Operations Guide CUSTOMER

SAP Hybris Marketing On Premise Document Version: 2.0 – April 24, 2017

Application Operations Guide 1702



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Document History

Before you start, make sure you have the latest version of this document. You can find the latest version at the following location:

http://service.sap.com/mkt/

The following table provides an overview of the most important document changes. If the information you are looking for is not described in this guide or if you find something described incorrectly, please send an email to mailto:saphybrismarketingfeedback@sap.com and we'll update this guide.

Table 1: Document History

Version	Date	Description
1.0	2017-02-13	Initial version for SAP Hybris Marketing 1702 (1.2 SP05)
2.0	2017-04-24	Enhancement to Administration Tools chapter. Application Copy and Homogenous System Copy chapters replaced with Client Copy and System Copy chapters. Score Builder task added to Periodic Tasks chapter.

1 Getting Started

i Note

This guide does not replace the daily operations handbook that we recommend customers to create for their specific production operations.

About this Guide

Designing, implementing, and running your SAP applications at peak performance 24 hours a day has never been more vital for your business success than now.

This guide provides a starting point for managing your SAP applications and maintaining and running them optimally. It contains specific information for various tasks and lists the tools that you can use to implement them. This guide also provides references to the documentation required for these tasks, so you will sometimes also need other guides such as the *Security Guide* or the SAP Library.

Target Groups

- Technical Consultants
- System Administrators
- Solution Consultants
- Business Process Owner
- Support Specialist

Feedback

We'd really like to know what you think of the quality, structure or content of this guide. Please send your feedback to us at mailto:saphybrismarketingfeedback@sap.com.

1.1 Global Definitions

SAP Application:

An SAP application is an SAP software solution that serves a specific business area like ERP, CRM, PLM, SRM, and SCM.

Business Scenario:

From a microeconomic perspective, a business scenario is a cycle, which consists of several different interconnected logical processes in time. Typically, a business scenario includes several company departments and involves with other business partners. From a technical point of view, a business scenario needs at least one SAP application (SAP ERP, SAP SCM, or others) for each cycle and possibly other third-party systems. A business scenario is a unit which can be implemented separately and reflects the customer's prospective course of business.

Component:

A component is the smallest individual unit considered within the Solution Development Lifecycle; components are separately produced, delivered, installed and maintained.

1.2 Important SAP Notes

Check regularly for notes available for *SAP Hybris Marketing*. The components are as follows:

- CEC-MKT for SAP Hybris Marketing (select a specific subcomponent CEC-MKT-* where possible)
- MOB-APP-MAI for Mobile Account Intelligence
- MOB-APP-SCE for Social Contact Explorer

Table 2:

SAP Note Number	Title	Comment
1885803	RIN SAP Hybris Marketing (formerly SAP Customer Engagement Intelligence 1.1)	All OSS notes relevant to the general operation of <i>SAP Hybris Marketing</i> can be found in Release Information Note (RIN).

1.3 Change History

Make sure you use the **current** version of the *SAP Hybris Marketing* Application Operations Guide. It can be found on the *SAP Service Marketplace* under http://service.sap.com/mkt/.

2 Technical System Landscape

SAP Hybris Marketing is based on the following components:

- SAP HANA 1.0, SPS12
- SAP NetWeaver 7.50, SP06 (including SAP NetWeaver Gateway and SAP NetWeaver UI Extension)
- SAP Business Suite Foundation (SAP_BS_FND) 7.48, SP01
- SAP MDG Foundation (MDG_FND) 7.49, SP01 or higher
- SAP Web UIF (WEBCUIF) 7.48, SP01

i Note

Most applications within SAP Hybris Marketing such as *Customer Journey Insight*, are SAP Fiori apps. All SAP Fiori apps are directly deployed on the SAP Hybris Marketing server.

All these components are embedded in the SAP Fiori launchpad that is based on HTML5 (SAPUI5). Some administrative tasks, such as Customizing tasks, are also based on the traditional SAP GUI technology, which is not explicitly shown in Figure 1. Figure 1 gives an example of a possible technical system landscape for SAP Hybris Marketing, which includes the use of SAP ERP and SAP CRM data.

The communication of the front-end components with the back end, which is an SAP NetWeaver 7.5 application server, is based on HTTPS. The Web applications are embedded in a shell that ensures secure session management. All servers run behind the firewall.

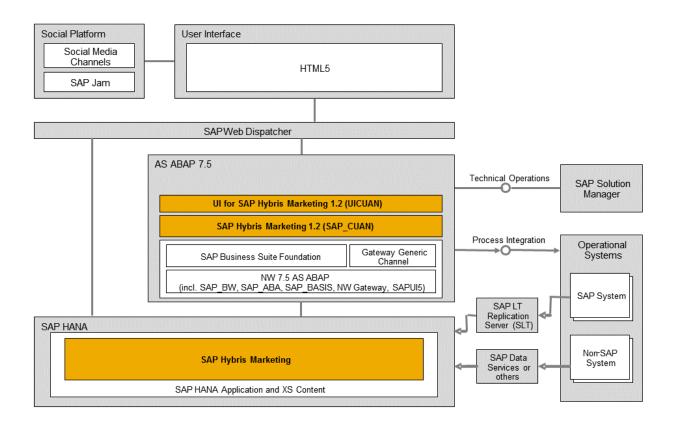
The requests of the stateless Web applications to the back end are based on OData (read and write) using HTTPS.

The main reused components of the application server are those of SAP NetWeaver 7.5, for example, user management, authentication, and authorization. SAP Gateway handles the requests from the front end through OData channel services.

The underlying database for SAP Hybris Marketing is SAP HANA 1.0. To leverage the capabilities of the SAP HANA database, parts of the segmentation, search capabilities, and analysis are performed directly on the database using stored procedures and SAP HANA information models, such as calculation views, attribute views, and analytical views. All access to the database is done through the SAP NetWeaver 7.5 application server using OpenSQL or the ABAP Database Connectivity (ADBC) interface of ABAP to the SAP HANA database. Only the user management of SAP NetWeaver is required and only a technical user within the SAP HANA database is required for the access.

Data from SAP ERP, for example, and other SAP components can be replicated to SAP Hybris Marketing with the SAP LT replication framework. For more information about the tables that are required for the usage of SAP Hybris Marketing in connection with SAP ERP or SAP CRM, and need to be configured in SAP LT, see the *Appendix* section of this document. Results for SAP Hybris Marketing can be sent to SAP CRM. For other deployment options of SAP Hybris Marketing with SAP ERP and SAP CRM, see Deployment Scenarios [page 10].

The SAP NetWeaver role and authorization framework is used with SAP Hybris Marketing.



More Information

For more information about the SAP HANA database system landscape, see the SAP Help Portal at:

http://help.sap.com/hana_platform Select "Version: 1.0 SPS 12" in the upper right corner Security SAP HANA Security Guide

(https://help.sap.com/viewer/b3ee5778bc2e4a089d3299b82ec762a7/1.0.12/en-US///

For more information, see the resources listed in the following table.

Table 3:

Topic	Guide/Tool	Quick Link on SAP Service Market- place or SCN
Security	See applicable documents	http://scn.sap.com/community/security https://help.sap.com/viewer/p/ SAP_HYBRIS_MARKETING Security

3 Deployment Scenarios

SAP Hybris Marketing can use SAP ERP data from SAP ERP 6.0 or higher and SAP CRM data from enhancement package (EHP) 1 for SAP CRM 7.0 SP04 (plus SAP Note 1995798) or higher. Several deployment options are available. Your decision for a certain deployment option depends on the release of your source system and the SAP Hybris Marketing applications that you want to run. The table below shows which data is mandatory for each solution.

For recommendations concerning the appropriate system landscape to run the application, refer to the Product Availability Matrix (PAM) at http://support.sap.com/pam/> under SAP HYBRIS MARKETING 1.2 Related Links ...

Table 4:

SAP Hybris Marketing Licenses or Applications	SAP ERP	SAP CRM
Data Management	optional	optional
Insight - Marketing Executive Dashboard	optional	optional
Insight - Relationship Analysis Sales, Stratification, Margin Decomposition	mandatory	optional
Insight - Relationship Analysis Presales	optional	mandatory
Segmentation on SAP ERP Accounts	mandatory	optional
Segmentation on SAP CRM Accounts	optional	mandatory
Segmentation on contact of third party data	optional	optional
Recommendation	optional	optional
Planning	optional	optional
Acquisition	optional	optional

3.1 Scenario A: Standalone Deployment

SAP Hybris Marketing Segmentation and SAP Hybris Marketing Data Management can be used without SAP ERP or SAP CRM data. Third-party data to be used in these applications can be replicated to the SAP HANA database or imported to the SAP Hybris Marketing system with different tools:

- For the replication of your third-party data, you can use one of the SAP HANA data provisioning tools described in the SAP HANA Master Guide under:

 - (https://help.sap.com/viewer/eb3777d5495d46c5b2fa773206bbfb46/1.0.12/en-US)
- For the import of your third-party data to your SAP Hybris Marketing system, you can use one of the inbound interfaces for data upload, described in the Data Management Upload Interfaces guide under:

https://help.sap.com/viewer/p/SAP_HYBRIS_MARKETING Integration Data Management Upload Interfaces

(https://help.sap.com/doc/4d660f95f99b41a3a66283a7dff0e160/1702%20YMKT/en-US/loio339d4f548e6a5176e10000000a4450e5.pdf)

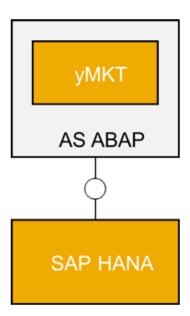


Figure 1: Standalone Deployment

3.2 Scenario B: Hub-Deployment with Separate SAP HANA System

You can deploy SAP Hybris Marketing in a side-by-side approach. This means that the application runs on a separate application server with a separate SAP HANA database. In this case the data is replicated from your source system into the SAP HANA database with the SAP Landscape Transformation Replication Server (SAP LT).

Using separate deployment and data replication ensures that there is no incident or disruption in your production source systems, since the application does not directly access your production data. Replication also allows your SAP HANA-based application to work with data even if your production systems do not use SAP HANA.

For more information about the data replication, see the installation and configuration guide for SAP Hybris Marketing, section *Data Replication*. You find this guide on the SAP Help Portal at:

https://help.sap.com/viewer/p/SAP_HYBRIS_MARKETING | Installation and Upgrade | Installation Guide |

(https://help.sap.com/doc/0bbf18e6ff434689addc108a905f55ed/1702%20YMKT/en-US/loiodb010b78486849a78a5f1b569b696a65.pdf)

In this scenario, you can, in addition, upload third-party data to your SAP Hybris Marketing system by using one of the inbound interfaces for data upload, described in the Data Management Upload Interfaces guide under:

https://help.sap.com/viewer/p/SAP_HYBRIS_MARKETING Integration Data Management Upload Interfaces

(https://help.sap.com/doc/4d660f95f99b41a3a66283a7dff0e160/1702%20YMKT/en-US/loio339d4f548e6a5176e10000000a4450e5.pdf)

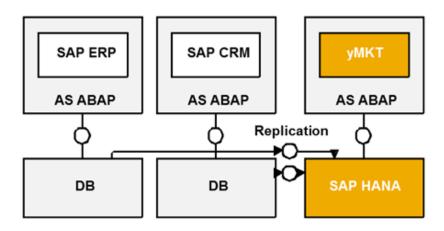


Figure 2: Hub-Deployment with Separate SAP HANA System

The following table shows the minimum required releases:

Table 5:

SAP ERP	SAP CRM
SAP ERP 6.0	EHP1 for SAP CRM 7.0 SP04 plus SAP Note 1995798

3.3 Scenario C: Hub-Deployment with Shared SAP HANA System of SAP Business Suite

SAP Hybris Marketing can be deployed in parallel with SAP Business Suite applications on the same SAP HANA database. In this case SAP Hybris Marketing shares the SAP HANA database with one SAP ERP, one SAP CRM, or one SAP S/4HANA system, reading SAP ERP, SAP CRM, or SAP S/4HANA data directly without replication.

i Note

In this scenario, ensure that you have carefully read and considered SAP Note 1826100 as it contains more information about this deployment.

In this scenario, you can, in addition, upload third-party data to your SAP Hybris Marketing system by using one of the inbound interfaces for data upload, described in the Data Management Upload Interfaces guide under:

https://help.sap.com/viewer/p/SAP_HYBRIS_MARKETING Integration Data Management Upload Interfaces

(https://help.sap.com/doc/4d660f95f99b41a3a66283a7dff0e160/1702%20YMKT/en-US/loio339d4f548e6a5176e10000000a4450e5.pdf)

If you decide to deploy SAP Hybris Marketing in such a deployment scenario, you have the following options:

You can deploy SAP Hybris Marketing on the same SAP HANA database as your SAP ERP system if your SAP ERP system is minimum an EHP6 for SAP ERP 6.0 on SAP HANA. In addition, if you require to use SAP CRM business data as well, you can replicate this data from your SAP CRM system into the same SAP HANA database. This means that the SAP Hybris Marketing system is deployed with a shared SAP HANA database of SAP ERP, whereas SAP CRM runs on a separate database, as shown in scenario B.

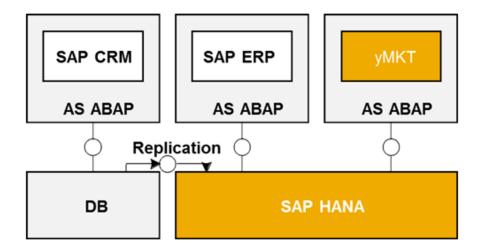


Figure 3: Hub-Deployment with Shared SAP HANA System of SAP ERP

The following table shows the minimum required releases:

Table 6:

SAP ERP	SAP CRM
EHP6 for SAP ERP 6.0 on SAP HANA	EHP1 for SAP CRM 7.0 SP04 plus SAP Note 1995798
EHP7 for SAP ERP 6.0	EHP1 for SAP CRM 7.0 SP04 plus SAP Note 1995798

You can deploy SAP Hybris Marketing on the same SAP HANA database as your SAP CRM system if your SAP CRM system is minimum an EHP2 for SAP CRM 7.0 on SAP HANA. In addition, if you require to use SAP ERP business data as well, you can replicate this data from your SAP ERP system into the same SAP HANA database. This means that the SAP Hybris Marketing system is deployed with a shared SAP HANA database of SAP CRM, whereas SAP ERP runs on a separate database, as shown in scenario B.

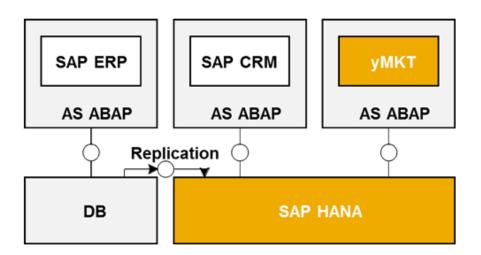


Figure 4: Hub-Deployment with Shared SAP HANA System of SAP CRM

The following table shows the minimum required releases:

Table 7:

SAP ERP	SAP CRM
SAP ERP 6.0	EHP2 for SAP CRM 7.0 on SAP HANA SP01 plus SAP Note 1996523
SAP ERP 6.0	EHP3 for SAP CRM 7.0

• You can deploy SAP Hybris Marketing on the same SAP HANA database as your SAP S/4HANA system. In addition, if you require to use SAP CRM or SAP ERP business data as well, you can replicate this data from your SAP CRM or SAP ERP system into the same SAP HANA database. This means that the SAP Hybris Marketing system is deployed with a shared SAP HANA database of SAP S/4HANA, whereas SAP CRM or SAP ERP runs on a separate database, as shown in scenario B.

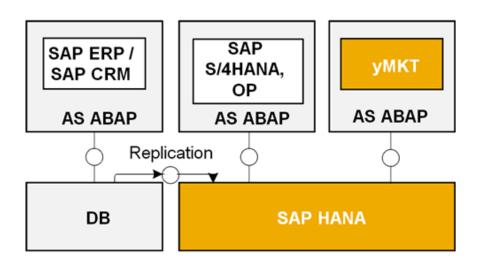


Figure 5: Hub-Deployment with Shared SAP HANA System of SAP S/4HANA

3.4 Scenario D: Hub-Deployment with Shared SAP HANA System of Other Application

SAP Hybris Marketing can be deployed on an SAP HANA database that is already used for applications which are listed in SAP Note 1661202 — Support for Multiple Applications on SAP HANA. If you require to use SAP ERP or SAP CRM business data as well, you can replicate this data into the same SAP HANA database.

This deployment scenario is not separately pointed out in this installation guide. If you require to replicate data refer to the deployment process for scenario B; if you do **not** require to replicate data refer to the deployment process for scenario A.

In this scenario, you can, in addition, upload third-party data to your SAP Hybris Marketing system by using one of the inbound interfaces for data upload, described in the Data Management Upload Interfaces guide under:

https://help.sap.com/viewer/p/SAP_HYBRIS_MARKETING Integration Data Management Upload Interfaces

(https://help.sap.com/doc/4d660f95f99b41a3a66283a7dff0e160/1702%20YMKT/en-US/loio339d4f548e6a5176e10000000a4450e5.pdf)

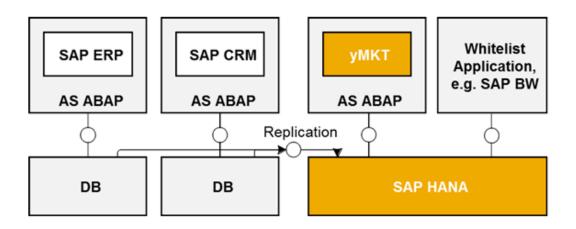


Figure 6: Hub-Deployment with Shared SAP HANA System of Other Application

4 Monitoring the Application

Monitoring is an essential task in managing and operating SAP Technology. This section is therefore devoted to this topic.

You can find more information about the underlying technology in *Technical Operations for SAP NetWeaver* in the SAP Help Portal http://help.sap.com/>, SAP NetWeaver > SAP NetWeaver 7.5 > System Administration and Maintenance Information .

4.1 Alert Monitoring

Proactive, automated monitoring is the basis for ensuring reliable operations for your SAP system environment. SAP provides you with the infrastructure and recommendations needed to set up your alert monitoring to recognize critical situations for *SAP Hybris Marketing* as quickly as possible.

SAP Hybris Marketing is based on SAP NetWeaver technology, so you can use standard SAP NetWeaver monitoring tools. This includes the Computing Center Management System (CCMS).

With the monitoring architecture of the CCMS, SAP provides an infrastructure with which you can monitor your IT landscape centrally. The monitoring architecture is delivered with every SAP NetWeaver Application Server. The architecture runs on every SAP NetWeaver Application Server and can be extended to include additional SAP and non-SAP components. The concept of the monitoring architecture is to make all required information available in a central monitoring system, such as alerts or log files.

For central monitoring of your applications, you can use CCMS Availability monitoring to ensure that the back end system on which your applications run is up and running. You should also monitor key performance indicators of the back end system, such as the response time. There is no CCMS instrumentation specific to the applications themselves; rather, you should monitor the back end NetWeaver systems on which the applications depend.

For more information about the CCMS, see the SAP Help Portal http://help.sap.com/nw_platform > System Administration and Maintenance Information > Technical Operations for SAP NetWeaver >.

4.1.1 Monitoring Installation and Setup

If you are already using *CCMS* central monitoring, then you need only set up central monitoring of the NetWeaver AS ABAP System on which you have installed *SAP Hybris Marketing*.

For more information, see the CCMS documentation at the Help Portal http://help.sap.com/> for help in installing CCMS agents at your system and for setting up the central monitoring connections.

In order to enable the auto-alert mechanism of CCMS, see SAP Note 617547/2.

4.1.2 Component-Specific Monitoring

Computing Center Management System (CCMS)

SAP Hybris Marketing is installed as an Add-On on an SAP NetWeaver ABAP stack; no Java component is required. The status of the application is therefore that of the NetWeaver System on which it runs.

To monitor *SAP Hybris Marketing*, you therefore need only monitor the NetWeaver system on which the application runs.

SAP does not deliver a separate CCMS monitor template for *SAP Hybris Marketing*. Rather, SAP recommends that you set up a monitor definition for the application on your CCMS central monitoring system.

The monitor definition for the application should include the following monitoring elements:

- The availability of the NetWeaver System on which the application runs. Use the SAP CCMS CCMSPING technology for availability monitoring.
- The availability of the production systems from which records are replicated to the SAP HANA database of the application.
- The availability of the SAP Gateway component (for HTML 5 user interfaces), if this is running in a system other than the NetWeaver system that hosts the application.
- Standard CCMS monitoring of the status of the host system of the application. The CCMS monitor template Entire System in transaction RZ20 on the central system is a good candidate for monitoring the condition of all of the essential technical components of that system.

SAP LT (Landscape Transformation)

You can use SAP LT (Landscape Transformation Monitoring) to monitor load and replication processes and identify potential replication issues. For more information, see the operations guide for SAP LT on SAP Help Portal under http://help.sap.com/hana SAP HANA Platform System Administration and Maintenance Information 3.

SAP Hana Database

There are a number of tools available to you for monitoring the SAP HANA database, including the SAP HANA studio. For details, see section *Monitoring the SAP HANA Database* of the *SAP HANA Technical Operations Manual* on SAP Help Portal http://help.sap.com/hana SAP HANA Platform System Administration and Maintenance Information 3.

4.1.3 Queue Monitoring for Actual and Committed Spend ERP Integration

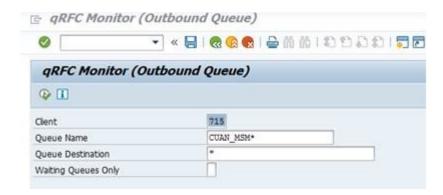
You can use transaction SMQ1 (qRFC Monitor) for outbound queues to monitor queues. This is required if you have an integration from Spend Management to ERP using RFC.

Using transaction SMQ1, you enter the following:

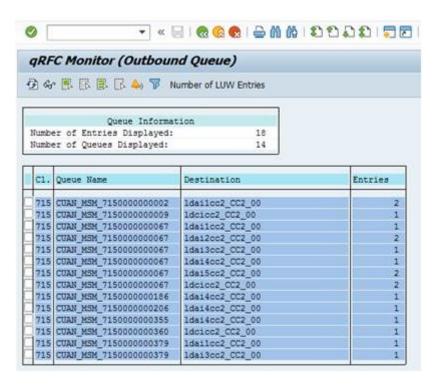
- Client
- Queue Name: CUAN_MSM*
- Queue Destination: *

This allows you to see the relevant queue.

Example



Each campaign has its own queue. This ensures that individual campaigns are not blocked if a problem is campaign-related. For example, CUAN_MSM_7150000000002 is specifically for campaign 2.



You can view errors and re-run queues to view the most up-to-date status. For more information, enter the keywords *Transactional RFC and Queued RFC Monitor* on SAP Help Portal at http://help.sap.com.

You can also follow the path on SAP Help Portal at http://help.sap.com/nw75 Application Help Function-Oriented View Application Server Application Server ABAP Administration of Application Server ABAP Monitoring and Administration Tools for Application Server ABAP Monitoring in the CCMS Alert Monitor Predefined Monitors for the Alert Monitor SAP CCMS Monitor Templates Monitor Set Transactional RFC and Queued RFC Monitor

4.2 Monitoring and Tools for Problem and Performance Analysis

You can analyze problems and the performance of *SAP Hybris Marketing* using the standard tools offered by the NetWeaver AS ABAP platform.

Useful tools include the following:

- The system trace (transaction ST01)
- The system log (transaction SM21)
- ABAP dump analysis (transaction ST22)

Choose Help Application Help to display the application documentation on each of these transactions.

The following sections provide information on application-specific logging and tracing.

4.2.1 Trace and Log Files

Application Log

Logging and tracing for ABAP components is done using transaction SLG1. An Application Log consists of a log header and a set of messages. The log header contains general data (type, created by/on, and so on). Each log in the database also has the attributes *Object* and *Subobject*. These attributes describe the application that wrote the log and classify the application.

Archiving and Deleting Log Entries

You can archive and delete data from the application logs using the following programs:

- Use program BC SBAL WRI to read data from the application log tables and write it to archive files.
- Use program SBAL_ARCHIVE_DELETE to delete data that has been archived from the application log. The program deletes data only if it has been archived.

For more information on archiving and deleting data, search for **Archiving Object BC_SBAL** on the SAP Help Portal at http://help.sap.com.

Application Logging

Any errors that occur in Gateway can be analyzed with transaction /iwfnd/error_log. Errors occurring in the backend are written to the application log; the log is divided into a set of application log objects (use transaction SLG1 to analyze the log) and are displayed on the UI (SAPUI5).

Table 8:

Activity	Application Log Object	Comments
Merging of contacts that refer to one and the same person (Report CUAN_IC_MERGE)	CUAN_CE_IC	The report log provides information on: changed attributes of the target contact the number of interactions transferred the number of posts transferred
Splitting of contacts that refer to one and the same person (Report CUAN_IC_SPLIT)	CUAN_CE_IC	The report log provides information on: changed attributes of the target contact the number of interactions transferred the number of posts transferred

Activity	Application Log Object	Comments
Extracting data from SAP ERP and CRM back end systems and creating interactions for posts (Reports CUAN_IC_MASTERDATA_EXTR_FULL, and CUAN_IC_MASTERDATA_EXTR_DELT)	CUAN, subobject CUAN_EXTRACT	The report log provides information on, for example: • number or rows that were successfully processed • number of rows where the processing failed • block size • start and finish date of the run
CUAN_MKT_EXEC_LISTENER	CUAN, subobject CUAN_MKT_ORC_RT	Information on Trigger collections for campaign automation
CUAN_MKT_EXEC_EXECUTE	CUAN, subobject CUAN_MKT_ORC_RT	Information on execution of actions of marketing automation
CUAN_MKT_EXEC_BOUNCE	CUAN, subobject CUAN_MKT_EXEC_BOUNCE	Information on bounce collection for emails and text messages that have been sent previously by marketing automation and corresponding interaction creation
CUAN_MKT_EXEC_LINK_TRACKING	CUAN, subobject CUAN_MKT_EXEC_LINK_T	Information on collecting link tracking data and corresponding interaction creation
Paid search integration	CUAN_PSI, subobject CUAN_PSI_HCI	The report log provides information on: Functional and user errors received when performing service calls to Google Technical and network errors received when performing service calls to Google Authorization errors received when performing service calls to Google

Activity	Application Log Object	Comments
Handling of inbound WeChat messages (Reports:	CUAN_WECHAT	The report log provides the following information on: Processing of inbound WeChat
 CUAN_WECHAT_MESSAGE_HANDLE CUAN_WECHAT_CONTENT_SYNC CUAN_WECHAT_USER_SYNC) CUAN_WECHAT_STORE DE- 		messages • Synchronization of followers from WeChat
VICE_SYNC		 Synchronization of marketing content from WeChat Synchronization of locations, beacons, and the relationship between them from WeChat

System Log and System Trace

SAP Hybris Marketing doesn't write any application-specific messages to the ABAP System Log.

However, the system trace can offer valuable information for the analysis of system problems that degrade the performance of the application.

Should the application produce a runtime error, then the ABAP dump analysis can help you analyze the problem that occurred. Short dumps are generally the result of problems affecting the system as a whole, such as memory shortages or problems with the file system in the host operating system.

4.2.2 Interface Monitors

SAP Hybris Marketing doesn't have a separate interface monitor; however, it uses the message monitor of web service utilities (SRT_MONI). For more information about how to find messages with errors, see Checking Lead Integration With C4C [page 52] in this guide.

4.2.3 Data Growth and Data Archiving Monitors

The application does not provide a data archiving solution.

You can use administrative tools of the SAP HANA database to track space usage and data growth. For more information, see SAP Help Portal at http://help.sap.com/>, section > SAP In-Memory Computing > SAP HANA > SAP HANA Platform > System Administration and Maintenance Information.

i Note

Replicated data that is archived in the source system (for example an ERP or a CRM system) is automatically deleted in the *SAP Hybris Marketing* System.

4.3 Data Consistency

If related or identical data is stored in multiple places there may be the possibility of inconsistencies (e.g. after a restore of a single component).

i Note

Replicated data, that is archived in the source system (for example an ERP or a CRM system) is automatically deleted in the *SAP Hybris Marketing* system.

5 Management of the Application

SAP provides you with an infrastructure to help your technical support consultants and system administrators effectively manage all SAP components and complete all tasks related to technical administration and operation.

You can find more information about the underlying technology in *Technical Operations for SAP NetWeaver* in the *SAP Library* http://help.sap.com under SAP NetWeaver SAP NetWeaver SAP NetWeaver SAP NetWeaver 7.5 System Administration and Maintenance Information.

5.1 Starting and Stopping

SAP Hybris Marketing is started and stopped together with the SAP NetWeaver ABAP AS System on which it runs.

For information on and procedures for starting and stopping an SAP NetWeaver AS ABAP System, see *Technical Operations for SAP NetWeaver* in the SAP Help Portal http://help.sap.com/nw_platform/*

5.2 Software Configuration

This chapter explains which components or scenarios used by this application are configurable and which configuration tools you can use.

SAP Hybris Marketing

In the SAP menu of the SAP system under Tools Customizing IMG nchoose the Guide SAP Hybris Marketing to add settings and configurations for the following areas:

- General Settings
- Planning
- Segmentation
- Predictive Scenarios
- Insight
- Data Management
- Recommendations
- Target Group
- Campaigns
- Accounts

Export Definitions

SAP Hybris Marketing

SAP Solution Manager is the standard SAP tool for process and scenario-based configuration.

In the Solution Manager, call up transaction SOLAR_LIBRARY and navigate to Solutions/Applications Applications Powered by SAP HANA Scenarios SAP Hybris Marketing.

SAP NetWeaver Launchpad

For more information on how to work with and how to configure launchpads, see SAP Library on SAP Help Portal at http://help.sap.com/netweaver , SAP NetWeaver 7.5 (subtitled Support Package Stack 00 with Component SAP_UI 750 SP01) Application Help SAP NetWeaver Library: Function-oriented view Application Server Application Server ABAP UI Technologies in ABAP Launchpads -> Working with Launchpads at Design Time

SAP NetWeaver Gateway OData Services

For more information on how to maintain the OData services to administrate SAP Hybris Marketing, see go to the SAP Help Portal at http://help.sap.com/netweaver, SAP NetWeaver Gateway 2.0 Application Help SAP Library Support Package 11 SAP NetWeaver Gateway Developer Guide OData Channel Basic Features Service Life-Cycle Activate and Maintain Services.

5.3 Administration Tools

SAP Hybris Marketing does provide the technical configuration cockpit for configuration of technical details of the applications such as the web dispatcher, the integration of optional components, and so on.

For more information, see the installation or upgrade guide for SAP Hybris Marketing under http://help.sap.com/mkt SAP Hybris Marketing Product Page Installation and Upgrade Information.

5.4 **Backup and Restore**

You need to back up your system landscape regularly to ensure that you can restore and recover it in case of failure.

The backup and restore strategy for SAP Hybris Marketing consists of two parts:

- Backup and restore coverage for each component (see list below)
- Cross-system data dependencies

The backup and restore strategy for your system landscape should not only consider SAP systems but should also be embedded in overall business requirements and incorporate your company's entire process flow.

In addition, the backup and restore strategy must cover disaster recovery processes, such as the loss of a data center through fire. It is most important in this context that you ensure that backup devices are not lost together with normal data storage (separation of storage locations).

For SAP Hybris Marketing, the following backup strategy is recommended:

- 1. The SAP HANA database of the application must be backed up according to the procedures and recommendations documented in the SAP HANA Database Backup and Recovery Guide . You can find this guide on the SAP Help Portal http://help.sap.com/ under SAP In-Memory Computing SAP HANA SAP HANA Platform > System Administration and Maintenance Information > SAP HANA Administration Guides .
- 2. The SAP ABAP AS application software and non-database configuration should be backed up using backup facilities of the host operating system after installation and initial configuration and after every change in the configuration of the SAP NetWeaver ABAP AS (for example, changes in system and instance profiles, installation of updated or additional components, and so on).
- 3. The SAP Gateway application software and non-database configuration should be backed up as for the SAP ABAP AS application server. This requirement applies, however, only in the event that the Gateway is installed on a separate host than the NetWeaver application servers of the application.

5.5 **Client Copy**

A new client can be created using the client copier see https://help.sap.com/viewer/p/SAP_NETWEAVER_750 under Application Help SAP NetWeaver Library: Function Oriented View Solution Life Cycle Management Software Logisitics > Change and Transport System > BC - Client Copy and Transport (BC-CTS-CCO)



Caution

Ensure that the initial setup or any upgrade process for SAP Hybris Marketing is completed for the main client that you are going to copy before starting the client copy procedure.

To start a client copy, proceed as follows:

1. Create a new client by copying either the SAP reference client 000 or any of your existing and already configured SAP Hybris Marketing clients with your selected copy profile.

2. Execute CUAN_TECHNICAL_CONF and run the "Essentials" scenario and any scenario you want to re-enable in your new client.

Restrictions:

SAP Smart Business, executive edition (SBEE) does not support multi-client.

To apply a project-based customer-specific solution, you must extend the default setup for the SAP HANA user handling (see the installation guide at https://help.sap.com/mkt SAP Hybris Marketing Product Page

| Installation and Upgrade | Installation and Configuation Guide | User Configuration for SAP Smart Business, executive edition | Description | De

ERP/CRM Integration:

The type of integration ("Reuse of Original Suite Schema" or "Use of Replicated Suite Schema") is system-wide valid, which means in all clients of a system. Only exactly one SAP ERP and/or SAP CRM source system can be connected to SAP Hybris Marketing. A SAP Hybris Marketing client can consume data from only exactly one source client.

The following restrictions need to be solved on a project by project basis.

- The SAP CRM UI navigation (determination of target URL) must be manually adapted:
 - 1. Create a new RFC connection to the correct SAP CRM system and client (such as the RFC named CRMAPP).
 - 2. Open transaction LPD CUST.
 - 3. Search for the entry with role "HPA" and instance "CUAN", and select the icon displayed in column *Alias Mapping*.
 - 4. In the appearing dialog, select the entry CRMAPP in column *Current System Alias*, and enter the name of the RFC connection you created under step 1 in column *New System Alias*.
- As the standard Spend Distribution allows only one client (see the installation guide at https://
 help.sap.com/mkt SAP Hybris Marketing Product Page Installation and Upgrade Installation and
 Configuation Guide Setting Up Spend Management Activate SAP ERP PS Integration for Cost
 Collection →, implement the provided BAdl CL_BADI_IMP_CUAN_MSM_SPEND_PRJ and adapt it according to your requirements.

5.6 System Copy

In different situations during the lifecycle of your solution, it may be appropriate for you to perform a system copy. SAP recommends that you perform a system copy if you are planning to set up a test, demo or training system. For more general information about system copies, see the SAP Community Network at http://scn.sap.com/docs/DOC-8324/2.

SAP Hybris Marketing is relying directly on SAP HANA features not handled directly by SAP NetWeaver AS ABAP. Therefore not all standard SAP NetWeaver tool options for system copy are supported.

Follow the homogenous system copy on SAP HANA procedures as described in SAP Note 184468. In addition, refer to the generic Software Update Manager Guide for System Copy at http://service.sap.com/sltoolset

under System Provisioning System Copy Option Guide for Systems Based on SAP NetWeaver 7.1 & Higher \(\)

Caution

Don't forget to isolate the system during the restore and ensure that all running processes (such as running batch jobs, SLT replication, remote outbound connectivity such as sending of e-mails) are stopped before copying the system.

Follow-up step specific toSAP Hybris Marketing:

- 1. After your target system is up-and running, execute the Essentials scenario in the technical configuration cockpit of the main client. According to your requirements, execute any required technical configuration scenario in addition. Once the scenarios are completed in the main client, you can execute the scenarios in additional clients, if any. This procedure ensures the adaptation of settings to the new system.
- 2. Reconfigure any outbound connection via the technical configuration cockpit (transaction CUAN TECHNICAL CONF) or the respective integration guides [path to be added (service.sap.com/mkt)].

SLT Replication:

If you want to attach a different SAP ERP or SAP CRM source system, you must reset the whole SAP Hybris Marketing client concerning the processed interaction contacts and other related business objects. After that, you must manually force the reset of the integration mode to "No Integration". To do so, see consulting note 2400761 **%**

For more information, see https://go.sap.com/community/topic/software-logistics.html and http:// service.sap.com/instguidesnw/...

5.7 **Application Copy**

In different situations during the lifecycle of your solution, it may be appropriate for you to perform a system copy or a migration. SAP recommends that you perform a system copy if you are planning to set up a test, demo or training system. You must also perform a system copy if you want to change your operating system or your database. For more information about system copies, see the SAP Community Network at http://scn.sap.com/ docs/DOC-8324/.

5.7.1 Homogenous System Copy

For a homogeneous system copy of SAP Hybris Marketing, the standard procedures of SAP NetWeaver apply.

For more information about system copies, see System Copy and Migration at http://scn.sap.com/docs/ DOC-8324 .

5.8 Periodic Tasks

This chapter describes all tasks that may be performed automatically and which must run periodically in order to keep *SAP Hybris Marketing* running smoothly over time. In the case of *SAP Hybris Marketing*, the set of these tasks is restricted to a short list of periodically executed jobs in the ABAP Background Processing System.

A separate requirement is that you ensure that data is imported from production systems into *SAP Hybris Marketing* at the frequency that you require. *SAP Hybris Marketing* is not able to provide facilities for ensuring that data transfers occur, since they originate outside the system.

This section sets as a prerequisite that all standard background jobs required by the NetWeaver ABAP AS itself have been scheduled. For more information, see SAP Help Portal at http://help.sap.com//nw_platform SAP NetWeaver 7.5 System Administration and Maintenance Information Technical Operations for SAP NetWeaver ...

Scheduled Periodic Tasks

This section is relevant for all installations of SAP Hybris Marketing.

Resetting the Cache Buster

If the Cache Buster is not reset after a change in the application code (for example, after an ABAP import or the installation of a note), the user might receive the message HTTP status code 500 — Requested Resource outdated.

You can fix this either by waiting (2 hours maximum) for the Cache Buster to be reset automatically, or by running report /UI5/APP_INDEX_CALCULATE. For more information, see SAP Help Portal at http://help.sap.com//nw_platform SAP NetWeaver 7.5 Application Help UI Technologies in SAP NetWeaver with SAP_UI 740 SAPUI5: UI Development Toolkit for HTML5 Using the SAPUI5 Repository SAP UI5 Application index.

The report updates the information on the server that is checked by the client in order to decide, whether a resource can be read from the browser cache or whether it has to be retrieved from the server.

If changes are frequently being made to the application code during regular working hours, you can either run this report as required after each ABAP import, or schedule it to run as a periodic background job.

Creating Interactions and Contacts

Interaction contacts are used in the following worksets:

- Contact Engagement you can analyze the interaction or interests based on the contacts and corresponding contact master data.
- Sentiment Engagement you can filter posts by contacts, as well as display the contact details of the authors of posts;
- Segmentation you can, for example, segment according to contact persons for accounts, business partners
 or consumers;
- Accounts you can display the relevant contacts for an account;
- Customer Journey Insight you can explore the sequence of interactions performed by customers over time
 through various touch points such as social, Web and phone, or events, for example: clicked ads, opened
 emails, and confirmed web searches.

In order to use interaction contacts based on data from an SAP ERP and/or SAP CRM system, proceed as follows:

- If you are using interactions for the first time:
 - 1. Run ABAP Report CUAN IC MASTERDATA EXTR FULL once for the initial load.
 - 2. Run ABAP Report CUAN_IC_MASTERDATA_EXTR_DELT as a regular background job to keep your system updated with interaction contacts.

i Note

This report must be run exclusively. Overlapping runs are not supported. Please plan sufficient time between the runs and don't split up the extraction by business type.

- If you are already using SAP Hybris Marketing Data Management and have ABAP Report CUAN_IC_MASTERDATA_EXTR running as a regular background job, we recommend that you replace it with ABAP Report CUAN_IC_MASTERDATA_EXTR_DELT, which has been designed specifically for regular updates in delta mode
- If you are already using SAP Hybris Marketing Data Management and have ABAP Report CUAN IC MASTERDATA DELT running as a regular background job, no further action is required.

The following sources are supported:

- SAP CRM B2B contacts, B2B consumers, and marketing prospects
- SAP ERP B2B contacts and B2C consumers

i Note

See the report documentation for further details.

Scheduled Periodic Tasks for SAP Hybris Marketing Segmentation

There are currently no periodic tasks scheduled to run for SAP Hybris Marketing Segmentation.

Scheduled Periodic Tasks for SAP Hybris Marketing Insight

This section is only relevant if you have installed SAP Hybris Marketing Insight.

Data Model Maintenance

Run ABAP Program CUAN_PRED_MODEL_UPD regularly in order to maintain a data model that is used for carrying out customer-specific analyses and calculations for:

- ABC classification of customers
- Customer lifetime value
- Customer churn rate
- Customer loyalty

To monitor the background job, proceed as follows:

- 1. Call up transaction ${\tt SM36}$ and enter the name of the job you defined.
- 2. To display a user independent job overview, enter user name *.
- 3. Specify the status and the period of the job.
- 4. Press Execute.
- 5. Check for strong deviations in processing times.

To analyze errors, use the application log object Customer Engagement Intelligence: Account Intelligence (CUAN_AI) and proceed as follows:

- 1. Call up transaction SLG1 to display application logs.
- 2. Enter Object CUAN AI.
- 3. Enter sub-object CUAN AI MODEL UPDATE, or * for all.
- 4. Specify the time period that you want to analyze.
- 5. Carry out the application log analysis.
- 6. Double-click on the entry that interests you to open the corresponding error description.

i Note

If Customizing (ABC, CLV and so on) is copied into the productive system (as opposed to being set up directly in the productive system), you need to also run the report in the productive system in order to gain immediate access to current data.

Update Program for Margin Decomposition

Run ABAP Report CUAN_CVI_LOAD_FMD_SD to load the materialized view of table CUAND_CVI_FMD_SD (Flexible Margin Decomposition). If you want to run the update program CUAN_CVI_LOAD_FMD_SD on a weekly basis, you can use the standard variant SAP_DELTA_LOAD, which is set to weekly updates. If, however, you want to want to run the update program with a different frequency, you can create a variant using transaction RSASSIBTCH. The frequency of your updates depends on how you handle billing in your SAP ERP system: For example, if billing occurs several times a day, a daily update is recommended. If billing occurs once a day, a daily update is recommended. The same applies to a weekly or monthly update.

We recommend that you schedule this update program to run after every billing document run.

Scheduled Periodic Tasks for SAP Hybris Marketing Data Management

This section is only relevant if you have installed SAP Hybris Marketing Data Management.

• The following scheduled background jobs for program CUAN_IC_MASTERDATA_EXTR_DELT are run regularly:

Table 9

Background Job Name	Program Name	For these Applications / In-	Default Frequency
		tegration Scenarios	

CUAN_IC_EXTR_DELTA_CRM	CUAN_IC_MASTERDATA_EXT R_DELT	SAP CRM	every 15 minutes
CUAN_IC_EXTR_DELTA_ERP	CUAN_IC_MASTERDATA_EXT R_DELT	SAP ERP	every 15 minutes
CUAN_IA_TA_EXTR_DELTA	CUAN_IC_MASTERDATA_EXT R_DELT	all	every 5 minutes

• The program 'Match and Merge Contacts" CUAN_CE_IC_TRIGGER_EIM can be run if required. You can use this report to start a *Contact Match and Merge* run based on HANA Enterprise Information Management (EIM) capabilities. This enables you to periodically clean up duplicate interaction contacts in your system. During each run the system searches for potentially duplicate interaction contacts and, if the option 'Merge High-Confidence Matches' is flagged, automatically merges the interaction contacts in each high-confidence match group into one remaining interaction contact.

This report can be run as follows:

- o Run Initial Matching
- o Run Periodic Matching
- o Run Matching with Specified Timestamp

Scheduled Periodic Tasks for SAP Hybris Marketing Campaigns

This section is only relevant if you have installed SAP Hybris Marketing Campaigns.

Uploading KPI Data for Google Paid Search Campaigns

If you enabled paid search integration with Google AdWords, the following background job is scheduled to run every 3 hours. The background job will retrieve KPIs for paid search campaigns from Google AdWords:

- Background Job Name: SAP CUAN PAID SEARCH KPI
- Report name: CUAN_HCI_ADWORDS_KPI_READ

To activate the integration with Paid Search, carry out the steps described in the Installation Guide. For more information, see the installation guide at http://help.sap.com/mkt/ Installation and Upgrade Information Installation Guide ...

Scheduled Periodic Tasks for SAP Hybris Lead Management

This section is only relevant if you use Lead Management.

It is possible to define lead stages for contacts in a specific segmentation profile using the **Lead Stages** app. With the lead dashboard, the customer can analyze the status of the contacts in the current lead stages or their behavior over a certain period of time. To enable this functionality, you use transaction SM37 to schedule report CUAN LM IC STAGE ATTH WRITE on a daily basis.

The report calculates the current lead stage of an interaction contact based on the defined lead stages and writes it to the attribute history of the interaction contact. It is recommended that you assign the role SAP CUSTOMER ANALYTICS ADMIN to your user for this purpose.

Scheduled Periodic Tasks for SAP Hybris Marketing Score Builder

This section is only relevant if you use SAP Hybris Marketing Score Builder.

In **Define Background Job** (transaction SM36), the business administrator needs to schedule the ABAP report CUAN SCORE PERSISTENCE UPDATE.

The report must be scheduled 3 times with different periodicity. For example:

- For Variant FREQ_HIGH choose periodicity 'Daily' start date/time: Today/00:00:00
- For Variant FREQ_MEDIUM choose periodicity 'Weekly' start date/time: Next Sunday/00:00:00
- For Variant FREQ_LOW choose periodicity 'Monthly' start date/time: First Sunday of next month/00:00:00

5.9 Required Manual Periodic Tasks

The following manual tasks are available in SAP Hybris Marketing.

Deletion Reports

You can use the following reports for deleting data in SAP Hybris Marketing.

i Note

The deletion of campaigns, interactions, interaction contacts, and target groups is carried out in a two step procedure: First you set the deletion indicator for the objects that you want to delete. In a second step you can then carry out the actual deletion of all objects that have reached or exceeded the retention period specified for that object type.

To set the retention period for campaigns, interactions, and interaction contacts, go to SAP Hybris Marketing Customizing under Cross-Application Components Processes and Tools for Enterprise Applications Reusable Objects and Functions for BOPF Environment Archiving Adapter Maintain BO-Specific Residence Periods. Enter the retention period that you want to apply to each business object, which are as follows:

- CUAN_INITIATIVE
- CUAN_INTERACTION
- CUAN_INTERACTION_CONTACT
- CUAN TARGET GROUP
- GSEG_BUILDING_BLOCK
- GSEG_SEGMENTATION_MODEL

i Note

To use the deletion reports, you need to be assigned to your copy of the role SAP CUSTOMER ANALYTICS ADMIN.

There are different deletion reports for different business objects:

- To delete **campaigns** that have the status completed or discarded:
 - Use transaction CUAN_INI_SET_COLD to set the deletion indicator in campaigns whose retention period has expired.
 - Use transaction CUAN INI DEL COLD to delete campaigns where the deletion indicator has been set.
- To delete interactions, proceed as follows:
 - Use transaction CUAN_CE_IA_SET_COLD to set the deletion indicator in interactions whose retention period has expired.
 - Use transaction CUAN CE IA DEL COLD to delete interactions where the deletion indicator has been set.
- To delete interaction contacts, proceed as follows:
 - Use transaction CUAN_CE_IC_SET_COLD to set the deletion indicator in interaction contacts and/or facets whose retention period has expired.
 - Use transaction CUAN_CE_IC_DEL_COLD to delete interaction contacts and/or facets where the deletion indicator has been set.

i Note

For more information on deleting interaction contacts, see the report documentation.

- To delete target groups, proceed as follows:
 - Use report CUAN_TARGET_GROUP_SET_COLD to set the deletion indicator in target groups whose retention period has expired.
 - Use report CUAN_TARGET_GROUP_DELETE_COLD to delete target groups where the deletion indicator has been set.

i Note

For more information on deleting target groups, see the report documentation.

- For a one-step deletion of product category hierarchies or product categories, use report CUAN DELETE PRODUCT CATEGORIES
- For a one-step deletion of products, use report CUAN DELETE PRODUCTS
- In SAP Hybris Marketing Segmentation you can use the following transactions for deleting data:
 - o To delete **segmentation models**, proceed as follows:
 - Use report GSEG_SM_SET_COLD to set the deletion indicator in segmentation models whose retention period has expired.

- Use report <code>GSEG_SM_DELETE_COLD</code> to delete segmentation models where the deletion indicator has been set.
- To delete **building blocks**, proceed as follows:
 - Use report <code>GSEG_BB_SET_COLD</code> to set the deletion indicator in building blocks whose retention period has expired.
 - Use report <code>GSEG_BB_DELETE_COLD</code> to set the deletion indicator in building blocks where the deletion indicator has been set.

i Note

If you have not set a retention period in customizing for either building blocks (archiving object GSEG_BUILDING_BLOCK) or segmentation models (archiving object GSEG_SEGMENTATION_MODEL) the system automatically uses a retention period of 365 days for these objects.

File Upload for White Space Analysis Transaction

Transaction CUAN_WS_UPLOAD_VAL (ABAP Report CUAN_CUST_WS_UPLOAD) allows you to maintain CSV data via file upload.*

You may need to change target values if

- The definition of customer segments is changed (attribute for segmenting customers)
- New customer segments are added (for example a new industry)
- The definition of product segments is changed (attribute for segmenting products)
- New product segments are added (for example a new material group)
- Target values (distribution percentage) need to be adapted.

We recommend that you run the report to adapt the target values annually.

Maintaining Services

Use transaction SICF to maintain the HTTP service hierarchy

Refreshing KPI Tiles

Call up this transaction ${\tt CUAN_HS_KPI_REFRESH}$ to refresh the KPI tiles in the Home workset.

Assigning Backend System Sales Employees (Sales Representatives) to Backend Users

For more information, see http://help.sap.com/mkt > Application Help (English) > SAP Hybris Marketing User Management > My Customer Assignment.

Importing Interactions and Interaction Contacts

With the *Import* subworkset in *SAP Hybris Marketing Data Management* you can upload the following objects manually in a comma separated value (CSV) file format: **interactions** .

Interactions

The manual upload serves the same interface as the automatic upload and you can use it to facilitate the upload of test and demo data. You can also use it to upload interactions from sources from which automatic uploads are neither necessary nor desirable. An example CSV file is available for download.

- Interaction Contacts
 - In addition to commas, semicolons and tabulators are supported as separators and identified automatically. A header row with attribute names is mandatory. Allowed attributes are defined in structure CUAN S CE IC EXT FAFL with the following exceptions:
 - For attributes pairs of attribute key and attribute free text (suffix _FT) keyed attributes are not allowed
 (TITLE, COUNTRY, REGION, LANGUAGE, SEX, MARITAL_STATUS; BRSCH, ABTNR, PAFKT). Use
 free text attributes instead. Free text attributes can be mapped against keyed attributes (customizing
 tables CUANC CE MFT *, report CUAN IC MASTERDATA FT)
 - The origin of the interaction contact data (ID_ORIGIN) is set internally (SAP_FILE_IMPORT) and cannot be changed.
 - Not allowed attributes are ignored without errors or warnings, enabling you to use additional columns in the CSV file for comments.

i Note

Rows before the header row are supported and identified with * at the beginning of the row.

The CSV content can be escaped with quotations marks or apostrophes. In this case, escape all columns. For a correct handling of special characters, store the CSV file in the UTF-8 code page. An example CSV file is available for download

Contact Engagement: Mapping Table Keys to Filter Texts

The keys and descriptions of the filter criteria displayed on the *Contact Engagement* screen cannot always be automatically matched to the corresponding keys and descriptions in the underlying ERP or CRM backend systems. This can lead to duplicate entries with asterisks appearing in the filter drop-down boxes:

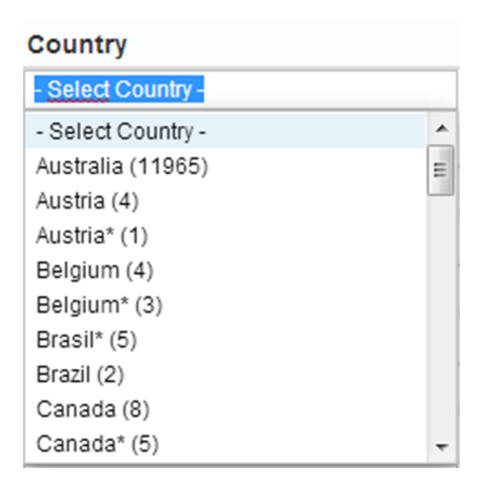


Figure 7: Country Drop-Down Menu

If you find such duplicate entries in your system, you need to carry out the following steps:

- 1. Run report CUAN_IC_MASTERDATA_FT:
 - In section Free Text Attributes, select the filter criteria affected (for example Country).
 - o In section Mode, select Update Mapping Tables.

The system selects all entries from outside channels (for example from data harvested from social media) that do not have key/description combinations identical to the corresponding internal tables and tries to match them automatically (for example through lower/upper case conversion).

Entries that cannot be automatically matched are stored in the following views (for mapping free texts to keys). All entries in these views need to be mapped manually:

Table 10:

Name	Description
CUANV_CE_MFT_C	Mapping of Country Free Texts to Country Keys
CUANV_CE_MFT_D	Mapping of Department Free Texts to Department Keys
CUANV_CE_MFT_F	Mapping of Function Free Texts to Function Keys
CUANV_CE_MFT_G	Mapping of Gender Free Texts to Gender Keys
CUANV_CE_MFT_I	Mapping of Industry Free Texts to Industry Keys
CUANV_CE_MFT_L	Mapping of Language Free Texts to Language Keys
CUANV_CE_MFT_M	Mapping of Marital Status Free Texts to Marital Status Keys
CUANV_CE_MFT_R	Mapping of Region Free Texts to Region Keys (cross-country)
CUANV_CE_MFT_T	Mapping of Title Free Texts to Title Keys

- 2. Call up the corresponding views in transaction SM30 and manually assign the remaining entries to the relevant key. You can use the F4 help to do this. Save your entries.
- 3. After you have mapped the remaining text entries, run report CUAN_IC_MASTER_FT a second time using the following settings:
 - In section Free Text Attributes, select the same filter criteria as in Step 1).
 - In section Mode, select Update Interaction Tables.

The system now updates all interaction contacts with the correct key/description combinations.

After you have carried out these three steps, the drop-down boxes for the filters should be free from duplicate entries.

Processing Requests for Removing Contact Identity

Use report CUAN_IC_MASTERDATA_ANON to process requests for the removal of interaction contact data. When you run this report it deletes the master data of an interaction contact, as well as related data, such as ratings and interactions.

For more information, see the report documentation in SE38.

This report should be executed as and when needed.

Processing Requests for Display of Personal Data

Use report CUAN_IC_DATA_PRIVACY_DISPLAY upon request to display details of contact data stored in the business objects Interaction Contact and Interaction within SAP Hybris Marketing.

For more information, see the report documentation in SE38.

This report should be executed as and when needed.

You can also take screenshots of a contact's profile from the Contact Profile UI.

SAP Hybris Marketing Data Management: Changing the Required Level of De-Identification for Different Groups or Countries

When working with harvested data, you can take into account different data privacy laws for different groups and countries.

- If you are already using Consent Management and want to change the level of contact data displayed in SAP Hybris Marketing Data Management go into Customizing and call up Cross-Application Components Processes and Tools for Enterprise Applications Social Intelligence Social Consent Management (See the Customizing documentation for details).
- If you want to start using Consent Management, you can find information on the function as well as how to switch it on in http://help.sap.com/erp607/ Application Help (English) Processes and Tools for Enterprise Applications Social Intelligence Overview Consent Management.

Resetting the Cache Buster

If the Cache Buster is not reset after a change in the application code (for example, after an ABAP import or the installation of a note), the user might receive the message <code>Http</code> status code 500 — Requested Resource outdated. You can fix this either by waiting (2 hours maximum) for the Cache Buster to be reset automatically, or by running report /UI5/RESET CACHEBUSTER.

The report updates the information on the server that is checked by the client in order to decide, whether a resource can be read from the browser cache or whether it has to be retrieved from the server. If changes are frequently being made to the application code during regular working hours, you can either run this report as required after every ABAP import, or schedule it to run as a periodic background job.

5.10 Uploading Campaign Success Data

You can manually upload campaign success data. You upload campaign success data from a comma-separated value (CSV) file using the *Import Data* application under *Data Management*.

For more information, go to the SAP Help Portal athttp://help.sap.com/mkt/mkt/ SAP Hybris Marketing Worksets and Applications Data Management Importing Data .

To access the Import Data application, the user must be assigned a copy of the following role:

• SAP MARKETING BUS ADMIN USER

To upload campaign success data, the user must have the following authorization object assignments:

Table 11:

Authorization Object	Object Name (HPA_OBJ)	Activity (ACTVT)
HPA_OBJECT	CUAN_INITIATIVE	02 (Change)

Table 12:

Authorization Object	Object Name (HPA_OBJ)	Action Name (HPA_ACTION)	Activity (ACTVT)
HPA_ACTION	CUAN_INITIATIVE	UPDATE_EXTERNAL_REPORTI	16 (Execute)

For more information, see the security guide for SAP Hybris Marketing on SAP Help Portal at http://help.sap.com//mkt Security Information.

5.11 Uploading Customer Satisfaction Survey Data

In *SAP Hybris Marketing*, you can include customer satisfaction survey results in the customer analysis and customer segmentation. The following section describes how to upload customer satisfaction survey data to the SAP HANA database you use for *SAP Hybris Marketing*.

Note that the upload procedure described here is based on the usage of the *SAP BusinessObjects Data Services* (DS) designer. However, you define the parameters for processing the customer satisfaction survey data in Customizing for *SAP Hybris Marketing*.

5.11.1 Creating Users for Data Upload Tasks

As a prerequisite for the upload procedure, you create users for the connection of DS datastores to the target SAP HANA database. Each building block requires a specific user with different roles and privileges. The following user details are relevant:

Table 13:

Proposed User ID Building Block	Granted Roles	SQL Privile	SQL Privileges						System Privileges
		SQL Ob-	Alter	Drop	Select	Update	Insert	Delete	
RDSLL2H1 DH1	Modeling	<sa- PHAN></sa- 			X	X	X	X	Catalog read
	Monitoring	catalog							Data ad- min
	SAP_CUA N_CRM_S ELECT_US E								Export
RDSLL2H 2 DH3	SAP_CUA N_CRM_S	CUAN_EX T_SUR_A			X	Х	X	X	
	ELECT_US E	CUAN_EX T_SUR_C			Х	X	X	Х	
		CUAN_EX T_SUR_CT			Х	Х	Х	Х	
		CUAN_EX T_SUR_H			Х	X	X	X	
	SAP_CUA N_ERP_SE LECT_USE	CUAN_EX T_SUR_HT			X	X	X	X	
		CUAN_EX T_SUR_Q			Х	Х	X	Х	
		CUAN_EX T_SUR_QT			Х	X	X	X	
		CUAN_EX T_SUR_R			Х	X	X	X	

Proposed User ID Building Block	Granted Roles	SQL Privile						System Privileges	
		SQL Ob- ject	Alter	Drop	Select	Update	Insert	Delete	
		CUAN_EX T_SUR_ST G			X	X	X	X	
RDSLL2H 3 DH5	SAP_CUA N_CRM_S ELECT_US	_SYS_BIC			X				Save- point_ad- min
	E	CUAND_C UST_ENH _C <sap schema></sap 	X		X	X	X	X	Scenario

You use SAP HANA Studio to create the users. Make sure you have established the connection to your SAP HANA data base system. Perform the following steps:

- 1. In the navigation area, locate the catalog node *Users* under *Authorization*. Use the context menu to create a new user. For the user name enter one of the users as listed above per building block. You need a separate user for each building block.
- 2. Enter an initial password and confirm it.
- 3. Use the input help to specify all roles and SQL privileges you want to assign to the user. You assign the roles and privileges according to the requirements of the upload task.
- 4. Choose Deploy after you have created all users.

5.11.2 Preparing the Upload of Customer Satisfaction Survey Data

This procedure describes how to set up the *SAP BusinessObjects Data Services* (DS) designer for the upload of customer satisfaction survey data to *SAP Hybris Marketing*.

Prerequisites

- The users for the survey data upload are available. For more information, see the section on user creation.
- You have installed the SAP HANA Database Client, version number 1.00.41.370937 or higher.

Adjusting the Datastore

Perform the following steps to adjust the datastore DS HANA SAT SURVEY in DS:

- 1. From the Windows menu, choose All Programs SAP BusinessObjects Data Services 4.1 Patch 5 Data Services Designer The Designer prompts you for logon information associated with your repository database.
- 2. In the BusinessObjects Data Services Repository Login dialog box, enter the following:
 - In System Host, choose <BOE Server Name: BOE Server Port> using default value <your computer name>: 6400.
 - For the *User* name enter **Administrator**.
 - For the *Password* enter <administrator password>. For more information, see the section about the authorization details relevant for the upload of customer satisfaction survey data using DS.
 - For Authentication select Enterprise.
- 3. Choose *Log on* and select the repository DATA_LOAD_HANA_REPO. Choose *OK* to access the DS *Designer* for the selected repository.
- 4. In the Local Object Library (bottom-left section of the screen), choose the Datastores tab. Right-click on the Datastore DS HANA SAT SURVEY and choose Edit.
- 5. In the *Edit Datastore* DS_HANA_SAT_SURVEY dialog box, choose *Advanced* and choose *Edit* to define the values for the data source, user and password as required.

Table 14:

Parameter	Value	Comment
Default Configuration	Yes	Set <i>Default Configuration</i> to <i>Yes</i> for your target database.
Database type	HANA	
Database Version	<hana.1.x></hana.1.x>	Based on your actual version
Data Source	DS_HANA_SAT_SURVEY	
User Name	<user access="" containing="" data="" database="" erp="" for="" hana="" name="" sap="" the="" to=""> RDSLL2H2</user>	
Password	<pre><password access="" containing="" data="" database="" erp="" for="" hana="" sap="" the="" to=""> Welcome1</password></pre>	
DS_OWNER	SAPHAN	SAP HANA database containing the ERP data

Creating a New Data Source

Perform the following steps to create a new data source in DS:

1. Choose ODBC Admin..., select tab System DSN, and choose Add.

- 2. In the *Create New* data source view, select driver *HDBODBC* and choose *Finish*. If driver *HDBODBC* is not available, check whether you have properly installed the SAP HANA database client.
- 3. In the SAP HDB(<client version>) view, enter the name for the new data source, for example, DS_HANA_SAT_SURVEY. Also, enter the server port (mandatory), and a description for the data source. For information about the port number, open the SAP HANA Studio (connected to the SAP HANA database for the ERP data). Use the context menu to access the properties of the connection. On the Database User Logon tab, choose Additional Properties to find the port number under Host.
- 4. In DS, choose *Connect*. Enter user and password for the access to the SAP HANA database for the ERP data. Deselect *Connect using SSL*. Choose *OK*.
- 5. In the SAP HDB(<client version>) view, choose OK. Check whether the new data source is listed under System Data Sources. Choose OK.
- 6. In the Edit Datastore dialog box, use the input help to select the new data source.
- 7. Enter the user and password.
- 8. Choose Advanced. For the parameter DS_OWNER, enter your HANA schema. Choose OK.

As a result, the new data source is created and references the HANA schema you have defined for DS_OWNER.

Defining the Parameters for the Customer Satisfaction KPI

In SAP Hybris Marketing, the customer satisfaction survey data are processed to provide a corresponding KPI. You define the parameters for the interpretation and calculation of the customer satisfaction KPI in Customizing under SAP Hybris Marketing Customer Value Intelligence Settings for Relationship Analysis and Stratification Define Customer Satisfaction Survey Parameters Vou can also use this customizing activity to check the log for the upload of customer survey data to SAP Hybris Marketing.

Creating Tables in the Target Database

In DS, you perform the following jobs to create the required data base tables for the upload of customer satisfaction survey data:

Table 15:

Object (Job)	Table	Description
Job_DM_SURVEY_Flat_Format_UP-	CUAN_EXT_SUR_R	Survey results: Main
LOAD	CUAN_EXT_SUR_A	Survey results: Survey answers
Job_DM_SURVEY_Load_MERGE	CUAN_EXT_SUR_STG	Survey results: Load
		You perform this job to merge the load IDs.

Perform the following steps to execute the DS jobs:

- 1. In the Local Object Library of DS, use the context menu to open a Data_Model project.
- 2. In the *Project Area*, use the context menu for the job you want to perform and choose *Execute*.

As a result, the database tables are created in the target data base schema DS_HANA_SAT_SURVEY.

5.11.3 Performing Data Upload Tasks

For the actual upload of customer satisfaction survey data to the SAP HANA database used for the *SAP Hybris Marketing* application, you perform the following series of tasks:

- Set variables
- Connect the source for the survey data. You can connect to TXT files, MS Excel files, or databases.
- Validate and enrich the survey data you want to upload
- Review invalid job output
- Upload the validated and enriched survey data to the SAP HANA database

Using Global Variables

You use global variables to increase the flexibility and reusability of the jobs you are designing. You can utilize global variables for the following purposes:

- Defining default values for segment fields where no values are provided by the source system
- Determining whether a segment is required for a job when performing the mapping, validation and enrichment steps
- Defining the format for data conversions, such as the date field conversion, or the decimal conversion.

Variables for Default Values

The following global variables provide default values for fields that are not mapped to the survey data, or that contain NULL values:

Table 16:

Variable	Data Type	Description	Default Value	Comment
\$G_LoadDate	Datetime	Provides a consistent timestamp for a single execution of the job	Current date and time at the start of the job execution	
\$G_ProfileMapTables	Varchar(1)	Defines whether to execute the profile MAP table data step	Y	
\$G_SourceData_Path	Varchar(255)	Points to the location of the test data refer- enced by each mapping data flow	C:\ Data_Load_HANA \Source_Files_DI_IN	Working folder path
\$G_LANGU_Default	Varchar(255)	Default language	E	
\$G_DI_OPERA- TION_TYPE_Default	Varchar(255)	Indicates how to process the target HANA data	I	
\$G_CLIENT	Varchar(255)	Default client	800	

Variable	Data Type	Description	Default Value	Comment
\$G_LoadID	int			Relevant for job
\$G_Survey	Varchar(10)		4711	Job_DM_SURVEY_Flat _Format_UPLOAD
\$G_Min_Answer_ID	int		1	
\$G_Max_Answer_ID	int		10	
\$G_LoadTime	Varchar(30)			

Variables for the Staging Table Execution

The following variables determine whether a table (for mapping, validation, enrichment) is processed within a specific job:

Table 17:

Variable	Data Type	Default Value	Used in Job
\$G_LoadDataToHANA	Varchar(1)	N	Job_DM_SURVEY_Flat_Form at_UPLOAD
\$G_Stop_Job_If_Inva- lid_Data_Exists	Varchar(1)	Y	Job_DM_SURVEY_Flat_Form at_UPLOAD
\$G_01_CUAN_EXT_SUR- VEY_A_Req	Varchar(1)	Υ	Job_DM_SURVEY_Flat_Form at_UPLOAD

Variables for the Segment Upload

The following variables determine whether a segment is processed within a specific job:

Table 18:

Variable	Data Type	Default Value	Used in Job
\$G_01_CUAN_EXT_SUR- VEY_A_LoadToHANA_Req	Varchar(1)	Y	Job_DM_SURVEY_Flat_Form at_UPLOAD
\$G_08_CUAN_EXT_SUR- VEY_R_LoadToHANA_Req	Varchar(1)	Y	

Variables for Formatting

The following variables determine the target format for unformatted source data:

Table 19:

Variable	Data Type	Default Value	Description
\$G_Date_Format	Varchar(10)	YYYYMMDD	Provides the default format for dates received from files, or non-date format fields.
\$G_Time_Format	Varchar(10)	HHMISS	Provides the default format for times received from files, or non-time format fields.
\$G_Decimal_Separator	Varchar(1)		Specifies the decimal separator for decimal data received from files, or non-date format fields.

Connecting the Source

Perform the following steps to connect the data source to the DS designer:

1. Log on to the DS designer specifying the following:

Table 20:

Table 20.	
System - Host	<bi bi="" name:="" platform="" port="" server=""></bi>
Table 21:	
User Name	The administrator, or the user assigned to the BI platform
Table 22:	
Password	The administrator password, or the password of the user assigned to the BI platform
Table 23:	
Authentication	Enterprise

- 2. Select repository DATA_LOAD_HANA_REPO.
- 3. Perform one of the following alternatives, depending on the type of your data source:

Connecting to TXT files

- 1. In the *Local Object Library*, choose tab *Formats*. Choose *New* in the *Flat Files* context menu to create a new file format template for the connection to flat files.
 - Specify the file type. Select *Delimited* if the file uses a character sequence to separate columns. Select *Fixed width* if the file uses specified widths for each column.
 - Provide a description for the new template (under General, Name).
- 2. Specify the location of the files browsing to the corresponding folder under *Data Files*, *Root Directory*.
- 3. Select the delimiter for your files under *Delimiters*, *Column*. Select a text delimiter if one is required to define the text fields in your files.
 - Do not use "for quotation marks in the text field as this can interfere with the mapping for inch values.

- 4. Under *Input/Output*, specify the number of rows you want to skip. For *Skip row header*, select *Yes* if your files contain the column headings in the first row. For *Write row header*, select *Yes* if you want to reprocess files using the same file format, and preserving the column headings in the first row. When asked by the system whether to overwrite the current schema with the schema from the file you have selected, confirm the overwriting to create the required schema for your flat file.
- 5. Specify the field names, data types, and field sizes according to the source files.
- 6. Choose Save & Close to save the newly defined file format template. You can find the new template in the Local Object Library under Flat Files. Choose View Data in the context menu to check the template definitions.

Connecting to MS Excel files

- 1. In the Local Object Library, choose tab Formats. Choose New in the Excel Workbooks context menu to create a new file format template for the connection to Excel files.

 Provide a description for the new template (under Import Excel Workbook, Format name).
- 2. Specify the location of the Excel files (browsing to the corresponding folder under *Directory*), and specify the file (under *File name*).
- 3. Choose Save & Close to save the newly defined file format template. You can find the new template in the Local Object Library under Flat Files. Choose View Data in the context menu to check the template definitions.
- 4. If your data contains a named range, choose *Named range* to select the type.

 If the first row contains the column headings of the named range columns, choose *Use first row values as column names*, and additionally choose *Import Schema*. If not, choose *Import Schema*, and change the names of the field names as needed.
- 5. If your data is contained in an Excel worksheet, choose Worksheet to select the according worksheet.
- 6. For the population of the custom range field, choose *Custom range* and select the header row of the Excel sheet. Close the file. Select *Extend range*.
- 7. If the first row of your Excel sheet contains the column names, select *Use first row values as column*
- 8. Choose *Import Schema*. If you are not sure about the data type and size of the fields you want to import, change *Data Type* to *Varchar* and *Field Size* to *255* for all fields.
- 9. Choose OK. You can find the new template in the Local Object Library under Excel Workbooks.

Connecting to a Database

- 1. In the Local Object Library, choose tab Datastores. Choose New in the context menu to create a new datastore for the connection to a database.
- 2. Enter a name for the datastore. We recommend not to include development tier information, such as "DEV" or "TEST" as you cannot change the name once the datastore is created.
- 3. For a Datastore type, select Database.
- 4. Select the *Database type* according to the database you want to connect. Also, specify the connection details, such as an ODBC data source.

 Choose Apply and OK. Select the new datastore you have created and open it (using the context menu.)
 - Choose *Apply* and *OK*. Select the new datastore you have created and open it (using the context menu). Check whether the datastore tables are correctly displayed. If not, check the connection details you have specified.
- 5. Select all database tables required as a source for the mapping. Choose *Import/Reimport* (context menu) to import the metadata for each table into the datastore.
- 6. Expand the datastore. Expand the Tables and check whether the metadata is correctly imported.
- 7. Choose Save & Close to save the newly defined file format template. You can find the new template in the Local Object Library under Flat Files. Choose View Data in the context menu to check the template definitions.
- 8. Expand the datastore, and then expand the Tables to ensure that the table metadata has been imported.

9. You can now map the source data to the required segments.

Validating and Enriching the Data

You perform the satisfaction survey processing job for validation and enrichment without loading the data to the HANA system. Perform the validation and enrichment job as often as needed until all data passes the validation and enrichment steps as follows:

- 1. Log on to the DS designer specifying the log on details as listed in the above section describing the data source connection task.
 - Select repository DATA_LOAD_HANA_REPO.
- 2. Choose Tools Project Area to select a processing job. Choose Execute.

 See the above section Preparing the Upload of Customer Satisfaction Survey Data for the job details.
- 3. For the Execution Properties specify the following details:
 - Enter **n** for the global variable \$G_LoadDataToHANA to ensure the validation and enrichment processing steps are performed without sending the data to the target SAP HANA database.
 - For the segment you want to execute, enter **y** for Value. For example,
 \$G_01_CUAN_EXT_SURVEY_A_Req.
 - Ensure \$G_SourceData_Path refers to 'C:\Data_Load_HANA\Source_Files_DI_IN', or the location of your data load files.
 - Note that $G_LoadDate$ captures the data and time at the beginning of the session. Do not enter any information here as it is provided by the system.
 - Ensure the global variables for the default values as used in the enrichment rules are set to the values you require.
 - The values are only effective for the current runtime. In the job *Properties*, choose the *Global Variable* tab. Here, you can set the default values to be used for all executions.
 - If the date format is not 'YYYYMMDD', ensure to define the \$G_Date_Format variable according the date format of the source data. For example, if 31072009 is the date format of your data, define 'DDMMYYYY' as the date format in the variable.
 - Ensure the global variable \$G_ProfileMapTables is set to **Y** when you run the profile step of the job. This takes the distinct list of values from the lookup columns in all segment MAP tables and populates it to the MigrationServices application.
- 4. Choose *Monitor* for statistic job information. Choose *Log* to access log information. Check whether the job is completed successfully.

Review Invalid Output

Perform the following steps to review invalid output once a job has been processed:

- 1. Locate the container for the records of invalid output in the work area of the job. Open the container for an overview.
- 2. Review the errors as listed in the invalid table. The table also provides status information.

 Choose *Save* to download the complete list of failed records, including a status field that indicates the reason for the failure.

Upload Enriched Data to the SAP HANA Database

Perform the following steps to upload survey data to a SAP HANA database:

- Log on to the DS designer specifying the log on details as listed in the above section describing the data source connection task.
 Select repository DATA LOAD HANA REPO.
- 2. Choose Tools Project Area to select a processing job. Choose Execute.

See the above section Preparing the Upload of Customer Satisfaction Survey Data for the job details.

- 3. For the Execution Properties specify the following details:
 - Enter **y** for the global variable \$G_LoadDataToHANA to enable the data uploaded to the target SAP HANA database.
 - Use the same variable settings as for the validation and enrichment of the data.

Troubleshooting

Check the following solutions for typical upload task errors.

- Version Incompatibility
 DS allows to import project file (atl) only when the file version is the same or lower than the DS version.
 Upgrade your DS installation if necessary.
- Failed Connections
 DS datastores cannot be saved when the datastore connection to the application is not working. See the above section *Preparing the Upload of Customer Satisfaction Survey Data* to check the corresponding parameter settings.
- Database Tables are not Available for Import
 Check the user details for the database you are trying to access. Make sure the user has read access for the database tables and the data dictionary where appropriate.

5.12 Checking Integration with SAP Hybris Cloud for Customer

In lead management, leads are sent to the SAP Hybris Cloud for Customer system connected by a specific type of campaign. You can check the status of sent message with transaction $\mathtt{SRT_MONI}$. From this transaction, search for the interface $LeadReplicationRequest_Out$.

If the message was not sent, the following may be the cause:

- Check if the user defined in the *Logical Port* is locked or invalid.
- Check if the PI is down or HCI tenant is not available.
- Message mapping CUAN COD Lean Lead Replicate Bulk2 in HCI/PI was modified and contains an error.
- Mapped code values contain values that are not maintained in the customizing of the SAP Hybris Cloud for Customer system.
- Other

Correct your scenario according to the error and restart the message.

In case leads are created but not updated properly, use the transaction <code>SRT_MONI</code> of the SAP Cloud for Customer system. Run this transaction and search for the interface <code>LeadReplicationInitiatedByExternalOut</code>.

If the message was not sent properlyt, the following may be the cause:

- User defined in the Logical Port is locked or invalid.
- Check if the PI is down or HCI tenant is not available.
- Message mapping COD_CUAN_Lead_Replicate_Bulk_Confirmation in HCI/PI was modified and contains an error
- Updated data cannot be stored in SAP Hybris Marketing.

Other

Correct your scenario according to the error and restart the message.

Batch-Report for Calculating Lead Stages

It is possible to define lead stages for contacts in a specific segmentation profile using the *Lead Stages* app. With the lead dashboard, the customer can analyze the status of the contacts in the current stages or their behavior over a certain period of time. In order to enable this functionality, use transaction SM37 to schedule report CUAN_LM_IC_STAGE_ATTH_WRITE on a daily basis. Please note, the user that executes the batch report needs authorization to change Interaction contacts. It is recommended that the user has role SAP_CUSTOMER_ANALYTICS_ADMIN for this purpose.

Application Integration Errors

For the Integration with SAP Hybris Cloud for Customer using PI/HCI, this app has been provided to monitor OData error messages which can occur when the PI/HCI calls OData Services CUAN_BUSINESS_DOCUMENT_SRV or CUAN_BUSINESS_PARTNER_SRV. When an OData call has failed, it is possible to re-trigger the call if the cause of the error has been removed, for example, a missing customizing entry is added.

For more information, see http://help.sap.com/mkt Application Help SAP Hybris Marketing Worksets and Applications Lead Management Handling Leads Managing Integration Errors.

Creating Leads and Activities in SAP Hybris Cloud for Customer

It is possible to trigger the creation of activities (tasks, appointments, or phone calls) and leads using the campaign action from SAP Hybris Marketing in SAP Hybris Cloud for Customer. Leads are created by calling the service interface LeadReplicationRequest_Out. Activities are created by calling the service interface ActivityReplicationOut.

The status of sent SOAP messages can be checked in transaction ART_MONI. You can search for the service interfaces. If a message was not sent, it may be due to the following reasons:

- The defined logical Port is locked or invalid
- The PI is down or the HCI tenant is not available
- The message mapping for the service interface message data type in PI/HCI has been modified and contains an error
- Others

Correct the errors for your scenario and restart the message.

For more information on integration using HCI, see the corresponding integration guide on SAP Service Marketplace at http://service.sap.com/instguides Cloud Solutions from SAPSAP Cloud for CustomerINTEGRATION: SAP Hybris Marketing and SAP Cloud for Customer via HCI.

For more information on integration using PI, see the corresponding integration guide on SAP Service Marketplace at http://service.sap.com/instguides Cloud Solutions from SAPSAP Cloud for CustomerINTEGRATION: SAP Hybris Marketing and SAP Cloud for Customer via PI.

5.13 Integrating Digital Asset Management Systems

Digital Asset Management (DAM) systems provide catalogs of digital images, videos, documents, music etc. Digital assets can be searched easily by keywords. With the integration of DAM systems you can directly access images for use in static image links in a campaign content. SAP delivers standard settings for the following DAM systems:

- Hybris Product Content Management
- OpenText Media Manager

Typically the systems are activated and the credentials are set during the execution of the Technical Configuration

Configuration of the OpenText system

For the integration to OpenText to work, some prerequisites have to be met by the OpenText system:

- The REST API version 1 must be active
- A technical user must be defined in the OpenText system with read access to the API and the digital assets.
- External URLs have to be present in the metadata of each image asset. These external URLs have to be reachable from the Internet to be visible in email content for the email recipients
- The external URL must be populated manually in the Media Manager or by a project-specific workflow in the OpenText system

Default Customizing from BC-Set CEI_ME_DAM defines the mapping from OpenText metadata fields to the field names in the adapter implementation. To make use of these defaults, enhance an existing model that is used for image assets in OpenText Media Manager by adding the fields for external URLs.

Carry out these steps in the OpenText Media Management Administration:

- 1. In the Custom Table Editor create new table CUSTOM_HYBRIS_ASSET_INFO to store the additional external URL fields. Then add columns EXTERNAL_MASTER_URL, EXTERNAL_PREVIEW_URL and EXTERNAL THUMBNAIL URL of type CHARACTER and size 2000 to the new table.
- 2. In the Metadata Editor go to Fields and define the new fields for the model:

Table 24:

ID	CUSTOM.FIELD.HYBRIS.URL
Name	External Master Url
Table	CUSTOM_HYBRIS_ASSET_INFO

ID	CUSTOM.FIELD.HYBRIS.URL
Column	EXTERNAL_MASTER_URL
Data Type	CHAR
Data Length	2000
Edit Type	TEXTAREA

Table 25:

ID	CUSTOM.FIELD.HYBRIS.PREVIEW_URL
Name	External Master Url
Table	CUSTOM_HYBRIS_ASSET_INFO
Column	EXTERNAL_PREVIEW_URL
Data Type	CHAR
Data Length	2000
Edit Type	TEXTAREA

Table 26:

ID	CUSTOM.FIELD.HYBRIS.THUMBNAIL_URL
Name	External Master Url
Table	CUSTOM_HYBRIS_ASSET_INFO
Column	EXTERNAL_THUMBNAIL_URL
Data Type	CHAR
Data Length	2000
Edit Type	TEXTAREA

3. In the *Metadata Editor* go to *Field Groups* and select CUSTOM.CATEGORY.USEFORALL. From the *Available Fields* list, choose the newly created fields CUSTOM.FIELD.HYBRIS.URL, CUSTOM.FIELD.HYBRIS.PREVIEW URL and add them to *Associated Fields and Groups*.

After applying these changes, the new fields are available in all models containing the *Field Group* CUSTOM.CATEGORY.USEFORALL. The new fields will be visible in all assets defined by these models.

You can adapt the default mapping in *Customizing Data* of *DAM System* in Customizing for *SAP Hybris Marketing* under Campaign Library Set Up Digital Asset Management System.

External URLs are mapped against the new, recommended metadata fields in the OpenText model:

Table 27:

Property	OpenText Metadata Field
EXTERNAL_MASTER_URL	CUSTOM.FIELD.HYBRIS.URL
EXTERNAL_PREVIEW_URL	CUSTOM.FIELD.HYBRIS.PREVIEW_URL
EXTERNAL_THUMBNAIL_URL	CUSTOM.FIELD.HYBRIS.THUMBNAIL_URL

Title and description are mapped against existing default fields in the OpenText model:

Table 28:

Property	OpenText Metadata Field
DESCRIPTION	ARTESIA.FIELD.ASSET DESCRIPTION
TITLE	ARTESIA.FIELD.ASSET NAME

Configuration of the Hybris PCM system

The REST API version 1 with authentication None or Basic Authentication has to be active.

5.14 Load Balancing

SAP Hybris Marketing uses the standard logon and load-balancing mechanisms provided by the NetWeaver AS ABAP platform. No application-specific actions are required on your part to ensure that *SAP Hybris Marketing* makes optimal use of NetWeaver load-balancing.

For more information on NetWeaver's logon and load-balancing infrastructure, go to the SAP Help Portal at http://help.sap.com/nw_platform
System Administration and Maintenance Information
Technical Operations for SAP NetWeaver .

5.15 User Management

SAP Hybris Marketing uses the standard functionality of SAP NetWeaver for user management, such as creating users with transaction SU01 and creating and using roles with transaction PFCG.

For more information on user management, see the SAP Help Portal at http://help.sap.com/nw_platform/>
Security Information Security Guide User Administration and Authentication .

5.16 Printing

SAP Hybris Marketing uses only front-end printing functionality that is independent of the ABAP AS back end system.

5.17 Management of Outdated Technical Data

No tasks currently known.

5.18 Setting the Logon Mode

You can force users to logon with each use of the application via a logon dialog that requests a user and password. (Client is set in the query string of the URL with which the session is started.)

In order to force users to logon, delete any client certificate with which the user can log on to the application.

In Microsoft Internet Explorer 10 and up, you can manage certificates by choosing Tools Internet Options Content Certificates .

6 High Availability

The application follows the general high availability concept for all SAP NetWeaver based systems. You can find more information on SAP High Availability on the SAP Help Portal at http://help.sap.com/> and on the SAP Community Network http://scn.sap.com/>.

7 Software Change Management

7.1 Transport and Change Management

Component change management tools

Table 29:

Component	Solution Manager Maintenance Opti- mizer Integration	Transport Management Tool
SAP Hybris Marketing	Yes	NetWeaver Transport Organizer

7.2 Development Requests and Development Release Management

Use the standard tools and procedures of SAP NetWeaver to transport *SAP Hybris Marketing* code extensions or customizing changes. All such changes are captured by the transport system and are transportable.

For more information on the Change and Transport System, see http://help.sap.com/nw75 section System

Administration and Maintenance Information

Technical Operations for SAP NetWeaver

Interpretation

Interpretation

Technical Operations for SAP NetWeaver

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Technical Operations for SAP NetWeaver

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Transport of Scores Not Possible

In a production environment for *SAP Hybris Marketing*, the system can be set up as changeable and all system changes can be recorded on transport requests.

If your system is set up as just described, transport tasks are generated for scores created in the *Score Builder*. These transports are generated for recording reasons. However, the transports must not be released.

The description of these tasks is ~SAP SIMPLE SCORES (generated -- DO NOT TRANSPORT).

Without further configuration, all users create their own transport requests whenever they create scores in the Score Builder. This happens in the background without any user interaction. There will be one transport request for each user.

Alternatively, you can create a central request, that collects all transport tasks for scores, to ensure that these tasks are not released. Carry out the following steps:

1. Create a central transport request starting with ~SAP SIMPLE SCORES for a central user.

- 2. Add tasks for all users in your system for this transport request.

 Whenever one of the users creates a score, the user's task under this central transport request is used and no personal user request is created.
- 3. Restrict the authorization to release the central transport request.

7.3 Support Packages and Patch Implementation

If your NetWeaver AS ABAP system and *SAP Hybris Marketing* add-on are not up to date, then we recommend that you implement NetWeaver and *SAP Hybris Marketing* Support Package Stacks (SP Stacks). A support stack is a set of Support Packages and patches for the respective product version that must be used in the given combination. (There are currently no SP Stacks for the *SAP Hybris Marketing* add-on itself, only for NetWeaver).

Please read the corresponding release and information notes (RIN - SAP Note 1886295) before you apply any support packages or patches of the selected SP Stack.

Use the *Maintenance Optimizer* (transaction DSWP) of the SAP Solution Manager to select, download, and install the needed usages, or software components and required support packages. For more information, see the following resources:

- SAP Community Network at http://wiki.scn.sap.com/wiki/x/VlwqCw/2.
- The documentation for transaction SAINT (SAP Add-On Installation Tool)
- For more information about the implementation of support packages as well as possible side effects, see http://support.sap.com/patches.

i Note

If your users encounter display problems in Internet browsers after you have installed a transport, then instruct the users to clear the cache of the browser and then restart the browser.

In Microsoft Internet Explorer 9, you can clear the cache by selecting Safety Delete browsing history... Then clear the browsing history category Temporary Internet files. When the user starts the application again, then the client software in the browser is downloaded to the browser in its current state.

In browsers other than IE9 users can first try the key combination $\mathtt{Shift} + \mathtt{Ctrl} + \mathtt{Del}$ to delete temporary Internet files. Should deleting temporary Internet files not be sufficient, then instruct users to clear the browser cache completely and restart the browser. Please see the Help provided by the browser for exact instructions.

8 Troubleshooting

Should you encounter problems while using *SAP Hybris Marketing*, use the standard problem analysis and troubleshooting tools of the NetWeaver AS ABAP System

While problems can potentially occur because of programming errors in the application, a more likely cause of a problem is some problem that affects the system as a whole, such as a shortage of resources, for example, available memory. For more information, see SAP Help Portal http://help.sap.com/nw_platform/>, \bigcirc System Administration and Maintenance Information \bigcirc Technical Operations for SAP NetWeaver \bigcirc Troubleshooting \bigcirc.

Other Troubleshooting Topics

The following troubleshooting topics are also included in this chapter:

8.1 Troubleshooting Segmentation

For issues regarding Segmentation in SAP Hybris Marketing Segmentation, see SAP Note 2075429 for more information.

8.2 Troubleshooting Garbage Collection

When working in either one of these apps*Product Recommendation Intelligence* or *Manage Recommendation*, saving or deleting a model automatically triggers a clean-up process that removes objects in the SAP HANA Rules Framework (HRF) that have been made redundant. This clean-up is carried out asynchronously by an update function module. If the processing is not accomplished successfully in transaction SM13, a new entry will show up. Transaction SM13 offers triggering the failed clean-up manually again.

For more information, see SAP Help Portal at http://www.help.sap.com/nw75 > System Administration and Maintenance Information > Technical Operations for SAP NetWeaver > Administration of Application Server ABAP > Update Task in SAP System > SAP Update: Configuration and Administration > Monitoring Updates > 1.

Here a direct link to that topic: http://help.sap.com/saphelp_nw75/helpdata/en/cd/68476b226d46c9a8c489c4cf864ba7/content.htm

8.3 Troubleshooting Facebook Success Data

Use

You use the report CUAN_CPG_CHK_AND_UPD_EXT_DATA to troubleshoot discrepancies between campaign success data stored in the SAP Hybris Marketing system with that of reporting data from Facebook. If it's been determined that there's a discrepancy in the datasets after the data has been analyzed, then you can use this report to trigger an update. The current reporting data will then be retrieved again from Facebook .

This report compares the success data stored in database of the system with the success data of a campaign currently running in Facebook.

Executing the Report

To run the report, first enter the name of the campaign owner and the corresponding campaign ID. You can also specify the checks that should be run from the following list of options; however, the report always verifies that for each dataset, there is a valid date:

Table 30:

Check Option	Description
Duplicate Records	Select this option to check if there are duplicate records in the success data
Currency	Select this option to display the currency that is being used.
External Campaign ID	Select this option to check that an internal tag has been saved with the data.
Message from the App. Log w/Error	Use this check if the application log indicated there was an error with success data. This report will then point out this error.
Compare with Facebook Call	Select this option to compare real-time data between what is in the system and in Facebook.

Table 31:

Report Execution	Description
Check All Options	By selecting this option, all options from the list above will be selected. However, this could create performance issues.
Update Corrupted Data	This executes the retrieval and update of success data from Facebook.

i Note

The scenarios for *Compare with Facebook Call* and *Update Corrupted Data* can only be run together when a campaign ID has been entered. This is done for performance reasons.

More Information

For more information, see http://help.sap.com/mkt > SAP Hybris Marketing > SAP Hybris Marketing Worksets and Applications > Campaigns > Campaigns > Integration With Facebook \(\).

8.4 Troubleshooting Marketing Permission History

Background

Change documents are used to store marketing permission history in the system. The change document object CUAN_MKT_PERM is defined to enable change documents for the CUAN_MARKETING_PERMISSION business object.

The mapping of the change document object and the implementation class are specified in Customizing for SAP **Hybris Marketing** under Cross-Application Components Processes and Tools for Enterprise Applications

Reusable Objects and Functions for BOPF Environment Maintain BO-Specific Change Document Objects

.

i Note

The application business object and the change document object must be defined in the Customizing activity **Maintain BO-Specific Change Document Objects**. Changes are tracked for the following fields:

- Opt-In
- Contact Facet ID
- Contact Facet ID Origin
- Outbound Communication Medium
- Communication Medium
- Communication Direction
- Launch URL
- IP Address

Table CDHDR

The table CDHDR contains the header data of the change document. This data is the change data for a single permission record. Detailed field changes are stored in table CDPOS. You can view details for the following fields:

- OBJECTID the database key (DB key) of the marketing permission record
- CHANGENR the ID of the change document
- USERNAME the user who performed the change
- UDATE and UTIME the timestamp for the change document

Example

Group description	Cell Content
MANDANT	100
OBJECTCLAS	CUAN_MKT_PERM
OBJECTID	047D7B8BFC411ED6809410AEBABEE552
CHANGENR	0009803757
USERNAME	Z_DEMO
UDATE	12.04.2016
UTIME	13:26:58
TCODE	
PLANCHNGNR	
ACT_CHNGNO	
WAS_PLANND	
CHANGE_IND	
LANGU	E
VERSION	000
_DATAAGING	

Table CDPOS

The table CDPOS contains the detailed data of the change document. For each field that was changed during a transaction, there is an entry in this table listed with the corresponding change number. You use the change number to find detailed data for a specific header. You can view details for the following fields:

- OBJECTID the DB key of the marketing permission record
- CHANGENR the ID of the change document
- FNAME the name of the field that was changed. In the example below, the field OPT_IN was changed.
- VALUE_OLD and VALUE_NEW the old and new value of the changed field

Example

Group description	Cell Content
MANDANT	100
OBJECTCLAS	CUAN_MKT_PERM
OBJECTID	047D7B8BFC411ED6809410AEBABEE552
CHANGENR	0009803757
TABNAME	CUAND_CE_MP_ROOT
TABKEY	100047D7B8BFC411ED6809410AEBABEE552
FNAME	OPT_IN
CHNGIND	U
TEXT_CASE	1
UNIT_OLD	
UNIT_NEW	
CUKY_OLD	
CUKY_NEW	
VALUE_NEW	N
VALUE_OLD	Y
_DATAAGING	

How to Find Data in Tables CDHDR and CDPOS

Currently, no user interface is provided for permission history. You must use transaction SE16 to retrieve data from the CDHDR and CDPOS tables. To view change documents, you can enter the following possible search parameters:

• Table CDHDR

- Object Class (OBJECTCLAS) enter the change document object CUAN MKT PERM
- Change Number (CHANGENR)
- Object ID (OBJECTID) enter the ID of the marketing permission record
- User Name (USERNAME)
- Date (UDATE)

Table CDPOS

- Object Class (OBJECTCLAS) enter the change document object CUAN MKT PERM
- Change Number (CHANGENR) to find changed data for a specific change record
- o Object ID (OBJECTID) enter the ID of the marketing permission record

i Note

If a permission record is newly-created, no change document is recorded.

How to Find the Marketing Permission ID (DB Key)

Marketing permission records are stored in table $CUAN_CE_MP_ROOT$. To find all permission records for a specific contact, you use the contact key as a selection criteria. To find the contact key (DB key of a contact record), you search for the contact in table $CUAND_CE_IC_ROOT$ using transaction SE16.

The contact is found by searching by name, address data, or email address (DB field SMTP ADDR), for example.

The following are general permissions for email, phone, and newsletter subscriptions:

General Email Permission

- OPT IN this is the general marketing permission for the channel EMAIL
- COMM CAT KEY this is the communication category key, which is empty in this example
- CONTACT_FACET_ID_ORIGIN and CONTACT_FACET_ID the permission is valid for the contact facet EMAIL and the email address demo@test.com

☑ Details	
Group description	Cell Content
MANDT	100
DB_KEY	047D7B8BFC411ED6809410AEBABEE552
CONTACT_KEY	047D7B8BFC411ED6809410AEBABE0552
OUTBOUND_COMM_MEDIUM	EMAIL
OPT_IN	N
COMM_MEDIUM	WEB
INITIATIVE_ID	
SOURCE_SYSTEM_TYPE	SAP_CEI
SOURCE_SYSTEM_ID	ANKCLNT100
SOURCE_OBJECT_TYPE	CUAN_MARKETING_PERMISSION
SOURCE_OBJECT_ID	047D7B8BFC411ED6809410AEBABEE552
SOURCE_DATA_URL	
IA_TIMESTAMP	20.160.412.112.640,6850000
CONTACT_FACET_ID_ORIGIN	EMAIL
CONTACT_FACET_ID	demo@test.com
LAUNCH_URL	
IP_ADDRESS	
COMM_DIRECTION	0
COMM_CAT_KEY	000000000000000000000000000000000000000
CUAN E CE MP RT	

Newsletter Permission

The following examples show where a communication category and marketing permission opt-in is present. If the $COMM_CAT_KEY$ (communication category) is filled, this means it is a newsletter subscription for a newsletter that has a communication category with this ID. The subscription is valid for the contact facet EMAIL - demo@test.com.

☑ Details	
Group description	Cell Content
MANDT	100
DB_KEY	047D7B8BFC411ED680942EF7C91525A0
CONTACT_KEY	047D7B8BFC411ED6809410AEBABE055
OUTBOUND_COMM_MEDIUM	EMAIL
OPT_IN	Υ
COMM_MEDIUM	WEB
INITIATIVE_ID	
SOURCE_SYSTEM_TYPE	SAP_CEI
SOURCE_SYSTEM_ID	ANKCLNT100
SOURCE_OBJECT_TYPE	CUAN_MARKETING_PERMISSION
SOURCE_OBJECT_ID	047D7B8BFC411ED680942EF7C91525A0
SOURCE_DATA_URL	
IA_TIMESTAMP	20.160.412.112.653,2760000
CONTACT_FACET_ID_ORIGIN	EMAIL
CONTACT_FACET_ID	demo@test.com
LAUNCH_URL	
IP_ADDRESS	
COMM_DIRECTION	0
COMM_CAT_KEY	047D7B8BFC411ED59AA0250CC804C09
CUAN E CE MP RT	

General Phone Permission

In this case, a general marketing permission (opt-in) is given for the channel PHONE. The communication category is empty. The permission is valid for the contact facet PHONE - (+49 1511 234 5678).

☑ Details	
Group description	Cell Content
MANDT	100
DB_KEY	047D7B8BFC411ED68094BDA70E5BC781
CONTACT_KEY	047D7B8BFC411ED6809410AEBABE0552
OUTBOUND_COMM_MEDIUM	PHONE
OPT_IN	Υ
COMM_MEDIUM	SYSTEM
INITIATIVE_ID	
SOURCE_SYSTEM_TYPE	SAP_CEI
SOURCE_SYSTEM_ID	ANKCLNT100
SOURCE_OBJECT_TYPE	SAP_FILE_IMPORT
SOURCE_OBJECT_ID	
SOURCE_DATA_URL	
IA_TIMESTAMP	20.160.412.115.852,5972800
CONTACT_FACET_ID_ORIGIN	PHONE
CONTACT_FACET_ID	+4915112345678
LAUNCH_URL	
IP_ADDRESS	
COMM_DIRECTION	0
COMM_CAT_KEY	000000000000000000000000000000000000000
CUAN E CE MP RT	

9 Support Desk Management

Support Desk Management enables you to set up an efficient internal support desk for your support organization that seamlessly integrates your end users, internal support employees, partners, and SAP Active Global Support specialists with an efficient problem resolution procedure.

The relevant component hierarchy entry for this application is CEC (Customer Engagement and Commerce).

9.1 Remote Support Setup

SAP support needs to be able to work remotely for highest efficiency and availability. Therefore all required support tools must be remotely accessible for SAP support. For SAP SNC, the standard SAP procedures for setting up remote support setup apply.

For information about Remote Support Setup, see the Support Portal at http://support.sap.com/remoteconnection.

All support tools are accessible by SAPGUI or web browser using a support role. This role does not allow to perform any changes to the component.

For ABAP-based components e.g. the role SAP_RCA_SAT_DISP is shipped via the ABAP add-on component ST-PI.

9.2 Problem Message Handover

For information about processing of internal support messages and forwarding them to SAP, see the SAP Help Portal, http://help.sap.com/ Technology Platform SAP Solution Manager SAP Solution Manager

The component hierarchy designation of *SAP Hybris Marketing* is CEC. Assign OSS problem messages that you file for the application to this component.

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