



Administration Guide | PUBLIC
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SAP Promotion Management 5.0 Administration Guide

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1 Getting Started


This document is a single source of information for the implementation of SAP Promotion Management.

You can find the most current version of this guide on SAP Help Portal at <https://help.sap.com/viewer/p/CARAB>  [<your release>](#) .

It is divided into the following main sections:








- Introduction with references to related documents and relevant SAP notes
- Security Information
- Operation Information
- Business Overview
- Configuration Information

i Note

SAP Promotion Management 4.0, and subsequent releases of this version, is the last version that includes functionality using FLEX components by Adobe. For more information about this topic, please see note [2701641](#) .

Installation and Configuration

For information on planning and installation, <http://help.sap.com/viewer/p/CARAB>  [<your release>](#)  *Installation and Upgrade*  *Common Installation Guide* .

For information on upgrades, see the  *Follow-Up Activities*  *Merchandise Planning for Retail*  section at <http://help.sap.com/viewer/p/CARAB>  [<your release>](#)  *Installation and Upgrade*  *Common Upgrade Guide* .

2 Naming Conventions

Throughout this document the following naming conventions apply.

Definitions

The following terms are used consistently in the processes and procedures described in this guide:

Term	Definition
back-end system	The SAP NetWeaver-based back-end server on which SAP Customer Activity Repository and its consuming applications (such as SAP Assortment Planning and SAP Promotion Management) are installed.
front-end server	The SAP NetWeaver-based front-end server on which the SAP Gateway, SAP Fiori Launchpad, SAP Fiori Central UI, and SAP Fiori product-specific components are installed.
Common Installation Guide	Installation Guide for all applications provided with SAP Customer Activity Repository applications bundle
Common Upgrade Guide	Upgrade Guide for all applications provided with SAP Customer Activity Repository applications bundle

Naming Differences

Due to naming differences between the underlying technical objects of the components, the names of the following business objects are used interchangeably in this document:

SAP Customer Activity Repository	Demand Data Foundation (DDF) with Unified Demand Forecast (UDF)	SAP Promotion Management	SAP Merchandise Planning	SAP ERP
article	product location (specific product in a specific location)	product	product	article material
article variant	product variant	product variant	product variant	article variant
store	location	location	location	store site

























3 Security Information

With the increasing use of distributed systems and the Internet for managing business data, the demands on security are also on the rise. When using a distributed system, you need to be sure that your data and processes support your business needs without allowing unauthorized access to critical information. User errors, negligence, or attempted manipulation on your system should not result in loss of information or processing time. These demands on security apply likewise to SAP Promotion Management. To assist you in securing SAP Promotion Management, we provide this security information.

3.1 Fundamental Security Guide

SAP Promotion Management is based on the SAP NetWeaver technology platform. Therefore, the corresponding security guides also apply to SAP Promotion Management.

Fundamental Security Guides

Scenario, Application or Component Security Guide	Most Relevant Sections or Specific Restrictions
SAP Customer Activity Repository Security Guide	http://help.sap.com/  SAP for Retail  SAP Customer Activity Repository  Security Information 
SAP NetWeaver Application Server ABAP Security Guide	http://help.sap.com/nw74/  Security Information  Security Guide  Security Guides for SAP NetWeaver Functional Units  Security Guides for the Application Server  Security Guides for AS ABAP  SAP NetWeaver Application Server ABAP Security Guide 
Security section of the Administrator's Guide, SAP HANA Live for SAP Business Suite	http://help.sap.com/  Master, Installation, Security, Configuration, and Operations Information Administrator's Guide 
SAP HANA Security Guide	http://help.sap.com/hana/  SAP HANA Platform  Security Information  SAP HANA Security Guide 
SAP Fiori for Business Suite	http://help.sap.com/businesssuite/  SAP Fiori for SAP Business Suite  SAP Fiori for SAP Business Suite 7 Innovations 2013  SAP Fiori Apps-Overview  Transactional Apps and Fact Sheets  Central Implementation  Security 

Scenario, Application or Component Security Guide	Most Relevant Sections or Specific Restrictions
SAP NetWeaver 7.4 Security Guide	http://help.sap.com/nw74 > Security Information > Security Guide
SAP ERP 6.0 EHP 5 Security Guide	http://help.sap.com/erp/ > Security Information > SAP Service Marketplace > 6.0, EHP5 > SAP ERP Central Component: Security Guide
Portal Security Guide	http://help.sap.com/nw74 > Security Information Security Guide > Security Guides for SAP NetWeaver Functional Units Security Guides for Enterprise Portal (EP) and EP Core - Application Portal (EPC) > Portal Security Guide
SAP NetWeaver Gateway Security Guide	http://help.sap.com/nwgateway
SAP for Retail (Industry Solution)	http://help.sap.com/retail-erp605/ > Security Information > SAP Service Marketplace > SAP Security Guide > Industry Solution > SAP for Retail > SAP for Retail > Security Guide

Configuration

i Note

You can find the most current version of this guide on SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> > <your release> > Administration > SAP Promotion Management Administration Guide.

We strongly recommend that you use the document available there. The guide is updated with each new release of the software.

3.2 User Administration and Authentication

Use

SAP Promotion Management uses the user management and authentication mechanisms provided by SAP NetWeaver, in particular, the SAP NetWeaver Application Server ABAP and Java. Therefore, the security recommendations and guidelines for user administration and authentication per the SAP NetWeaver

Application Server ABAP Security Guide and the SAP NetWeaver Application Server Java Security Guide also apply to SAP Promotion Management.

Features

User Management

User management for SAP Promotion Management uses the mechanisms provided with the SAP NetWeaver Application Server component (ABAP and Java), for example, tools, user types, and password policies. For an overview of how these mechanisms apply to SAP Promotion Management, see the following sections.

User Administration Tools

The following table lists useful information for user management tools:

Tool	Most Relevant Sections	Prerequisites
User and role maintenance with SAP NetWeaver AS ABAP (Transactions SU01, PFCG)	AS ABAP Authorization Concept	SAP NetWeaver Application Server ABAP should be running.

User Types

It is necessary to specify different security policies for different types of users. For example, your policy may specify that individual users who perform tasks interactively have to change their passwords on a regular basis, but not those users under which background processing jobs run.

The user types that are required for SAP Promotion Management include:

- Individual Users
 - Dialog users are used for SAP GUI for Windows or RFC connections
 - Internet users are used for same policies apply as for dialog users, but used for internet connections
- Technical users:
 - Communication user type: used for dialog-free communication through external RFC calls
 - System and background user type: used for background processing and communication within the system, such as, running scheduled inbound/outbound dispatcher jobs

For more information about these user types, see topic [User Types](#) in the [User Authentication](#) structure in the SAP NetWeaver Application ABAP Security Guide.

Standard Users

SAP Promotion Management does not require specialized standard users. SAP Promotion Management indirectly uses SAP NetWeaver standard users.

For more information about these standard users, see topic [Protecting Standard Users](#) in the [User Administration](#) structure in the SAP NetWeaver Application ABAP Security Guide.

Integration into Single Sign-On Environments

SAP Promotion Management supports the Single Sign-On (SSO) mechanisms provided by SAP NetWeaver. Therefore, the security recommendations and guidelines for user administration and authentication as described in the SAP NetWeaver Security Guide also apply to SAP Promotion Management.

For more information about the available authentication mechanisms, see topic User Authentication and Single Sign-On in the User Authentication structure in the SAP NetWeaver Application Server ABAP Security Guide.

Secure Network Communications (SNC)

SNC is available for user authentication and provides for an SSO environment when using the SAP GUI for Windows or remote function calls.

For more information, see [Secure Network Communications \(SNC\)](#).

SAP Logon Tickets

SAP Promotion Management supports the use of logon tickets for SSO when using a Web browser as the front-end client. In this case, users can be issued a logon ticket after they have authenticated themselves with the initial SAP system. The ticket can then be submitted to other systems (SAP or external systems) as an authentication token. The user does not need to enter a user ID or password for authentication but can access the system directly after the system has checked the logon ticket.

SNC is available for user authentication and provides for an SSO environment when using the SAP GUI for Windows or remote function calls.

For more information, see [Logon Tickets](#).

Client Certificates

As an alternative to user authentication using a user ID and passwords, users using a Web browser as a front-end client can also provide X.509 client certificates to use for authentication. In this case, user authentication is performed on the Web server using the secure sockets layer protocol (SSL protocol) and no passwords have to be transferred. User authorizations are valid in accordance with the authorization concept in the SAP system.

For more information, see [Client Certificates](#).

SAP Promotion Management uses the authorization concept provided by SAP NetWeaver. Therefore, the recommendations and guidelines for authorizations as described in the *SAP NetWeaver Application Server ABAP Security Guide* apply to SAP Promotion Management.

The SAP NetWeaver authorization concept is based on assigning authorizations to users based on roles. For role maintenance, use the profile generator (transaction PFCG) when using ABAP technology

i Note

For more information, see [User Administration and Authentication](#).

For more information about the available authentication mechanisms, see [User Authentication](#).

Logging and Tracing

- SAP Promotion Management relies on the logging and tracing mechanisms of SAP NetWeaver. For more information on logging and tracing, see [Auditing and Logging](#).

Logging and Tracing for Customizing Changes

To evaluate changes to the individual SAP Promotion Management Customizing tables, use the SCU3 transaction to activate the logging of changes to table data.

Troubleshooting

To view promotions in SAP ERP for offers which are successfully transferred within NetWeaver Business Client:

- Create a PFCG role in ERP having only transaction code WAK3 assigned in the menu. The RFC connection needs to be mentioned for correct role creation.
- Import this role to a PFCG role created in SAP Promotion Management.
- In SAP Promotion Management, link the imported role to OBN Offer.DisplayErpPromotion (Method: DisplayErpPromotion of Business Object /PRM/ISROF). The selection screen should be skipped with the following parameter assignment WAKHD-AKTNR = {WAKHD-AKTNR}.
- If required, define a trusted system relationship between the SAP Promotion Management system and the connected ERP system by following the steps mentioned in the SAP note [128447](#). Ensure that the user for invoking the *Promotion Display* transaction in ERP has the right authorizations.
- If the above step is skipped, then there would be a need to logon to the remote ERP system with a valid user and password.

For more information see SAP Note [1550323](#).

3.3 Network and Communication Security

Your network infrastructure is extremely important in protecting your system. Your network needs to support the communication necessary for your business needs without allowing unauthorized access. A well-defined network topology can eliminate many security threats based on software flaws (at both the operating system level and application level) or network attacks such as eavesdropping. If users cannot log on to your application or database servers at the operating system or database layer, then there is no way for intruders to compromise the machines and gain access to the back-end system's database or files. Additionally, if users are not able to connect to the server LAN (local area network), they cannot exploit well-known bugs and security holes in network services on the server machines.

The network topology for SAP Promotion Management is based on the topology used by the SAP NetWeaver platform. Therefore, the security guidelines and recommendations described in the SAP NetWeaver Security Guide also apply to SAP Promotion Management. Details that specifically apply to SAP Promotion Management are described in the following topics:

- **Communication Channel Security**
This topic describes the communication paths and protocols used by the application.
- **Network Security**
This topic describes the recommended network topology for the application. It shows the appropriate network segments for the various client and server components and where to use firewalls for access protection. It also includes a list of the ports needed to operate the application.

Communication Channel Security

The table below shows the communication paths used by SAP Promotion Management, the protocol used for the connection, and the type of data transferred.

Communication Path	Protocol Used	Type of Data Transferred	Data Requiring Special Protection
Front-end client using SAP Fiori to SAP NetWeaver Gateway application server	HTTPS	Login Information data	Password
Front-end client using SAP Fiori to application Server	HTTPS	All Application Data	Transactional data
Application Server to application server	RFC	Application data	System information, personal data and transactional data

DIAG and RFC connections can be protected using Secure Network Communications (SNC). HTTP connections are protected using the Secure Sockets Layer (SSL) protocol. SOAP connections are protected with Web services security.

→ Recommendation

We strongly recommend using secure protocols (SSL, SNC) whenever possible.

For more information, see [Transport Layer Security](#) and [Web Services Security](#) in the *SAP NetWeaver Security Guide*.

Network Security

The network topology for SAP Promotion Management is based on the topology used by the SAP NetWeaver platform. Therefore, refer to the following documentation for information on network security:

- SAP NetWeaver 7.5
- SAP Supply Chain Management Security Guide
- SAP Supplier Relationship Management Security Guide
- SAP Customer Activity Repository Administration Guide

Ports

SAP Promotion Management runs on SAP NetWeaver and uses the ports from the AS ABAP. For more information, see the topics for [AS ABAP Ports](#) in the corresponding *SAP NetWeaver Application Server ABAP Security Guide*. For other components, for example, SAPinst, SAProuter, or the SAP Web Dispatcher, see also the document [TCP/IP Ports Used by SAP Applications](#), which is located on SAP Community Network (SCN) at <http://scn.sap.com/community/security/Infrastructure Security/Network and Communication Security>

3.4 Authorizations

Use

SAP Promotion Management uses the user management and authentication mechanisms provided with the SAP NetWeaver platform, in particular the SAP NetWeaver Application Server ABAP and Java. Therefore, the security recommendations and guidelines for user administration and authentication as described in the SAP NetWeaver Application Server ABAP Security Guide and SAP NetWeaver Application Server Java Security Guide also apply to SAP Promotion Management.

i Note

For more information about how to create roles, see [Role Administration](#) in the [SAP NetWeaver Library](#).

Prerequisites

As a security requirement, follow the instructions in the following see the following SAP Notes:

SAP Note Number	Description
1717945	Portal Logoff Does Not Logoff the Backend When Using HTTP Security Session Management
1471069	Security Note - ABAP Security Sessions and SAML 2.0
1490105	Closing All Portal Session Windows

SAP Promotion Management requires a layered system landscape. You must have the necessary users, roles, and authorization in all of the layers of SAP Promotion Management.

- Front-end server
To use the [Manage Promotional Offers](#) SAP Fiori app you must hve a user on the SAP NetWeaver Gateway.
- Back-end server
To access the relevant Customizing activities, and to use core SAP Promotion Management, you must have a user on the ABAP back-end server.

Features

The table lists standard roles used by Demand Data Foundation (DDF):

Role	Description
SAP_ISR_DMF_MASTER	<p>Includes access to the following applications:</p> <ul style="list-style-type: none">• Product Groups• Placeholder Products• Location Groups• Define Area of Responsibility• Search for Schedule Jobs• Schedule Model and Forecasts• Monitor Imports• Configure Load Balancing• Monitor Exceptions• Monitor Compressed Data• Product• Search Placeholder Products• Transportation Lanes• Maintain Product Locations• Remove Time Series• Check Mass Maintenance
SAP_ISR_DMF_READONLY	<p>Includes access to the following applications:</p> <ul style="list-style-type: none">• Product Groups• Placeholder Products• Location Groups• Define Area of Responsibility• Search for Schedule Jobs• Schedule Model and Forecasts• Monitor Imports• Configure Load Balancing• Monitor Exceptions• Monitor Compressed Data• Product• Search Placeholder Products• Transportation Lanes• Maintain Product Locations• Remove Time Series• Check Mass Maintenance

The table lists standard roles used by SAP Promotion Management:

Role	Description
SAP_ISR_PROMO_ADMINISTRATION	
SAP_ISR_PROMO_MARKETING	<p>Includes access to the following applications:</p> <ul style="list-style-type: none"> • Campaign Schedule • Event Schedule • Offer Schedule • Planning Workbench • Vendor Fund Maintenance • Product Groups • Placeholder Products • Location Groups • Templates • Define Area of Responsibility • Schedule Jobs • Monitor Imports • Monitor Exceptions • Manage Images • Products • Placeholder Products • Transportation Lanes • Product Locations • Remove Time Series • Check Mass Maintenance

Role	Description
SAP_ISR_PROMO_MERCHANDISE	<p data-bbox="804 371 1241 394">Includes access to the following applications:</p> <ul data-bbox="804 421 1150 1137" style="list-style-type: none"> <li data-bbox="804 421 1046 443">• Campaign Schedule <li data-bbox="804 456 1002 479">• Event Schedule <li data-bbox="804 492 995 515">• Offer Schedule <li data-bbox="804 528 1050 551">• Planning Workbench <li data-bbox="804 564 1104 586">• Vendor Fund Maintenance <li data-bbox="804 600 1002 622">• Product Groups <li data-bbox="804 636 1059 658">• Placeholder Products <li data-bbox="804 672 1011 694">• Location Groups <li data-bbox="804 707 951 730">• Templates <li data-bbox="804 743 1129 766">• Define Area of Responsibility <li data-bbox="804 779 992 801">• Schedule Jobs <li data-bbox="804 815 1149 837">• Schedule Model and Forecasts <li data-bbox="804 851 1008 873">• Monitor Imports <li data-bbox="804 887 1040 909">• Monitor Exceptions <li data-bbox="804 922 1005 945">• Manage Images <li data-bbox="804 958 938 981">• Products <li data-bbox="804 994 1059 1016">• Placeholder Products <li data-bbox="804 1030 1059 1052">• Transportation Lanes <li data-bbox="804 1066 1027 1088">• Product Locations
SAP_ISR_PROMO_ADVERTISING	<p data-bbox="804 1178 1241 1200">Includes access to the following applications:</p> <ul data-bbox="804 1227 1129 1482" style="list-style-type: none"> <li data-bbox="804 1227 1046 1249">• Campaign Schedule <li data-bbox="804 1263 1002 1285">• Event Schedule <li data-bbox="804 1299 1050 1321">• Planning Workbench <li data-bbox="804 1335 1011 1357">• Location Groups <li data-bbox="804 1370 951 1393">• Templates <li data-bbox="804 1406 1129 1429">• Define Area of Responsibility <li data-bbox="804 1442 1005 1464">• Manage Images
SAP_ISR_PROMO_READONLY	<p data-bbox="804 1523 1382 1581">Includes access to all SAP Promotion Management applications with read-only authorization</p>
SAP_PMR_TCR_T	<p data-bbox="804 1621 1378 1680">Grants access to the Manage Promotional Offers Fiori transactional app.</p>

Standard Authorization Objects

The table shows the security-relevant authorization objects that are used by SAP Promotion Management.

Standard Authorization Objects

Authorization Object	Field	Value	Description
CA_POWL	POWL_APPID		Authorization for Personal Object Worklist (POWL) menu function for the DDF POWL applications.
	POWL_CAT		
	POWL_LSEL		
	POWL_QUERY		
	POWL_RA_AL		
	POWL_TABLE		
S_START	Object Name	/DMF/* and /PRM/* POWL	The authorization object S_START is used during the start authorization check for particular TADIR objects, such as Web Dynpro applications. Note that you must not use this object directly in your own coding. The object can only be used through the class CL_START_AUTH_CHECK. The concept of the start authorization check for program objects with object catalog entries is described in SAP Note 1413011
	Object Type	WDYA	
	Program ID	R3TR	
S_TCODE		/DMF/TS_DELETE	Transaction Code Check at Transaction Start
		RSM37	
		SM37	
/PRM/CMPN	ACTV	01 Create	Authorization for Campaign Maintenance application. 01 allows user to create campaign. 06 allows user to delete an event. 23 allows user to edit an event. D1 with 01 allows a user to create a campaign with reference.
		06 Delete	
		06 Delete	
		D1 Copy	

Authorization Object	Field	Value	Description
/PRM/OFFR	ACTVT	01 Create or generate 02 Change 03 Display 06 Delete 23 Maintain 61 Export 75 Remove 78 Assign D1 Copy	<p>Offer authorization object. 01 enables the <i>Create Without Reference</i> button. If user has only 01 authorization, all functionality is available except the authorization to assign attributes in create mode.</p> <p>02 enables the <i>Update Status</i> and <i>Update</i> buttons. User can save offers. If user has only 02 authorization, user cannot assign and remove attributes.</p> <p>06 allows user to delete an offer.</p> <p>23 allows user to create an offer in reference to a vendor fund; however, to save the offer, user must have either 01 or 02 authorization.</p> <p>61 enables the <i>Transfer</i> button.</p> <p>75 remove</p> <p>78 allows user to assign and remove attributes; however, to save, user must have either 01 or 02 authorization.</p> <p>D1 enables user to create with reference; however, to save the copied offer, user must also have either the 01 or 02 authorization.</p>

Authorization Object	Field	Value	Description
/PRM/EVENT	ACTVT	01 Create	Event authorization object.
		06 Delete	01 allows user to create an event.
		23 Maintain	06 allows user to delete an event.
		37 Accept	23 allows user to edit an event, deliver an event, and refresh offer financials.
		43 Release	43 allows user to transfer an event.
		61 Export	61 allows user to export an event.
		D1 Copy	D1 with 01 allows user to create an event with reference to another event.
/PRM/VDRDL	ACTVT	01 Create	Vendor deal authorization object.
		02 Change	01 allows user to create a vendor deal.
		03 Display	02 allows user to edit a vendor deal.
		06 Delete	01 or 02 allows user to assign or unassign attributes to a vendor deal.
		23 Maintain	06 allows user to delete a vendor deal.
		90 Copy	

Authorization Object	Field	Value	Description
/PRM/RM	ACTVT	01 Create	Representation management authorization object. 01 allows user to create a template. 02 allows user to edit a template. 03 Display 06 allows user to delete a template. 10 allows user to post and unpost a template. 23 allows the user to edit an approved offer D1 allows user to copy a template.
		02 Change	
		03 Display	
		06 Delete	
		10 Post	
		23 Maintain	
		D1 Copy	
/DMF/OFFR	ACTVT	01 Add or Create	01 allows the user to create an offer and change to In Process status. 02 allows user to edit a template 06 allows user to delete a template 23 allows the user to edit an approved offer. 37 allows the user to approve an offer and change the status of an approved offer. 43 allows the user to release an offer and change the status of a recommended offer. 48 allows the user to recommend an offer and change the status of a recommended offer. FA allows the user to cancel an offer and change the status of a canceled offer.
		02 Change	
		06 Delete	
		23 Maintain	
		37 Accept	
		43 Release	
		48 Simulate	
		FA Cancel	

Security Protection

To increase security and prevent access to the SAP logon ticket and security session cookies, we recommend activating secure session management.

We also highly recommend using SSL to protect the network communications where these security-relevant cookies are transferred.

Session Security Protection on the AS ABAP

To activate session security on the AS ABAP, set the corresponding profile parameters and activate the session security for the client using the `SICF_SESSIONS` transaction.

For more information, see *Activating HTTP Security Session Management on AS ABAP* in the *SAP NetWeaver Application Server ABAP* security guide.

More Information

For more information about specific topics, see the quick links as shown in the table below.

Content	Quick Link on the SAP Marketplace or SAP Developer Network (SDN)
Security	http://sdn.sap.com/irj/sdn/security
Related SAP Notes	https://support.sap.com/en/my-support/knowledge-base/security-notes-news.html
Released platforms	https://support.sap.com/en/release-upgrade-maintenance.html
SAP NetWeaver	http://sdn.sap.com/irj/sdn/netweaver

3.5 OData Services

All OData Services are delivered in an inactive state. You must activate these application specific services to use the SAP Fiori user interface of the SAP Promotion Management application. The following OData services are available:

OData Services

OData Service	Description
/DMF/PROD_MD_SRV	Master Data Retrieval Service
/DMF/OFFER_MANAGEMENT_V2_SRV	Manage Promotional Offer Main Service
/DMF/PRODUCT_GROUP_SRV	Manage Product Groups Main Service
/DMF/LOCATION_SUBGROUP_SRV	Manage Location Subgroups Main Service

OData Service	Description
/PRM/OFFER_CONTENT_SRV	Offer Content Assignment Service, used from Manage Promotional Offers Fiori App
/PRM/EVENT_PREVIEW_SRV	Preview Events Service

3.6 Data Protection and Privacy

[Introduction \[page 20\]](#)

[Glossary \[page 21\]](#)

[Information Retrieval \[page 24\]](#)

[Deletion of Personal Data \[page 24\]](#)

3.6.1 Introduction

Data protection is associated with numerous legal requirements and privacy concerns. In addition to compliance with general data protection and privacy acts, it is necessary to consider compliance with industry-specific legislation in different countries. SAP provides specific features and functions to support compliance with regard to relevant legal requirements, including data protection. SAP does not give any advice on whether these features and functions are the best method to support company, industry, regional, or country-specific requirements. Furthermore, this information should not be taken as advice or a recommendation regarding additional features that would be required in specific IT environments. Decisions related to data protection must be made on a case-by-case basis, taking into consideration the given system landscape and the applicable legal requirements.

i Note

SAP does not provide legal advice in any form. SAP software supports data protection compliance by providing security features and specific data protection-relevant functions, such as simplified blocking and deletion of personal data. In many cases, compliance with applicable data protection and privacy laws will not be covered by a product feature. Definitions and other terms used in this document are not taken from a particular legal source.

⚠ Caution

The extent to which data protection is supported by technical means depends on secure system operation. Network security, security note implementation, adequate logging of system changes, and appropriate usage of the system are the basic technical requirements for compliance with data privacy legislation and other legislation.

i Note

Data protection and privacy-related functionality has been implemented in the Demand Data Foundation (DDF) module in SAP Customer Activity Repository. DDF includes a reusable data layer that supports the planning, analysis, and forecasting required by different business processes. DDF acts as a liaison between the consuming application installed on top of SAP Customer Activity Repository and the modules within the repository that provide these business processes.

For more information, see the *Data Protection and Privacy* section of the *SAP Customer Activity Repository Administration Guide* under <https://help.sap.com/viewer/p/CARAB> >> <Version> > Administration >. For details about simplified blocking of personal data, see *Deletion of Personal Data*.

Generic Fields

You need to make sure that no personal data enters the system in an uncontrolled or non-purpose related way, for example, in free-text fields, through APIs, or customer extensions. Note that these are not subject to the read access logging (RAL) example configuration.

Parent topic: [Data Protection and Privacy \[page 20\]](#)

Related Information

[Glossary \[page 21\]](#)

[Information Retrieval \[page 24\]](#)

[Deletion of Personal Data \[page 24\]](#)

3.6.2 Glossary

The following terms are general to SAP products. Not all terms may be relevant for this SAP product.

Term	Definition
Blocking	A method of restricting access to data for which the primary business purpose has ended.
Business Purpose	The legal, contractual, or in other form justified reason for the processing of personal data to complete an end-to-end business process. The personal data used to complete the process is predefined in a purpose, which is defined by the data controller. The process must be defined before the personal data required to fulfill the purpose can be determined.

Term	Definition
Consent	The action of the data subject confirming that the usage of his or her personal data shall be allowed for a given purpose. A consent functionality allows the storage of a consent record in relation to a specific purpose and shows if a data subject has granted, withdrawn, or denied consent.
Data Subject	Any information relating to an identified or identifiable natural person ("data subject"). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier, or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural, or social identity of that natural person.
Deletion	Deletion of personal data so that the data is no longer available.
End of business	Defines the end of active business and the start of residence time and retention period.
End of Purpose (EoP)	The point in time when the processing of a set of personal data is no longer required for the primary business purpose, for example, when a contract is fulfilled. After the EoP has been reached, the data is blocked and can only be accessed by users with special authorizations (for example, tax auditors).
End of Purpose (EoP) check	A method of identifying the point in time for a data set when the processing of personal data is no longer required for the primary business purpose . After the EoP has been reached, the data is blocked and can only be accessed by users with special authorization, for example, tax auditors.
Personal Data	Any information relating to an identified or identifiable natural person ("data subject"). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier, or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural, or social identity of that natural person.
Purpose	The information that specifies the reason and the goal for the processing of a specific set of personal data. As a rule, the purpose references the relevant legal basis for the processing of personal data.

Term	Definition
Residence Period	The period of time between the end of business and the end of purpose (EoP) for a data set during which the data remains in the database and can be used in case of subsequent processes related to the original purpose. At the end of the longest configured residence period, the data is blocked or deleted. The residence period is part of the overall retention period.
Retention Period	The period of time between the end of the last business activity involving a specific object (for example, a business partner) and the deletion of the corresponding data, subject to applicable laws. The retention period is a combination of the residence period and the blocking period.
Sensitive Personal Data	<p data-bbox="804 797 1386 860">A category of personal data that usually includes the following type of information:</p> <ul data-bbox="815 882 1398 1227" style="list-style-type: none"> <li data-bbox="815 882 1398 1046">• Special categories of personal data, such as data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data, biometric data, data concerning health or sex life or sexual orientation. <li data-bbox="815 1059 1291 1081">• Personal data subject to professional secrecy <li data-bbox="815 1095 1374 1158">• Personal data relating to criminal or administrative offenses <li data-bbox="815 1171 1398 1227">• Personal data concerning insurances and bank or credit card accounts
Technical and Organizational Measures (TOM)	<p data-bbox="804 1267 1398 1431">Some basic requirements that support data protection and privacy are often referred to as technical and organizational measures (TOM). The following topics are related to data protection and privacy and require appropriate TOMs, for example:</p> <ul data-bbox="815 1453 1398 1742" style="list-style-type: none"> <li data-bbox="815 1453 1238 1476">• Access control Authentication features <li data-bbox="815 1489 1227 1512">• Authorizations Authorization concept <li data-bbox="815 1525 1059 1547">• Read access logging <li data-bbox="815 1561 1326 1583">• Transmission control/communication security <li data-bbox="815 1597 1150 1619">• Input control/change logging <li data-bbox="815 1632 1043 1655">• Availability control <li data-bbox="815 1668 1398 1742">• Separation by purpose Subject to the organizational model implemented and must be applied as part of the authorization concept.

Parent topic: [Data Protection and Privacy \[page 20\]](#)

Related Information

[Introduction \[page 20\]](#)

[Information Retrieval \[page 24\]](#)

[Deletion of Personal Data \[page 24\]](#)

3.6.3 Information Retrieval

Data subjects have the right to receive information regarding their personal data that is being processed. The information retrieval feature supports you in complying with the relevant legal requirements for data protection by allowing you to search for and retrieve all personal data for a specified data subject. The search results are displayed in a comprehensive and structured list containing all personal data of the data subject specified, organized according to the purpose for which the data was collected and processed.

To see where personal information is used, you must use the Demand Data Foundation (DDF) feature that provides this information. For information, see [▶ SAP Customer Activity Repository Administration Guide ▶ Security Information ▶ Data Protection and Privacy ▶ Deletion of Personal Data ▶ Expected Behavior Within Demand Data Foundation \(DDF\) ▶](#).

Parent topic: [Data Protection and Privacy \[page 20\]](#)

Related Information

[Introduction \[page 20\]](#)

[Glossary \[page 21\]](#)

[Deletion of Personal Data \[page 24\]](#)

3.6.4 Deletion of Personal Data

Simplified Blocking and Deletion

When considering compliance with data protection regulations, it is also necessary to consider compliance with industry-specific legislation in different countries. A typical potential scenario in certain countries is that personal data shall be deleted after the specified, explicit, and legitimate purpose for the processing of personal data has ended, but only as long as no other retention periods are defined in legislation, for example, retention periods for financial documents. Legal requirements in certain scenarios or countries also often require blocking of data in cases where the specified, explicit, and legitimate purposes for the processing of

this data have ended, however, the data still has to be retained in the database due to other legally mandated retention periods. In some scenarios, personal data also includes referenced data. Therefore, the challenge for deletion and blocking is first to handle referenced data and finally other data, such as business partner data.

Deletion of Personal Data

The processing of personal data is subject to applicable laws related to the deletion of this data when the specified, explicit, and legitimate purpose for processing this personal data has expired. If there is no longer a legitimate purpose that requires the retention and use of personal data, it must be deleted. When deleting data in a data set, all referenced objects related to that data set must be deleted as well. Industry-specific legislation in different countries also needs to be taken into consideration in addition to general data protection laws. After the expiration of the longest retention period, the data must be deleted.

This SAP product might process data (personal data) that is subject to the data protection laws applicable in specific countries as described in SAP Note [1825544](#).

For information, see [▶ SAP Customer Activity Repository Administration Guide ▶ Security Information ▶ Data Protection and Privacy ▶ Deletion of Personal Data ▶ Expected Behavior Within Demand Data Foundation \(DDF\) ▶](#).

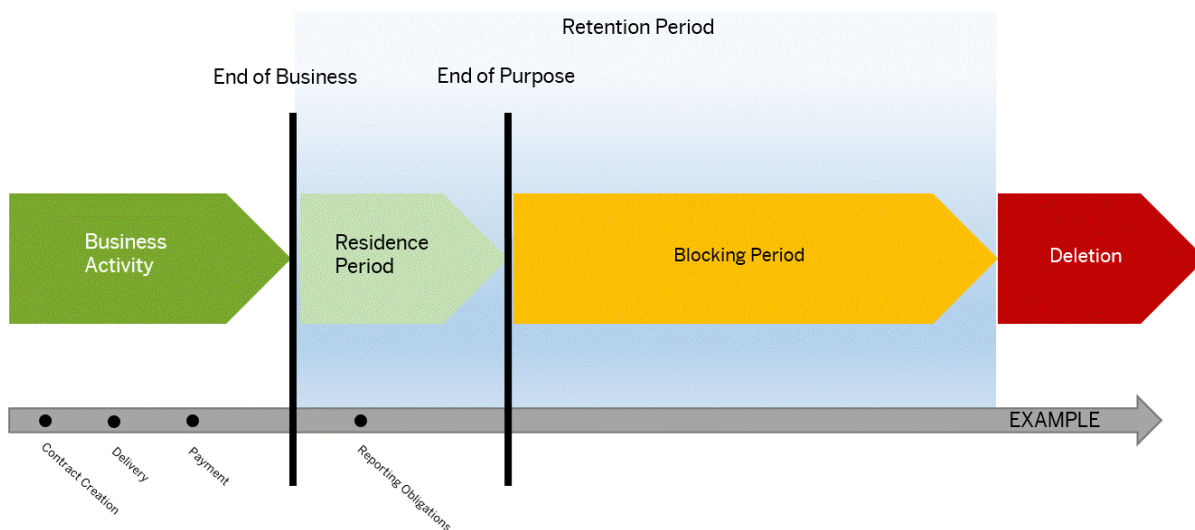
Deletion

To enable even complex scenarios, SAP simplifies existing deletion functionalities to cover data objects that are personal data by default. For this purpose, SAP uses SAP Information Lifecycle Management (ILM) to help you set up a compliant information lifecycle management process in an efficient and flexible manner. The functions that support the simplified blocking and deletion of personal data are not delivered in one large implementation, but in several waves. Scenarios or products that are not specified in SAP Note [1825608](#) (central Business Partner) and SAP Note [2007926](#) (ERP Customer and Vendor) are not yet subject to simplified blocking and deletion. Nevertheless, it is also possible to destroy personal data for these scenarios or products. In these cases, you have to use an existing archival or deletion functionality or implement individual retention management of relevant business data throughout its entire lifecycle. The ILM component supports the entire software lifecycle including storage, retention, blocking, and deletion of data.

End-of-Purpose Check

An end of purpose (EoP) check determines whether data is still relevant for business activities based on the retention period defined for the data. The retention period is part of the overall lifecycle of personal data, which consists of the following phases:

- **Business activity:** The relevant data is used in ongoing business, for example contract creation, delivery or payment.
- **Residence period:** The relevant data remains in the database and can be used in case of subsequent processes related to the original purpose, for example reporting obligations.
- **Blocking period:** The relevant data needs to be retained for legal reasons. During the blocking period, business users of SAP applications are prevented from displaying and using this data. It can only be processed in case of mandatory legal provisions.
- **Deletion:** The data is deleted and no longer exists in the database.



Blocking

Blocking of data can impact system behavior in the following ways:

- **Display:** The system does not display blocked data.
- **Change:** It is not possible to change a business object that contains blocked data.
- **Create:** It is not possible to create a business object that contains blocked data.
- **Copy/follow-up:** It is not possible to copy a business object or perform follow-up activities for a business object that contains blocked data.
- **Search:** It is not possible to search for blocked data or to search for a business object using blocked data in the search criteria.

It is possible to display blocked data if a user has special authorization; however, it is still not possible to create, change, copy, or perform follow-up activities on blocked data.

1. Before blocking or deleting of personal data, you must define the residence time and retention periods in SAP Information Lifecycle Management (ILM) for the corresponding ILM objects.
2. You can choose whether data deletion is required for data stored in archive files or data stored in the database, depending on the type of deletion functionality available.
3. For an end of purpose check regarding business partner master data complete the following steps:
 - Define the required residence and retention policies for the business partner ILM objects.
 - Run the corresponding transaction to enable the end-of-purpose check function for business partners. After EoP the master data is blocked and the required retention information is stored.
 - Business users can request unblocking of blocked business partner master data. Users that have the necessary authorizations can unblock the data.
4. You can delete data using the transaction ILM_DESTRUCTION for the ILM objects of application, component, scenario.

Parent topic: [Data Protection and Privacy \[page 20\]](#)

Related Information

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4 Operation Information

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 section provides a starting point for managing, maintaining, and running your application optimally. It contains specific information for various tasks and lists the tools that you can use to implement them.

i Note

Adaptive Computing is a capability provided by SAP NetWeaver. Any component, for example SAP Promotion Management, released on NetWeaver 4.6C or higher, can run within the NetWeaver adaptive framework.

4.1 Monitoring

Use

Monitoring is an essential task in the management of SAP technology. Monitoring allows you to detect any irregularities or deviations from an ideal business process flow or to detect error situations concerning a core business process at an early stage.

SAP Promotion Management supports monitoring functions within the Demand Data Foundation (DDF) framework. DDF uses the SAP NetWeaver standard functions for monitoring. For more information about standard functions for monitoring, see the SAP NetWeaver Operations Guide.

Features

Alert Monitoring

Computing Center Management System (CCMS) is not supported for the `RTLPRMO_810` component.

Component-Specific Monitoring

DDF provides CCMS monitoring for the following processes:

- Model by product location
- Model by hierarchy
- Forecast by product location
- Forecast by hierarchy

The Monitor Tree Elements (MTEs) must be verified and configured for the following processes:

- DMF_MODEL_PROCESSES_BY_HIER
- DMF_MODEL_PROCESSES_BY_PROD_LOC
- DMF_FORECAST_PROCESSES_BY_HIER
- DMF_FORECAST_PROCESSES_BY_PROD_LOC

Monitoring Details

Exception Handling

DDF uses the exception handling framework to log errors that arise while running background processes. You can define the exception messages in the system before actual exception instances can be created. The exception definition is based on the general ABAP message concept. Each exception is identified by a combination of a message class and a message number. Each instance of an exception has a unique internal ID (message handle).

i Note

The following sub-objects do not use exception handling:

- /DMF/OFFER_PURGE
- /DMF/PHP
- /DMF/ENGINE

Configuration of Exceptions

You can manage the exceptions in Customizing under [Cross-Application Components](#) > [Demand Data Foundation](#) > [Basic Settings](#) > [Exception Management](#).

Configuration Data for High Level Exceptions

[Cross-Application Components](#) > [Demand Data Foundation](#) > [Basic Settings](#) > [Exception Management](#) > [Maintain Configuration Data for High Level Exceptions](#).

You have the following customizing options:

- Assignment of business areas to exceptions
- Definition of exception priority
- Definition of message types
- Definition of validity period
- Definition of validity period

Configuration Data for Low Level Exceptions

You can define the priority of exceptions in Customizing under [Cross-Application Components](#) > [Demand Data Foundation](#) > [Basic Settings](#) > [Exception Management](#) > [Maintain Configuration Data for Low Level Exceptions](#).

Customer-Specific Replacement Messages

You can define the replacement of messages in Customizing under [Cross-Application Components](#) > [Demand Data Foundation](#) > [Basic Settings](#) > [Exception Management](#) > [Define Customer-Specific Replacement Messages](#).

Customizable Message Status

You can define the available exception status values in Customizing under [Cross-Application Components](#) > [Demand Data Foundation](#) > [Basic Settings](#) > [Exception Management](#) > [Define Customizable Message Status](#).

Monitoring of Exceptions

You use the [Monitor Exceptions](#) function to review and process the exceptions that have been generated from the batch processes

You have the following features:

- Flexible filtering of exceptions
- Overview the number of exceptions
- Perform additional filtering based on the business area, the context type, or the context instance (value)
- Display of result of the selected exceptions in a table grid.
- Display of exception details including associated low level exceptions for one highlighted exception

Housekeeping for Exceptions

You can have a high number of exceptions that occur during the system operation. We recommend that you perform a regular purging (deletion) of obsolete exceptions.

Application Log

The [Application Log](#) function collects messages, exceptions, and errors, and displays them in a log. This log provides you with basic header information, a message long text, detailed information, and technical information.

SAP Promotion Management consumes the Demand Data Foundation APIs. Therefore, the following log objects under `/DMF/APPL` and sub-objects are used for logging:

- `/DMF/ENGINE`
- `/DMF/MERCH_PLAN`
- `/DMF/OFFER`
- `/DMF/OFFER_PURGE`
- `/DMF/PHP`

Setting the Trace Level

The trace level controls the amount and type of information that will appear in the trace file. The three levels are as follows:

- **ERROR** - the trace file will only contain information (and in fact will only be created) when an actual runtime error occurs during execution of modeling and/or forecasting.
- **WARNING** - the trace file will contain all information normally found at the error level, plus information relating to out-of-the-ordinary conditions that might signal a potential problem.
- **INFO** - the trace file will contain all information normally found at the warning level plus information about the functioning of each call to modeling or forecasting, even when there are no errors or warnings.

By default, the trace level is set to ERROR, so that no trace file is produced unless an error occurs. This is the recommended setting.

Changing the Trace Level for Modeling

1. Define the model profile in the Customizing profile under [► Cross-Application Components ► Demand Data Foundation ► Modeling and Forecasting ► Maintain Forecast Profiles. ►](#)
2. Select the modeling profile for which you wish to adjust the trace level, and then select the *Model Configuration* folder.
3. Enter the trace level in the *Modeling Parameter Settings* field as follows: `trace_level=<INFO| ERROR | WARNING>`. If this field contains additional settings, separate the settings with a semicolon.
4. Note that this text field can contain additional settings. If so, separate the settings using a semicolon.

Viewing the Trace Files

Each execution of modeling or forecasting is referred to as a task, and is assigned a unique 32-character identifier called a task ID. The system places the trace files for a given task in a folder named after the task ID. The name of the trace file for modeling is `cam.trc` and the name of the trace file for forecasting is `fcst.trc`.

By default, the system creates these task directories in the `DIR_HOME` folder. The trace files can be viewed either on the host system using transaction `AL11`.

Changing the Location of Trace Files

By default, no particular location is specified for the trace file results. As a result, the system produces the trace files in the current working directory of the running science process. The working directory is in the `DIR_HOME` folder.

1. Define the model profile in the Customizing activity for *Maintain Forecast Profiles*.
2. Select the modeling profile for which you wish to adjust the trace level, and then select the *Model Configuration* folder.
3. Enter the file location in the *Modeling Parameter Settings* field as follows: `log_directory=<location>`. The location must already exist and must be writable by the operating system user that runs the science process. If this field contains additional settings, separate the settings with a semicolon.

Workload Monitors

When instances of an object are sent from an external system to DDF via an inbound remote function call (RFC) or Enterprise Services, the data is stored in the staging tables.

The transfer of objects can be triggered by an initial load as well as by a delta load that transfers modified instances of an object. You can schedule the `/DMF/PROCESS_STAGING_TABLES` report as a batch job to move data from the staging tables into the corresponding object. The following table lists all interfaces and indicates the relationship between the master data object and its corresponding interface tables:

Master Data Object	Interface Table	Description
Image Data	DMF/MDIF_IMAGE	Staging table for Image Header
	DMF/MDIF_IMGTEXT	Staging table for Image Texts
Transportation Lane	/DMF/MDIF_LANE	Staging table for data of Transportation Lane
	/DMF/MDIF_LANEPC	Staging table for price data of Transportation Lane

Master Data Object	Interface Table	Description
	/DMF/MDIF_LANETD	Staging table for time dependent data of Transportation Lane
Location	/DMF/MDIF_LOC	Staging table for Location Header Data
	/DMF/MDIF_LOCADR	Staging table for Location Address Data
	/DMF/MDIF_LOCASS	Staging table for Location Hierarchy Assignment Data
	/DMF/MDIF_LOCTXT	Staging table for Location Text Data, including fax, telephone and URL
Location Hierarchy	/DMF/MDIF_LOCH	Staging table for Location Hierarchy Header Data
	/DMF/MDIF_LOCHAS	Staging table for Location Hierarchy Assignment Data
	/DMF/MDIF_LOCHN	Staging table for Location Hierarchy Node Data
	/DMF/MDIF_LOCHNT	Staging table for Location Hierarchy Node Text Data
	/DMF/MDIF_LOCHT	Staging table for Location Hierarchy Text Data
Product Location	/DMF/MDIF_PRLC	Staging table for Product Location Header Data
	/DMF/MDIF_PRLCCT	Staging table for Product Location time dependent Cost Data
	/DMF/MDIF_PRLCPR	Staging table for Product Location time dependent Price Data
	/DMF/MDIF_PRLCTD	Staging table for Product Location time dependent Data
Product	/DMF/MDIF_PROD	Staging table for Product Header Data
	/DMF/MDIF_PROASS	Staging table for Product Hierarchy Assignment Data
	/DMF/MDIF_PROTXT	Staging table for Product Description Data
	/DMF/MDIF_PROUOM	Staging table for Product Unit of Measure Data

Master Data Object	Interface Table	Description
Product Hierarchy	/DMF/MDIF_PROH	Staging table for Product Hierarchy Header Data
	/DMF/MDIF_PROHN	Staging table for Product Hierarchy Node Data
	/DMF/MDIF_PROHNT	Staging table for Product Hierarchy Node Text Data
	/DMF/MDIF_PROHTX	Staging table for Product Hierarchy Header Text Data

Technical Data Object	Interface Table	Description
Generic Time Series	/DMF/TS_GENERIC	Staging table for Generic Time Series Data
Inventory Data	/DMF/OPIF_INVENT	Staging table for Inventory Data
Sales Data	/DMF/BI_SALES	Staging table for BI Sales Data

The following remote function modules (RFCs) can be called to write data into staging tables:

Master Data Object	Remote Function Module
Image Data	/DMF/MDIF_IMAGE_DATA_INBOUND
Transportation Lane	/DMF/MDIF_LANE_INBOUND
Location	/DMF/MDIF_LOCATION_INBOUND
Location Hierarchy	/DMF/MDIF_LOC_HIER_INBOUND
Product Location	/DMF/MDIF_PROD_LOC_INBOUND
Product	/DMF/MDIF_PRODUCT_INBOUND
Product Hierarchy	/DMF/MDIF_PROD_HIER_INBOUND

Transactional Data Object	Remote Function Module
Generic Time Series	/DMF/TS_GENERIC_INBOUND
Inventory Data	/DMF/OPIF_INVENTORY_INBOUND
Vendor Fund	/DMF/OPIF_VENDOR_FUND_INBOUND

Transactional Data Object

Remote Function Module

Sales Data

/DMF/BI_SALES_DATA

You can schedule the /DMF/PROCESS_STAGING_TABLES report as a batch job to move data from the staging tables into the corresponding object.

Data Consistency

The external data providers that write data into the staging tables can additionally provide a high resolution time stamp when an RFC is called. Every data record within a staging table has a high resolution time stamp assigned (EXT_KEY_TST field) to it. This high resolution time stamp is part of the key of the data record within the staging table. Therefore, different records for the same object can exist at a point in time within the staging table. The processing of the data from the staging table into the corresponding business object ensures that the data of the newest data record within a staging table is processed.

Authorizations




To ensure the data consistency, only the users with authorizations can load the data into staging tables. The system performs authorization checks on the following function groups:

- /DMF/BI_SALES_INBOUND
- /DMF/MDIF_IMAGE_DATA
- /DMF/MDIF_LANE
- /DMF/MDIF_LOCATION
- /DMF/MDIF_LOC_HIER
- /DMF/MDIF_PRODUCT
- /DMF/MDIF_PROD_HIER
- /DMF/MDIF_PROD_LOC
- /DMF/OPIF_INVENTORY
- /DMF/TS_GENERIC_INBOUND

4.2 Management

Use

SAP provides an infrastructure to help your technical support consultants and system administrators manage the SAP components, as well as complete all technical administration and operation tasks.

For more information, see the technical operations guide for SAP NetWeaver in the SAP Help Portal at <http://help.sap.com>  *System Administration and Maintenance Information*  *Technical Operations Guide*. 

Features

Starting and Stopping

When you start SAP NetWeaver, you start the system database, the application servers, and the respective processes of which the system consists.

For more information, see the technical operations guide for SAP NetWeaver in the SAP Help Portal at <http://help.sap.com> ► *System Administration and Maintenance Information* ► *Technical Operations Guide (English)* ► *General Administration Tasks* ► *Starting and Stopping SAP NetWeaver ABAP and Java.* ►

Backup and Restore

You back up your system landscape regularly to ensure that you can restore and recover it in case of failure. The backup and restore strategy of your system landscape must not only include your strategy for your SAP system, but it must also be included in your company's overall business requirements and incorporated into your entire process flow.

In addition, the backup and restore strategy must cover disaster recovery processes, such as how to recover from the loss of a data center due to a fire. You specify in your strategy that the normal data and the backup data are stored in separate physical locations, so that you do not lose both types of data in a disaster.

Scheduled Periodic Tasks

You can automatically schedule import tasks using the `/DMF/PROCESS_STAGING_TABLES` report in the `/DMF/EXT_IF_COMMON` package.

Required Manual Periodic Tasks

This section describes all manual tasks required to run periodically to keep the application running smoothly over time. A manual task needs a person to execute it. A scheduled task can be automated using a task scheduler program. Such tasks may be required on the component level and are therefore relevant in each scenario that uses the component. Other tasks may be relevant for certain business scenarios only. It is important that you monitor the successful execution of these tasks on a regular basis.

Manual tasks for DDF

Task	Tool Supporting this Task	Recommended Frequency	Detailed Description
Purge Data	Report <code>/DMF/PURGE_AGENT</code>	As required	See the <code>/DMF/PURGE_AGENT</code> report documentation (transaction code <code>SE38</code>).

Task	Tool Supporting this Task	Recommended Frequency	Detailed Description
Delete Obsolete Time Series Data	Report /DMF/TS_DELETE	As required	<p>You can select the data to be deleted by location and product using the key figure parameter (KPRM).</p> <p>The available time series types include:</p> <ul style="list-style-type: none"> • Universal (UN) • Location Universal (UL) • Point of Sale (PS) • Syndicate Data (SY)
Delete Obsolete Exception Message Data	Program /DMF/ PURGE_EWB_MESSAGES	As required	<p>Execute or schedule the program.</p> <p>No parameter is required by this program. The purging is driven by the message configuration and the executed deletions in the UI.</p>
Consolidate Time Series Data	Program /DMF/ TS_BUFFER_CLEAN	As required	<p>Use this function to clear the Time Series buffer to propagate the data to the final persistence engine in the Compressed Data Management module.</p> <p>Execute the program for each KPRM in which the Buffer Threshold parameter is greater than 0.</p>

Load Balancing


The application uses the standard function of SAP NetWeaver for logon and load balancing.

For modeling and forecasting services, the maximum number of products and maximum number of demand group locations is essential.

During workload processing, the system breaks a single operation or service into many smaller tasks. It then runs each of these tasks as separate dialog work processes (task requests or screen changes), up to the configured maximum number of work processes. Since the system attempts to run this maximum number of processes in parallel, you use load balancing to help more evenly distribute workload within the system.

High Availability

This application is based on SAP NetWeaver technology. The high availability considerations that apply to SAP NetWeaver, such as increasing system availability, improving performance, and eliminating unplanned downtime, also apply to SAP Promotion Management for Retail.

For more information, see the *SAP High Availability* in the SAP Help Portal at http://help.sap.com/nw_platform
 [Application Help](#) > [Function-Oriented View](#) > [English](#) > [Solution Life Cycle Management](#) > [SAP High Availability](#) >

Support Desk Management

Support Desk Management allows 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.

For support desk management, you need the methodology, management procedures, and tools infrastructure to run your internal support organization efficiently.

Remote Support

If you want to use SAP remote services (for example, SAP EarlyWatch or Remote Consulting), or if you would like to permit an SAP support consultant to work directly in your system to make a more precise problem diagnosis, then you need to set up a remote service connection. Additionally, there exists an ABAP role for read-only access for remote support that is also relevant. This role (SAP_RCA_SAT_DISP for ABAP) is available in the STPI plug-in and is generated when a managed system is connected to SAP Solution Manager. Should any additional application-specific functionality be necessary for use by an SAP support consultant, then an applicable role should be defined providing the appropriate authorization(s) and assigned to the SAP support consultant's user login.

Problem Message Handover

To create SAP support messages for your installation, you must specify an application component.

For SAP Promotion Management, you can specify the CA-RT-PMR application component.

5 Business Overview

SAP Promotion Management is a comprehensive solution for creating promotional offers for retail omnichannel markets. The solution integrates offers into advertising vehicles in each of the retailer's marketing channels, presentable to mass groups or unique targeted groups of consumers. Promotion pricing and other consumer offer information is available to the retailer's purchase channels to ensure consistent pricing across all purchase channels.

SAP Promotion Management leverages predictive algorithms within SAP Customer Activity Repository to enable retailers to collaboratively plan promotions in line with unique customer preferences across all channels. Certain retail vertical markets may define and utilize vendor funding to maximize margins from trade fund proposal via collection and settlement.

SAP Promotion Management provides a single source of all promotional data to participants in the retailer organization's promotion process, as well as to 3rd parties supporting the retailer's business

5.1 Software Component Matrix

This section provides the software components used by each business process.

During the installation of SAP Customer Activity Repository applications bundle (shipped in the SAP CARAB 5.0 back-end product version and the SAP FIORI FOR SAP CARAB 5.0 front-end product version), all of the software components listed below are installed.

Whereas you must always install all of these software components, you only need to configure those that are required for your specific implementation scenario.

For information on installation prerequisites and installation instructions, see the [Common Installation Guide](https://help.sap.com/viewer/p/CARAB), available at <https://help.sap.com/viewer/p/CARAB>.

Software Components Used by SAP Promotion Management Business Processes

SAP Promotion Management Business Process	Back-End Product Version SAP CARAB 5.0		Front-End Product Version SAP FIORI FOR SAP CARAB 5.0
	RTLCAB	SAP RTL AFL FOR SAP HANA	UICAR001
System Preparation	X		
Enabling Demand Data Foundation and Creating Demand Forecast	X	X	
Data Preparation	X		

SAP Promotion Management Business Process	Back-End Product Version SAP CARAB 5.0			Front-End Product Version SAP FIORI FOR SAP CARAB 5.0
	RTL CAB	SAP RTL AFL FOR SAP HANA		UICAR001
Offer Scheduling	X			
Promotion Planning	X			
Data Transfer	X			
Manage Promotional Offers	X			X

Note

This business overview provides just one way to implement each business scenario. Alternative implementations, including other SAP solutions, business scenarios, and processes might be applicable to your specific business needs.

5.2 Business Scenario

You use this scenario to plan, create and execute retail promotional events and campaigns. Implement this scenario to improve your overall profitability by:

- Identifying the offers that will be most profitable based on shopper demand
- Reducing the time required to plan and execute a promotional event
- Creating marketing and merchandising offer versions to target specific locations and specific products
- Helping retailers to efficiently manage their advertising dollars by better understanding the expected financial performance of each offer

As the scenario provides all participants in the promotion process with a single, up-to-date set of data points, it enables a comprehensive view and status of all promotional events and promotional offers throughout the retail operation.

This single view promotes collaboration between merchandising, marketing, advertising, inventory replenishment and location operations within a retailer. It ensures that the information is consistent throughout the planning and execution processes between these groups.

From a planning perspective it also reduces the number of tactical tasks each group must perform such as:

- Providing iterative support for the strategic annual (or semi-annual) planning process
- Reducing communications between merchandising and advertising with regards to promotional content
- Ensuring that pricing is consistent from the merchandising group to location operations
- Providing adequate visibility for inventory during promotional events, thus ensuring proper inventory levels during the promotions

5.2.1 Enabling Demand Data Foundation and Creating Demand Forecast

You must enable Demand Data Foundation (DDF) to support consuming applications of SAP Customer Activity Repository and to be able to create a demand forecast with Unified Demand Forecast (UDF). For more information about DDF and UDF, see the application help for SAP Customer Activity Repository at <https://help.sap.com/viewer/p/CARAB>.

The UDF demand forecast can serve as the basis for various cross-industry planning and automation use cases. UDF also provides insights into shopper behavior, enabling retailers to perform predictive analytics.

The demand forecast is generated in two steps:

1. **Demand modeling** is the process of finding the values for the parameters of a defined statistical model to explain the historical demand. The parameters of this demand model typically describe the effects of demand influencing factors (DIFs) in the past. The parameter values can then be used to predict the effects of similar DIF occurrences in the future, a process referred to as demand forecasting.
2. **Demand forecasting** predicts the demand for a particular product or group of products, in a particular location, for a given scenario (for example, promotion, sales channel), for a specific time period in the future (forecast horizon). Any aggregation of demand forecasts across products, locations, scenarios, or time is also a demand forecast.

The demand forecast uses the following master data:

- Location
- Location hierarchy
- Product
- Product hierarchy
- Product location combination
- Offer (optional)
- User DIF (optional)

The demand forecast uses the following organizational data:

- Sales organization
- Distribution channel
- Distribution chain
- Order channel

The demand forecast can use the following transaction data (time series):

- Point-of-sale (POS) data from SAP Business Warehouse (SAP BW) or from an external application
- Consumption data from an external application
- Syndicated data obtained from an external provider (sales data commonly aggregated to a weekly level and locations).

i Note

For more information on the different master data objects and time series, see the *Data Management* section in the application help for SAP Customer Activity Repository.

Business Process Steps

This business process runs as follows:

1. Send master data (SAP ERP)

SAP ERP prepares and sends the master data through a Remote Function Call (RFC) by using the data replication framework (DRF, transaction **DRFOUT**).

You have the following outbound implementations:

Sequence	Replication Mode	SAP ERP Outbound Implementation	SAP ERP Description	DDF Inbound Interface
1	Initialization	PMCH	Material Group Hierarchy	/DMF/ MDIF_PROD_HIER_INBOUND Product Hierarchy
2	Initialization, Change, and Manual	SEASON	Season	/DMF/ MDIF_SEASON_INBOUND Season
3	Initialization, Change, and Manual	PMAT	Material	/DMF/ MDIF_PRODUCT_INBOUND Product
4	Initialization, Change, and Manual	PPLT	Plant	/DMF/ MDIF_LOCATION_INBOUND Location
5	Initialization, Change, and Manual	PMPL	Material and Plant	/DMF/ MDIF_PROD_LOC_INBOUND Product Location
6	Change	PSPR	Sales Price	/DMF/ MDIF_PROD_LOC_INBOUND Product Location
7	Initialization, Change, and Manual	PCON	Consumption	/DMF/ TS_GENERIC_INBOUND Generic

Sequence	Replication Mode	SAP ERP Outbound Implementation	SAP ERP Description	DDF Inbound Interface
8	Initialization, Change, and Manual	PCUS	Customer	/DMF/ MDIF_LOCATION_INBOUND Customer
9	Initialization, Change, and Manual	PINV	Inventory	/DMF/ OPIF_INVENTORY_INBOUND Inventory
10	Change	PMAP	Moving Average Price	/DMF/ MDIF_PROD_LOC_INBOUND Product Location
11	Initialization, Change, and Manual	PSOS	Source of Supply	/DMF/ MDIF_LANE_INBOUND Transportation Lane
12	Initialization, Change, and Manual	PVEN	Vendor	/DMF/ MDIF_LOCATION_INBOUND Location
13	Initialization, Change, and Manual	PBBY	ERP Bonus Buy Transferred as Offer	/DMF/ OPIF_OFFER_INBOUND Offer
14	Initialization, Change, and Manual	POFF	ERP Promotion Transferred as Offer	/DMF/ OPIF_OFFER_INBOUND Offer
15	Initialization	PPHY_CLASS	Plant Hierarchy and Group from Classification System	/DMF/ MDIF_LOC_HIER_INBOUND Location Hierarchy

Sequence	Replication Mode	SAP ERP Outbound Implementation	SAP ERP Description	DDF Inbound Interface
16	Initialization	PAHY	Article Hierarchy	/DMF/ MDIF_PROD_HIER_INBOUND Product Hierarchy
17	Initialization	PPHY	Plant Hierarchy	/DMF/ MDIF_LOC_HIER_INBOUND Location Hierarchy
18	Initialization, Change, and Manual	PMCS	Material and Plant (Wholesale)	/DMF/ MDIF_PROD_LOC_INBOUND Customer Location/Product
19	Initialization, Change, and Manual	PWEB	Documents (Sales Order/Shipment/Billing)	/DMF/ OPIF_DOCUMENT_INBOUND
20	Initialization, Change, and Manual	PURCH_ORDR	Purchase Order	/DMF/ OPIF_PURCH_ORDR_INBOUND Purchase Order /DMF/ OPIF_CONFIRMATION_INBOUND Confirmation

Note

For more information about the ERP outbound processes, see the *Configuring Data Replication from SAP ERP to DDF* section of the *SAP Customer Activity Repository Administration Guide*.

For more information about the DDF inbound interfaces, see <https://help.sap.com/viewer/p/CARAB>
 ► <Version> ► Application Help ► SAP Customer Activity Repository ► Demand Data Foundation ► Integration Information ►.

When replicating the data, the system automatically generates data replication logs, which you can then evaluate. You can access this option via *SAP Easy Access SAP Retail* (transaction **w10t**) under ► *Logistics* ► *Retailing* ► *Distributed Retailing* ► *Merchandise Lifecycle Optimization* ► *Outbound* ► *Analyze Log for Outbound Implementations (DRFLOG)* ►.

2. Receive master data (DDF)

DDF can receive master data from the following:

- Multiple SAP ERP applications
- Non-SAP applications

By default, the data is stored in the DDF staging tables. From there, you transfer the data to the production tables by using one of the following options:

- The *Monitor Imports* function
You use this function to transfer data from the staging tables to the production tables, review erroneous records, delete erroneous records, and clean up the staging tables. Note that you correct the erroneous records in the source application, and then you send the data again. For more information about this function, see <https://help.sap.com/viewer/p/CARAB> >> <Version> > [Application Help](#) > [SAP Customer Activity Repository](#) > [Demand Data Foundation](#) > [General Services](#) > [Monitor Imports](#).
- The *Process Inbound Staging Tables* function
For more information, see <https://help.sap.com/viewer/p/CARAB> >> <Version> > [Application Help](#) > [SAP Customer Activity Repository](#) > [Demand Data Foundation](#) > [General Services](#) > [Monitor Imports](#) > [Process Inbound Staging Tables](#).
- The `/DMF/PROCESS_STAGING_TABLES` report
For more information, see the accompanying system documentation (transaction **SE38**).

Note

You can choose to bypass the staging tables in Customizing under >> [Cross-Application Components](#) > [Demand Data Foundation](#) > [Basic Settings](#) > [Integration](#) > [Define Import Settings](#). For more information, see the Customizing activity documentation (transaction **SPRO**).

DDF inbound process performs validation checks before inserting the data into the production tables. For more information about how the data from external applications is processed, see <https://help.sap.com/viewer/p/CARAB> >> <Version> > [Application Help](#) > [SAP Customer Activity Repository](#) > [Demand Data Foundation](#) > [Integration Information](#) > [Inbound Processing](#).

3. Define sales history (DDF)
For information on how to define the sales history, see the *Integrating Historical Demand Data* section in [Introduction to SAP Customer Activity Repository](#).
4. Provide SAP Planning for Retail information (SAP BW)
This step is optional. It is currently used only by SAP Assortment Planning or SAP Merchandise Planning to compare the planned assortment figures to the open-to-buy (OTB).
For more information about the standard SAP BW InfoProvider, see https://help.sap.com/viewer/p/BI_CONTENT >> <Version> > [Application Help/SAP Library](#) > [BI Content](#) > [Industry Solutions](#) > [Trading Industries](#) > [Retail Trade](#) > [Merchandise and Assortment Planning](#) > [Retail Planning](#) > [MultiProvider](#) > [Merchandise Retail Plan](#).
5. Receive SAP Planning for Retail information (DDF)
This step is optional. It is currently used only by SAP Assortment Planning to compare the planned assortment figures to the open-to-buy (OTB).
Run report `/DMF/BI_IF_MERCH_PLAN` (transaction **SE38**) to receive the SAP Planning for Retail information from SAP Business Warehouse (SAP BW) to DDF. You can run this report as a scheduled background job (transaction **SM36**).

Note

- Provide the required settings in the Customizing activities *Define SAP BW Application for Merchandise Planning* and *Define Field Mapping for Merchandise Planning* under ► *Cross-Application Components* ► *Assortment Planning* ► *Imported Demand Data Foundation Settings* ► *Integration* ▾.
Alternatively, provide a custom implementation for the *BAdI: Read Merchandise Planning* Business Add-In.
- If you use the standard settings in the *Define Field Mapping for Merchandise Planning* Customizing activity, that is, you are importing the OTB from the `ORP_MP12` MultiProvider, you must specify **MMF** (*Finalized Merchandise Version*) in the *Merchandise Plan Version* field of the report.

6. Schedule demand model (UDF)

You can schedule the system to create the demand model with the following options:

- Model by hierarchy
With this option, you can select a node to include all products and locations assigned to that hierarchy branch.
- Model by product location
With this option, you can specify a list of one or more products and one or more locations.

For more information, see the *Schedule Model and Forecast* section in the application help for SAP Customer Activity Repository.

7. Schedule demand forecast (UDF)

You can schedule the system to create the demand forecast with the following options:

- Forecast by hierarchy
With this option, you can select a node to include all products and locations assigned to that hierarchy branch.
- Forecast by product location
With this option, you can specify a list of one or more products and one or more locations.

For more information, see the *Schedule Model and Forecast* section in the application help for SAP Customer Activity Repository.

Result

The system generates the demand forecast, which is then saved in the database.

⚠ Caution

If you are using workbooks in SAP Assortment Planning or SAP Merchandise Planning, only the following standard characters are valid in values for characteristics (in the sense of BI Content objects):

!"%&'()*+,-./:;<=>?_0123456789ABCDEFGHIJKLMNOQRSTUVWXYZ

Values of characteristics that only consist of the character # or that begin with ! are not valid.

For more information about allowed characters in SAP BW systems, see SAP Note [173241](#).

5.2.2 System Preparation

You use this business process to prepare your SAP Promotion Management system as well as your peripheral systems to carry out this business scenario.

SAP Promotion Management requires master data in order to carry out its intended purpose. This master data is obtained from one or more external systems such as SAP ERP, but any other external system can be interfaced. SAP POS sales data must also be interfaced to SAP Promotion Management so that scientific-based demand modeling can take place and to produce offer forecasts. Finally, there are SAP Promotion Management specific configuration settings which need to be maintained in order to enable full functionality in SAP Promotion Management.

Process

1. System receives POS data from SAP Customer Activity Repository (optional)
SAP Promotion Management receives aggregated transaction log sales history from SAP Customer Activity Repository
This step is only required if using forecasting. It can only take place after master data has been successfully replicated and received.
2. System replicates low resolution image data (optional)
Images are sequentially loaded into SAP Promotion Management after master data has been successfully replicated and received.

i Note

There is no native interface for replicating low resolution image data in SAP ERP.

This step is only required if using product images in SAP Promotion Management.

3. System receives low resolution image data (optional)
An enterprise SOA service loads images into SAP Promotion Management. When images are imported, they go into staging tables visible in the *Monitor Imports* function. From there, the data is processed into the SAP Promotion Management tables.
This step is only required if using product images in SAP Promotion Management.
4. Maintain offer priorities (optional)
Maintain the offer priority for event planning and offer modelling. This priority is assigned at the block level of an area template and is used to identify the value of the block within the area.
5. Maintain SAP ERP promotion types
Maintain settings for the SAP ERP system and the valid promotion types associated with it. The promotion types can then be assigned to offers and events. Only offers that have valid SAP ERP promotion types assigned to them can be transferred from SAP Promotion Management.
6. Maintain margin and price allocation for vendor funds (optional)
Maintain the default price percentage and margin percentage allocated for each type of vendor fund. These percentages must equal 100% for each vendor fund. When a fund is associated with offers, the fund impact per product is divided into price and margin. It is possible to override the default allocation at the time of associating a vendor fund with an offer.
This step is only required if using vendor funds in SAP Promotion Management.
7. Maintain placeholder product settings (optional)

Maintain settings and controls for the use of placeholder products (PHPs) in SAP Promotion Management and the transfer of Placeholder Product data to the SAP ERP system.

This step is only required if using placeholder products in SAP Promotion Management.

8. Maintain shopper card settings (optional)

Maintain the shopper card types that are used in SAP Promotion Management that correspond to the customer types in the SAP ERP system. You can also create shopper card types that do not exist in SAP ERP but integration between SAP Promotion Management, SAP POS and the SAP ERP system cannot be guaranteed.

This step is only required if using shopper cards in SAP Promotion Management

9. Maintain content template types and categories

Maintain and organize content templates, content template types and content template categories. The content template category simply provides a way to categorize the content template types. Both the content template type and the content template category facilitate the search and selection of a content template to a block template's box.

Results

At the conclusion of this business process:

- All attributes and images (optionally) will be available in SAP Promotion Management
- All POS history required for modelling purposes will be available in SAP Promotion Management
- All relevant configuration settings for an SAP ERP system will be linked to SAP Promotion Management
- All mandatory SAP Promotion Management settings will be made
- Shopper cards, vendor funds, incentives and placeholder products will be available for use in SAP Promotion Management

5.2.3 Data Preparation

You use this business process to set up job scheduling for various activities and to create and configure additional components in SAP Promotion Management.

Process

1. Define area of responsibility

Define the area of responsibility by assigning one or more merchandise (or article) hierarchy nodes to users. This assignment will personalize the data presented during promotional activities in SAP Promotion Management.

2. Maintain templates

Create and configure area, block and content templates for use in SAP Promotion Management.

3. Schedule jobs for exporting

Create jobs designed to transfer:

- Master data from SAP Promotion Management to SAP ERP

- Event and offer information from SAP Promotion Management to SAP BI
 - Layout information and instructions from SAP Promotion Management to an external desktop publishing system
4. Assign attributes to products (optional)
Assign previously-configured attribute types and attribute values to products. This is typically used to associate product text and images to an offer.
This step is only required if using attributes in SAP Promotion Management.
 5. Maintain placeholder products (optional)
Create and maintain placeholder products that function as temporary products in SAP Promotion Management for products that do not yet exist in the master data system. When the placeholder products are replicated in the master data system (such as SAP ERP), the new fully maintained real master data will be created. Once transferred to SAP Promotion Management, the new products will automatically replace the placeholder products and all their assignments.
This step is only required if using placeholder products in SAP Promotion Management.
 6. Maintain location hierarchies
Create and maintain location hierarchies that group together individual locations that already exist in the master data system. Retail events use location hierarchies to determine primary and secondary market versions.

Results

At the conclusion of this business process:

- All of the required administrative settings and job scheduling will be available in SAP Promotion Management.
- All of the required data management components will be available in SAP Promotion Management.

5.2.4 Promotion Planning

You use this business process to plan promotional activities and to create vendor funds in SAP Promotion Management.

Process

1. Maintain campaigns (optional)
Create and maintain promotional campaigns to which you assign one or more retail events.
This step is only required if using campaigns in SAP Promotion Management.
2. Maintain event query settings
Create and standardize user interface settings and queries related to event planning in order to personalize the screen layout and pre-filter the data retrieved by active queries.
3. Maintain events
Create and maintain retail events that function to promote products to consumers. Events can be planned in advance on a yearly basis, seasonal basis, or manually at any time.

4. Assign market versions to events
Assign a single location hierarchy to an event to establish the primary market version. You can optionally assign additional hierarchy nodes to create secondary market versions in which deviations from event planning (such as the language used in the event) can be created and monitored.
5. Maintain event partitions
Create and maintain partitions that establish the structure or layout of an event. You assign areas and the number of desired positions to your event. Traditional partitions are mapped directly to merchandise or article hierarchy categories, whereas open partitions are freely definable and not mapped to any product category in particular.
You also define financial and layout-related goals to an event.
6. Assign areas to partitions by market version
Assign one or more defined partitions with assigned areas to each market version.
7. Assign templates
Rename areas to correspond with the intended product category promoted in each area, then assign area templates to each of the areas.
8. Assign partitions to blocks
Assign categories to each area in your primary and secondary market versions and assign partition names to available blocks.
9. Maintain vendor funds (optional)
Create and maintain vendor funds that function to provide retailers with additional financial incentives to promote the products of vendors.
Vendor funds must have a status of Recommended before they can be used in SAP Promotion Management. Vendor funds cannot be modified once they are assigned to an offer.
This step is only required if using vendor funds in SAP Promotion Management.

Results

At the conclusion of this business process:

- Campaigns and events will be available in SAP Promotion Management
- Event query settings and personalization will be available
- Market versions will be assigned to events
- Events will be structured into partitions
- Templates will be assigned to events
- Vendor funds will be available in SAP Promotion Management

5.2.5 Offer Scheduling

You use this business process to:

- Create and forecast offers that can achieve the sales goals for your retail event
- Assign vendor funds to offers and calculate their impact on overall financials
- Review all financials associated with events and their associated offers

Process

1. Maintain offer schedule settings
Create and standardize user interface personalization settings and queries for offer scheduling.
2. Maintain product group settings
Create and standardize user interface personalization settings and queries related to product groups.
3. Maintain product groups
Create and maintain products groups, then assign attributes to products and product groups.
4. Maintain offer headers
Create and maintain offer header information, including the offer name, time period associated with the offer, location group, tactic type and tactic. When the location group is assigned in the header, it automatically becomes the primary market for the offer.
5. Maintain offer version settings
Maintain personalization settings on the offer version tab within the offer.
6. Create offer terms
Create and maintain the offer terms that dictate the products, placeholder products, product groups, discount type, discount value and user projection. Additional offer versions can be created by adding or excluding locations from specific product group offerings. You can also review the financial expectations of the offer at all levels.
7. System models and forecasts offers (optional)
Use confidence indices and forecast decompositions based on POS data from SAP Customer Activity Repository. Forecasts can be continually updated as desired. If you do not want to use forecasting in SAP Promotion Management, manual projections can be entered instead.
This step is only required if using forecasting in SAP Promotion Management.
8. Review financial forecasts
Review system-generated forecasts, as well as the forecast confidence index and the decomposition of how the forecast was derived.
9. Update offer status
Once complete, set the offer status to *Recommended*.
10. Assign block templates
Assign block templates to offers. The templates assigns actual values to attributes, such as display images and selling descriptions.
11. Apportion values and percentages to offers
Modify apportionment discount values and/or apportionment percentage values for each product
12. Assign offers to events
Offers with a *Recommended* status can be assigned to areas within an event. Once complete, set the offer status to *Recommended*.
13. Preview events
Display all accepted offers by area.
14. Review event financials
View multiple events by date range, comparing planned and forecasted values between events and partitions.
15. Edit events (optional)
Edit events and partitions, reassign offers and update financials

Result

At the conclusion of this business process:

- All required user settings and master data for offers will be available in SAP Promotion Management
- Offers will have products, locations, templates and (optionally) vendor funds
- Offers will have forecasts and be available for financial review
- Accepted offers will be assigned to events
- Events can be previewed by area
- Event financials and layout assignments can be reviewed
- Events can be edited and offers can be reassigned after having been reviewed

5.2.6 Data Transfer

You use this business process to transfer finalized events and offers for follow on processing in SAP ERP, SAP BI, and in desktop publishing.

Process

1. Transfer offers and events to SAP ERP
Offers possessing valid SAP ERP promotion types can be transferred; an associated promotion is created in SAP ERP and the appropriate pricing conditions for the products and locations in the promotion are sent from SAP ERP to SAP POS.
Offers not possessing valid SAP ERP promotion types will not be transferred; messaging is sent after the transfer indicating whether or not the transfer was successful.
2. Receive offers and events from SAP ERP
3. Receive pricing conditions from SAP ERP
4. Transfer offers and events to desktop publishing
5. Receive offers and events from SAP ERP
6. Transfer offers and events to SAP BI
Details regarding finalized and executed promotional offers are sent to SAP BI in order to for the system to continuously provide SAP Promotion Management with the most accurate forecasting possible.
7. Receive offers and events from SAP ERP
8. Receive POS sales data from POS system
9. Receive POS sales data from SAP Customer Activity Repository

Result

At the conclusion of this business process:

- Finalized offers and events are sent to SAP ERP

- Promotions are created in SAP ERP
- Pricing conditions are generated and sent to SAP POS
- Versioned content from offers and events is exported to desktop publishing for creation of appropriate advertising versions
- Finalized offers and events are sent to SAP BI for analysis
- POS sales data is sent to SAP BI for analytics
- POS sales data is sent from SAP Customer Activity Repository to SAP Promotion Management for modeling purposes

5.3 Configuration Information

You use these procedures to successfully set up SAP Promotion Management.

1. Configure promotion planning.
You use these procedures to perform the suggested business processes as described in this Administration guide.
2. Import images
You use this procedure to import images to SAP Promotion Management.

5.3.1 Configuring Promotion Planning

To perform the suggested business processes as described in this Administration Guide, the following configuration activities are required.

Process: System Preparation

Transaction Type	Object	Path	Description
Transaction	SM31	Not Applicable	Call View Maintenance Like SM30
Transaction	SE38		Call View Maintenance Like SM30
Web DynPro	OE/dmf/wda_inf_wb? WDCONFIGURATIONID= %2fDMF %2fAPP_CFG_INF_WB		Interface Workbench

Transaction Type	Object	Path	Description
IMG Activity	/PRM/NR_EVT	<ul style="list-style-type: none"> ▶ SAP Customizing Implementation Guide ▶ Cross Application Components ▶ Promotions ▶ Event ▶ Maintain Number Range for Events ▶ 	Maintain number ranges for number range objects that you use in generation rules for events.
IMG Activity	/PRM/NR_TMPL	<ul style="list-style-type: none"> ▶ SAP Customizing Implementation Guide ▶ Cross Application Components ▶ Promotions ▶ Templates ▶ Maintain Number Range for Templates s ▶ 	Maintain number ranges for number range objects that you use in generation rules for templates.

Transaction Type	Object	Path	Description
IMG Activity	/PRM/V_TEMPL_DIM	<ul style="list-style-type: none"> ▶▶ SAP Customizing Implementation Guide ▶ Cross Application Components ▶ Promotions ▶ Templates ▶ Maintain Number Range for Templates s ▶ 	Maintain standard area template dimensions that will be used when creating area templates.
IMG Activity	/PRM/NR_CMP	<ul style="list-style-type: none"> ▶▶ SAP Customizing Implementation Guide ▶ Cross Application Components ▶ Promotions ▶ Maintain Number Range for Campaigns s ▶ 	Maintain number ranges for number range objects that you use in generation rules for campaigns..

Transaction Type	Object	Path	Description
IMG Activity	/PRM/CURR_DISP	▶ SAP Customizing Implementation Guide > Cross Application Components > Promotions > Offer > Preview > Maintain Currency Symbols for Offer > Preview >	Maintain the currency symbol you wish to see in the user interface when previewing offers.
IMG Activity	/PRM/V_VARIABLE	▶ SAP Customizing Implementation Guide > Cross Application Components > Promotions > Offer > Preview > Maintain Currency Symbols for Offer > Preview >	Maintain variables. These variables are assigned to templates, which in turn are used while previewing offers and events.

Process: Enabling Demand Data Foundation and Creating Demand Forecast

For information on the configuration activities for this process, see [▶ SAP Customer Activity Repository Administration Guide](#) > [Business Overview](#) > [Configuration Information](#) > [Enabling Demand Data Foundation and Creating Demand Forecast](#) >.

Process: Data Preparation

Transaction Type	Object	Description
Web Dynpro	OE/prm/a_maintain_template?IV_TEMPLATE_TYPE=a&IV_TRXN_MODE=01&WDCONFIGURATIONID=%252fPRM%252fCONF_MAINTAIN_TEMPLATE&WDCONFIGURATIONID=%2fPRM%2fCONF_MAINTAIN_TEMPLATE	Maintain Area Template Application
Web Dynpro	OE/prm/a_maintain_template?IV_TEMPLATE_TYPE=B&IV_TRXN_MODE=01&WDCONFIGURATIONID=%2fPRM%2fCONF_MAINTAIN_TEMPLATE	Maintain Block Template Application
Web Dynpro	OE/prm/a_maintain_template?iv_template_type=C&IV_TRXN_MODE=01&WDCONFIGURATIONID=%252fPRM%252fCONF_MAINTAIN_TEMPLATE&WDCONFIGURATIONID=%2fPRM%2fCONF_MAINTAIN_TEMPLATE	Maintain Content Template Application
Transaction	SM37	Overview of job selection
Transaction	SE38	ABAP Editor
Transaction	SNRO	Number Range Objects

Process: Promotion Planning


Transaction Type	Object	Description
Web Dynpro	OE/prm/wda_campaign_details?IV_KEY=&IV_TRXN_MODE=&WDCONFIGURATIONID=%2fPRM%2fWDA_CAMPAIGN_DETAILS_ID	Campaign Maintenance
Web Dynpro	SE/prm/c_event_maint?IV_KEY=&IV_TRXN_MODE=01&WDCONFIGURATIONID=%2fPRM%2fC_EVENT_MAINT	Planning Event Maintenance Application

Transaction Type	Object	Description
Web Dynpro	OE/prm/wda_promo_act_view? WDCONFIGURATIONID=%2fPRM %2fAPP_CFG_PROMO_ACT_VIEW	Promotion Planning Workbench
Web Dynpro	OE/prm/wda_vendor_fund_main? IV_ID=&IV_KEY=&IV_LOG- SYS=&IV_TRXN_MODE=01&WDCON- FIGURATIONID=&WDCONFIGURATIO- NID=%2fPRM%2fWDA_VEN- DOR_FUND_MAIN	Vendor Fund Application

Process: Offer Scheduling

Transaction Type	Object	Description
Web Dynpro	OE/prm/wda_offer_main?WDCONFI- GURATIONID=%2fPRM %2fAPP_CFG_OFFER_MAIN	
Web Dynpro	OE/prm/wda_offer_assignment? EVENT_ID=&EXT_OFR_ID=&IV_SHOW _EVENT_NAME=&LOG_SYS_ID=&____ ____=&WDCON- FIGURATIONID=PRM%2fAPP_CFG_OF- FER_ASSIGNMENT	
Web Dynpro	OE/prm/wda_ofr_search?WDCONFI- GURATIONID=%2fPRM %2fAPP_CFG_OFR_SEARCH	
Web Dynpro	OE/prm/wda_promo_act_view? WDCONFIGURATIONID=%2fPRM %2fAPP_CFG_PROMO_ACT_VIEW	

Process: Data Transfer

Transaction Type	Object	Path	Description
IMG activity	RDM_BBY_0003	SAP Customizing Implementation Guide > Logistics General > Retail Promotion >	Maintain Number Ranges
IMG activity	SIMG_CFMENUOLSDBK004		Maintain Condition Type
IMG activity	RDM_BBY_0001		Maintain Bonus Buy Profiles
IMG activity	W_ZF_VK_0221	SAP Customizing Implementation Guide > Logistics General > Retail Promotion > Promotion Type >	
Document	SAP Note 1509490 		Bonus buy profile contains invalid condition types

5.3.2 Importing Images for SAP Promotion Management

You use this procedure to import images to SAP Promotion Management.

One method to import images to SAP Promotion Management is to store all product images to an image server for use across multiple applications. This is the preferred method of using images in the offer creation process since image libraries are usually large and need to be changed and updated frequently.

Alternatively, you can import images to SAP Promotion Management. Image information must be compiled according to precise specifications in a comma-separated values (CSV) file. The CSV file and its associated images are placed into two staging tables:

- The `/DMF/MDIF_IMAGE` table contains image information, such as the external image ID and the image type
- The `/DMF/MDIF_IMGTEXT` table contains the image description for translation

The information in the staging tables is imported using the Monitor Imports function in SAP Promotion Management.

Procedure


1. Create a CSV file using the following column headings and guidelines:

Column Heading	Description of Contents	Values/Example	Length
Name	Name of image	myImage	40
Image_Format	Image format	jpeg, gi, bmp, png	10
Image_Size	File size in bytes	http://www.site.com/ myImage.jpg	10
Actual_Path	URL to Image for SAP Promotion Management	http://www.site.com/ myImage.jpg	255
High_Resolution_Path	Path to external location of high resolution image		255
Height	Image height in pixels	4000	10
Width	Image width in pixels	2000	10
Image_Type	Product or NonProduct	Product/Nonproduct Product images must be as- sociated with an external product, placeholder prod- uct or product group exter- nal ID	30
Langu	Language code, used with the description	EN	2
Ext_image_id	External image ID. This is the main key on the image database table business ob- ject.		60
Ext_prod_id	External product ID	Optional. Used for products and placeholder products. Leave blank for non-product images.	
Description	Image description. This is language-specific and can be used to create transla- tions to other languages.		100

Column Heading	Description of Contents	Values/Example	Length
Prod_md_system	Master data system in which the product originated		10
Prod_group_id	Product group identifier	Optional, use for product groups	10
Sales_org	Sales organization	optional	20
Distribution_ch	Distribution channel	optional	20
Bus_part_id	Business partner ID	optional	60
Part_role_cat_cd	Partner role code	optional	3
Bus_part_name	Partner name	optional	40
Image_attr_key	Images are assigned to products using attributes. The image attribute types are predefined in Customizing. This field associates this image to a specific image attribute type.		4

i Note

All headings are mandatory and are case-sensitive. Column headings can be created in any order but the last column must be a required data column.

2. Store the CSV file in a folder.
3. Start transaction SE38
4. Enter `/DMF/IMAGE_BO_IMPORT` and choose *Execute*.
5. Make your entries and choose *Execute*.
6. Point the system to the path in which you saved your CSV file.
7. Log onto SAP Promotion Management using the NetWeaver Business Client.
8. Choose **Services** > *Monitor Imports* .

5.3.3 Optimizing SAP Promotion Management

Performance Considerations for SAP Promotion Management

Product and Location Limitation

To limit the products and locations that are displayed when an offer is opened you can use one of the following Business Add-Ins (BAdIs) in transaction SE18: To limit the products and locations that are displayed when an offer is opened you can use one of the following Business Add-Ins (BAdIs) in transaction SE18:

- `/DMF/GW_TERM_OBJECT_SUBSET`
You can use this BAdI to limit the number of products returned for product groups and product hierarchy nodes. This is used when the user is selecting a product group for the first time.
- `/DMF/GW_OFPR_PROD_SUBSET`
You can use this BAdI to limit the number of products returned for an offer. The default implementation limits up to 1000 products spread evenly between all terms and versions.

Financial Records Limitations

You can limit the number of financial records that are generated within an offer by specifying the level of detail at which the records are stored. You have the following options:

- All levels (product locations, products, locations, and total)
- Only aggregates (products, locations, and total)
- Totals only (locations and total)

To set this value, use Customizing activity (transaction SPRO), [▶ SAP Customery Activity Repository ▶ Demand Data Foundation ▶ Data Maintenance ▶ Offer ▶ Maintain Indicators for Offer Calculations ▶ . ▶](#)

Changing the Maximum Number of Records for Processing

You can change the maximum number of records for processing (batching). With this option you can reduce the number of calls between the application and the forecasting engine for improved performance.

To set this value, use Customizing activity (transaction SPRO), [▶ SAP Customery Activity Repository ▶ Demand Data Foundation ▶ Data Maintenance ▶ Offer ▶ Specify Parameters for Offer Financials ▶](#). Update *Max Fin Records* to a very large number (such as 1000000). While 1000000 is a good number to start with, each system is different and it is recommended to test with alternative numbers (smaller or larger) to get the best performance for your scenario.

Adjust Load Balancing Parameters

You can review and, if necessary, adjust your load balancing parameters (Num Records, Max Work Processes) to optimize performance for the following processes:

- Demand modeling
- Demand forecasting (only for production forecasts; not possible for what-if forecasts)
- Calculation of hierarchical priors (HPRs)

Number of Products Displayed in Product Details Limitations

You can limit the number of products displayed in product detail of the SAP Manage Promotional Offers UI, which improves the performance of opening an offer.

Implement notes [2732884](#) and [2732333](#). This new feature will push the filters down to the database and improve performance of opening an offer. There are manual instructions to be aware of so the notes must be applied separately.

Order Channels Limitations

You can limit the Order Channels which are submitted to the What-if forecast in SAP Promotion Management by deleting unused order channels from configuration.

To delete unused order Channels, use Customizing activity (transaction SPRO), [Cross-Application Components](#) > [Define Order Channels](#). Identify which *Order Channels* will not be utilized, and delete them from this configuration section.

Note

You must do your own due diligence to understand the impact of deleting order channels in your own environment.

Purchase Order data replication (DRF Outbound Implementation `PURCH_ORDER`) uses the `CDPOS` table to monitor changes. The standard code uses a FOR ALL ENTRIES on this table since any joins will result in a syntax error. In order to improve performance for SAP HANA-based systems only, you can implement the example code provided in `CL_EX_PURCH_ORDER` in the BAdI: Read Purchase Order (`DMF_BADI_PURCH_ORDER`). See BAdI documentation for further information.



For more information and additional tips and best practices, see the Optimize UDF Performance section of the SAP Customer Activity Repository Administration Guide. You can find this guide on SAP Help Portal under <https://help.sap.com/viewer/p/CARAB-><Version>->Administration>.

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