampaignId" : "234",
            "Timestamp" : "2016-06-16T13:10:12",
            "InteractionContactId" : "3440B5B11ACE1EE693DCDFBB3B211B5"
        },
        {
            "Id" : "",
            "OptimizationScenarioId" : "PHONE",
            "CampaignId" : "321",
            "Timestamp" : "2016-07-16T17:11:03",
            "InteractionContactId" : "3440B5B11ACE1EE69E934168A6E95CEE"
        }
    ]
}
```
Response

Example for response in case of successful creation:

```json
{
    "d": {
        
        : "__metadata": {
            : "id": "<system>:<port>/sap/opu/odata/sap/CUAN_MPO_IMPORT_SRV/ImportHeaders('E41D2DE534A01ED6A2F92AC2DD49165E')",
            : "uri": "<system>:<port>/sap/opu/odata/sap/CUAN_MPO_IMPORT_SRV/ImportHeaders('E41D2DE534A01ED6A2F92AC2DD49165E')",
            : "type": "CUAN_MPO_IMPORT_SRV.ImportHeader"
        },
        : "Id": "E41D2DE534A01ED6A2F92AC2DD49165E",
        : "Timestamp": "\Date(1467360612000)\",
        : "SourceSystemType": "EXT",
        : "SourceSystemId": "JMeter_Auto",
        : "Username": "AUT_TESTER",
        : "ProcessAllOrNothing": false,
        : "ExecPlanItems": null
    }
}
```

5.5.4 Campaigns

Public OData API (API_MKT_CAMPAIGN_SRV) for Campaigns.

Technical Data

The public API for Campaigns supports operations on the Campaigns business object.

Note

We recommend that you use the current version 0003 of this service. Don’t revert to using version 0002 once you start using version 0003 since this may result in data inconsistencies. However, if you want to continue using the previous version, you’ll find the help link here:

- Campaigns API, Version 0002: [Campaigns API, Version 0002](#)
### Root URI
```
https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;V=3
```

### Service Metadata URI
```
https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;V=3/$metadata
```

### Authorizations
The following business catalog role is required:
- SAP_CEC_BC_MKT_API_CPG3_PC

### Communication Scenario ID
SAP_COM_0204

### Component for Incidents
- CEC-MKT-CPG

#### **Note**
Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](page 402).

### Field Extensibility Supported
Yes

## Technical Field Documentation
You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=0002/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>
| [Marketing - Campaign Details Page](#) | General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.  
1. On the Details page, click Download Specification and download as EDMX.  
2. Specify which application you want to use to open the EDMX file type. |
| [Campaigns API](#) | General access link takes you directly to the Campaign metadata file. One-time registration or logon is required. |

#### **Note**
You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:
### Metadata Value in XML

<table>
<thead>
<tr>
<th>Metadata Value</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

### 5.5.4.1 Structure of API_MKT_CAMPAIGN_SRV

#### Entities

The Campaign OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaigns</td>
<td>This entity contains campaign data.</td>
<td>/Campaigns</td>
</tr>
<tr>
<td>AssignedTargetGroups</td>
<td>This entity contains target groups that are assigned to a campaign.</td>
<td>/CampaignAssignedTargetGroups</td>
</tr>
<tr>
<td>TeamMembers</td>
<td>This entity contains team members that are assigned to a campaign.</td>
<td>/CampaignAssignedTeamMembers</td>
</tr>
<tr>
<td>ActualSpends</td>
<td>This entity provides information on the actual spend amount and the committed amount of a campaign.</td>
<td>/ActualSpends</td>
</tr>
<tr>
<td>SpendHeaders</td>
<td>This entity provides generic information about spend period, status and whether SpendItems exists or not. SpendHeaders contains data as soon as spend information for a campaign is maintained.</td>
<td>/SpendHeaders</td>
</tr>
<tr>
<td>ExternalCampaignReferences</td>
<td>This entity contains external campaigns that are assigned to a campaign.</td>
<td>/ExternalCampaignReferences</td>
</tr>
<tr>
<td>Interests</td>
<td>This entity contains interests that are assigned to a campaign.</td>
<td>/CampaignAssignedInterests</td>
</tr>
<tr>
<td>SpendHeaderTimeSplits</td>
<td>This entity exists for each SpendHeaders and provides information on how the planned spend header amount is distributed over the period.</td>
<td>/SpendHeaderTimeSplits</td>
</tr>
<tr>
<td>SpendItemTimeSplits</td>
<td>This entity exists for each SpendItem and provides information on how the planned spend item amount is distributed to the spend periods.</td>
<td>/SpendItemTimeSplits</td>
</tr>
<tr>
<td>SpendItems</td>
<td>This entity contains data as soon as a campaign is planned in detail. It provides generic information about the spend item itself and its spend period.</td>
<td>/SpendItems</td>
</tr>
</tbody>
</table>

You can view sample payloads and test the API at https://api.sap.com.
## Campaigns

**Resource Path:** /Campaigns

You can perform the following operations on the **Campaigns** entity set:

### Operations on Campaigns entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of campaigns. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby.</td>
<td>/Campaigns?$top=1</td>
</tr>
</tbody>
</table>

**i Note**

- The Campaigns OData API does not support Lead Transfer Campaigns (process type = '05').
- A maximum of 100 campaigns can be fetched in a single request.

<table>
<thead>
<tr>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get the details of a specific campaign using the Campaign UUID.</td>
<td>/Campaigns(guid '&lt;Campaign UUID&gt;')</td>
</tr>
<tr>
<td>Get a list of campaigns.</td>
<td>/Campaigns</td>
</tr>
<tr>
<td>Get a specific campaign using the Campaign UUID.</td>
<td>/Campaigns((Campaign UUID))</td>
</tr>
<tr>
<td>Get a list of target groups assigned to a specific campaign.</td>
<td>/Campaigns((Campaign UUID))/CampaignAssignedTargetGroups</td>
</tr>
<tr>
<td>Get a list of assigned team members to a campaign using the Campaign UUID.</td>
<td>/Campaigns((Campaign UUID))/CampaignAssignedTeamMembers</td>
</tr>
<tr>
<td>Get the actual spend of a specific campaign.</td>
<td>/Campaigns((Campaign UUID))/CampaignActualSpend</td>
</tr>
<tr>
<td>Get a specific campaign's spend header information.</td>
<td>/Campaigns((Campaign UUID))/CampaignSpendHeader</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of external campaign references from a specific campaign.</td>
</tr>
<tr>
<td></td>
<td>Get a list of a campaign's assigned interests.</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a campaign.</td>
</tr>
<tr>
<td></td>
<td>Create a campaign and assign a target group to the campaign by using the <code>$batch</code> parameter.</td>
</tr>
<tr>
<td></td>
<td>Add a target group to a specific campaign.</td>
</tr>
<tr>
<td></td>
<td>Assign team members to a specific campaign.</td>
</tr>
<tr>
<td></td>
<td>Add spend headers to a specific campaign.</td>
</tr>
<tr>
<td></td>
<td>Assign interests to a specific campaign.</td>
</tr>
<tr>
<td></td>
<td>Create a campaign from a template.</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update the data for an <em>In Preparation</em> campaign.</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update the data for an <em>In Preparation</em> campaign. For example, you can update the Life Cycle Status of a campaign.</td>
</tr>
</tbody>
</table>
### AssignedTargetGroups

**Resource Path:** /AssignedTargetGroups

You can perform the following operations on the `AssignedTargetGroups` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of target groups assigned to the campaign.</td>
<td>/Campaigns({CampaignUUID})/CampaignAssignedTargetGroups</td>
</tr>
<tr>
<td></td>
<td>Get the details of an assigned target group.</td>
<td>/AssignedTargetGroups(TargetGroupUUID={TargetGroupUUID},CampaignUUID={CampaignUUID})</td>
</tr>
<tr>
<td></td>
<td>Get the details of all target groups.</td>
<td>/AssignedTargetGroups</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an assigned target group for a specific campaign by using the Campaign UUID.</td>
<td>/Campaigns({CampaignUUID})/CampaignAssignedTargetGroups</td>
</tr>
<tr>
<td></td>
<td>Assign target groups to a campaign.</td>
<td>/AssignedTargetGroups</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete an assigned target group from a campaign.</td>
<td>/AssignedTargetGroups(TargetGroupUUID={TargetGroupUUID},CampaignUUID={CampaignUUID})</td>
</tr>
</tbody>
</table>

### TeamMembers

**Resource Path:** /TeamMembers

You can perform the following operations on the `TeamMembers` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of team members assigned to a specific campaign.</td>
<td>/Campaigns({CampaignUUID})/CampaignAssignedTeamMembers</td>
</tr>
<tr>
<td></td>
<td>Get the details of an assigned team member.</td>
<td>/TeamMembers(CampaignUUID={CampaignUUID},TeamMemberName='{TeamMemberName}')</td>
</tr>
<tr>
<td></td>
<td>Get the details of all team members.</td>
<td>/TeamMembers</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an assigned interest for a specific campaign by using the Campaign UUID.</td>
<td>/Campaigns({CampaignUUID})/CampaignAssignedTeamMembers</td>
</tr>
<tr>
<td></td>
<td>Add new team members.</td>
<td>/TeamMembers</td>
</tr>
</tbody>
</table>
### HTTP Method

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATCH</td>
<td>Update the data of a team member. For example, you can change the owner of a campaign.</td>
<td><code>/TeamMembers(CampaignUUID={CampaignUUID}, TeamMemberName='{TeamMemberName}')</code></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELETE</td>
<td>Delete an assigned team member from a campaign.</td>
<td><code>/TeamMembers(CampaignUUID={CampaignUUID}, TeamMemberName='{TeamMemberName}')</code></td>
</tr>
</tbody>
</table>

### ActualSpends

**Resource Path:** /ActualSpends

You can perform the following operations on the ActualSpends entity set:

#### Operations on ActualSpends entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of actual spends.</td>
<td><code>/ActualSpends</code></td>
</tr>
</tbody>
</table>

Get a list of actual spends for a specific campaign.

### SpendHeaders

**Resource Path:** /SpendHeaders

You can perform the following operations on the SpendHeaders entity set:

#### Operations on SpendHeaders entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get specific spend header information.</td>
<td><code>/SpendHeaders({MarketingSpendHeaderUUID})</code></td>
</tr>
</tbody>
</table>

**Note**

Do not use GET SpendHeader if IsPlannedInDetail == true.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Get</strong></td>
<td>Get a list of spend headers.</td>
<td>/SpendHeaders</td>
</tr>
<tr>
<td></td>
<td>Get a spend header for a campaign.</td>
<td>/Campaigns({CampaignUUID})/CampaignSpendHeader</td>
</tr>
<tr>
<td></td>
<td>Get the header time split from a specific spend header.</td>
<td>/SpendHeaders({MarketingSpendHeaderUUID})/HeaderTimeSplit</td>
</tr>
<tr>
<td></td>
<td>Get a list of items from a specific spend header.</td>
<td>/SpendHeaders({MarketingSpendHeaderUUID})/Item</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a spend header for an existing campaign.</td>
<td>/SpendHeaders</td>
</tr>
<tr>
<td></td>
<td>Deep create: Create a spend header including its spend items and spend item time splits for an existing campaign.</td>
<td>/Campaigns({CampaignUUID})/CampaignSpendHeader</td>
</tr>
<tr>
<td></td>
<td>Add a campaign spend header to a specific campaign.</td>
<td>/SpendHeaders({MarketingSpendHeaderUUID})/Item</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update a specific spend header.</td>
<td>/SpendHeaders({MarketingSpendHeaderUUID})</td>
</tr>
</tbody>
</table>

### ExternalCampaignReferences

**Resource Path:** /ExternalCampaignReferences

You can perform the following operations on the ExternalCampaignReferences entity set:

Operations on ExternalCampaignReferences entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of external campaign references for a specific campaign.</td>
<td>/Campaigns({CampaignUUID})/ExternalCampaignReferences</td>
</tr>
<tr>
<td></td>
<td>Get details of a specific external campaign reference.</td>
<td>/ExternalCampaignReferences({ExternalCampaignUUID})</td>
</tr>
</tbody>
</table>
HTTP Method | Description | Path
--- | --- | ---
 | Get a list of external campaign references. | /ExternalCampaignReferences

**Interests**

**Resource Path:** /Interests

You can perform the following operations on the Interests entity set:

**Operations on Interests entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of interests assigned to a specific campaign.</td>
<td>/Campaigns({CampaignUUID})/CampaignAssignedInterests</td>
</tr>
<tr>
<td></td>
<td>Get the details of an assigned interest.</td>
<td>/Interests(CampaignUUID={CampaignUUID},InterestItem='{InterestItem}')</td>
</tr>
<tr>
<td></td>
<td>Get the details of all interests.</td>
<td>/Interests</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an assigned interest for a specific campaign by using the Campaign UUID.</td>
<td>/Campaigns({CampaignUUID})/CampaignAssignedInterests</td>
</tr>
<tr>
<td></td>
<td>Add new interests.</td>
<td>/Interests</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete an assigned interest from a campaign.</td>
<td>/Interests(CampaignUUID={CampaignUUID},InterestItem='{InterestItem}')</td>
</tr>
</tbody>
</table>

**SpendHeaderTimeSplits**

**Resource Path:** /SpendHeaderTimeSplits

You can perform the following operations on the SpendHeaderTimeSplits entity set:

**Operations on SpendHeaderTimeSplits entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get specific spend header time split information.</td>
<td>/SpendHeaderTimeSplits/{MarketingSpendHdrTimeSplitUUID}</td>
</tr>
<tr>
<td></td>
<td>Get a list of spend header time splits.</td>
<td>/SpendHeaderTimeSplits</td>
</tr>
</tbody>
</table>
## SpendItemTimeSplits

**Resource Path:** /SpendItemTimeSplits

You can perform the following operations on the SpendItemTimeSplits entity set:

### Operations on SpendItemTimeSplits entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get specific spend item time split information.</td>
<td>/SpendItemTimeSplits({MarketingSpendItmTimeSplitUUID})</td>
</tr>
<tr>
<td></td>
<td>Get a list of spend item time splits.</td>
<td>/SpendItemTimeSplits</td>
</tr>
<tr>
<td></td>
<td>Get spend item time splits for a specific spend item.</td>
<td>/SpendItems({MarketingSpendItemUUID})/ItemTimeSplit</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create spend item time splits.</td>
<td>/SpendItemTimeSplits</td>
</tr>
<tr>
<td></td>
<td>Create a spend item time split and add them to a specific spend item.</td>
<td>/SpendItems({MarketingSpendItemUUID})/ItemTimeSplit</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update a specific spend item time split.</td>
<td>/SpendItemTimeSplits({MarketingSpendItmTimeSplitUUID})</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete a specific spend item time split.</td>
<td>/SpendItemTimeSplits({MarketingSpendItmTimeSplitUUID})</td>
</tr>
</tbody>
</table>

## SpendItems

**Resource Path:** /SpendItems
You can perform the following operations on the `SpendItems` entity set:

### Operations on SpendItems entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get specific spend item information.</td>
<td>*/SpendItems({MarketingSpendItemUUID})</td>
</tr>
<tr>
<td></td>
<td>Get a list of spend items.</td>
<td>*/SpendItems</td>
</tr>
<tr>
<td></td>
<td>Get spend items for a specific spend header.</td>
<td>*/SpendHeaders({MarketingSpendHeaderUUID})/Item</td>
</tr>
<tr>
<td></td>
<td>Get item time splits for a specific spend item.</td>
<td>*/SpendItems({MarketingSpendItemUUID})/ItemTimeSplit</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a spend item.</td>
<td>*/SpendItems</td>
</tr>
<tr>
<td></td>
<td>Deep create: Create a spend item including its spend item time splits for an existing spend header.</td>
<td>*/SpendItems({MarketingSpendItemUUID})/ItemTimeSplit</td>
</tr>
<tr>
<td></td>
<td>Add item time splits to a specific spend item.</td>
<td>*/SpendItems({MarketingSpendItemUUID})/ItemTimeSplit</td>
</tr>
<tr>
<td></td>
<td>Add items to a specific spend header.</td>
<td>*/SpendHeaders({MarketingSpendHeaderUUID})/Item</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update a specific spend item.</td>
<td>*/SpendItems({MarketingSpendItemUUID})</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete a specific spend item and all related spend item time splits.</td>
<td>*/SpendItems({MarketingSpendItemUUID})</td>
</tr>
</tbody>
</table>

### 5.5.4.2 Payload Examples

The following examples show how you can use the Campaigns API.

#### GET Requests - Examples

**Get the First 100 Campaigns**

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/Campaigns?$top=100&$format=json
Get the First 100 Campaigns Filtered by Campaign Category and LifeCycle Status

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/Campaigns?
$filter=LifecycleStatus eq '1' and CampaignCategory eq 'CME'&$top=100&$format=json

Get the First 100 Campaigns Filtered by Marketing Area and Media Type

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/Campaigns?$filter=MediaType eq 'PRINT' and MarketingArea eq 'CXXGLOBAL'&$top=100&$format=json

Get a Campaign's Assigned Target Group, Interests, Assigned Team Members

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/Campaigns(guid'94188283-1c7d-1ed9-82d1-59d7230c7110')?
$expand=CampaignAssignedTargetGroups,CampaignAssignedInterests,CampaignAssignedTeamMembers&$format=json

POST Requests - Examples

Post a Campaign

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/Campaigns

```json
{
  "CampaignName": "Email Campaign 1SY 2018-04-20T12:36:04.0000000",
  "CampaignDescription" : "V2 New Description 2018-04-20T12:36:04.0000000",
  "MarketingArea" : "Global",
  "CampaignCategory" :  "CME",
  "CommunicationCategoryUUID" : "1C98EC18-1855-1EE7-A8BF-713D0AF485F8",
  "MarketingProgramUUID": "0050569F-4A52-1ED7-8481-8A95A404CF53",
  "MediaType" : "PRINT",
  "CampaignPriority" : "3",
  "CampaignExecutionFrqcyUnit" : "2"
}
```

Assign a Target Group to a Created Campaign

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/Campaigns(guid'94188283-1c7d-1ed9-82d1-59d7230c7110')/CampaignAssignedTargetGroups

```json
{
  "TargetGroupUUID": "9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9"
}
```

Assign a Team Member to a Campaign

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/Campaigns(guid'94188283-1c7d-1ed9-82d1-59d7230c7110')/CampaignAssignedTeamMembers
Assign an Interest to a Created Campaign

```
{
    "CampaignUUID": "94188283-1c7d-1ed9-82d1-59d7230c7110",
    "InterestItem": "CAMERA"
}
```

Update Requests - Examples

PUT a Campaign

```
{
    "CampaignName": "Email Campaign 1 SY 2018-04-20T12:36:04.0000000",
    "CampaignDescription": "DR_PUT-DESC Change",
    "CampaignScheduleDateTime": "2018-07-30T11:36:00",
    "CampaignExecutionFrqcyInterval": "001",
    "CampaignExecutionFrqcyUnit": "3",
    "MediaType": "PRINT",
    "MarketingProgramUUID": "0050569F-4A52-1ED7-8481-8A95A404CF53",
    "CommunicationCategoryUUID": "1C98EC18-1855-1EE7-A8BF-713D0A84F853",
    "CampaignPriority": "1",
    "CampaignStartDate": "2018-06-22T00:00:00",
    "CampaignEndDate": "2018-08-22T00:00:00",
    "CampaignOwner": "CB9980000130"
}
```

PUT a Campaign's Team Member

```
{
    "TeamMemberName": "ERIKA",
    "IsOwner": true
}
```
Delete Requests - Examples

Unassign a Target Group from a Campaign

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/
AssignedTargetGroups(TargetGroupUUID='guid'9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9',CampaignUUID='guid'94188283-1c7d-1ed9-82d1-59d7230c7110')

Unassign a Team Member from a Campaign

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/
TeamMembers(CampaignUUID='guid'94188283-1c7d-1ed9-82d1-59d7230c7110',TeamMemberName= 'CB9980000130')

Unassign an Interest from a Campaign

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/
Interests(CampaignUUID='guid'94188283-1c7d-1ed9-82d1-59d7230c7110',InterestItem='CAMERA')

Batch OData Requests - Examples

Create Campaigns in a Batch

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/$batch

```
--batch_020c-a527-decc
Content-Type: multipart/mixed; boundary=changeset_9970-5898-d67d
--changeset_9970-5898-d67d
Content-Type: application/http
Content-Transfer-Encoding: binary
POST Campaigns?sap-client=100 HTTP/1.1
sap-contextid-accept: header
Accept: application/json
Accept-Language: en
DataServiceVersion: 2.0
MaxDataServiceVersion: 2.0
sap-cancel-on-close: true
Content-Type: application/json
Content-Length: 588
{"CampaignName":"DR CPG -1
2018-04-20T12:36:04.0000000","CampaignDescription":"My CPG
2018-04-20T12:36:04.0000000","MarketingArea":"GLOBAL","CampaignCategory":"CME"}
--changeset_9970-5898-d67d
Content-Type: application/http
Content-Transfer-Encoding: binary
POST Campaigns?sap-client=100 HTTP/1.1
sap-contextid-accept: header
Accept: application/json
Accept-Language: en
DataServiceVersion: 2.0
MaxDataServiceVersion: 2.0
sap-cancel-on-close: true
Content-Type: application/json
Content-Length: 588
```
Assign Target Group to a Campaign in a Batch

`/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/$batch`

**Sample Code**

```bash
--batchtest01
Content-Type: multipart/mixed; boundary=changeset
--changeset
```
Assign Team Members to a Campaign in a Batch

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/$batch

```xml
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:CampaignUUID>94188283-1c7d-1ed9-82d1-59d723c7110</d:CampaignUUID>
<d:TargetGroupUUID>9CDCD400-0C70-1ED6-BF9C-0C6E0BB242E9</d:TargetGroupUUID>
</m:properties>
</atom:content>
</atom:entry>
```
Assign Interests to a Campaign in a Batch

/sap/opu/odata/SAP/API_MKT_CAMPAIGN_SRV;v=3/$batch

---Sample Code---

```http
POST Campaigns(guid'94188283-1c7d-1ed9-82d1-59d7230c7110')/CampaignAssignedInterests HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 588
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:CampaignUUID>94188283-1c7d-1ed9-82d1-59d7230c7110</d:CampaignUUID>
<d:InterestItem>CAMERA</d:InterestItem>
</m:properties>
</atom:content>
</atom:entry>
```

---Sample Code---

```http
POST Campaigns(guid'94188283-1c7d-1ed9-82d1-59d7230c7110')/CampaignAssignedInterests HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 588
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:CampaignUUID>94188283-1c7d-1ed9-82d1-59d7230c7110</d:CampaignUUID>
<d:InterestItem>CAMERA</d:InterestItem>
</m:properties>
</atom:content>
</atom:entry>
```

---Sample Code---

```http
POST Campaigns(guid'94188283-1c7d-1ed9-82d1-59d7230c7110')/CampaignAssignedInterests HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 588
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:CampaignUUID>94188283-1c7d-1ed9-82d1-59d7230c7110</d:CampaignUUID>
<d:InterestItem>CAMERA</d:InterestItem>
</m:properties>
</atom:content>
</atom:entry>
```
Spend Header, Spend Item, and Spend Item Time Splits

Create One Spend Header, One Spend Item, and Three Spend Item Time Splits

The following is a deep create example using content-id and one batch request:

```xml
<?xml version="1.0" encoding="utf-8" standalone="yes"?><atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:CampaignName>Email Campaign Batch 1</d:CampaignName>
<d:CampaignDescription>Email Campaign</d:CampaignDescription>
<d:MarketingArea>GERMANY</d:MarketingArea>
</m:properties>
</atom:content></atom:entry>

POST Campaigns HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 999
Content-ID: 2
<?xml version="1.0" encoding="utf-8" standalone="yes"?><atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:MarketingSpendPeriodStartYear>2018</d:MarketingSpendPeriodStartYear>
<d:MarketingSpendPeriodStartMonth>01</d:MarketingSpendPeriodStartMonth>
<d:MarketingSpendPeriodEndYear>2018</d:MarketingSpendPeriodEndYear>
<d:MarketingSpendPeriodEndMonth>04</d:MarketingSpendPeriodEndMonth>
<d:PlannedMktgSpendHeaderAmt>5000.00</d:PlannedMktgSpendHeaderAmt>
<d:PlannedMktgSpendHeaderCrcy>USD</d:PlannedMktgSpendHeaderCrcy>
</m:properties>
</atom:content>
```

Sample Code

```
--batchtest_085421042017-0001
Content-Type: multipart/mixed; boundary=changeset_085421042017-0001-0001
--changeset_085421042017-0001-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST Campaigns HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 999
Content-ID: 1
<?xml version="1.0" encoding="utf-8" standalone="yes"?><atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:CampaignName>Email Campaign Batch 1</d:CampaignName>
<d:CampaignDescription>Email Campaign</d:CampaignDescription>
<d:MarketingArea>GERMANY</d:MarketingArea>
</m:properties>
</atom:content></atom:entry>

--changeset_085421042017-0001-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST $1/CampaignSpendHeader HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 999
Content-ID: 2
<?xml version="1.0" encoding="utf-8" standalone="yes"?><atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:MarketingSpendPeriodStartYear>2018</d:MarketingSpendPeriodStartYear>
<d:MarketingSpendPeriodStartMonth>01</d:MarketingSpendPeriodStartMonth>
<d:MarketingSpendPeriodEndYear>2018</d:MarketingSpendPeriodEndYear>
<d:MarketingSpendPeriodEndMonth>04</d:MarketingSpendPeriodEndMonth>
<d:PlannedMktgSpendHeaderAmt>5000.00</d:PlannedMktgSpendHeaderAmt>
<d:PlannedMktgSpendHeaderCrcy>USD</d:PlannedMktgSpendHeaderCrcy>
</m:properties>
</atom:content>
```
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POST $2/Item HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 999
Content-ID: 10

<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:MarketingSpendType>DIGITAL</d:MarketingSpendType>
<d:MarketingSpendItemName>Digi Costs</d:MarketingSpendItemName>
<d:MarketingSpendPeriodStartYear>2018</d:MarketingSpendPeriodStartYear>
<d:MarketingSpendPeriodStartMonth>02</d:MarketingSpendPeriodStartMonth>
<d:MarketingSpendPeriodEndYear>2018</d:MarketingSpendPeriodEndYear>
<d:MarketingSpendPeriodEndMonth>04</d:MarketingSpendPeriodEndMonth>
</m:properties>
</atom:content></atom:entry>

POST $10/ItemTimeSplit HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 999
Content-ID: 10

<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:MarketingSpendCalendarYear>2018</d:MarketingSpendCalendarYear>
<d:MarketingSpendCalendarQuarter>1</d:MarketingSpendCalendarQuarter>
<d:MarketingSpendCalendarMonth>02</d:MarketingSpendCalendarMonth>
<d:PlannedMktgSpendAmt>2000.00</d:PlannedMktgSpendAmt>
<d:PlannedMktgSpendCrcy>USD</d:PlannedMktgSpendCrcy>
</m:properties>
</atom:content></atom:entry>

POST $10/ItemTimeSplit HTTP/1.1
Content-Type: application/atom+xml
Content-Length: 999
Content-ID: 10

<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<atom:entry xmlns:atom="http://www.w3.org/2005/Atom"
<atom:content type="application/xml">
<m:properties>
<d:MarketingSpendCalendarYear>2018</d:MarketingSpendCalendarYear>
<d:MarketingSpendCalendarQuarter>1</d:MarketingSpendCalendarQuarter>
<d:MarketingSpendCalendarMonth>03</d:MarketingSpendCalendarMonth>
<d:PlannedMktgSpendAmt>3000.00</d:PlannedMktgSpendAmt>
<d:PlannedMktgSpendCrcy>USD</d:PlannedMktgSpendCrcy>
</m:properties>
</atom:content></atom:entry>
Spend Header

Create Spend Header

**Sample Code**

```json
{
  "MarketingSpendStatus" : "00",
  "CampaignUUID" : "6C0B84B7-5523-1ED7-BBF7-F8A14CC949B6",
  "MarketingSpendPeriodStartYear" : "2018",
  "MarketingSpendPeriodStartMonth" : "03",
  "MarketingSpendPeriodEndYear" : "2018",
  "MarketingSpendPeriodEndMonth" : "04",
  "PlannedMktgSpendHeaderAmt" : "3000.00",
  "PlannedMktgSpendHeaderCrcy" : "USD"
}
```

Update Spend Header Period and Planned Spend

**Sample Code**

```json
{
  "MarketingSpendPeriodStartYear" : "2018",
  "MarketingSpendPeriodStartMonth" : "04",
  "MarketingSpendPeriodEndYear" : "2018",
  "MarketingSpendPeriodEndMonth" : "05",
  "PlannedMktgSpendHeaderAmt" : "10000",
  "PlannedMktgSpendHeaderCrcy" : "USD"
}
```
Spend Item

Create Spend Item

Sample Code

```json
{
    "MarketingSpendHeaderUUID" : "6C0B84B7-5523-1EE7-BED2-B47CFBED5A07",
    "MarketingSpendType" : "DIGITAL",
    "MarketingSpendItemName" : "Print Costs",
    "MarketingSpendPeriodStartYear" : "2018",
    "MarketingSpendPeriodStartMonth" : "04",
    "MarketingSpendPeriodEndYear" : "2018",
    "MarketingSpendPeriodEndMonth" : "04"
}
```

Create One Spend Item and 2 Spend Item Time Splits

Sample Code

```json
{
    "MarketingSpendHeaderUUID" : "6C0B84B7-5523-1ED7-BED4-79CB3454407E",
    "MarketingSpendType" : "Print",
    "MarketingSpendItemName" : "Paper",
    "MarketingSpendPeriodStartYear" : "2018",
    "MarketingSpendPeriodStartMonth" : "04",
    "MarketingSpendPeriodEndYear" : "2018",
    "MarketingSpendPeriodEndMonth" : "05",
    "ItemTimeSplit" : [
        {
            "MarketingSpendCalendarYear" : "2018",
            "MarketingSpendCalendarQuarter" : "2",
            "MarketingSpendCalendarMonth" : "04",
            "PlannedMktgSpendAmt" : "4000.00",
            "PlannedMktgSpendCrcy" : "USD"
        },
        {
            "MarketingSpendCalendarYear" : "2018",
            "MarketingSpendCalendarQuarter" : "2",
            "MarketingSpendCalendarMonth" : "05",
            "PlannedMktgSpendAmt" : "5000.00",
            "PlannedMktgSpendCrcy" : "USD"
        }
    ]
}
```

Spend Item Time Splits

Create Spend Item Time Splits

Sample Code

```json
{
    "MarketingSpendItemUUID" : "6C0B84B7-5523-1ED8-80D0-9AAE7F2C3528",
    "MarketingSpendCalendarYear" : "2018",
    "MarketingSpendCalendarQuarter" : "1",
    "MarketingSpendCalendarMonth" : "04",
    "PlannedMktgSpendAmt" : "6000.00",
    "PlannedMktgSpendCrcy" : "USD"
}
```
5.5.4.3 Function Imports

Function imports are used to perform custom operations on an entity, in addition to typical OData operations.

Create Campaign Using Campaign Template ID and Description

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Create a campaign using the campaign template ID and description</td>
<td>/CreateCampaignFromTemplate?TemplateID='&lt;Campaign Template ID&gt;'&amp;CampaignName='&lt;Description&gt;'</td>
</tr>
</tbody>
</table>

5.5.5 Campaign Templates

Public OData API (API_MKT_CAMPAIGN_TEMPLATE_SRV) for Campaign Templates.

Technical Data

The public API for Campaign Templates supports operations on the Campaign Templates business object.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_TEMPLATE_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_TEMPLATE_SRV/$metadata</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required:</td>
</tr>
<tr>
<td></td>
<td>• SAP_CEC_BC_MKT_API_CPG_PC</td>
</tr>
</tbody>
</table>
Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_TEMPLATE_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**Marketing - Campaign Templates Page**

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

**Campaign Templates API**

General access link takes you directly to the Campaign Templates metadata file. One-time registration or logon is required.

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap.updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>
Related Information

https://api.sap.com

5.5.5.1 Structure of API_MKT_CAMPAIGN_TEMPLATE_SRV

Entity Data Model

The Campaign Template OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>CampaignTemplates</td>
<td>This entity contains campaign template data.</td>
<td>/CampaignTemplates</td>
</tr>
<tr>
<td>AssignedInterests</td>
<td>This entity contains interests that are assigned to a campaign template.</td>
<td>/AssignedInterests</td>
</tr>
<tr>
<td>AssignedTargetGroups</td>
<td>This entity contains target groups that are assigned to a campaign template.</td>
<td>/CampaignAssignedTargetGroups</td>
</tr>
<tr>
<td>TeamMembers</td>
<td>This entity contains team members that are assigned to a campaign template.</td>
<td>/TeamMembers</td>
</tr>
</tbody>
</table>

You can view sample payloads and test the API at https://api.sap.com.

CampaignTemplates

Resource Path: /CampaignTemplates

You can perform the following operations on the CampaignTemplates entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of campaigns. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, and $orderby.</td>
<td>/CampaignTemplates</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details of a specific campaign template using the Campaign Template ID.</td>
<td>/CampaignTemplates('{'CampaignTemplate}')</td>
</tr>
</tbody>
</table>
**AssignedInterests**

**Resource Path:** /AssignedInterests

You can perform the following operations on the **AssignedInterests** entity set:

**HTTP Operations on AssignedInterests entity set**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of interests assigned to a specific campaign template.</td>
<td>/AssignedInterests(ItemOfInterest='{ItemOfInterest}',CampaignTemplate='{CampaignTemplate}')</td>
</tr>
<tr>
<td></td>
<td>Get a list of assigned interests.</td>
<td>/AssignedInterests</td>
</tr>
</tbody>
</table>

**AssignedTargetGroups**

**Resource Path:** /AssignedTargetGroups

You can perform the following operations on the **AssignedTargetGroups** entity set:

**HTTP Operations on AssignedTargetGroups entity set**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of assigned target groups.</td>
<td>/AssignedTargetGroups</td>
</tr>
<tr>
<td></td>
<td>Get the details of an assigned target group.</td>
<td>/AssignedTargetGroups(TargetGroupUUID={TargetGroupUUID},CampaignTemplate='{CampaignTemplate}')</td>
</tr>
</tbody>
</table>

**TeamMembers**

**Resource Path:** /TeamMembers
You can perform the following operations on the TeamMembers entity set:

**HTTP on TeamMembers entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a specific team member assigned to a campaign template.</td>
<td>/TeamMembers(CampaignTemplate='{CampaignTemplate}',CampaignTemplateTeamMemberName='{CampaignTemplateTeamMemberName}')</td>
</tr>
<tr>
<td></td>
<td>Get a list of team members.</td>
<td>/TeamMembers</td>
</tr>
</tbody>
</table>

5.5.5.2 **Payload Examples**

The following examples show how you can use the Campaign Templates API.

**GET Requests - Examples**

**Get the First 100 Campaign Templates**

/sap/opu/odata/sap/API_MKT_CAMPAIGN_TEMPLATE_SRV/CampaignTemplates?$top=100&$format=json

**Get the First 100 Campaign Templates Filtered by Campaign Category Type and Marketing Area**

/sap/opu/odata/sap/API_MKT_CAMPAIGN_TEMPLATE_SRV/CampaignTemplates?$filter=MarketingArea eq 'GLOBAL' and CampaignCategoryType eq 'FB'&$top=100&$format=json

**Get a Campaign Template's Assigned Target Group**

sap/opu/odata/sap/API_MKT_CAMPAIGN_TEMPLATE_SRV/CampaignTemplates('C000000BDA')/to_AssignedTargetGroups?$$format=json

**Get a Campaign Template's Assigned Team Member**

/sap/opu/odata/sap/API_MKT_CAMPAIGN_TEMPLATE_SRV/CampaignTemplates('erika.mustermann@privat.de')/to_AssignedTeamMembers?top=5&$format=json

**Get a Campaign Template's Assigned Interest**

/sap/opu/odata/sap/API_MKT_CAMPAIGN_TEMPLATE_SRV/CampaignTemplates('erika.mustermann@privat.de')/to_AssignedInterests?$$format=json
5.5.6 Campaign Message Content and Personalized Email Content

Public OData API (API_MKT_CAMPAIGN_MESSAGE_SRV) for exporting and importing message content in multiple languages.

Overview

The public API for Campaign Message Content supports the following operations for the Marketing Engagement Business Object:

- Creating a message. For example, create an email or a text message using the MessageEntityType entity.
- Exporting the message content for defined languages
  - Export messages as an HTML stream for defined languages. For example, you can use the exported HTML Message Content in a third-party HTML testing tool.
  - Export the Message Block Content (HTML body and subject) and its condition assignments for defined languages. For example, you can use the exported HTML Message Block Content in a third-party translation tool.
- Importing the message content for defined languages
  - Import the Message Block Content for defined languages.
  - Import the Message Block Content. For example, importing the HTML content of an email message for a new message created using the entity MessageContentType.
  - Create the Message Block Content of the block and subject for new languages.
  - Update the Message Block Content of the block and subject for existing languages.
- Assigning a marketing agency to a message.
- Fetching marketing agencies, assigned to a message.
- Querying all installed languages using the ValueHelps entity set.
- Querying for all marketing areas using the ValueHelps entity set.
- Updating the HTML message content of an existing message. The following restrictions apply:
  - You cannot update the name of the message.
  - You cannot update a reusable block.
  - You cannot update the Confirmation (CON) content type.
  - If the SUBJECT block type is not available in the file, the SUBJECT block is removed during the update.
  - You can only update messages that have the status In Preparation.
  - You can update the existing message if no other language other than the default language exists.
  - You can update text messages, line messages, and mobile push notifications with a single block that only contains plain text.
Technical Data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/$metadata</td>
</tr>
<tr>
<td></td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/$metadata?sap-documentation=all</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required: SAP_CEC_BC_MKT_API_CMC_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0208</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-MEM</td>
</tr>
</tbody>
</table>

**i Note**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

Field Extensibility Supported  No

Support of OData Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Extensibility</td>
<td>No</td>
</tr>
</tbody>
</table>

Use Case

You can use the Campaign Message Content (API_MKT_CAMPAIGN_MESSAGE_SRV) ODATA API for the following use cases:

- Use the API as a basis for collaborating with marketing agencies to create messages, and to map messages to agency users. An application that is built specifically for agencies or a third-party agency application can use this API and integrate this with the SAP Marketing Cloud system.
- Use the API to build a translation application for using translation as a service. The translation-as-a-service model enables translators to download messages and following translation, upload the translated content to the SAP Marketing Cloud system.
- Use the API to update the HTML message content of an existing message, if no other language other than the default language exists. You can use this functionality if an agency has uploaded an incorrect file, and the file has to be replaced instead of creating a message.
• Use this API in a customer care scenario where a customer care executive can access the personalized user content for a particular user. For example, during a call with a certain customer, the customer care executive gets access to the personalized content. For this use case, link tracking can be disabled using the parameter LINKTRACKING_DISABLED = true.

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV;v=0002/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
<tr>
<td>Marketing - Campaign Message Content Details Page</td>
<td>General access to the Details page of the service on the SAP API Hub. One-time registration is required for first-time users.</td>
</tr>
<tr>
<td></td>
<td>1. On the Details page, click Download Specification and download as EDMX.</td>
</tr>
<tr>
<td></td>
<td>2. Specify which application you want to use to open the EDMX file type.</td>
</tr>
<tr>
<td>Campaign Message Content API</td>
<td>General access link takes you directly to the Campaign Message Content metadata file. One-time registration or login is required.</td>
</tr>
</tbody>
</table>

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

Entity Data Model for Personalized Email Content

The following figure shows the entity data model (EDM) for this OData Service.
Permissions

- This feature can be enabled using the SAP PFCG role SAP_COM_CSR_0094.
- This feature must be assigned to a generic user for email recipients using a profile.
- The feature can be assigned to a specific user using a profile for call agents using this service.
- Add the following objects to the PFCG role:
  - Metadata: R3TR IWSG API_MKT_CAMPAIGN_MESSAGE_SRV_0001
  - Service: R3TR IWSV API_MKT_CAMPAIGN_MESSAGE_SRV_0001
- Maintain the following authorization data for the PFCG role:

<table>
<thead>
<tr>
<th>Authorization Object</th>
<th>Authorization Field</th>
<th>Activity</th>
<th>Object Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPA_MKT_AR</td>
<td>MKTAREA_ID</td>
<td>Display</td>
<td>*</td>
</tr>
<tr>
<td>HPA_OBJ</td>
<td>Display</td>
<td></td>
<td>○ CUAN_COMMUNICATION_CATEGORY</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>○ CUAN_MARKETING_ENGAGEMENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>○ CUAN_OFFER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>○ CUAN_PRODUCT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>○ CUAN_SENDER_PROFILE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>○ HPA_USER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>○ PRECO_SCENARIO</td>
</tr>
</tbody>
</table>
### Authorization Object

<table>
<thead>
<tr>
<th>Authorization Object</th>
<th>Authorization Field</th>
<th>Activity</th>
<th>Object Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>○ Change</td>
<td>○ CUAN_MARKETING_ENGAGEMENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ Display</td>
<td>○ HPA_USER</td>
</tr>
<tr>
<td>HPA_ME_TMP</td>
<td>HPA_ME_TMP</td>
<td>○ Change</td>
<td>○ Messages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ Display</td>
<td>○ Template</td>
</tr>
</tbody>
</table>

### Entity Sets

The Campaign Message Content OData API provides the following entity sets:

- [Messages](#)
- [MessageContents](#)
- [Blocks](#)
- [BlockContents](#)
- [MarketingAgencies](#)
- [ValueHelps](#)
- [GetPersonalizedMessage](#)

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messages</td>
<td>MessageEntityType</td>
<td>This entity set contains all messages</td>
<td>/Messages</td>
</tr>
<tr>
<td>MessageContents</td>
<td>MessageContentType</td>
<td>This entity set contains all message content</td>
<td>/MessageContents</td>
</tr>
<tr>
<td>Blocks</td>
<td>BlockEntityType</td>
<td>This entity set contains all blocks in a message</td>
<td>/Blocks</td>
</tr>
<tr>
<td>BlockContents</td>
<td>BlockContentType</td>
<td>This entity set contains the contents of a block</td>
<td>/BlockContents</td>
</tr>
<tr>
<td>MarketingAgencies</td>
<td>MarketingAgencyType</td>
<td>The entity represents a marketing agency with the assigned campaign message.</td>
<td>/MarketingAgencies</td>
</tr>
<tr>
<td>ValueHelps</td>
<td>ValueHelpType</td>
<td>The entity represents a generic value help.</td>
<td>/ValueHelps</td>
</tr>
</tbody>
</table>
### Entity Set

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetPersonalized-</td>
<td>GetPersonalized-</td>
<td>This entity set returns the personalized campaign message content for a given campaign execution out-bound id as text.</td>
<td>/GetPersonalizedMessages</td>
</tr>
<tr>
<td>Messages</td>
<td>MessageEntity Type</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You can view sample payloads and test the API at [https://api.sap.com](https://api.sap.com).

### Messages

**Resource Path:** /Messages

You can perform the following operations on the Messages entity set:

#### Operations on Messages entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the list of all messages. This method supports standard OData parameters such as $filter, $select, $top, and $skip.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Messages?$top=&lt;Number of messages&gt;</td>
</tr>
</tbody>
</table>

- **Note:** The $top parameter is mandatory. You can get only 100 messages with each request.

- **Note:** The $top parameter is mandatory. You can get only 100 messages with each request.

| **POST**    | Create a message.                                                                                    | https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Messages |

- **Note:** MessageType, MessageName, MarketingArea, and DefaultLanguage are the mandatory parameters for creating a message.

#### Sample Payload

```json
{
    "MessageName": "API New Message",
    "MessageType": "EM",
    "MarketingArea": "GLOBAL",
    "DefaultLanguage": "DE",
}
```
The following table describes the properties for the Messages entity.

**Messages Property Names and Descriptions**

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MessageUUID</td>
<td>Message database key.</td>
</tr>
<tr>
<td>MessageIdentifier</td>
<td>Identifier of a message in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>MessageType</td>
<td>The type of the message. Whether the message is an email or a text message.</td>
</tr>
<tr>
<td></td>
<td>The possible values for the MessageType are:</td>
</tr>
<tr>
<td></td>
<td>- EM - email (additionally, if the IsTemplate flag is set, the message is an email template)</td>
</tr>
<tr>
<td></td>
<td>- LIN - LINE Message</td>
</tr>
<tr>
<td></td>
<td>- LP - Landing Page</td>
</tr>
<tr>
<td></td>
<td>- MPN - Mobile Push Notification</td>
</tr>
<tr>
<td></td>
<td>- SMS - Text Message</td>
</tr>
<tr>
<td>MessageTypeName</td>
<td>The description of the message type.</td>
</tr>
<tr>
<td>MessageName</td>
<td>The name of the message.</td>
</tr>
<tr>
<td>MessageStatus</td>
<td>The status of the message.</td>
</tr>
<tr>
<td>MessageStatusName</td>
<td>The description of the message status.</td>
</tr>
<tr>
<td>CreationDateTime</td>
<td>The creation date and time.</td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>The last changed date and time.</td>
</tr>
<tr>
<td>CreatedByUser</td>
<td>The user who created the message.</td>
</tr>
<tr>
<td>CreatedByUserName</td>
<td>The user name of the user who created the message.</td>
</tr>
<tr>
<td>LastChangeByUser</td>
<td>The user who last modified the message.</td>
</tr>
<tr>
<td>LastChangeByUserName</td>
<td>The user name of the user who last modified the message.</td>
</tr>
<tr>
<td>DefaultLanguage</td>
<td>Identifier of the default language. For example: EN.</td>
</tr>
<tr>
<td>DefaultLanguageName</td>
<td>Description of the default language. For example: English.</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>IsTemplate</td>
<td>Defines if the message is a template.</td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
</tr>
<tr>
<td></td>
<td><em>IsTemplate = true</em> is a valid combination only if <em>MessageType</em> is email.</td>
</tr>
<tr>
<td>MarketingArea</td>
<td>ID of the marketing area.</td>
</tr>
<tr>
<td>MarketingAreaName</td>
<td>Name of the marketing area.</td>
</tr>
</tbody>
</table>

**MessageContents**

**Resource Path:** /MessageContents

You can perform the following operations on the MessageContents entity set:

**Operations on MessageContents entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get all the message contents of a message.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Messages(guid'&lt;MessageUUID&gt;')/MessageContents</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create message content.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/sap/API_MKT_CAMPAIGN_MESSAGE_SRV/MessageContents</td>
</tr>
</tbody>
</table>

**Payload Sample:**

```json
{
  "MessageUUID": "6c0b84b7-5523-1ed7-bcbe-2f035bd42b3",
  "LanguageCode": "EN",
  "LanguageName": "English",
}  ```
The following table describes the properties for MessageContents entity.

**Blocks Property Names and Descriptions**

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MessageUUID</td>
<td>Message database key.</td>
</tr>
<tr>
<td>LanguageCode</td>
<td>ISO code of the language.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong></td>
</tr>
<tr>
<td></td>
<td>The value of LanguageCode must be the same as the DefaultLanguage of the corresponding message (MessageUUID).</td>
</tr>
<tr>
<td>LanguageName</td>
<td>The name of the language.</td>
</tr>
<tr>
<td>MessageContentHTMLString</td>
<td>The HTML content of the message.</td>
</tr>
</tbody>
</table>

**Blocks**

**Resource Path:** /Blocks

You can perform the following operations on the Blocks entity set:

**Operations on Blocks entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Get a specific block using the Block entity.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Blocks(guid'&lt;Block UUID&gt;')</td>
</tr>
</tbody>
</table>
HTTP Method | Description | Path
--- | --- | ---
**POST** | Create a block using the Block entity. | https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/$batch
https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Blocks

**i Note**
This method supports creation of deep entity. You can create a deep entity using the Block to create a BlockContents entity within a Block entity.

The following table describes the properties for the Blocks entity.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlockUUID</td>
<td>Unique identifier of a block in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>ParentBlockUUID</td>
<td>Unique identifier of a parent block in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>MessageUUID</td>
<td>Unique identifier of a message in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>LanguageCode</td>
<td>ISO code of the language.</td>
</tr>
<tr>
<td>Block</td>
<td>Identifier of the block.</td>
</tr>
<tr>
<td>BlockType</td>
<td>The following block types exist: TEXT, OFFER, PRODUCT, PROD_RECO, OFFER_RECO, ASC, ASC_PROD, and SUBJECT.</td>
</tr>
</tbody>
</table>

**i Note**
The BlockType field has subblocks. The BlockType=ASC can have subblocks. The values for subblocks can be BlockType=ASC_PROD (Products) or BlockType=TEXT (Header or Footer). The ParentBlockUUID property refers to an ASC parent-block within the subblock of an ASC parent-block.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlockReuseType</td>
<td>Whether the BlockType is reusable. If the status is R, it is a reusable block with reference.</td>
</tr>
</tbody>
</table>

**i Note**
The header and footer BlockType can be reused.

**BlockContents**

**Resource Path:** /BlockContents

You can perform the following operations on the BlockContents entity set:
### Operations on BlockContents entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get all Block Contents of a Block.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Blocks(guid'&lt;Block UUID&gt;')/MessageBlockContents</td>
</tr>
<tr>
<td></td>
<td>Get the specific Block Content of a Block.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/BlockContents(guid'&lt;Block Contents UUID&gt;')</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create block content using the Block Content entity.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/BlockContents</td>
</tr>
</tbody>
</table>

The following table describes the properties for BlockContents entity.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlockContentUUID</td>
<td>Unique identifier of block content in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>BlockUUID</td>
<td>Unique identifier of a block in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>MessageUUID</td>
<td>Unique identifier of a message in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>LanguageCode</td>
<td>ISO code of the language.</td>
</tr>
<tr>
<td>BlockContentConditionID</td>
<td>Identifier of the condition link with block content.</td>
</tr>
<tr>
<td>BlockContentConditionName</td>
<td>Name of the condition link with block content.</td>
</tr>
<tr>
<td>BlockContentHTMLString</td>
<td>Block content in the form of HTML string.</td>
</tr>
<tr>
<td>BlockContentType</td>
<td>Type of the block content like subject, text, and so on.</td>
</tr>
<tr>
<td>BlockPosition</td>
<td>Block position in a message. For example:</td>
</tr>
<tr>
<td></td>
<td>- The position of the SUBJECT block has a fixed value of -2.</td>
</tr>
<tr>
<td></td>
<td>- The position of the BODY block has a fixed value of -1.</td>
</tr>
<tr>
<td></td>
<td>- All other blocks start with position 0.</td>
</tr>
<tr>
<td>BlockContentStyleClasses</td>
<td>Style classes used in block content.</td>
</tr>
<tr>
<td>Property Name</td>
<td>Property Description</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>BlockControl</td>
<td>Block Control Identifier.</td>
</tr>
</tbody>
</table>

**Note**

The defined JSON objects and their possible properties are as follows:

- If the **BlockType: ASC**, the possible property values are:

  ```json
  "BlockControl": {"SELECTION": {"LAYOUT": {"SHOW_HEADER": true, "SHOW_PRODUCTS": true, "SHOW_FOOTER": false}, "NO_MESSAGE_SEND_ON_ISSUES": false}, "BlockControlName": ""}

  "BlockControl": {"SELECTION": {"LAYOUT": {"SHOW_HEADER": true, "SHOW_PRODUCTS": true, "SHOW_FOOTER": false}, "NO_MESSAGE_SEND_ON_ISSUES": false}, "BlockControlName": ""}
  ``

- If the **BlockType: ASC_PROD**, the possible property values are:

  ```json
  "BlockControl": {"SELECTION": {"MAX_ITEMS": 8}, "BlockControlName": ""}

  "BlockControl": {"SELECTION": {"MAX_ITEMS": 9999}, "BlockControlName": ""}
  ``

- If the **BlockType: OFFER**, the possible property values are:

  ```json
  "BlockControl": {"ASSIGNMENT": "static", "SELECTION": {"ID": "0000004419", "CI_NAME": "", "COMM_MEDIUM": "EMAIL", "CONT_MEDIUM_TYPE": "01", "LANGUAGE": "EN", "NO_MESSAGE_SEND_ON_ISSUES": true}, "BlockControlName": "4419 - Image"}

  "BlockControl": {"ASSIGNMENT": "static", "SELECTION": {"NO_MESSAGE_SEND_ON_ISSUES": true}, "BlockControlName": ""}
  ``
If the BlockType: OFFER_RECO, the possible property values are:

"BlockControl" : "{"ASSIGNMENT" : "offer_reco", "SELECTION": {"LEADING_ITEMS": [{"DB_KEY": "FF91813198160B001600236CE9B411D4", "NAME": "R-T215"}, {"DB_KEY": "FF93813198160B001600236CE9B411D4", "NAME": "T-T109"}], "ITEM_TYPE": "CUAN_PRODUCT"}, "LEADING_CATEGORIES": [{"ITEMS": [{"DB_KEY": "JMAT_ProdCatHier_API_20170512-205027_Cat_1", "NAME": "JMAT_ProdCatHier_API_20170512-205027_Cat_1"}], "ITEM_TYPE": "CUAN_PRODUCT_CATEGORY"}], "POSITION": "TOP", "CNT_TYPE": "01", "MAX_ITEMS": 5, "MAX_RESULT": 10, "SCENARIO_ID": "LD_TEST_COUPON_USAGE", "TARGET": "", "NO_MESSAGE_SEND_ON_ISSUES": true}"

"BlockControlName" : "LD_TEST_COUPON_USAGE"

If the BlockType: PRODUCT, the possible property values are:

"BlockControl" : 

"BlockControlName" : 

"BlockControl" : "{"ASSIGNMENT": "static", "SELECTION": {"PRODUCT_ID": "R-T129", "PRODUCT_ORIGIN": "SAP_ERP_MATNR", "NO_MESSAGE_SEND_ON_ISSUES": true}"}

"BlockControlName" : "R-T129"

If the BlockType: PROD_RECO, the possible property values are:

"BlockControl" : 

"BlockControlName" : 

"BlockControl" : "{"ASSIGNMENT": "prod_reco", "SELECTION": {"LEADING_ITEMS": [{"ITEMS": []}, "ITEM_TYPE": "CUAN_PRODUCT"}], "MAX_ITEMS": 7, "MAX_RESULT": ":

---

**Property Name**  | **Property Description**
---|---

If the BlockType: OFFER_RECO, the possible property values are:

"BlockControl" : "{"ASSIGNMENT" : "offer_reco", "SELECTION": {"LEADING_ITEMS": [{"DB_KEY": "FF91813198160B001600236CE9B411D4", "NAME": "R-T215"}, {"DB_KEY": "FF93813198160B001600236CE9B411D4", "NAME": "T-T109"}], "ITEM_TYPE": "CUAN_PRODUCT"}, "LEADING_CATEGORIES": [{"ITEMS": [{"DB_KEY": "JMAT_ProdCatHier_API_20170512-205027_Cat_1", "NAME": "JMAT_ProdCatHier_API_20170512-205027_Cat_1"}], "ITEM_TYPE": "CUAN_PRODUCT_CATEGORY"}], "POSITION": "TOP", "CNT_TYPE": "01", "MAX_ITEMS": 5, "MAX_RESULT": 10, "SCENARIO_ID": "LD_TEST_COUPON_USAGE", "TARGET": "", "NO_MESSAGE_SEND_ON_ISSUES": true}"

"BlockControlName" : "LD_TEST_COUPON_USAGE"

If the BlockType: PRODUCT, the possible property values are:

"BlockControl" : ""

"BlockControlName" : ""

"BlockControl" : "{"ASSIGNMENT": "static", "SELECTION": {"PRODUCT_ID": "R-T129", "PRODUCT_ORIGIN": "SAP_ERP_MATNR", "NO_MESSAGE_SEND_ON_ISSUES": true}"}

"BlockControlName" : "R-T129"

If the BlockType: PROD_RECO, the possible property values are:

"BlockControl" : ""

"BlockControlName" : ""
MarketingAgencies

Resource Path: /MarketingAgencies

You can perform the following operations on the MarketingAgencyEntityType entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a marketing agency to assign to a campaign message.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/sap/API_MKT_CAMPAIGN_MESSAGE_SRV/MarketingAgencies(MessageUUID=guid'6c0b84b7-5523-1ed8-8bce-01d61d137b6f',MarketingAgencyUUID=guid'6c0b84b7-5523-1ed7-bdf5-5aab5e1f5e21')</td>
</tr>
<tr>
<td>GET</td>
<td>Get all marketing agencies.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/sap/API_MKT_CAMPAIGN_MESSAGE_SRV/MarketingAgencies</td>
</tr>
<tr>
<td>POST</td>
<td>Create a marketing agency to assign to a campaign message.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/sap/API_MKT_CAMPAIGN_MESSAGE_SRV/MarketingAgencies</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete a marketing agency assigned to a campaign message.</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/sap/API_MKT_CAMPAIGN_MESSAGE_SRV/MarketingAgencies(MessageUUID=guid'6c0b84b7-5523-1ed8-8bce-01d61d137b6f',MarketingAgencyUUID=guid'6c0b84b7-5523-1ed7-bdf5-5aab5e1f5e21')</td>
</tr>
</tbody>
</table>

Sample Payload:
The following table describes the properties for the `MarketingAgencyEntityType` entity.

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MessageUUID</td>
<td>Unique identifier of the campaign message.</td>
</tr>
<tr>
<td>MarketingAgencyUUID</td>
<td>Unique identifier of the agency.</td>
</tr>
<tr>
<td>MarketingAgency</td>
<td>Identifier of the agency.</td>
</tr>
<tr>
<td>MarketingAgencyName</td>
<td>Name of the agency.</td>
</tr>
<tr>
<td>EmailAddress</td>
<td>Email-Address of the agency.</td>
</tr>
</tbody>
</table>

**ValueHelps**

**Resource Path:** `/ValueHelps`

You can perform the following operations on the `ValueHelps` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Get all marketing areas.</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/sap/API_MKT_CAMPAIGN_MESSAGE_SRV/ValueHelps?$filter=ObjectType eq 'marketing_area'</code></td>
</tr>
<tr>
<td></td>
<td>Get all marketing areas for an agency.</td>
<td><code>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/sap/API_MKT_CAMPAIGN_MESSAGE_SRV/ValueHelps?$filter=ObjectType eq 'marketing_area ' and Filter/Context1 eq '6C0B84B7-5523-1EE8-8B85-084154378FB6'</code></td>
</tr>
</tbody>
</table>
### ValueHelps Property Names and Descriptions

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ObjectType</strong></td>
<td>Type of value help. The possible values are either <code>MARKETING_AREA</code> or <code>LANGUAGE</code>.</td>
</tr>
<tr>
<td><strong>Code</strong></td>
<td>Identifier of the value. For example, marketing area ID.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Description of the value. For example, marking area description.</td>
</tr>
<tr>
<td><strong>Filter</strong></td>
<td>Generic filter structure of ValueHelpFilterCT type. The content is dependent on the value of ObjectType property.</td>
</tr>
</tbody>
</table>

#### ObjectType | Filter | Description |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MARKETING_AREA</td>
<td>Context1</td>
<td>Unique identifier of the agency.</td>
</tr>
</tbody>
</table>

**Note**

- ValueHelpFilterCT is the generic type for the value help.

### GetPersonalizedMessage

#### Operations

**CRUD Operations**

Do not exist for this OData service scenario.

**Custom or Service Operations**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation Type</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>GetPersonalizedMessage</td>
<td>/GetPersonalizedMessage</td>
</tr>
</tbody>
</table>

#### Operations Request

**URI:** `/API_MKT_CAMPAIGN_MESSAGE_SRV/GetPersonalizedMessage`

**Operation Type:** Function Import

**HTTP Method:** `GET`
Permissions: SAP PFCG role SAP_COM_CSR_0094

Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Data Type</th>
<th>Description</th>
<th>Parameter Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CampaignOutbound</td>
<td>Yes</td>
<td>Edm.String</td>
<td>The campaign outbound id hash key to identify the campaign, execution of the campaign and the recipient of the email.</td>
<td>ID</td>
</tr>
<tr>
<td>LinkTrackingDisabled</td>
<td>Yes</td>
<td>Edm.Boolean</td>
<td>If set to 'true', a link tracking interaction record is written to the database, if set to 'false', no tracking record is written.</td>
<td>Flag</td>
</tr>
</tbody>
</table>

Request Example

```
API_MKT_CAMPAIGN_MESSAGE_SRV/GetPersonalizedMessage?
CampaignOutbound='174A024EC5EAAAC778D6BF115125D284E705C90F68'&LinkTrackingIsDisabled=false
```

Response Status and Error Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Reason</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>OK</td>
<td>Content found and returned</td>
</tr>
<tr>
<td>400</td>
<td>Bad Request</td>
<td>Code = CUAN_ME/812 (Page not found.) means: No content could be determined using the CampaignOutbound (Id) specified.</td>
</tr>
</tbody>
</table>

Related Information

https://api.sap.com

5.5.6.1 Payload Examples

The following examples show how you can use the Campaign Message Content API.

GET Requests - Examples

Get the First 100 Messages

```
/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Messages?$top=100&$format=json
```
Get the First 100 Messages Filtered by MessageType and MessageStatus

```
/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Messages?$filter=MessageStatus eq '10' and MessageType eq 'EM'&$top=100&$format=json
```

Get a Message Content

```
sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/
MessageContents(MessageUUID=guid'0050569F-4A52-1ED7-8481-8A95A404CF53',LanguageCode = 'EN')?$select=MessageUUID,LanguageCode,LanguageName,MessageContentHTMLString& $format=json
```

Get a Message Content's Message Blocks

```
/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/
MessageContents(MessageUUID=guid'0050569F-4A52-1ED7-8481-8A95A404CF53',LanguageCode = 'EN')/MessageBlocks?$format=json
```

Get a Block's Block Contents

```
/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/
Blocks(guid'0050569F-4A52-1ED7-8481-8A95A404CF53')/MessageBlockContents?$format=json
```

POST Requests - Examples

Create a Message Block

```
/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/Blocks

Sample Code

```
{
   "MessageUUID" : "0050569F-4A52-1ED7-8481-8A95A404CF53",
   "LanguageCode" : "EN",
   "BlockType" : "Offer"
}
```

Create Block Content

```
/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/BlockContents

Sample Code

```
{
   "BlockUUID" : "0050569F-4A52-1ED7-8481-8A95A404CF53",
   "BlockContentHTMLString" : "The Message API creates a block content for a block-2018-04-20T12:36:04.0000000",
   "BlockContentConditionName" : "cond2018-04-20T12:36:04.0000000",
   "BlockPosition" : 2,
   "BlockControl" : "DR",
   "BlockControlName" : "Divya"
}
```
Update Requests - Examples

Put a Block Content

```
/sap/opu/odata/SAP/API_MKT_CAMPAIGN_MESSAGE_SRV/
BlockContents(guid'{{New_BlCnt_UUID}}')
```

Sample Code

```
{
    "BlockContentHTMLString" : "PUT of Block content by DR on
    2018-04-20T12:36:04.0000000",
    "BlockPosition" : 1,
    "BlockControl" : "DR-PUT",
    "BlockControlName" : "Divya-PUT"
}
```

OData Batch Requests - Examples

Post Block and Block Content in a Batch

```
--batch_01869434-0005
Content-Type: multipart/mixed; boundary=changeset_01869434-0005-0001
--changeset_01869434-0005-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST Blocks HTTP/1.1
Content-Type: application/json
Content-Length: 1021
Content-ID: 1
"MessageUUID" : "0050569F-4A52-1ED7-8481-8A95A404CF53","LanguageCode" :
"HE", "BlockType" : "text"
--changeset_01869434-0005-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST Blocks HTTP/1.1
Content-Type: application/json
Content-Length: 1021
Content-ID: 2
"MessageUUID" : "0050569F-4A52-1ED7-8481-8A95A404CF53","LanguageCode" :
"RU","BlockType" : "offer"
--changeset_01869434-0005-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST $1/MessageBlockContents HTTP/1.1
Content-Type: application/json
Content-Length: 1021
```
5.5.7 Campaign Success Data

Public OData API (API_MKT_CMPGN_SUCCESS_IMPORT) for importing aggregated success data for Campaigns.

Technical Data

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_CMPGN_SUCCESS_IMPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required: SAP_CEC_BC_MKT_API_SUC_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0390</td>
</tr>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Root URI</td>
<td><a href="https://Server:Port/sap/opu/odata/SAP/API_MKT_CMPGN_SUCCESS_IMPORT_SRV">https://Server:Port/sap/opu/odata/SAP/API_MKT_CMPGN_SUCCESS_IMPORT_SRV</a></td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td><a href="https://Server:Port/sap/opu/odata/SAP/API_MKT_CMPGN_SUCCESS_IMPORT_SRV/$metadata">https://Server:Port/sap/opu/odata/SAP/API_MKT_CMPGN_SUCCESS_IMPORT_SRV/$metadata</a></td>
</tr>
</tbody>
</table>

Field Extensibility Supported: Yes

i Note

The SAP_COM_0304 communication scenario that was previously used by this API is obsolete as of SAP Marketing Cloud. For detailed information about how to create a new communication arrangement using SAP_COM_0390, see SAP Note 2913447.
Technical Field Documentation

You can access technical documentation for the API fields at the following service metadata URL:

https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_CMPGN_SUCCESS_IMPORT_SRV/
$metadata?sap-documentation=all.

**Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

5.5.7.1 Basic Concepts

Campaign success data can provide insights that allow marketing teams to better plan and allocate campaign budget. Use the `API_MKT_CMPGN_SUCCESS_IMPORT` Public OData API to import aggregated campaign success data from external systems and write the data to campaigns in SAP Marketing Cloud.

Processing Info

The `API_CMPGN_SUCCESS_IMPORT_SRV` Public OData service only supports POST operations.

Single requests are submitted as a single HTTP POST request to Successes endpoint. Batch requests are submitted as a single HTTP POST request to $batch endpoint. The batch request must contain a content-type header specifying a content type of multipart/mixed and a boundary specification.

If data with the following properties is already stored in SAP Marketing Cloud, a POST request containing the same properties updates the data stored in SAP Marketing Cloud:

- Campaign ID
- Ext. Campaign ID
  This also includes the following:
  - Advertiser ID
  - Managing Party
  - Ext. Cpg. System ID (Multichannel campaigns)
- Date
  This also includes the following:
  - Time Zone
Error Messages

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the batch request contains many sub-requests, the HTTP status code 202 is always returned. The real HTTP returning status code and messages are shown in the response body for each individual sub-request.

Field Extensibility

In addition to the pre-delivered attributes, you can add customer-specific fields using the Custom Fields and Logic app. For more information about how to do this, see Custom Fields and Logic.

5.5.7.2 Structure of OData Service

This document describes the structure of the Public OData API service API_MKT_CMPGN_SUCCESS_IMPORT. Make sure you read the Basic Concepts topic before you start.

Entity Set: Successes

This Public OData API provides the Successes entity set, which contains campaign success data and resides in /Successes.

You can perform the following operation on this entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Single import of campaign success data.</td>
<td>/Successes</td>
</tr>
<tr>
<td></td>
<td>Batch import of campaign success data.</td>
<td>/Successes/$batch</td>
</tr>
</tbody>
</table>

**Note**

This API is designed for use with communication users only.
5.5.7.3 Payload Examples

The following examples show how you can use the Campaign Success Data API.

POST

The following request is without batch:

```
Sample Code

{
  "CampaignID": "000000000001",
  "CampaignCategoryID": "EEM",
  "ExternalCampaignID": "ext1",
  "ExternalCampaignName": "ext1",
  "Advertiser": "Advertiser1",
  "AdvertiserName": "AdvertiserName1",
  "ExternalCmpgnManagingParty": "party1",
  "ExternalCmpgnManagingPartyName": "partyName1",
  "CommunicationMedium": "DISPLAY_ADS",
  "SuccessDataDate": "/Date(662725468168)/",
  "SuccessDataDateTimeZone": "UTC",
  "YearWeek": "",
  "YearMonth": "",
  "AdServingSpendAmount": "100",
  "AdServingSpendAmtCryISOCode": "USD",
  "SuggestedAdServingSpendAmount": "200",
  "AgeRangeLowerLimit": 9,
  "AgeRangeUpperLimit": 10,
  "GenderFreeText": "female",
  "CountryFreeText": "usa",
  "RegionFreeText": "region",
  "InteractionStatus": "99",
  "InteractionType": "InvalidType",
  "InteractionReason": "InvalidReason",
  "CampaignContent": 98,
  "CampaignContentName": "98name",
  "CampaignContentLinkName": "97Name",
  "DeviceFreeText": "device1",
  "AdNetworkFreeText": "AdNetwork1",
  "PaidSearchKeywordText": "searchKeywordBaidu",
  "PaidSearchSearchTermText": "SearchTermBaidu",
  "CampaignReach": "96",
  "CampaignReachInPercent": "101.02",
  "NumberOfImpressions": "11",
  "NumberOfUniqueImpressions": "13",
  "NumberOfPageLikes": "14",
  "NumberOfPostEngagements": "15",
  "NumberOfOfferClaims": "16",
  "NumberOfVideoViews": "17",
  "NumberOfWebsiteConversions": "18",
  "NumberOfAppInstalls": "19",
  "NumberOfAppEngagements": "20",
  "NumberOfEventResponses": "21",
  "NumberOfRejectedMessages": "22",
  "NumberOfSentMessages": "23",
  "NumberOfDeliveredMessages": "24",
  "NumberOfOpenedMessages": "25",
}
```
"NumberOfHardBounces": "26",
"NumberOfSoftBounces": "27",
"NumberOfOrders": "28",
"OrderAmount": "29",
"MultiTouchAttributedOrderAmt": "29",
"OrderAmountCurrencyISOCode": "USD",
"NumberOfRegistrations": "30",
"NumberOfDownloads": "31",
"VideoViewedAverageInPercent": "32",
"GrossRatingPoints": "33",
"GrossRatingPointBase": "34",
"NumberOfLeads": "35",
"NumberOfOpportunities": "36",
"OpportunityAmount": "37",
"OpportunityAmountCurrencyISOCode": "USD",
"NumberOfPhoneCalls": "38",
"NumberOfAppointments": "39",
"NumberOfFailedInteractions": "40",
"NumberOfMarketingOfferViews": "41",
"NumberOfEmailComplaints": "42",
"NumberOfOpenChannelInteractions": "43",
"NumberOfExecutedInteractions": "44",
"NumberOfTasks": "45"
}

POST

Sample Code

--batchtest
Content-Type: multipart/mixed; boundary=changeset_1
--changeset_1
Content-Type: application/http
Content-Transfer-Encoding: binary
POST Successes HTTP/1.1
Content-Type: application/json
Content-Length: 168
{
  "CampaignID": "0000000004",
  "SuccessDataDate": "2017-08-03T00:00:00",
  "CommunicationMedium": "",
  "NumberOfMultiTchAttrConvsns": "21.54",
  "MultiTouchAttributedOrderAmt": "2125.34",
  "OrderAmountCurrencyISOCode": "USD"
}
--changeset_1
Content-Type: application/http
Content-Transfer-Encoding: binary
POST Successes HTTP/1.1
Content-Type: application/json
Content-Length: 168
{
  "CampaignID": "1000000004",
  "SuccessDataDate": "2017-08-04T00:00:00",
  "CommunicationMedium": "",
  "NumberOfMultiTchAttrConvsns": "21.54",
  "MultiTouchAttributedOrderAmt": "2125.34",
}
5.5.8 Import Campaign Performance Data

You have the following options for uploading success data:

- CSV Upload - Data File Load
- Public OData API - Campaign Success Data [page 812]
- OData Pull Interface for Externally Executed Campaigns - Implementing Interfaces for External Campaign Execution [page 158]

You can also manually enter target data in the Campaigns app, in addition to using the CSV upload. Campaign performance data can also be automatically retrieved through standard processes in email and Facebook campaigns.

When using any of the import methods, there are a few things you need to keep in mind about your data.
Different Drill-Down Depending on KPI

Import Data by Campaign

Importing success data on campaign level allows you to use cross-campaign reporting on campaign-related dimensions such as Campaign ID or Marketing Area.

Example

Data by Campaign

<table>
<thead>
<tr>
<th>Campaign ID</th>
<th>Impressions</th>
<th>Clicks</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>500</td>
<td>5</td>
</tr>
<tr>
<td>101</td>
<td>1000</td>
<td>10</td>
</tr>
</tbody>
</table>

Import Data with Drill-Downs by One or Several Dimensions

Additional drill-downs allow for corresponding reporting, for example, over time when a success data date is given.

Importing data with a different drill-down level for various KPIs is possible, as long as you ensure that the totals remain correct.

Example

In an email campaign with two different links, you can divide the clicks based on which link was clicked, as you can see here:

Data with Drill-Downs by One or Several Dimensions

<table>
<thead>
<tr>
<th>Campaign ID</th>
<th>Success Data Date</th>
<th>Campaign Content Link Name</th>
<th>Impressions</th>
<th>Clicks</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>Learn More</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>Unsubscribe</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Campaign 100</td>
<td></td>
<td></td>
<td>1000</td>
<td>10</td>
</tr>
</tbody>
</table>

Drilling down this way can impact calculated measures, such as Click-Through Rate (Clicks/Impressions * 100%). Both variables must be available on the same level to make the calculation. In the example above, there is no division of Impression on the Campaign Content Link Name level, therefore, you cannot calculate the Click-Through Rate based on the Campaign Content Link Name. However, at other drill-down levels, such as Success Data Date, you get the expected Click-Through Rate of 1%.

Totals Must Be Correct

Most imported measures like Number of Impressions, Number of Clicks or Ad Serving Spend Amount are aggregated by summing up the values. To ensure a consistent reporting you have to import the data in a way
that the totals are correct independent from any drilldown or filtering. In the following example, you are totaling up the number of impressions across two days, using a drilldown based on gender. These data sets do not overlap each other, providing you with an accurate total number of impressions over those two days.

### Correct Totals

<table>
<thead>
<tr>
<th>Campaign ID</th>
<th>Success Data Date</th>
<th>Gender</th>
<th>Age Range</th>
<th>Impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>female</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>male</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal 1.1.2016</td>
<td>2000</td>
</tr>
<tr>
<td>100</td>
<td>2.1.2016</td>
<td>female</td>
<td></td>
<td>1500</td>
</tr>
<tr>
<td>100</td>
<td>2.1.2016</td>
<td>male</td>
<td></td>
<td>1500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal 2.1.2016</td>
<td>3000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Campaign 100</td>
<td>5000</td>
</tr>
</tbody>
</table>

This means that you cannot combine overlapping data sets like, for example, gender and age range. If you total together the number of impressions drilled down by gender and the number of impressions drilled down by age range, you will count the same impressions twice. This leads to inconsistent data, as shown in the example below:

### Incorrect Totals

<table>
<thead>
<tr>
<th>Campaign ID</th>
<th>Success Data Date</th>
<th>Gender</th>
<th>Age Range</th>
<th>Impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>female</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>male</td>
<td></td>
<td>1500</td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td></td>
<td>18–24</td>
<td>500</td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td></td>
<td>25–34</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal 1.1.2016</td>
<td>5000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal All Genders (correct)</td>
<td>2500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal All Age Ranges (correct)</td>
<td>2500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Campaign 100</td>
<td>5000</td>
</tr>
</tbody>
</table>
The total in the table above is incorrect, as the number of impressions has actually been counted twice. To avoid incorrect data, you would need to organize your data with a combined drill-down, as shown below:

Corrected Totals

<table>
<thead>
<tr>
<th>Campaign ID</th>
<th>Success Data Date</th>
<th>Gender</th>
<th>Age Range</th>
<th>Impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>female</td>
<td>18–24</td>
<td>400</td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>female</td>
<td>25–34</td>
<td>600</td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>male</td>
<td>18–24</td>
<td>500</td>
</tr>
<tr>
<td>100</td>
<td>1.1.2016</td>
<td>male</td>
<td>25–34</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>Subtotal 1.1.2016</td>
<td></td>
<td></td>
<td>2500</td>
</tr>
<tr>
<td></td>
<td>Subtotal All Genders</td>
<td></td>
<td></td>
<td>2500</td>
</tr>
<tr>
<td></td>
<td>Subtotal All Age Ranges</td>
<td></td>
<td></td>
<td>2500</td>
</tr>
<tr>
<td></td>
<td>Total Campaign 100</td>
<td></td>
<td></td>
<td>2500</td>
</tr>
</tbody>
</table>

**Aggregating Reach and Unique Clicks**

For Reach and Unique Clicks, there are two measures that count the number of different people who saw an ad or clicked a link. You have to be careful with summing these measures up. It is rather straightforward to measure the number of impressions, but connecting those to distinct individuals is a bit more complicated. You may have the same person view an ad or click a link more than once. For that reason it’s strongly recommended to import data with no drill-down by Success Data Date for Reach and Unique Clicks. Note that a drill-down by Gender or Age Range is allowed, as one person typically doesn’t change age range or gender during one campaign.

You may want to be careful with cross campaign reporting on Reach and Unique Clicks, as well. Overlapping target groups may create incorrect results.

**Discrepancies in Amounts in Some Currencies**

Due to the difference in the number of decimal places stored for monetary amounts in different systems, there may be a discrepancy when viewing these amounts in the different systems. In SAP Marketing Cloud, the number of decimal places in an amount depends on the currency. For example, an amount in USD is stored with two decimal places, while an amount in JPY is stored with no decimal places. However, some other systems may send amounts with more decimal places than are stored in SAP Marketing Cloud. These additional digits are cut off, which may result in minor differences when looking at totals.
Overwriting Data by Date and Campaign ID

The semantical key of the data consists of the SAP Marketing Cloud Campaign ID, External Campaign ID (including Advertiser and Managing Party), Date, Time Unit, Communication Medium, and Input Method. To overwrite data, you must upload aggregated success data with the same success data date and external campaign ID as the data you wish to overwrite. This will overwrite all of the success data for that date and campaign ID combination.

The success data date is optional. If no success data date is given with the imported data, all other success data of the referenced external campaign ID without a success data date will be overwritten.

To delete aggregated success data, you can upload a CSV file with the success data date and external campaign ID of the data you wish to delete and leave the rest of fields blank. This will cause of the success data to be overwritten with empty fields, essentially deleting the data.

Related Information

Campaign Performance
Interaction and Aggregated Success Data
Custom Fields for Campaign Performance
Assigning External References to Externally Executed, Facebook, and Google Ads Campaigns

5.5.8.1 Campaign Performance Measures and Dimensions

The list of measures and dimensions for campaign performance.

To overwrite data, you must upload aggregated success data with the same semantic key as the data you wish to overwrite. This will overwrite all of the success data for that key combination.

The semantic key for overwriting data can consist of the following:

- Campaign ID
- Ext. Campaign ID
  - This also includes the following:
    - Advertiser ID
    - Managing Party
    - Ext. Cpg. System ID (Multichannel campaigns)
- Date
  - This also includes the following:
    - Time Zone
    - Year Month
    - Year Week
- Communication Medium
<table>
<thead>
<tr>
<th>Global Field Name</th>
<th>Label</th>
<th>Type</th>
<th>Description</th>
<th>Column in CSV Upload</th>
<th>Name in External Campaign OData Pull Interface</th>
<th>Name in OData Push Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar Year</td>
<td>Calendar Year</td>
<td>Performance Dimension</td>
<td>Calendar year the campaign performance measures refer to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CampaignContentLinkAliasName</td>
<td>Link Alias</td>
<td>Performance Dimension</td>
<td>Alias name of the link in the campaign content the campaign performance measures refer to</td>
<td>CampaignContentLinkAliasName</td>
<td></td>
<td>CampaignContentLinkAliasName</td>
</tr>
<tr>
<td>PaidSearchKeyWordText</td>
<td>Baidu Key Word</td>
<td>Performance Dimension</td>
<td>The key word of the paid search campaign the campaign performance measures refer to, in standard processes used for Baidu campaigns only</td>
<td>PaidSearchKeyWordText</td>
<td></td>
<td>PaidSearchKeyWordText</td>
</tr>
<tr>
<td>PaidSearchSearchTermText</td>
<td>Baidu Search Term</td>
<td>Performance Dimension</td>
<td>The search term of a paid search campaign the campaign performance measures refer to, in standard processes used for Baidu campaigns only</td>
<td>PaidSearchSearchTermText</td>
<td></td>
<td>PaidSearchSearchTermText</td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
</tr>
<tr>
<td>------------------</td>
<td>-------</td>
<td>------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>TargetAdServingCostPerClick</td>
<td>Target CPC</td>
<td>Target</td>
<td>Not shown on the campaign UI - use TgtAdSrvg:Cost:Per1000Clicks instead. Target value for ad serving cost per click, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td>TargetAdServingCostPerClick</td>
<td>TgtAdSrvg:SpendTransCurrency with CampaignPerformanceType=&quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>TargetAdServingCostPerLead</td>
<td>Target Cost per Lead</td>
<td>Target</td>
<td>Target value for ad serving cost per lead, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td>TgtAdSrvg:SpendTransCurrency with CampaignPerformanceType=&quot;TARGET&quot; only</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Global Field Name</th>
<th>Label</th>
<th>Type</th>
<th>Description</th>
<th>Column in CSV Upload</th>
<th>Name in External Campaign OData Pull Interface</th>
<th>Name in OData Push Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>TargetAdServingCostPerOrder</td>
<td>Target Order Cost</td>
<td>Target</td>
<td>Target value for ad serving cost per order, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetAdServingCostPerOrder and TgtAdSrvgSpendTransCurrency with CampaignPerformanceType = &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>TargetAdServingCostPerRegn</td>
<td>Target Reg Cost</td>
<td>Target</td>
<td>Target value for ad serving cost per registration, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetAdServingCostPerRegn and TgtAdSrvgSpendTransCurrency with CampaignPerformanceType = &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
<td>------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>TargetAdSrvg-Cost1000Reach</td>
<td>Tgt 1000 Reach Cost</td>
<td>Target</td>
<td>Target value for ad serving cost per 1000 people reached, there is no meaningful aggregation possible, technically summed up when aggregated, don't set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetAdSrvg-Cost1000Reach and TgtAdSrvg-SpendTransCurrency with CampaignPerformanceType= &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>TargetAdSrvg-CostPerEventRsp</td>
<td>Tgt Event Rsp Cost</td>
<td>Target</td>
<td>Target value for ad serving cost per event response, there is no meaningful aggregation possible, technically summed up when aggregated, don't set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetAdSrvg-CostPerEventRsp and TgtAdSrvg-SpendTransCurrency with CampaignPerformanceType= &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>TargetAdSrvg-CostPerLead</td>
<td>Target Cost per Lead</td>
<td>Converted Amount in Display Currency</td>
<td>Target value for the ad serving cost per lead converted to the display currency using the currency exchange rate of the campaign start date</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------------------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>TargetAdSrvg: CostPerPageLike</td>
<td>Tgt Page Like Cost</td>
<td>Target</td>
<td>Target value for ad serving cost per page like, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetAdSrvg: CostPerPageLike and TgtAdSrvg: SpendTransCurrency with CampaignPerformanceType= &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>TargetAdSrvg: CostPerRegConvInDC</td>
<td>Target Reg Cost</td>
<td>Converted</td>
<td>Target value for the ad serving cost per registration converted to the display currency using the currency exchange rate of the campaign start date</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TargetBounceRateInPercent</td>
<td>Target Bounce Rate</td>
<td>Target</td>
<td>Target value for bounce rate in percent, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetBounceRateInPercent with CampaignPerformanceType= &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>TargetClick-ThroughRateInPct</td>
<td>Target CTR</td>
<td>Target</td>
<td>Target value for click-through rate in percent, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetClick-ThroughRateInPct with CampaignPerformanceType= &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>TargetClickToOpenRateInPct</td>
<td>Target Click Open</td>
<td>Target</td>
<td>Target value for click-to-open rate in percent, there is no meaningful aggregation possible, technically summed up when aggregated, don’t set this target in combination with further dimensions such as time or gender to avoid meaningless aggregation</td>
<td></td>
<td>TargetClickToOpenRateInPct with CampaignPerformanceType= &quot;TARGET&quot; only</td>
<td></td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
</tr>
<tr>
<td>------------------</td>
<td>-------</td>
<td>------</td>
<td>-------------</td>
<td>----------------------</td>
<td>---------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>TgtAdServing- CostPerDownload</td>
<td>Target Download Cost</td>
<td>Target</td>
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*Integration Guide*

*Integration APIs*
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<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per click in display currency calculated as ad serving spend in display currency / number of clicks</td>
<td></td>
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<tr>
<td>AdServingCostPerDownload</td>
<td>Cost per Download</td>
<td>Calculated Actual</td>
<td>Ad serving cost per download calculated as ad serving cost / number of downloads</td>
<td></td>
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</tr>
<tr>
<td>AdServingCostPerDownloadInDC</td>
<td>Cost per Download</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per download in display currency calculated as ad serving spend in display currency / number of downloads</td>
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<tr>
<td>AdServingCostPerEventResponse</td>
<td>Event Response Cost</td>
<td>Calculated Actual</td>
<td>Ad serving cost per event response calculated as ad serving cost / number of event responses</td>
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<tr>
<td>AdServingCostPerEventResponseInDC</td>
<td>Event Response Cost</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per event response in display currency calculated as ad serving spend in display currency / number of event responses</td>
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<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
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<td>AdServingCostPerLead</td>
<td>Cost per Lead</td>
<td>Calculated Actual</td>
<td>Ad serving cost per lead calculated as ad serving cost / number of leads</td>
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<tr>
<td>AdServingCostPerLeadInDC</td>
<td>Cost per Lead</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per lead in display currency calculated as ad serving spend in display currency / number of leads</td>
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<td>AdServingCostPerMktgOfferClaim</td>
<td>Cost per Offer Claim</td>
<td>Calculated Actual</td>
<td>Ad serving cost per offer claim calculated as ad serving cost / number of offer claims</td>
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<td>AdServingCostPerOfferClaimInDC</td>
<td>Cost Offer Claim</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per offer claim in display currency calculated as ad serving spend in display currency / number of offer claims</td>
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<td>AdServingCostPerOrder</td>
<td>Cost per Order</td>
<td>Calculated Actual</td>
<td>Ad serving cost per order calculated as ad serving cost / number of orders</td>
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<td>AdServingCostPerOrderInDC</td>
<td>Cost per Order</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per order in display currency calculated as ad serving spend in display currency / number of orders</td>
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<td>AdServingCostPerPageLike</td>
<td>Cost per Page Like</td>
<td>Calculated Actual</td>
<td>Ad serving cost per page like calculated as ad serving cost / number of page likes</td>
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<td>AdServingCostPerPageLikeInDC</td>
<td>Cost Page Like</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per page like in display currency calculated as ad serving spend in display currency / number of page likes</td>
<td></td>
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<td>AdServingCostPerPostEngagement</td>
<td>Post Engagement Cost</td>
<td>Calculated Actual</td>
<td>Ad serving cost per post engagement calculated as ad serving cost / number of post engagements</td>
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<td></td>
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<tr>
<td>AdServingCostPerPostEngagementInDC</td>
<td>Post Eng. Cost</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per post engagement in display currency calculated as ad serving spend in display currency / number of post engagements</td>
<td></td>
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<td>AdServingCostPerRegistration</td>
<td>Registration Cost</td>
<td>Calculated Actual</td>
<td>Ad serving cost per registration calculated as ad serving cost / number of registrations</td>
<td></td>
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<tr>
<td>AdServingCostPerVideoView</td>
<td>Cost per Video View</td>
<td>Calculated Actual</td>
<td>Ad serving cost per video view calculated as ad serving cost / number of video views</td>
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<td>AdServingCostPerVideoViewInDC</td>
<td>Cost Video View</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per video view in display currency calculated as ad serving spend in display currency / number of video views</td>
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<td>AdServingCostPerWebsiteConversionCost</td>
<td>Web Conversion Cost</td>
<td>Calculated Actual</td>
<td>Ad serving cost per website conversion calculated as ad serving cost / number of website conversions</td>
<td></td>
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<tr>
<td>AdServingCostRegistrationCostInDC</td>
<td>Registration Cost</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per registration in display currency calculated as ad serving spend in display currency / number of registrations</td>
<td></td>
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<tr>
<td>AdServingCostWebsiteConversionInDC</td>
<td>Web Conv. Cost</td>
<td>Converted Amount in Display Currency</td>
<td>Ad serving cost per website conversion in display currency calculated as ad serving spend in display currency / number of website conversions</td>
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<tr>
<td>AdServingSpendAmount</td>
<td>Ad Serving Spend</td>
<td>Persistent Actual</td>
<td>Amount spend for ad serving, summed up when aggregated</td>
<td>AdServingSpendAmount and AdServingSpendTransactionCurrency with CampaignPerformanceType= &quot;ACTUAL&quot; only Old CSV: SPEND_AMOUNT and SPEND_CURRENCY</td>
<td></td>
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</tr>
<tr>
<td>AdServingSpendAmountInDC</td>
<td>Ad Serving Spend</td>
<td>Converted</td>
<td>Ad serving spend amount converted to the display currency using the currency exchange rate of the campaign start date</td>
<td>AdServingSpendAmount and AdServingSpendAmtCurrencyISOCode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AdServingCost1000PeopleReachInDC</td>
<td>Cost per 1000 Reach</td>
<td>Converted</td>
<td>Ad serving cost per 1000 people reached in display currency calculated as (ad serving spend in display currency / reach) *1000</td>
<td>AdServingSpendAmount and AdServingSpendAmtCurrencyISOCode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertiser</td>
<td>Advertiser ID</td>
<td>External Campaign Reference</td>
<td>Advertiser ID of the external campaign, the advertiser ID is part of the semantical key of the external campaign, not supported for campaign targets</td>
<td>Advertiser (with CampaignPerformanceType= &quot;ACTUAL&quot; only) Old CSV: AdVERTISER</td>
<td></td>
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<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
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<td>Advertiser-Name</td>
<td>Advertiser Name</td>
<td>External Campaign Reference</td>
<td>Advertiser name of the external campaign, not supported for campaign targets</td>
<td>Advertiser-Name (with CampaignPerformanceType=&quot;ACTUAL&quot; only)</td>
<td>Old CSV: ADVERTISER-NAME</td>
<td>Advertiser-Name</td>
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<td>ExternalCampaignSystem-Type</td>
<td>Ext. Cpg. System ID</td>
<td>External Campaign Reference</td>
<td>ID of the external campaign system. This ID is defined in the communication arrangement required for the Steps on External Platform action. For more information, see Steps on External Platform.</td>
<td>ExternalCampaignSystem-Type (with CampaignPerformanceType=&quot;ACTUAL&quot; only)</td>
<td></td>
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<tr>
<td>AgeRange</td>
<td>Age Range</td>
<td>Performance Dimension</td>
<td>The age range the campaign performance measures refer to</td>
<td>AgeRangeLowerLimit and AgeRangeUpperLimit</td>
<td>Old CSV: AGE_RANGE_LOW and AGE_RANGE_HIGH</td>
<td></td>
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<tr>
<td>AverageFrequency</td>
<td>Average Frequency</td>
<td>Calculated Actual</td>
<td>Average frequency of impressions calculated as number of impressions / reach</td>
<td></td>
<td></td>
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<tr>
<td>BounceRateInPercent</td>
<td>Bounce Rate</td>
<td>Calculated Actual</td>
<td>Bounce rate in percent calculated as ((hard + soft bounces)/number of sent messages) *100%</td>
<td></td>
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<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
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<td>CampaignAutomationActionUUID</td>
<td>Node ID</td>
<td>Performance Dimension</td>
<td>UUID of campaign automation action. Will only be used for automation tab, not for performance tab</td>
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<td>CampaignCategory</td>
<td>Campaign Category</td>
<td>Campaign Dimension</td>
<td>Category code of the campaign</td>
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<td>CampaignCategory</td>
<td>CampaignCategoryID</td>
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<td>CampaignCategoryName</td>
<td>Campaign Category (Description)</td>
<td>Language Dependent Description</td>
<td>Category name of the campaign</td>
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<td>CampaignContentLinkName</td>
<td>Content Link Name</td>
<td>Performance Dimension</td>
<td>Name of the link in the campaign content the campaign performance measures refer to</td>
<td></td>
<td>CampaignContentLinkName</td>
<td>CampaignContentLinkName</td>
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<td></td>
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<td>Old CSV: CAMPAIGNCONTENTLINKNAME</td>
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<td>CampaignContentName</td>
<td>Content Name</td>
<td>Performance Dimension</td>
<td>Name of the campaign content the campaign performance measures refer to</td>
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<td>CampaignContentName</td>
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<td>Old CSV: EXT_CONTENT_TITLE</td>
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<td>CampaignEndDate</td>
<td>Campaign End Date</td>
<td>Campaign Dimension</td>
<td>End date of the campaign</td>
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<td>CampaignID</td>
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<td>Campaign Dimension</td>
<td>ID of the SAP Marketing Cloud campaign.</td>
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<td>Old CSV: CAMPAIGN_ID</td>
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<td>CampaignLifecycleStatus</td>
<td>Camp. Life Cycle St.</td>
<td>Campaign Dimension</td>
<td>Life cycle status code of the campaign</td>
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<td>Camp. Life Cycle St. (Description)</td>
<td>Language Dependent Description</td>
<td>Life cycle status name of the campaign</td>
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<td>CampaignName</td>
<td>Campaign Name</td>
<td>Campaign Dimension</td>
<td>Name of the campaign</td>
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<td>CampaignOwner</td>
<td>Campaign Owner</td>
<td>Campaign Dimension</td>
<td>ID of the campaign owner</td>
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<tr>
<td>CampaignOwnerName</td>
<td>Campaign Owner (Description)</td>
<td>Campaign Dimension</td>
<td>Name of the campaign owner</td>
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<td>Global Field Name</td>
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<td>Type</td>
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<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
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<td>Process Type</td>
<td>Campaign Dimension</td>
<td>Process type code of the campaign</td>
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<td>CampaignProcessTypeName</td>
<td>(Description)</td>
<td>Language Dependent Description</td>
<td>Process type name of the campaign</td>
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<td>CampaignReach</td>
<td>Reach</td>
<td>Persistent Actual</td>
<td>Reach, summed up when aggregated. this is a people centric measure - be careful to combine it with non-person related dimensions such as time when importing data as this leads to wrong aggregated values, a combination with people related dimensions such as gender is fine</td>
<td></td>
<td>CampaignReach with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
<td>CampaignReach</td>
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<td></td>
<td>Old CSV: UNIQUE_IMPRESSIONS</td>
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<tr>
<td>CampaignReachInPercent</td>
<td>Reach in Percent</td>
<td>Persistent Actual</td>
<td>Reach in percent, summed up when aggregated. this is a people centric measure - be careful to combine it with non-person related dimensions such as time when importing data as this leads to wrong aggregated values, a combination with people related dimensions such as gender is fine</td>
<td></td>
<td>CampaignReachInPercent with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
<td>CampaignReachInPercent</td>
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<td></td>
<td>Old CSV: CAMPAIGNREACHINPERCENT</td>
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<td>CampaignStartDate</td>
<td>Campaign Start Date</td>
<td>Campaign Dimension</td>
<td>Start date of the campaign</td>
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<tr>
<td>Global Field Name</td>
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<td>Column in CSV Upload</td>
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<td>CampaignSuccessImportMethod</td>
<td>Import Method</td>
<td>Other</td>
<td>The code of the method the campaign performance data was imported with, filled automatically by the system if performance data is retrieved</td>
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<tr>
<td>ClickThroughRateInPercent</td>
<td>CTR</td>
<td>Calculated Actual</td>
<td>Click-through rate in percent calculated as (number of clicks / (impressions + sent messages)) * 100%, depending on the campaign type typically either impressions or sent messages are given</td>
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<tr>
<td>ClickToOpenRateInPercent</td>
<td>Click-To-Open Rate</td>
<td>Calculated Actual</td>
<td>Click-to-open rate in percent calculated as (number of clicks / number of opened messages) *100%</td>
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<tr>
<td>CmpgnPerfAltDrillDown</td>
<td>Drill Down</td>
<td>Other</td>
<td>Alternative drill down of the campaign performance data used to separate independent data sets that must not be aggregated together, only used for Baidu campaigns</td>
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<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
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<td>CmpgnPerformanceTimeUnit</td>
<td>Time Unit</td>
<td>Other</td>
<td>The time unit code the campaign performance data was imported with, filled automatically by the system if performance data is retrieved depending on the granularity of the incoming data being daily, weekly or monthly</td>
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<td>Language Dependent Description</td>
<td>The time unit name the campaign performance data was imported with</td>
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<td>CmpgnSuccessImportMethodName</td>
<td>Import Method (Description)</td>
<td>Language Dependent Description</td>
<td>The name of the method the campaign performance data was imported with</td>
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<td>CommunicationMedium</td>
<td>Communication Medium</td>
<td>Performance Dimension</td>
<td>Communication medium code of the campaign performance measures, the communication medium used to deliver the ad, possible values can be looked up and maintained with the Manage Your Solution app</td>
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<td>CommunicationMedium-Name</td>
<td>Communication Medium (Description)</td>
<td>Language Dependent Description</td>
<td>Communication medium name of the campaign performance measures</td>
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<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
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<td>CountryCode</td>
<td>Country/Region</td>
<td>Performance Dimension</td>
<td>Country/region code of the campaign performance measures, a mapping of external values to internal codes is maintained with the &quot;Map Free Texts&quot; app</td>
<td>CountryFreeText</td>
<td>Old CSV: COUNTRY_FT</td>
<td>CountryFreeText</td>
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<td>Language Dependent Description</td>
<td>Country/region name of the campaign performance measures</td>
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<td>DeviceType</td>
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<td>Performance Dimension</td>
<td>Device type code of the campaign performance measures, a mapping of external values to internal codes is maintained with the &quot;Map Free Texts&quot; app</td>
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<td>Old CSV: DEVICEFREETEXT</td>
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<tr>
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<td>Device Type (Description)</td>
<td>Language Dependent Description</td>
<td>Device type name of the campaign performance measures</td>
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<td>Ext. Campaign ID</td>
<td>ExternalCampaignID (with CampaignPerformanceType= 'ACTUAL' only)</td>
</tr>
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<td>ExternalCampaignID</td>
<td>Ext. Campaign ID</td>
<td>External Campaign Reference</td>
<td>ID of a campaign executed on an external platform assigned to the SAP Marketing Cloud campaign, not supported for campaign targets</td>
<td>ExternalCampaignID</td>
<td>ServerCampaignID</td>
<td>ExternalCampaignID</td>
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<td>Name of the external campaign, not supported for campaign targets</td>
<td>ExternalCampaignName</td>
<td>(with CampaignPerformanceType= &quot;ACTUAL&quot; only)</td>
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<td>Ext. Campaign URL</td>
<td>External Campaign Reference</td>
<td>Link to the campaign on the external platform</td>
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<td>ExternalCmpgnManagingParty</td>
<td>Managing Party</td>
<td>External Campaign Reference</td>
<td>Party ID of the party managing the external campaign, the party ID is part of the semantic key of the external campaign, not supported for campaign targets</td>
<td>ExternalCmpgnManagingParty</td>
<td>(with CampaignPerformanceType= &quot;ACTUAL&quot; only)</td>
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<td>Managing Party Name</td>
<td>External Campaign Reference</td>
<td>Party name of the party managing the external campaign, not supported for campaign targets</td>
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<td>GenderCode</td>
<td>Gender</td>
<td>Performance Dimension</td>
<td>Gender code of the campaign performance measures, a mapping of external values to internal codes is maintained with the &quot;Map Free Texts&quot; app</td>
<td>GenderFreeText</td>
<td>GenderFreeText FT</td>
<td>GenderFreeText</td>
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<td>Gender code name of the campaign performance measures</td>
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<td>GrossRating-PointBase</td>
<td>GRP Base</td>
<td>Performance Dimension</td>
<td>Base the gross rating points measure refers to, typically contains a custom string describing the audience the gross rating points are related to, not supported for campaign targets</td>
<td>GrossRating-PointBase (with CampaignPerformanceType= &quot;ACTUAL&quot; only)</td>
<td>GrossRating-PointBase</td>
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<tr>
<td>GrossRating-Points</td>
<td>Gross Rating Points</td>
<td>Persistent Actual</td>
<td>Gross rating points, summed up when aggregated, be aware that an aggregation of gross rating points with a different gross rating point base doesn't make sense but technically is not prevented</td>
<td>GrossRating-Points with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
<td>GrossRating-Points</td>
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<tr>
<td>InteractionReason</td>
<td>Interaction Reason</td>
<td>Performance Dimension</td>
<td>The interaction reason code the campaign performance measures refer to, mainly providing failure reasons for SAP Marketing Cloud internally executed campaigns such as a failed marketing permission check, possible values can be looked up and maintained with the Manage Your Solution app, not supported for campaign targets</td>
<td>InteractionReason</td>
<td>InteractionReason (with CampaignPerformanceType=‘ACTUAL’ only)</td>
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<td>InteractionReasonName</td>
<td>Interaction Reason (Descrip</td>
<td>Language Dependent Descri</td>
<td>The interaction reason name the campaign performance measures refer to</td>
<td>InteractionReason</td>
<td>InteractionReason</td>
<td>InteractionReason</td>
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<tr>
<td>InteractionStatus</td>
<td>Interaction Status</td>
<td>Performance Dimension</td>
<td>Status code of the interaction the campaign performance measures refer to, mainly used for measures related to business documents such as leads or sales orders to provide a status of the business document, possible values are:</td>
<td>InteractionStatus (with CampaignPerformanceType= 'ACTUAL' only)</td>
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<tr>
<td></td>
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<td>• 01 In Process</td>
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<td>• 02 Released</td>
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<td>• 03 Completed</td>
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<td>• 04 Cancelled</td>
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<td>• 05 Converted</td>
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<td></td>
<td>• 06 Successful</td>
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<td></td>
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<td></td>
<td>• 07 Unsuccessful</td>
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<td>• 00 New</td>
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<td></td>
<td>Not supported for campaign targets</td>
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<th>InteractionStatusName</th>
<th>Interaction Status (Description)</th>
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<th>Status name of the interaction the campaign performance measures refer to</th>
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<td>InteractionType</td>
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<td>Type code of the interaction the campaign performance measures refer to, mainly used together with interaction reasons, possible values can be looked up and maintained with the Manage Your Solution app, not supported for campaign targets</td>
<td>InteractionType (with CampaignPerformanceType=&quot;ACTUAL&quot; only)</td>
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<td>Type name of the interaction the campaign performance measures refer to</td>
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<td>LeadConversionRateInPercent</td>
<td>Lead Conversion Rate</td>
<td>Calculated Actual</td>
<td>Lead conversion rate in percent calculated as (number of converted leads / number of leads) *100%</td>
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<td>LeadNurtureName</td>
<td>Lead Nurture ID</td>
<td>Campaign Dimension</td>
<td>Technical ID of a lead nurture using a campaign</td>
<td>CSV upload ignores field</td>
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<td>LeadNurtureStageUUID</td>
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<td>Guid of lead nurture stage</td>
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<td>Marketing area ID of the campaign</td>
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<td>Marketing Area (Description)</td>
<td>Language Dependent Description</td>
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<td>MarketingPlanID</td>
<td>Marketing Plan Name</td>
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<td>ID of the marketing plan associated with the campaign</td>
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<td>MarketingPlanName</td>
<td>Mktg Plan Name</td>
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<td>Name of the marketing plan associated with the campaign</td>
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<td>MediaType</td>
<td>Media Type ID</td>
<td>Performance Dimension</td>
<td>Media type code of the campaign performance measures, the media type is</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>derived from the communication medium, if no communication medium is</td>
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<td></td>
<td></td>
<td></td>
<td>given the media type is taken from the campaign, possible values can be</td>
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<td></td>
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<td></td>
<td>looked up and maintained with the Manage Your Solution app</td>
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<td>MediaTypeName</td>
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<td>MultiTouchAttributedOrdAmtInDC</td>
<td>Multi Touch Ord Amt</td>
<td>Converted Amount in Display Currency</td>
<td>Multi touch attributed order amount converted to the display currency using the currency exchange rate of the campaign start date</td>
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<td>MultiTouchAttributedOrderAmt</td>
<td>Multi Touch Ord Amt</td>
<td>Persistent Actual</td>
<td>Order amount attributed to the campaign using multi touch attribution, summed up when aggregated, typically used with SAP Hybris Customer Attribution integration, summed up when aggregated</td>
<td>MultiTouchAttributedOrderAmt and OrderTransactionCurrency with CampaignPerformanceType=“ACTUAL”</td>
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<tr>
<td>NmbrOfOpenChannelInteractions</td>
<td>Open Channel Interactions</td>
<td>Persistent Actual</td>
<td>Number of open channel interactions, summed up when aggregated, used for campaigns executed in SAP Marketing Cloud that include custom actions implemented using the open channel</td>
<td>NmbrOfOpenChannelInteractions with CampaignPerformanceType=“ACTUAL”</td>
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<td>NrOfMultiTch-AttrCnvrsns</td>
<td>Multi Touch Cnvrsns</td>
<td>Persistent Actual</td>
<td>Number of conversions attributed to the campaign using multi touch attribution, typically used with SAP Hybris Customer Attribution integration, summed up when aggregated</td>
<td>NrOfMultiTch-AttrCnvrsns with Campaign-Performance-Type= “ACTUAL”</td>
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<td>NumberOfAppEngagements</td>
<td>App Engagements</td>
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<td>Number of app engagements as a result of the campaign, summed up when aggregated</td>
<td>NumberOfAppEngagements with Campaign-Performance-Type= “ACTUAL”</td>
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<td>NumberOfAppInstalls</td>
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<td>Number of app installs attributed to the campaign, summed up when aggregated</td>
<td>NumberOfAppInstalls with CampaignPerformanceType= “ACTUAL”</td>
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<td>NumberOfAppointments</td>
<td>Appointments</td>
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<td>Number of appointments scheduled as a result of the campaign, summed up when aggregated</td>
<td>NumberOfAppointments with CampaignPerformanceType= “ACTUAL”</td>
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<td>Number of clicks, summed up when aggregated</td>
<td>NumberOfClicks with CampaignPerformanceType= “ACTUAL”</td>
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<tr>
<td>NumberOfConvertedLeads</td>
<td>Converted Leads</td>
<td>Calculated Actual</td>
<td>Number of converted leads created as a result of the campaign</td>
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<td>NumberOfDeliveredMessages</td>
<td>Delivered Messages</td>
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<td>Number of messages successfully delivered by the campaign, for campaigns executed in SAP Marketing Cloud delivered messages = sent messages - hard and soft bounces - rejected messages, summed up when aggregated</td>
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<td>NumberOfDownloads</td>
<td>Downloads</td>
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<td>Number of downloads attributed to the campaign, summed up when aggregated</td>
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<td>NumberOfEmailComplaints</td>
<td>Email Complaints</td>
<td>Persistent Actual</td>
<td>Number of email complaints, the number of times a mail sent by the campaign was marked as spam, summed up when aggregated</td>
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<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
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<td>Column in CSV Upload</td>
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<td>NumberOfEventResponses</td>
<td>Event Responses</td>
<td>Persistent Actual</td>
<td>Number of event responses, typically used with Facebook campaigns, summed up when aggregated</td>
<td>NumberOfEventResponses with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>NumberOfExecutedInteractions</td>
<td>Executed Interactions</td>
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<td>Number of interactions executed by the SAP Marketing Cloud campaign, summed up when aggregated</td>
<td>NumberOfExecutedInteractions (with CampaignPerformanceType= &quot;ACTUAL&quot; only)</td>
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<td>Old CSV: NUMBEROFEXECUTEDINTERACTIONS</td>
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<td>NumberOfFailedInteractions</td>
<td>Failed Interactions</td>
<td>Persistent Actual</td>
<td>Number of failed interactions, for campaigns executed in SAP Marketing Cloud this is the number of interactions that have been triggered but could not be executed for various reasons such as missing marketing permissions, summed up when aggregated</td>
<td>NumberOfFailedInteractions (with CampaignPerformanceType= &quot;ACTUAL&quot; only)</td>
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<tr>
<td>NumberOfHardBounces</td>
<td>Hard Bounces</td>
<td>Persistent Actual</td>
<td>Number of hard bounces for sent messages, summed up when aggregated</td>
<td>NumberOfHardBounces with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Number of leads created as a result of the campaign, summed up when aggregated</td>
<td>NumberOfLeads with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Number of offer claims as a result of the campaign, summed up when aggregated</td>
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<td>NumberOfOpenedMessages</td>
<td>Opened Messages</td>
<td>Persistent Actual</td>
<td>Number of opened messages, summed up when aggregated</td>
<td>NumberOfOpenedMessages with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>No. of Opportunities</td>
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<td>Number of opportunities created as a result of the campaign, summed up when aggregated</td>
<td>NumberOfOpportunities with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Number of orders attributed to the campaign, summed up when aggregated</td>
<td>NumberOfOrders with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Page Likes</td>
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<td>Number of page likes as a result of the campaign, typically used for Facebook campaigns, summed up when aggregated</td>
<td>NumberOfPageLikes with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>NumberOfPhoneCalls</td>
<td>Phone Calls</td>
<td>Persistent Actual</td>
<td>Number of phone calls triggered as a result of the campaign, summed up when aggregated</td>
<td>NumberOfPhoneCalls with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Old CSV: NUMBEROFPHONECALLS</td>
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<tr>
<td>NumberOfPostEngagements</td>
<td>Page Post Eng.</td>
<td>Persistent Actual</td>
<td>Number of engagements with a page post, typically used with Facebook campaigns, summed up when aggregated</td>
<td>NumberOfPostEngagements with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Old CSV: POST_ENGAGEMENTS</td>
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<tr>
<td>NumberOfRegistrations</td>
<td>Registrations</td>
<td>Persistent Actual</td>
<td>Number of registrations attributed to the campaign, summed up when aggregated</td>
<td>NumberOfRegistrations with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Old CSV: NUMBEROFREGISTRATIONS</td>
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<tr>
<td>NumberOfRejectedMessages</td>
<td>Rejected Messages</td>
<td>Persistent Actual</td>
<td>Number of rejected messages, for campaigns executed in SAP Marketing Cloud this is the number of messages that has been sent successfully to an external platform but that have been rejected for any reason by this platform without being counted as hard or soft bounces, summed up when aggregated</td>
<td>NumberOfRejectedMessages with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Old CSV: REJECTED_MESSAGES</td>
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<tr>
<td>NumberOfSent-Messages</td>
<td>Sent Messages</td>
<td>Persistent Actual</td>
<td>The number of messages sent by the campaign, the type of the message such as email or SMS typically is given by the communication medium, summed up when aggregated</td>
<td>NumberOfSent-Messages with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
</tr>
<tr>
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<td>Old CSV: SENT_MESSAGES</td>
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<tr>
<td>NumberOfSoft-Bounces</td>
<td>Soft Bounces</td>
<td>Persistent Actual</td>
<td>Number of soft bounces for sent messages, summed up when aggregated</td>
<td>NumberOfSoft-Bounces with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td></td>
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<td></td>
<td>Old CSV: NUMBEROFSOFTBOUNCES</td>
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<tr>
<td>NumberOf-Tasks</td>
<td>Tasks</td>
<td>Persistent Actual</td>
<td>Number of tasks triggered as a result of the campaign, typically tasks are created in a connected CRM system, summed up when aggregated</td>
<td>NumberOf-Tasks with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
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<td>Old CSV: NUMBEROFTASKS</td>
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<td>NmbrOfTriggeredInteractions</td>
<td>Triggered Interact.</td>
<td>Calculated Actual</td>
<td>Number of triggered interactions calculated as executed interactions + failed interactions</td>
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<tr>
<td>Global Field Name</td>
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<tr>
<td>NumberOfUniqueClicks</td>
<td>Unique Clicks</td>
<td>Persistent Actual</td>
<td>Number of unique clicks, the number of different people that clicked an ad. For campaigns executed in SAP Marketing Cloud the number of unique clicks is per content (and not per link in the content or per campaign), summed up when aggregated, this is a people centric measure - be careful to combine it with non-person related dimensions such as time when importing data as this leads to wrong aggregated values, a combination with people related dimensions such as gender is fine</td>
<td>UniqueClicks with CampaignPerformanceType= &quot;ACTUAL&quot; Old CSV: UNIQUE_CLICKS</td>
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<tr>
<td>NumberOfVideoViews</td>
<td>Video Views</td>
<td>Persistent Actual</td>
<td>Number of video views, summed up when aggregated</td>
<td>VideoViews with CampaignPerformanceType= &quot;ACTUAL&quot; Old CSV: VIDEO_VIEWS</td>
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<td>Global Field Name</td>
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<tr>
<td>NumberOfWebsiteConversions</td>
<td>Website Conversions</td>
<td>Persistent Actual</td>
<td>Number of website conversions attributed to the campaign, typically used for Facebook campaigns, for other scenarios there are dedicated measures for the different types of conversions such as number of orders or number of registrations, summed up when aggregated</td>
<td>NumberOfWebsiteConversions with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
</tr>
<tr>
<td>OpenedMessageRateInPercent</td>
<td>Opened Messages in %</td>
<td>Calculated Actual</td>
<td>Rate of opened messages in percent calculated as (number of opened messages / number of delivered messages) *100%</td>
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<td>Global Field Name</td>
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<td>Description</td>
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<td>OpportunityAmountInDC</td>
<td>Opportunity Amount</td>
<td>Converted Amount in Display Currency</td>
<td>Opportunity amount converted to the display currency using the currency exchange rate of the campaign start date</td>
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<tr>
<td>OrderAmount</td>
<td>Order Amount</td>
<td>Persistent Actual</td>
<td>Order amount attributed to the campaign, summed up when aggregated</td>
<td>OrderAmount and OrderTransactionCurrency with CampaignPerformanceType= &quot;ACTUAL&quot;</td>
</tr>
<tr>
<td>OrderAmountInDC</td>
<td>Order Amount</td>
<td>Converted Amount in Display Currency</td>
<td>Order amount converted to the display currency using the currency exchange rate of the campaign start date</td>
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<tr>
<td>ProjectedNumberOfConversions</td>
<td>Proj. Conversions</td>
<td>Persistent Actual</td>
<td>Projected number of conversions that could have been achieved with an optimized campaign, typically used with SAP Hybris Customer Attribution integration, summed up when aggregated</td>
<td>ProjectedNumberOfConversions (with CampaignPerformanceType= &quot;ACTUAL&quot; only)</td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
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<tr>
<td>ProjectedOrderAmount</td>
<td>Proj.Order Amount</td>
<td>Persistent Actual</td>
<td>Projected order amount that could have been achieved with an optimized campaign, typically used with SAP Hybris Customer Attribution integration, summed up when aggregated</td>
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<tr>
<td>ProjectedOrderAmountInDC</td>
<td>Proj. Order Amount</td>
<td>Converted Amount in Display Currency</td>
<td>Projected order amount converted to the display currency using the currency exchange rate of the campaign start date</td>
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<tr>
<td>Region</td>
<td>Region</td>
<td>Performance Dimension</td>
<td>Region code of the campaign performance measures, a mapping of external values to internal codes is maintained with the &quot;Map Free Texts&quot; app</td>
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<td>RegionName</td>
<td>Region (Description)</td>
<td>Language Dependent Description</td>
<td>Region name of the campaign performance measures</td>
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<tr>
<td>SuccessDataDate</td>
<td>Date</td>
<td>Performance Dimension</td>
<td>Date the campaign performance measures refer to</td>
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<tr>
<td>SuccessDataLastChangeDateTime</td>
<td>Time Last Changed</td>
<td>Other</td>
<td>Date and time when the performance data record was last updated, filled automatically by the system if performance data is retrieved</td>
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<td>SuccessDataReplicationStatus</td>
<td>Reporting Status</td>
<td>Other</td>
<td>Status code of the campaign success data replication, filled automatically by the system if performance data is retrieved</td>
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<tr>
<td>SuccessDataDateTimeZone</td>
<td>TimeZone</td>
<td>Performance Dimension</td>
<td>Time zone of success data date</td>
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<td>SuggestedAdServingSpendAmount</td>
<td>Suggested Spend</td>
<td>Persistent Actual</td>
<td>Suggested ad serving spend amount for an optimized campaign, typically used with SAP Hybris Customer Attribution integration, summed up when aggregated</td>
<td>SuggestedAdServingSpendAmount and AdServingSpendTransactionCurrency with CampaignPerformanceType=&quot;ACTUAL&quot; only</td>
</tr>
<tr>
<td>SuggestedAdServingSpendAmtInDC</td>
<td>Suggested Spend</td>
<td>Converted Amount in Display Currency</td>
<td>Suggested ad serving spend amount converted to the display currency using the currency exchange rate of the campaign start date</td>
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<td>Global Field Name</td>
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<td>TargetCampaignReach</td>
<td>Target Reach</td>
<td>Target</td>
<td>Target value for the reach, summed up when aggregated. This is a people-centric measure - be careful to combine it with non-person related dimensions such as time when importing data as this leads to wrong aggregated values, a combination with people related dimensions such as gender is fine</td>
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<td>Old CSV: UNIQUE_IMPRESSIONS</td>
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<td>TargetGrossRatingPoints</td>
<td>Target GRPs</td>
<td>Target</td>
<td>Target value for the gross rating points, summed up when aggregated, be aware that an aggregation of gross rating points with a different gross rating point base doesn’t make sense but technically is not prevented</td>
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<tr>
<td>TargetMultiTouchAttribOrderAmt</td>
<td>Target MTA Ord Amt</td>
<td>Target</td>
<td>Target value for the multi touch attributed order amount, summed up when aggregated</td>
<td>MultiTouchAttributedOrderAmt and OrderTransactionCurrency with CampaignPerformanceType= &quot;TARGET&quot;</td>
</tr>
<tr>
<td>TargetNmbrOfAppEngagements</td>
<td>Tgt App Engagements</td>
<td>Target</td>
<td>Target value for the number of app engagements, summed up when aggregated</td>
<td>NumberOfAppEngagements with CampaignPerformanceType= &quot;TARGET&quot;</td>
</tr>
<tr>
<td>TargetNumberOfAppInstalls</td>
<td>Target App Installs</td>
<td>Target</td>
<td>Target value for the number of app installs, summed up when aggregated</td>
<td>NumberOfAppInstalls with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TargetNumberOfAppointments</td>
<td>Target Appointments</td>
<td>Target</td>
<td>Target value for the number of appointments, summed up when aggregated</td>
<td>NumberOfAppointments with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TargetNumberOfClicks</td>
<td>Target Clicks</td>
<td>Target</td>
<td>Target value for the number of clicks, summed up when aggregated</td>
<td>NumberOfClicks with CampaignPerformanceType= &quot;TARGET&quot; Old CSV: CLICKS</td>
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<td>TargetNumberOfDownloads</td>
<td>Target Downloads</td>
<td>Target</td>
<td>Target value for the number of downloads, summed up when aggregated</td>
<td>NumberOfDownloads with CampaignPerformanceType= &quot;TARGET&quot; Old CSV: NUMBEROFDOWNLOADS</td>
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<tr>
<td>TargetNumberOfHardBounces</td>
<td>Target Hard Bounces</td>
<td>Target</td>
<td>Target value for the number of hard bounces, in contrast to most other targets less is considered to be better, summed up when aggregated</td>
<td>NumberOfHardBounces with CampaignPerformanceType= &quot;TARGET&quot; Old CSV: NUMBEROFHARDBOUNCES</td>
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<td>TargetNumberOfImpressions</td>
<td>Target Impressions</td>
<td>Target</td>
<td>Target value for the number of impressions, summed up when aggregated</td>
<td>NumberOfImpressions with CampaignPerformanceType= &quot;TARGET&quot; Old CSV: IMPRESSIONS</td>
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<td>TargetNumberOfLeads</td>
<td>Target No. of Leads</td>
<td>Target</td>
<td>Target value for the number of leads, summed up when aggregated</td>
<td>NumberOfLeads with CampaignPerformanceType= &quot;TARGET&quot; Old CSV: NUMBEROFLEADS</td>
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<td>Global Field Name</td>
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<td>TargetNumberOfOpportunities</td>
<td>Target Opportunities</td>
<td>Target</td>
<td>Target value for the number of opportunities, summed up when aggregated</td>
<td>NumberOfOpportunities with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TargetNumberOfOrders</td>
<td>Tgt Number of Orders</td>
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<td>Target value for the number of orders, summed up when aggregated</td>
<td>NumberOfOrders with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TargetNumberOfPageLikes</td>
<td>Target Page Likes</td>
<td>Target</td>
<td>Target value for the number of page likes, summed up when aggregated</td>
<td>NumberOfPageLikes with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<tr>
<td>TargetNumberOfPhoneCalls</td>
<td>Target Phone Calls</td>
<td>Target</td>
<td>Target value for the number of phone calls, summed up when aggregated</td>
<td>NumberOfPhoneCalls with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TargetNumberOfRegistrations</td>
<td>Target Registrations</td>
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<td>Target value for the number of registrations, summed up when aggregated</td>
<td>NumberOfRegistrations with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<tr>
<td>TargetNumberOfSentMessages</td>
<td>Target Sent Messages</td>
<td>Target</td>
<td>Target value for the number of sent messages, summed up when aggregated</td>
<td>NumberOfSentMessages with CampaignPerformanceType= &quot;TARGET&quot;</td>
</tr>
<tr>
<td>TargetNumberOfSoftBounces</td>
<td>Target Soft Bounces</td>
<td>Target</td>
<td>Target value for the number of soft bounces, in contrast to most other targets less is considered to be better, summed up when aggregated</td>
<td>NumberOfSoftBounces with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TargetNumberOfTasks</td>
<td>Target Tasks</td>
<td>Target</td>
<td>Target value for the number of tasks, summed up when aggregated</td>
<td>NumberOfTasks with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<tr>
<td>TargetNumberOfUniqueClicks</td>
<td>Target Unique Clicks</td>
<td>Target</td>
<td>Target value for the number of unique clicks, summed up when aggregated, this is a people centric measure - be careful to combine it with non-person related dimensions such as time when importing data as this leads to wrong aggregated values, a combination with people related dimensions such as gender is fine</td>
<td>NumberOfUniqueClicks with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<tr>
<td>TargetNumberOfVideoViews</td>
<td>Target Video Views</td>
<td>Target</td>
<td>Target value for the number of video views, summed up when aggregated</td>
<td>NumberOfVideoViews with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<tr>
<td>TargetOpportunityAmount</td>
<td>Tgt Opportunity Amt</td>
<td>Target</td>
<td>Target value for the opportunity amount, summed up when aggregated</td>
<td>OpportunityAmount and OpportunityTransactionCurrency with CampaignPerformanceType= &quot;TARGET&quot;</td>
</tr>
<tr>
<td>TargetOpportunityAmountInDC</td>
<td>Tgt Opportunity Amt</td>
<td>Converted</td>
<td>Target value for the opportunity amount converted to the display currency using the currency exchange rate of the campaign start date</td>
<td>OrderAmount and OrderTransactionCurrency with CampaignPerformanceType= &quot;TARGET&quot;</td>
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Integration APIs
<table>
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<tr>
<th>Global Field Name</th>
<th>Label</th>
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<th>Description</th>
<th>Column in CSV Upload</th>
<th>Name in External Campaign OData Pull Interface</th>
<th>Name in OData Push Interface</th>
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<tbody>
<tr>
<td>TargetOrderAmountInDC</td>
<td>Target Order Amount</td>
<td>Converted Amount in Display Currency</td>
<td>Target value for the order amount converted to the display currency using the currency exchange rate of the campaign start date</td>
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<tr>
<td>TgtCampaignReachInPercent</td>
<td>Tgt Reach in Percent</td>
<td>Target</td>
<td>Target value for the reach in percent, summed up when aggregated, this is a people centric measure - be careful to combine it with non-person related dimensions such as time when importing data as this leads to wrong aggregated values, a combination with people related dimensions such as gender is fine</td>
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<tr>
<td>TgtMultiTchAtOrdAmtInDC</td>
<td>Target MTA Ord Amt</td>
<td>Converted Amount in Display Currency</td>
<td>Target value for the multi touch attributed order amount converted to the display currency using the currency exchange rate of the campaign start date</td>
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<td>Global Field Name</td>
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<td>TgtNmbrOfDeliveredMessages</td>
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<td>Target</td>
<td>Target value for the number of delivered messages, summed up when aggregated</td>
<td>NumberOfDeliveredMessages with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TgtNmbrOfOpenChnlInteractions</td>
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<td>Target value for the number of open channel interactions, summed up when aggregated</td>
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<td>TgtNmbrOfWebsiteConversions</td>
<td>Target Conversions</td>
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<td>Target value for the number of website conversions, summed up when aggregated</td>
<td>NumberOfWebsiteConversions with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>TgtNrOfMultiTch-AttrCnvrns</td>
<td>Tgt MTA Conversions</td>
<td>Target</td>
<td>Target value for the number of multi touch attributed conversions, summed up when aggregated</td>
<td>NrOfMultiTch-AttrCnvrns with CampaignPerformanceType= &quot;TARGET&quot;</td>
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<td>Name in External Campaign</td>
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<td>TgtNumberOfEmailComplaints</td>
<td>Tgt Email Complaints</td>
<td>Target</td>
<td>Target value for the number of email complaints, in contrast to most other targets less is considered to be better, summed up when aggregated</td>
<td>NumberOfEmailComplaints with Campaign-Performance-Type= &quot;TARGET&quot;</td>
<td>Old CSV: NUMBEROFEMAILCOMPLAINTS</td>
<td></td>
</tr>
<tr>
<td>TgtNumberOfEventResponses</td>
<td>Tgt Event Responses</td>
<td>Target</td>
<td>Target value for the number of event responses, summed up when aggregated</td>
<td>NumberOfEventResponses with Campaign-Performance-Type= &quot;TARGET&quot;</td>
<td>Old CSV: EVENTRESPONSES</td>
<td></td>
</tr>
<tr>
<td>TgtNumberOfMktgOfferClaims</td>
<td>Target Offer Claims</td>
<td>Target</td>
<td>Target value for the number of offer claims, summed up when aggregated</td>
<td>NumberOfOfferClaims with CampaignPerformanceType= &quot;TARGET&quot;</td>
<td>Old CSV: OFFERCLAIMS</td>
<td></td>
</tr>
<tr>
<td>TgtNumberOfMktgOfferViews</td>
<td>Target Offer Views</td>
<td>Target</td>
<td>Target value for the number of offer views, summed up when aggregated</td>
<td>NumberOfMarketingOfferViews with CampaignPerformanceType= &quot;TARGET&quot;</td>
<td>Old CSV: NUMBEROFMARKETINGOFFERVIEWS</td>
<td></td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------</td>
<td>-------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>TgtNumberOfOpenedMessages</td>
<td>Tgt Opened Messages</td>
<td>Target</td>
<td>Target value for the number of opened messages, summed up when aggregated</td>
<td></td>
<td>NumberOfOpenedMessages with Campaign-Performance-Type= &quot;TARGET&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Old CSV: NUMBEROFOPENEDMESSAGES</td>
<td></td>
</tr>
<tr>
<td>TgtNumberOfPostEngagements</td>
<td>Tgt Page Post Eng.</td>
<td>Target</td>
<td>Target value for the number of page post engagements, summed up when aggregated</td>
<td></td>
<td>NumberOfPostEngagements with Campaign-Performance-Type= &quot;TARGET&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Old CSV: POST_ENGAGEMENTS</td>
<td></td>
</tr>
<tr>
<td>TgtNumberOfRejectedMessages</td>
<td>Target Rejected Msgs</td>
<td>Target</td>
<td>Target value for the number of rejected messages, in contrast to most other targets less is considered to be better, summed up when aggregated</td>
<td></td>
<td>NumberOfRejectedMessages with Campaign-Performance-Type= &quot;TARGET&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Old CSV: REJECTED_MESSAGES</td>
<td></td>
</tr>
<tr>
<td>UniqueClickThroughRateInPct</td>
<td>Unique CTR</td>
<td>Calculated Actual</td>
<td>Unique click-through rate in percent calculated as (number of unique clicks / (reach + sent messages)) * 100%, depending on the campaign type typically either reach or sent messages is given</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Field Name</td>
<td>Label</td>
<td>Type</td>
<td>Description</td>
<td>Column in CSV Upload</td>
<td>Name in External Campaign OData Pull Interface</td>
<td>Name in OData Push Interface</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------</td>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>VideoViewedAverageInPercent</td>
<td>Per. Video Viewed</td>
<td>Persistent Actual</td>
<td>Average percentage of video viewed, aggregated as average weighted by the number of video views</td>
<td>VideoViewedAverageInPercent with CampaignPerformanceType=&quot;ACTUAL&quot;</td>
<td>VideoViewedAverageInPercent</td>
<td>VideoViewedAverageInPercent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YearMonth</th>
<th>Year Month</th>
<th>Performance Dimension</th>
<th>Year and month the campaign performance measures refer to</th>
<th>YearMonth</th>
<th>YearMonth</th>
<th>YearMonth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Old CSV: YEARMONTH</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YearQuarter</th>
<th>Year Quarter</th>
<th>Performance Dimension</th>
<th>Year and quarter the campaign performance measures refers to</th>
<th>YearWeek</th>
<th>YearWeek</th>
<th>YearWeek</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Old CSV: YEARWEEK</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YearWeek</th>
<th>Year Week</th>
<th>Performance Dimension</th>
<th>Year and week the campaign performance measures refer to</th>
<th>YearWeek</th>
<th>YearWeek</th>
<th>YearWeek</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Old CSV: YEARWEEK</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5.5.8.2 Aggregated Success Data from Interactions

Some interactions are used to update aggregated success for campaigns.

#### Interactions

Certain interactions are used to update the aggregated success data of campaigns. These interactions need to have a timestamp and a reference to a campaign. Therefore, the following interaction attributes must be correctly maintained:

- UTC Time Stamp in Long Form (TIMESTAMP)
- Campaign ID (INITIATIVE_ID)

**Note**

Aggregated success data can’t be extended to include any additional measures and dimensions from interactions than those that are already used.
The interactions can have any communication medium besides Business Document (BUSINESS_DOCUMENT) and WeChat (WEC). To see a list of business documents used to update aggregated success data, see the Business Documents section below.

Interactions Used to Update Aggregated Success

<table>
<thead>
<tr>
<th>Measure</th>
<th>Global Field Names</th>
<th>Interaction Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivered Messages</td>
<td>NumberOfDeliveredMessages</td>
<td>Outbound Email (EMAIL_OUTBOUND)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emails Classified as Complaint (Spam) (EMAIL_COMPLAINT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outbound Text Message (SMS_OUTBOUND)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mobile Notification Sent (MOB_APP_NOTIF_SENT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outbound Message from Digital Account (DIG_ACC_OUTBOUND)</td>
</tr>
<tr>
<td>Hard Bounces</td>
<td>NumberOfHardBounces</td>
<td>Hard Bounce (EMAIL_BOUNCE_HARD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hard Bounce (SMS_BOUNCE_HARD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hard Bounce (BOUNCE_HARD)</td>
</tr>
<tr>
<td>Soft Bounces</td>
<td>NumberOfSoftBounces</td>
<td>Soft Bounce (EMAIL_BOUNCE_SOFT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soft Bounce (SMS_BOUNCE_SOFT)</td>
</tr>
<tr>
<td>Email Complaints</td>
<td>NumberOfEmailComplaints</td>
<td>Emails Classified as Complaint (Spam) (EMAIL_COMPLAINT)</td>
</tr>
<tr>
<td>Opened Messages</td>
<td>NumberOfOpenedMessages</td>
<td>Email Opened (EMAIL_OPENED)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mobile Notification Viewed (MOB_APP_NOTIF_VIEWED)</td>
</tr>
<tr>
<td>Measure</td>
<td>Global Field Names</td>
<td>Interaction Types</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sent Messages</td>
<td>NumberOfSentMessages</td>
<td>Outbound Email (EMAIL_OUTBOUND)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hard Bounce (EMAIL_BOUNCE_HARD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soft Bounce (EMAIL_BOUNCE_SOFT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emails Classified as Complaint (Spam) (EMAIL_COMPLAINT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outbound Text Message (SMS_OUTBOUND)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hard Bounce (SMS_BOUNCE_HARD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soft Bounce (SMS_BOUNCE_SOFT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hard Bounce (BOUNCE_HARD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mobile Notification Sent (MOB_APP_NOTIF_SENT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outbound Message from Digital Account (DIG_ACC_OUTBOUND)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delivery Failed (DELIVERY_FAILED)</td>
</tr>
<tr>
<td>Rejected Messages</td>
<td>NumberOfRejectedMessages</td>
<td>Delivery Failed (DELIVERY_FAILED)</td>
</tr>
<tr>
<td>Clicks</td>
<td>NumberOfClicks</td>
<td>Click Through (CLICK_THROUGH)</td>
</tr>
<tr>
<td>Executed Interactions</td>
<td>NumberOfExecutedInteractions</td>
<td>Any interaction type</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Failed Interactions</td>
<td>NumberOfFailedInteractions</td>
<td>Outbound Failed (OUTBOUND_FAILED)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outbound Check Failed (OUTBOUND_CHK_FAILED)</td>
</tr>
<tr>
<td>Unique Clicks</td>
<td>NumberOfUniqueClicks</td>
<td>Click Through (CLICK_THROUGH)</td>
</tr>
<tr>
<td>Open Channel Interactions</td>
<td>NmbrOfOpenChannelInteractions</td>
<td>Open Channel (OPEN_CHANNEL)</td>
</tr>
</tbody>
</table>

For more information about the Open Channel Integration, see [Open Channel Integration](page 197).
For all of these measures, except for **Unique Clicks**, the following dimensions are available as drilldowns in the aggregated success, if data is available:

- Communication Medium
- Interaction UTC Date
- Interaction Date in Campaign Time Zone
- Campaign Time Zone
- Campaign Content ID
- Campaign Content Name
- Campaign Automation Action UUID

For **Clicks**, the following dimensions are also available:

- Campaign Content Link Name
- Campaign Content Link Alias Name

For **Failed Interactions and Delivery Failed Messages**, the following dimensions are also available:

- Interaction Type
- Interaction Reason

For **Unique Clicks**, the following dimensions are available:

- Communication Medium
- Campaign Content ID
- Campaign Content Name
- Campaign Automation Action UUID
- Campaign Execution Run Date

### Business Documents

The measures in aggregated success listed below are updated using business documents. These business documents are handled the same as the interactions above. All of the business documents must have the communication medium **Business Document** (BUSINESS_DOCUMENT).

<table>
<thead>
<tr>
<th>Measure</th>
<th>Global Field Names</th>
<th>Interaction Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leads</td>
<td>NumberOfLeads</td>
<td>Lead (MARKETING_LEAD)</td>
</tr>
<tr>
<td>Opportunities</td>
<td>NumberOfOpportunities</td>
<td>Opportunity ('OPPORTUNITY')</td>
</tr>
<tr>
<td>Opportunity Amount</td>
<td>OpportunityAmount, OpportunityTransactionCurrency</td>
<td>Opportunity ('OPPORTUNITY')</td>
</tr>
<tr>
<td>Orders</td>
<td>NumberOfOrders</td>
<td>Sales Order (SALES_ORDER)</td>
</tr>
<tr>
<td>Order Amount</td>
<td>OrderAmount, OrderTransactionCurrency</td>
<td>Sales Order (SALES_ORDER)</td>
</tr>
<tr>
<td>Measure</td>
<td>Global Field Names</td>
<td>Interaction Types</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Phone Calls</td>
<td>NumberOfPhoneCalls</td>
<td>Incoming Telephone Call (TELEPHONE_INBOUND)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outgoing Telephone Call (TELEPHONE_OUTBOUND)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unsuccessful Telephone Call (TELEPHONE_UNSUCCESSFUL)</td>
</tr>
<tr>
<td>Appointments</td>
<td>NumberOfAppointments</td>
<td>Appointment (APPOINTMENT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canceled Appointment (APPOINTMENT_CANCELLD)</td>
</tr>
<tr>
<td>Tasks</td>
<td>NumberOfTasks</td>
<td>Task (TASK)</td>
</tr>
<tr>
<td>Executed Interactions</td>
<td>NumberOfExecutedInteractions</td>
<td>Any interaction type (excluding inbound interactions)</td>
</tr>
<tr>
<td>Failed Interactions</td>
<td>NumberOfFailedInteractions</td>
<td>Outbound Failed (OUTBOUND_FAILED)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outbound Check Failed (OUTBOUND_CHK_FAILED)</td>
</tr>
</tbody>
</table>

For all of the business documents, the following dimensions are available as drilldowns, when data is available:

- Communication Medium
- Interaction Status
- Interaction UTC Date
- Interaction Date in Campaign Time Zone
- Campaign Time Zone
- Campaign Automation Action UUID

### 5.5.9 Survey

Set up the SAP Marketing Cloud integration with either a third-party survey tool or SAP Qualtrics Surveys via the SAP Cloud Platform Integration. You can integrate survey metadata and survey responses from either a third-party survey tool or SAP Qualtrics Surveys using an OData service. Use the imported survey responses to create target groups and view analytics in the Query Browser app.

### Prerequisites

- You have a third-party survey tool or SAP Qualtrics Surveys.
- You have configured communication management by using the communication scenario SAP_COM_0073. For more information, see Communication Management.
- You’ve created a Survey channel by performing the following steps:
1. In SAP Marketing Cloud, launch the Manage Your Solution app.
2. Add a new interaction channel Survey.
3. Assign communication medium Web and interaction type Survey Response to the Survey channel.
4. Choose Save.

**Context**

As a marketer, it’s important to get constant feedback from your valued customers about the product or service that you’re selling on the market. Marketers initiate online surveys using third-party survey provider tools or use SAP Qualtrics Surveys to collect valuable feedback from their customers, analyze survey responses, and use this data to improve customer experience.

**Procedure**

1. Create a survey using a third-party survey tool or using SAP Qualtrics Surveys.
2. Use extensibility tools in the third-party survey tool to create a custom variable and name it as soid.
3. Copy the generated survey URL.
4. Create an email template in SAP Marketing Cloud:
   a. Launch the Content Studio app.
   b. In the New Content dialog box, select Global from the Marketing Area dropdown.
   c. Choose Create.
   d. In the Design tab, paste the survey URL into the Text field of the email.
   e. Select the Outbound ID for Consuming App checkbox to append a unique reference to the survey URL. The Outbound ID is the external ID of the interaction contact.
   f. Release the email template.
5. Use the email template in email campaigns. For more information, see Email and Text Message Campaigns.
   The target group members receive the email containing the survey link. The survey responses are stored in the third-party survey tool.
6. Use the OData API service to import the survey responses into SAP Marketing Cloud. For more information, see Survey OData API [page 890].

By default, the Survey node is hidden on the Segmentation UI. For any segmentation profile, you must enable Survey Name from the Segmentation Configuration app.

7. Use the survey responses to create a target group in segmentation:
   a. Launch the Segmentation Models app and choose Create.
   b. In the Profile dropdown, select the required segmentation profile. The All Consumers and All Contacts segmentation profiles include the data of the All Interactions segmentation profile. The All Interactions segmentation profile doesn’t include the data of the All Consumers and All Contacts segmentation profiles.
   c. Drag the Provider attribute from Survey group, and choose the required survey provider from the value help.
   d. Enter the Segment Name (optional) and choose Keep.
e. Drag the *Name* attribute from *Survey* group and choose the required survey name from the value help.

f. Drag the *Question* attribute from *Survey* group and choose the required survey question from the value help.

- The following tables list the survey question types and subtype supported in SAP Marketing Cloud: Question type ‘MX’ - Matrix along with the question subtype ‘MU’ - Menu isn’t supported in SAP Marketing Cloud.

**Survey Question Types:**

<table>
<thead>
<tr>
<th>Question Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RB</td>
<td>Radio Button</td>
</tr>
<tr>
<td>CB</td>
<td>Checkbox</td>
</tr>
<tr>
<td>DL</td>
<td>Dropdown List</td>
</tr>
<tr>
<td>FT</td>
<td>Free Text</td>
</tr>
<tr>
<td>MX</td>
<td>Matrix</td>
</tr>
<tr>
<td>OE</td>
<td>Open Ended</td>
</tr>
<tr>
<td>DG</td>
<td>Demographic</td>
</tr>
<tr>
<td>DT</td>
<td>Date Time</td>
</tr>
<tr>
<td>OT</td>
<td>Rank Order</td>
</tr>
</tbody>
</table>

**Survey Question Subtypes:**

<table>
<thead>
<tr>
<th>Question Subtype</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT</td>
<td>Vertical</td>
</tr>
<tr>
<td>HZ</td>
<td>Horizontal</td>
</tr>
<tr>
<td>MU</td>
<td>Menu</td>
</tr>
<tr>
<td>SL</td>
<td>Single</td>
</tr>
<tr>
<td>RT</td>
<td>Rating</td>
</tr>
<tr>
<td>RK</td>
<td>Ranking</td>
</tr>
<tr>
<td>ML</td>
<td>Multiple</td>
</tr>
<tr>
<td>NU</td>
<td>Numerical</td>
</tr>
<tr>
<td>ES</td>
<td>Essay</td>
</tr>
<tr>
<td>IN</td>
<td>International</td>
</tr>
<tr>
<td>Question Subtype</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>BO</td>
<td>Both</td>
</tr>
<tr>
<td>DO</td>
<td>Date Only</td>
</tr>
<tr>
<td>TO</td>
<td>Time Only</td>
</tr>
<tr>
<td>DT</td>
<td>Descriptive Text</td>
</tr>
</tbody>
</table>

The following table lists the Qualtrics question types and subtype supported by SAP Marketing Cloud:

<table>
<thead>
<tr>
<th>Qualtrics</th>
<th>Question Type - SAP Marketing Cloud</th>
<th>Subtype - SAP Marketing Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAVR (Multiple Answers, Vertical)</td>
<td>CB</td>
<td>VT</td>
</tr>
<tr>
<td>MAHR (Multiple Answers, Horizontal)</td>
<td>CB</td>
<td>HZ</td>
</tr>
<tr>
<td>SAVR (Single Answer, Vertical)</td>
<td>RB</td>
<td>VT</td>
</tr>
<tr>
<td>SAHR (Single Answer, Horizontal)</td>
<td>RB</td>
<td>HZ</td>
</tr>
<tr>
<td>DL (Drop Down)</td>
<td>DL</td>
<td>MU</td>
</tr>
<tr>
<td>SB (Select Box)</td>
<td>RB</td>
<td>VT</td>
</tr>
<tr>
<td>MSB (Multiple Select Boxes)</td>
<td>CB</td>
<td>VT</td>
</tr>
<tr>
<td>NPS</td>
<td>RB</td>
<td>HZ</td>
</tr>
<tr>
<td>TE (Text Entry)</td>
<td>FT</td>
<td>SL/ML/ES</td>
</tr>
<tr>
<td>Slider</td>
<td>RB</td>
<td>RT</td>
</tr>
<tr>
<td>RO (Rank Order)</td>
<td>RO</td>
<td>RK</td>
</tr>
<tr>
<td>Matrix</td>
<td>MX</td>
<td>SL</td>
</tr>
</tbody>
</table>

SAP Marketing Cloud supports only Drop Down List and Single Answer subtype questions for Matrix question type on SAP Qualtrics Surveys.

g. Drag the Answer attribute from Survey group and choose the survey responses that you would like to analyze. You can refine the segmentation model using the following survey fields:

- Provider
- Question
- Answer
After completing segmentation, create a target group based on survey responses.

8. Use the target group in the Campaigns app to send emails.

### 5.5.9.1 Survey OData API

OData API (CUAN_SURVEY_IMPORT_SRV) that supports operations on survey metadata and survey responses.

**Overview**

The Survey OData API supports operations on the Survey Business Object.

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>CUAN_SURVEY_IMPORT_SRV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorizations</td>
<td>This feature can be enabled with the Communication Scenario SAP_COM_0073.</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0073</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>● CEC-MKT-INT-SI (Survey Integration)</td>
</tr>
</tbody>
</table>

**i Note**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV</td>
</tr>
<tr>
<td>Field Extensibility Suported</td>
<td>Yes</td>
</tr>
</tbody>
</table>

You can view sample payloads and test the API at https://api.sap.com.
Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV;v=0002/$metadata?sap-documentation=all</td>
<td>Only for internal access. You must provide the server and port names.</td>
</tr>
</tbody>
</table>

**Marketing - Survey Details Page**

- General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.
  1. On the Details page, click **Download Specification** and download as EDMX.
  2. Specify which application you want to use to open the EDMX file type.

**Survey ODATA API**

- General access link takes you directly to the Survey metadata file. One-time registration or logon is required.

---

**i Note**

- You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

---

**Entities**

The Survey OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>SurveySet</td>
<td>This entity contains survey metadata.</td>
<td>/SurveySet</td>
</tr>
<tr>
<td>QuestionSet</td>
<td>This entity contains survey questions.</td>
<td>/QuestionSet</td>
</tr>
<tr>
<td>SurveyResponseSet</td>
<td>This entity contains survey responses.</td>
<td>/SurveyResponseSet</td>
</tr>
<tr>
<td>Entity</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>AnswerSet</td>
<td>This entity contains survey answers to survey questions.</td>
<td>/AnswerSet</td>
</tr>
<tr>
<td>ChoiceSet</td>
<td>This entity contains choice options to the survey questions.</td>
<td>/ChoiceSet</td>
</tr>
<tr>
<td>SurveyResponseDetailSet</td>
<td>This entity contains details of the survey responses.</td>
<td>/SurveyResponseDetailSet</td>
</tr>
<tr>
<td>EventSet</td>
<td>This entity contains details of events associated with surveys.</td>
<td>/EventSet</td>
</tr>
</tbody>
</table>

**SurveySet**

**Resource Path:** /SurveySet

You can perform the following operations on the SurveySet entity:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of surveys.</td>
<td>/SurveySet</td>
</tr>
<tr>
<td>GET</td>
<td>Get a specific survey.</td>
<td>/SurveySet(SurveyId='&lt;Survey ID&gt;',Provider='&lt;Survey Provider&gt;',=Version='&lt;Survey Version Number&gt;')</td>
</tr>
<tr>
<td>POST</td>
<td>Create a survey.</td>
<td>/SurveySet</td>
</tr>
</tbody>
</table>

You can extend the fields of the SurveySet entity as follows:

1. Configure communication management. For more information, see Communication Management.
2. Create a custom field. For more information, see Custom Fields and Logic
3. On the Uls and Reports tab, enable the Field Usage for Survey Import Service.
4. The payload of the SurveySet entity contains the new field.

**QuestionSet**

**Resource Path:** /QuestionSet
You can perform the following operations on the **QuestionSet** entity:

### Operations on QuestionSet Entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get list of questions of a survey.</td>
<td>/QuestionSet(SurveyId='Survey ID', Provider='Survey Provider', Version='Survey Version Number')</td>
</tr>
<tr>
<td></td>
<td>Get a specific question of a survey.</td>
<td>/QuestionSet(SurveyId='Survey ID', Provider='Survey Provider', Version='Survey Version Number', QuestionId='Question ID')</td>
</tr>
<tr>
<td></td>
<td>Get the list of questions in a particular survey.</td>
<td>/SurveySet(SurveyId='Survey ID', Provider='Survey Provider', Version='Survey Version Number', QuestionId='Question ID')</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a survey question.</td>
<td>/QuestionSet</td>
</tr>
</tbody>
</table>

### SurveyResponseSet

**Resource Path:** /SurveyResponseSet

You can perform the following operations on the **SurveyResponseSet** entity:

### Operations on SurveyResponseSet Entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get list of responses of all surveys.</td>
<td>/SurveyResponseSet</td>
</tr>
<tr>
<td></td>
<td>Get a response of a specific survey.</td>
<td>/SurveyResponseSet(SurveyId='Survey ID', Provider='Survey Provider', Version='Survey Version Number', ResponseId='Response ID')</td>
</tr>
<tr>
<td></td>
<td>Get all the responses of a specific survey.</td>
<td>/SurveySet(SurveyId='Survey ID', Provider='Survey Provider', Version='Survey Version Number')/SurveySurveyResponseSet</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>POST</td>
<td>Create a survey response.</td>
<td>/SurveyResponseSet</td>
</tr>
</tbody>
</table>

**i Note**

- Use extensibility tools in the third-party survey tool to create a custom variable and name it as `soid`. For more information, see [Survey](page 886).
- While importing survey responses, the e-mail ID must be unique so that there’s no inconsistency in the `CONTACT_KEY` of the survey response.
- An interaction of type `SURVEY_RESPONSE` is created for each survey response.

---

**AnswerSet**

**Resource Path:** `/AnswerSet`

You can perform the following operations on the `AnswerSet` entity:

**Operations on AnswerSet Entity**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get the answer of a specific question in a survey.</td>
<td>/QuestionSet(QuestionId='&lt;Question ID&gt;',Provider='&lt;Survey Provider&gt;',=Version='&lt;Survey Version Number&gt;',SurveyId='&lt;Survey ID&gt;')/QuestionAnswerSet</td>
</tr>
<tr>
<td></td>
<td>Get the list of questions and answers for a particular survey.</td>
<td>/SurveySet(SurveyId='&lt;Survey ID&gt;',Provider='&lt;Survey Provider&gt;',=Version='&lt;Survey Version Number&gt;')?$expand=SurveyQuestionSet/QuestionAnswerSet</td>
</tr>
</tbody>
</table>

---

**ChoiceSet**

**Resource Path:** `/ChoiceSet`
You can perform the following operations on the **ChoiceSet** entity:

### Operations on ChoiceSet Entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the choices to a specific question in a survey.</td>
<td>/QuestionSet(QuestionId='&lt;Question ID&gt;',Provider='&lt;Survey Provider&gt;',Version='&lt;Survey Version Number&gt;',SurveyId='&lt;Survey ID&gt;')/QuestionChoiceSet</td>
</tr>
<tr>
<td></td>
<td>Get the list of questions and choices for a specific survey.</td>
<td>/SurveySet(SurveyId='&lt;Survey ID&gt;',Provider='&lt;Survey Provider&gt;',Version='&lt;Survey Version Number&gt;')?$expand=SurveyQuestionSet/QuestionChoiceSet</td>
</tr>
</tbody>
</table>
|             | Get the list of questions, answers, and choices for a specific survey.      | ● /SurveySet(SurveyId='<Survey ID>',Provider='<Survey Provider>',Version='<Survey Version Number>')/SurveyQuestionSet?sap-client=100&$expand=QuestionAnswerSet,QuestionChoiceSet
● /SurveySet(SurveyId='<Survey ID>',Provider='<Survey Provider>',Version='<Survey Version Number>')?$&$expand=SurveyQuestionSet/QuestionAnswerSet,SurveyQuestionSet/QuestionChoiceSet (with root data) |

### SurveyResponseDetailSet

You can perform the following operations on the **SurveyResponseDetailSet** entity:

**Resource Path:** /SurveyResponseDetailSet

### Operations on SurveyResponseDetailSet Entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the response details of a specific survey.</td>
<td>/SurveyResponseSet(Provider='&lt;Survey Provider&gt;',Version='&lt;Survey Version Number&gt;',ResponseId='&lt;Response ID&gt;',SurveyId='&lt;Survey ID&gt;')/SurveyResponseSurveyResponseDetailSet</td>
</tr>
</tbody>
</table>
**EventSet**

**Resource Path:** /EventSet

You can perform the following operations on the EventSet entity:

### Operations on EventSet Entity

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the list of all events of all surveys.</td>
<td>/EventSet</td>
</tr>
<tr>
<td></td>
<td>Get the list of all events for a specific survey.</td>
<td>/SurveySet(SurveyId='&lt;Survey ID&gt;',Provider='Survey Provider',Version='&lt;Survey Version Number&gt;')/SurveyEventSet</td>
</tr>
<tr>
<td></td>
<td>Get the details of a particular event for a specific survey.</td>
<td>/EventSet(SurveyId='&lt;Survey ID&gt;',Provider='Survey Provider',Version='&lt;Survey Version Number&gt;',MktgEventUUID='&lt;MktgEventUUID&gt;')</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an event.</td>
<td>/EventSet</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update a specific event for the specified survey.</td>
<td>/EventSet(SurveyId='&lt;Survey ID&gt;',Provider='Survey Provider',Version='&lt;Survey Version Number&gt;',MktgEventUUID='&lt;MktgEventUUID&gt;')</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete a specific event for the specified survey.</td>
<td>/EventSet(SurveyId='&lt;Survey ID&gt;',Provider='Survey Provider',Version='&lt;Survey Version Number&gt;',MktgEventUUID='&lt;MktgEventUUID&gt;')</td>
</tr>
</tbody>
</table>

### 5.5.9.2 Payload Examples for Survey

The following examples show how you can use the Survey API.

#### Payload Example for Survey ROOT: POST

**OData End-Point:** /sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV/SurveySet

```
Sample Code
```

```json
{
    "SurveyId": "1234",
    "Provider": "SurveyMonkey",
    "Version": 1,
    "Name": "SurveyMonkey Demo",
    "NickName": "Demo",
    "AccountId": "1"
}
```
Payload Example for Survey ROOT and Question: POST

OData End-Point: /sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV/SurveySet

```json
{
    "CategoryId":"customer feedback",
    "Url":"www.surveymonkey.com",
    "MarketingAreaId":"Global",
    "Language":"E",
    "IsSurveyAnonymous":false,
    "CreatedOn":"2018-01-01T02:03:04",
    "ModifiedOn":"2018-02-02T02:03:04",
    "ValidFrom":"2018-01-01T02:03:04",
    "ValidTo":"2018-12-31T02:03:04",
    "IsMultipleRespAllowed":false,
    "SurveyQuestionSet": [{
        "SurveyId":"1234",
        "Provider":"SurveyMonkey",
        "Version":1,
        "Name":"SurveyMonkey Demo",
        "NickName":"Demo",
        "AccountId":"1",
        "CategoryId":"customer feedback",
        "Url":"www.surveymonkey.com",
        "MarketingAreaId":"Global",
        "Language":"E",
        "IsSurveyAnonymous":false,
        "CreatedOn":"2018-01-01T02:03:04",
        "ModifiedOn":"2018-02-02T02:03:04",
        "ValidFrom":"2018-01-01T02:03:04",
        "ValidTo":"2018-12-31T02:03:04",
        "IsMultipleRespAllowed":false,
        "SurveyQuestionSet": [{
            "SurveyId":"1234",
            "Provider":"SurveyMonkey",
            "Version":1,
            "QuestionId":"Q2",
            "Language":"E",
            "PageId":1,
            "Position":1,
            "IsMandatory":false,
            "Type":"RB",
            "TypeName":"Single",
            "SubType":"VT",
            "Text":"Gender"
        }]
    }]
}
```

Payload Example for Survey ROOT, Question, and Answer: POST

OData End-Point: /sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV/SurveySet
Sample Code

```json
{
    "SurveyId":"1234",
    "Provider":"SurveyMonkey",
    "Version":1,
    "Name":"SurveyMonkey Demo",
    "NickName":"Demo",
    "AccountId":1,
    "Category":"customer feedback",
    "Url":"www.surveymonkey.com",
    "MarketingAreaId":"Global",
    "Language":"E",
    "IsSurveyAnonymous":false,
    "CreatedBy": "2018-01-01T02:03:04",
    "ModifiedOn": "2018-02-02T02:03:04",
    "ValidFrom": "2018-01-01T02:03:04",
    "ValidTo": "2018-12-31T02:03:04",
    "IsMultipleRespAllowed": false,
    "SurveyQuestionSet": [
        {
            "SurveyId": "1234",
            "Provider": "SurveyMonkey",
            "Version": 1,
            "QuestionId": "Q2",
            "Language": "E",
            "PageId": 1,
            "Position": 1,
            "IsMandatory": false,
            "Type": "RB",
            "TypeName": "Single",
            "SubType": "VT",
            "Text": "Gender",
            "QuestionAnswerSet": [
                {
                    "RowId": "A1",
                    "Language": "E",
                    "RowText": "Male",
                    "RowPosition": 1
                },
                {
                    "RowId": "A2",
                    "Language": "E",
                    "RowText": "Female",
                    "RowPosition": 2
                }
            ]
        }
    ]
}
```

Payload Example for Survey Metadata ($batch): POST

OData End-Point: /sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV/$batch

```
`--batch_01869434-0005
Content-Type: multipart/mixed; boundary=changeset_01869434-0005-0001
`--changeset_01869434-0005-0001
Content-Type: application/http
```
Payload Example for Survey Response: POST

OData End-Point: /sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV/SurveyResponseSet

```json
{
    "SurveyId": "1234",
    "Provider": "SurveyMonkey",
    "Version": 1,
    "ResponseId": "11",
    "Id": "response@sap.com",
    "IdOrigin": "EMAIL",
    "IsResponseAnonymous": false,
    "ResponseUrl": "www.surveymonkey.com",
    "RespondedOn": "2018-03-08T02:03:04",
    "SurveyResponseSurveyResponseDetailSet": [
        {
            "QuestionId": "Q1",
            "ResponseIdRow": "A1"
        },
        {
            "QuestionId": "Q2",
            "ResponseIdRow": "B1",
            "ResponseIdCol": "C2"
        }
    ],
    "SurveyResponseContactSet":
    {
        "SurveyId": "1234",
        "Provider": "SurveyMonkey",
        "Version": 1,
        "NameFirst": "Suresh",
        "NameLast": "K",
        "EmailAddr": "suresh.r.kai@sap.com",
        "TelephoneNo": "9008122077"
    }
}
```
Payload Example for Survey Response ($batch): POST

OData End-Point: /sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV/$batch

Sample Code

```plaintext
--batch_01869434-0005
Content-Type: multipart/mixed; boundary=changeset_01869434-0005-0001

--changeset_01869434-0005-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST SurveyResponseSet HTTP/1.1
Content-Type: application/json
Content-Length: 1021
{
  "Provider": "SurveyMonkey",
  "ResponseId": "11",
  "SurveyId": "1234",
  "Version": 1,
  "Id": "response1r11@sap.com",
  "IdOrigin": "EMAIL",
  "IsResponseAnonymous": false,
  "ResponseUrl": "www.surveymonkey.com",
  "RespondedOn": "2018-02-04T02:03:04",
  "SurveyResponseSurveyResponseDetailSet": [
    {
      "QuestionId": "Q1",
      "ResponseIdRow": "A1"
    },
    {
      "QuestionId": "Q2",
      "ResponseIdRow": "R1",
      "ResponseIdCol": "C2"
    }
  ]
}
--changeset_01869434-0005-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST SurveyResponseSet HTTP/1.1
Content-Type: application/json
Content-Length: 1021
{
  "Provider": "SurveyMonkey",
  "ResponseId": "12",
  "SurveyId": "1234",
  "Version": 1,
  "Id": "response1r12@sap.com",
  "IdOrigin": "EMAIL",
  "IsResponseAnonymous": false,
  "ResponseUrl": "www.surveymonkey.com",
  "RespondedOn": "2018-02-04T02:03:04",
  "SurveyResponseSurveyResponseDetailSet": [
    {
      "QuestionId": "Q1",
      "ResponseIdRow": "A1"
    },
    {
      "QuestionId": "Q2",
      "ResponseIdRow": "R1",
      "ResponseIdCol": "C2"
    }
  ]
}
```

Integration Guide
Integration APIs
Payload Example for an Event Creation: POST

OData End-Point: /sap/opu/odata/SAP/CUAN_SURVEY_IMPORT_SRV/EventSet

```

``` Sample Code

```javascript
{
  "SurveyId": "SRV_EVT1_0002",
  "Provider": "Qualtrics",
  "Version": 1,
  "MktgEventExternalID": "5482759",
  "MktgEventUUID": "6C0B84B7-5523-1EE9-B2B0-5DAC5A630B55",
  "MktgEventProvider": "ON24_ID",
  "MktgEventProviderAccount": "23192"
}

```

5.5.10 Read Content of Export Files in Campaigns

Public OData API for Export Definition. An export definition is a template for structuring the export of target group member data, included in a target group or a campaign, to CSV files.

Overview

The public API for Export Definition supports operations on the Export Definition Business Object.

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_EXPORT_DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underlying BO</td>
<td>BO_HPA_EXPORT_DEFINITION</td>
</tr>
<tr>
<td></td>
<td>Read of BO CUAN_INITIATIVE and</td>
</tr>
<tr>
<td></td>
<td>CUAN_MARKETING_ORCHESTRATION</td>
</tr>
<tr>
<td>Package</td>
<td>CUAN_ODATA_API_EXPORT_DEF</td>
</tr>
</tbody>
</table>
Technical Data

Technical Data of Service

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_EXPORT_DEFINITION_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_EXPORT_DEFINITION_SRV/$metadata</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0311</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-EXP</td>
</tr>
</tbody>
</table>

i Note

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_EXPORT_DEFINITION_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

Read Content of Export Files in Campaigns API ➔

General access link takes you directly to the Read Content of Export Files in Campaigns metadata file. One-time registration or logon is required.

Read Content of Export Files in Campaigns ➔

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click Download Specification and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

i Note

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:
Entity Sets

The Export Definition OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>ObjectFiles</td>
<td>This entity contains data for an export file created during campaign execution.</td>
<td>/ObjectFiles</td>
</tr>
</tbody>
</table>

Resource Path: /ObjectFiles

You can perform the following operations on the /ObjectFiles entity set:

Operations on ObjectFiles entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of Export File Names for a campaign ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide property CampaignID</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide property FileName (space)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use property DateFrom as filter to get files not older than the specified date/time</td>
<td></td>
</tr>
<tr>
<td>GET (STREAM)</td>
<td>Get the stream of an Export File Content in XString format for the specified properties FileName and CampaignID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide properties CampaignID and FileName (from result of first GET)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The $value parameter is mandatory.</td>
<td></td>
</tr>
</tbody>
</table>

You can view sample payloads and test the API at https://api.sap.com/.
5.5.11 Marketing Events

5.5.11.1 Marketing Events OData API

Public OData API (API_MKT_EVENT_SRV) for importing events data from third-party event provider platforms.

Overview

With the OData Service API_MKT_EVENT_SRV, you can import events, participants, and participants Q&A from third-party event provider platforms such as ON24, Zoom, and so on.

Participants are imported as contacts and are used for event promotions and follow-up marketing activities in SAP Marketing Cloud.

Root URI: https://ldciabd.wdf.sap.corp:44300/sap/opu/odata/SAP/API_MKT_EVENT_SRV

Integration Scenario: SAP_COM_CSR_0371 (SAP Marketing Cloud)

Business Catalog: SAP_CEC_BC_MKT_API_EVENT_PC (SAP Marketing Cloud)

Technical Roles: SAP_COM_CSR_0371 (SAP Marketing Cloud)

Authentication Methods: Basic, x509

Support of OData Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query options for value help entities</td>
<td>The current implementation of the value help entities supports the following query options, which can be either passed as a query or path parameters:</td>
</tr>
<tr>
<td></td>
<td>- $top and $skip</td>
</tr>
<tr>
<td></td>
<td>- $select</td>
</tr>
<tr>
<td></td>
<td>- $orderby</td>
</tr>
<tr>
<td></td>
<td>- $count and $inlinecount</td>
</tr>
<tr>
<td>Bulk processing using deep-create</td>
<td>The service supports bulk processing using deep-create.</td>
</tr>
<tr>
<td>Batch processing of multiple service call</td>
<td>Multiple services like import events, participants, and participant Q&amp;A can be called together.</td>
</tr>
<tr>
<td>Contact check</td>
<td>While importing a participant as contact, checks if a contact with same ID and origin already exists in SAP Marketing system.</td>
</tr>
</tbody>
</table>
Entity Data Model

**Service Metadata URI:** https://ldciabd.wdf.sap.corp:44300/sap/opu/odata/SAP/API_MKT_EVENT_SRV/$metadata

**MarketingEvents**

**Resource Path:** /MarketingEvents

You can perform the following operations on the MarketingEvents resource:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Getting all marketing events</td>
<td>/MarketingEvents</td>
</tr>
<tr>
<td>GET</td>
<td>Getting a single marketing event</td>
<td>/MarketingEvents ('&lt;MktgEventUUID&gt;')</td>
</tr>
<tr>
<td>POST</td>
<td>Deep-create or a single program create</td>
<td>/MarketingEvents</td>
</tr>
<tr>
<td>PUT</td>
<td>Updating a single marketing event</td>
<td>/MarketingEvents ('&lt;MktgEventUUID&gt;')</td>
</tr>
</tbody>
</table>

**Properties**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Creatable</th>
<th>Updatable</th>
<th>Key</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>MktgEventUUID</td>
<td>Unique identifier generated in SAP Marketing Cloud system for every marketing event</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEvent</td>
<td>Identifier of the marketing event</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgObjVersHdrUUID</td>
<td>Unique identifier generated in SAP Marketing Cloud system for version of the marketing object</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventExtermalId</td>
<td>External identifier of the imported marketing event</td>
<td>X</td>
<td></td>
<td></td>
<td>(except for event with the status “In Preparation”)</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Creatable</td>
<td>Updatable</td>
<td>Key</td>
<td>Mandatory</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----</td>
<td>-----------</td>
</tr>
<tr>
<td>MktgEventProvider</td>
<td>Name of the marketing event provider</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MktgEventProviderAccount</td>
<td>Provider account of the marketing event</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventName</td>
<td>Name of the marketing event</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MktgEventDescription</td>
<td>Description of the marketing event</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventStatus</td>
<td>Identifier of the marketing event status. This is a pre-delivered and configurable field.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventStatusName</td>
<td>Name of the marketing event status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MediaType</td>
<td>Identifier of the media type. This is a pre-delivered and configurable field.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MediaTypeName</td>
<td>Name of the media type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventDateTime</td>
<td>End date and time (in UTC) of the marketing event</td>
<td>X</td>
<td>X (except for events with status “Conducted” and “Cancelled”)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Creatable</td>
<td>Updatable</td>
<td>Key</td>
<td>Mandatory</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>MktgEventStart</td>
<td>Start date and time (in UTC) of the marketing event</td>
<td>X</td>
<td>X (except for events with status “Conducted” and “Cancelled”)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

- Value of event start date should be lesser than or equal to the value of event end date.
- If the event start date is in the future, then you cannot set the event status to "Conducted".
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Creatable</th>
<th>Updatable</th>
<th>Key</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>MktgEvtReplayAvalFromDateTime</td>
<td>Date and time (in UTC) from when the on-demand recording will be available.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>i Note</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value of on-demand recording available from date (MKTGEVTREPLAYAVAILFROMDATETIME) should be lesser than or equal to the value of on-demand recording available until date (MKTGEVTREPLAYAVAILTODATETIME).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEvtReplayAvalToDateTime</td>
<td>Date and time (in UTC) until when the on-demand recording will be available.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventTimeZone</td>
<td>Time zone of the marketing event. This is a pre-delivered and configurable field.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MarketingArea</td>
<td>Identifier of the marketing area</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MarketingAreaName</td>
<td>Name of the marketing area name</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Language key</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Creatable</td>
<td>Updatable</td>
<td>Key</td>
<td>Mandatory</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----</td>
<td>-----------</td>
</tr>
<tr>
<td>MktgEventInfoURL</td>
<td>URL of the marketing event</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventRegistrationURL</td>
<td>Registration URL of the marketing event</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventOnlineURL</td>
<td>Live URL of the marketing event</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventReplayURL</td>
<td>On-demand URL of the marketing event</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventType</td>
<td>Type of the marketing event. This is a pre-delivered field.</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventTypeName</td>
<td>Type name of the marketing event</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CreatedByUser</td>
<td>Name of the user who created the marketing event</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CreationDateTime</td>
<td>Date and time when the marketing event was created</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who last changed the marketing event</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LastChangeDate</td>
<td>Date and time when the marketing event was last changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following event status values are available:

- 0001 for In Preparation
- 0002 for Ready
- 0003 for Cancelled
- 0004 for Conducted
- 0005 for Archived
The following event type values are available:

- _ (read as blank) for Online
- 10 for In Person

The following event status transitions are possible:

<table>
<thead>
<tr>
<th>Source Status ID</th>
<th>Target Status ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>0002</td>
</tr>
<tr>
<td>0001</td>
<td>0003</td>
</tr>
<tr>
<td>0001</td>
<td>0004</td>
</tr>
<tr>
<td>0001</td>
<td>0005</td>
</tr>
<tr>
<td>0002</td>
<td>0003</td>
</tr>
<tr>
<td>0002</td>
<td>0004</td>
</tr>
<tr>
<td>0002</td>
<td>0005</td>
</tr>
<tr>
<td>0003</td>
<td>0005</td>
</tr>
<tr>
<td>0004</td>
<td>0005</td>
</tr>
</tbody>
</table>

**EventParticipants**

**Resource Path:** /EventParticipants

You can perform the following operations on the EventParticipants resource:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Getting all marketing event participants</td>
<td>/EventParticipants</td>
</tr>
<tr>
<td><strong>GET</strong></td>
<td>Getting a single marketing event participant</td>
<td>/EventParticipants (&lt;MktgEventParticipantUUID&gt;)</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Deep-create or single marketing event participant create</td>
<td>/MarketingEvents (&lt;MktgEventUUID&gt;)/to_Participantw</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Updating a single marketing event participant</td>
<td>/EventParticipants (&lt;MktgEventParticipantUUID&gt;)</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Deleting a single marketing event participant along with it's interactions and survey response data</td>
<td>/EventParticipants (&lt;MktgEventParticipantUUID&gt;)</td>
</tr>
</tbody>
</table>
### Properties

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Creatable</th>
<th>Updatable</th>
<th>Key</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>MktgEventParticipantUUID</td>
<td>Unique identifier generated in SAP Marketing Cloud system for every marketing event participant</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MktgEventUUID</td>
<td>Unique identifier generated in SAP Marketing Cloud system for every marketing event</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventParticipantExternalID</td>
<td>External identifier of the imported marketing event participant</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ContactOrigin</td>
<td>Origin of interaction contact data</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>MktgEngagementScore</td>
<td>Participation score</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>TotalNumberOfMinutesAttended</td>
<td>Total number of minutes a participant attended the event live and on-demand</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>NumberOfQuestions</td>
<td>Number of questions asked by participants</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>NumberOfPollsAnswered</td>
<td>Number of polls responded by participants</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>NumberOfSurveysAnswered</td>
<td>Number of surveys answered by participants</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>NumberOfContentDownloads</td>
<td>Number of contents downloaded by participants</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Creatable</td>
<td>Updatable</td>
<td>Key</td>
<td>Mandatory</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----</td>
<td>-----------</td>
</tr>
<tr>
<td>TotalNumberOfMinutesLive</td>
<td>Total number of minutes a participant attended the event live</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TotalNumberOfMinutesReplay</td>
<td>Total number of minutes a participant attended the event on-demand</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventParticipantStatus</td>
<td>Identifier of the participant status. A list of participant status is pre-delivered.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventParticipantID</td>
<td>Identifier of the participant</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEventParticipantStatusName</td>
<td>Name of the participant status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CreationDateTime</td>
<td>Date and time when the marketing event was created</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CreatedByUser</td>
<td>Name of the user who created the marketing event</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LastChangeDateTime</td>
<td>Date and time when the marketing event was last changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LastChangedByUser</td>
<td>Name of the user who last changed the marketing event</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FullName</td>
<td>Full name of the participant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EmailAddress</td>
<td>Email address of the participant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following table shows if you are allowed to create participants based on the status of the event:

<table>
<thead>
<tr>
<th>Participant Status</th>
<th>Event Status</th>
<th>In Preparation</th>
<th>Ready</th>
<th>Conducted</th>
<th>Cancelled</th>
<th>Archived</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Registered</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>No show</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Invited</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**EventStatuses**

**Resource Path:** /EventStatuses

You can perform the following operations on the EventStatuses resource:

**Operations on the EventStatuses resource**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Getting all marketing event participants</td>
<td>/EventStatuses</td>
</tr>
</tbody>
</table>

**Properties**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Creatable</th>
<th>Updatable</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>MktgEventStatus</td>
<td>Identifier of the marketing events status</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### ParticipantQuestionAnswers

**Resource Path:** /ParticipantQuestionAnswers

You can perform the following operations on the EventStatuses resource:

#### Operations on the ParticipantQuestionAnswers resource

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Getting all questions and answers of marketing event participant</td>
<td>/ParticipantQuestionAnswers</td>
</tr>
<tr>
<td><strong>GET</strong></td>
<td>Getting a single participant’s questions and answers</td>
<td>/ParticipantQuestionAnswers('&lt;MktgEvtPrtcptQstnAnswUUID&gt;')</td>
</tr>
<tr>
<td><strong>GET</strong></td>
<td>Getting all questions and answers of a single marketing event’s participants</td>
<td>/EventParticipants('&lt;MktgEventParticipantUUID&gt;')/to_QuestionAnswer</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Deep-create or a single participant’s questions and answers create</td>
<td>/EventParticipants('&lt;MktgEventParticipantUUID&gt;')/to_QuestionAnswer</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Updating a single participant’s questions and answers</td>
<td>/ParticipantQuestionAnswers('&lt;MktgEvtPrtcptQstnAnswUUID&gt;')</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Deleting a single participant’s questions and answers</td>
<td>/ParticipantQuestionAnswers('&lt;MktgEvtPrtcptQstnAnswUUID&gt;')</td>
</tr>
</tbody>
</table>

#### Properties

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Creatable</th>
<th>Updaatable</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>MktgEventStatusName</td>
<td>Name of the marketing event status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEvtPrtcptQstnAnswUUID</td>
<td>Unique identifier generated in SAP Marketing Cloud system for questions and answers of the marketing event participant</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Creatable</td>
<td>Updaatable</td>
<td>Key</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------</td>
<td>------------</td>
<td>-----</td>
</tr>
<tr>
<td>MktgEventParticipantUUID</td>
<td>Unique identifier generated in SAP Marketing Cloud system for every marketing event participant</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MktgEventUUID</td>
<td>Unique identifier generated in SAP Marketing Cloud system for every marketing event</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MktgEvtPrtcpntQstnTxt</td>
<td>Question asked by the marketing event participant</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MktgEvtPrtcpntAnsWtXt</td>
<td>Answer provided by the marketing event participant</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

## Common Status and Error Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>204</td>
<td>Marketing events, participants, or Q&amp;A updated successfully.</td>
</tr>
<tr>
<td>404</td>
<td>Not found, for example, marketing events, participants, or Q&amp;A with the given key cannot be found in the system.</td>
</tr>
<tr>
<td>201</td>
<td>Marketing events, participants, or Q&amp;A imported successfully.</td>
</tr>
<tr>
<td>400</td>
<td>Bad request, for example, a marketing event, participant, or Q&amp;A with the same key already exists.</td>
</tr>
</tbody>
</table>

### 5.5.11.2 Payload Examples for Marketing Events

The following examples show how you can use the marketing events API:

**Payload Example for Deep-Create of Marketing Events: POST**

**URI:** /MarketingEvents

**Request Example:** [POST] https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_EVENT_SRV/MarketingEvents
Payload Example for Marketing Events Create: POST

URL: /MarketingEvents

Request Example: [POST] https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_EVENT_SRV/MarketingEvents

Sample Code

```json
{
    "MktgEventExternalId": "EXt1",
    "MktgEventProvider": "ON24_ID",
    "MktgEventProviderAccount": "31835",
    "MktgEventName": "EVENT",
    "MktgEventDescription": "EVENT",
    "MktgEventStatus": "0001",
    "MediaType": "EVENTS",
    "MktgEventEndDateTime": "2018-10-10T12:34:32",
    "MktgEventStartDateTime": "2018-10-10T12:34:32",
    "MktgEvtReplayAvailFromDateTime": "2018-10-10T12:34:32",
    "MktgEvtReplayAvailToDateTime": "2018-10-10T12:34:32",
    "MktgEventTimezone": "CET",
    "MarketingArea": "GLOBAL",
    "Language": "EN",
    "MktgEventTypeName": "Online",
    "MktgEventInfoURL": "https://event.on24.com/wcc/r/1918973/12F107615216042B4905524623A91E9A",
    "MktgEventRegistrationURL": "https://event.on24.com/wcc/r/1918973/12F107615216042B4905524623A91E9A",
    "MktgEventOnlineURL": "https://event.on24.com/wcc/r/1918973/12F107615216042B4905524623A91E9A",
    "MktgEventReplayURL": "https://event.on24.com/wcc/r/1918973/12F107615216042B4905524623A91E9A",
    "to_Participant": [{
        "MktgEventParticipantExternalID": "barryallen@mailinator.com",
        "ContactOrigin": "ON24_ID",
        "MktgEventParticipantID": "ID1",
        "MktgEngagementScore": 10,
        "TotalNumberOfMinutesAttended": 20,
        "NumberOfQuestions": 60,
        "NumberOfPollsAnswered": 50,
        "NumberOfSurveysAnswered": 0,
        "NumberOfContentDownloads": 0,
        "TotalNumberOfMinutesLive": 10,
        "Payload Examples for Marketing Events CUSTOMER"
    },
    "to_QuestionAnswer": [{
        "MktgEvtPrtcpntQstnTxt": "Can I replay the recording?",
        "MktgEvtPrtcpntAnswTxt": "Yes you can"
    }]
}
```
Payload Example for Marketing Events Update: PUT

URL: /MarketingEvents ('<MktgEventUUID>')

Request Example: [PUT] https://<Server>[:<Port>]/sap/opu/odata/SAP/API_MKT_EVENT_SRV/MarketingEvents('<MktgEventUUID>')

Sample Code

```json
{
  "MktgEventExternalId" : "EXT11",
  "MktgEventProvider" : "ON24_ID",
  "MktgEventProviderAccount" : "31835",
  "MktgEventName" : "EVENT",
  "MktgEventDescription" : "EVENT",
  "MktgEventStatus" : "0004",
  "MediaType" : "EVENTS",
  "MktgEventEndDateTime" : "2019-04-10T12:37:33",
  "MktgEventStartDateTime" : "2019-04-10T11:34:32",
  "MktgEvtReplayAvailFromDateTime" : "1019-10-10T12:34:32",
  "MktgEvtReplayAvailToDateTime" : "1020-10-10T12:34:33",
  "MktgEventTimezone" : "CET",
  "MarketingArea" : "GLOBAL",
  "Language" : "EN",
  "MktgEventTypeName" : "Online"
}
```
Payload Example for Marketing Events Participant Update: PUT

URL: /EventParticipants ('<MktgEventParticipantUUID>')

Request Example: [PUT] https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_EVENT_SRV/EventParticipants ('<MktgEventParticipantUUID>')

Sample Code

```json
{
    "MktgEventParticipantExternalID": "EventParticipant@eventstest.com",
    "ContactOrigin": "ON24_ID",
    "MktgEngagementScore": 10,
    "TotalNumberOfMinutesAttended": 20,
    "NumberOfQuestions": 60,
    "NumberOfPollsAnswered": 50,
    "NumberOfSurveysAnswered": 0,
    "NumberOfContentDownloads": 0,
    "TotalNumberOfMinutesLive": 10,
    "TotalNumberOfMinutesReplay": 0,
    "MktgEventParticipantStatus": "1002",
    "MktgEventParticipantID": "ID1"
}
```

Payload Example for Participant Questions and Answers Create: POST

URL: /EventParticipants ('<MktgEventParticipantUUID>')/to_QuestionAnswer

Request Example: [POST] https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_EVENT_SRV/EventParticipants ('<MktgEventParticipantUUID>')/to_QuestionAnswer

Sample Code

```json
{
    "MktgEvtPrtcpntQstnTxt": "Can I replay the recording?",
    "MktgEvtPrtcpntAnswTxt": "Yes you can"
}
```

Payload Example for Participant Questions and Answers Update: PUT

URL: /ParticipantQuestionAnswers ('<MktgEvtPrtcpntQstnAnswUUID>')
Request Example: [PUT] https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_EVENT_SRV/ParticipantQuestionAnswers('<MktgEvtPrtcpntQstnAnswUUID>')

**Sample Code**

```json
{
    "MktgEvtPrtcpntQstnTxt": "Is recording available?",
    "MktgEvtPrtcpntAnswTxt": "Yes"
}
```

Payload Example for Marketing Events ($batch): POST

URI: $batch

Request Example: [POST] https://<Server>:<Port>/sap/opu/odata/SAP/API_MKT_EVENT_SRV/$batch

**Sample Code**

```bash
--batch
Content-Type: multipart/mixed; boundary=changeset_01869434-0008-0001
--changeset_01869434-0008-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST MarketingEvents HTTP/1.1
Content-Type: application/json
Content-Length: 1021
{
    "MktgEventExternalId" : "EXT1",
    "MktgEventProvider" : "ON24_ID",
    "MktgEventProviderAccount" : "31835",
    "MktgEventName" : "EVENT",
    "MktgEventDescription" : "EVENT",
    "MktgEventStatus" : "0001",
    "MediaName" : "EVENT",
    "MktgEventEndDateDateTime" : "1018-10-10T12:34:32",
    "MktgEventStartDateTime" : "1018-10-10T12:34:32",
    "MktgEvtReplayAvailFromDateTime" : "1018-10-10T12:34:32",
    "MktgEvtReplayAvailToDateTime" : "1018-10-10T12:34:32",
    "MktgEventTimezone" : "CET",
    "MarketingArea" : "GLOBAL",
    "Language" : "EN",
    "MktgEventRegistrationURL" : "https://event.on24.com/wcc/r/1918973/12F1076152160424905524623A91E9A",
    "MktgEventOnlineURL" : "https://event.on24.com/wcc/r/1918973/12F1076152160424905524623A91E9A",
    "to_Participant" : [{
        "MktgEventParticipantExternalID" : "barryallen@mailinator.com",
        "ContactOrigin" : "ON24_ID",
        "MktgEngagementScore" : 10,
        "TotalNumberOfMinutesAttended" : 20,
        "NumberOfQuestions" : 60,
        "NumberOfPollsAnswered" : 50,
        "NumberOfSurveysAnswered" : 0,
        "NumberOfContentDownloads" : 0,
        "TotalNumberOfMinutesLive" : 10,
    }]
}
```
"TotalNumberOfMinutesReplay" : 0,
"MktgEventParticipantStatus" : "1003"
}
}
--changeset_01869434-0008-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
POST MarketingEvents(guid'6c0b84b7-5523-1ed9-8ba5-cf63a92f034f')/
to_Participant HTTP/1.1
Content-Type: application/json
Content-Length: 1021
{
"MktgEventParticipantExternalID" : "eveprt2002@mailinator.com",
"ContactOrigin" : "EMAIL",
"MktgEngagementScore" : 10,
"NumberOfMinutesAttended" : 20,
"NumberOfPollsAnswered" : 50,
"NumberOfSurveysAnswered" : 0,
"NumberOfContentDownloads" : 0,
"TotalNumberOfMinutesLive" : 0,
"TotalNumberOfMinutesReplay" : 0,
"MktgEventParticipantStatus" : "1002"
}
--changeset_01869434-0008-0001
Content-Type: application/http
Content-Transfer-Encoding: binary
PUT EventParticipants(guid'6c0b84b7-5523-1ed9-8ba9-3c522fd891d6') HTTP/1.1
Content-Type: application/json
Content-Length: 1021
{
"MktgEventParticipantExternalID" : "eveprt22@mailinator.com",
"ContactOrigin" : "EMAIL",
"MktgEngagementScore" : 10,
"NumberOfMinutesAttended" : 20,
"NumberOfPollsAnswered" : 90,
"NumberOfSurveysAnswered" : 0,
"NumberOfContentDownloads" : 0,
"TotalNumberOfMinutesLive" : 0,
"TotalNumberOfMinutesReplay" : 0,
"MktgEventParticipantStatus" : "0002"
}
--changeset_01869434-0008-0001--
--batch--
5.5.11.3 Function Imports

Function imports are used to perform custom operations on an entity, in addition to typical OData operations. This section also provides payload examples.

Get Event Languages

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get the list of event languages</td>
<td>/GetEventLanguage</td>
</tr>
</tbody>
</table>

Payload Examples

- Get Event Languages
  /sap/opu/odata/SAP/API_MKT_EVENT_SRV/GetEventLanguage

5.6 Commerce Marketing

The following APIs are available for the Commerce Marketing business area.

OMC: Social Media Marketing [page 922]
The Open Marketing Connector (OMC) for Social Media Marketing provides you with end-to-end guidance to integrate with a social media management and marketing.

Recommendations (SAP Cloud Platform) [page 927]
Public OData API (API_MKT_RECOMMENDATION_SRV) that allows a client system to obtain recommendations from the SAP Marketing Cloud using the SAP Cloud Platform.

Recommendations [page 943]
The PROD_RECO_RUNTIME_SRV OData service enables customer channels to receive recommendations generated by Recommendation.

External Recommendations [page 958]
Use the public OData API API_MKT_EXTERNAL_RECMDN_SRV to upload (import) recommendations from external sources.

Recommendations Interaction Data [page 975]
OData service (PROD_RECO_RUNTIME_SRV) for posting interactions to an SAP HANA database.

Import Offers [page 977]
Use the public OData API CUAN_OFFER_IMPORT_SRV to upload (import) offers from external sources.

Read Offers [page 1006]
Public OData API (API_MKT_OFFER_SRV) for Offers
Discover Offers [page 1012]
Use the API OData service CUAN_OFFER_DISCOVERY_SRV for SAP Marketing Cloud Offers to find suitable offers for a consumer.

Coupons [page 1028]
Public OData API (API_MKT_COUPON_SRV) for Coupons.

5.6.1 OMC: Social Media Marketing

The Open Marketing Connector (OMC) for Social Media Marketing provides you with end-to-end guidance to integrate with a social media management and marketing.

Business Scenario

Using a social media management system, you engage one-on-one with people for service, complaints, or other topics on various social platforms. With some of those people, you want to follow up with marketing activities. To do so, you can import contact and interaction data from your social media management system to SAP Marketing Cloud. Their corresponding contacts and interactions are then used for follow-up marketing activities, such as sending cross-selling special offers or vouchers.

In SAP Marketing Cloud, you plan all your campaigns across channels. You or your marketing agency execute paid social campaigns either directly on the social platforms or by using a third-party social media marketing system. You link the SAP Marketing Cloud campaigns and the external paid social campaigns to get an integrated view of all your campaigns in SAP Marketing Cloud. Optionally you can transfer first party contact data from SAP Marketing Cloud to social platforms or to a third-party social media marketing system. There you can use these audiences either directly or for further processing, for example, as input for the creation of look-alike audiences.

During campaign execution on the social media marketing system, campaign performance data is replicated into SAP Marketing Cloud for cross-campaign and cross-channel analysis.
Integration Points and Steps

Integrated Processes

Import Raw Leads from Social Channels

Steps
1. A marketing expert prepares campaigns for follow-up marketing activities triggered by conversations on social platforms. For example, these campaigns might send special offers for cross-selling or vouchers to apologize for something that went wrong. For more information, see Trigger-Based Campaigns.

2. A social agent monitors and engages 1:1 on social channels using a social media management system.

3. The social agent selects relevant postings with the corresponding profiles for follow-up in SAP Marketing Cloud. In the conversation, the agent asks for contact information required for the follow-up, such as email or customer number, and enriches the profile with that data. Optionally, the agent manually matches the profile with an existing contact in SAP Marketing Cloud. Optionally the agent also enriches the posting with context information such as tags, interests, or products.

4. The profile information and the postings are automatically imported into SAP Marketing Cloud and corresponding interactions and contacts are created.

5. Based on the context information provided with the incoming interaction and the trigger conditions of the prepared campaigns, follow-up marketing activities are started automatically. For example, a cross-selling special offer is sent via email.

**Variants**

Instead of preparing trigger-based campaigns upfront, it’s also possible to create automated campaigns for dedicated events addressing all contacts that engaged on a social platform. For example, you can create a campaign with special spring offers for all contacts that engaged on a social platform in the last three months.

**How to Implement**

Two marketing APIs are needed, API_MKT_CONTACT for contacts and API_MKT_INTERACTION_SRV for interaction.

When working with these APIs, you can use the Import Monitor app to monitor the send requests. This app requires the business role Administrator - Marketing. For more information, see Import Monitor [page 397].

Some configuration is needed as a prerequisite:

- For contacts, an ID origin should be created, and a stable ID from the source system should be used. For more information, see Origins of Contact IDs.
- For interactions, a suitable interaction type should be used. For more information, see Managing Interaction Content.
- If you’re using interests with the API for Interactions, you need to configure the interests using the corresponding app. For more information, see Manage Interests. You need the business role Administrator - Marketing.

The following entities are used in the API for Contacts:

- **Contacts**
  - Search for a contact using GET
- **ContactOriginData**
  - Create a contact via batch request using POST
  - Update a contact via batch request using PUT

The following entities are used in the API for Interactions:

- **Interactions**
  - Create interaction via batch request using POST
- **InteractionTags**
  - Deep create using POST
- **InteractionProducts**
Hand Over Paid Social Campaigns

Steps

1. A marketing manager plans campaigns in SAP Marketing Cloud. This planning may include setting performance targets for the individual campaigns. Planning may start with marketing plans and programs including budget planning or directly with creating campaigns. For more information, see Marketing Plans and Setting Campaign Targets.

2. A marketing expert starts a paid social campaign in SAP Marketing Cloud in the Campaigns app. Optionally, the marketing expert can add a target group to the campaign for transfer from SAP Marketing Cloud to the social platform or the social media marketing system. Using a periodically scheduled campaign and a dynamic target group, it’s possible to regularly update the target group, for example, to address people whose contracts are expiring soon with a long running paid social campaign. For more information, see Recurring Campaigns.

3. After the paid social campaign has been started in SAP Marketing Cloud, a corresponding campaign is automatically created in the external system and linked to the campaign in SAP Marketing Cloud. If an SAP Marketing Cloud target group is provided, a custom audience is created on the external system from that target group. In the third-party social marketing solution or directly on the social media platform, the campaign is managed and executed, typically by a marketing agency. However, this step may also be done by a marketing expert. This mainly includes creating and managing creatives, bidding and targeting.

4. If a target group has been transferred, the target group can be used directly for targeting, or, depending on the capabilities of the external system, used in other ways like, for example, as a seed for a look-alike audience.

Variants

Instead of creating the campaign in the external system from SAP Marketing Cloud it’s also possible to link an existing paid social campaign to a campaign in SAP Marketing Cloud. This can be used when a marketing agency prefers to create campaigns with their own tools. It can also be used to handle exceptions in the campaign creation process, for example, if a campaign on the external platform has to be stopped and re-created. For more information, see Assigning External References to Externally Executed, Facebook, and Google Ads Campaigns.

Multiple external campaigns can be linked to a single campaign in SAP Marketing Cloud and you can combine campaigns created from SAP Marketing Cloud with campaigns assigned from elsewhere.

How to Implement

There are several involved interfaces for the campaign creation, for a value help to find external campaign IDs, and for the target group transfer. For more information, see Implementing Interfaces for External Campaign Execution [page 158].

The implementation of all interfaces is optional depending on your business needs. For example, you can still assign existing external campaigns to a campaign in SAP Marketing Cloud even if the interface to create campaigns hasn’t been implemented.

Get Campaign Performance

Steps
1. Campaign success data, like number of impressions or clicks, together with ad serving spend is automatically replicated back to SAP Marketing Cloud, typically with a daily break-down to also analyze trends. Optionally, the data can be provided with a break-down by additional dimensions like age range or gender.

2. The marketing expert can now analyze the campaign performance in SAP Marketing Cloud. If targets for the campaigns have been set, those targets can be compared to the incoming actual numbers. For more information, see Campaign Performance.

**Variants**

Performance data can also be manually loaded using the Data File Load app. For more information, see Data File Load.

**How to Implement**

Typically, the success data is pulled from the external system. For more information, see Requesting Campaign Success Data [page 177]. Using this pull interface, SAP Marketing Cloud orchestrates the retrieval of the success data, including scheduling and automated recovery from temporary errors.

If pulling the data doesn’t provide the required flexibility there’s also an API interface to push in the data, see Campaign Success Data [page 812].

**Prerequisites**

- **Scope Items**
  The following scope items are relevant and are included in the base scope:
  - External Campaigns (JC9)

- **Business Catalogs**
  The following business catalogs are relevant to assign authorizations for the API services:

<table>
<thead>
<tr>
<th>Business Catalog Name</th>
<th>Required for API</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_CEC_BC_MKT_API_IC2_PC</td>
<td>API_MKT_CONTACTS</td>
</tr>
<tr>
<td>SAP_CEC_BC_MKT_API_IA_PC</td>
<td>API_MKT_INTERACTIONS</td>
</tr>
<tr>
<td>SAP_CEC_BC_MKT_API_SUC_PC</td>
<td>API_MKT_CMPGN_SUCCESS_IMPORT</td>
</tr>
</tbody>
</table>

For more information, see Business Catalogs for Business Scenarios.

- **Communication Scenario**
  To integrate with Public APIs, you must start by configuring communication between your SAP Marketing Cloud solution and the Public APIs. You assign the following communication scenario IDs to communication users to enable communication between systems:

<table>
<thead>
<tr>
<th>Communication Scenario ID</th>
<th>Scenario Name</th>
<th>Required if you want to integrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_COM_0207</td>
<td>Marketing - Interaction Contact Inte-</td>
<td>Contacts and Corporate Accounts</td>
</tr>
<tr>
<td></td>
<td>gration</td>
<td></td>
</tr>
</tbody>
</table>
### Communication Scenario ID

<table>
<thead>
<tr>
<th>Communication Scenario ID</th>
<th>Scenario Name</th>
<th>Required if you want to integrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_COM_0206</td>
<td>Marketing - Interactions Integration</td>
<td>Interactions</td>
</tr>
<tr>
<td>SAP_COM_0037</td>
<td>Marketing - External Campaign Execution</td>
<td>External Systems</td>
</tr>
<tr>
<td>SAP_COM_0390</td>
<td>Import Campaign Success</td>
<td>Campaign Success</td>
</tr>
</tbody>
</table>

**Configuration Activities**

For more information about configuration and setting up the communication arrangement, see Communication Arrangement for External Campaign Execution [page 195].

### How to Implement the API Services

The following services are relevant for the scenarios described in this guide:

- **API_MKT_CONTACT**
  - Contacts [page 408]
  - Payload Examples [page 441]
- **API_MKT_INTERACTION**
  - Interactions [page 605]
- **Payload Examples [page 634]**
- **API_MKT_CMPGN_SUCCESS_IMPORT**
  - Campaign Success Data [page 812]

### 5.6.2 Recommendations (SAP Cloud Platform)

Public OData API (API_MKT_RECOMMENDATION_SRV) that allows a client system to obtain recommendations from the SAP Marketing Cloud using the SAP Cloud Platform.

### Technical Data

<table>
<thead>
<tr>
<th>Name of Service</th>
<th>API_MKT_RECOMMENDATION_SRV</th>
</tr>
</thead>
</table>
Authorization

No authorization is required, however, a Security String must be obtained from the Recommendation Scenarios app. Append the security string to every request for validation to occur.

**Note**
The security string is only valid for requests that originate from your system, however, it should not be shared.

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>OData Version</td>
<td>2.0</td>
</tr>
<tr>
<td>Root URL</td>
<td>https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/</td>
</tr>
<tr>
<td></td>
<td>The root URL points to the SAP Cloud Platform tenant that is assigned to you. The Root URL (Recommendation Scenario URL) is provided through the Recommendation Scenarios app. With the proper user (for example, Marketing Expert or Business Analyst), you can log on to their SAP Marketing Cloud tenant and obtain the necessary information to consume the service.</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/$metadata</td>
</tr>
<tr>
<td>Field Extensibility Supported</td>
<td>Yes. For more information, search for extensibility in Get Offers [page 932].</td>
</tr>
</tbody>
</table>

**Error Messages**

If the API encounters an error, the following HTTP status codes are returned:

<table>
<thead>
<tr>
<th>Code</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>429</td>
<td>The API has reached the maximum number of allocated API calls. The maximum number of allocated API calls is 200 per second.</td>
</tr>
<tr>
<td>400</td>
<td>A bad request was submitted. For example, the security string is invalid.</td>
</tr>
</tbody>
</table>

**Security String Parameters**

All function import calls must include the security string parameters. The Security String for a given recommendation scenario, can be obtained through the Recommendations Scenario application, in the Advanced tab.
### Secure User ID

If you opt for using a recommendation scenario with the **Secure User ID** option, make sure that you enable this option in the **Recommendation Scenarios** application in your SAP Marketing Cloud system. This option affects your **Security String** for the scenario, so you need to copy the new value. The **User ID Salt** value (which needs to be passed along with the **User ID** in your HTTP request headers) can also be obtained in the same application.

### Technical Field Documentation and Payload Examples

For function import technical field documentation and payload examples, see **Function Imports** [page 929].

#### 5.6.2.1 Function Imports

Function imports are used to perform custom operations on an entity, in addition to typical OData operations. This section contains technical field documentation and payload examples for the following function imports:

- **Get Recommendations** [page 930]
  
  GetRecommendations retrieves recommendations from either the SAP Cloud Platform (cached recommendations) or the SAP Marketing Cloud.

- **Get Offers** [page 932]
  
  GetOfferRecommendations retrieves offer recommendations (offer content) from either SAP Cloud Platform (cached recommendations) or SAP Marketing Cloud.

- **Get Products** [page 937]
  
  GetProducts retrieves product master data from either SAP Cloud Platform (cached products) or SAP Marketing Cloud.

- **Post Interactions** [page 939]
  
  SendProductClickThrough and SendOfferClickThrough post interactions that occur between consumers and recommendations.
### 5.6.2.1.1 Get Recommendations

GetRecommendations retrieves recommendations from either the SAP Cloud Platform (cached recommendations) or the SAP Marketing Cloud.

**HTTP Method**  
GET

**Function Import**  
GetRecommendations  
Retrieves recommendations from either the SAP Cloud Platform (cached recommendations) or the SAP Marketing Cloud. Depending on the Recommendation Scenario, the function import can either return product or offer (offer content GUID and score) recommendations.

Each call to this service results in an impression being recorded for the scenario. When a recommendation is retrieved from the SAP Marketing Cloud, the impression is recorded in the back-end system. However, if the recommendation is retrieved from the cache, the impression is stored in a database table in the SAP Cloud Platform. The impressions that are stored in the database table are periodically aggregated and then posted to the SAP Marketing Cloud.

**URL**  
https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/GetRecommendations

### HTTP Request Header Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Mandatory</th>
<th>Data Type</th>
<th>Max. Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>u</em></td>
<td>Optional – Appears if Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td>String</td>
<td>N/A</td>
<td>The user ID.</td>
</tr>
<tr>
<td><em>h</em></td>
<td>Optional – Appears if Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td>String</td>
<td>N/A</td>
<td>An SHA-256 cryptographic hash of the user ID and the salt</td>
</tr>
</tbody>
</table>

### Request Parameters

<table>
<thead>
<tr>
<th>Field</th>
<th>Mandatory</th>
<th>Data Type</th>
<th>Max. Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LeadingItemIds</td>
<td>Only for association algorithms.</td>
<td>String</td>
<td>1000</td>
<td>The comma-separated product IDs to be passed to the recommendation scenario.</td>
</tr>
<tr>
<td>Field</td>
<td>Mandatory</td>
<td>Data Type</td>
<td>Max. Length</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>LeadingItemType</td>
<td>Only when LeadingItemIds is provided.</td>
<td>String</td>
<td>50</td>
<td>The product type (origin) as defined in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>BasketItemIds</td>
<td>No</td>
<td>String</td>
<td>1000</td>
<td>The comma-separated product IDs which are already in the cart.</td>
</tr>
<tr>
<td>BasketItemType</td>
<td>Only when BasketItemIds is provided</td>
<td>String</td>
<td>50</td>
<td>The product type (origin) as defined in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>ContextParameters</td>
<td>No</td>
<td>String</td>
<td>1000</td>
<td>The context parameters as configured in SAP Marketing Cloud. For example, interaction type, interaction contact type, or any of the other algorithm data source pre-filters (standard delivery or custom). For more information, see Algorithm Data Source Pre-filters and Recommendation Data Source Pre-Filters.</td>
</tr>
<tr>
<td>UserId</td>
<td>No</td>
<td>String</td>
<td>71</td>
<td>The user ID, depending on the specified user type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This parameter is ignored if the Secure User ID checkbox is checked in the custom Recommendation Scenarios app.</td>
</tr>
<tr>
<td>UserType</td>
<td>Only when UserId is provided or when Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td>String</td>
<td>50</td>
<td>The user facet, as defined in SAP Marketing Cloud.</td>
</tr>
</tbody>
</table>

**Example of Request**

Sample Code

https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/GetRecommendations
iNote

The scenario ID and the marketing tenant are encoded in the _L54AD1F204_ parameter. For example, a decoded version of the parameter contained in the example request would be RECO&tenant=[my-tenant].ondemand.com&reco_scenario=SAP_CROSS_SELL_WEB_PRODUCT_DETAILS&secure_user=

Example of Response

Sample Code

```xml
  <element m:type="API_MKT_RECOMMENDATION_SRV.Recommendation">
    <ResultObjectId>10023</ResultObjectId>
    <ResultObjectType>SAP_HYBRIS_PRODUCT</ResultObjectType>
    <ResultObjectScore>1.00000</ResultObjectScore>
  </element>
  <element m:type="API_MKT_RECOMMENDATION_SRV.Recommendation">
    <ResultObjectId>10024</ResultObjectId>
    <ResultObjectType>SAP_HYBRIS_PRODUCT</ResultObjectType>
    <ResultObjectScore>0.79831</ResultObjectScore>
  </element>
</GetRecommendations>
```

5.6.2.1.2 Get Offers

GetOfferRecommendations retrieves offer recommendations (offer content) from either SAP Cloud Platform (cached recommendations) or SAP Marketing Cloud.

HTTP Method

GET
Function Import: GetOfferRecommendations

Retrieves offer recommendations from either SAP Cloud Platform (cached recommendations) or SAP Marketing Cloud.

This function import returns offer content, as opposed to the offer content GUID and score returned by the GetRecommendations function import.

URL: https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/GetOfferRecommendations

Field Extensibility: The OfferContent complex type supports field extensibility. For more information see, Custom Fields for Offer Header and Offer Content.

HTTP Request Header Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Mandatory</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>u</em></td>
<td>Optional – Appears if Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td>String</td>
<td>The user ID.</td>
</tr>
<tr>
<td><em>h</em></td>
<td>Optional – Appears if Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td>String</td>
<td>An SHA-256 cryptographic hash of the user ID and the salt</td>
</tr>
</tbody>
</table>

Request Parameters

<table>
<thead>
<tr>
<th>Field</th>
<th>Mandatory</th>
<th>Data Type</th>
<th>Max. Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LeadingItemIds</td>
<td>Only for association algorithms.</td>
<td>String</td>
<td>1000</td>
<td>The comma-separated product IDs to be passed to the recommendation scenario.</td>
</tr>
<tr>
<td>LeadingItemType</td>
<td>Only when LeadingItemIds is provided.</td>
<td>String</td>
<td>50</td>
<td>The product type (origin) as defined in the SAP Marketing Cloud.</td>
</tr>
<tr>
<td>BasketItemIds</td>
<td>No</td>
<td>String</td>
<td>1000</td>
<td>The comma-separated product IDs which are already in the cart.</td>
</tr>
<tr>
<td>BasketItemType</td>
<td>Only when BasketItemIds is provided</td>
<td>String</td>
<td>50</td>
<td>The product type (origin) as defined in the SAP Marketing Cloud.</td>
</tr>
<tr>
<td>Field</td>
<td>Mandatory</td>
<td>Data Type</td>
<td>Max. Length</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ContextParameters</td>
<td>No</td>
<td>String</td>
<td>1000</td>
<td>The context parameters as defined in the SAP Marketing Cloud, e.g.: Interaction Type, Interaction Contact Type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>i Note</strong> Additional request parameters that are not defined in the ContextParameters are appended.</td>
</tr>
<tr>
<td>UserId</td>
<td>No</td>
<td>String</td>
<td>71</td>
<td>The user ID, depending on the specified user type.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This parameter is ignored if the Secure User ID checkbox is checked in the custom Recommendation Scenarios app.</td>
</tr>
<tr>
<td>UserType</td>
<td>Only when UserId is provided or when Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td>String</td>
<td>50</td>
<td>The user facet, as defined in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>Language</td>
<td>No</td>
<td>String</td>
<td>2</td>
<td>The ISO language code of the offer content. In a Web shop, the language may correspond to the user's logon language. If no language is passed to the OData service, the result contains all available languages.</td>
</tr>
<tr>
<td>Field</td>
<td>Mandatory</td>
<td>Data Type</td>
<td>Max. Length</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Position</td>
<td>No</td>
<td>String</td>
<td>40</td>
<td>The position in the Web shop where offers are to be displayed, such as Top or Bottom. This information must be maintained for the offer content in the SAP Marketing Cloud.</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>No</td>
<td>String</td>
<td>20</td>
<td>The communication medium as defined in the SAP Marketing Cloud. The parameter filters the offer content by the communication medium.</td>
</tr>
<tr>
<td>OfferContentType</td>
<td>No</td>
<td>String</td>
<td>2</td>
<td>The OfferContentType parameter filters offers by content type.</td>
</tr>
<tr>
<td>WithCoupon</td>
<td>No</td>
<td>String</td>
<td>1</td>
<td>The following WithCoupon parameter values filter offers by whether or not they have a coupon assigned:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• ‘x’ retrieves offers with coupons assigned.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• ‘ ’ retrieves offers without coupons assigned.</td>
</tr>
<tr>
<td>MarketingArea</td>
<td>No</td>
<td>String</td>
<td>40</td>
<td>The marketing area as defined in the SAP Marketing Cloud. The parameter filters offers by marketing area.</td>
</tr>
</tbody>
</table>

**Note**

Requests without the parameter retrieve offers with and without coupons assigned.
Example of Request

**Sample Code**

```xml
https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/
GetOfferRecommendations
?LeadingItemIds='PRODUCT_ID_1'
&LeadingItemType='SAP_HYBRIS_PRODUCT'
&UserId='username@sap.com'
&UserType='EMAIL'
&_L54AD1F204_='c2NlbmFyaW89UkVDTyZ0ZW5hbnQ9W215LXRlbmFudF0uczRoYW5hLm9uZGVtYW5kb20S
YmV0d29yZWNvX3NjZW5hcmllcVVRPUPF9PRkZFUlMmc2VjdXJ1X3VzZXJuYW1lU2VvdGlmej`
&_K13_='20'
&_V_='343fd3e7f98cc3842765a4fe965685344560c05207075519ab2e5f9248b51810'
```

**Note**

The scenario ID and the marketing tenant are encoded in the `_L54AD1F204_` parameter. For example, a decoded version of the parameter contained in the example request would be `RECO&tenant=[my-tenant].ondemand.com&reco_scenario=SAP_CROSS_SELL_WEB_PRODUCT_DETAILS&secure_user`.

Example of Response

**Sample Code**

```xml
<?xml version='1.0' encoding='utf-8'?>
<GetOfferRecommendations
<element m:type="API_MKT_RECOMMENDATION_SRV.OfferContent">
  <MarketingOffer>32</MarketingOffer>
  <MarketingOfferContent>00001</MarketingOfferContent>
  <OfferContentType>01</OfferContentType>
  <OfferContentTypeName>Image</OfferContentTypeName>
  <CommunicationMedium>EMAIL</CommunicationMedium>
  <CommunicationMediumName>Email</CommunicationMediumName>
  <LanguageISOCode>EN</LanguageISOCode>
  <MarketingArea>CXXGLOBAL</MarketingArea>
  <OfferContentPosition>Home</OfferContentPosition>
  <OfferContentSourceURLDesc>50% Special Offer</OfferContentSourceURLDesc>
  <OfferContentTargetURL>https://img.freepik.com/free-vector/colorful-shopping-sale-banner-template_1201-1308.jpg?size=338&amp;amp;ext=jpg</OfferContentTargetURL>
  <OfferContentTargetURLDesc>50% Special Offer</OfferContentTargetURLDesc>
  <CouponUUID></CouponUUID>
  <ExternalOffers></ExternalOffers>
</element>
</GetOfferRecommendations>
```
### 5.6.2.1.3 Get Products

GetProducts retrieves product master data from either SAP Cloud Platform (cached products) or SAP Marketing Cloud.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Function Import</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>GetProducts</td>
<td>https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/GetProducts</td>
</tr>
</tbody>
</table>

#### Request Parameters

<table>
<thead>
<tr>
<th>Field</th>
<th>Mandatory</th>
<th>Data Type</th>
<th>Max. Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProductIds</td>
<td>Yes</td>
<td>String</td>
<td>2000</td>
<td>The comma-separated product IDs to be passed to the recommendation scenario.</td>
</tr>
<tr>
<td>ProductOrigin</td>
<td>Yes</td>
<td>String</td>
<td>50</td>
<td>The product type (origin) as defined in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>Language</td>
<td>Yes</td>
<td>String</td>
<td>2</td>
<td>The Language of the master data.</td>
</tr>
</tbody>
</table>
Note
All of the parameters in the table are query strings.

Example of Request

**Sample Code**

```plaintext
https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/GetProducts
?ProductIds='PRODUCT1,PRODUCT2'
&ProductOrigin='SAP_COMMERCE_PRODUCT'
&Language='EN'
&_L54A1F204_='c2NlbmFyaW89UkVDTyZ0ZW5hbnQ9W01ZLU1LVC1URU5BT1RdLnM0aGFuYS5vbmlr
lWFuZC5jb20mcmVjb19zY2VvYXJpbz1TQVBFVE9QX1NFTExFU19IT01FX1BBR0U="
&_K13_=1
&_V_=2
&_K14_='9fd6e90b810e9c24fbbd44d2158d564333b4a5f13fc597b343c5bdafe50ea4'
```

Example of Response

**Sample Code**

```xml
 <element m:type="com.sap.cec.mkt.recommendation.ProductStructure">
   <ProductId>PRODUCT1</ProductId>
   <ProductDescription>Product One Description Text</ProductDescription>
   <ProductName>Product 1 Name</ProductName>
   <ProductTargetUrl>https://[some_host]/.../PRODUCT_DETAILS/PRODUCT1.html</ProductTargetUrl>
   <ProductImageUrl>https://[some_host]/sap/files/PRODUCT_BRAND/PRODUCT_CATEGORY/PRODUCT1.jpg</ProductImageUrl>
 </element>
 <element m:type="com.sap.cec.mkt.recommendation.ProductStructure">
   <ProductId>PRODUCT2</ProductId>
   <ProductDescription>Product Two Description Text</ProductDescription>
   <ProductName>Product 2 Name</ProductName>
   <ProductTargetUrl>https://[some_host]/.../PRODUCT_DETAILS/PRODUCT2.html</ProductTargetUrl>
   <ProductImageUrl>https://[some_host]/sap/files/PRODUCT_BRAND/PRODUCT_CATEGORY/PRODUCT2.jpg</ProductImageUrl>
 </element>
</GetProducts>
```
5.6.2.1.4 Post Interactions

SendProductClickThrough and SendOfferClickThrough post interactions that occur between consumers and recommendations.

Send Product Click-Throughs

HTTP Method | POST
---|---
Function Import | SendProductClickThrough

Posts interactions that occur between consumers and the products that are recommended.

URL | https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/SendProductClickThrough

Request Parameters

<table>
<thead>
<tr>
<th>Field</th>
<th>Mandatory</th>
<th>Data Type</th>
<th>Max. Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ItemId</td>
<td>Yes</td>
<td>String</td>
<td>50</td>
<td>The comma-separated item IDs to be passed to the recommendation scenario.</td>
</tr>
<tr>
<td>ItemType</td>
<td>Yes</td>
<td>String</td>
<td>30</td>
<td>The item type as defined in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>UserId</td>
<td>No</td>
<td>String</td>
<td>71</td>
<td>The user ID, depending on the specified user type. This parameter is ignored if the Secure User ID checkbox is checked in the custom Recommendation Scenarios app.</td>
</tr>
<tr>
<td>UserType</td>
<td>Only when UserId is provided or when Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td>String</td>
<td>50</td>
<td>The User Type configured for the recommendation scenario in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>TargetUrl</td>
<td>No</td>
<td>String</td>
<td>2000</td>
<td>The target URL to be used for the redirection.</td>
</tr>
<tr>
<td>Field</td>
<td>Mandatory</td>
<td>Data Type</td>
<td>Max. Length</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Yes</td>
<td>String</td>
<td>20</td>
<td>The Communication Medium configured for the recommendation scenario in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>SourceObjectId</td>
<td>Yes</td>
<td>String</td>
<td>50</td>
<td>The ID of the object that triggered the interaction. For example, a session or sales order ID.</td>
</tr>
<tr>
<td>SourceObjectType</td>
<td>Yes</td>
<td>String</td>
<td>30</td>
<td>A custom defined string that describes the type of object passed as the SourceObjectId.</td>
</tr>
<tr>
<td>SourceSystemId</td>
<td>No</td>
<td>String</td>
<td>255</td>
<td>The ID of the system that is receiving the recommendations, and providing interaction data. For example, a commerce Web shop (<a href="http://www.xyz.com">www.xyz.com</a>).</td>
</tr>
<tr>
<td>SourceSystemType</td>
<td>Required with SourceSystemId</td>
<td>String</td>
<td>20</td>
<td>The type of system that is receiving the recommendations and providing interaction data. For example, SAP _Commerce.</td>
</tr>
</tbody>
</table>

**Example of Request**

```plaintext
https://recow62890cfa.cert.int.sap.hana.ondemand.com/reco/api/
API_MKT_RECOMMENDATION_SRV/SendProductClickThrough
?CommunicationMedium='EMAIL'
&SourceObjectId='mySourceObjectId'
&SourceObjectType='mySourceObjectType'
&itemID='myItemId'
&ItemType='SAP_PRODUCT'
&_L54AD1F204_='c2NlbmFyaW89UKVDTyZ0ZW5hbnQ9bXzxMDA0NzAuczcRoYW5hLm9uZGVtYW5kLmNvbSUMzWVNvX3Nj2W5hcmlvPUFMT59GRkV5Uw=='
&_K13_='1'
&_V_='2'
&_K14_='1f18e01b8c3ceac1bf6669203d4f60a5a137cc2142ce01165b8297b62400c9f9'
```

**Example of Response**

```xml
<?xml version='1.0' encoding='utf-8'?>
```
Send Offer Click-Throughs

HTTP Method  
POST

Function Import  
SendOfferClickThrough

Posts interactions that occur between consumers and the offers that are recommended.

URL  
https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/
SendOfferClickThrough

Request Parameters

<table>
<thead>
<tr>
<th>Field</th>
<th>Mandatory</th>
<th>Data Type</th>
<th>Max. Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MarketingOffer</td>
<td>Yes</td>
<td>String</td>
<td>10</td>
<td>The comma-separated offer IDs to be passed to the recommendation scenario.</td>
</tr>
<tr>
<td>MarketingOfferContent</td>
<td>Yes</td>
<td>String</td>
<td>5</td>
<td>The Marketing Offer Content ID</td>
</tr>
<tr>
<td>ExternalOffer</td>
<td>No</td>
<td>String</td>
<td>60</td>
<td>External Offer ID</td>
</tr>
<tr>
<td>ExternalOfferOrigin</td>
<td>Only when</td>
<td>String</td>
<td>30</td>
<td>External Offer Origin</td>
</tr>
<tr>
<td>ExternalOffer is provided.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coupon</td>
<td>No</td>
<td>String</td>
<td>32</td>
<td>Marketing Coupon ID</td>
</tr>
<tr>
<td>UserId</td>
<td>No</td>
<td>String</td>
<td>71</td>
<td>The user ID, depending on the specified user type.</td>
</tr>
<tr>
<td>This parameter is ignored if the Secure User ID checkbox is checked in the custom Recommendation Scenarios app.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UserType</td>
<td>Only when</td>
<td>String</td>
<td>50</td>
<td>The user facet, as defined in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>UserId is provided or when Secure User ID checkbox is checked in Recommendation Scenarios app.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Mandatory</td>
<td>Data Type</td>
<td>Max. Length</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Yes</td>
<td>String</td>
<td>20</td>
<td>The Communication Medium configured for the recommendation scenario in SAP Marketing Cloud.</td>
</tr>
<tr>
<td>SourceObjectId</td>
<td>Yes</td>
<td>String</td>
<td>50</td>
<td>The ID of the object that triggered the interaction. For example, a session or sales order ID.</td>
</tr>
<tr>
<td>SourceObjectType</td>
<td>Yes</td>
<td>String</td>
<td>30</td>
<td>A custom defined string that describes the type of object passed as the SourceObjectId.</td>
</tr>
<tr>
<td>SourceSystemId</td>
<td>No</td>
<td>String</td>
<td>255</td>
<td>The ID of the system that is receiving the recommendations, and providing interaction data. For example, a commerce Web shop (<a href="http://www.xyz.com">www.xyz.com</a>).</td>
</tr>
<tr>
<td>SourceSystemType</td>
<td>Required with SourceSystemId</td>
<td>String</td>
<td>20</td>
<td>The type of system that is receiving the recommendations and providing interaction data. For example, SAP _Commerce.</td>
</tr>
</tbody>
</table>

**Example of Request**

```
https://[Recommendation Scenario URL]/api/API_MKT_RECOMMENDATION_SRV/
SendOfferClickThrough
?CommunicationMedium='EMAIL'
&SourceObjectId='mySourceObjectId'
&SourceObjectType='mySourceObjectType'
&MarketingOffer='32'
&MarketingOfferContent='00001'
&_L54AD1F204_='.c2NlbmFyaW89UKVDTyZ0ZW5hbWV9bXkzMDE0NzAuczRoYW5hLm9uZGVtYW5kLmNvbSZyZWNvX3NjZW5hcmlvPUEMTDE9GRkV5Uw=='
&_K13_='.1
&_V=.2
&_K14_='1f18e01b8c3ceac1bf6669203d4f60a5137cc2142ce01165b8297b62400c9f9'
```

**Example of Response**

```
<?xml version='1.0' encoding='utf-8'?>
<SendOfferClickThrough
```
5.6.3 Recommendations

The PROD_RECO_RUNTIME_SRV OData service enables customer channels to receive recommendations generated by Recommendation.

Prerequisites

- You have assigned the Marketing - Recommendation Integration communication scenario to your communication user in Maintain Communication Users.
- You have setup the communication system by doing the following:
  1. From the SAP Fiori launchpad, choose Communication Management ➤ Communication Systems ➤ Communication Systems. Choose Save and return back to the SAP Fiori launchpad.
  2. Create a communication system, and enter an ID and a system name.
  3. Under Technical Data, enter the Host Name of the SAP Cloud Platform Integration system to be connected.
  4. Choose Save and return back to the SAP Fiori launchpad.
- You have setup the communication arrangement by doing the following:
  1. From the SAP Fiori launchpad, choose the Communication Arrangements app.
  2. Create a communication arrangement for the scenario SAP_COM_0019 (Marketing - Recommendation Integration), and enter an arrangement name.
  3. In the Communication Arrangement for Marketing - Recommendation Integration, choose the communication system that you created earlier.
  4. Under Inbound Communication, enter your communication user name, and choose an authentication method.
  5. Under Inbound Services, the system provides the relevant services from the communication scenario.
  6. Choose Save and return back to the SAP Fiori launchpad.
- To receive the recommendations, call the service using the deep insert functionality of OData. For more information about the deep insert functionality of OData, see https://help.sap.com/viewer/product/SAP_GATEWAY/2.0/en-US. Choose Developer’s Guide ➤ OData Channel ➤ Advanced Features ➤ Deep Insert.

Details of Service Entity

Root URL: https://<Server>:<Port>/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios

Request Mode: POST

Entity Data Model: RecommendationScenarios
The nested structure of the entities that can be navigated to from the RecommendationScenarios entity are as follows:

- RecommendationScenarios
  - Scenarios
    - LeadingObjects
    - BasketObjects
  - ContextParams
  - ScenarioHashes
  - ResultObjects

**RecommendationScenario Entity Parameters**

The following table contains the parameters of the RecommendationScenario entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>UserId</td>
<td>The ID of the user who performs the interaction, for example, customer ID or contact ID.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
<tr>
<td>UserType</td>
<td>The type of user who performs the interaction, for example, SAP Commerce Consumer or SAP Marketing Interaction Contact.</td>
<td>Edm.String</td>
<td>20</td>
<td>TRUE</td>
</tr>
<tr>
<td>ExternalTracking</td>
<td>A flag that implies external tracking of impressions using the PostImpressions function import (Optional).</td>
<td>Edm.Boolean</td>
<td>1</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

**Scenario Entity Parameters**

The following table contains the parameters of the Scenario entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScenarioId</td>
<td>The scenario ID represents a model type and related usage information, for example, promotion model type and user type.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
</tbody>
</table>
### HashId

A hash associated to a specific user. The hash accelerates retrieving recommendations from the cache of an optimized algorithm.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>HashId</td>
<td>A hash associated to a specific user. The hash accelerates retrieving recommendations from the cache of an optimized algorithm.</td>
<td>Edm.String</td>
<td>32</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

**Note**

You can use the `ProductRecoScenario` entity to enable your customer channel to choose `ScenarioId` from a value help. For more information, see Value Help Enabling Entities [page 956].

### LeadingObject Entity Parameters

The following table contains the parameters of the `LeadingObject` entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>LeadingObjectId</td>
<td>The ID of the leading object, for example, material number.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>LeadingObjectType</td>
<td>A recommendation data source type that is defined to an <code>ITEM</code> data source class, for example, SAP Commerce Product.</td>
<td>Edm.String</td>
<td>30</td>
<td>TRUE</td>
</tr>
</tbody>
</table>

**Note**

You can use the `ItemSourceTypes` entity to enable your customer channel to choose `LeadingObjectType` from a value help. For more information, see Value Help Enabling Entities [page 956].

### BasketObject Entity Parameters

The following table contains the parameters of the `BasketObject` entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>BasketObjectId</td>
<td>The ID of the leading object, for example, material number.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
</tbody>
</table>
### Property

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>BasketObjectType</td>
<td>A recommendation data source type that is defined to an ITEM data source class, for example, SAP Commerce Product.</td>
<td>Edm.String</td>
<td>30</td>
<td>TRUE</td>
</tr>
</tbody>
</table>

---

**i Note**

You can use the ItemSourceTypes entity to enable your customer channel to choose BasketObjectType from a value help. For more information, see Value Help Enabling Entities [page 956].

### ContextParam Entity Parameters

The following table contains the parameters of the ContextParam entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContextId</td>
<td>The prefilter parameter ID.</td>
<td>Edm.Int32</td>
<td>n.a.</td>
<td>TRUE</td>
</tr>
<tr>
<td>ContextParamId</td>
<td>The parent prefilter parameter ID.</td>
<td>Edm.Int32</td>
<td>n.a.</td>
<td>FALSE</td>
</tr>
<tr>
<td>Value</td>
<td>The value of the prefilter parameter.</td>
<td>Edm.String</td>
<td>100</td>
<td>FALSE</td>
</tr>
<tr>
<td>ValueType</td>
<td>The value type of the prefilter parameter.</td>
<td>Edm.String</td>
<td>32</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

### ScenarioHash Entity Parameters

The following table contains the parameters of the ScenarioHashes entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScenarioId</td>
<td>The recommendation scenario ID.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
<tr>
<td>HashID</td>
<td>A hash returned by the system that is associated to a specific user. The hash accelerates retrieving recommendations from the cache of an optimized algorithm.</td>
<td>Edm.String</td>
<td>32</td>
<td>TRUE</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Max Length</td>
<td>Key</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>------</td>
</tr>
<tr>
<td>ExpiresOn</td>
<td>Expiry date of HashID.</td>
<td>Edm.DateTime</td>
<td></td>
<td>FALSE</td>
</tr>
<tr>
<td>ResultScope</td>
<td>The scope of the result. For example, Generic, Restricted, or Personalized.</td>
<td>Edm.String</td>
<td>1</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

**ResultObject Entity Parameters**

The following table contains the parameters of the `ResultObject` entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScenarioId</td>
<td>The recommendation scenario ID.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
<tr>
<td>ResultObjectType</td>
<td>A recommendation data source type that is defined to an ITEM data source class. For example, SAP Commerce Product.</td>
<td>Edm.String</td>
<td>30</td>
<td>TRUE</td>
</tr>
</tbody>
</table>

**Note**

The `ResultObjectType` (Recommendation Type) parameter is defined in the `Recommendation Model Types` app. The Recommendation Type reflects either offers or the products contained in the system receiving the recommendations.

**Example**

To enable an SAP Commerce Web shop to receive recommendations; SAP Commerce Product is defined as the Recommendation Type. Only Recommendation objects of type SAP Commerce Product will be returned by the API.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ResultObjectId</td>
<td>The ID of the result object, for example, material number.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
<tr>
<td>ResultObjectScore</td>
<td>The score of the result object.</td>
<td>Edm.Decimal</td>
<td>10.5</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

**PostImpressions Function Import Parameters**
The following table contains the parameters of the `PostImpressions` function import:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScenarioId</td>
<td>The recommendation scenario ID.</td>
<td>Edm.String</td>
<td>50</td>
</tr>
<tr>
<td>TimeStamp</td>
<td>The timestamp of the impression.</td>
<td>Edm.DateTimeOffset</td>
<td>30</td>
</tr>
<tr>
<td>ImpressionCount</td>
<td>The total number of impressions performed.</td>
<td>Edm.Int16</td>
<td></td>
</tr>
<tr>
<td>ItemCount</td>
<td>The total number of items recommended.</td>
<td>Edm.Int16</td>
<td></td>
</tr>
</tbody>
</table>

If the `ExternalTracking` parameter in the `RecommendationScenario` entity is set to `TRUE`, as it is in the HTTP post request example, SAP Marketing Cloud does not count the impressions for the recommendation scenario that is being solicited. To keep the number of impressions in SAP Marketing Cloud accurate, it is necessary for the external system to convey the impression count. To do so, an additional separate call must be made to increase the impression count. For example, if the scenario `INT_TEST` returns 3 items that were consumed once; the additional call would contain the following:

```
https://[sap -marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/
PostImpressions?ScenarioId='INT_TEST'&TimeStamp=datetimeoffset'2016-12-03T12:45:29Z'&ImpressionCount=1&ItemCount=3&saml2=disabled
```

**JSON Examples**

**HTTP Post Request Using Deep Insert Functionality of OData in JSON Encoding**

```json
{
    "UserId" : "40F2E9306E391ED59BDE581AFE71F329 ",
    "UserType" : "COOKIE_ID",
    "ExternalTracking" : true,
    "Scenarios" : [
        {
            "ScenarioId" : "INT_TEST",
            "HashId" : "D33DD1F71615D50334FB2F1043365430",
            "LeadingObjects" : [
                {
                    "LeadingObjectType" : "SAP_ERP_MATNR",
                    "LeadingObjectId" : "M-01"
                }
            ],
            "BasketObjects" : [
                {
                    "BasketObjectType" : "SAP_ERP_MATNR",
                    "BasketObjectId" : "100-100"
                }
            ],
            "ContextParams" : [],
            "ScenarioHashes" : [],
            "ResultObjects" : []
        }
    ]
}
```
HTTP Post Response Payload in JSON Encoding

```json
{
"d":
{
  "metadata":
  {
    "id": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(UserId='', UserType='')",
    "uri": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(UserId='', UserType='')",
    "type": "PROD_RECO_RUNTIME_SRV.RecommendationScenario"
  },
  "UserId": "",
  "UserType": "",
  "ExternalTracking": true,
  "ScenarioHashes": [
    {
      "metadata":
      {
        "id": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ScenarioHashes('SAP_TOP_SELLERS_EMAIL_CAMPAIGN')",
        "uri": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ScenarioHashes('SAP_TOP_SELLERS_EMAIL_CAMPAIGN')",
        "type": "PROD_RECO_RUNTIME_SRV.ScenarioHash"
      },
      "ScenarioId": "SAP_TOP_SELLERS_EMAIL_CAMPAIGN",
      "HashId": "D33DD1F71615D50334FB2F1043365429",
      "ExpiresOn": "/Date(1478180969524)/",
      "ResultScope": "G"
    }
  ],
  "ResultObjects": [
    {
      "metadata":
      {
        "id": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ResultObject(ScenarioId='INT_TEST', ResultObjectType='SAP_ERP_MATNR', ResultObjectId='100-100')",
        "uri": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ResultObject(ScenarioId='INT_TEST', ResultObjectType='SAP_ERP_MATNR', ResultObjectId='100-100')",
        "type": "PROD_RECO_RUNTIME_SRV.ResultObject"
      },
      "ScenarioId": "INT_TEST",
      "ResultObjectType": "SAP_ERP_MATNR",
      "ResultObjectId": "100-100",
      "ResultObjectScore": "1.00000"
    },
    {
      "metadata":
      {
        "id": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ResultObject(ScenarioId='INT_TEST', ResultObjectType='SAP_ERP_MATNR', ResultObjectId='P-102')",
        "uri": "https://[sap-marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ResultObject(ScenarioId='INT_TEST', ResultObjectType='SAP_ERP_MATNR', ResultObjectId='P-102')",
        "type": "PROD_RECO_RUNTIME_SRV.ResultObject"
      },
      "ScenarioId": "INT_TEST",
      "ResultObjectType": "SAP_ERP_MATNR",
      "ResultObjectId": "P-102",
      "ResultObjectScore": "1.00000"
    }
  ]
}
```
XML Examples

HTTP Post Request Payload in XML Encoding

```xml
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<entry
xmlns:base="https://[sap -marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/
xmlns="http://www.w3.org/2005/Atom">
  <id>https://[sap -marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(0)</id>
  <title type="text">RecommendationScenarios</title>
  <link rel="self" href="RecommendationScenarios" title="RecommendationScenarios(0)="/>
  <link rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/Scenarios" type="application/atom+xml;type=feed" href="RecommendationScenarios(0)/Scenarios"/>
  <title type="text">Scenarios</title>
  <id>https://[sap -marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(0)/Scenarios</id>
  <link rel="self" title="Scenarios" href="RecommendationScenarios(0)/Scenarios"/>
</entry>
```
<link rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/Scenarios" type="application/atom+xml;type=entry" title="Scenarios" href="RecommendationScenarios(0)/Scenarios" />
<content type="application/xml">
<m:properties>
<d:ScenarioId>[Scenario ID]</d:ScenarioId>
<d:HashId></d:HashId>
</m:properties>
</content>
</entry>
</feed>
</m:inline>
</link>
<link rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/ScenarioHashes" type="application/atom+xml;type=feed" title="ScenarioHashes" href="RecommendationScenarios(0)/ScenarioHashes" />
<m:inline>
<title type="text">Scenarios</title>
<id>https://[sap -marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(0)/ScenarioHashes</id>
<link rel="self" title="ScenarioHashes" href="RecommendationScenarios(0)/ScenarioHashes" />
<entry>
<id>https://[sap -marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(0)/ScenarioHashes(0)</id>
<title type="text">ScenarioHashes</title>
<link rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/ScenarioHashes" type="application/atom+xml;type=entry" title="ScenarioHashes" href="RecommendationScenarios(0)/ScenarioHashes" />
<category term="PROD_RECO_RUNTIME_SRV.ScenarioHashes" scheme="http://schemas.microsoft.com/ado/2007/08/dataservices/scheme" />
<content type="application/xml">
<m:properties>
</m:properties>
</content>
</entry>
</feed>
</m:inline>
</link>
<link rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/ResultObjects" type="application/atom+xml;type=feed" title="ResultObjects" href="RecommendationScenarios(0)/ResultObjects" />
<m:inline>
<title type="text">ResultObjects</title>
<id>https://[sap -marketing-server]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(0)/ResultObjects</id>
<link rel="self" title="ResultObjects" href="RecommendationScenarios(0)/ResultObjects" />
<entry>
</feed>
</m:inline>
</link>
HTTP Post Response Payload in XML Encoding

```xml
<?xml version="1.0" encoding="utf-8"?>
  <id>https://[SAP_MARKETING_CLOUD_SYSTEM]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(UserId='',UserType='')/ScenarioHashes</id>
  <title type="text">ScenarioHashes</title>
  <author>
    <name/>
  </author>
  <link href="https://[SAP_MARKETING_CLOUD_SYSTEM]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(UserId='',UserType='')/ScenarioHashes" rel="self" title="ScenarioHashes"/>
  <link href="https://[SAP_MARKETING_CLOUD_SYSTEM]/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/RecommendationScenarios(UserId='',UserType='')" rel="feed" title="RecommendationScenarios(UserId='',UserType='')"/>
</entry>
</feed>
```

Integration Guide
Integration APIs
ResultObject(ScenarioId='SAMPLE_TOPN_SCENARIO',ResultObjectType='SAP_HYBRIS_PRODUCT',ResultObjectId='07_TTACPRODW2')
ResultObject(ScenarioId='SAMPLE_TOPN_SCENARIO',ResultObjectType='SAP_HYBRIS_PRODUCT',ResultObjectId='03_TTPRODW2')
ResultObject(ScenarioId='SAMPLE_TOPN_SCENARIO',ResultObjectType='SAP_HYBRIS_PRODUCT',ResultObjectId='02_TTPRODW2')
5.6.3.1 Value Help Enabling Entities

Entities that enable you to choose recommendation scenario and item source type parameters from a value help.

The PROD_RECO_RUNTIME_SRV OData service enables customer channels to receive recommendations generated by Recommendation. The RecommendatioRecoScenarios and ItemSourceTypes entities enable customer channels to choose ScenarioID, LeadingObjectType, or BasketObjectType parameters from a value help.

Prerequisites

You have assigned the Marketing - Recommendation Integration communication scenario to your communication user in Maintain Communication Users.
**ProductRecoScenarios Entity**

**Root URL:** https://<Server>:<Port>/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ProductRecoScenarios

**Request Mode:** GET

**ProductRecoScenario Entity Parameters**

The following table contains the parameters of the `ProductRecoScenario` entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScenarioId</td>
<td>The ID of the scenario.</td>
<td>Edm.String</td>
<td>50</td>
<td>TRUE</td>
</tr>
<tr>
<td>ScenarioDescription</td>
<td>The description of the scenario.</td>
<td>Edm.String</td>
<td>255</td>
<td>FALSE</td>
</tr>
<tr>
<td>Language</td>
<td>The language of the scenario description.</td>
<td>Edm.String</td>
<td>30</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

**ItemSourceTypes Entity**

**Root URL:** https://<Server>:<Port>/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/ItemSourceTypes

**Request Mode:** GET

**ItemSourceTypes Entity Parameters**

The following table contains the parameters of the `ItemSourceTypes` entity:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>ItemSourceId</td>
<td>The ID of the item source.</td>
<td>Edm.String</td>
<td>2</td>
<td>TRUE</td>
</tr>
<tr>
<td>ItemSourceTypeDescription</td>
<td>The description of the item source type.</td>
<td>Edm.String</td>
<td>255</td>
<td>FALSE</td>
</tr>
<tr>
<td>ItemSourceObjectType</td>
<td>The object type of the item source.</td>
<td>Edm.String</td>
<td>30</td>
<td>FALSE</td>
</tr>
</tbody>
</table>
5.6.4 External Recommendations

Use the public OData API `API_MKT_EXTERNAL_RECMDN_SRV` to upload (import) recommendations from external sources.

Overview

This OData API provides functionality to import product and offer recommendations that have been calculated using external tools. External recommendations can be used in the recommendation processes for products and offers.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td><code>https://&lt;server&gt;:&lt;port&gt;/sap/opu/odata/sap/API_MKT_EXTERNAL_RECMDN_SRV</code></td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td><code>https://&lt;server&gt;:&lt;port&gt;/sap/opu/odata/sap/API_MKT_EXTERNAL_RECMDN_SRV/$metadata</code></td>
</tr>
<tr>
<td>Authorizations</td>
<td>A copy of the following PFCG role is required: <code>SAP_COM_CSR_0300</code>. Read-only access is provided using the <code>SAP_BCR CEC_MKT_API_EXTRECO_PC</code> PFCG role.</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td><code>SAP_COM_0300</code></td>
</tr>
<tr>
<td>Component for Incidents</td>
<td><code>CEC-MKT-PRI (Recommendation)</code></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>$top query option</td>
<td>When performing GET calls on entity sets for this API, the $top query option is mandatory to restrict resource consumption in the system.</td>
</tr>
</tbody>
</table>

5.6.4.1 Basic Concepts

The public `API_MKT_EXTERNAL_RECMDN_SRV` OData API upload (import) recommendations from external sources.

Note

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].
Processing Information

The API can perform all supported operations either as a single operation or as a batch request. Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a header parameter content-type, specifying the value multipart/mixed and boundary=batch.

**i Note**

There are no eligibility or validity checks performed on offers. Offer content is determined using the following value help entities of the CUAN_OFFER_DISCOVERY_SRV API:

- Communication Medium
- Content Type
- Content Position
- Marketing Area
- Languages
- Coupon

For more information, see [Discover Offers](#) [page 1012].

Error Messages

By default, data processing for external recommendation is synchronous and an OK response or error messages are returned as soon as data processing finishes. If the OData service isn’t accessible, for example due to missing authorization, or because the system isn’t available, a corresponding HTTP status code is returned.

You can change the default setting to asynchronous with the Sap-Cuan-AsynchronousProcessing property. Using asynchronous processing, an OK response is returned almost immediately. If data uploads contain severe errors, such as parse or format errors, they produce an error message and the data is placed in a staging area, where it’s then further processed. To view the processing status and check for errors or success messages when data is processed asynchronously, you must launch the Import Monitor app. If errors occur, you can restart or discard the import in the app.

For more information, see [Structure of OData Service API_MKT_EXTERNAL_RECMDN_SRV](#) [page 960].

Related Information

- [Import Monitor](#) [page 397]
- [External Algorithms](#)
5.6.4.2 Structure of OData Service
API_MKT_EXTERNAL_RECMDN_SRV

This document describes the structure of the Public OData API service API_MKT_EXTERNAL_RECMDN_SRV. Be sure to read the Basic Concepts topic before you start.

Request Header

The request header contains the additional header fields listed in the table.

<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max. Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-cuan-asynchronousProcessing</td>
<td>X</td>
<td>This property enables uploaded data to be processed asynchronously. For more information, see Basic Concepts [page 958].</td>
<td>Edm.Boolean</td>
<td>n/a</td>
<td>No</td>
</tr>
<tr>
<td>Sap-cuan-SourceSystemId</td>
<td>HYBRIS</td>
<td>This free text field identifies the source system.</td>
<td>Edm.String</td>
<td>255</td>
<td>No</td>
</tr>
</tbody>
</table>

**i Note**

This property is only useful if property Sap-Cuan-AsynchronousProcessing is enabled.
<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Max. Length</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sap-cuan-SourceSystemType</td>
<td>EXTERNAL</td>
<td>This free text field identifies the source system type.</td>
<td>Edm.String</td>
<td>20</td>
<td>No</td>
</tr>
</tbody>
</table>

**Note**

This property is only useful if property Sap-Cuan-AsynchronousProcessing is enabled.

---

**Entity Data Model**

```
ExternalRecommendation
  ExtRecommendationUUID
    1.1
    0. *

ExternalRecmdlVersion
  ExtRecommendationVersionUUID
    1.1
    0. *

RecommendationCluster
  RecommendationClusterUUID
    1.1
    1.1
    1.1
    0. *

RecmdnClusterItemAssignment
  RecommendatoItemUUID

RecmdnClusterForLeadingItem
  RecommendationItemUUID

ContactOfRecmdnCltrAssign
  CmdToRecmdnCltrAssignUUID
```
## Entity Sets

The External Recommendations OData API provides the following entity sets:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExternalRecommendations</td>
<td>This entity set contains a list of external recommendation data sets.</td>
<td>/ExternalRecommendations</td>
</tr>
<tr>
<td>ExternalRecmdnVersions</td>
<td>This entity set contains a list of versions of an external recommendation data set.</td>
<td>/ExternalRecommendations(guid '&lt;ExternalRecommendationUUID&gt;')/ to_ExternalRecmdnVersion</td>
</tr>
<tr>
<td>RecommendationClusters</td>
<td>This entity set contains a list of clusters of a version of an external recommendation data set.</td>
<td>/ExternalRecmdnVersions(guid '&lt;ExtRecommendationVersionUUID&gt;')/ to_Recommenda­tionCluster</td>
</tr>
<tr>
<td>ContactToRecmdnClstrAssgmts</td>
<td>This entity set contains a list of contacts that are assigned to a recommendation cluster.</td>
<td>/RecommendationClusters(guid '&lt;RecommendationClusterUUID&gt;')/ to_CntctToRecmdnCl­strAssgmt</td>
</tr>
<tr>
<td>RecmdnClusterItemAssignments</td>
<td>This entity set contains a list of ranked recommendation result items (products, offers).</td>
<td>/RecommendationClusters(guid '&lt;RecommendationClusterUUID&gt;')/ to_RecmdnClstrItemAssgmt</td>
</tr>
<tr>
<td>RecmdnClusterForLeadingItems</td>
<td>This entity set contains a list of tuples of recommendation leading items (products, product categories, items of interest, offers) and result items (products, offers).</td>
<td>/RecommendationClusters(guid '&lt;RecommendationClusterUUID&gt;')/ to_RecmdnClstrLeadingItm</td>
</tr>
</tbody>
</table>

### ExternalRecommendations

The **ExternalRecommendations** entity set represents the header of an external recommendations data set. Its data controls the behavior of the dependent subnodes in the data model.

**Resource Path:** /ExternalRecommendations

You can perform the following operations on the **ExternalRecommendations** entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of external recommendations. This method supports standard OData parameters, such as $filter, $select, $top, $skip, $count, $inlinecount, $orderby and $expand.</td>
<td>/ExternalRecommendations? $top=1</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Operation</td>
<td>URI</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details of a specific external</td>
<td>/ExternalRecommendations(guid'&lt;ExternalRecommendationUUID&gt;')</td>
</tr>
<tr>
<td></td>
<td>recommendation</td>
<td></td>
</tr>
<tr>
<td>POST</td>
<td>Create an external recommendation data set</td>
<td>/ExternalRecommendations</td>
</tr>
<tr>
<td>PATCH</td>
<td>Update an external recommendation data set</td>
<td>/ExternalRecommendations(guid'&lt;ExternalRecommendationUUID&gt;')</td>
</tr>
</tbody>
</table>

More information about the fields in the `ExternalRecommendations` entity set:

- The field `ExternalRecommendation` is a 32 character free-text field that identifies the data set.
- The field `ExternalRecommendationName` is a 120 character free-text field that describes the data set.
- The field `ExternalRecommendationType` is a 2 character field that must use the values '01' or '02'. This field controls whether the data set contains a simple ranked list of recommendation result items (see the entity set `RecmdnClusterItemAssignments`) or a list of ranked leading and result item tuples (see the entity set `RecmdnClusterForLeadingItems`).
- The field `RecommendationResultItemType` controls whether the recommendation result items are products (value '13') or offer content items (value '15'). Offers aren’t subject to any eligibility or validity checks.

**i Note**

During the import process of external recommendations, enclose multiple changes within a single changeset. Doing so ensures a higher throughput in the import process.

---

**ExternalRecmdnVersions**

The `ExternalRecmdnVersions` entity set represents a version of an external recommendations data set. Several versions of each data set can be uploaded to the system in parallel. The recommendation engine determines which version is used at runtime based on the value of the field `ValidityStartDate`. This timestamp controls the point in time at which the data within a version becomes active. The recommendation engine uses the version for which the value of `ValidityStartDate` is in the past and closest to the current point in time. If two versions have the same value for `ValidityStartDate`, the version with the most recent `LastChangedDate` timestamp is used at runtime.

The `IsDeleted` field indicates that an internal cleanup job deleted an obsolete data set version. The following criteria must be met for the data set to be deemed obsolete and to enable the internal job to delete the version:

- The version isn’t active and won’t be active later. For example, another version with a more recent `ValidityStartDate` is active.
- The version isn’t used by a recommendation model that has a status of `Active` or `Activation Pending`.

For more information, see [Understanding Model Statuses](#).

**Resource Path:** /ExternalRecmdnVersions
You can perform the following operations on the `ExternalRecmdnVersions` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation Description</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of external recommendation versions for an external recommendation. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, <code>$orderby</code> and <code>$expand</code>.</td>
<td><code>/ExternalRecommendations(guid'&lt;ExternalRecommendationUUID&gt;')/to_ExternalRecmdnVersion</code></td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific external recommendation version</td>
<td><code>/ExternalRecmdnVersions(guid'&lt;ExtRecommendationVersionUUID&gt;')</code></td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create an external recommendation version for an external recommendation data set</td>
<td><code>/ExternalRecommendations(guid'&lt;ExternalRecommendationUUID&gt;')/to_ExternalRecmdnVersion</code></td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update an external recommendation version</td>
<td><code>/ExternalRecmdnVersions(guid'&lt;ExtRecommendationVersionUUID&gt;')</code></td>
</tr>
</tbody>
</table>

**RecommendationClusters**

The `RecommendationClusters` entity set represents a cluster of recommendation data in a version of an external recommendation data set. A cluster in the recommendation contains a list to contacts assigned to this cluster (entity set `ContactToRecmdnClstrAssgmts`), and either a list of ranked recommendation items (entity set `RecmdnClusterItemAssignments`) or a list of ranked leading and result item tuples (entity set `RecmdnClusterForLeadingItems`). See also the field `ExternalRecommendationType` in the `ExternalRecommendations` entity type.

**Resource Path:** /RecommendationClusters

You can perform the following operations on the `RecommendationClusters` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation Description</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of recommendation clusters for a recommendation version. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, <code>$orderby</code> and <code>$expand</code>.</td>
<td><code>/ExternalRecmdnVersions(guid'&lt;ExtRecommendationVersionUUID&gt;')/to_RecommendationCluster</code></td>
</tr>
</tbody>
</table>
### HTTP Method

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get the details of a specific recommendation cluster</td>
<td>/RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;')</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a recommendation cluster</td>
<td>/ExternalRecmdnVersions(guid'&lt;ExtRecommendationVersionUUID&gt;)/to_RecommendationCluster</td>
</tr>
<tr>
<td><strong>PATCH</strong></td>
<td>Update a recommendation cluster</td>
<td>/RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;')</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete a recommendation cluster</td>
<td>/RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;')</td>
</tr>
</tbody>
</table>

One cluster in the list of clusters of a version can be a fallback cluster. If the contact for which the recommendation was called was either anonymous or couldn’t be found in any other cluster, the recommendation runtime uses the recommendation items from this cluster. Only one fallback cluster is allowed. It’s identified by the `IsFallbackRecmdnCluster` field with the value `true`. Fallback clusters don’t need any contacts in the `ContactToRecmdnClstrAssgmts` entity set.

### ContactToRecmdnClstrAssgmts

The `ContactToRecmdnClstrAssgmts` entity set represents the assignment of interaction contacts to a recommendation cluster.

**Resource Path:** `/ContactToRecmdnClstrAssgmts`

You can perform the following operations on the `ContactToRecmdnClstrAssgmts` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of interaction contacts in a recommendation cluster. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, $orderby and $expand.</td>
<td>/RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;)/to_CntctToRecmdnClstrAssgmt</td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific contact to cluster assignment</td>
<td>/ContactToRecmdnClstrAssgmts(guid'&lt;CntctToRecmdnClstrAssgmtUUID&gt;')</td>
</tr>
</tbody>
</table>
### HTTP Method | Operation | URI
--- | --- | ---
POST | Create a contact to cluster assignment | /RecommendationClusters(guid'<RecommendationClusterUUID>'/to_CntctToRecmdnClstrAssgmt)

DELETE | Delete a contact to cluster assignment | /ContactToRecmdnClstrAssignments(guid'<CntctToRecmdnClstrAssgmtUUID>')

When creating a ContactToRecmdnClstrAssignments entity using a POST call, the interaction contact is provided using the fields `InteractionContactId` and `InteractionContactOrigin`. The system determines the corresponding `InteractionContactUUID` automatically.

The field `RecommendationCluster` is inherited from the RecommendationClusters entity. The field `RecmdnInteractionContactType` is determined internally.

### RecmdnClusterItemAssignments

The `RecmdnClusterItemAssignments` entity set represents the assignment of ranked result items to a recommendation cluster.

**Resource Path:** /RecmdnClusterItemAssignments

You can perform the following operations on the `RecmdnClusterItemAssignments` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of recommendation items in a recommendation cluster. This method supports standard OData parameters such as <code>$filter</code>, <code>$select</code>, <code>$top</code>, <code>$skip</code>, <code>$count</code>, <code>$inlinecount</code>, <code>$orderby</code> and `$expand.</td>
<td>/RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;'/to_RecmdnClstrItemAssgmt</td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific recommendation item to cluster assignment</td>
<td>/RecmdnClusterItemAssignments(guid'&lt;RecommendedItemUUID&gt;')</td>
</tr>
<tr>
<td>POST</td>
<td>Create a recommendation item to cluster assignment</td>
<td>/RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;'/to_RecmdnClstrItemAssgmt)</td>
</tr>
</tbody>
</table>
### HTTP Method | Operation | URI
---|---|---
DELETE | Delete a recommendation item to cluster assignment | /RecmdnClusterItemAssignments(guid'<RecommendationItemUUID>')

When creating a recommendation item to cluster assignment using a POST call, the field `RecommendationResultItemType` is automatically inherited from the corresponding `ExternalRecommendations` entity. The field `RecommendationCluster` is inherited from the `RecommendationClusters` entity.

If the `RecommendationResultItemType` is “13” for products, recommendation result items can be identified using the combination of `RecommendationResultItem` and `RecommendationResultItemOrigin` or using `RecommendationResultItemUUID`. If all values are provided in the POST call, they’re cross-checked.

If the `RecommendationResultItemType` is “15” for SAP Marketing Cloud Offer Content, result items are identified using `RecommendationResultItemUUID`. For more information, see Read Offers [page 1006].

The `RecommendationItemScore` value must be greater than 0.

#### RecmdnClusterForLeadingItems

The `RecmdnClusterForLeadingItems` entity set represents the assignment of ranked leading and result item tuples to a recommendation cluster.

**Resource Path:** /RecmdnClusterForLeadingItems

You can perform the following operations on the `RecmdnClusterForLeadingItems` entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of recommendation leading item/result item tuples in a recommendation cluster. This method supports standard OData parameters such as $filter, $select, $top, $skip, $count, $inlinecount, $orderby and $expand.</td>
<td>/ RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;'</td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific recommendation leading item/result item tuple to cluster assignment</td>
<td>/ RecmdnClusterForLeadingItems(guid'&lt;RecommendationItemUUID&gt;')</td>
</tr>
<tr>
<td>POST</td>
<td>Create a recommendation leading item/result item tuple to cluster assignment</td>
<td>/ RecommendationClusters(guid'&lt;RecommendationClusterUUID&gt;'</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete a leading item/result item tuple to cluster assignment</td>
<td>/ RecmdnClusterForLeadingItems(guid'&lt;RecommendationItemUUID&gt;')</td>
</tr>
</tbody>
</table>
When creating a recommendation item to cluster assignment using a POST call, the field `RecommendationResultItemType` is automatically inherited from the corresponding `ExternalRecommendations` entity. The field `RecommendationCluster` is inherited from the `RecommendationClusters` entity.

If the `RecommendationResultItemType` is “13” for products, recommendation result items can be identified using the combination of `RecommendationResultItem` and `RecommendationResultItemOrigin` or using `RecommendationResultItemUUID`. If all values are provided in the POST call, they’re cross-checked.

If the `RecommendationResultItemType` is “15” for SAP Marketing Cloud Offer Content, result items are identified using `RecommendationResultItemUUID`. For more information, see Read Offers [page 1006].

The `RecommendationResultItemScore` value must be greater than 0.

The following leading item types are supported:

- “11” for items of interest
  - The POST call expects `RecommendationLeadingItem` and/or `RecommendationLeadingItemUUID` which are checked for correctness and eventually converted into each other.
- “13” for products
  - The POST call expects `RecommendationLeadingItem` and `RecommendationLeadingItemOrigin` or `RecommendationLeadingItemUUID` which are checked for correctness and eventually converted into each other.
- “15” for SAP Marketing Cloud Offer Content
  - The POST call expects `RecommendationLeadingItemUUID` which is checked for correctness.
- “19” for product categories
  - The POST call expects the category UUID in `RecommendationLeadingItemUUID` or the category ID in `RecommendationLeadingItem` and hierarchy ID in `RecommendationLeadingItemOrigin`.

General comment on create (POST):

The system generates the key for the entities. The POST payload doesn’t provide the key.

General comment on update (PATCH):

Certain fields (for example `RecommendationResultItemType` in the `ExternalRecommendations` entity set) can be updated while there are no child entities. As soon as child nodes exist, the fields can no longer be updated, and update requests return an error when trying to update these fields.

Entities from the `ContactToRecmdnClstrAssgmts`, `RecmdnClusterItemAssignments`, `RecmdnClusterForLeadingItems` entity sets, can only be created or deleted. The entities can’t be updated.

General comment on error handling:

If errors occur when using the default synchronous data processing, they’re directly reported using the response to the OData request. Any errors that occur during create or update operations are also recorded in the application log. The application log object is "Recommendations" (PRI) with the subobject "External Recommendations" (EXT_DATA). A system administrator can analyze entries in the application log in the corresponding SAP Fiori UI.

If errors occur when using the asynchronous data processing feature, you must launch the Import Monitor app to view the processing status and check for errors or success messages. If errors occur, you can restart or discard the import using the app.
5.6.4.3 Payload Examples

The following are examples of how you can use the External Recommendations API.

Example 1

External offer recommendation with one contact, the tuple of a leading product, and an offer (content) result item. The leading product and the offer (content) are identified by their UUIDs.

Sample Code

```json
{
    "ExternalRecommendation": "EXTERNAL_OFFER",
    "ExternalRecommendationName": "External Offer",
    "ExternalRecommendationType": "02",
    "RecommendationResultItemType": "15",
    "to_ExternalRecmdnVersion": [
        {
            "ExtRecmdnExternalVersion": "EXTERNAL_OFFER_V1",
            "ValidityStartDateTime": "2017-02-12T09:00:00.0000000",
            "to_RecommendationCluster": [
                {
                    "RecommendationCluster": "EXTERNAL_OFFER_C1",
                    "IsFallbackRecmdnCluster": false,
                    "to_CntctToRecmdnClstrAssgmt": [
                        { "InteractionContactId": "test_user@test.test",
                          "InteractionContactOrigin": "EMAIL"
                    ]
                },
                "to_RecmdnClstrLeadingItm": [
                    {
                        "RecommendationLeadingItemUUID": "2DA602C04DD61C1516006102FF7A1A39",
                        "RecommendationLeadingItemType": "13",
                        "RecommendationResultItemUUID": "941882831C71ED88AF4C61864181AE7",
                        "RecommendationItemScore": 1.0
                    }
                ]
            ]
        }
    ]
}
```
Example 2

External offer recommendation with one contact, two tuples of leading products, and offer (content) result items. The offer (content) result item is identified by its UUID. The leading product is identified once by its origin and ID, and once by its UUID.

Sample Code

```json
{
    "ExternalRecommendation": "EXTERNAL_OFFER",
    "ExternalRecommendationName": "External Offer",
    "ExternalRecommendationType": "02",
    "RecommendationResultItemType": "15",
    "to_ExternalRecmdnVersion": [
        {
            "ExtRecmdnExternalVersion": "EXTERNAL_OFFER_V1",
            "ValidityStartDateTime": "2017-02-15T09:00:00.0000000",
            "to_RecommendationCluster": [
                {
                    "RecommendationCluster": "EXTERNAL_OFFER_C1",
                    "IsFallbackRecmdnCluster": false,
                    "to_CntctToRecmdnClstrAssgmt": [
                        {
                            "InteractionContactId": "test_user@test.test",
                            "InteractionContactOrigin": "EMAIL"
                        }
                    ],
                    "to_RecmdnClstrLeadingItm": [
                        {
                            "RecommendationLeadingItem": "P-12345",
                            "RecommendationLeadingItemOrign": "SAP_PRODUCT",
                            "RecommendationLeadingItemType": "13",
                            "RecommendationResultItemUUID": "941882831C7D1ED88AF4C6181AE79",
                            "RecommendationItemScore": 1.0
                        },
                        {
                            "RecommendationLeadingItemUUID": "31A602C04DD61C1516006102FF7A1A39",
                            "RecommendationLeadingItemType": "13",
                            "RecommendationResultItemUUID": "941882831C7D1EE888AF07DF4D1A0094",
                            "RecommendationItemScore": 1.0
                        }
                    ]
                }
            ]
        }
    ]
}
```
**Example 3**

External offer recommendation without contacts (uses the fallback cluster), two tuples of leading products, and offer (content) result items. The leading products and the offer (content) result item are identified by their UUIDs.

```json
{
    "ExternalRecommendation": "EXTERNAL_OFFER",
    "ExternalRecommendationName": "External Offer",
    "ExternalRecommendationType": "02",
    "RecommendationResultItemType": "15",
    "to_ExternalRecmdnVersion": {
        "ExtRecmdnExternalVersion": "EXTERNAL_OFFER_V1",
        "ValidityStartDate": "2017-02-15T09:00:00.0000000",
        "to_RecommendationCluster": {
            "RecommendationCluster": "EXTERNAL_OFFER_CFB",
            "IsFallbackRecmdnCluster": true,
            "to_RecmdnClstrLeadingItm": [{
                "RecommendationLeadingItemUUID": "2DA602C04DD61C1516006102FF7A1A39",
                "RecommendationLeadingItemType": "13",
                "RecommendationResultItemUUID": "941882831C7D1ED88AF4C61864181AE7",
                "RecommendationItemScore": 1.0
            }, {
                "RecommendationLeadingItemUUID": "31A602C04DD61C1516006102FF7A1A39",
                "RecommendationLeadingItemType": "13",
                "RecommendationResultItemUUID": "941882831C7D1EE888AF07DF4D1A0094",
                "RecommendationItemScore": 1.0
            }]
        }
    }
}
```

**Example 4**

External offer recommendation without contact (uses the fallback cluster) and a single offer result item identified by its UUID.

```json
{
    "ExternalRecommendation": "EXTERNAL_OFFER",
    "ExternalRecommendationName": "External Offer",
    "to_ExternalRecmdnVersion": {
        "ExtRecmdnExternalVersion": "EXTERNAL_OFFER_V1",
        "ValidityStartDate": "2017-02-15T09:00:00.0000000",
        "to_RecommendationCluster": {
            "RecommendationCluster": "EXTERNAL_OFFER_CFB",
            "IsFallbackRecmdnCluster": true,
            "to_RecmdnClstrLeadingItm": [{
                "RecommendationLeadingItemUUID": "2DA602C04DD61C1516006102FF7A1A39",
                "RecommendationLeadingItemType": "13",
                "RecommendationResultItemUUID": "941882831C7D1ED88AF4C61864181AE7",
                "RecommendationItemScore": 1.0
            }]
        }
    }
}
```
Example 5

Same as example 4, but the request is redirected to asynchronous processing.

**POST** https://server:port/sap/opu/odata.sap/API_MKT_EXTERNAL_RECMDN_SRV/ExternalRecommendations

**Header**

```
Content-Type: application/json
sap-cuan-asynchronousprocessing: x
sap-cuan-sourcesystemid: batl
sap-cuan-sourcesystemtype: ERP
```

**Body**

```
{
    "ExternalRecommendation": "EXTERNAL_OFFER",
    "ExternalRecommendationName": "External Offer",
    "ExternalRecommendationType": "02",
    "RecommendationResultItemType": "15",
    "to_ExternalRecmdnVersion": [
        {
            "ExtRecmdnExternalVersion": "EXTERNAL OFFER_V1",
            "ValidityStartDateTime": "2017-02-15T09:00:00.0000000",
            "to_RecommendationCluster": [
                {
                    "RecommendationCluster": "EXTERNAL_OFFER_CFB",
                    "IsFallbackRecmdnCluster": true,
                    "to_RecmdnClstrItemAssgmt": [
                        {
                            "RecommendationResultItemUUID": "941882831C7D1ED88AF4C61864181AE7",
                            "RecommendationItemScore": 1.0
                        }
                    ]
                }
            ]
        }
    ]
}
```
Example 6

A batch request using asynchronous processing. This sample request includes the following:

- A deletion of a cluster.
- A deep creation of a cluster.
- A patch to a leading item node.

**POST** https://server:port/sap/opu/odata/sap/API_MKT_EXTERNAL_RECMDN_SRV/$batch

**Header**

```
Content-Type: multipart/mixed; boundary=batchtest
```

**Body**

```
--batchtest
Content-Type: multipart/mixed; boundary=changeset_9970-5898-d67d

--changeset_9970-5898-d67d
Content-Type: application/http
Content-Transfer-Encoding: binary

PATCH RecmdnClusterForLeadingItems(guid'6c0b84b7-5523-1ee9-b8a4-fa24838b7e95') HTTP/1.1
Content-Type: application/json
Content-Length: 168
```
{"RecommendationLeadingItem": "TEAMTD_PRD_06_01",
"RecommendationLeadingItemType": "13",
"RecommendationLeadingItemOrigin": "SAP_HYBRIS_PRODUCT",
"RecommendationResultItem": "TEAMTD_PRD_03_02",
"RecommendationResultItemType": "13",
"RecommendationResultItemOrigin": "SAP_HYBRIS_PRODUCT",
"RecommendationItemScore": 9
}
5.6.5 Recommendations Interaction Data

OData service (PROD_RECO_RUNTIME_SRV) for posting interactions to an SAP HANA database.

The PROD_RECO_RUNTIME_SRV OData service enables host systems to post interactions to an SAP HANA database and then consume the information in a recommendation model. An interaction can be any event performed by a consumer on a Web shop.

Prerequisites

- You have assigned the Marketing - Recommendation Integration communication scenario to your communication user in Maintain Communication Users.
- To post interactions, you must call the service using the deep insert functionality of OData. For more information about the deep insert functionality of OData, see http://www.help.sap.com. Choose Technology SAP Gateway. Choose a release and then Application Help. In SAP Library, choose SAP NetWeaver Gateway Developer Guide > OData Channel > Advanced Features > Deep Insert.

Details of Service Entity

Root URL: https://<Server>:<Port>/sap/opu/odata/sap/PROD_RECO_RUNTIME_SRV/Interactions

Request Mode: POST

Entity Data Model: Interaction

The following table contains the parameters of the Interaction Entity:

<table>
<thead>
<tr>
<th>Name</th>
<th>Is Key</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Creatable</th>
<th>Updatable</th>
<th>Sortable</th>
<th>Nullable</th>
<th>Filterable</th>
<th>Complex Type Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario Id</td>
<td>TRUE</td>
<td>Edm.String</td>
<td>50</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
<td>n.a.</td>
</tr>
<tr>
<td>UserId</td>
<td>TRUE</td>
<td>Edm.String</td>
<td>255</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>n.a.</td>
</tr>
</tbody>
</table>
Parameter Descriptions

- **ScenarioId**
  The recommendation scenario ID represents a model type and related usage information, for example, promotion model type and user type.

- **UserId**
  The ID of the user who performs the interaction, for example, customer ID or contact ID.

- **UserType**
  The type of the user who performs the interaction, for example, COOKIE_ID or SAP_ERP_CONTACT.

- **InteractionType**
  The interaction type, for example, click through and conversion.

- **SourceObjectId**
  The ID of the session the user performed the interaction in.

- **TimeStamp**
  The coordinated universal time (UTC) stamp of when the interaction happened.

**Entity Data Model: InteractionItems**

The following table contains the parameters of the `InteractionItems` entity:

<table>
<thead>
<tr>
<th>Name</th>
<th>Is Key</th>
<th>Edm Core Type</th>
<th>Max Length</th>
<th>Creatable</th>
<th>Updatable</th>
<th>Sortable</th>
<th>Nullable</th>
<th>Filterable</th>
<th>Complex Type Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ItemType</td>
<td>TRUE</td>
<td>Edm.String</td>
<td>30</td>
<td>FALSE</td>
<td>FALSE</td>
<td>TRUE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>n.a.</td>
</tr>
<tr>
<td>ItemId</td>
<td>TRUE</td>
<td>Edm.String</td>
<td>50</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>n.a.</td>
</tr>
<tr>
<td>ItemNavUrl</td>
<td>FALSE</td>
<td>Edm.String</td>
<td>1333</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>FALSE</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Parameter Descriptions

- **Item_type**
  One of the following standard delivery item types:
  - SAP_CUAN_PRODUCT
○ SAP_HYBRIS_PRODUCT
○ CUAN_PROD_CATEGORY_HIERARCHY

- **ItemId**
  The ID of the item, for example, material number.

- **ItemNavUrl**
  The url to navigate to the item, for example:
  ```
  ```

**Example**

**Payload in JSON Format:**

```json
{
 "ScenarioId" : "INT_TEST",
 "UserType" : "COOKIE_ID",
 "UserId" : "ccef655202caec49",
 "InteractionType": "CLICK_THROUGH",
 "TimeStamp": "2015-11-23T01:00:00Z",
 "SourceObjectId":"17FE2EA62DB2154594CC1FCEEB58C691",
 "InteractionItems" : [{
  "ItemType" : "SAP_ERP_MATNR",
  "ItemId" : "M-10",
 }]
}
```

The HTTP post response does not contain any entity.

**5.6.6 Import Offers**

Use the public OData API `CUAN_OFFER_IMPORT_SRV` to upload (import) offers from external sources.

**Note**

The offer import API supports the importation of offers with assigned object references, such as products, marketing locations and coupons. Furthermore, the service supports basic read functionality to read an imported offer when specifying the offer key (consisting of external id and external origin). It is not possible to query all offers or all imported offers with functionality such as search and filtering. For such usecases, please use the [Read Offers API](page 1006). Technically, HTTPS GET operations on entities, such as Offers, ProductAssignments, and TargetGroupAssignments, only return data when providing the fully qualified key.

**Overview**

Offer data can be maintained using the corresponding maintenance app in the system, but it can also be imported from other systems using this public OData application programming interface (API). You can use the
OData service CUAN_OFFER_IMPORT_SRV to upload (import) external offers and offer content with extensibility, assign dependent objects like marketing locations, products, and product categories and read the offer information. Imported offers are assigned an external reference and origin and initially have the status In Preparation. You cannot change the offer data, but you can, for example, change the contents and the status. The ability to import the offer content entity allows for a complete end-to-end integration without any manual steps in SAP Marketing Cloud.

**OData Version**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV/</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required: SAP_COM_CSR_0020</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0020</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-OFM (Offers)</td>
</tr>
</tbody>
</table>

**Support of OData Features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query options for value help entities</td>
<td>The current implementation of the value help entities supports the following query options, which can be passed as query or path parameters:</td>
</tr>
<tr>
<td></td>
<td>* $top and $skip</td>
</tr>
<tr>
<td></td>
<td>* $select</td>
</tr>
<tr>
<td></td>
<td>* $orderby</td>
</tr>
<tr>
<td></td>
<td>* $count and $inlinecount</td>
</tr>
<tr>
<td>Bulk processing using deep-create on entity ImportHeader</td>
<td>The service supports both bulk processing using deep-create on the ImportHeader entity as well as single access to the entities. If the ImportHeader is used, an application log protocol entry is written.</td>
</tr>
</tbody>
</table>

**InNote**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].
Entity Data Model

The following figure shows the entity data model (EDM) for the offer import service:


Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV;v=0003/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
<tr>
<td>Marketing Offer Import Details Page</td>
<td>General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.</td>
</tr>
<tr>
<td>1. On the Details page, click Download Specification and download as EDMX.</td>
<td></td>
</tr>
<tr>
<td>2. Specify which application you want to use to open the EDMX file type.</td>
<td></td>
</tr>
<tr>
<td>Import Offers API</td>
<td>General access link takes you directly to the Import Offers metadata file. One-time registration or logon is required.</td>
</tr>
</tbody>
</table>
iNote

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

Resources

The service consists of the following types of resources:

- **Read-Only Value Help Entities**
  Value help entities to provide values for certain code and identifiers used in other entities. These entities are read-only and support HTTP GET operation to read the values defined in the system.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExternalOfferStatus</td>
<td>Read-only value help entity to retrieve all possible external offer status values.</td>
<td>/ExternalOfferStatus</td>
</tr>
<tr>
<td>MarketingArea</td>
<td>Read-only value help entity to retrieve all active marketing areas in the system.</td>
<td>/MarketingAreas</td>
</tr>
<tr>
<td>ProductOrigin</td>
<td>Read-only value help entity to retrieve all active product origins in the system.</td>
<td>/ProductOrigins</td>
</tr>
<tr>
<td>MarketingLocationOrigin</td>
<td>Read-only value help to retrieve all active marketing location origins defined in the system.</td>
<td>/MarketingLocationOrigins</td>
</tr>
<tr>
<td>OfferContentType</td>
<td>Read-only value help entity to retrieve all active offer content types in the system.</td>
<td>/OfferContentTypes</td>
</tr>
<tr>
<td>CommunicationMedium</td>
<td>Read-only value help entity to retrieve all active communication mediums in the system.</td>
<td>/CommunicationMedium</td>
</tr>
</tbody>
</table>
• **Import Entities**
Entities used for importing offers with their assignment. These entities support multiple operations and are described in more detail in the OData operations sections below.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImportHeader [page 982]</td>
<td>Starting point when importing offers using deep-create.</td>
<td>/ImportHeaders</td>
</tr>
<tr>
<td>Offer [page 983]</td>
<td>Supports basic CRUD with single read, create, update, and delete of imported offers</td>
<td>/Offers</td>
</tr>
<tr>
<td>OfferContent [page 985]</td>
<td>Supports basic CRUD with single read, expanded read of all content for an imported offer, create, update and deletion of offer content.</td>
<td>/OfferContents</td>
</tr>
<tr>
<td>OfferDateRulesType [page 986]</td>
<td>Supports basic CRUD with single read, expanded read of all validity rules for an imported offer, create, update and deletion of validity rules.</td>
<td>/OfferDateRules</td>
</tr>
<tr>
<td>MarketingLocationAssignment [page 987]</td>
<td>Assign or remove the assignment of marketing locations to offers.</td>
<td>/MarketingLocationAssignments</td>
</tr>
<tr>
<td>ProductAssignment [page 988]</td>
<td>Assign or remove the assignment of products to offers.</td>
<td>/ProductAssignments</td>
</tr>
<tr>
<td>ProductCategoryAssignment [page 989]</td>
<td>Assign or remove the assignment of product categories to offers.</td>
<td>/ProductCategoryAssignments</td>
</tr>
<tr>
<td>TargetGroupAssignment [page 990]</td>
<td>Assign or remove the assignment of target groups to offers.</td>
<td>/TargetGroupAssignments</td>
</tr>
<tr>
<td>CouponAssignment [page 991]</td>
<td>Assign or remove the assignment of coupons to offers.</td>
<td>/CouponAssignments</td>
</tr>
</tbody>
</table>
**OData Resource: ImportHeader**

Helper entity representing import metadata, such as the importing system.

**Resource Path:** https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV/ImportHeaders

**Permissions:** Business Role SAP_COM_CSR_0020

**Operations**

Only deep-create and single read is support on this helper resource.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Bulk import multiple offers with their assignments to Marketing Locations, Products, and Product Categories and Validity Rules.</td>
<td>/ImportHeaders</td>
</tr>
<tr>
<td>GET</td>
<td>Read import header metadata of a specific import run, identified by its Id.</td>
<td>/ImportHeaders(&lt;id&gt;)</td>
</tr>
</tbody>
</table>

**Properties**

- **Id:** A technical ID of one import service execution. If no value is provided by the caller, an ID is generated by the system.
- **Timestamp:** Timestamp of the import run. If no value is provided by the caller, a timestamp is generated by the system.
- **UserName:** Name of the user who started the import. If no value is provided by the caller, the system uses the system name.
- **SourceSystemType:** The type of source system (can be freely defined, could be, for example, CRM or ERP).
- **SourceSystemId:** The ID of the source system. Can be freely defined.
- **ImportMode:** Mode in which the offers are imported.
  - The following status values are available:
    - "U" for Upsert: Non-existing offers are created with dependent child objects and already existing ones are updated. For existing ones, the offer header properties not given in the request or not changeable are ignored (works like a PATCH request). We recommend to always send the whole offer with all assigned objects and all offer header properties. For updating single values or assignments, the "Offer" entity or the offer assignment entitysets can be used. The offer child entities (like products, marketing locations, etc.) are replaced with the new entered ones (works like a PUT request). Assigned marketing locations or content will be deleted if not in the payload available. For Example: An offer has two validity rules. The request for update contains only offer header data with start date and end date. The two validity rules will be deleted and a new validity rule with the start date and end date of the offer header data will be created.
    - "F" (Default) for Full: Only creates offers. Does not update.
- **ProcessAllOrNothing:** If an error occurs, this flag defines, whether all imported offers are discarded (response code 201) or only the ones that contain an error (response code 400, the error messages can be found in the response header). If the import mode is "U", the flag is always considered to have the value "true". If the import mode is "F", the flag can have values "true" and "false" (default).
OData Resource: Offer

Represents an imported offer.


Operations

The Offer resource provides basic offer header attributes that can be imported, for example offer name and validity start and end date.

i Note

If an OfferDateRuleType entity is assigned, then no start or end date are allowed in the payload. Otherwise the execution will fail and an error message will be produced.

If you have enabled extension fields for the import service using the app Custom Fields And Logic, these extension attributes are also available to the offer resource to be imported.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Single read an imported offer and its assigned objects.</td>
<td>/Offers(&lt;key&gt;)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/Offers(&lt;key&gt;) /MarketingLocations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/Offers(&lt;key&gt;) /Products</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/Offers(&lt;key&gt;) /ProductCategories</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/Offers(&lt;key&gt;) /Rules</td>
</tr>
<tr>
<td>PUT</td>
<td>Update an already imported offer, for example change the external status.</td>
<td>/Offers(&lt;key&gt;)</td>
</tr>
<tr>
<td>MERGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete an imported offer</td>
<td>/Offers(&lt;key&gt;)</td>
</tr>
</tbody>
</table>

Properties

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key in the import scenario.
- **OfferIdOrigin**: A unique identifier of the origin of the external offer. This origin ID is also used as part of the internal offer key in the import scenario. It should logically match the SourceSystemId and SourceSystemType of the ImportHeader entity type.
- **Name**: Name of the external offer (freetext).
- **Description**: Description of the external offer (freetext).
- **MarketingAreaDescription**: The description of the marketing area, which must be known to the system. Based on the description, the import system determines the ID of the marketing area. Note that either the marketing area description or the marketing area ID has to be provided.
- **MarketingAreaID**: The ID of the marketing area, which must be known to the system. Note that either the marketing area description or the marketing area ID has to be provided.

- **StartDate**: The validity start date of the offer (timestamp with timezone offset). Not allowed together with OfferDateRuleType entity. Either offer dates or validity rules must be filled.

- **EndDate**: The validity end date of the offer (timestamp with timezone offset). Not allowed together with OfferDateRuleType entity. Either offer dates or validity rules must be filled.

- **ExternalStatus**: Status of the offer that can be defined by the external system (optional). Admissible values can be retrieved by the ExternalOfferStatus entity.

  If the ExternalStatus property is used, it is possible to control the internal lifecycle status of the offer under certain conditions. If the conditions are met, the internal offer status corresponds with the external status. In an integrated environment, it is then no longer necessary to release the imported offer manually in the SAP Marketing Cloud system. The release can instead be triggered by the importing system.

  The conditions under which the external status is mapped to the internal status are met if the offer is completely managed externally. This is the case if:
  - TargetGroupManagedExternally was set to true during offer creation and
  - CouponManagedExternally was either set to 'E' or left blank when the offer was imported and
  - ContentManagedExternally was set to true during offer creation.

  The following status values are available:
  - 00 for *In Preparation*
  - 01 for *Released*
  - 02 for *Paused*

  The following status transitions are possible:
  - From 00 to 01.
  - From 01 to 00 if the offer start date is in the future.
  - From 01 to 02 if the offer start date is in the past.
  - From 02 to 01.

  It is possible to create or import an offer with the status *Released* directly without having to import it with the *In Preparation* status first and then update it to *Released*. However, this will only succeed if all prerequisites for releasing an offer are met (such as offer content must be available; if it is an offer with coupon, a released coupon must be assigned; and so on).

- **OfferContentManagedExternally**: Defines whether the offer content is managed by the consumer of this API (=true) or by the Manage Offers application in SAP Marketing Cloud (=false). If you want to import offer content, you must set the property to true. The value for this property cannot be changed during a subsequent update to the offer and retains its original value.

- **ExternalStatusDescription**: Status description of the offer that can be defined by the external system (optional). Admissible values can be retrieved by the ExternalOfferStatus entity.

- **TargetGroupManagedExternally**: Defines if the target group assignments to externally created offers is managed by the import service (=true) or by the Manage Offers app (=false). In case you want to import target group assignments with this OData Service, this property must be set to true for the respective offer. If you later update the offer, the value for this property cannot be changed and will keep its original value.

- **CouponManagedExternally**: Defines if the coupon assignment to externally created offers is managed by the import service (=E) or by the Manage Offers app (=blank (I)) or if there is no coupon assignment to the offer at all (= ''). In the latter case, the offer will be created without the coupon feature. In case you want to import a coupon assignment with this OData Service, this property must be set to E for the respective offer. If you later update the offer, the value for this property cannot be changed and will keep its original value.
- **OfferIsFundedBySupplier**: A boolean flag that indicates if the offer is funded by a supplier or vendor of the offered products.
- **ProjectedGrossMarginInPercent**: The projected or calculated gross margin in percent, for example, for an offer.

**i Note**

**Marketing Area**

When assigning additional objects to an offer like target groups or coupons, the corresponding marketing area of the assigned objects need to match the marketing area of the offer. Keep in mind that also related marketing areas can taken into account when the enhancement option *Allowed Marketing Areas* has been implemented.

For more information, see *Allowed Marketing Areas*.

**OData Resource: OfferContent**

Represents an imported offer content.


**Operations**

The OfferContent resource provides offer content attributes that can be imported, such as the image URL and target link URL for offer content with the type *Image*. If you have enabled offer content extension fields for the import service using the app *Custom Fields And Logic*, these extension attributes are also available to the offer content resource to be imported.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
</table>
| GET         | Single read a specific offer content or read all content defined for a given offer. | /OfferContents(<key>)
|             |           | /Offers(<key>)/OfferContent |
| PUT         | Update an offer content entity that has already been imported, for example change the URL of an image. | /OfferContents(<key>) |
| MERGE       |           | /OfferContents(<key>) |
| PATCH       |           | /OfferContents(<key>) |
| DELETE      | Delete an offer content instance. | /OfferContents(<key>) |

**Properties**

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key in the import scenario.
- **OfferIdOrigin**: A unique identifier of the origin of the external offer. This origin ID is also used as part of the internal offer key in the import scenario. It should logically match the SourceSystemId and SourceSystemType of the ImportHeader entity type.
• **MarketingOfferContent**: A consecutive number generated in the backend to identify a single offer content instance of an offer, such as 00001.

• **LanguageISOCode**: The language ISO code defining the language of the offer content, such as EN or DE.

• **OfferContentType**: The identifier of the offer content type, such as 01.

• **OfferContentTypeName**: The language-dependent name of the offer content type, such as Image.

• **CommunicationMedium**: The identifier of a communication medium to which the offer content is to apply, such as EMAIL.

• **CommunicationMediumName**: The language-dependent name of communication medium, such as Email.

• **OfferContentPosition**: The position of the offer content. This is an additional key field to define different offer contents of the same type for the same language and communication medium. In the case of offer content displayed on a webpage of an online shop, positions might be TOP or BOTTOM. The position can be freely defined by the consumer of the API.

• **OfferContentSourceURL**: The URL of an image.

• **OfferContentSourceURLDesc**: A description for the image URL.

• **OfferContentTargetURL**: The URL of a target link mostly used to define the target of a click action on the image.

• **OfferContentTargetURLDesc**: A description for the target link URL.

---

**OData Resource: OfferDateRulesType**

Represents an imported validity rule.


**Operations**

The OfferDateRulesType resource provides validity rule attributes that can be imported, such as visibility, recurrence, start date, and end date. If you have enabled extension fields for the import service using the app Custom Fields and Logic, these extension attributes are also available to the OfferDateRulesType resource to be imported.

---

**Note**

When importing Validity Rules, please familiarize yourself with the Special behavior for importing and updating validity rules [page 1000] at the end of this page.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operations</th>
<th>URI</th>
</tr>
</thead>
</table>
| **GET**     | Single read a specific offer validity rule or read all validity rules defined for a given offer. | /OfferDateRules(<key>)
<p>|             |            | /Offer(&lt;key&gt;)/Rules |</p>
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operations</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUT</td>
<td>Update an offer validity rule that has already been imported. For example, change the start date or end date of the validity rule.</td>
<td>/OfferDateRules(&lt;key&gt;)</td>
</tr>
<tr>
<td>MERGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POST</td>
<td>Creates one or more additional offer validity rules entities for an offer that has already been imported.</td>
<td>/OfferDateRules</td>
</tr>
<tr>
<td>Delete</td>
<td>Delete an offer validity rule instance.</td>
<td>/OfferDateRules(&lt;key&gt;)</td>
</tr>
</tbody>
</table>

Properties

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key import scenario.
- **OfferIdOrigin**: A unique identifier of the origin of the external offer. This origin ID is also used as part of the internal offer key in the import scenario. It should logically match the SourceSystemId and SourceSystemType of the ImportHeader entity type.
- **OfferDateRule**: A consecutive number generated in the backend to identify a single offer validity rule instance of an offer, such as 00001.
- **OfferDateRuleType**: Use the offer validity rule type to define the rule visibility and validity in the specified time period, e.g. 01 to make the rule only visible for the contact in this period, 02 to make the rule visible for the contact and valid for business processes in this period, and 03 to make the rule only valid for business processes in this period.
- **OfferDateRuleStartDateDateTime**: The start date of the validity rule (timestamp with timezone offset).
- **OfferDateRuleEndDateDateTime**: The end date of the validity rule (timestamp with timezone offset).

**OData Resource: MarketingLocationAssignment**

Represents a marketing location assignment to an offer. The resource only contains the key fields for the offer and the marketing location. To import and read marketing locations, please use the corresponding import service. For more information, see Marketing Locations [page 706].

**Resource Path**: https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV/MarketingLocationAssignments

**Operations**

The MarketingLocationAssignment resource provides the necessary attributes to add, remove, and read marketing location assignments from existing offers.
HTTP Method | Operation | URI
---|---|---
GET | Query of all marketing locations assigned to a specific offer. | /Offers(<key>)/MarketingLocations/MarketingLocationAssignments(<key>)
POST | Add new assignment of a marketing location to an existing offer. The location must not be obsolete. | /MarketingLocationAssignments
DELETE | Delete existing marketing location assignment from an existing offer. | /MarketingLocationAssignments(<key>)

Properties

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key in the import scenario.
- **OfferIdOrigin**: A unique identifier of the origin of the external offer. This origin ID is also used as part of the internal offer key in the import scenario. It should logically match the SourceSystemId and SourceSystemType of the ImportHeader entity type.
- **MarketingLocationId**: Unique marketing location ID provided by the external system. With the MarketingLocationOriginId, it is the external identifier of the master data object Marketing Location. In the import scenario, it is part of the key used to assign marketing locations to an offer.
- **MarketingLocationOriginId**: A unique identifier of the origin of the external marketing location. In the import scenario, this origin ID is part of the key used to assign marketing locations to an offer.

**OData Resource: ProductAssignment**

Represents the product assignment to an offer. The resource only contains the key fields for the offer and the product. To import and read products, please use the corresponding import service. For more information, see [Products](page 577).


**Operations**

The ProductAssignment resource provides the necessary attributes to add, remove, and read products from existing offers.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Query of all products assigned to a specific offer.</td>
<td>/Offers(&lt;key&gt;)/Products/ProductAssignments(&lt;key&gt;)</td>
</tr>
<tr>
<td>POST</td>
<td>Add new assignment of a product to an existing offer.</td>
<td>/ProductAssignments</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete existing product assignment from an existing offer.</td>
<td>/ProductAssignments(&lt;key&gt;)</td>
</tr>
</tbody>
</table>

**Properties**

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key in the import scenario.
- **OfferIdOrigin**: A unique identifier of the origin of the external offer. This origin ID is also used as part of the internal offer key in the import scenario. It should logically match the `SourceSystemId` and `SourceSystemType` of the `ImportHeader` entity type.
- **ProductId**: Unique product ID provided by the external system. With the `ProductOriginId`, it is the external identifier of the master data object `Product`. In the import scenario, it is part of the key used to assign a product to an offer.
- **ProductOriginId**: A unique identifier of the origin of the external product. In the import scenario, this origin ID is part of the key used to assign a product to an offer.

**OData Resource: ProductCategoryAssignment**

Represents the product category assignment to an offer. The resource only contains the key fields for the offer and the product category. To import and read product categories, please use the corresponding import service. For more information, see Product Hierarchies and Categories [page 594].


**Operations**

The ProductCategoryAssignment resource provides the necessary attributes to add, remove, and read product categories from existing offers.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Query to get all product categories assigned to a specific offer.</td>
<td>/Offers(&lt;key&gt;)/ProductCategories/ProductCategoryAssignments(&lt;key&gt;)</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Operation</td>
<td>URI</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>POST</td>
<td>Add new assignment of a product category to an existing offer.</td>
<td>/ProductCategoryAssignments</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete existing product category assignment from an existing offer.</td>
<td>/ProductCategoryAssignments({key})</td>
</tr>
</tbody>
</table>

### Properties

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key in the import scenario.
- **OfferIdOrigin**: A unique identifier of the origin of the external offer. This origin ID that is also used as part of the internal offer key in the import scenario. It should logically match the `SourceSystemId` and `SourceSystemType` of the `ImportHeader` entity type.
- **CategoryId**: The unique category ID provided by the external system. Together with the `HierarchyId`, it is the external identifier of the master data object `Product Category`. In the import scenario, it is part of the key used to assign a product category to an offer.
- **HierarchyId**: A unique identifier external identifier of the product category `Hierarchy`. In the import scenario, this `HierarchyId` is part of the key used to assign a product category to an offer.

### OData Resource: TargetGroupAssignment

Represents a target group assignment to an offer. The resource only contains the key fields for the offer and the target group. To import and read target groups, please use the corresponding import service. For more information, see [Target Groups](#).


### Operations

The `TargetGroupAssignment` resource provides the necessary attributes to add, remove, and read target group assignments from existing offers.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Query of all target groups assigned to a specific offer.</td>
<td>/Offers({key})/TargetGroups /TargetGroupAssignments({key})</td>
</tr>
<tr>
<td>POST</td>
<td>Add new assignment of a target group to an existing offer. The target group must be in status <em>Released</em> and the category must not be <em>Live</em>. Only static or dynamic target groups are allowed.</td>
<td>/TargetGroupAssignments</td>
</tr>
</tbody>
</table>
HTTP Method | Operation | URI
--- | --- | ---
DELETE | Delete existing target group assignment from an existing offer. | /TargetGrouopAssignments(<key>)

Properties

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key in the import scenario.
- **OfferIdOrigin**: A unique identifier of the origin of the external offer. This origin ID is also used as part of the internal offer key in the import scenario. It should logically match the `SourceSystemId` and `SourceSystemType` of the `ImportHeader` entity type.
- **TargetGroupKey**: Unique target group key provided by the external system. Note that this key is a GUID which must be known to the caller.

OData Resource: CouponAssignment

Represents a coupon assignment to an offer. The resource only contains the key fields for the offer and the coupon. Note that in difference to all other assignments, the coupon represents a 1:1 relationship to the offer, for example, only a single coupon can be assigned to an offer. To import and read coupons, please use the corresponding import service. For more information, see Coupons [page 1028].


Operations

The CouponAssignment resource provides the necessary attributes to add, remove, and read coupon assignments from existing offers.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Query of the coupon assigned to a specific offer.</td>
<td>/Offers(&lt;key&gt;)/Coupons</td>
</tr>
<tr>
<td>POST</td>
<td>Add new assignment of a coupon to an existing offer and implicitly delete the old one. The coupon must not be assigned to another offer already.</td>
<td>/CouponAssignments</td>
</tr>
<tr>
<td>DELETE</td>
<td>Delete existing coupon assignment from an existing offer.</td>
<td>/CouponAssignments(&lt;key&gt;)</td>
</tr>
</tbody>
</table>

Properties

- **OfferIdExt**: The unique offer ID provided by the external system that is used as part of the internal offer key in the import scenario.
• OfferIdOrigin: A unique identifier of the origin of the external offer. This origin ID is also used as part of the internal offer key in the import scenario. It should logically match the SourceSystemId and SourceSystemType of the ImportHeader entity type.

• CouponUUID: Unique coupon identifier provided by the external system. Note that this key is a GUID which must be known to the caller.

• Coupon: Unique user-assigned coupon identifier. Can be used to identify which coupon should be assigned to the offer. If both CouponUUID and Coupon are provided, the system will use CouponUUID and ignore Coupon.

Common HTTP Headers

Common request and response headers used by the service operations.

**Common Request Headers**

<table>
<thead>
<tr>
<th>Header</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content-Type</td>
<td>No</td>
<td>Describes the format of the request body, for example, application/json. All examples in this document use JSON format for the payloads.</td>
</tr>
<tr>
<td>X-CSRF-Token</td>
<td>Yes</td>
<td>A security token that must be passed with every request.</td>
</tr>
</tbody>
</table>

**Common Response Headers**

<table>
<thead>
<tr>
<th>Header</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP-Messages</td>
<td>No</td>
<td>If a request is successful, messages can be returned to the service consumer in this HTTP header. For example, in the case of deep-create offers with the property ProcessAllOrNothing set to false, this header contains potential errors occurred during the creation. However, the response shows the actual data created in the system.</td>
</tr>
</tbody>
</table>

**Common Status and Error Codes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>Bad request, for example, an offer with the same key already exists.</td>
</tr>
<tr>
<td>404</td>
<td>Not found, for example, an offer with the given key cannot be found in the system.</td>
</tr>
</tbody>
</table>
OData Operation: Bulk Import Offers

Import offers using the resource ImportHeader to create multiple offers with their assignments collectively (OData deep-create).

Request

**URL:** https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV/ImportHeaders

**HTTP Method:** POST

**Request Example:**

```plaintext
```

**Request Payload Example**

Import exactly one offer using the ImportHeader resource.

```
{
    "UserName" : "IMPORT_USER",
    "SourceSystemType" : "SGC",
    "SourceSystemId" : "Gateway Client",
    "ProcessAllOrNothing" : true,
    "Offers" : [
        {
            "OfferIdExt" : "0000000001",
            "OfferIdOrigin" : "SAP_PMR",
            "Name" : "PMR Offer Name",
            "Description" : "Offer Description",
            "MarketingAreaDescription" : "Global",
            "StartDate" : "\'/Date(1432634400000)\'/",
            "EndDate" : "\'/Date(1441872000000)\'/"
        }
    ]
}
```

**Request Example:**

```plaintext
```

**Request Payload Example**

Complex payload example of creating two offers, each offer including:

- Two Marketing Locations
- Two Validity Rules
- Two Products
- Two Product Categories
- Two Target Groups
- One Offer
```json
{
    "UserName": "IMPORT_USER",
    "SourceSystemType": "SGC",
    "SourceSystemId": "Gateway Client",
    "ProcessAllOrNothing": true,
    "CouponManagedExternally": "E",
    "Offers": [{
        "OfferIdExt": "OFFER_0057",
        "OfferIdOrigin": "SAP_PMR",
        "Name": "PMR Offer 0057",
        "Description": "Offer 0057 from Gateway Test Client",
        "MarketingAreaDescription": "Global",
        "MarketingLocations": [{
            "MarketingLocationOriginId": "SAP_HYBRIS_COMMERCE_POS",
            "MarketingLocationId": "99998"
        }, {
            "MarketingLocationOriginId": "SAP_HYBRIS_COMMERCE_POS",
            "MarketingLocationId": "99985"
        }]
    }, {
        "Rules": [{
            "OfferDateRule": "0001",
            "OfferDateRuleType": "01",
            "OfferDateRuleStartDateTime": "\Date(1530900780000)\",
            "OfferDateRuleEndDateTime": "\Date(1531772000000)\"
        }, {
            "OfferDateRule": "0002",
            "OfferDateRuleType": "01",
            "OfferDateRuleStartDateTime": "\Date(1531000780000)\",
            "OfferDateRuleEndDateTime": "\Date(1531572000000)\"
        }]
    }, {
        "Products": [{
            "ProductOriginId": "SAP_ERP_MATNR",
            "ProductId": "887749052850"
        }, {
            "ProductOriginId": "SAP_ERP_MATNR",
            "ProductId": "887749052848"
        }]
    }, {
        "ProductCategories": [{
            "HierarchyId": "GENERATED_HIERARCHY_ID",
            "CategoryId": "Fleece2"
        }, {
            "HierarchyId": "GENERATED_HIERARCHY_ID",
            "CategoryId": "Fleece3"
        }]
    }, {
        "TargetGroups": [{
            "TargetGroupKey": "6C0B84B7-5523-1ED7-8BFB-CFE77A316EC7"
        }, {
            "TargetGroupKey": "6C0B84B7-5523-1ED7-8AB7-D828EE6098BD"
        }]
    }, {
        "Coupons": {
            "OfferIdExt": "OFFER_0057",
            "OfferIdOrigin": "SAP_PMR",
            "CouponUUID": "6C0B84B7-5523-1ED7-8BFB-CFE77A316EC7"
        }
    }
}
```
OData Operation: Update an Offer That Has Already Been Imported

Update field values in an existing offer. The values of the following properties can be changed:

- Name
- Description
- **StartDate**
- **EndDate**
- **ExternalStatus**
- **ExternalStatusDescription**

System response is defined by the HTTP method used:

- **MERGE** or **PATCH**: It is possible to update a single value, for example the value for the description. All other fields won’t be changed. No mandatory fields.
- **POST**: It is possible to add an additional value, for example TargetGroupAssignments. All other fields won’t be changed. No mandatory fields.
- **PUT**: All fields will be updated, fields not mentioned in the request payload will be initialized. Update won’t be performed if not all mandatory fields are included in the request payload.

**Request**

**URI:** `https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV/Offers`

**HTTP Method:** POST, MERGE, PATCH, OR PUT.

**Request Example:**

Example of changing the external status of an already imported offer to “released”.


**Request Payload Example**

```json
{
    "ExternalStatus": "01",
    "ExternalStatusDescription": ""
}
```

**Request Example:**

Example of changing an offer using HTTP PUT. Properties not included in the payload will be set to their initial value.

[PUT] `https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV/Offers(<key>)`

**Request Payload Example**

```json
{
    "Name": "Offer_0120_new",
    "Description": "brand new Text for Offer 120",
    "StartDate": "\Date(1432634400000)\",
    "EndDate": "\Date(1432734400000)\",
    "ExternalStatus": "02"
}
```

**OData Operation: Delete Existing Offer**

An existing offer will be deleted including all assigned marketing location, products, and product categories.
Request

URI: https://<Server>:<Port>/sap/opu/odata/sap/CUAN_OFFER_IMPORT_SRV/Offers

HTTP Method: DELETE

Request Example:


OData Operation: Read Offer Details

Read offer details of an existing offer.

Request

URI: https://<Server>:<Port>/sap/opu/odata/sap/CUAN_OFFER_IMPORT_SRV/Offers(<offer key>)

HTTP Method: GET

Request Example:

[GET] https://<Server>:<Port>/sap/opu/odata/sap/CUAN_OFFER_IMPORT_SRV/Offers(OfferIdExt='EXT_ID_0001', OfferIdOrigin='SAP_PMR')

Response Payload Example

```json
{
  "OfferIdExt": "EXT_ID_0001",
  "OfferIdOrigin": "SAP_PMR",
  "Name": "PMR Offer Name",
  "Description": "PMR Offer Description ",
  "MarketingAreaId": "Global",
  "MarketingAreaDescription": "Global",
  "StartDate": "/Date(1432634400000)="/",
  "EndDate": "/Date(1441872000000)="/",
  "ExternalStatus": "01",
  "ExternalStatusDescription": "Externally Released"
}
```

Request Example:

Read the offer header data and all of the assignment information in one request.

[GET] https://<Server>:<Port>/sap/opu/odata/sap/CUAN_OFFER_IMPORT_SRV/Offers(OfferIdExt='EXT_ID_0001', OfferIdOrigin='SAP_PMR')?
$expand=Products,ProductCategories,MarketingLocations

Response Payload Example

```json
{
  "OfferIdExt": "EXT_ID_0001",
  "OfferIdOrigin": "SAP_PMR",
  "Name": "PMR Offer Name",
```
OData Operation: Assign Marketing Location for an Existing Offer

Create single marketing location assignment to an existing offer.

Request

URI: https://<Server>:<Port>/sap/opu/odata/sap/CUAN_OFFER_IMPORT_SRV/MarketingLocationAssignments

HTTP Method: POST

Request Example:

[POST] https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_IMPORT_SRV/MarketingLocationAssignments

Response Payload Example

Add exactly one marketing location to an existing offer.

```
{
  "OfferIdExt" : "OFFER_0020",
  "OfferIdOrigin" : "SAP_PMR",
  "MarketingLocationOriginId" : "SAP_HYBRIS_COMMERCE_POS",
  "MarketingLocationId" : "99998"
}
```

OData Operation: Remove Marketing Location Assignment from an Existing Offer

Remove assignment of a single marketing location assignment from an existing offer.

Request

URI: https://<Server>:<Port>/sap/opu/odata/sap/CUAN_OFFER_IMPORT_SRV/MarketingLocationAssignments(<offer_key><mkt_location_key>)

HTTP Method: DELETE
For create and remove assignment operations replace MarketingLocationAssignments in the URI with ProductAssignments, ProductCategoryAssignments, TargetGroupAssignments, CouponAssignments, or OfferDateRules.

Within the create request payload example replace the marketing location specific properties with product-, product-category-, target-group-, coupon-, or validity-rules-specific properties.

To perform the GET operation, replace MarketingLocations with Products, ProductCategories, TargetGroups, Coupons, or OfferDateRules.
### Special behavior for importing and updating Validity Rules

**Import Validity Rules**

<table>
<thead>
<tr>
<th>Start Date Included</th>
<th>End Date Included</th>
<th>Number of Validity Rules in Request</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>0</td>
<td>&quot;Either offer dates or validity rules must be filled.&quot;</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>&gt;0</td>
<td>Success</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>0</td>
<td>&quot;End date must be filled.&quot;</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>&gt;0</td>
<td>&quot;Not allowed to import offer dates and rules.&quot;</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Import Validity Rules

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>O</th>
<th>&quot;Start date must be filled.&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>&gt;0</td>
<td>&quot;Not allowed to import offer dates and rules.&quot;</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>0</td>
<td>Success</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>&gt;0</td>
<td>&quot;Not allowed to import offer dates and rules.&quot;</td>
</tr>
</tbody>
</table>

### Offers Entityset - Patch

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>-</th>
<th>&quot;Offer start and end dates are not filled.&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
<td>&quot;Offer start date is not filled.&quot;</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
<td>&quot;Offer end date is not filled.&quot;</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
<td>-</td>
<td>&quot;Offer start date is not filled.&quot;</td>
</tr>
</tbody>
</table>

### Offers Entityset - Put
### Import Validity Rules

| Offer has only 1 rule assigned, change the start and end dates of the rule and the offer. If >1 rule is assigned: “Start and end dates of offers with more than one rule assigned cannot be changed.” |
|---|---|---|---|
| Yes | Yes | - | |

### Update Offer Validity

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Number of Validity Rules in the Request</th>
<th>Offer Status</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImportHeaders Entityset</td>
<td>No</td>
<td>No</td>
<td>0</td>
<td>In Preparation</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>&gt;0</td>
<td>In Preparation</td>
<td>Replace the existing rules with new ones.</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>0</td>
<td>In Preparation</td>
<td>If only one rule is assigned, update start date, keep the end date. If &gt;1 rule is assigned: “Start and end dates of offers with more than one rule assigned cannot be changed.”</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>&gt;0</td>
<td>In Preparation</td>
<td>“Not allowed to import offer dates and rules.”</td>
</tr>
</tbody>
</table>
### Update Offer Validity

<table>
<thead>
<tr>
<th>Rule Assignment</th>
<th>Validity Assignment</th>
<th>Assigned Rules</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>0</td>
<td>In Preparation</td>
<td>If only one rule is assigned, update end date, keep the start date. If &gt;1 rule is assigned: “Start and end dates of offers with more than one rule assigned cannot be changed.”</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>&gt;0</td>
<td>In Preparation</td>
<td>“Not allowed to import offer dates and rules.”</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>0</td>
<td>In Preparation</td>
<td>Delete all assigned rules and create a new one with the given start and end dates.</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>&gt;0</td>
<td>In Preparation</td>
<td>“Not allowed to import offer dates and rules.”</td>
</tr>
</tbody>
</table>

### ImportHeaders

<table>
<thead>
<tr>
<th>Entityset</th>
<th>Offer Dates</th>
<th>Validity Rules</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>0</td>
<td>Paused</td>
<td>“Either offer dates or validity rules must be filled.”</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>&gt;0</td>
<td>Paused</td>
<td>If any stored or imported rules have any dates in the past, then an error is raised. If all stored and imported rules have all dates in the future, then replace the existing rules with new ones.</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>0</td>
<td>Paused</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>----</td>
<td>---</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If only one rule is assigned and start date is in the future, then update the start date and keep the end date. Otherwise, an error message is produced: “Start date is in the past and cannot be changed.”

If >1 Rule is stored, then an error message is produced: “Start and end dates of offers with more than one rule assigned cannot be changed.”

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>&gt;0</th>
<th>Paused</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“Not allowed to import offer dates and rules.”

<table>
<thead>
<tr>
<th>No</th>
<th>Yes</th>
<th>0</th>
<th>Paused</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If only one rule is stored and end date is in the future, then update the end date and keep the start date (also if it is in the past). Otherwise, an error message is produced: “End date is in the past and cannot be changed.”

If >1 rule is stored, then an error message is produced: “Start and end dates of offers with more than one rule assigned cannot be changed.”
Update Offer Validity

<table>
<thead>
<tr>
<th>Yes</th>
<th>Yes</th>
<th>&gt;0</th>
<th>Paused</th>
<th>&quot;Not allowed to import offer dates and rules.&quot;</th>
</tr>
</thead>
</table>

Yes | Yes | 0 | Paused | If >1 rule is stored and any date is in the past, then an error message is produced: “Start and end dates of offers with more than one rule assigned cannot be changed.” If all stored rules start in the future, then delete all assigned rules and create a new one with the given start and end dates. If only one rule is assigned, then send dates to BOPF (tests). change existing rule and same behavior < 1902. |

Yes | Yes | >0 | Paused | "Not allowed to import offer dates and rules." |

Related Information

Custom Fields and Logic
5.6.7 Read Offers

Public OData API (API_MKT_OFFER_SRV) for Offers

Technical Data

The public API for Offers supports operations on the Offers Business Object.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_OFFER_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_OFFER_SRV/$metadata</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog is required: SAP_CEC_BC_MKT_API_OFR_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0306</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-OFM (Offers)</td>
</tr>
</tbody>
</table>

**iNote**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

Field Extensibility Supported | Yes

You can view sample payloads and test the API at https://api.sap.com.

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_OFFER_SRV/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>
## Access Link

**Marketing - Offers Details Page**

General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click **Download Specification** and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

## Read Offers API

General access link takes you directly to the Offers metadata file. One-time registration or logon is required.

### Note

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

## Entity Sets

The Offers OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers</td>
<td>This entity contains a list of offers.</td>
<td>/Offers</td>
</tr>
<tr>
<td>OfferContents</td>
<td>This entity contains the contents of an offer.</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferContents</td>
</tr>
<tr>
<td>OfferCoupons</td>
<td>This entity contains offer coupons.</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferCoupons</td>
</tr>
<tr>
<td>OfferMarketingLocations</td>
<td>This entity contains the marketing locations of offers.</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferMarketingLocations</td>
</tr>
<tr>
<td>OfferProducts</td>
<td>This entity contains the products that are on offer.</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferProducts</td>
</tr>
<tr>
<td>OfferProductCategories</td>
<td>This entity contains the categories of products that are on offer.</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferProductCategories</td>
</tr>
<tr>
<td>OfferTargetGroups</td>
<td>This entity contains the target groups to which you want to send the offers.</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferTargetGroups</td>
</tr>
<tr>
<td>Entity Set</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>OfferFeatures</td>
<td>This entity contains the features of offers.</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferFeatures</td>
</tr>
<tr>
<td>OfferFacets</td>
<td>This entity contains external offers.</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferFacets</td>
</tr>
</tbody>
</table>

## Offers

**Resource Path:** /Offers

You can perform the following operations on the Offers entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of offers</td>
<td>/Offer?$top</td>
</tr>
<tr>
<td>GET</td>
<td>Get the details of a specific offer</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')</td>
</tr>
</tbody>
</table>

## OfferContents

**Resource Path:** /Offers(guid'<Offer UUID>')/OfferContents

You can perform the following operations on the OfferContents entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all contents of an offer</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferContents</td>
</tr>
<tr>
<td>GET</td>
<td>Get a specific offer content</td>
<td>/OfferContents(guid'&lt;Offer Contents UUID&gt;')</td>
</tr>
<tr>
<td>GET</td>
<td>Get the offer or offers in which a specific offer content is used</td>
<td>/OfferCoupons(CouponUUID=guid'&lt;Coupon UUID&gt;,MarketingOfferUUID=guid'&lt;MarketingOffer UUID'&gt;)/Offer</td>
</tr>
</tbody>
</table>

## OfferCoupons

**Resource Path:** /Offers(guid'<Offer UUID>')/OfferCoupons

You can perform the following operations on the OfferCoupons entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all coupons of an offer</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferCoupons</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Get a specific coupon of an offer</td>
<td>/OfferCoupons(MarketingOfferUUID=guid '&lt;Marketing Offer UUID&gt;',CouponUUID=guid '&lt;Coupon UUID&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get the offer or offers in which a specific coupon is used</td>
<td>/OfferCoupons(CouponUUID=guid '&lt;Coupon UUID&gt;',MarketingOfferUUID=guid '&lt;Marketing Offer UUID&gt;')/Offer</td>
</tr>
</tbody>
</table>

**OfferMarketingLocations**

**Resource Path:** /Offers(guid '<Offer UUID>')/OfferMarketingLocations

You can perform the following operations on the OfferMarketingLocations entity set:

**HTTP**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all marketing locations of an offer</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferMarketingLocations</td>
</tr>
<tr>
<td></td>
<td>Get a specific marketing location of an offer</td>
<td>/OfferMarketingLocations(MarketingOfferUUID=guid '&lt;Marketing Offer UUID&gt;',MarketingLocationUUID=guid '&lt;Marketing Location UUID&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get the offer or offers in which a specific marketing location is used</td>
<td>/OfferMarketingLocations(MarketingLocationUUID=guid '&lt;Marketing Location UUID&gt;',MarketingOfferUUID=guid '&lt;Marketing Offer UUID&gt;')/Offer</td>
</tr>
</tbody>
</table>

**OfferProducts**

**Resource Path:** /Offers(guid '<Offer UUID>')/OfferProducts

You can perform the following operations on the OfferProducts entity set:

**HTTP**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all products of an offer</td>
<td>/Offers(guid '&lt;Offer UUID&gt;')/OfferProducts</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>GET</td>
<td>Get a specific product of an offer</td>
<td>/OfferProducts(MarketingOfferUUID=guid'&lt;Marketing Offer UUID&gt;',ProductUUID=guid'&lt;Product UUID&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get the offer or offers in which a specific product is used</td>
<td>/OfferProducts(ProductUUID=guid'&lt;Product UUID',MarketingOfferUUID=guid'&lt;Marketing Offer UUID&gt;')/Offer</td>
</tr>
</tbody>
</table>

**OfferProductCategories**

**Resource Path:** /Offers(guid'<Offer UUID>')/OfferProductCategories

You can perform the following operations on the OfferProductCategories entity set:

**Operations on OfferProductCategories entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all product categories of an offer</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferProductCategories</td>
</tr>
<tr>
<td></td>
<td>Get a specific product category of an offer</td>
<td>/OfferProductCategories(MarketingOfferUUID=guid'&lt;Marketing Offer UUID&gt;',ProductCategoryUUID=guid'&lt;Product Category UUID&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get the offer or offers in which a specific product category is used</td>
<td>/OfferProductCategories(Product Category UUID=guid'&lt;ProductCategoryUUID&gt;',MarketingOfferUUID=guid'&lt;Marketing Offer UUID&gt;')/Offer</td>
</tr>
</tbody>
</table>

**OfferTargetGroups**

**Resource Path:** /Offers(guid'<Offer UUID>')/OfferTargetGroups

You can perform the following operations on the OfferTargetGroups entity set:

**Operations on OfferTargetGroups entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all target groups of an offer</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferTargetGroups</td>
</tr>
</tbody>
</table>
### OfferFeatures

**Resource Path:** `/Offers(guid'<Offer UUID>')/OfferFeatures`

You can perform the following operations on the *OfferFeatures* entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all features of an offer</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferFeatures</td>
</tr>
<tr>
<td></td>
<td>Get a specific feature of an offer</td>
<td>/OfferFeatures(MarketingOfferUUID=guid'&lt;Marketing Offer UUID&gt;',OfferFeature='&lt;Offer Feature&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get the offer or offers in which a specific feature is used</td>
<td>/OfferFeatures(MarketingOfferUUID=guid'&lt;Marketing Offer UUID&gt;',OfferFeature=guid'&lt;Offer Feature&gt;')</td>
</tr>
</tbody>
</table>

### OfferFacets

**Resource Path:** `/Offers(guid'<Offer UUID>')/OfferFacets`

You can perform the following operations on the *OfferFacets* entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all external offers</td>
<td>/Offers(guid'&lt;Offer UUID&gt;')/OfferFacets</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>GET</td>
<td>Get a specific external offer</td>
<td>/OfferFacets(ExternalOffer=guid''&lt;External Offer&gt;',ExternalOfferOrigin=guid''&lt;External Offer Origin&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get the offer or offers for a given offer facet</td>
<td>/OfferFacets(ExternalOffer=guid''&lt;External Offer&gt;',ExternalOfferOrigin=guid''&lt;External Offer Origin&gt;')/Offer</td>
</tr>
</tbody>
</table>

### 5.6.8 Discover Offers

Use the API OData service `CUAN_OFFER_DISCOVERY_SRV` for SAP Marketing Cloud Offers to find suitable offers for a consumer.

#### Overview

The public OData service `CUAN_OFFER_DISCOVERY_SRV` can be used to retrieve suitable offer content to consumers for a specific context. For example in a Web shop, such as SAP Commerce, the service can be used to determine offer content, such as a banner, to be displayed on a Web page in the shop. To find the most relevant offer content, a number of context parameters can be passed to the service. Possible contexts for a Web shop scenario include the following:

- Current user logged on to the Web shop to show personalized offers
- Browser language to determine offer content (such as images) in the correct language

When requesting the OData with an Offer Recommendation Scenario ID, the rule based Offer Recommendation Intelligence will include recommended offers. Without the Scenario ID a simple solution will recommend offers based on solely on the eligibility.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/ CUAN_OFFER_DISCOVERY_SRV</td>
</tr>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required: SAP_COM_CSR_0021</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0021</td>
</tr>
</tbody>
</table>
You can view sample payloads and test the API at https://api.sap.com

Support of OData Features
See the following chapters for implementation details and search behavior of the OData services.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query options for value help entities</td>
<td>The current implementation of the value help entities supports the following query options, which can be passed as query or path parameters:</td>
</tr>
<tr>
<td></td>
<td>• $top and $skip</td>
</tr>
<tr>
<td></td>
<td>• $select</td>
</tr>
<tr>
<td></td>
<td>• $orderby</td>
</tr>
<tr>
<td></td>
<td>• $count and $inlinecount</td>
</tr>
<tr>
<td></td>
<td>Exception: the entity set ItemSourceTypes supports only $orderby, the entity set ItemValueHelps does not support $inlinecount.</td>
</tr>
<tr>
<td>http GET on OfferContents entity set</td>
<td>This API can be used to retrieve Offer Content objects from the system using the input parameters provided. This API supports the retrieval of an offer without Offer Recommendation Intelligence (ORI) and with ORI with a subset of the available ORI functionality.</td>
</tr>
<tr>
<td>http POST with deep-create on Recommendations entity set</td>
<td>This API is the preferred method to retrieve Offer Content Recommendations using Offer Recommendation Intelligence (ORI). It supports enhanced capabilities for use with the ORI.</td>
</tr>
<tr>
<td>http GET on function GetCouponCode</td>
<td>This API endpoint can be used to retrieve coupon codes.</td>
</tr>
</tbody>
</table>
**Technical Field Documentation**

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image](https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/ CUAN_OFFER_DISCOVERY_SRV;v=000 3/$metadata?sap-documentation=all)</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>

**Remarks:**

1. **Marketing Offer Discovery Service Details Page**
   - General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.
   - On the Details page, click Download Specification and download as EDMX.
   - Specify which application you want to use to open the EDMX file type.

2. **Discover Offers API**
   - General access link takes you directly to the Offer Discovery Service metadata file. One-time registration or logon is required.

**Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

---

Service Metadata URI: https://<Server>:<Port>/sap/opu/odata/SAP/ CUAN_OFFER_DISCOVERY_SRV/$metadata
Resources

The service consists of the following resource:

- Value help entities to provide values for certain code and identifiers used in other entities. These entities are read-only and support HTTP GET operation on the corresponding entity set to read the values defined in the system.
- Navigational entities, that cannot be called directly, but are used in combination with another entity. The API hub documentation shows these entities only as collections in the model description of the corresponding request of its parent entity set.
- Entities to retrieve offer content objects from the system. These entities are described in more detail in the OData Resource section of this document.

Read-Only Value Help Entities

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>CommunicationMedium</td>
<td>Value help entity to retrieve available communication mediums.</td>
<td>/CommunicationMedians</td>
</tr>
<tr>
<td>ContentPosition</td>
<td>Value help entity to retrieve available content position values.</td>
<td>/ContentPositions</td>
</tr>
<tr>
<td>ContentType</td>
<td>Value help entity to retrieve available offer content type values</td>
<td>/ContentTypes</td>
</tr>
<tr>
<td>CustomerOrigin</td>
<td>Value help entity to retrieve available customer origins</td>
<td>/CustomerOrigins</td>
</tr>
<tr>
<td>ItemSourceType</td>
<td>Value help entity to retrieve available item source types for BasketObject and LeadingObject.</td>
<td>/ItemSourceTypes</td>
</tr>
<tr>
<td>ItemValueHelp</td>
<td>Value help entity to retrieve available items for BasketObject and LeadingObject.</td>
<td>/ItemValueHelps</td>
</tr>
<tr>
<td>Language</td>
<td>Value help entity to retrieve available language ISO codes</td>
<td>/Languages</td>
</tr>
<tr>
<td>MarketingLocation</td>
<td>Value help entity to retrieve available marketing location UUIDs.</td>
<td>/MarketingLocations</td>
</tr>
<tr>
<td>Resource</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>OfferRecommendationScen-</td>
<td>Value help entity to retrieve available offer recommendation scenario IDs.</td>
<td>/OfferRecommendationScenarios</td>
</tr>
<tr>
<td>nario</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Read-Only Navigational Property Entities

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>BasketObject</td>
<td>Navigational property of the Recommendation entity to provide BasketObjects in the deep-create call.</td>
<td>/Recommendations/BasketObjects</td>
</tr>
<tr>
<td>ContentTypeField</td>
<td>Navigational property of the ContentType entity to read the available fields of offer content types.</td>
<td>/ContentTypes/ContentTypeFields</td>
</tr>
<tr>
<td>ContextParam</td>
<td>Navigational property of the Recommendation entity to provide free context parameters in the deep-create call.</td>
<td>/Recommendations/ContextParams</td>
</tr>
<tr>
<td>LeadingObject</td>
<td>Navigational property of the Recommendation entity to provide LeadingObjects in the deep-create call.</td>
<td>/Recommendations/LeadingObjects</td>
</tr>
<tr>
<td>Result</td>
<td>Navigational property of the Recommendation entity to return results in the deep-create call.</td>
<td>/Recommendations/Results</td>
</tr>
<tr>
<td>AssignedCoupon</td>
<td>Navigational property of the Result entity to provide Coupon data in the deep-create call.</td>
<td>/Recommendations/Results/AssignedCoupon</td>
</tr>
</tbody>
</table>

Offer Content Retrieval Entities

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>OfferContent</td>
<td>Entity to retrieve offer content objects from the system using a GET call on the corresponding entity set OfferContents with search parameters provided via the complex type OfferContentSearch.</td>
<td>/OfferContents</td>
</tr>
<tr>
<td>Resource</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Entity to retrieve offer content objects from the system using a POST call on the corresponding entity set Recommendations and providing the input parameters in a deep-create call using the navigational properties LeadingObjects, BasketObjects and Context-Params of the entity. The results are returned using the navigational property Results.</td>
<td>/Recommendations</td>
</tr>
</tbody>
</table>

**OData Resource: OfferContent**

The entity to retrieve offer content objects from the system using a GET call on the corresponding entity set.

**Resource Path:** https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/OfferContents

**Permissions:** PFCG role SAP_COM_CSR_0021

**Operations**

**CRUD Operations**

The entity supports only GET on its entity set.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Read a list of offer content objects that adhere to the provided search parameters.</td>
<td>/OfferContents</td>
</tr>
</tbody>
</table>

The retrieval of OfferContent entities in the OData service CUAN_OFFER_DISCOVERY_SRV is done by requesting the entity set OfferContents using a GET operation, using a $filter operator with the available parameters for the complex type OfferContentSearch. A direct retrieval of individual OfferContent entities using the key fields is not implemented. The following request parameters can be used as filter properties in the $filter-clause:

- **CustomerId:** The user or customer or consumer ID of the user logged on to the Web shop. If this parameter is not used in $filter or used with an empty string, the parameter CustomerOriginId is ignored.
- **CustomerOriginId:** The origin ID for interaction contacts defined in Customizing. If this parameter is not used in $filter or used with an empty string and the CustomerId is also used, the parameter value is defaulted to the delivered value SAP_HYBRIS_CONSUMER internally.
- **CommunicationMediumId:** The ID of a communication medium. If a CommunicationMediumId is passed to the OData service as a filter, only offer contents for that communication medium are retrieved.
- **LanguageId**: The ISO language code of the offer content. In a Web shop, this might correspond to the user’s logon language. If no language is passed to the OData service, the result contains all available languages.
- **Position**: Position in the Web shop where offers are to be displayed, such as **Top** or **Bottom**. This information must have been entered for the offer content.
- **RecommendationScenarioId**: This field is not supported.
- **ContentMediumTypeId**: The ID of a content type, such as "01" for content type "Image". If this parameter is not used in $filter the value is defaulted to "01" internally. Only offer contents matching the specified content medium type ID are retrieved.
- **MarketingLocationKey**: One or more marketing location identifiers (UUIDs) to search for offers that either have no marketing location assigned or have one of the specified marketing locations assigned. If offers without marketing locations are requested, a filter on MarketingLocationKey for example "" must be supplied in the query. When not using the MarketingLocationKey property as filter, the returned offers can have zero to multiple marketing locations assigned.

### Extensibility and Offer Content Types

The OData service **CUAN_OFFER_DISCOVERY_SRV** supports both "Offer Header Data" and "Offer Content Data" extensibility using the **Custom Fields and Logic** application. For more information, see **Custom Fields for Offer Header and Offer Content**. It is possible to read the values of extensibility fields when reading OfferContent entities. However, it is not possible to define filters for these extension fields.

For any content type defined in the app **Manage your Solution**, associated fields can be defined in the app **User Interface Adaptation**. For more information, see **User Interface Adaptation**. The service provides the information about which fields belong to which offer content type in the following two ways:

- The value help entity type **ContentType** has a navigational property **AvailableFields** to read the list of available fields in the entity type **OfferContent**.
- Field-control fields are part of the entity type **OfferContent**. These fields control the visibility of the corresponding data field in the following way:
  - If the corresponding data field is part of the returned content type the value is 1 (meaning read-only)
  - If the corresponding data field is not part of the returned content type the value is 0 (meaning hidden)

### Search Behavior

The **CustomerId** and **CustomerOriginId** parameters can only accept a single value for the filter operation $filter with the operator EQ. Additional filters using these parameters are ignored. Other operators are ignored and set to EQ. If a range operator (for example BT) is used, the lower boundary value is used. The higher boundary value is ignored.

The search result contains 0-n OfferContent entities which are active on the date and time of the actual request and have only valid marketing location assignments. If a coupon is assigned to the offer, an offer is only returned if the redemption limit for the coupon has not been reached. The **Redemption Limit** and the **Redemption Limit for Each Contact** are taken into account. For more information, see **Manage Coupons**.

An offer is active at a particular point in time if the status is **Released** and if the point in time is found during one of the offer visibility (valid or visible) ranges.

A marketing location assigned to an offer is valid with respect to this offer if, and only if the following is true:

- The marketing location is not closed (deleted).
- The offer end date, in UTC, is found during the validity period of the location.
The result set is sorted internally using a ranking that is based on the filterable properties CustomerId: Offers are assigned the highest ranking if the CustomerId is part of any assigned target group that is assigned to the offer. Conversely, offers with no target group are assigned the lowest ranking. These offers are valid for any customer.

Additional sorting parameters can be passed to the service using $orderby, but are applied to the internal sorting after the logic described above.

**OData Operation: GET OfferContent**

**Request**

**URI:** https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/OfferContents

**Operation Type:** R (Read)

**HTTP Method:** GET

**Permissions:** GET

The OData API is only to be called using $batch, so that the query can be encrypted in the HTTP request body and to avoid URL overflows. A request to the OData service to retrieve up to ten OfferContent entities with filters on CustomerId, CommunicationMedium, Language and Position could then be as follows:

**Example HTTP request for offer content retrieval**

```
POST /sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/$batch

Request Headers:
accept          application/json
content-type    multipart/mixed;boundary=batch_1e29-6867-0e8e

Request Body:
--batch_1e29-6867-0e8e Content-Type: application/http Content-Transfer-Encoding: binary
   GET OfferContents?$top=10&$filter=Search/CustomerId eq 'demo@hybris.com' and Search/CommunicationMediumId eq 'ONLINE_SHOP' and Search/LanguageId eq 'FR' and Search/Position eq 'TOP'
HTTP/1.1
Accept: application/json
Accept-Language: en-US
DataServiceVersion: 2.0
MaxDataServiceVersion: 2.0
)--batch_1e29-6867-0e8e--
```

**Response**

**Format:** JSON

```json
{
```
This response contains two OfferContent entities. The first entity was found because the customer (with id demo@hybris.com) was found in a target group that is assigned to offer 4711 and both the language, the communication medium and the position of the entity match the search query. The second OfferContent
entity was found because the offer has no target group assigned and the language, the communication medium and the position match the corresponding filter values of the entity. The content of offer 4711 is ranked first according to the sorting rules described above.

**OData Resource: Recommendations**

As of Release 1705, a new API has been introduced in the offer discovery service that provides enhanced capabilities to use in combination with the Offer Recommendation Intelligence (ORI).

This API is based on the new Recommendation entity in the offer discovery service and allows the caller to specify leading items, basket items and free context parameters to be used in the defined rules in an ORI model. Since this functionality could not be provided using the existing GET OfferContent API, this new API was introduced which uses a POST call on the Recommendations entity set. All input parameters are provided in the HTTP body of the request, similar to a deep create of an OData entity.

**Remark:** The GET OfferContent continues to work with the release 1705, with some minor changes regarding the search behavior when using a MarketingLocationKey filter and the sorting behavior of the result set.


**Permissions:** PFCG role SAP_COM_CSR_0021

**Operations**

**CRUD Operations**

The entity supports only PUT on its entity set.

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Operation</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Deep-create on the Recommendations entity set to retrieve offer content objects process by the ORI</td>
<td>/Recommendations</td>
</tr>
</tbody>
</table>

Input and output of the API is defined by the structure of the Recommendation entity (see also the $metadata XML definition of the offer discovery service and the API hub documentation).

The Recommendation entity has three properties (CustomerId, CustomerOriginId and RecommendationScenarioId) that are used as input values when calling the API. To call the recommendation API for anonymous contacts, provide the CustomerID and CustomerOriginId parameters and use blank/empty (""") values. Additional input values for leading items, basket items and free context parameters are provided using navigation properties with the respective entity types LeadingObject, BasketObject and ContextParam.

The results are returned in the navigation property results. The entity result uses the same properties as the OfferContent entity for the GET OfferContent call and adds the property Score, which contains the score value for the offer content object as determined by the ORI and the external ID and origin for imported offer objects (InboundOriginIdExt and InboundOriginId).

The service contains two additional value help entities ItemSourceType and ItemValueHelp for the properties of the LeadingObject and BasketObject entities. These are defined in the service metadata using ValueList annotations, similar to the value help entities for the OfferContent/Search in the GET call of the API.
No value help entity is available for the ContextParam entity. For a list of possible context parameter names, see the “Search Behavior” chapter of this section.

Example of the Recommendation entity as JSON structure:

```json
Recommendation: {
  // -> IN: fields that were previously used in complex type OfferContentSearch to perform the ORI call.
  // CustomerId is now UserId
  // CustomerOriginId is now UserOriginId
  // CommunicationMediumId -> is derived from the recommendation scenario!
  // ContentMediumType, LanguageId, Position, MarketingLocationKey -> moved into the ContextParams navigation property
  UserId: "",   
  UserOriginId: "", 
  RecommendationScenarioId: "", // value list annotation to OfferRecommendationScenarios

  // -> IN: new LeadingObject entity type (same internal structure as BasketObject)
  LeadingObjects: [{
    LeadingObjectType: "", // -> value list annotation to ItemSourceTypes
    LeadingObjectId: ""   // -> value list annotation to ItemValueHelps
  },],

  // -> IN: new BasketObject entity type (same structure as LeadingObject)
  BasketObjects: [{
    BasketObjectType: "", // -> value list annotation to ItemSourceTypes
    BasketObjectId: "" // -> value list annotation to ItemValueHelps
  },],

  // -> IN: new ContextParam entity type
  ContextParams: [{
    ContextId: 0 // Integer key
    Name: "",  
    Value: "" 
  },],

  // -> OUT: new Result entity type
  Results: [{
    OfferId: "",   
    Offer: "",  
    InboundOriginId: "", 
    InboundOriginIdExt: "", 
    ContentId: "",  
    CommunicationMediumId: "", 
    CommunicationMedium: "", 
    LanguageId: "",  
    Language: "", 
    Position: "", 
    ContentMediumType: "",  
    ContentMediumType: "",  
    ContentDescription: "", 
    ContentSource: "",  
    TargetDescription: "", 
    TargetLink: "", 
    FC_ContentPosition: "", 
    FC_ContentMediumType: "", 
    FC_ContentDescription: "", 
    FC_ContentSource: "", 
    FC_TargetDescription: "", 
    FC_TargetLink: "", 
    Score: "" 
  }]
}
```

"Sample Code"
Extensibility and Result Entity Type

The Result entity responds in the same way as the OfferContent entity with regards to extensibility (see also the corresponding chapter above).

Search Behavior

The POST Recommendations API responds similarly to the GET OfferContents API, with the following differences:

- The call is performed using an HTTP POST, providing all input parameters in the request body.
- To call the API, a valid X-CSRF-Token must be supplied in the request header (this token can be retrieved by sending a GET request to /sap/opu/odata/sap/CUAN_OFFER_DISCOVERY_SRV with the HTTP header containing the attribute X-CSRF-Token with the value 'fetch'.
- $skip/$top operations are not supported. The number of returned offer content objects in the Result property is restricted by the available number of valid objects in the system and the maximum number of results defined in the recommendation model.
- The API can only be used for use with ORI. Therefore, the RecommendationScenarioId is a mandatory input parameter.
- The chosen recommendation scenario must have a communication medium assigned. The communication medium is used during the selection of the relevant offer content. Using a recommendation scenario without a communication medium will lead to an error.
- LeadingObjects, BasketObjects and ContextParams are optional input parameters.
- The Results navigational property must be requested in the API call (see below for an example of calling the API).
- The ContentMediumTypeId, LanguageId, Position, MarketingLocationKey and CommunicationMediumId input parameters from the GET OfferContent API are provided using the ContextParams navigation property.
- When providing CommunicationMediumId in the ContextParams, the values are used in addition to the communication medium derived from the recommendation scenario.
- The available context parameters names are:
  - P_LANGUAGE: for OfferContent/Search/LanguageId
  - P_POSITION: for OfferContent/Search/Position
  - P_COMM_MEDIUM: for OfferContent/Search/CommunicationMediumId
  - P_CONT_MEDIUM_TYPE: for OfferContent/Search/ContentMediumTypeId
  - P_ML_UUID32: for OfferContent/Search/MarketingLocationKey
  - P_CURRENT_LONGITUDE: parameter no longer supported
  - P_CURRENT_LATITUDE: parameter no longer supported
  - P_WITH_COUPON: parameter to filter offers with assigned coupons
    - Parameter value = ‘X’ delivers only offers with assigned coupons
    - Parameter value = ‘ ’ delivers only offers without assigned coupons
    - Requests without parameter P_WITH_COUPON deliver offers with and without assigned coupons
  - P_MARKETING_AREA: parameter to restrict the offers based on their assigned marketing area
- Context parameters that are not explicitly listed are ignored.
OData Operation: POST Recommendations

**URI:** https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/Recommendations

**Operation Type:** C (Create)

**HTTP Method:** POST

**Permissions:** PFCG role SAP_COM_CSR_0021

**Request**

As previously mentioned, the Recommendation entity can only be called using an HTTP POST call. The call mimics an OData deep-create call. Other calls to the Recommendation entity are not supported. (such as GET entity/set, and so on).

**i Note**

To improve readability, the following example HTTP requests and responses do not show all the details. Some metadata information is for example omitted in the JSON responses and URLs are shown without encoding. For example, spaces are not replaced by `%20`

**Example**

**Sample Code**

```plaintext
POST /sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/Recommendations

Request Headers:
accept          application/json
content-type    application/json
X-CSRF-Token    _oHVBAS9m4E95kbcxqVV2ww==

Request Body:
{
    "UserOriginId": "ONLINE_SHOP",
    "UserId": "demo@hybris.com",
    "RecommendationScenarioId": "ORI_SCENARIO",
    "BasketObjects": [],
    "LeadingObjects": [],
    "ContextParams": [{
        "ContextId": 1,
        "Value": "EN",
        "Name": "P_LANGUAGE"
    }, {
        "ContextId": 2,
        "Value": "TOP",
        "Name": "P_POSITION"
    }],
    "Results": []
}
```

**Response**

**Sample Code**

```plaintext
{
    "d": {
        "UserId": "",
```
"UserOriginId": "", "RecommendationScenarioId": "", "BasketObject": null, "LeadingObjects": null, "ContextParams": null, "Results": { "results": [{ "OfferId": "0000004711", "Offer": "Offer 4711", "CustomerId": "demo@hybris.com", "ContentId": "00001", "CommunicationMediumId": "ONLINE_SHOP", "CommunicationMedium": "Online-shop", "LanguageId": "FR", "Language": "French", "Position": "TOP", "ContentMediumTypeId": "01", "ContentMediumType": "Image", "ContentDescription": "Buy 2 get 1 free", "ContentSource": "http://assets.mycompany.com/offer4711.png", "TargetDescription": "Link for offer 4711", "TargetLink": "http://www.mycompany.com/offer4711.html", "Score": "1.00" }, { "OfferId": "0000004712", "Offer": "Offer 4712", "CustomerId": "", "ContentId": "", "ContentId": "00001", "CommunicationMediumId": "ONLINE_SHOP", "CommunicationMedium": "Online-shop", "LanguageId": "FR", "Language": "French", "Position": "TOP", "ContentMediumTypeId": "01", "ContentMediumType": "Image", "ContentDescription": "20% off for order values > 100€", "ContentSource": "http://assets.mycompany.com/offer4712.png", "TargetDescription": "Link for offer 4712", "TargetLink": "http://www.mycompany.com/offer4712.html", "Score": "0.80" } ] } }

Sample Code

Example request with coupon-parameter: "P_WITH_COUPON"

POST /sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/Recommendations

Request Headers:
accept application/atom xml
content-type application/json
X-CSRF-Token _oHVbAS9m4E95kbxqYV2ww==

Request Body:
{
  "UserOriginId": "ONLINE_SHOP",
  "UserId": "demo@hybris.com",
  "RecommendationScenarioId": "ORI_SCENARIO",
  "BasketObjects": [],
  "LeadingObjects": [],
  "ContextParams": []
}
Example response with coupon data

<title type="text">Coupons('COUPON_FOR_MOBILE')</title>
<updated>2017-09-08T14:29:37Z</updated>
<link title="CouponEntityType" rel="self" href="Coupons('COUPON_FOR_MOBILE')"/>

-<content type="application/xml">
  -<m:properties>
    <d:Coupon>COUPON_FOR_MOBILE</d:Coupon>
    <d:CouponType>SINGLE</d:CouponType>
    <d:CouponName/>
    <d:CouponDescription/>
  </m:properties>
</content>
### Request Headers

#### Recommendations Request Headers

<table>
<thead>
<tr>
<th>Header</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content-Type</td>
<td>Yes</td>
<td>Recommended value: application/json</td>
</tr>
<tr>
<td>Accept</td>
<td>Yes</td>
<td>Recommended value: application/json</td>
</tr>
<tr>
<td>X-CSRF-Token</td>
<td>Yes</td>
<td>To be retrieved by the caller before calling the Recommendations API, for example using a GET call on https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/using the HTTP Header “X-CSRF-Token” with the value “fetch”</td>
</tr>
</tbody>
</table>

### Recommendations Response Headers

<table>
<thead>
<tr>
<th>Header</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content-Type</td>
<td>Returned value: application/json</td>
</tr>
</tbody>
</table>

### Recommendations Status and Error Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>Recommendations call was successfully processed.</td>
</tr>
<tr>
<td>400</td>
<td>There was an error processing the request. See the response for detailed error information.</td>
</tr>
</tbody>
</table>

### OData Operation: GET GetCouponCode

**URI:** https://<Server>:<Port>/sap/opu/odata/SAP/CUAN_OFFER_DISCOVERY_SRV/GetCouponCode

**Operation Type:** R (Read)

**HTTP Method:** GET

**Permissions:** PFCG role SAP_COM_CSR_0021

When Discovery and Recommendation returns Offer with Coupon information, then the user receives just the Coupon root information. To get a redeemable coupon code a second request is necessary. Therefore, this OData Function Import has been defined.

This OData API endpoint is used to fetch coupon codes for a coupon that was retrieved by a POST call on the Recommendations entity set using the “AssignedCoupon” navigational property in the request (see above).

In order to retrieve coupon codes for anonymous contacts, the parameters UserId and UserOriginId must be provided with empty values (&UserId=''&UserOriginId='').
Anonymous contacts can only receive coupon codes of coupons with contact relationship type "No Contact Assigned". For more information, see Manage Coupons.

Example Request
GET /sap/opu/odata/sap/CUAN_OFFER_DISCOVERY_SRV/GetCouponCode?
Coupon='COUPON_FOR_MOBILE'&UserId='demo@hybris.com'&UserOriginId='ONLINE_SHOP'

Example Response (JSON)

```
{
  "d": {
    "CouponCode" : "CODE_1234",
    "EANCodeImageUrlParser" : "https://yourdomain.com/url_to_eancode/1234",
    "QRCodeImageUrlParser" : "https://yourdomain.com/url_to_qrcode/1234",
    "ValidityStartDateTime" : "\Date(1527235508173)\",
    "ValidityEndDateTime" : "\Date(1527717599000)\",
    "CouponCodeSerialNumber" : "1234"
  }
}
```

Request Headers

Recommendations Request Headers

<table>
<thead>
<tr>
<th>Header</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept</td>
<td>No</td>
<td>Recommended value: application/json</td>
</tr>
</tbody>
</table>

Recommendations Response Headers

<table>
<thead>
<tr>
<th>Header</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content-Type</td>
<td>Returned value: application/json</td>
</tr>
</tbody>
</table>

Recommendations Status and Error Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Recommendations call was successfully processed.</td>
</tr>
<tr>
<td>4xx</td>
<td>There was an error processing the request. See the response for detailed error information.</td>
</tr>
</tbody>
</table>

5.6.9 Coupons

Public OData API (API_MKT_COUPON_SRV) for Coupons.

Overview [page 1029]
Entity Sets

- Coupons [page 1031]
- CouponCodes [page 1031]
- CouponTexts [page 1032]
- CouponCodeUsages [page 1033]
- CouponCodeUsageIntactnCntcts [page 1033]

Overview

The public API for Coupons supports operations on the Coupons Business Object.

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_COUPON_SRV</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_COUPON_SRV/$metadata</td>
</tr>
</tbody>
</table>

**Authorizations**

The following business catalog is required:

SAP_CEC_BC_MKT_API_COP_PC

**Communication Scenario ID**

SAP_COM_0317

Component for Incidents

CEC-MKT-OFM-CPM (Coupons)

**Note**

Not to be used for HTTP errors. For more information, see HTTP Response Status Codes [page 402].

Field Extensibility Supported

Yes

Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_CONTACT_SRV;v=0003/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>
**Access Link**  
**Remarks**

**Marketing - Coupons Details Page**  
General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.

1. On the Details page, click **Download Specification** and download as EDMX.
2. Specify which application you want to use to open the EDMX file type.

**Coupons API**  
General access link takes you directly to the Coupons metadata file. One-time registration or logon is required.

---

**i Note**

You can convert the XML file to an XML table to make it easier to read.

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

---

**Entity Sets**

The Coupons OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coupons</td>
<td>This entity contains coupon data</td>
<td>/Coupons</td>
</tr>
<tr>
<td>CouponCodes</td>
<td>This entity contains the coupon codes of coupons</td>
<td>/CouponCodes</td>
</tr>
<tr>
<td>CouponTexts</td>
<td>This entity contains the coupon texts of coupons</td>
<td>/CouponTexts</td>
</tr>
<tr>
<td>CouponCodeUsages</td>
<td>This entity contains the coupon code usage of coupons</td>
<td>/CouponCodeUsages</td>
</tr>
<tr>
<td>CouponCodeUsageIntactnCntcts</td>
<td>This entity contains the contact and contact origin of a coupon code usage</td>
<td>/CouponCodeUsageIntactnCntcts</td>
</tr>
</tbody>
</table>

The service supports OData deep create functionality to create a tree of related entities in a single POST request. The service also supports $batch to group any number of arbitrary requests into one request.

You can view sample payloads and test the API at [https://api.sap.com](https://api.sap.com).
### Coupons

**Resource Path:** /Coupons

You can perform the following operations on the **Coupons** entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get a list of coupons</td>
<td>/Coupons? $top=&lt;Number_Of_Objects&gt;</td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● The <code>$top</code> parameter is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● You can get only 100 coupons with each request.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get the details of a specific coupon</td>
<td>/Coupons(guid'&lt;Coupon UUID&gt;')</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a coupon</td>
<td>/Coupons</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update a coupon</td>
<td>/Coupons(guid'&lt;Coupon UUID&gt;')</td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● The <code>CouponCanExceedOfferPeriod</code> property can be set to TRUE only for a Released offer.</td>
<td></td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete a coupon</td>
<td>/Coupons(guid'&lt;Coupon UUID&gt;')</td>
</tr>
</tbody>
</table>

### CouponCodes

**Resource Path:** /CouponCodes

You can perform the following operations on the **CouponCodes** entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get all the coupon codes for a specific coupon</td>
<td>/Coupons(guid'&lt;Coupon UUID&gt;')/CouponCodes</td>
</tr>
<tr>
<td></td>
<td>i Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● The <code>$top</code> parameter is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● You can get only 100 coupon codes with each request.</td>
<td></td>
</tr>
</tbody>
</table>
### HTTP Method

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Get</strong></td>
<td>Get the coupon codes of a specific coupon</td>
<td>/CouponCodes(guid'&lt;&lt;Coupon Code UUID&gt;&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get a list of coupon codes</td>
<td>/CouponCodes? $top=&lt;Number_Of_Objects&gt;</td>
</tr>
<tr>
<td></td>
<td>Get the coupon of a specific coupon code</td>
<td>/CouponCodes(guid'&lt;&lt;Coupon Code UUID&gt;&gt;')/to_Coupon</td>
</tr>
<tr>
<td><strong>POST</strong></td>
<td>Create a coupon code</td>
<td>/Coupons(guid'&lt;&lt;Coupon UUID&gt;&gt;')/to_CouponCode</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update a coupon code</td>
<td>/CouponCodes(guid'&lt;&lt;Coupon Code UUID&gt;&gt;')</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete a coupon code</td>
<td>/CouponCodes(guid'&lt;&lt;Coupon Code UUID&gt;&gt;')</td>
</tr>
</tbody>
</table>

### CouponTexts

**Resource Path:** /CouponTexts

You can perform the following operations on the CouponTexts entity set:

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get all the coupon texts</td>
<td>/Coupons(guid'&lt;&lt;Coupon UUID&gt;&gt;')/CouponTexts</td>
</tr>
<tr>
<td></td>
<td>Get the coupon texts of a specific coupon</td>
<td>/CouponTexts(guid'&lt;&lt;Coupon Text UUID&gt;&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get a list of coupon texts</td>
<td>/CouponTexts? $top=&lt;Number_Of_Objects&gt;</td>
</tr>
<tr>
<td></td>
<td>Get the coupon of a specific coupon text</td>
<td>/CouponTexts(CouponUUID=guid'&lt;&lt;Coupon UUID&gt;&gt;',Language=guid'&lt;&lt;Language&gt;&gt;')/to_Coupon</td>
</tr>
</tbody>
</table>

**Note**

- If the path is /CouponTexts, the $Stop parameter is mandatory.
- You can get only 100 coupons texts with each request.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POST</strong></td>
<td>Create a coupon text</td>
<td>/Coupons(guid'&lt;Coupon UUID&gt;')/to_CouponText</td>
</tr>
<tr>
<td><strong>PUT</strong></td>
<td>Update a coupon text</td>
<td>/CouponTexts(guid'&lt;Coupon Text UUID&gt;')</td>
</tr>
<tr>
<td><strong>DELETE</strong></td>
<td>Delete a coupon text</td>
<td>/CouponTexts(guid'&lt;Coupon Text UUID&gt;')</td>
</tr>
</tbody>
</table>

**CouponCodeUsages**

**Resource Path:** /CouponCodeUsages

You can perform the following operations on the CouponCodeUsages entity set:

**Operations on CouponCodeUsages entity set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GET</strong></td>
<td>Get all the coupon code usages for a coupon code</td>
<td>/CouponCodes(guid'&lt;Coupon Code UUID&gt;')/to_CouponCodeUsage</td>
</tr>
<tr>
<td></td>
<td></td>
<td><img src="#" alt="i Note" /></td>
</tr>
<tr>
<td></td>
<td>- The $top$ parameter is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- You can get only 100 coupon code usages with each request.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Get a specific coupon code usage</td>
<td>/CouponCodeUsages(guid'&lt;Coupon Code Usage UUID&gt;')</td>
</tr>
<tr>
<td></td>
<td>Get a list of coupon code usages</td>
<td>/CouponCodeUsages? $top=&lt;Number_Of_Objects&gt;</td>
</tr>
<tr>
<td></td>
<td>Get the coupon code for a specific coupon code usage</td>
<td>/CouponCodeUsages(guid'&lt;Coupon Code Usage UUID&gt;')/to_CouponCode</td>
</tr>
</tbody>
</table>

**CouponCodeUsageIntactnCntcts**

**Resource Path:** /CouponCodeUsageIntactnCntcts

You can perform the following operations on the CouponCodeUsageIntactnCntcts entity set:
# Operations on CouponCodeUsageIntactnCntcts entity set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get all the contacts and contact origins for a specific coupon code usage</td>
<td><code>/CouponCodeUsages(guid'&lt;Coupon Code UUID&gt;')/to_Contacts</code></td>
</tr>
</tbody>
</table>

**i Note**
- The `$top` parameter is mandatory.
- You can get only 100 contacts and contact origins with each request.

| GET | Get the contact and contact origin for a specific interaction contact | `/CouponCodeUsageIntactnCntcts(InteractionContactFacetUUID=guid'<Interaction Contact Facet UUID>',InteractionContactUUID=guid'<Interaction Contact UUID>')` |

| GET | Get a list of interaction contacts and contacts origins used in coupon code origins | `/CouponCodeUsageIntactnCntcts?$top=<Number_Of_Objects>` |

## Implementation Hints

When calling this API, please observe the following recommendations:

- It is not possible to update a specific coupon or any of its child objects (codes, texts) using parallel requests because each update request locks the coupon object and all its child objects. Therefore it is not possible to upload coupon codes for the same coupon in parallel requests. The requests must be serialized by the caller.
- The recommended maximum package size for uploading multiple coupon codes in a single `$batch` request is 1,000. Larger package sizes can have a negative influence on other processes on the system. The preferred package size is 500 codes per `$batch` request.
- The expected average throughput for uploading coupon codes using these package sizes is between 1,200 and 1,800 codes/minute.

## Function Imports

Function imports are used to perform custom operations on an entity, in addition to typical OData operations. This section contains function import payload examples for some functions of the process automation.
<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>Release a coupon. Sets the status from <em>In Process</em> (01) to <em>Released</em> (02).</td>
<td>`/ReleaseCoupon?CouponUUID=guid’&lt;Coupon UUID&gt;'</td>
</tr>
<tr>
<td></td>
<td>Reject a coupon. Sets the status from <em>Released</em> (02) to <em>In Process</em> (01).</td>
<td>`/RejectCoupon?CouponUUID=guid’&lt;Coupon UUID&gt;'</td>
</tr>
<tr>
<td></td>
<td>Deletes all codes of a coupon. To be used for efficient deletion of all codes in large multi-code coupons.</td>
<td>`/DeleteCodes?CouponUUID=guid’&lt;Coupon UUID&gt;'</td>
</tr>
<tr>
<td></td>
<td>Trigger the replication of the coupon to an external system and request a number of coupon codes from the external system. 0 is a valid value for NumberOfCouponCodes and the value to be used for single-code coupons.</td>
<td>`/ReplicateCoupon?CouponUUID=guid’&lt;Coupon UUID’&amp;NumberOfCouponCodes=&lt;Number of codes to be requested from external system&gt;'</td>
</tr>
</tbody>
</table>

**Related Information**

https://api.sap.com

### 5.7 Marketing Analytics

#### 5.7.1 OMC: Intelligence

The SAP Marketing Cloud Open Marketing Connector for Intelligence enables you to read score values stored within SAP Marketing Cloud and process them externally, as well as write scores into the SAP Marketing Cloud database from external sources for seamless integration into marketing applications.

**Business Scenarios**

SAP Marketing Cloud has an infrastructure to create scores, calculate score values based on local and extended data, and distribute scores to various marketing applications for process optimization. The scores can be predictive scores, based on machine learning, or heuristic scores based on defined rules and conditions. The calculated score values can be stored on the database periodically.

The following two business scenarios are described:

1. **PULL**: Read score values from SAP Marketing Cloud for external usage.
2. **PUSH**: Write externally calculated score values into SAP Marketing Cloud

### Integration Points and Process Steps

**Scenario 1: Pull (read) score values from SAP Marketing Cloud for external usage.**

Your company wants to retrieve scores calculated and stored in SAP Marketing Cloud for processing in other systems. Take, for example, a score which is generated in SAP Marketing Cloud and then used in a booking system or online shop to classify a consumer and target them with personalized offers or information. For such scenarios score values can be exported from Marketing.

**Process Steps**

1. Score values are calculated and stored internally at SAP Marketing Cloud.
2. For other business processes, these scores shall also be available outside the Marketing Cloud in external systems as additional information about contacts.
3. Using the API Service `SAP_COM_0307` of SAP Marketing Cloud a user can get the score values of a specific version of a Score Model.
4. The retrieved score values can be loaded to an external system.

**Scenario 2: PUSH (write) externally created score values into SAP Marketing Cloud**

Inversely, your company can use the Open Marketing Connector for Intelligence to input score values into SAP Marketing Cloud. Score values are calculated externally with particular engines or based on datasets which are not integrated with the marketing solution. If you want to use these externally calculated score values within marketing applications, they can be imported to the Marketing database. Scores loaded from external sources are the same as any other score and can be used for segmentation, target group specification, contact rating, lead nurturing, campaign execution, product or offer recommendation, analytics and reporting and many other functions within SAP Marketing Cloud.
Imported Predictive Scores must be of a value between 0 and 1 as they express a probability.

Process Steps
1. A business analyst or data scientist uses a particular tool or engine to calculate score values for a set of marketing contacts. This externally calculated score will be used for segmentation within SAP Marketing Cloud.
2. In SAP Marketing Cloud, the business analyst creates a new Predictive Scenario of type ‘External Score’ for this score. This is done in the quality system and then transported to the productive system.
3. A Score Model with a new version can be generated for a predictive scenario by utilizing the API Service SAP_COM_0307, and the externally calculated score values can be pushed to SAP Marketing Cloud.
4. The generated score model is immediately active and can be used in the segmentation profile that was assigned to the Predictive Scenario.
5. A marketing expert can now create a segmentation model based on this segmentation profile and use the score with the imported score values for the set of contacts.

Prerequisites
- **Scope Items**
The following scope items are relevant and are included in the base scope:
  - Consumer and Customer Profiling (JC1)
  - Marketing Lead Management (JC0)
- **Business Catalogs**
The following business catalogs are relevant to assign authorizations for the API services:
Business Catalog Name | Required for API
---|---
SAP_CEC_BC_MKT_API_SCO_PC | API_MKT_SCORE_SRV

For more information, see Business catalogs for Business Scenarios.

- **Communication Scenario**
The following communication scenario IDs must be assigned to communication users to enable communication between systems:

<table>
<thead>
<tr>
<th>Communication Arrangement with Communication Scenario ID</th>
<th>Scenario Name</th>
<th>Required if you want to Integrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP_COM_0307</td>
<td>Marketing - Scores Integration</td>
<td>External Score Values</td>
</tr>
</tbody>
</table>

- **Configuration Activities**
SAP Marketing Cloud delivers preconfigured content

<table>
<thead>
<tr>
<th>Configuration Activity</th>
<th>Required / Optional</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictive Studio</td>
<td>Required</td>
<td>Create Predictive Scenario (Score) of type &quot;External Score&quot; manually in Q-system and transport to P-system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Posting Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>For more information, see configuration apps</td>
</tr>
</tbody>
</table>

How to Implement

API Services

- API_MKT_SCORE_SRV

Scores [page 696]

### 5.8  Marketing Planning and Performance
5.8.1 Actual and Committed Spend Data

You can upload actual and committed spend data from an external ERP system into SAP Marketing Cloud using the CUAN_ACTUAL_IMPORT_SRV OData service.

Prerequisites

- You have assigned the Marketing - Business Data Integration communication scenario to your communication user in Maintain Communication Users.
- You have maintained the SICF node for the CUAN_ACTUAL_IMPORT_SRV external service name in SAP Marketing Cloud (which is either a back-end system or a remote gateway system, depending on your setup).

Mass Import

The OData protocol allows the import or update of one object record (one spend item) only. To achieve the mass create and mass update of records, a dummy entity (import header) is created by deep insert. You perform an insert on the ImportHeader entity and create actual spend items as subnodes of the import header. The metadata of the service is read by means of the OData call:

- Request URL: /sap/opu/odata/sap/CUAN_ACTUAL_IMPORT_SRV/$metadata
- HTTP Method: Get

Structure of CUAN_ACTUAL_IMPORT_SRV OData Service

The CUAN_IMPORT_SRV OData service consists of the following entity sets and entity types:

<table>
<thead>
<tr>
<th>Entity Set</th>
<th>Entity Type</th>
<th>Entity Type Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CampaignActual</td>
<td>CampaignActual</td>
<td>Actual Spends</td>
</tr>
<tr>
<td>ImportHeader</td>
<td>ImportHeader</td>
<td>Technical Import Message Header</td>
</tr>
</tbody>
</table>

ImportHeader Entity Type

The ImportHeader entity type describes the technical header of an import of actual spends. The property ID is used as an external reference number to identify the associated application log.
CampaignActual Entity Type

The CampaignActual entity type contains all attributes that are required to upload actual spend data. If the values for a combination of source ID, campaign ID, spend type, spend item ID, and reference date are being uploaded for the first time, the corresponding values for this combination (amounts and currency) from the HTTP request are uploaded. If they are being uploaded a subsequent time, the corresponding values for this combination are updated with the values from the HTTP request.

Actual and committed spend can be created at any level. You are responsible to create data at the level that is relevant for your campaign and your business processes. For example, you can create data at the following levels:

- Campaign level
- Campaign and spend level
- Campaign and spend item level

CampaignActual Meta Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Edm Core Type</th>
<th>Maximum Length</th>
<th>Mandatory</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>SourceID</td>
<td>The source ID indicates the origin of the spend information.</td>
<td>Edm.String</td>
<td>30</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>CampaignID</td>
<td>Campaigns have been created in the Campaigns, Programs, or Marketing Plans applications.</td>
<td>Edm.String</td>
<td>10</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>SpendType</td>
<td>Spend types have been defined in the Spend Type configuration application.</td>
<td>Edm.String</td>
<td>10</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
<td>Edm Core Type</td>
<td>Maximum Length</td>
<td>Mandatory</td>
<td>Key</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>----------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>SpendItemID</td>
<td>If specified, the spend item ID must exist in the campaign and the spend type must match. If no spend type is specified, the spend type will be derived from the spend item of the campaign.</td>
<td>Edm.String</td>
<td>10</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>ReferenceDate</td>
<td>The date that is used for currency conversion. The reference date must be a valid date in the following format “YYYY-MM-DDT00:00:00”.</td>
<td>Edm.DateTime</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>WBSElementID</td>
<td>The WBS Element ID is only used internally by SAP</td>
<td>Edm.String</td>
<td>24</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Currency</td>
<td>Currency for the spend amount.</td>
<td>Edm.String</td>
<td>5</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>ActualSpend</td>
<td>Actual costs that have been incurred from marketing activities.</td>
<td>Edm.Decimal</td>
<td>15.2</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CommittedSpend</td>
<td>The amount of already known spend based on existing requests and orders for an item, for example, from a purchasing system.</td>
<td>Edm.Decimal</td>
<td>15.2</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Importing Actual Spend Data Using OData Service

For the input file, the following applies:

- If the values for a combination of source ID, campaign ID, spend type, spend item ID, and reference date are being uploaded for the first time, the corresponding values for this combination (amounts and currency) from the local file are uploaded. If they are being uploaded a subsequent time, the corresponding values for this combination are updated with the values from the new local file.
- A period (.) must be used to separate decimals in amounts.
- If a field is optional and you do not want to include a value for it in the file, you still need to insert a comma (,) in place of the excluded value.
- Actual and committed spend can be uploaded at any level. You are responsible for uploading data at the level that is relevant for your campaign and your business processes. For example, you can upload data at the following levels:
  - Campaign level
  - Campaign and spend level
  - Campaign and spend item level

If there is invalid data in the local file, no actual and committed spend amounts are uploaded and saved.

To upload actual spend data, the ImportHeader and CampaignActual entity types are required.

Example

- Request URL: `/sap/opu/odata/sap/cuan_actual_import_srv/ImportHeaders`
- HTTP Method: Post
- Example request:

```json
{
  "Id": "Example-01",
  "CampaignActuals": [
    {
      "SourceId": "",
      "CampaignId": "40144",
      "SpendType": "",
      "SpendItemId": "1",
      "ReferenceDate": "2015-11-30T00:00:00",
      "Currency": "USD",
      "ActualSpend": "50000.00",
      "CommittedSpend": "30000.00"
    },
    {
      "SourceId": "",
      "CampaignId": "40144",
      "SpendType": "",
      "SpendItemId": "2",
      "ReferenceDate": "2015-11-30T00:00:00",
      "Currency": "USD",
      "ActualSpend": "10000.00",
      "CommittedSpend": "10000.00"
    }
  ]
}
```

Success Message
After a successful upload of the actual spend data, the status of the HTTP response is 201 Created and the following success message is provided:

```xml
<?xml version="1.0" encoding="utf-8"?>
  <id>https://wdciwe1.wdf.sap.corp:11100/sap/opu/odata/sap/cuan_actual_import_srv/ImportHeaders('Example-01')</id>
  <title type="text">ImportHeaders('Example-01')</title>
  <updated>2015-12-01T13:44:21Z</updated>
  <link href="ImportHeaders('Example-01')" rel="self" title="ImportHeader"/>
  <link href="ImportHeaders('Example-01')/CampaignActuals" rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/CampaignActuals" type="application/atom+xml;type=feed" title="CampaignActuals">
    <m:inline/>
  </link>
  <content type="application/xml">
    <m:properties>
      <d:Id>Example-01</d:Id>
      <d:UserName>USERNAME</d:UserName>
      <d:SourceSystemType/>
      <d:SourceSystemId/>
    </m:properties>
  </content>
</entry>
```

**Error Handling**

If the request fails due to some errors, the complete HTTP request is rejected and errors must be corrected before uploading again. In case of errors, the status of the HTTP response is 400 Bad Request.

You can also find all messages using the Application Log application, entering CUAN_IMPORT as a category and CUAN_ACTUAL_IMPORT as a subcategory.

**Component for Incidents**

CEC-MKT-MSM

**5.8.2 Marketing Programs**

Public OData API (API_MKT_PROGRAM) for reading, updating and creating marketing program data.

**Entity Data Model**

The following diagram shows the entity data model for program and its media type spend.
## Technical Data

<table>
<thead>
<tr>
<th>Name of the Service</th>
<th>API_MKT_PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorizations</td>
<td>The following business catalog role is required: SAP_BCR_CEC_MKT_API_PGM_PC</td>
</tr>
<tr>
<td>Communication Scenario ID</td>
<td>SAP_COM_0320</td>
</tr>
<tr>
<td>Component for Incidents</td>
<td>CEC-MKT-PGM</td>
</tr>
</tbody>
</table>

**Note**

Not to be used for HTTP errors. For more information, see [HTTP Response Status Codes](#) [page 402].

<table>
<thead>
<tr>
<th>OData Version</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_PROGRAM_SRV/</td>
</tr>
<tr>
<td>Service Metadata URI</td>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_PROGRAM_SRV/$metadata</td>
</tr>
<tr>
<td>Field Extensibility Supported</td>
<td>Only the Program entity is enabled for extension.</td>
</tr>
</tbody>
</table>

## Technical Field Documentation

You can access detailed technical documentation for the API fields by downloading a metadata file in one of the following ways:

**i Note**

You can convert the XML file to an XML table to make it easier to read.

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>https://&lt;Server&gt;:&lt;Port&gt;/sap/opu/odata/SAP/API_MKT_PROGRAM_SRV;v=0002/$metadata?sap-documentation=all</td>
<td>Only for internal access. You need to provide the server and port names.</td>
</tr>
</tbody>
</table>
### Access Link

<table>
<thead>
<tr>
<th>Access Link</th>
<th>Remarks</th>
</tr>
</thead>
</table>
| Marketing - Programs Details Page | General access to the Details page of the service on SAP API Hub. One-time registration is required for first-time users.  
  1. On the Details page, click Download Specification and download as EDMX.  
  2. Specify which application you want to use to open the EDMX file type. |
| Marketing Programs API | General access to the Marketing Programs metadata file. One-time registration or logon is required. |

Please note the meaning of the following values in the file:

<table>
<thead>
<tr>
<th>Metadata Value in XML</th>
<th>Meaning When FALSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>sap:updatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>sap:creatable</td>
<td>read-only field</td>
</tr>
<tr>
<td>nullable</td>
<td>mandatory field</td>
</tr>
</tbody>
</table>

### 5.8.2.1 Basic Concepts

The public API for Marketing Programs API_MKT_PROGRAM_SRV supports operations on the Marketing Program Business Object.

### Processing Info

Batch requests are submitted as a single HTTP POST request to the $batch endpoint of a service as described in [OData-URI](#). The batch request must contain a header parameter content-type, specifying the value multipart/mixed and boundary=batch.

A PATCH (MERGE) request updates only the properties indicated in the request body and leaves everything untouched that was not mentioned. All properties that are not to be changed can be omitted. The transmitted properties are merged with the data already stored in SAP Marketing Cloud.

### Best Practices

You can view sample payloads and test the API at [https://api.sap.com/](https://api.sap.com/).
**Error Messages**

If the OData service is not accessible, for example due to missing authorization, or because the system is not available, a corresponding HTTP status code is returned.

If the OData service is accepted by the gateway component in SAP Marketing Cloud, the HTTP status code 201 or 204 is returned.

**Field Extensibility**

In addition to the pre-delivered attributes, you can add customer-specific fields using the *Custom Fields and Logic* app. The Program entity is the only entity that is enabled for extension. For more information, see *Custom Fields and Logic*.

Please enable the Data Source under UIs and Reports: `API_MKT_PROGRAM_SRV 0002`.

**5.8.2.2 Structure of OData Service API_MKT_PROGRAM**

This document describes the structure of the Public OData API `API_MKT_PROGRAM_SRV`. Make sure you read the Basic Concepts topic before you start.

**Entity Sets**

The Programs OData API provides the following entities:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>This entity contains program header data. Read and create functionalities are supported.</td>
<td><code>/Programs</code></td>
</tr>
<tr>
<td>HeaderProposedSpend</td>
<td>This entity provides information about the proposed spend entered at the program plan level. Only read functionalities are supported.</td>
<td><code>/HeaderProposedSpend</code></td>
</tr>
<tr>
<td>ProgramPhase</td>
<td>This entity provides information about the name and the validity period of the program phase. Only read functionalities are supported.</td>
<td><code>/ProgramPhases</code></td>
</tr>
<tr>
<td>Entity</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>MediaTypeSpend</td>
<td>This entity provides information about the different media types used for the program, their validity period, and their possible assignment to a program phase. Create, read, update functionalities are supported.</td>
<td>/MediaTypeSends</td>
</tr>
<tr>
<td>MediaTypeTimeSplit</td>
<td>This entity provides the proposed spend for each media type on a monthly level. Read and update functionalities are supported.</td>
<td>/MediaTypeTimeSplits</td>
</tr>
</tbody>
</table>

**Program**

**Resource Path:** /Programs

You can perform the following operations on the Program entity set:

**Operations on Program Entity Set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of programs.</td>
<td>/Programs</td>
</tr>
<tr>
<td></td>
<td>Get specific program information.</td>
<td>/Programs(&lt;MarketingProgramUUID&gt;)</td>
</tr>
<tr>
<td>POST</td>
<td>Create a program.</td>
<td>/Programs</td>
</tr>
</tbody>
</table>

**HeaderProposedSpend**

**Resource:** /HeaderProposedSpend

You can perform the following operations on the HeaderProposedSpend entity set:

**Operations on HeaderProposedSpend Entity Set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of header proposed spend.</td>
<td>/HeaderProposedSpend</td>
</tr>
</tbody>
</table>
### HTTP Method Description Path

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get</td>
<td>Get specific header proposed spend information.</td>
<td>/HeaderProposedSpends(&lt;MarketingProgramPlngDataUUID&gt;)</td>
</tr>
<tr>
<td></td>
<td>Get header proposed spend for a specific program.</td>
<td>/Programs(&lt;MarketingProgramUUID&gt;)/ProgramHeaderProposedSpend</td>
</tr>
</tbody>
</table>

### ProgramPhase

**Resource Path:** /ProgramPhases

You can perform the following operations on the ProgramPhases entity set:

**Operations on ProgramPhases Entity Set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of program phases.</td>
<td>/ProgramPhase</td>
</tr>
<tr>
<td></td>
<td>Get specific program phase information.</td>
<td>/ProgramPhases(&lt;MarketingProgramPhaseUUID&gt;)</td>
</tr>
<tr>
<td></td>
<td>Get program phases for a specific program.</td>
<td>/Programs(&lt;MarketingProgramUUID&gt;)/Phase</td>
</tr>
</tbody>
</table>

### MediaTypeSpend

**Resource Path:** /MediaTypeSpends

You can perform the following operations on the MediaTypeSpends entity set:

**Operations on MediaTypeSpends Entity Set**

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of media type spends.</td>
<td>/MediaTypeSpends</td>
</tr>
<tr>
<td></td>
<td>Get specific media type spend information.</td>
<td>/MediaTypeSpends(&lt;MarketingProgramMediaTypeUUID&gt;)</td>
</tr>
<tr>
<td></td>
<td>Get media type spends for a specific program.</td>
<td>/Programs(&lt;MarketingProgramUUID&gt;)/ProgramMediaTypeSpend</td>
</tr>
<tr>
<td>HTTP Method</td>
<td>Description</td>
<td>Path</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>PUT/PATCH/MERGE</td>
<td>Update specific media type spend.</td>
<td>/MediaTypeSpends(&lt;MarketingProgramMediaTypeUUID&gt;)</td>
</tr>
<tr>
<td>POST</td>
<td>Create media type spend for a specific program.</td>
<td>/MediaTypeSpends</td>
</tr>
</tbody>
</table>

### MediaTypeTimeSplit

**Resource Path:** /MediaTypeTimeSplits

You can perform the following operations on the MediaTypeTimeSplits entity set:

#### Operations on MediaTypeTimeSplits Entity Set

<table>
<thead>
<tr>
<th>HTTP Method</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>Get a list of media type splits.</td>
<td>/MediaTypeTimeSplits</td>
</tr>
<tr>
<td>GET</td>
<td>Get media type time split information for a specific year and month.</td>
<td>/MediaTypeTimeSplits(&lt;MarketingProgramMediaTypeUUID&gt;,&lt;Calendar-Year&gt;,&lt;Calendar-Month&gt;)</td>
</tr>
<tr>
<td>GET</td>
<td>Get media type time splits for a specific media type.</td>
<td>/MediaTypeSpends(&lt;MarketingProgramMediaTypeUUID&gt;)/TimeSplit</td>
</tr>
<tr>
<td>PUT/PATCH/MERGE</td>
<td>Update media type time splits for a specific media type.</td>
<td>/MediaTypeTimeSplits(&lt;MarketingProgramMediaTypeUUID&gt;,&lt;Calendar-Year&gt;,&lt;Calendar-Month&gt;)</td>
</tr>
</tbody>
</table>
5.8.2.3 Payload Examples

The following examples show how you can use the Programs API.

Update Monthly Proposed Spend

**MERGE and PATCH**

The following example is a request without batch:

```
Sample Code

MediaTypeTimeSplits(MarketingProgramMediaTypeUUID=guid'6C0B84B7-5523-1EE7-A7B9-2CDC0AF8FECB',CalendarYear='2041',CalendarMonth='01')
{
    "ProposedMktgSpendAmt" : "3000.00",
    "MarketingProgramCurrency" : "USD"
}
```

The following example is a request with batch:

```
Sample Code

--batch_d3de-e5db-e865
Content-Type: multipart/mixed; boundary=changeset_5cda-58b3-eea0
--changeset_5cda-58b3-eea0
Content-Type: application/http
Content-Transfer-Encoding: binary
MERGE MEDIATypeTimeSplits(MarketingProgramMediaTypeUUID=guid'6C0B84B7-5523-1EE7-A7B9-2CDC0AF8FECB',CalendarYear='2041',CalendarMonth='01') HTTP/1.1
sap-contextid-accept: header
Accept: application/json
Accept-Language: en
DataServiceVersion: 2.0
MaxDataServiceVersion: 2.0
sap-cancel-on-close: true
Content-Type: application/json
Content-Length: 250
{
    "ProposedMktgSpendAmt" : "10000.00",
    "MarketingProgramCurrency" : "USD"
}
--changeset_5cda-58b3-eea0--
--batch_d3de-e5db-e865--
```

**MERGE**

The following example is a request with batch:

```
Sample Code

--batch_d3de-e5db-e865
Content-Type: multipart/mixed; boundary=changeset_5cda-58b3-eea0
--changeset_5cda-58b3-eea0
```
PUT

The following example is a request without batch:

**Sample Code**

```json
{
   "MarketingProgramMediaTypeUUID" : "6C0B84B7-5523-1EE7-A7B9-2CDC0AF8FECB",
   "MarketingProgramUUID" : "6C0B84B7-5523-1EE7-A7B9-2CDC0AF8FECB",
   "CalendarYear" : "2041",
   "CalendarMonth" : "01",
   "ProposedMktgSpendAmt" : "30000.00",
   "MarketingProgramCurrency" : "USD"
}
```
Create Program

POST

The following example is a request without batch:

```json
{  "MarketingProgramName" : "New Product Launch A",  "MarketingProgramMarketingArea" : "GLOBAL",  "MarketingProgramValidFromDate" : "2041-01-01T00:00:00",  "MarketingProgramValidToDate" : "2041-02-06T00:00:00",  "MarketingProgramCurrency" : "USD" }
```

Create MediaTypeSpend

POST

The following example is a request without batch:

```json
{  "MarketingProgramUUID" : "6c0b84b7-5523-1ed8-accc-2c4f6f612f18",  "MarketingProgramMediaType" : "TV",  "MktgProgramMediaTypeStartDate" : "2018-09-08T00:00:00",  "MktgProgramMediaTypeEndDate" : "2018-09-20T00:00:00" }
```

Update MediaTypeSpend

MERGE and GET

The following example is a request with batch:

```text
--batch_d3de-e5db-e865
Content-Type: multipart/mixed; boundary=changeset_5cda-58b3-eea0
--changeset_5cda-58b3-eea0
Content-Type: application/http
Content-Transfer-Encoding: binary
MERGE MediaTypeSpends(MarketingProgramMediaTypeUUID=guid'6C0B84B7-5523-1EE7-A7B9-2C4C0AF6ECB') HTTP/1.1
sap-contextid-accept: header
Accept: application/json
Accept-Language: en
DataServiceVersion: 2.0
MaxDataServiceVersion: 2.0
sap-cancel-on-close: true
```
### MERGE and PATCH

The following example is a request without batch:

```json
{  
  "MarketingProgramMediaTypeId": "RADIO",
  "MktgProgramMediaTypeId": "2041-01-03T00:00:00",
  "MktgProgramMediaTypeIdEndDate": "2041-02-07T00:00:00"
}
```

### PUT

The following example is a request without batch:

```json
{  
  "MarketingProgramMediaUUID": "6c0b84b7-5523-1ee7-a7b9-2cdc0af8fecb",
  "MarketingProgramUUID": "6c0b84b7-5523-1ee7-a7b9-2cdc0af8ecb",
  "MarketingProgramMediaTypeId": "RADIO",
  "MktgProgramMediaTypeId": "2041-01-03T00:00:00",
  "MktgProgramMediaTypeIdEndDate": "2041-02-07T00:00:00",
  "MarketingProgramPhaseUUID": "6c0b84b7-5523-1ee7-a7b9-2cdc0af8decb"
}
```

### Get MediaTypeSpend

#### GET

The following example is with batch:

```json
{  
  "MarketingProgramMediaUUID": "6c0b84b7-5523-1ee7-a7b9-2cdc0af8fecb",
  "MarketingProgramUUID": "6c0b84b7-5523-1ee7-a7b9-2cdc0af8ecb",
  "MarketingProgramMediaTypeId": "RADIO",
  "MktgProgramMediaTypeId": "2041-01-03T00:00:00",
  "MktgProgramMediaTypeIdEndDate": "2041-02-07T00:00:00",
  "MarketingProgramPhaseUUID": "6c0b84b7-5523-1ee7-a7b9-2cdc0af8decb"
}
```
Get all MediaTypeSpend for a Phase

GET

The following is an example without batch:

```
{
  "d": {
    "results": [
      {
        "MarketingProgramMediaTypeUUID": "01234567-89ab-cdef-0123-456789abedef",
        "MarketingProgramUUID": "01234567-89ab-cdef-0123-456789abedef",
        "MarketingProgramMediaType": "string",
        "MediaTypeName": "string",
        "MktgProgramMediaTypeStartDate": "/Date(1492098664000)/",
        "MktgProgramMediaTypeEndDate": "/Date(1492098664000)/",
        "MarketingProgramPhaseUUID": "01234567-89ab-cdef-0123-456789abedef",
        "MarketingProgramPhaseName": "string",
        "TimeSplit": {
          "results": [
            {
              "MarketingProgramMediaTypeUUID": "01234567-89ab-cdef-0123-456789abedef",
              "MarketingProgramUUID": "01234567-89ab-cdef-0123-456789abedef",
```
5.9 Custom Business Objects

5.9.1 Import of Data into Custom Business Object

Import data into a Custom Business Object by using an OData service

Prerequisites

- You are assigned the following catalog roles:
  - SAP_BCR_CORE_EXT
  - SAP_BCR_CORE_COM
- You have created a communication user for your custom communication scenario.

Context

When creating a custom business object you have the possibility to generate an OData service. This OData service can be assigned to a custom communication scenario. With the custom communication scenario a communication arrangement can be setup. For more information, see How to Create Custom Business Objects. Once you have a communication user assigned to this communication arrangement, the required data can be imported into the custom business object.

Call OData Service

You find the URL of your Custom Business Object’s OData service in your communication arrangement. You can call the metadata document by adding $metadata through the URL. You insert data by using the POST method. To update data use the PATCH method and to delete data use the DELETE method. If you want to upload multiple data sets send a batch request.
5.10 Business Users

The following synchronous inbound SOAP services are provided for setting up business users in SAP Marketing Cloud.

- MANAGEBUSINESSUSERIN
- QUERYBUSINESSUSERIN

5.10.1 Business User

**Technical name:** MANAGEBUSINESSUSERIN

This synchronous inbound SOAP service enables you to create, update, and delete business users from your external data sources, such as an identity management system. Deleting business users doesn’t mean you’ve actually deleted them yet. The user assigned to the business user is deleted and the MarkedForArchivingIndicator has been set. This is the prerequisite for the ILM process that physically deletes business users.

You can assign business role IDs to the users at the node Role.

We recommend processing blocks of 10 users to a maximum of 100 users. Otherwise, the target system may time out.

This service supports the business users Employee (BUP003) and Agency User (AGC001).

⚠️ **Caution**

This service directly influences the data and authorizations of business users. Changes are effective immediately in the target system.

Make sure to maintain only those authorizations that are intended for what a user needs to do in the system. Not doing so can cause security issues.

### Service Request

The service is structured into the following two top-level nodes:

- **Message Header** (MessageHeader)
  
  The service message header is not in use in this service.

- **Business User** (BusinessUser)
  
  The service nodes contain the service’s business data.

ℹ️ **Note**

In the following table, attributes are marked in blue.
<table>
<thead>
<tr>
<th>Node or Field</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>PersonExternalID</td>
<td>Person External ID</td>
<td>60</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>Mandatory for business partner category role BUP003 (Employee) at creation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PersonID</td>
<td>Person ID</td>
<td>10</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>At least one of the person IDs is mandatory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PersonUUID</td>
<td>Person UUID</td>
<td>36</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>At least one of the person IDs is mandatory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BusinessPartnerRoleCode</td>
<td>Business Partner Role Code</td>
<td>6</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>Only business partner role code BUP003 (Employee) is supported.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field is mandatory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------------------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>MarkedForArchivingIndicator</td>
<td>Mark for Archiving</td>
<td></td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>Set to <strong>True</strong>:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The business user will be archived</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The <code>actionCode</code> [1] for User must be set to 02</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set to <strong>False</strong>:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The business user will be re-activated (Undo Archive)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The <code>actionCode</code> [1] for User must be set to 02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ValidityPeriod</td>
<td>StartDate</td>
<td>Format: YYYY-MM-DD</td>
<td>0..1</td>
</tr>
<tr>
<td>Cardinality: 0..1</td>
<td></td>
<td>By default, the system date is set.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EndDate</td>
<td>Format: YYYY-MM-DD</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By default, 9999-12-31 is set.</td>
<td></td>
</tr>
<tr>
<td>PersonalInformation</td>
<td>FormOfAddress</td>
<td>Form of address 4</td>
<td>0..1</td>
</tr>
<tr>
<td>Cardinality: 0..1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FirstName</td>
<td>First name 40</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>LastName</td>
<td>Last name 40</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This field is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PersonFullName</td>
<td>Person full name 80</td>
<td>0..1</td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>AcademicTitle</td>
<td>Academic title</td>
<td>4</td>
<td>0..1</td>
</tr>
<tr>
<td>CorrespondenceLanguage</td>
<td>Correspondence language</td>
<td>9</td>
<td>0..1</td>
</tr>
<tr>
<td>MiddleName</td>
<td>Middle name</td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>AdditionalLastName</td>
<td>Additional last name</td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>BirthName</td>
<td>Birth name</td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>NickName</td>
<td>Nick name</td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>Initials</td>
<td>Initials</td>
<td>10</td>
<td>0..1</td>
</tr>
<tr>
<td>AcademicSecondTitle</td>
<td>Academic second title</td>
<td>4</td>
<td>0..1</td>
</tr>
<tr>
<td>LastNamePrefix</td>
<td>Last name prefix</td>
<td>4</td>
<td>0..1</td>
</tr>
<tr>
<td>LastNameSecondPrefix</td>
<td>Last name second prefix</td>
<td>4</td>
<td>0..1</td>
</tr>
<tr>
<td>NameSupplement</td>
<td>Name supplement</td>
<td>4</td>
<td>0..1</td>
</tr>
<tr>
<td><strong>actionCode</strong></td>
<td>You can use the following values:</td>
<td>2</td>
<td>optional</td>
</tr>
<tr>
<td></td>
<td>● 01 - Create</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 02 - Update</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 03 - Delete</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mandatory if [2] is not set and personal information data are given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>User</strong> (only for Cloud)</td>
<td><strong>UserName</strong></td>
<td>User name/Alias</td>
<td>40</td>
</tr>
<tr>
<td><strong>Cardinality:</strong></td>
<td><strong>LogonLanguageCode</strong></td>
<td>Logon language</td>
<td>9</td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>DateFormatCode</td>
<td>You can use the following values:</td>
<td>2</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>• 1 - DD.MM.YYYY (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 - MM/DD/YYYY (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3 - MM-DD-YYYY (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 4 - YYYY.MM.DD (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 5 - YYYY/MM/DD (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 6 - YYYY-MM-DD (Gregorian Date, ISO 8601)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 7 - GYY.MM.DD (Japanese Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 8 - GYY/MM/DD (Japanese Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 9 - GYY-MM-DD (Japanese Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A - YYYY/MM/DD (Islamic Date 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• B - YYYY/MM/DD (Islamic Date 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>C</td>
<td>YYYY/MM/DD D (Iranian Date)</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>DecimalFormatCode</td>
<td>You can use the following values:</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>● 1.234,567.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● X - 1,234,567.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Y - 1,234 567.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TimeZoneCode</td>
<td>Time zone</td>
<td>10</td>
<td>0.1</td>
</tr>
<tr>
<td>TimeFormatCode</td>
<td>You can use the following values:</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>● 0 - 24 Hour Format (Example: 12:05:10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 1 - 12 Hour Format (Example: 12:05:10 PM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 2 - 12 Hour Format (Example: 12:05:10 pm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 3 - Hours from 0 to 11 (Example: 00:05:10 PM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 4 - Hours from 0 to 11 (Example: 00:05:10 pm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LockedIndicator</td>
<td>Locked indicator</td>
<td>5</td>
<td>0.1</td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ValidityPeriod StartDate</td>
<td>Format: YYYY-MM-DD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cardinality: 1</td>
<td>If no start date is maintained for the User, the StartDate for the BusinessUser is entered.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EndDate</td>
<td>Format: YYYY-MM-DD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If no EndDate is maintained, it is set to 9999-12-31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role RoleName</td>
<td>Role name</td>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>Cardinality: 0..unbounded</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>actionCode</td>
<td>You can use the following values: 01 - Create, 03 - Delete</td>
<td>2</td>
<td>optional</td>
</tr>
<tr>
<td></td>
<td>Mandatory if [6] is not set and role name data is given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>actionCode</td>
<td>You can use the following values: 01 - Create, 02 - Update, 03 - Delete</td>
<td>2</td>
<td>optional</td>
</tr>
<tr>
<td></td>
<td>Mandatory if [3] is not set and user data (UserName and Role) are given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[6] roleListCompleteTransmissionIndicator</td>
<td>CTI for the Role node</td>
<td></td>
<td>optional</td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------------------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>UserAssignment</td>
<td>User ID</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td><strong>(actionCode</strong></td>
<td>You can use the following values:</td>
<td>2</td>
<td>optional</td>
</tr>
<tr>
<td></td>
<td>● 01 - Create</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 02 - Update</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 03 - Delete</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mandatory if [4] is not set and User ID data are given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WorkplaceInformation</td>
<td>Email address</td>
<td>241</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>(PhoneNumber)</strong></td>
<td>Phone type</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>● B - Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● C - Cell</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Country dialing code</td>
<td>10</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Used for both phone types.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phone number area code</td>
<td>10</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Used for phone type B only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phone number subscriber ID</td>
<td>30</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Used for both phone types.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phone number extension</td>
<td>10</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Used for phone type B only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| **actionCode** | You can use the following values:  
  - 01 - Create  
  - 02 - Update  
  - 03 - Delete  
  Mandatory if [7] is not set and phone data is given. | 2 | optional |
| FunctionalTitleName | Functional title name | 40 | 0..1 |
| Department | Department name | 40 | 0..1 |
| RoomNumber | Room number | 10 | 0..1 |
| Building | Building name | 10 | 0..1 |
| **actionCode** | You can use the following values:  
  - 01 - Create  
  - 02 - Update  
  - 03 - Delete  
  Mandatory if [5] is not set and workplace information data is given. | 2 | optional |
| [7] phoneInformationListCompleteTransmissionIndicator | CTI for the PhoneInformation node |  | optional |
| [1] actionCode | You can use the following values:  
  - 01 - Create  
  - 02 - Update  
  - 03 - Delete  
  This attribute is mandatory. | 2 | optional |
<p>| [2] personalInformationListCompleteTransmissionIndicator | CTI for the PersonalInformation node |  | optional |</p>
<table>
<thead>
<tr>
<th>Node or Field</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>userListCompleteTransmissionIndicator</td>
<td>CTI for the User node</td>
<td></td>
<td>optional</td>
</tr>
<tr>
<td>userAssignmentListCompleteTransmissionIndicator</td>
<td>CTI for the UserAssignment node</td>
<td></td>
<td>optional</td>
</tr>
<tr>
<td>workplaceInformationListCompleteTransmissionIndicator</td>
<td>CTI for the WorkplaceInformation node</td>
<td></td>
<td>optional</td>
</tr>
</tbody>
</table>

Sample Payload

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:aba="http://sap.com/xi/ABA">
    <soapenv:Header/>
    <soapenv:Body>
        <aba:BusinessUserBundleMaintainRequest_sync>
            <!--1 or more repetitions:-->
            <BusinessUser actionCode="01"
                personalInformationListCompleteTransmissionIndicator="false"
                userListCompleteTransmissionIndicator="false"
                userAssignmentListCompleteTransmissionIndicator="false"
                workplaceInformationListCompleteTransmissionIndicator="false">
                <PersonExternalID>Muster01</PersonExternalID>
                <BusinessPartnerRoleCode>BUP003</BusinessPartnerRoleCode>
                <PersonalInformation actionCode="01">
                    <FormOfAddress>0002</FormOfAddress>
                    <FirstName>Max</FirstName>
                    <LastName>Muster</LastName>
                    <PersonFullName>Prof. Dr. Max Muster</PersonFullName>
                    <AcademicTitle>0002</AcademicTitle>
                    <CorrespondenceLanguage>D</CorrespondenceLanguage>
                    <MiddleName>Michael</MiddleName>
                    <AcademicSecondTitle>0001</AcademicSecondTitle>
                    <BirthName>Milli</BirthName>
                    <NickName>Maxi</NickName>
                    <LastNamePrefix>0001</LastNamePrefix>
                </PersonalInformation>
                <User actionCode="01"
                    roleListCompleteTransmissionIndicator="false">
                    <!--Optional:-->
                    <UserName>MAXMUSTER01</UserName>
                    <LogonLanguageCode>DE</LogonLanguageCode>
                    <LockedIndicator>false</LockedIndicator>
                    <Role actionCode="01">
                        <RoleName>SAP_BR_MANAGER</RoleName>
                    </Role>
                    <Role actionCode="01">
                        <RoleName>SAP_BR_BPC_EXPERT</RoleName>
                    </Role>
                </User>
                <WorkplaceInformation actionCode="01">
                    <EmailAddress>Max.Muster01@Test.com</EmailAddress>
                </WorkplaceInformation>
            </BusinessUser>
        </aba:BusinessUserBundleMaintainRequest_sync>
    </soapenv:Body>
</soapenv:Envelope>
```
<PhoneInformation actionCode="01">
  <CountryDialingCode>+49</CountryDialingCode>
  <PhoneNumberSubscriberID>0160123456</PhoneNumberSubscriberID>
</PhoneInformation>

<PhoneInformation actionCode="01">
  <CountryDialingCode>+49</CountryDialingCode>
  <PhoneNumberAreaID>06227</PhoneNumberAreaID>
  <PhoneNumberSubscriberID>7</PhoneNumberSubscriberID>
  <PhoneNumberExtension>12345</PhoneNumberExtension>
</PhoneInformation>

<FunctionalTitleName>TESTER</FunctionalTitleName>
<Department>QUALITY</Department>
<RoomNumber>C1.23</RoomNumber>
<Building>WDF01</Building>
</WorkplaceInformation>
</BusinessUser>

<BusinessUser actionCode="01" personalInformationListCompleteTransmissionIndicator="false" userAssignmentListCompleteTransmissionIndicator="false" workplaceInformationListCompleteTransmissionIndicator="false">
  <PersonExternalID>MINIMUSTER01</PersonExternalID>
  <BusinessPartnerRoleCode>BUP003</BusinessPartnerRoleCode>
  <PersonalInformation actionCode="01">
    <FormOfAddress>0001</FormOfAddress>
    <FirstName>Mini</FirstName>
    <LastName>Muster</LastName>
    <PersonFullName>Prof. Dr. Mini Muster</PersonFullName>
    <AcademicTitle>0002</AcademicTitle>
    <CorrespondenceLanguage>D</CorrespondenceLanguage>
    <AcademicSecondTitle>0001</AcademicSecondTitle>
    <LastNamePrefix>0001</LastNamePrefix>
  </PersonalInformation>
  <User actionCode="01">
    <UserName>MINIMUSTER01</UserName>
    <LogonLanguageCode>DE</LogonLanguageCode>
    <LockedIndicator>false</LockedIndicator>
    <Role actionCode="01">
      <RoleName>SAP_BR_MANAGER</RoleName>
    </Role>
    <Role actionCode="01">
      <RoleName>SAP_BR_BPC_EXPERT</RoleName>
    </Role>
  </User>
  <WorkplaceInformation actionCode="01" phoneInformationListCompleteTransmissionIndicator="true">
    <EmailAddress>Mini.Muster01@Test.com</EmailAddress>
    <PhoneInformation actionCode="01">
      <CountryDialingCode>+49</CountryDialingCode>
      <PhoneNumberSubscriberID>0160123456</PhoneNumberSubscriberID>
    </PhoneInformation>
  </WorkplaceInformation>
</BusinessUser>
Service Response

You receive a confirmation message response for each bundle of business users you send. If the service request is processed, a confirmation message is sent. This contain crucial information provided by the fields PersonExternalID, PersonID, and PersonUUID for each business user of the bundle.

The following table provides an overview of the response structure for the BusinessUser service node.

<table>
<thead>
<tr>
<th>Field or Node</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>PersonExternalID</td>
<td>Person External ID</td>
<td>60</td>
<td>0..1</td>
</tr>
<tr>
<td>PersonID</td>
<td>Person ID</td>
<td>10</td>
<td>0..1</td>
</tr>
<tr>
<td>PersonUUID</td>
<td>Person UUID</td>
<td>36</td>
<td>0..1</td>
</tr>
<tr>
<td>Log BusinessDocumentProcessingResultCode</td>
<td>Not in use</td>
<td>2</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>MaximumLogItemSeverityCode</td>
<td>If several messages are stored for a business user, the maximum of all received severity codes the most severe level will be shown.</td>
<td>1</td>
</tr>
<tr>
<td>Item TypeID</td>
<td>Message number</td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>CategoryCode</td>
<td>Not in use</td>
<td>15</td>
<td>0..1</td>
</tr>
<tr>
<td>SeverityCode</td>
<td>Severity code definition:</td>
<td>1</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>● 1 - Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 2 - Warning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 3 - Error</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Field or Node | Description | Maximum Field Length | Cardinality |
---|---|---|---|
Note | Contains the message texts. | 200 | 1 |
WebURI | Not in use | 0..1 |

### Error Codes

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| 104 | Combination of Ext. ID &1 and ID &2 inconsistent. Processing cancelled.  
PersonExternalID and PersonID have a 1:1 relationship.  
Enter the PersonID that corresponds with the PersonExternalID. |
| 105 | Combination of Ext. ID &1 and UUID &2 inconsistent.  
PersonExternalID and PersonUUID have a 1:1 relationship.  
Enter the PersonUUID that corresponds with the PersonExternalID. |

### Constraints

This service does not support:
- Service Performer (BBP005) business users
- Freelancer (BBP010) business users

### Additional Information

For more information about the API, choose the Details tab on the SAP API Business Hub.

### 5.10.2 Business User - Read

Technical name: QUERYBUSINESSUSERIN
This synchronous inbound SOAP service enables you to provision users from your external data source such as an identity management system.

**Service Request**

The service is structured into the following two top-level nodes:

*B我们知道* (BusinessUser)

The service node contains the search parameters.

### Nodes and Fields for the BusinessUser Node

<table>
<thead>
<tr>
<th>Field or Node</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>PersonExternalIdInterval</td>
<td>IntervalBoundaryTypeCode, You can use the following values:</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>- 1: Equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No upper boundary value must be set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 3: Between</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is mandatory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 6: Lower than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 7: Lower equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 8: Greater than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 9: Greater equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field is mandatory if LowerBoundaryPersonExtId is set.</td>
<td></td>
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</tr>
<tr>
<td>LowerBoundaryPersonExtId</td>
<td>Employee name</td>
<td>60</td>
<td>.1</td>
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<td>--------------------------------------------------</td>
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<tr>
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<td>60</td>
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<td>You can use the following values:</td>
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</tr>
<tr>
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<td>● 1 - Equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No upper boundary value must be set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 3 - Between</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is mandatory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 6 - Lower than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 7 - Lower equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 8 - Greater than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 9 - Greater equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field is mandatory if</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LowerBoundaryPersonId is set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LowerBoundaryPersonId</td>
<td></td>
<td>10</td>
<td>0..1</td>
</tr>
<tr>
<td>UpperBoundaryPersonId</td>
<td></td>
<td>10</td>
<td>0..1</td>
</tr>
<tr>
<td>Field or Node</td>
<td>Description</td>
<td>Maximum Field Length</td>
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</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| BusinessPartnerRoleCodeInterval | You can use the following values:  
- 1 - Equal  
  No upper boundary value must be set.  
- 3 - Between  
  Upper boundary value is mandatory.  
- 6 - Lower than  
  Upper boundary value is optional.  
- 7 - Lower equal  
  Upper boundary value is optional.  
- 8 - Greater than  
  Upper boundary value is optional.  
- 9 - Greater equal  
  Upper boundary value is optional.  
This field is mandatory if LowerBoundaryBusinessPartnerRoleCode is set. | 1 | 1 |
| LowerBoundaryBusinessPartnerRoleCode | Only business partner role code BUP003 (Employee) is supported. | 6 | 0..1 |
| MarketForArchivingIndicator | You can use the following values:  
- True  
- False | 1 | 1 |
<p>| LowerBoundaryMarkedForArchivingIndicator | | 1 | 0..1 |</p>
<table>
<thead>
<tr>
<th>Field or Node</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>UserIdInterval</td>
<td>IntervalBoundaryTypeCode</td>
<td>You can use the following values:</td>
<td>1</td>
</tr>
<tr>
<td>Cardinality: 0..unbounded</td>
<td></td>
<td>● 1 - Equal No upper boundary value must be set.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● 3 - Between Upper boundary value is mandatory.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● 6 - Lower than Upper boundary value is optional.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● 7 - Lower equal Upper boundary value is optional.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● 8 - Greater than Upper boundary value is optional.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● 9 - Greater equal Upper boundary value is optional.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>This field is mandatory if <code>LowerBoundaryUserId</code> is set.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>0..1</td>
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<tr>
<td></td>
<td></td>
<td>12</td>
<td>0..1</td>
</tr>
<tr>
<td>Field or Node</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>UserNameInterval</td>
<td>IntervalBoundaryTypeCode</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Cardinality: 0..unbounded</td>
<td>You can use the following values:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 1 - Equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No upper boundary value must be set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 3 - Between</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is mandatory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 6 - Lower than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 7 - Lower equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 8 - Greater than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 9 - Greater equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field is mandatory if LowerBoundaryUserName is set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LowerBoundaryUserName Name</td>
<td>40</td>
<td>0..1</td>
<td></td>
</tr>
<tr>
<td>UpperBoundaryUserName Name</td>
<td>40</td>
<td>0..1</td>
<td></td>
</tr>
<tr>
<td>Field or Node</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>FirstNameInterval</strong></td>
<td>IntervalBoundaryTypeCode</td>
<td>You can use the following values:</td>
<td>1</td>
</tr>
</tbody>
</table>
| Cardinality: 0..unbounded | | - 1: Equal  
No upper boundary value must be set. | | |
| | | - 3: Between  
Upper boundary value is mandatory. | | |
| | | - 6: Lower than  
Upper boundary value is optional. | | |
| | | - 7: Lower equal  
Upper boundary value is optional. | | |
| | | - 8: Greater than  
Upper boundary value is optional. | | |
| | | - 9: Greater equal  
Upper boundary value is optional. | | |
| | | This field is mandatory if  
LowerBoundaryFirstName is set. | | |

<table>
<thead>
<tr>
<th>Field or Node</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LowerBoundaryFirstName</strong></td>
<td></td>
<td>35</td>
<td>0..1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field or Node</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UpperBoundaryFirstName</strong></td>
<td></td>
<td>35</td>
<td>0..1</td>
</tr>
<tr>
<td>Field or Node</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>LastNameInterval</td>
<td>You can use the following values:</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>• 1 - Equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No upper boundary value must be set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3 - Between</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is mandatory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 6 - Lower than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 7 - Lower equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 8 - Greater than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 9 - Greater equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper boundary value is optional.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This field is mandatory</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>if LowerBoundaryLastName is set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LowerBoundaryLastName</td>
<td></td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>UpperBoundaryLastName</td>
<td></td>
<td>40</td>
<td>0..1</td>
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<tr>
<td>EmailAddressInterval</td>
<td>IntervalBoundaryTypeCode</td>
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<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LowerBoundaryEmailAddress</td>
<td>241</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UpperBoundaryEmailAddress</td>
<td>241</td>
<td>0..1</td>
</tr>
</tbody>
</table>

**Query Processing Conditions (QueryProcessingConditions)**

The service nodes contain the service’s business data.
Fields for the QueryProcessingConditions Node

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>QueryHitsTotalNumberIndicator</td>
<td>You can use the following values:</td>
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</tr>
<tr>
<td></td>
<td>● True</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● False (default)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QueryHitsMaximumNumberValue</td>
<td>Enter the maximum number of hits. If no value is entered, the default is automatically set to 1000.</td>
<td>9999999999</td>
<td>0..1</td>
</tr>
<tr>
<td>QueryHitsUnlimitedIndicator</td>
<td>You can use the following values:</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>● True</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● False (default)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set True to get all data based on selection criteria.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QueryLastReturnedObjectID</td>
<td>You can use the following values:</td>
<td></td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>● True</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● False (default)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If QueryHitsMaximumNumberValue is set and more data is available, you can set this value to True.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample Payload

```xml
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:aba="http://sap.com/xi/ABA">
  <soapenv:Header/>
  <soapenv:Body>
    <aba:BusinessUserSimpleByElementsQuery_sync>
      <BusinessUser>
        <PersonIDInterval>
          <IntervalBoundaryTypeCode>1</IntervalBoundaryTypeCode>
          <!--Optional:-->
          <LowerBoundaryPersonID>9980035943</LowerBoundaryPersonID>
          <!--Optional:-->
        </PersonIDInterval>
        <BusinessPartnerRoleCodeInterval>
          <IntervalBoundaryTypeCode>1</IntervalBoundaryTypeCode>
          <!--Optional:-->
          <LowerBoundaryBusinessPartnerRoleCode>bup003</LowerBoundaryBusinessPartnerRoleCode>
          <!--Optional:-->
        </BusinessPartnerRoleCodeInterval>
      </BusinessUser>
      <QueryProcessingConditions>
        <!--Optional:-->
      </QueryProcessingConditions>
    </aba:BusinessUserSimpleByElementsQuery_sync>
  </soapenv:Body>
</soapenv:Envelope>
```
### Business User (BusinessUser)

**i Note**
The fields below the node `User` will be filled.

<table>
<thead>
<tr>
<th>Node or Field</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
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</thead>
<tbody>
<tr>
<td>PersonExternalID</td>
<td>Person External ID</td>
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<td>0..1</td>
</tr>
<tr>
<td>PersonID</td>
<td>Person ID</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>PersonUUID</td>
<td>Person UUID</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>BusinessPartnerRoleCode</td>
<td>Business Partner Role Code</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>MarkedForArchivingIndicator</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicates Marked for Archiving</td>
<td>True, False</td>
<td>1</td>
</tr>
<tr>
<td>ValidityPeriod</td>
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</tr>
<tr>
<td>StartDate</td>
<td>Format: YYYY-MM-DD</td>
<td>1</td>
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</tr>
<tr>
<td>EndDate</td>
<td>Format: YYYY-MM-DD</td>
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<td>PersonalInformation</td>
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<td>Form of address</td>
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<td>0..1</td>
</tr>
<tr>
<td>FirstName</td>
<td>First name</td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>LastName</td>
<td>Last name</td>
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<td>0..1</td>
</tr>
<tr>
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<td>Person full name</td>
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<td>0..1</td>
</tr>
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<td>Academic title</td>
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</tr>
<tr>
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<td>Correspondence language</td>
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<td>0..1</td>
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<td>Node or Field</td>
<td>Description</td>
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<td>Cardinality</td>
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<td>----------------------</td>
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</tr>
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<td>Middle name</td>
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</tr>
<tr>
<td>AdditionalLastName</td>
<td>Additional last name</td>
<td>40</td>
<td>0..1</td>
</tr>
<tr>
<td>BirthName</td>
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<tr>
<td>Initials</td>
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<td>0..1</td>
</tr>
<tr>
<td>AcademicSecondTitle</td>
<td>Academic second title</td>
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<td>0..1</td>
</tr>
<tr>
<td>LastNamePrefix</td>
<td>Last name prefix</td>
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<td>0..1</td>
</tr>
<tr>
<td>LastNameSecondPrefix</td>
<td>Last name second prefix</td>
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<td>0..1</td>
</tr>
<tr>
<td>NameSupplement</td>
<td>Name supplement</td>
<td>4</td>
<td>0..1</td>
</tr>
</tbody>
</table>

**User**

<p>| UserID                     | User ID                   | 12                   | 1           |
| UserName                   | User name/Alias           | 40                   | 1           |
| LogonLanguageCode          | Logon language            | 9                    | 0..1        |</p>
<table>
<thead>
<tr>
<th>Node or Field</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>DateFormatCode</td>
<td>You can use the following values:</td>
<td>2</td>
<td>0..1</td>
</tr>
<tr>
<td></td>
<td>● 1 - DD.MM.YYYY (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 2 - MM/DD/YYYY (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 3 - MM-DD-YYYY (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 4 - YYYY.MM/DD (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 5 - YYYY/MM/DD (Gregorian Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 6 - YYYY-MM-DD (Gregorian Date, ISO 8601)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 7 - GYY.MM.DD (Japanese Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 8 - GYY/MM/DD (Japanese Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 9 - GYY-MM-DD (Japanese Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● A - YYYY/MM/DD D (Islamic Date 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● B - YYYY/MM/DD D (Islamic Date 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>C - YYYY/MM/D D (Iranian Date)</td>
<td>●</td>
<td>376</td>
<td>449</td>
</tr>
<tr>
<td>DecimalFormatCode</td>
<td>You can use the following values:</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>● 1.234.567.89</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>● X - 1.234,567.89</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>● Y - 1.234 567,89</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>TimeZoneCode</td>
<td>Time zone</td>
<td>10</td>
<td>0.1</td>
</tr>
<tr>
<td>TimeFormatCode</td>
<td>You can use the following values:</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>● 0 - 24 Hour Format (Example: 12:05:10)</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>● 1 - 12 Hour Format (Example: 12:05:10 PM)</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>● 2 - 12 Hour Format (Example: 12:05:10 pm)</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>● 3 - Hours from 0 to 11 (Example: 00:05:10 PM)</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>● 4 - Hours from 0 to 11 (Example: 00:05:10 pm)</td>
<td>●</td>
<td>304</td>
<td>376</td>
</tr>
<tr>
<td>LockedIndicator</td>
<td>Locked indicator</td>
<td>5</td>
<td>0.1</td>
</tr>
<tr>
<td>Node or Field</td>
<td>Description</td>
<td>Maximum Field Length</td>
<td>Cardinality</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ValidityPeriod</td>
<td>StartDate</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cardinality: 1</td>
<td>Format: YYYY-MM-DD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If no start date is maintained for the User, the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>StartDate for the BusinessUser is entered.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EndDate</td>
<td>Format: YYYY-MM-DD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If no EndDate is maintained, it is set to 9999-12-31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role</td>
<td>RoleName</td>
<td>Role name</td>
<td></td>
</tr>
<tr>
<td>Cardinality: 0..unbounded</td>
<td>Format:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>UserAssignment</td>
<td>UserID</td>
<td>User ID</td>
<td></td>
</tr>
<tr>
<td>Cardinality: 0..1</td>
<td>Format:</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UserName</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>WorkplaceInformation</td>
<td>EmailAddress</td>
<td>Email address</td>
<td></td>
</tr>
<tr>
<td>Cardinality: 0..1</td>
<td>Format:</td>
<td>241</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PhoneInformati on</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PhoneNumber</td>
<td>Phone type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CountryDialing Code</td>
<td>Country dialing code</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PhoneNumberAreaID</td>
<td>Phone number area code</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PhoneNumberSubscriberID</td>
<td>Phone number subscriber ID</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PhoneNumberExtension</td>
<td>Phone number extension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>FunctionalTitleName</td>
<td>Format:</td>
<td>Functional title name</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td>Format:</td>
<td>Department name</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>RoomNumber</td>
<td>Format:</td>
<td>Room number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Format:</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
Node or Field | Description | Maximum Field Length | Cardinality
---|---|---|---
Building | Building name | 10 | 0..1

Response Processing Conditions (ResponseProcessingConditions)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>HitsTotalNumberValue</td>
<td>Contains the number of users based on given criteria.</td>
<td>999999999</td>
<td>1</td>
</tr>
<tr>
<td>ReturnedQueryHitsNumberOfValue</td>
<td>Contains the number of found data sets for business users.</td>
<td>999999999</td>
<td>1</td>
</tr>
<tr>
<td>MoreHitsAvailableIndicator</td>
<td>The indicator is set if the query was limited to a number of hits, but more business user data sets are available based on the query.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>LastReturnedObjectID</td>
<td>Displays the last row of the found results list, limited by the found hits or by the value given for QueryHitsMaximumNumber Value.</td>
<td>999999999</td>
<td>0..1</td>
</tr>
</tbody>
</table>

Log (Log)

If errors occur, the log contains the information shown in the table below:

<table>
<thead>
<tr>
<th>Field or Node</th>
<th>Description</th>
<th>Maximum Field Length</th>
<th>Cardinality</th>
</tr>
</thead>
<tbody>
<tr>
<td>BusinessDocumentProcessingResultCode</td>
<td></td>
<td>2</td>
<td>0..1</td>
</tr>
<tr>
<td>MaximumLogItemSeverityCode</td>
<td>If several messages are stored for a business user, the maximum of all dropped severity codes worst level will be shown.</td>
<td>1</td>
<td>0..1</td>
</tr>
<tr>
<td>Item</td>
<td>TypeID</td>
<td>Message number</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>CategoryCode</td>
<td>Not in use</td>
<td>15</td>
</tr>
</tbody>
</table>
### Constraints

This service does not support:

- Service Performer (BBP005) business users
- Freelancer (BBP010) business users

### Additional Information

**Business User - Read**

**i Note**

For more information about the API, choose the *Details* tab on the SAP API Business Hub.
6 Business Event Handling

Subscribe to business events in SAP Marketing Cloud.

You can subscribe to business events triggered in SAP Marketing Cloud to receive notifications in SAP Cloud Platform extensions. Then you can take follow-up actions on the events, if desired. When an event is triggered in SAP Marketing Cloud, there is at least one API available to fetch the necessary information.

The following diagram illustrates the systems required to use business event handling in SAP Marketing Cloud.

You can use the SAP-managed deployment service for the Kubernetes cluster to set up the Kyma Runtime in SAP Cloud Platform extensions. For more information, see Kyma Environment.

Prerequisites

- You have connected SAP Marketing Cloud to SAP Cloud Platform Enterprise Messaging and have enabled the events in SAP Marketing Cloud. For more information, see Enterprise Event Enablement.
- You have configured SAP Cloud Platform Enterprise Messaging and set up a message queue to consume the events being triggered in SAP Marketing Cloud. For more information, see Using Enterprise Messaging.

For details about configuring the business events and APIs with SAP Marketing Cloud and SAP Cloud Platform extensions, see the following blog: Use SAP Cloud Platform, Kyma runtime to extend SAP Marketing Cloud.

**Note**

The SAP blog isn’t part of the official documentation of SAP Marketing Cloud and some of the information may be outdated.
Example

A customer in B2B Marketing, running email campaigns in SAP Marketing Cloud wants to use business events on interactions to notify a responsible sales person that a contact has opened or clicked through a recent email, which was supporting their sales activities in a given opportunity. The sales person is also be notified if the email wasn’t delivered or opened, because it was hard bounce, for example, the email address was invalid. The same happens for a soft bounce, for example, the email was identified as JUNK or SPAM email and didn’t reach the inbox of the contact.

For more examples of business scenarios that you can use business events from SAP Marketing Cloud, see the following blog: Extended Capabilities of SAP Marketing Cloud using Business Event Handling.

Note

The SAP blog isn’t part of the official documentation of SAP Marketing Cloud and some of the information may be outdated.

More Information

SAP Cloud Platform Enterprise Messaging
Business Event Handling
SAP Marketing Cloud Business Events

6.1 Campaign File Export

Business event for campaign file export (MarketingObjectAttachment).

During campaign execution, you can export target group members with the fields of the export definition as a file. The file is stored in relation to the campaign in SAP Marketing Cloud.

If another system wants to use this file to access the contact information and send out white papers, for example, then it alerts SAP Marketing Cloud by a business event. The event is raised after a successful export. The external system can retrieve the contact information using the Read Content of Export Files in Campaigns API (API_MKT_EXPORT_DEFINITION). For more information, see Read Content of Export Files in Campaigns [page 901].

Business Events

The following business event is available for the MarketingObjectAttachment object:
Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created</td>
<td>This event is raised when a marketing campaign export file is created.</td>
<td>MarketingObjectUUID: The unique identifier of the marketing object.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MarketingObject: MarketingObject</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MarketingObjectType: The type of the marketing object.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MktgObjectAttachmentFilename: The filename of the marketing object</td>
</tr>
<tr>
<td></td>
<td></td>
<td>attachment.</td>
</tr>
</tbody>
</table>

Additional Information

For more information about how business events are handled, see Business Event Handling.

For more technical information about this event, see the Marketing Campaign Export File Events page on the SAP API Business hub. One-time registration is required for first-time users.

6.2 Campaigns

Business events for campaigns (MarketingCampaign).

A business event can be raised for externally executed campaigns when the campaign has ended and the status has been changed to Stopped. The event allows the external system on which the campaign was executed, to react and retrieve further information using the Campaigns API (API_MKT_CAMPAIGN). For more information, see Campaigns [page 767].

Business Events

The following business event is available for the MarketingCampaign object:

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed</td>
<td>This event is raised when a marketing campaign is completed.</td>
<td>CampaignUUID: The unique identifier of the campaign.</td>
</tr>
</tbody>
</table>

Integration Guide

Business Event Handling
Additional Information

For more information about how business events are handled, see Business Event Handling.

For more technical information about this event, see the Marketing Campaign Events page on the SAP API Business hub. One-time registration is required for first-time users.

6.3 Coupon Code Usages

Business event for coupon code usage (CouponCodeUsages).

A business event can be raised to collect coupon code usage changes for coupons. Follow-up activities can then be triggered. You can retrieve detailed information about the coupon code usage using the Coupons API (API_MKT_COUPON_SRV). For more information, see Coupons [page 1028].

Business Events

The following business event is available for the CouponCodeUsages business object:

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed</td>
<td>This event is raised when a marketing coupon is used during campaign execution.</td>
<td>CouponCodeUUID: The unique identifier of a coupon code.</td>
</tr>
</tbody>
</table>

Example for a Received Message

Sample for Entering Messaging Java API (emjapi):

```json
{
    "message": {
        "eventType": "BO.MarketingCoupon.Changed",
        "cloudEventsVersion": "0.1",
        "source": "https://S4HANAOD.sap.com",
        "eventId": "hY+UEf5HtmYoI4Dl/x9uw==",
        "eventTime": "2019-04-17T11:32:10Z",
        "schemaURL": "https://S4HANAOD.sap.com/sap/opu/odata/IWXBE/BROWSER_SRV/",
        "contentType": "application/json",
        "data": {"KEY": [{"COUPONUUID": "FA163E5047F91ED9909BF4279961A4C7"}],"COUPONCODEUUID": [{"COUPONCODEUUID": "364CD2B40C8B189316006024A4657417"}]},
        "timestamp": "4/17/19 11:32 AM",
        "id": "47a2003c-95d2-475d-bd59-cfc81a053f2d"
    }
}
```
For further processes, such as reading further coupon information requested by the OData services (such as API_MKT_COUPON, CUAN_COUPON_MAINTAIN, and so on), CouponUUID or CouponCodeUUID must be converted and entered as CouponUUID equals fa163e50-47f9-1ed9-909b-f4279961a4c7 and CouponCodeUUID equals 364c-d2b4-0c8b-18931600-6024a4657417.

Examples

Coupon information with GUID: /sap/opu/odata/SAP/API_MKT_COUPON_SRV/Coupons(guid'fa163e50-47f9-1ed9-909b-f4279961a4c7')

Coupon code information with GUID: /sap/opu/odata/SAP/API_MKT_COUPON_SRV/CouponCodes(guid'364c-d2b4-0c8b-18931600-6024a4657417')

Additional Information

For more information about how business events are handled, see Business Event Handling.

For more technical information about this event, see the Marketing Coupon Events page on the SAP API Business hub. One-time registration is required for first-time users.

6.4 Interactions

Business events for interactions (Interaction).

A business event can be raised for any interaction type. Follow-up activities can then be triggered. You can retrieve detailed information using the Interactions API (API_MKT_INTERACTION). For more information, see Interactions [page 605].

Business Events

The following business event is available for the Interaction object:

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created</td>
<td>This event is raised when an interaction is created.</td>
<td>InteractionUUID: The unique identifier of the Interaction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>InteractionType: The type of the Interaction.</td>
</tr>
</tbody>
</table>
Marking an Interaction Type for Business Events

To indicate that you want to raise a business event for an interaction type, do the following:

1. Open the Manage Your Solution app.
2. Go to the Managing Interaction Content configuration step under Contacts and Profiles.
3. Find the interaction type you want to raise a business event for.
4. Select the Business Event checkbox in the Key Information screen.

The following screen capture shows an example of an interaction type that has been identified as a business event.

![Screen capture showing a business event checkbox selected in the Key Information screen.]

Additional Information

For more information about how business events are handled, see Business Event Handling.

For more technical information about this event, see the Interaction Events page on the SAP API Business hub. One-time registration is required for first-time users.

6.5 Interaction Contacts

Business events for interaction contacts (InteractionContact).

If you implement custom or partner scenarios that are dependent on the lifecycle of an interaction contact, you can use business events for interaction contacts. These events are used to trigger a reaction when an interaction contact is created, updated, merged, or deleted. You can then react on these changes. You can retrieve detailed information about the interaction contacts using the following APIs:

- Contacts API (API_MKT_CONTACTS). For more information, see Contacts [page 408].
- Interaction Contacts API (API_MKT_INTERACTION_CONTACT). For more information, see Interaction Contacts [page 465].
- Corporate Accounts API (API_MKT_CORPORATE_ACCOUNT). For more information, see Corporate Accounts [page 508].
Business Events

The following business events are available for the InteractionContact object:

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created</td>
<td>This event is raised when an interaction contact is created.</td>
<td>InteractionContactUUID: The unique identifier of the Interaction Contact.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>InteractionContactType: The type of the Interaction Contact.</td>
</tr>
<tr>
<td>Changed</td>
<td>This event is raised when an interaction contact is changed.</td>
<td></td>
</tr>
<tr>
<td>Deleted</td>
<td>This event is raised when an interaction contact is deleted.</td>
<td></td>
</tr>
<tr>
<td>Merged</td>
<td>This event is raised when an interaction contact is merged.</td>
<td>InteractionContactUUID: The unique identifier of the Interaction Contact.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AssgdToInteractionContactUUID: The unique identifier of the interaction contact, where the merged contact is assigned to.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AssgdToInteractionContactType: The type of the Interaction Contact, where the merged contact is assigned to.</td>
</tr>
</tbody>
</table>

Additional Information

For more information about how business events are handled, see Business Event Handling.

For more technical information about these events, see the Interaction Contact Events page on the SAP API Business Hub. One-time registration is required for first-time users.

6.6 Marketing Permissions

Business events for marketing permissions (MarketingPermission).

Marketing permissions that are gathered in SAP Marketing Cloud are often distributed to other marketing-related systems, for example, call center solutions. When a permission is created or changed in SAP Marketing Cloud, a business event can be raised to trigger the distribution of that permission. You can retrieve detailed information about the permission using the Interaction Contacts API (API_MKT_INTERACTION_CONTACT). For more information, see Interaction Contacts [page 465].
Business Events

The following business events are available for the `MarketingPermission` object:

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created</td>
<td>This event is raised when a marketing permission is created.</td>
<td><code>MarketingPermissionGUID</code>: The unique identifier of a marketing permission.</td>
</tr>
<tr>
<td>Changed</td>
<td>This event is raised when a marketing permission is changed.</td>
<td><code>ContactPermission</code>: Contact permission (contact allowed / not allowed or permission to be checked).</td>
</tr>
</tbody>
</table>

Additional Information

For more information about how business events are handled, see Business Event Handling.

For more technical information about these events, see the Marketing Permission Events page on the SAP API Business hub. One-time registration is required for first-time users.

6.7 Marketing Subscriptions

Business events for marketing subscriptions (`MarketingSubscription`).

Marketing subscriptions that are gathered in SAP Marketing Cloud are often distributed to other marketing-related systems, for example, call center solutions. When a contact subscribes or changes their subscription in SAP Marketing Cloud, a business event can be raised to trigger the distribution of that subscription. You can retrieve detailed information about the subscription using the Interaction Contacts API (`API_MKT_INTERACTION_CONTACT`). For more information, see Interaction Contacts [page 465].

Business Events

The following business events are available for the `MarketingSubscription` object:
Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Payload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created</td>
<td>This event is raised when a marketing subscription is created.</td>
<td>MarketingSubscriptionUUID: The unique identifier of a marketing subscription.</td>
</tr>
<tr>
<td>Changed</td>
<td>This event is raised when a marketing subscription is changed.</td>
<td>ContactSubscription: Contact subscription (contact allowed / not allowed or permission to be checked).</td>
</tr>
</tbody>
</table>

Additional Information

For more information about how business events are handled, see Business Event Handling.

For more technical information about these events, see the https://api.sap.com/event/SAPMarketingCloudBusinessEvents_MarketingSubscriptionEvents/overview page on the SAP API Business hub. One-time registration is required for first-time users.
# Integration Technologies

Here you can find an overview about the integration technologies used in your solution.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOAP</td>
<td>SOAP is a protocol specification for exchanging structured information in the implementation of web services in computer networks. The message format is based on XML. Message transfer is based on other web protocols, usually HTTP(S).</td>
</tr>
<tr>
<td>REST</td>
<td>Representational State Transfer (REST) is an architecture style for creating scalable web services. REST services are usually based on HTTP(S). They use HTTP URIs for resource identification and HTTP methods for service operations. It is used widely as an alternative to SOAP, as REST services usually provide better performance, scalability and simpler interfaces.</td>
</tr>
<tr>
<td>OData</td>
<td>OData provides a protocol for queryable and interoperable RESTful APIs. It provides an entity-based data model and a query language. Create, read, update and delete methods expressed using HTTP methods. All OData services use HTTPS protocol to ensure data security. The standard port for HTTPS is 443.</td>
</tr>
<tr>
<td>CSV</td>
<td>A comma-separated values (CSV) (also sometimes called character-separated values) file stores tabular data (numbers and text) in plain-text form. CSV files are widely used as import or export format and can be down- and uploaded to many systems.</td>
</tr>
</tbody>
</table>
8 Create Your Own Apps: Rapid Application Development by Mendix

With this integration, you can supplement marketing capabilities with apps that you’ve created on the low code platform Mendix.

Business Benefits

- Extend SAP Marketing Cloud with customer-specific applications for dedicated business use cases, for example, a trade fair app for registration of contacts for demo sessions.
- Enable business users to easily create apps for marketing using SAP Cloud Platform Rapid Application Development by Mendix.

Key Capabilities

- Extend SAP Marketing Cloud with a side-by-side approach, public APIs, and extensions.
- Provide user authentication and ensure security standards.
- Provide a means of extending apps to support a two-tier landscape for quality and productive systems.
- Fulfill requirements when the connected SAP Marketing Cloud system is upgraded.

Example Scenarios

- In B2B scenarios, apps can enable sales people to enter leads and maintain contact data in marketing.
- Other companies’ access to customer contacts for registration at session events or to request a product demo.
- For B2C customers, it’s beneficial for their call-center agents to put together a well-tailored factsheet of the most important profile data of their consumers by means of a low code app.
- You’re already running SAP Marketing Cloud and want to take the next step in your digitalization by offering individual product demo sessions at a trade fair. The registration can be realized by sending out emails with registration codes, for example, using offer coupon codes.
Prerequisites

- You’ve created a user on Mendix to access their platform.
- We recommend to install the Mendix Studio Pro (development platform) locally.

Steps to Get Your App

Prepare
1. Make sure that you have the Administrator role assigned.
2. Define the business scenarios you want to realize with the app and figure out, which application programming interfaces (APIs) from SAP Marketing Cloud you need.
   Get familiar with the data model, the entity relationship model and the available nodes and components, and how they interact with each other on the side of SAP Marketing Cloud.
3. Map the required APIs to your business scenario and check if they’re available in SAP Marketing Cloud.

Steps in SAP Marketing Cloud
1. Create communication arrangements and communication systems for the required communication scenarios in the SAP system for the APIs you selected.
2. Open the metadata request URL in your browser and save the text file to your machine.
   The URL has the pattern: https://<host>/sap/opu/odata/sap/API_MKT_<object>_SRV;v=<latest version>/$metadata.
   **Example**
   ```
   https://<host>/sap/opu/odata/sap/API_MKT_CONTACT_SRV;v=0003/$metadata
   ```

Steps in Mendix
1. Use the OData Model Creator for SAP Solutions to connect the SAP system with the Mendix solution.
   You can find the connectors in the Mendix App Store under [Connectors > SAP](#).
   In our example, we used the OData Connector for SAP Solutions and the OData Model Creator for SAP Solutions.
2. There you can manually upload the data model:
   2. Select the locally stored file.
   3. Choose Continue twice, and then Generate.mpk. The Mendix system generates a data model out of the SAP file.
   This generated data model can be imported into your Mendix project. You can see the data models next to your module folder.
3. Connect the required elements of data models in a combined Domain Model of your module.
4. We recommend using the offered app templates by Mendix for SAP, such as the SAP App Template for Fiori Apps. With the template, the correct OData connector is also installed.
5. For deployment ensure that the app user has the business catalog roles assigned that are required for the APIs you are using. You can generally find this information in the API documentation.
   Alternatively, you can use a technical user with basic authentications.
Related Information

- Business Scenarios
- Implementing Integrations for Business Scenarios [page 9]
- Consuming the Integration APIs [page 390] > Getting Started [page 382] > Consuming the Integration APIs [page 390]
- Documentation provided by SAP: SAP Cloud Platform Rapid Application Development by Mendix
- Tutorial from SAP's Developer Community: Get Started with SAP Cloud Platform Rapid Application Development by Mendix
- Documentation provided by Mendix: Low code development for SAP® by Mendix

Component for Incidents

Please use the following component for incidents: XX-PART-MDX-RAD
SAP Marketing Cloud Software Development Kit (SDK) aims at expanding our partner and developer ecosystem, by providing a development toolkit, that leverages the capabilities of SAP Marketing Cloud. The SDK allows developers to seamlessly integrate their solution with SAP Marketing Cloud. It reduces the effort to develop an application using SAP Marketing Cloud, by providing all the necessary libraries and project templates that help to get going quickly.

For more information on SAP Marketing Cloud SDK, see:

- Blog: Hello, SAP Marketing Cloud SDK
- Tutorial: Getting Started with SAP Marketing Cloud SDK
- Javadoc
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