Application Operations Guide

SAP Promotion Management for Retail

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Documentation in the SAP Service Marketplace

You can find this documentation at the following Internet address:
service.sap.com/instguides

Typographic Conventions

Type Style	Represents
Example Text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options.
	Cross-references to other documentation
Example text	Emphasized words or phrases in body text, titles of graphics and tables
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
Example text	Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, source code as well as names of installation, upgrade and database tools.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys (such as **F2**) or the **ENTER** key.

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Contents

1 Getting Started

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

1.1 About this Guide

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

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

Target Groups

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

1.2 Global Definitions

SAP Application:

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

Business Scenario:

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

Component:

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

1.3 Important SAP Notes

Check regularly for updates available for the Application Operations Guide.

Important SAP Notes

SAP Note Number	Title	Comment

1490012	Release Information Note (RIN) SAP PMR 7.1	Standard information for a release.

1.4 History of Changes

Make sure you use the **current** version of the Application Operations Guide.

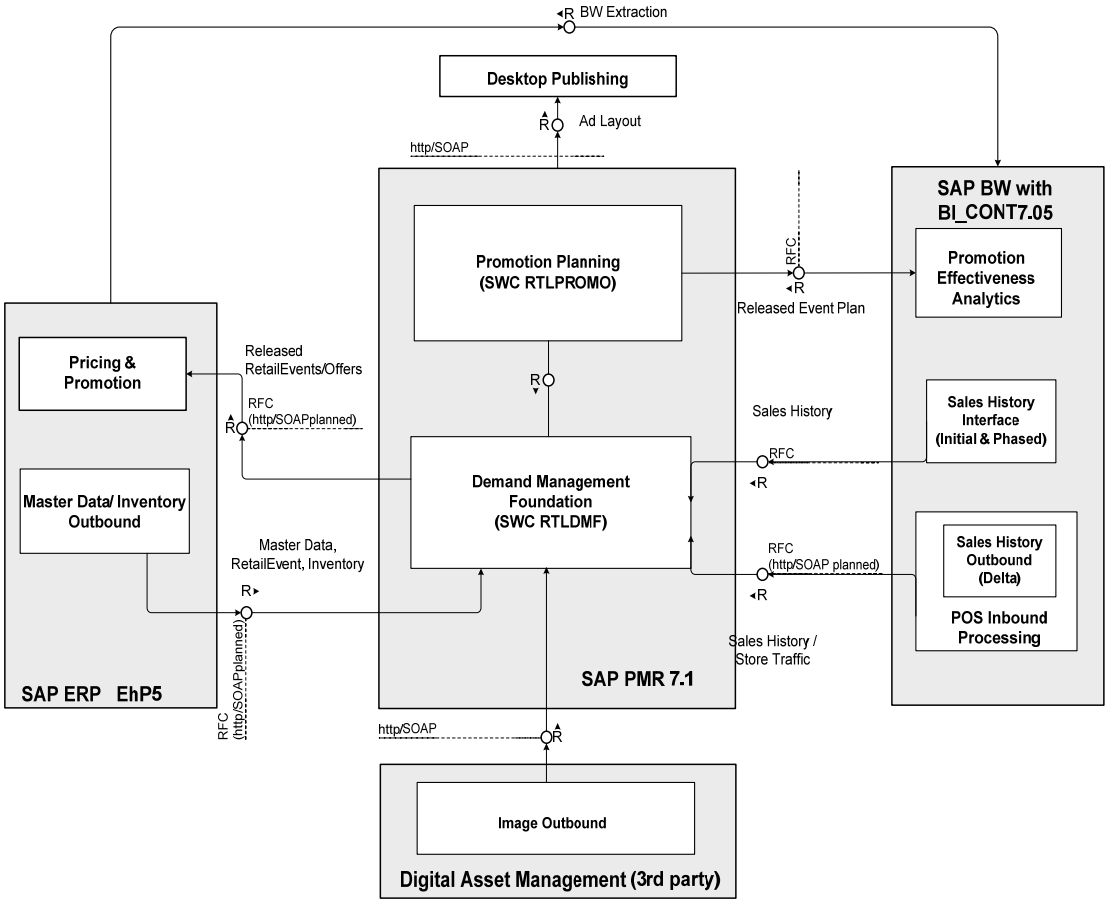
The current version of the Application Operations Guide is at **`service.sap.com/instguides`** on *SAP Service Marketplace*.

The following table provides an overview of the most important changes in prior versions.

Version	Important Changes
1.0	First version of the SAP PMR 7.1 Operations Guide

2 Technical System Landscape

The figure below shows an overview of the technical system landscape for SAP PMR:



2.1 Scenario/Component Matrix

The Promotion Management for Retail business scenario is comprised of the following software components:

Software Component	Required/Optional
Platform: SAP EhP1 for SAP NetWeaver 702 SP06 with component SAP_BS_FND 702 (latest SP)	Required
Demand Foundation Server: RTLDMF 1.2	Required
Promotions Server: RTLPROMO 710	Required
NetWeaver Business Client: NWBC 3.0; latest release	Required
Science Engine Server: RTLDMFSCENG 120	Optional
SAP NetWeaver Portal: NetWeaver 7.02 SP6	Optional

Software Component	Required/Optional
Portal Content: BPISRDMFMA00_0.sca BPISRPRADM00_0.sca BPISRPRADV00_0.sca BPISRPRFC00_0.sca BPISRPRMAR00_0.sca BPISRPRMER00_0.sca BPISRDMFMA 120 BPISRPRADM 710 BPISRPRADV 710 BPISRPRFC 710 BPISRPRMAR 710 BPISRPRMER 710	Optional
SAP NetWeaver Business Warehouse: SAP NetWeaver SAP BW 700 (with BI Content 705 SP01)	Optional

2.2 Related Documentation

The following table lists where you can find more information about the technical system landscape.

Topic	Guide/Tool	Quick Link on *SAP Service Marketplace* (**service.sap.com**)
Application- and Industry-specific Components such as SAP Financials and SAP Retail	Master Guide	**instguides**
Technology Components such as SAP Web Application Server	Master Guide	**instguides**
Sizing	Quick Sizer Tool	**sizing**
Technical Configuration	Master Guide	**instguides**
Scalability	Master Guide	**instguides**
High Availability	Master Guide	**instguides**
Security	Security Map Application Security Guide	**security** **instguides**

3 Monitoring of SAP PMR

Within the management of SAP Technology, monitoring is an essential task. A section has therefore been devoted solely to this subject.

You can find more information about the underlying technology in the SAP Netweaver Administrator's Guide - Technical Operations Manual in the *SAP Library* under *SAP Netweaver Library*.

3.1 Alert Monitoring

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

For more information, see the Monitoring Setup Guide for SAP NetWeaver (MSG) at *http://www.sdn.sap.com/irj/sdn/nw-70 -> SAP NetWeaver 7.0 EHP1 (docupedia) -> Solution Monitoring -> System Monitoring with CCMS.*

3.1.1 Monitoring Installation and Setup

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

3.1.2 Component specific Monitoring

SAP PMR is based on NetWeaver 2007 Usage type AS-ABAP and AS-Java. For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver -> SAP NetWeaver 7.0 -> System Administration -> Technical Operations*.

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

SAP PMR 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) for the 'SAP DMF Monitor Set' which must be verified and configured are as follows:

- DMF_MODEL_PROCESSES_BY_HIER
- DMF_MODEL_PROCESSES_BY_PROD_LOC
- DMF_FORECAST_PROCESSES_BY_HIER
- DMF_FORECAST_PROCESSES_BY_PROD_LOC

3.2 Detailed Monitoring and Tools for Problem and Performance Analysis

The following functions are available within SAP PMR to monitor data flow within the application:

- Interface Workbench
- Error Recovery

You can access these through the NetWeaver Business Client or, optionally, the NetWeaver Enterprise Portal.

3.2.1 Backend Framework

SAP DMF uses the Exception Workbench (EWB) back-end for logging errors with their related context. This error reporting is meant for errors arising while running background processes.

The EWB exceptions have 2 hierarchical levels that enable, at runtime, a process to log a global exception (called the high level exception) and attach detail exceptions (called low-level exception) to this global exception. The high level exception shall report the error event and the low level exception to link details to the high level exception.

The EWB exceptions shall be linked to multiple contexts, consisting of context types and context values that can be attached to the raised exception. The context type is a generic concept that is meant to link an exception instance to any number of Business, Technical or Configuration Object, Components, Process area or significant parameter related to an element of the latter list. The context type is restricted to the data model of it.

Context types are configured objects / processes definition that applies to the system where the EWB back-end is used. For the DMF/PMR system, context types are configured to include context:

- Product Import
- Product Text Import
- Product Unit of Measure Import
- Product Hierarchy Assignments Import
- Product Image Import
- Product Image Text Import
- Product Hierarchy Import
- Product Hierarchy Text Import
- Product Hierarchy Node Import
- Product Hierarchy Node Text Import
- Location Import
- Location Text Import
- Location Address Import
- Location Assignment Import
- Location Hierarchy Import
- Location Hierarchy Text Import
- Location Hierarchy Node Import
- Location Hierarchy Node Text Import
- Location Hierarchy Assignments Import
- Product Location Import
- Product Location Time Dependent Data Import
- Product Location Sales Price Import
- Product Location Cost Import
- Transportation Lane Import
- Transportation Lane Time Dependent Data Import
- Transportation Lane Procurement Cost Import
- Sales History Import
- Store Traffic Import
- Generic Time Series Import
- Inventory Import
- Promotional Offer Import
- Retail Event Import
- Retail Event Offer Buy Term Import
- Retail Event Offer Get Term Import
- Retail Event Offer Get Term Overview Import
- Vendor Fund Import
- Vendor Fund Product Data Import
- Vendor Fund Location Data Import
- Vendor Fund Distribution Channel Information Import
- Vendor Fund Amount Data Import
- Vendor Fund Product Amount Data Import
- Offer Import
- Offer Tactic Import

- Offer Location Import
- Offer Term Import
- Offer Product Override Import
- Offer Incentive Import
- Controller Process
- Running Date
- Generating Process
- Logical System
- Product
- Product Text
- Product Unit of Measure
- Product Assignment
- Product Image
- Product Image Text
- Place Holder Product
- Product Hierarchy
- Product Hierarchy Text
- Product Hierarchy Assignments
- Product Hierarchy Node Text
- Product Hierarchy Node
- Location
- Location Text
- Location Address
- Calendar
- Location Hierarchy
- Location Hierarchy Text
- Location Hierarchy Assignments
- Location Hierarchy Node
- Location Hierarchy Node Text
- Location Group
- Location Group Text
- Location Group Assignments
- Product Location
- Product Location Time Dependent Data
- Product Location Sales Price
- Product Location Cost
- Transportation Lane
- Transportation Lane Time Dependent Data
- Transportation Lane Procurement Cost
- Generic Time Series
- Location based Generic Time Series
- Consumption Data
- Point of Sale Data
- Store Traffic
- Inventory
- Offer
- Offer Tactic
- Offer Term
- Offer Term Product
- Offer Location Group
- Offer Product Group
- Vendor Fund
- Vendor Fund Product
- Vendor Fund Location
- Demand Model
- Diagnostic Demand Model
- Demand Forecast
- Diagnostic Demand Forecast

For a context type attached to a logged exception, a value shall be attached to this context type. This value shall help tracing back the facts surrounding an error event.

DMF provides the following business area, which can are linked to an exception message (the message class and number of an error message) EWB configuration:

- Inbound Processing
- Master Data Management
- Cleansing

- Modeling
- Forecasting
- Forecasting Analytics
- Time Series Management
- Job Processing
- Offer Modeling

DMF provides the following generating process, which can be linked to a raised exception message:

- Inbound Processing
- Cleansing
- Modeling
- Forecasting
- Forecasting Analytics
- Time Dialog Process
- Desktop Publishing
- Offer Export

3.2.2 Monitor Exceptions

You use this function to view exception data from SAP Demand Management Foundation (SAP DMF) and SAP Promotion Management for Retail (SAP PMR).

The Exception Framework traces errors and exceptions that occur while running background processes. The Exception Monitor provides a user interface to view the exceptions linked to their related context.

For more information, see the SAP Library help at **help.sap.com** *-> SAP for Industries -> SAP for Retail -> SAP Promotion Management*.

3.2.3 Monitor Message Classes

SAP DMF provides message classes containing the details of every possible error that may arise in the system.

Use transaction SE91 to select the message classes available. The primary message class is /DMF/MSG_HL; messages are grouped by number range as follows:

Development Area	Starting Number Range	Ending Number Range
Common Exceptions	000	099
Inbound Processing	100	399
Inbound Processing Promotion Image Processing	400	450
Distribution Chain	450	469
Offer	470	499
Cleansing	500	549

Modeling	550	599
Forecasting	600	649
Forecast Analytics	650	699
Outbound Processing	700	750
Time Series	750	824
Inventory	825	849
Forecasting	850	899
Job Processing	900	949
Offer Inbound	950	999

3.2.4 Monitor Compressed Data

You use this function to view Time Series data from SAP Demand Management Foundation (SAP DMF) and SAP Promotion Management for Retail (SAP PMR). SAP DMF uses Compressed Data Management (CDM) as the persistence engine for its Time Series data. This data is compressed to save space and ensure optimal database table performance, but compression prevents data from being read by the Data Browser function (transaction SE16).

For more information, see the SAP Library help at **help.sap.com** *-> SAP for Industries -> SAP for Retail -> SAP Promotion Management*.

3.2.5 Trace and Log Files

SAP PMR uses the standard SAP NetWeaver tools and processes for trace and log files. For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver -> SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> Administration of SAP NetWeaver Systems -> EPC (EP Core) and EP (Enterprise Portal) -> Visual Composer -> Monitoring -> Trace and Log Files.*

The DMF modeling and forecasting processes produce trace files on the file system of the host on which they are running. The location and level of detail in these trace files can be controlled via Customizing.

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:

- 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. In Customizing for Cross-Application Components, choose *Demand Management Foundation -> Modeling and Forecasting -> Maintain Model Profiles* to maintain model profiles or *Demand*

Management Foundation -> Modeling and Forecasting -> Maintain Forecast Profiles to maintain forecast profiles.

2. Select the modeling profile for which you wish to adjust the trace level and access Model Configuration. Unless you are using diagnostic profiles, you should select the profile with "PRODUCTION" model profile type.
3. Enter the desired trace level in the *Modeling Parameter Settings* field as follows: `trace_level=<INFO | ERROR | WARNING>`. Note that this text field may already contain other settings. If so, separate the settings using a semi-colon.

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 trace files for a given task are placed in a directory named after the task ID. The trace file for modeling is named "cam.trc" and the trace file for forecasting is named "fcst.trc".

By default, these task directories are created in the directory named DIR_HOME. The trace files can be viewed either on the host system using any suitable text viewer, or can be found using transaction AL11.

Changing the Location of Trace Files

By default, no particular location is specified for the trace file output. The result is that the trace files are produced in the current working directory of the running science process. Normally this location is known in transaction AL11 as DIR_HOME, which makes it convenient to view trace files.

1. In Customizing for Cross-Application Components, choose *Demand Management Foundation -> Modeling and Forecasting -> Maintain Model Profiles* to maintain model profiles or *Demand Management Foundation -> Modeling and Forecasting -> Maintain Forecast Profiles* to maintain forecast profiles.
2. Select the modeling profile for which you wish to adjust the trace level and access Model Configuration. Unless you are using diagnostic profiles, you should select the profile with Model Profile Type of "PRODUCTION."
3. Enter the desired 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. Note that this text field may already contain other settings. If so, separate the settings using a semi-colon.

3.2.6 Workload Monitors

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

The transfer of objects can be triggered by an initial load as well as by a delta load that only transfers modified instances of an object. The following table lists all interfaces in SAP PMR 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_IMGTXT	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
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

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

Transactional 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
Store Traffic	/DMF/BI_ST_TRAFF	Staging table for BI Store Traffic 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
Vendor Fund	

Transactional Data Object	Remote Function Module
Generic Time Series	/DMF/TS_GENERIC_INBOUND
Inventory Data	/DMF/OPIF_INVENTORY_INBOUND
Sales Data	/DMF/BI_SALES_DATA
Store Traffic	/DMF/BI_SALES_DATA

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

You can also process the data from the staging tables manually using the Interface Workbench.

3.3 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 gets this high resolution timestamp assigned (field EXT_KEY_TST). This high resolution timestamp 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 a staging table. This kind processing of the data from a staging table into the corresponding Business Object ensures that the data of newest data record within a staging table is processed.

The staging tables for a Business Object (for example, LOCATION) consists of a table for the header data and tables for the dependant data (see table). The key structure of the staging tables ensures that the data can be processed consistently.

 EXAMPLE

Table /DMF/MDIF_LOC has key segments

- EXT_LOCATION_ID
- LOCATION_TCD
- EXT_SENDER_ID
- EXT_KEY_TST

Table /DMF/MDIF_LOCADR has key segments

- EXT_LOCATION_ID
- LOCATION_TCD
- ADDRESS_ID
- EXT_SENDER_ID
- EXT_KEY_TST

The external data provider has to ensure that the EXT_LOCATION_ID and the LOCATION_TCD can also be found within table /DMF/MDIF_LOCADR. Data records in table /DMF/MDIF_LOCADR, which have no corresponding key within the header table (/DMF/MDIF_LOC) will not be processed into the Business Object. In this case the staging tables can be manually cleaned up using the Interface Workbench.

3.3.1 Authorizations

Authorization checks are performed 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

An authorization object (for RFC access) has to be created that contains the listed function groups.

4 Management of SAP PMR

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

For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver -> SAP NetWeaver 7.0 -> System Administration -> Technical Operations.*

4.1 Starting and Stopping

SAP PMR uses the standard SAP NetWeaver tools and processes for starting and stopping. Use the following steps to start and stop SAP NetWeaver ABAP under UNIX:

Software Component	Start and Stop Sequences and Tools		
	Sequence	Tool	Detailed Description
SAP PMR	1	STARTSAP	Log onto the host of your central system as the SAP Administrator. Enter `startsap ALL` to start the SAP NetWeaver database, ABAP instances, and all other processes.
SAP PMR	2	STOPSAP	Log onto the host of your central system as the SAP Administrator. Enter `stopsap R3`. Note that The R3 switch does not stop the database simultaneously. To do that, use the command `stopsap` or `stopsap ALL`.

For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver -> SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> General Administrative Tasks -> Starting and Stopping SAP NetWeaver ABAP and Java*.

4.2 Software Configuration

This chapter explains which components or scenarios used by this application are configurable and which tools are available for adjusting.

Component configuration tools

Component	Configuration Tool(s)	Detailed Description
RTLDMF	SAP Customizing	Refer to the Customizing documentation in your SAP PMR system.

4.3 Administration Tools

SAP PMR uses the standard SAP NetWeaver administration tools. For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> Administration of SAP NetWeaver Systems.*

4.4 Backup and Restore

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

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

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

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

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

SAP PMR uses the standard SAP NetWeaver tools and processes for backup and restore processing. For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> General Administrative Tasks -> Database Administration.*

4.5 Periodic Tasks

4.5.1 Scheduled Periodic Tasks

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

4.5.2 Required Manual Periodic Tasks

This chapter describes all manual tasks required to run periodically in order to keep the application running smoothly over time. A manual task need an a person to for each execute in opposite to the scheduled tasks listed above which can be automated using a task scheduler program. Such tasks may be required on component level and are therefore relevant in each scenario that uses the component. You can find the mapping in the chapter Scenario / Component Matrix above. 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 SAP PMR

Task	Tool(s) supporting this task	Recommended Frequency	Detailed Description
Define Data Purge Settings	Customizing for Cross Application Components -> Demand Management Foundation -> Initialization -> Define Purge Settings	As required	You set product business objects that can be purged to active, as well as set whether data is to be purged in normal mode or cascading mode.

Purge Data	Report /DMF/PURGE_AGENT	As required	Select a range of data (such as products or locations) from the selection screen. If no range is selected, the report considers all data set to soft deleted in the purging process.
Delete Obsolete Time Series Data	Report /DMF/TS_DELETE	As required	You can select the data to be deleted by location and product using the key figure parameter (KPRM). The available time series types include: • Universal (UN) • Location Universal (UL) • Point of Sale (PS) • Syndicate Data (SY)
Delete Obsolete Exception Message Data	Program /DMF/PURGE_EWB_MESSAGES	As required	Execute or schedule the program. No parameter is required by this program. The purging is driven by the message configuration and the executed deletions in the UI.
Consolidate Time Series Data	Program /DMF/TS_BUFFER_CLEAN	As required	Use this function to clear the Time Series buffer to propagate the data to the final persistence engine in the Compressed Data Management module. Execute the program for each KPRM in which the Buffer Threshold parameter is greater than 0.

4.6 Load Balancing

SAP PMR uses the standard SAP NetWeaver tools and processes for load balancing. For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver -> SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> Administration of SAP NetWeaver Systems -> AS ABAP (Application Server for ABAP) -> Tasks -> Monitoring the ABAP Performance*.

For modeling and forecasting services the maximum number of products and maximum number of demand group locations is essential. These are used for the decomposition of tasks for modeling and forecasting services. They are not relevant for other services.

Logging On and Load Balancing Setup/Tools

Scenario	Detailed Description	Tools to be used
SAP PMR	During processing, SAP PMR 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 SAP PMR attempts to run this maximum number of processes in parallel, you use load balancing to help more evenly distribute workload within the system. For more information, see the SAP Library help at **help.sap.com** *-> SAP for Industries -> SAP for Retail -> SAP Promotion Management*.	Configure Load Balancing (Web Dynpro Application /DMF/LB_CONFIG)

4.7 User Management

User management for SAP PMR uses the mechanisms provided with the SAP NetWeaver Application Server ABAP and Java, for example, tools, user types, and password policies.

It is often 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 PMR 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:
  - Service users are used for authorization to execute promotions.

For more information see the SAP Library help at **help.sap.com** *-> SAP NetWeaver Library -> Administrator's Guide -> SAP NetWeaver Security Guide -> Security Guide for Usage Type AS -> SAP NetWeaver Application Server ABAP Security Guide -> User Authentication -> User Types*.

User Management Setup/Tools

Scenario(s)	Detailed Description	Tools to be used

User and role maintenance with SAP NetWeaver AS ABAP (Transactions SU01, PFCG)	For more information see the SAP Library help at **help.sap.com** -> *SAP NetWeaver -> SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> General Administrative Tasks -> Security and User Administration*	NetWeaver should be running

4.7.1 Read-Only User

A read-only user can be set up to user for remote support that will have access to all promotions 7.1 application and necessary Netweaver transactions in display mode.

The following roles should be assigned to this user:

- SAP_ISR_PROMO_READONLY – Read-Only access to Promotions applications
- SAP_QAP_BC_SHOW – Read-Only access to all necessary Netweaver transactions.

For more information, see the *SAP Promotion Management for Retail 7.1 Security Guide* at **service.sap.com/securityguide**.

5 High Availability

The tasks for the system administrator depend on the high availability features that you have implemented. In general, you need to minimize both planned downtime and unplanned downtime for your SAP system.

For a full checklist of what features you need to consider when designing high availability into your system, see the SAP Library help at **help.sap.com** *-> SAP NetWeaver -> SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> General Administrative Tasks -> High Availability.*

High availability is a technically complex area, and implementation considerations vary according to your system setup.

For technical guidance when developing a high availability strategy or when implementing a specific product or feature, contact the appropriate source, such as your SAP consultant or your hardware partner.

For more information, see SAP Note 803018.

5.1 On Demand Tasks

Reason	Task	More Information
System failure	Restore database	*SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> General Administrative Tasks -> Database Administration*
SAP system upgrade required	Upgrade SAP system	**`service.sap.com/upgrade`** **`service.sap.com/nw04upgrade`** → *Upgrade*
Database upgrade required	Upgrade database	**`service.sap.com/instguides`** → *Other Documentation* → *Database Upgrades*
Operating system upgrade required	Upgrade operating system	Operating system documentation

5.2 Periodic Tasks

Frequency	Task	More Information
Regularly	Test switchover functionality	**`service.sap.com/ha`** → *Media Library* → *Documentation* → *Switchover*
Regularly	Database backup, online or offline, possibly with split-mirror	*SAP NetWeaver 7.0 -> System Administration -> Technical Operations Manual -> Technical Operations for SAP NetWeaver -> General Administrative Tasks ->*

		Database Administration

How often you perform the periodic tasks depends on the requirements and nature of your installation.

For example, the frequency with which you expect a switchover to occur determines how often you test switchover functionality – if you expect frequent switchovers you need to frequently test switchover functionality.

6 Troubleshooting

See Section 3.2, *Detailed Monitoring and Tools for Problem and Performance Analysis*.

7 Support Desk Management

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

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

7.1 Problem Message Handover

The components for SAP PMR include:

- CA_DMF_PRM (applies to promotion planning activities)
- CA_DMF_FCT (applies to import of master data)

7.2 Custom Development

Custom Development is an SAP group working with customers to extend standard ABAP functionality such as BADIs or normal code modifications associated with the software components, RTLDMF and RTLPROMO.

Application maintenance refers to standard ABAP NetWeaver solutions which are delivered by SAP notes and are found on the SAP Service Market Place. A package of SAP notes is called a support pack and these too can be found on the SAP Service Market Place. It is recommended to search for SAP notes to resolve issues you may have encountered so that you can quickly download the fix.

As for the science of Promotions Management for Retail, the DMF Science Engine (RTLDMFSCENG), the build process produces a SAP zip file (.SAR extension) for each supported platform (linuxx86_64, sunx86_64, ntamd64 etc). The .sar file includes science binaries and required support libraries.

7.3 Remote Support

You can set up a read-only for remote support that enables access to all SAP PMR 7.1 applications and Netweaver transactions.

The following roles should be assigned to this user:

- SAP_ISR_PROMO_READONLY (for SAP PMR)
- SAP_QAP_BC_SHOW (for NetWeaver)

For more information about the specific authorization objects delivered with the SAP_ISR_PROMO_READONLY role, see the *SAP Promotion Management for Retail 7.1 Security Guide*.

8 Appendix

8.1 Related Information

The following table contains links to information relating to the Application Operations Guide.

Content	Quick Link to the *SAP Service Marketplace* (`service.sap.com`)
Master Guide, Installation Guide and Upgrade Guide	**`instguides`** **`ibc`**
Related SAP Notes	**`notes`**
Released Platforms	**`platforms`**
Network Security	**`securityguide`** **`network`**
Technical Infrastructure	**`ti`**
SAP Solution Manager	**`solutionmanager`**