



UPGRADE GUIDE | PUBLIC

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Common Upgrade Guide for SAP Customer Activity Repository applications bundle 4.0 FPS01

Content

1	How to Use this Common Upgrade Guide.	4
1.1	Naming Conventions.	6
1.2	Information Available on SAP Help Portal.	8
2	Plan your System.	12
2.1	System Landscape.	13
2.2	Integration with Source Master Data Systems.	14
3	Upgrade the Prerequisites.	16
4	Prepare the Upgrade.	24
4.1	Implement SAP Notes for the Upgrade.	24
4.2	Verify Correct Schema Mapping.	36
4.3	Verify SAP HANA Users and Privileges.	38
4.4	Configure AFL Usage.	41
	Enable Usage of PAL Functions (SAP Assortment Planning).	41
	Check the OFL Installation.	42
5	Upgrade the Software.	44
5.1	Verify Prerequisites and SAP Notes.	45
5.2	Download and Install the Application Function Library (SAP RTL AFL FOR SAP HANA).	45
5.3	Upgrade SAP Customer Activity Repository applications bundle (Back-End Product Version).	48
5.4	Upgrade Product-Specific SAP Fiori UI Component (Front-End Product Version).	50
5.5	Check SAP Notes and RINs.	53
5.6	Install Alternate Storage (Optional).	54
	Install and Set Up Integration with SAP IQ.	54
	Install and Set Up Integration with Apache Hadoop.	57
	Install and Set Up Integration with SAP HANA Dynamic Tiering.	61
	Create the Remote Source in SAP HANA Studio.	62
	Create the Virtual Table.	62
	Activate Alternate Storage.	62
6	Set Up the Applications.	64
6.1	SAP Customer Activity Repository.	64
	Core (Mandatory for All Applications).	64
	Advanced (Optional).	82
	Troubleshooting.	152
6.2	SAP Merchandise Planning.	166

	Activate SAP HANA Content for SAP Merchandise Planning.	166
	Activate Application BI Content Upgrade.	168
	Verify Time Data.	173
6.3	SAP Assortment Planning.	173
	4.0 to 4.0 FPS01.	174
	2.0 SP4 to 4.0 FPS01.	202
	2.0 FP3 to 4.0 FPS01.	231
	2.0 SP6 to 4.0 FPS01.	260
6.4	SAP Promotion Management	289
6.5	SAP Allocation Management.	290
	1.5 (CARAB 2.0 SPS0) to 4.0.	291
	2.0 FP1 to 4.0.	293
	2.0 FP2 and FP3 to 4.0.	294
	Activate SAP Allocation Management SAP HANA Content.	295
	Check Procedure Associated with Function GENIOS_SOLVE is Active.	299
	Troubleshooting for SAP Allocation Management.	299
6.6	Configure Access to Documentation Provided on SAP Help Portal (Optional for All Applications)	300

1 How to Use this Common Upgrade Guide

This guide describes how to upgrade and set up the applications delivered with SAP Customer Activity Repository applications bundle 4.0 FPS01.

⚠ Caution

If you do not have an existing installation of any of these applications, you must perform a **new installation** rather than an upgrade. In this case, see the *Common Installation Guide* under <https://help.sap.com/viewer/p/CARAB> > <Version> > *Installation and Upgrade*.

Applications in this Release

SAP Customer Activity Repository applications bundle 4.0 FPS01 includes the following applications:

- SAP Customer Activity Repository 4.0 FPS01
- SAP Allocation Management 4.0 FPS01
- SAP Assortment Planning 4.0 FPS01
- SAP Merchandise Planning 4.0 FPS01
- SAP Promotion Management 4.0 FPS01

i Note

You can find the **product documentation** for all of these applications on SAP Help Portal for SAP Customer Activity Repository applications bundle at <https://help.sap.com/viewer/p/CARAB>.

If you wish to connect your system to consume documentation directly from the SAP Help Portal, see section [Configure Access to Documentation Provided on SAP Help Portal \(Optional for All Applications\)](#) [page 300] for more information.

What to Upgrade

Technically, SAP Customer Activity Repository applications bundle 4.0 FPS01 is delivered in the form of two installable **product versions**: one for the back-end and one for the front-end.

Product Versions for this Release	Description
SAP CARAB 4.0 FPS01	Back-end product version Contains several software components that provide the ABAP back-end functionality and the business content (such as SAP HANA views and SQLScript procedures, local BI Content, application function libraries, and workbooks, where applicable).
SAP FIORI FOR SAP CARAB 4.0 FPS01	Front-end product version Contains all the SAP Fiori apps included in SAP Customer Activity Repository applications bundle. It is also referred to as the <i>product-specific SAP Fiori UI component</i> .

→ Tip

If you need more information about a product version, log on to the SAP ONE Support Launchpad at <https://launchpad.support.sap.com/#/productsearch> and search for SAP CARAB or SAP FIORI FOR SAP CARAB. You will find download information, SAP Knowledge Base articles, guided answers, and more.

Upgrade at a Glance

1. First you **prepare** the upgrade. For example, you ensure that the technical prerequisites are installed. You also implement mandatory corrections, verify authorizations, and do other preparatory tasks. These steps are described in sections [Upgrade the Prerequisites \[page 16\]](#) and [Prepare the Upgrade \[page 24\]](#).
2. Then you **upgrade** the back-end product version and the front-end product version. These steps are described in section [Upgrade the Software \[page 44\]](#). You must do these steps regardless of the application that you want to set up later on.
3. Once you have upgraded the product versions, you **set up** the desired applications. These steps are described in section [Set Up the Applications \[page 64\]](#). First you do the general setup steps in section [Core \(Mandatory for All Applications\) \[page 64\]](#). You must do the core steps regardless of the application that you want to set up. After the core setup, you only need to do the steps that are required for your application. You do not need to read sections that do not apply to your application.

1.1 Naming Conventions

Important terms and variables used throughout this guide

Terminology

Term	Definition
<i>Common Installation Guide</i> <i>Common Upgrade Guide</i>	<p>Common guides for the applications delivered with <i>SAP Customer Activity Repository applications bundle</i>.</p> <p>You can find the guides on SAP Help Portal under https://help.sap.com/viewer/p/CARAB ▶ <Version> ▶ <i>Installation and Upgrade</i> ▶.</p>
consuming application	<p>An application designed to consume and utilize data obtained from the SAP Customer Activity Repository platform.</p> <div><p>❖ Example</p><ul style="list-style-type: none">• SAP Allocation Management• SAP Assortment Planning• SAP Merchandise Planning• SAP Promotion Management</div>
back-end server / system	The SAP NetWeaver-based ABAP back-end server on which SAP Customer Activity Repository and its consuming applications are installed.
front-end server / system	The SAP NetWeaver-based ABAP front-end server on which the SAP Gateway, SAP Fiori launchpad, central SAP Fiori UI component, and the product-specific SAP Fiori component (front-end product version) are installed.
source master data system	<p>SAP Customer Activity Repository applications bundle must be deployed alongside an SAP ERP or SAP S/4HANA central component as the single source of truth for all master data.</p> <p>Whenever this guide refers to a <i>source master data system</i>, it refers to the SAP ERP or SAP S/4HANA central component that you choose for your implementation.</p> <p>For more information, see Integration with Source Master Data Systems [page 14].</p>
SAP ERP	Unless otherwise specified, references in this guide to <i>SAP ERP</i> are comprehensive. That is, they apply to SAP Retail and SAP Fashion Management.

Naming Differences

Due to naming differences between the underlying technical objects, the following terms are **used interchangeably** in this guide:

SAP Customer Activity Repository (all modules except for UDF and DDF)	Unified Demand Forecast (UDF) and Demand Data Foundation (DDF)	SAP Assortment Planning / SAP Merchandise Planning	SAP Promotion Management	SAP Allocation Management	SAP Retail or SAP S/4HANA
article	product	product	product	product	article material
article variant	product variant	product variant	product variant	product variant or product/color/size	article variant
store	location (used as an umbrella term for stores, distribution centers, etc.)	location	location	store	store site

Variables

The variables are used as placeholders in the guides for objects that are user defined. When this variable is used in an instruction, you are expected to substitute your customer defined name for the object. For example, on the back-end application server where you have installed CARAB database objects, you have named your schema [ABC01](#). An instruction states to verify the list of packages in your `SAP<SID>`. You would look for packages in the [ABC01](#) schema.

To find the name of your `SAP<SID>`, sign on to your target system using SAP Logon. Use the file menu **► System ► Status ►**. In the lower right section titled [Database Data](#) the name of your [Schema](#) is shown. This same schema is also listed as an object in your HANA catalog.

Variables Used Across All Guides

Variable	Description
SAP<SID>	Physical schema name
<div> <div>i Note</div> <p>In this guide your physical schema is referred to as SAP<SID> and is your database system ID. This name is customer-defined.</p> <p>To find the name of your SAP<SID>, log on to your target system using SAP Logon. Choose System > Status . In the lower right-hand section titled <i>Database data</i>, the name of your <i>Schema</i> is shown. This same schema is also listed as an object in your SAP HANA studio, under <i>Catalog</i>. Substitute this schema name whenever the SAP<SID> variable is used in this guide.</p> </div>	
<sapsid>	SAP system ID in lowercase letters
<SAPSID>	SAP system ID in uppercase letters
<DBSID>	Database ID in uppercase letters
<dbsid>	Database ID in lowercase letters
<INSTDIR>	Installation directory for the SAP system
<DVD_DIR>	Directory on which a DVD is mounted
<OS>	Operating system name within a path

1.2 Information Available on SAP Help Portal






Information on prerequisite platforms, applications, and other components as well as quick links to SAP sites

Information on Prerequisite Platforms, Applications, Other Components

Information On	Path	Title
Installing SAP HANA	http://help.sap.com/viewer/p/SAP_HANA_PLATFORM > <Version> > Installation and Upgrade > SAP HANA Server Installation and Update Guide >	SAP HANA Server Installation and Update Guide

Information On	Path	Title
Installing SAP HANA database clients	http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Installation and Upgrade ► SAP HANA Client Installation and Update Guide ►	SAP HANA Client Installation and Update Guide
Installing SAP HANA studio	http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Installation and Upgrade ► SAP HANA Studio Installation and Update Guide ►	SAP HANA Studio Installation and Update Guide
Installing SAP LT (Landscape Transformation) Replication Server for SAP HANA	http://help.sap.com/viewer/p/SAP_HANA_REAL_TIME_REPLICATION ► <Version> ► Installation and Upgrade ►	Installation Guide - Trigger-Based Data Replication Using SAP Landscape Transformation Replication Serve
Managing major operational aspects of the SAP LT Replication Server	http://help.sap.com/viewer/p/SAP_HANA_REAL_TIME_REPLICATION ► <Version> ► Operations ►	Application Operations Guide - SAP Landscape Transformation Replication Server
Using SAP HANA	http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Administration ► SAP HANA Administration Guide ►	SAP HANA Administration Guide
Using the SAP HANA development tools to create comprehensive analytical models and to build applications with SAP HANA interfaces and integrated development (for developers)	http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Development ► SAP HANA Developer Guide (For SAP HANA Studio) ►	SAP HANA Developer Guide
Defining data models for use in SAP HANA (for modelers, business analysts)	http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Development ► SAP HANA Modeling Guide (For SAP HANA Studio) ►	SAP HANA Modeling Guide
Installing Foundation on SAP NetWeaver AS for ABAP 7.52, version for SAP HANA	https://help.sap.com/viewer/p/SAP_NETWEAVER_AS_ABAP_752 ► <Version> ► Installation and Upgrade ► Master Guide ►	SAP NetWeaver Master Guide

Information On	Path	Title
Installing SAP ERP 6.0	http://help.sap.com/viewer/p/SAP_ERP ► <Version> ► Installation and Upgrade ► Installation Guide ►	Installation Guide, SAP ERP 6.0 Including <your SAP Enhancement Package> - Technical Usage "Central Applications" <Your Server> on <Your Operating System>
Installing SAP S/4HANA, on-premise edition 1610 or higher	http://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE ► <Version> ► Product Documentation ► Installation Guide ►	Installation Guide for SAP S/4HANA, on-premise edition <version>
Installing SAP Enhancement Package 2 for SAP CRM 7.0 or SAP Enhancement Package 2 for SAP CRM 7.0, Version for SAP HANA or higher	http://help.sap.com/viewer/p/SAP_CUSTOMER_RELATIONSHIP_MANAGEMENT ► Version 7.0 EHP2 ► Installation and Upgrade ► Installation Guide ► Install ► Installation Guides for SAP EHP 2 for SAP CRM 7.0 ► Installation Guide - SAP enhancement package 2 for CRM 7.0 - ABAP and Java ► http://help.sap.com/crmhana ► Installation and Upgrade Information ► Administrator's Guide ► Administrator's Guide SAP CRM 7.0 EHP2, Version for SAP HANA ►	Installation Guide, SAP Customer Relationship Management 7.0 Including Enhancement Package 2 Java and ABAP Administrator's Guide, SAP Enhancement Package 2 for SAP CRM 7.0, Version for SAP HANA
General Quick Links		
SAP Site	Path	
SAP Help Portal	http://help.sap.com ►	
Knowledge Base Articles and SAP Notes	https://support.sap.com/en/index.html ►	
Product Availability Matrix (PAM)	http://support.sap.com/pam ►	
Maintenance and release strategy	https://support.sap.com/en/release-upgrade-maintenance.html ►	
SAP Software Download Center	http://support.sap.com/swdc ►	
SAP Solution Manager	http://support.sap.com/solutionmanager ►	
SAP Security Optimization Services Portfolio	https://support.sap.com/en/offerings-programs/support-services/security-optimization-services-portfolio.html ►	

SAP Site	Path
Data Protection and Privacy	https://www.sap.com/about/cloud-trust-center/data-ownership-privacy.html 
	2590321  <i>Upgrade recommendations to support GDPR compliance</i>
Support information (quick access via SAP ONE Support Launchpad; requires login)	https://launchpad.support.sap.com/#/productsearch 
Support package stacks, latest versions, patch level requirements	http://support.sap.com/patches 
System sizing	https://www.sap.com/about/benchmark/sizing.html 

2 Plan your System

[System Landscape \[page 13\]](#)

System landscape diagram for SAP Customer Activity Repository applications bundle

[Integration with Source Master Data Systems \[page 14\]](#)

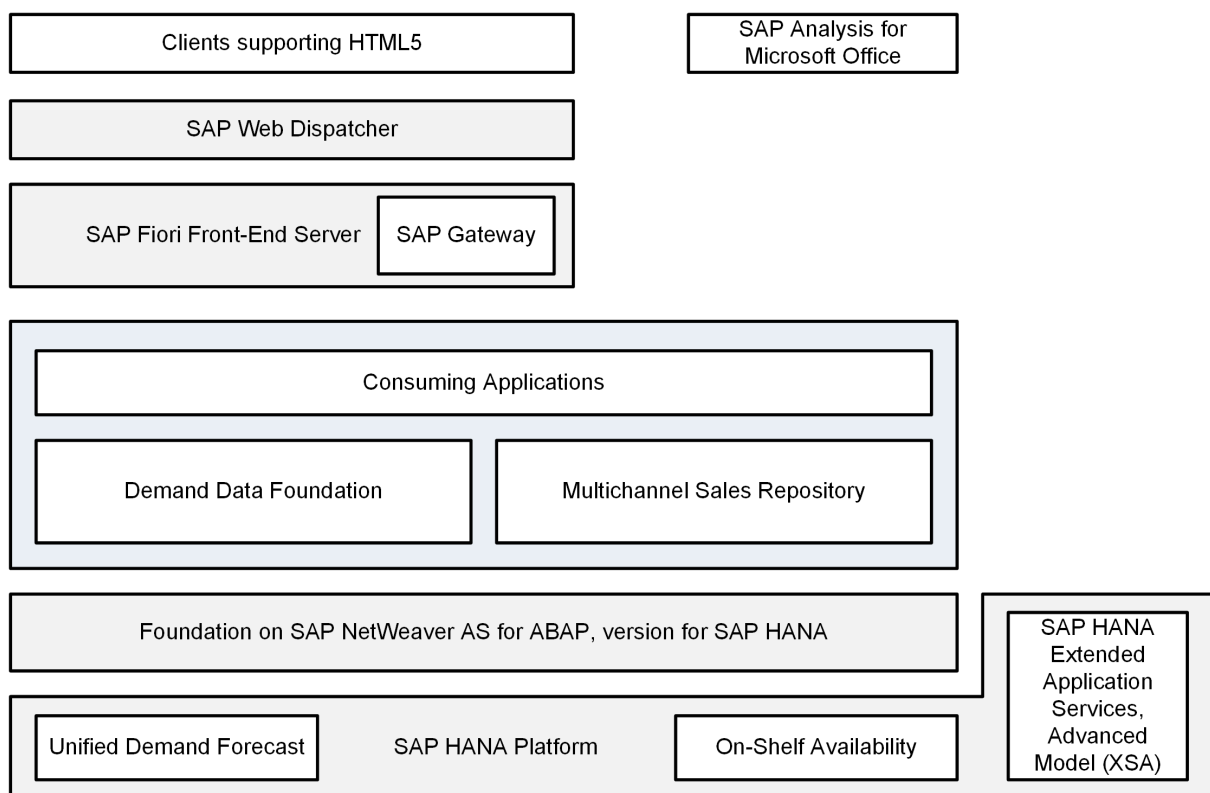
Overview of the source master data systems for deployment scenarios of SAP Customer Activity Repository applications bundle

2.1 System Landscape

System landscape diagram for SAP Customer Activity Repository applications bundle

System Landscape

The applications included in SAP Customer Activity Repository applications bundle require a layered system landscape, as illustrated in the following diagram:



System Landscape Example

For more information about the components not specific to SAP Customer Activity Repository applications bundle, see https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION > <Version> > *Installation and Upgrade* > *SAP Fiori: Setup and Configuration* > *Setup of SAP Fiori System Landscape*.

System Landscape Prerequisites

For information on the versions required for this release, see [Upgrade the Prerequisites](#) [page 16].

2.2 Integration with Source Master Data Systems

Overview of the source master data systems for deployment scenarios of SAP Customer Activity Repository applications bundle

Overview

You can deploy your SAP Customer Activity Repository applications bundle solution in parallel with one of the following source master data systems:

Source Master Data System	Flavor	More Information
SAP ERP (including the SAP ERP Central Component, SAP ECC)	SAP Retail (add-on to SAP ERP)	https://help.sap.com/viewer/p/SAP_ERP ► <Version> ► Application Help ► SAP Library ► Industries in SAP ERP ► SAP Retail ►
	SAP Fashion Management (add-on to SAP Retail)	https://help.sap.com/viewer/p/SAP_ERP ► <Version> ► Application Help ► SAP Library ► Industries in SAP ERP ► Fashion Management ►
SAP S/4HANA Retail	SAP S/4HANA Retail for merchandise management	https://help.sap.com/viewer/product/SAP_S4HANA_OVERVIEW/latest/en-US ► <Version> ► Product Assistance ► <Language> ► Industries ► Retail ►

Note

Unless otherwise specified, the following terms are used in this guide:

- References to the *source master data system* are comprehensive; that is, they apply to SAP ERP (including SAP ECC) and SAP S/4HANA Retail.
- References to *SAP ERP* are comprehensive; that is, they apply to SAP Retail and SAP Fashion Management.

Prerequisites

For information on what versions of the source master data systems are required for this release, see [Upgrade the Prerequisites \[page 16\]](#).

More Information

If a **migration to SAP S/4HANA** is in scope for your business, see the following information for guidance:

- SAP Transformation Navigator at <https://go.support.sap.com/transformationnavigator/#/welcome>
- SAP Readiness Check at https://help.sap.com/viewer/p/SAP_READINESS_CHECK

For **cross-scenario planning information**, see the following whitelists:

- SAP Note [1661202](#) - *Support multiple applications one SAP HANA database / tenant DB*: Support and special considerations for multiple applications on a single SAP HANA database or, in the case of MDC, on a single tenant DB
- SAP Note [1826100](#) - *Multiple applications SAP Business Suite powered by SAP HANA*: Support and special considerations for multiple applications on a single SAP HANA database within SAP Business Suite powered by SAP HANA

3 Upgrade the Prerequisites

This section lists all the prerequisite platforms, applications, and components that must be installed and configured to prepare the system landscape for **an upgrade from a previous release**.

i Note

If you are performing a **new installation of this release**, you must not follow this *Common Upgrade Guide* and rather proceed with the *Common Installation Guide*, available under <https://help.sap.com/viewer/p/CARAB> ► <Version> ► *Installation and Upgrade* ►.

For your convenience, the prerequisites are presented to you in two categories:

- *Common Prerequisites*, which must be installed regardless of the business scenario you are planning to implement
- *Application-Specific Prerequisites*, which are only relevant for specific applications under specific conditions

→ Tip

The prerequisites should be installed and configured by an experienced SAP Basis administrator.

Common Prerequisites

1. Foundation on SAP NetWeaver AS for ABAP, version for SAP HANA

The minimum requirement for this release is `ABAP FND 1709 ON HANA SPS 02 (05/2018)` (*foundation 1709 on SAP NetWeaver AS for ABAP 7.52, version for SAP HANA*).

This minimum requirement applies regardless of the business scenario you are planning to implement.

i Note

You must upgrade the foundation **prior** to upgrading other back-end components.

For installation information, see SAP Note [2534199](#) (ABAP FND 1709 ON HANA: Release Information Note) as well as the *Master Guide* for your SAP NetWeaver version under https://help.sap.com/viewer/p/SAP_NETWEAVER_AS_ABAP_752 ► <Version> ► *Installation and Upgrade* ►.

2. SAP HANA Platform 2.0

- **SAP HANA database** component:

The minimum requirement for this release is **SAP HANA 2.0 SPS 02 revision 24.08**, regardless of the business scenario you are planning to implement.

If you wish to use SAP HANA Platform 2.0 SPS 03, we recommend that you install **SAP HANA 2.0 SPS 03 revision 36**.

i Note

If you wish to use a higher revision of either SPS, we recommend that you select one of the “maintenance revisions”. See SAP Note [2378962](#) and consult the information under *Last Released Revision or Maintenance Revision*.

i Note

Regardless of the revision that you select, additionally implement mandatory SAP Note [2525644](#) (Input Variables are set to an Empty String When not Mapped in Top-Level Calculation Scenario).

- **SAP HANA AFL component:**
The minimum requirement for this release is the **SAP HANA AFL revision that is compatible with the selected SAP HANA database revision**.

For guidance on selecting the best revision for your scenario, see [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#).

For installation information, see the following:

- [2380229](#): SAP HANA Platform 2.0 Central Note
- [2339267](#): Important version information for SAP HANA client and SAP HANA server
- *SAP HANA Server Installation and Update Guide* for your SAP HANA Platform version under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► *<Version>* ► *Installation and Upgrade* ►
- If you are planning to upgrade from SAP HANA Platform 1.0 to SAP HANA Platform 2.0, additionally see the following SAP Notes:
 - [2372809](#): Guideline for upgrading from SAP HANA Platform 1.0 to SAP HANA Platform 2.0
 - [2422421](#): Guideline for upgrading an SAP HANA system with SAP HANA extended application services, advanced model (XSA)

→ Tip

(Optional) To get the latest technical recommendations related to your SAP HANA landscape, you can activate the SAP EarlyWatch Alert (EWA) in your SAP HANA environment. For more information, see SAP Note [1958910](#).

3. SAP RTL AFL FOR SAP HANA

⚠ Caution

SAP RTL AFL FOR SAP HANA is a back-end software component of SAP Customer Activity Repository applications bundle. However, you must always upgrade it together with the SAP HANA Platform. You must do this **before** upgrading the SAP CARAB back-end product version. This guide leads you through the correct procedures.

The minimum requirement for this release is the **SAP RTL AFL FOR SAP HANA revision that is compatible with the selected SAP HANA database revision**, regardless of the business scenario you are planning to implement. When you download an AFL revision from the SAP Support Portal, the compatible SAP HANA database revision is always indicated for your convenience.

For installation information, see [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#).

i Note

SAP RTL AFL FOR SAP HANA contains back-end functionality for two modules of SAP Customer Activity Repository: Unified Demand Forecast (UDF) and On-Shelf Availability (OSA).

You must always **install** component, regardless of the scenario you are planning to implement.

You only need to **set up and configure** UDF and/or OSA if you wish to use the functionality in your scenario.

4. SAP Landscape Transformation Replication Server

The minimum requirement for this release is **SAP Landscape Transformation Replication Server 2.0 for SAP HANA**, regardless of the business scenario you are planning to implement.

For installation information, see <https://help.sap.com/viewer/p/>

[SAP_LANDSCAPE_TRANSFORMATION_REPLICATION_SERVER](#) ► [<Version>](#) ► [Installation and Upgrade](#) ► [Installation Guide \(Replicating Data to SAP HANA\)](#) ►. Additionally, see SAP Note [1605140](#) (SAP Landscape Transformation Replication Server (SLT)). This is the central note for enabling trigger-based data replication (download, installation, upgrade, corrections, implementation).

5. SAP Fiori

The minimum requirement for this release is **SAP FIORI FRONT-END SERVER 4.0 - SAP FRONTEND SERVER 7.52**, regardless of the business scenario you are planning to implement. The minimum SAPUI5 version is **1.52.4**.

For installation and implementation information, see the following:

- [Set up the SAP Fiori infrastructure and SAP Fiori apps](#)
- [Overview of SAP Fiori front-end server components and versions](#)
- [2484979](#) (SAP-Fiori-Frontend-Server 4.0 - General Information)
- [2524632](#) (General Information: FIORI UI Infrastructure Components for products on SAP Frontend Server 4.0 (S4H))

If you are planning an upgrade to SAP Fiori front-end server 5.0, see SAP Note [2618605](#) (SAP-Fiori-Frontend-Server 5.0 - General Information) for information on technical dependencies to other components.

For additional planning information and a version overview, see SAP Note [2217489](#) (Maintenance and Update Strategy for SAP Fiori Front-End Server).

6. Source master data system










- Either SAP ERP or SAP S/4HANA, on-premise edition must be installed.
- The minimum release depends on the application that you wish to use. For more information, see the application-specific prerequisites below.

Application-Specific Prerequisites

SAP Customer Activity Repository

Prerequisites for SAP Customer Activity Repository

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP ERP	<p>When implementing SAP Customer Activity Repository with all modules, the minimum requirements are:</p> <ul style="list-style-type: none"> • SAP ERP 6.0 Enhancement Package 7 SP16 or higher • SAP ERP 6.0 Enhancement Package 8 SP09 or higher <p>For module-specific minimum requirements, see SAP Note 2696488 .</p>	You must install a source master data system; either SAP ERP or SAP S/4HANA must be installed.	<p>https://help.sap.com/viewer/p/SAP_ERP</p> <p>► <Version> ► Installation and Upgrade ► Installation Guide ►</p>
SAP S/4HANA, on-premise edition	<p>When implementing SAP Customer Activity Repository with all modules, the minimum requirement is:</p> <ul style="list-style-type: none"> • SAP S/4HANA 1709 FPS2 or higher <p>For module-specific minimum requirements, see SAP Note 2696488 .</p>	You must install a source master data system; either SAP ERP or SAP S/4HANA must be installed.	<p>https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE ► <Version> ► Product Documentation ► Installation Guide ►</p>
SAP CRM	<p>The minimum requirement for this release is one of the following:</p> <ul style="list-style-type: none"> • SAP Enhancement Package 2 for SAP CRM 7.0 • SAP Enhancement Package 2 for SAP CRM 7.0, Version for SAP HANA or higher 	Optional, depending on whether or not you choose to implement customer determination with SAP CRM.	<p>https://help.sap.com/viewer/p/SAP_CUSTOMER_RELATIONSHIP_MANAGEMENT</p> <p>► <Version> ► Installation and Upgrade ► Installation Guide ►</p>

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP Smart Business	SAP Smart Business foundation component 1.0, most recent SPS	Optional, depending on whether or not you choose to implement the SAP Smart Business for Multichannel Sales Analytics dashboard within SAP Customer Activity Repository.	SAP Note 2018360 
SAP Marketing (formerly, SAP Hybris Marketing)	SAP Marketing 1.10 or higher	Optional, depending on whether or not you choose to implement customer determination with SAP Marketing.	https://help.sap.com/viewer/product/SAP_HYBRIS_MARKETING/1702%20YMKT/en-US  <Version>  Installation and Upgrade  Installation and Configuration Guide 
SAP Commerce (formerly, SAP Hybris Commerce)	SAP Commerce 1811 or higher (in particular, the Accelerator, the Data Hub, and SAP Asynchronous Order Management)	Optional, depending on whether or not you choose to implement Omnichannel Article Availability and Sourcing or Omnichannel Promotion Pricing within SAP Customer Activity Repository.	http://help.hybris.com  SAP Commerce  <Version>  Installing & Upgrading 
SAP Commerce, integration package for SAP for Retail (formerly, SAP Hybris Commerce, integration package for SAP for Retail)	SAP Commerce, integration package for SAP for Retail 1811 or higher	Optional, depending on whether or not you choose to implement Omnichannel Article Availability and Sourcing or Omnichannel Promotion Pricing within SAP Customer Activity Repository.	See the <i>Administration Guide</i> delivered with the software package or from https://help.sap.com/viewer/p/IPR .

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP Analytics Cloud	Content Innovation 12	<p>Optional, depending on whether or not you choose to implement Omnichannel Article Availability and Sourcing (OAA) within SAP Customer Activity Repository.</p> <p>You only need to run and connect this application if you want to use the set of OAA analyses that has been predefined in SAP Analytics Cloud and that is part of the standard delivery of SAP Analytics Cloud. If you are using a different analytics tool, or if you do not run analytics at all, you do not need this application.</p>	System Requirements and Technical Prerequisites
SAP IQ	SAP IQ 16.0, SP8 or higher	Optional, depending on whether or not you choose to use the Table Content Aging report to move data from SAP Customer Activity Repository to SAP IQ.	https://help.sap.com/viewer/p/SAP_IQ ▶ <Version> ▶ Installation and Upgrade ▶ <various SAP IQ Installation and Configuration Guides> ▶
SAP HANA Dynamic Tiering	SAP HANA Dynamic Tiering is delivered with the SAP HANA Platform. See the <i>Common Prerequisites</i> section above.	Optional, depending on whether or not you choose to use the Table Content Aging report to move data from SAP Customer Activity Repository to extended storage using SAP HANA Dynamic Tiering.	https://help.sap.com/viewer/p/SAP_HANA_DYNAMIC_TIERING ▶ <Version> ▶ Installation and Upgrade ▶ SAP HANA Dynamic Tiering: Installation and Update Guide ▶

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP HANA XS Advanced	<p>SAP HANA XSA, version 1.0.88 or higher</p> <p>We recommend that you use the highest version available.</p>	Optional, depending on whether or not you choose to use Omnichannel Promotion Pricing within SAP Customer Activity Repository.	<p>https://help.sap.com/viewer/p/SAP_HANA_PLAT-FORM ► <Version> ►</p> <p>Installation and Upgrade ►</p> <p>SAP HANA Server Installation and Upgrade ►</p> <p>Installing an SAP HANA System ►</p> <p>Installing XS Advanced Runtime ►</p>

SAP Allocation Management

Prerequisites for SAP Allocation Management

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP ERP	SAP ERP 6.0 Enhancement Package 7.	You must install a source master data system; either SAP ERP or SAP S/4HANA must be installed.	<p>https://help.sap.com/viewer/p/SAP_ERP ► <Version> ►</p> <p>Installation and Upgrade ►</p> <p>Installation Guide ►</p>
SAP S/4HANA, on-premise edition	SAP S/4HANA, on-premise edition 1709	You must install a source master data system; either SAP ERP or SAP S/4HANA must be installed.	<p>https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE ► <Version> ►</p> <p>Product Documentation ►</p> <p>Installation Guide ►</p>

SAP Assortment Planning

Prerequisites for SAP Assortment Planning

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP ERP	SAP ERP 6.0 Enhancement Package 7	You must install a source master data system; either SAP ERP or SAP S/4HANA must be installed.	<p>https://help.sap.com/viewer/p/SAP_ERP ► <Version> ►</p> <p>Installation and Upgrade ►</p> <p>Installation Guide ►</p>

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP S/4HANA, on-premise edition	SAP S/4HANA, on-premise edition 1610	You must install a source master data system; either SAP ERP or SAP S/4HANA must be installed.	https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE >> <Version> > Product Documentation > Installation Guide >
SAP Analysis	SAP Analysis for Microsoft Office 2.6 SP03	Mandatory	https://help.sap.com/viewer/p/SAP_BUSINESS-OBJECTS_ANALYSIS_OF-FICE >> <Version> > Installation, Configuration, Security, and Administration > Administrator Guide >

SAP Promotion Management

SAP Promotion Management requires only the common prerequisites.

SAP Merchandise Planning

Prerequisites for SAP Merchandise Planning

Product	Minimum Requirement	Mandatory/Optional	Installation Information
SAP ERP	SAP ERP 6.0 Enhancement Package 7 SP16 or higher SAP ERP 6.0 Enhancement Package 8 SP09 or higher	Mandatory	https://help.sap.com/viewer/p/SAP_ERP >> <Version> > Installation and Upgrade > Installation Guide >
SAP S/4HANA, on-premise edition	SAP S/4HANA 1709 FPS2 or higher	You must install a source master data system; either SAP ERP or SAP S/4HANA must be installed.	https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE >> <Version> > Product Documentation > Installation Guide >
SAP Analysis	SAP Analysis for Microsoft Office 2.6 SP03	Mandatory	https://help.sap.com/viewer/p/SAP_BUSINESS-OBJECTS_ANALYSIS_OF-FICE >> <Version> > Installation, Configuration, Security, and Administration > Administrator Guide >

4 Prepare the Upgrade

Before you start with the actual upgrade of SAP Customer Activity Repository applications bundle 4.0 FPS01, you must first perform several preparatory tasks.

1. [Implement SAP Notes for the Upgrade \[page 24\]](#)

This section lists SAP Notes that you must read and — when appropriate — implement **at different points in the upgrade process**. For additional SAP Notes created **after the publication of this guide**, always consult the release information notes [2708055](#) (for the back-end) and [2708040](#) (for the front-end).

2. [Verify Correct Schema Mapping \[page 36\]](#)

In SAP HANA studio, verify that all authoring schemas of SAP Customer Activity Repository applications bundle are mapped to the correct physical schema of your customer back-end system. If necessary, create any mappings that are missing. This procedure is mandatory for all the applications.

3. [Verify SAP HANA Users and Privileges \[page 38\]](#)

SAP Customer Activity Repository applications bundle requires a layered system landscape (SAP HANA database, ABAP back-end server, ABAP front-end server with SAP Gateway and SAP Fiori). Each layer requires specific users and privileges. In this procedure, you set up the users and privileges for the SAP HANA database (level 1).

4. [Configure AFL Usage \[page 41\]](#)

Perform configuration tasks to enable the usage of application function libraries (such as the PAL and the OFL) for the applications SAP Assortment Planning and SAP Allocation Management.

4.1 Implement SAP Notes for the Upgrade

This section lists SAP Notes that you must read and — when appropriate — implement **at different points in the upgrade process**. For additional SAP Notes created **after the publication of this guide**, always consult the release information notes [2708055](#) (for the back-end) and [2708040](#) (for the front-end).

i Note

Make sure that you have the up-to-date version of each SAP Note, which you can find on the SAP Support Portal at <http://support.sap.com/notes>.

i Note





The *Implement* column indicates when to apply the SAP Note.






⚠ Caution





Always consult the table for SAP Customer Activity Repository, regardless of your scenario. Notes listed here are often common corrections, applicable to all consuming applications.









SAP Notes for SAP Customer Activity Repository


SAP Notes for SAP Customer Activity Repository

Implement	Area	SAP Note	Description
Prior to the upgrade	Back-end	2548843 	Mandatory correction for all the applications. <i>DD: data element changes from DEC to CURR, error for dependent views</i>
During the upgrade	Back-end	2298340 	Troubleshooting information for error messages during the “move nametabs” phase. <i>SAP HANA DB: CDS views with external views as base objects cannot be created in the DB</i>
During the upgrade	Back-end	2340418 	Troubleshooting information for error messages during the RUTDDLSCREATE phase. <i>SAP HANA DB: RUTDDL-SCREATE returns errors for CDS views with external views as base object</i>
During the upgrade	Back-end	2377525 	Troubleshooting information for error messages during the CREATE VIEW phase. <i>External view in view hierarchy</i>

Implement	Area	SAP Note	Description
During the upgrade	Back-end	2330184  <i>Appearance of Non-Existence/Activation Errors of Views/DDL Sources within installation of CARAB 1.0 FP03 and CARAB 2.0</i>	Troubleshooting information for error messages during various RSDB02CK-related phases (SUM only). For example, <i>2EETG002 View "/AMR/C_P_A_L_C" does not exist in the database or 2EETG002 View "/AMR/V_APITSLOC" does not exist in the database.</i>
After the upgrade	Front-end	2183947  <i>Smart Business for SoH (Suite on Hana) delivery</i>	Information on how to install add-on object <code>UISAFND1 100</code> when installing the SAP Smart Business Modeler Apps Framework with User Interface Add-On 2.0 for SAP NetWeaver.
After the upgrade	Back-end	1778607  <i>SAP HANA Live for SAP Business Suite</i>	Optional (only relevant if you choose to implement SAP HANA Live for SAP Business Suite). Release information and implementation considerations.
After the upgrade	Back-end	2623953  <i>SADL GW: Exposure for Annotations on Entity Container with namespace</i>	Mandatory if you are using omnichannel article availability and sourcing (OAA) and using the functionality in sales channel mode. Not required for functions other than OAA. Not required if you are using OAA in OAA profile mode.
After the upgrade	Back-end	2625428  <i>SADL GW: Exposure for Annotations on Entity Container with namespace</i>	Mandatory if you are using omnichannel article availability and sourcing (OAA) and using the functionality in sales channel mode. Not required for functions other than OAA. Not required if you are using OAA in OAA profile mode.

Implement	Area	SAP Note	Description
After the upgrade	Front-end	2547022  <i>Service cannot be consumed in SDK IOS due to invalid character '.' in EntityContainer namespace</i>	<p>Only required if your front-end server is version 7.50 or lower:</p> <p>Mandatory if you are using omnichannel article availability and sourcing (OAA) and using the functionality in sales channel mode. Not required for functions other than OAA. Not required if you are using OAA in OAA profile mode.</p>
After the upgrade	Front-end	2762819  <i>Adding new SAP Fiori catalog entry and group for new DDF role (SAP Customer Activity Repository applications bundle 4.0 FPS01)</i>	<p>Mandatory correction for any scenario using the Manage Product Attributes app. The correction is required for the new SAP_ISR_BR_DDF_ADMIN role for the app.</p> <div> <p>i Note</p> <p>The app is used by several scenarios, such as SAP Customer Activity Repository (similar products search), SAP Assortment Planning, or SAP Allocation Management.</p> </div>
After the upgrade	Front-end	2763472  <i>New Role "SAP_ISR_BR_DDF_ADMIN" for SAP Fiori apps (SAP Customer Activity Repository applications bundle 4.0 FPS01)</i>	<p>Mandatory correction for any scenario using the Manage Product Attributes app. The correction is required for the new SAP_ISR_BR_DDF_ADMIN role for the app.</p> <div> <p>i Note</p> <p>The app is used by several scenarios, such as SAP Customer Activity Repository (similar products search), SAP Assortment Planning, or SAP Allocation Management.</p> </div>
After the upgrade	Front-end	2760697  <i>Corrections for the Analyze Forecast and Adjust Forecast apps in SAP Customer Activity Repository 4.0 FPS01</i>	<p>Mandatory corrections for Analyze Forecast and Adjust Forecast.</p>

Implement	Area	SAP Note	Description
After the upgrade	Back-end and front-end	2763337  <i>Demand Planning CARAB 4.0 FPS01 - Collective Note for Corrections before RTC</i>	<p>Collective note for mandatory corrections for demand planning functionality. You need to apply these corrections for working with the Manage Demand Influencing Factors and the Adjust Forecast apps. The collective note references more notes:</p> <ul style="list-style-type: none"> • Back-end: 2766184  • Additional back-end improvements: 2780905  • Manage Demand Influencing Factors app: 2766567  • Adjust Forecast app: 2766169 
After the upgrade	Back-end	2770192  <i>Corrections for the Similar Products Search in SAP Customer Activity Repository applications bundle 4.0 FPS01</i>	<p>Mandatory corrections for the similar products search in SAP Customer Activity Repository. The note enables the full configuration of the search via the Manage Product Attributes app.</p> <div> <p>i Note</p> <p>Implement this note also for SAP Assortment Planning if you are using the search for this scenario.</p> </div>
After the upgrade	Back-end	2771130  <i>Back-end corrections for the demand planning apps (Analyze Forecast, Adjust Forecast, Manage Demand Influencing Factors) in SAP Customer Activity Repository 4.0 FPS01</i>	<p>Mandatory corrections for the SAP Fiori apps Analyze Forecast, Adjust Forecast, and Manage Demand Influencing Factors.</p>
After the upgrade	Back-end	2576497  <i>SQL Error Code 274: inserted value too large for column</i>	<p>Note for errors produced when material number is longer than 18 characters.</p>



Implement	Area	SAP Note	Description
After the upgrade	Back-end	2777415  <i>SAP Allocation Management: Activating /AM R/* views ends in Error</i>	Mandatory correction for all scenarios of SAP Customer Activity Repository applications bundle. Implement this note regardless of the application that you wish to set up.

SAP Notes for SAP Merchandise Planning

i Note

Always consult the table for SAP Customer Activity Repository, regardless of your scenario. Notes listed there are often common corrections, applicable to all consuming applications.

SAP Notes for SAP Merchandise Planning


Implement	Area	SAP Note	Description
After the upgrade	Back-end	1919631  <i>Activating the BPC imbedded is necessary</i>	Embedded BW-IP features explicitly needs the NW BPC10.1 license along with the PAK.
After the upgrade	Back-end	2600370  <i>The input help for time characteristics used as navigation attributes does not return any data</i>	The time-independent navigation attribute table of the characteristic (X table) is fully or partially empty.


SAP Notes for SAP Assortment Planning





i Note

Always consult the table for SAP Customer Activity Repository, regardless of your scenario. Notes listed there are often common corrections, applicable to all consuming applications.

SAP Notes for SAP Assortment Planning

Implement	Area	SAP Note	Description
Prior to the upgrade	SAP Retail system	2196351  <i>Pre-requisite for SAP Note #2196323</i>	Corrections to SAP Retail data elements.
Prior to the upgrade	SAP Retail system	2196323  <i>DRFOUT: Only valid current node assignments and article assignments are transferred during Article Hierarchy Replication</i>	Article Hierarchy Transfer replication will transfer all node and article assignments irrespective of the validity.
Prior to the upgrade	SAP Retail system	2209621  <i>Assortment Listing API: List by DC fix</i>	Functionality on the SAP Retail side to enable PIR integration with SAP Assortment Planning.
Prior to the upgrade	SAP Retail system	2286994  <i>New Listing API for Retail Assortment Planning</i>	Supports: <ul style="list-style-type: none"> • Different listing periods for different products within an assortment • Changes in the listing after a product has been listed • In-season listing changes • Multiple validity time periods for the same location
Prior to the upgrade	Back-end	1656983  <i>Result Set Size Limit Exceeded Message</i>	Information on changing the default <code>ResultSetSizeLimit</code> setting.

Implement	Area	SAP Note	Description
Prior to the upgrade	Back-end	2564718  <i>Authorization replication terminates with the SQL error message Predicates are required in a where clause: unknown user_name</i>	Corrections to the installation of InfoProviders (SAP BW).
After the upgrade	Back-end	2706022  <i>When Current Member is activated on OFISCYEAR, the calculation was not possible</i>	This note is relevant if you use the Retail SAP BW Structure. This note contains instructions for solving a BW issue in the Plan Products by Week worksheet of the Plan Assortment workbook.
After the upgrade	Back-end	2706848  <i>Assortment Planning - Plan Options: Add Reference Number of Options by Module</i>	This note is relevant if you use the Retail SAP BW Structure. This note contains instructions to update the display of the reference option count in the Plan Options by Module query to keep this query compatible with the standard delivery of the virtual Info-Cube Plan Options: Historical Sales (/RAP/VC20).
After the upgrade	Back-end	2773890  <i>Assortment List 4.0 - Add access control objects for OData entities and bug fixes</i>	This optional note for the My Assortment Lists app includes the following: <ul style="list-style-type: none"> • Instructions for adding additional access control objects for OData entities • Bug fix regarding sorting issues for business week and fiscal month • Bug fix for module assignment that is not kept when replacing a product in the similar products table


Implement	Area	SAP Note	Description
After the upgrade	Front-end	2772899  <i>Assortment List 4.0 - Stable ids for UI elements</i>	This mandatory note for the My Assortment Lists app includes the following: <ul style="list-style-type: none"> • Stable ids to be able to assign hotspots for Web Assistant • Bug fixes for the Manage Products screen
After the upgrade	Front-end	2767553  <i>APR 4.0 FP01 - Manage Option Plans UI OPTION PLANNING - UI Fixes</i>	This mandatory note for the Manage Option Plans app includes several bug fixes.
After the upgrade	Back-end	2784220  <i>Assortment List 4.0 - Column with concatenated values too large</i>	This mandatory note for the My Assortment Lists app includes a bug fix.
After the upgrade	Front-end	2776566  <i>Assortment List 4.0 - Enhance Update products and Multi-Copy/Merge extensibility and bug fixes</i>	This mandatory note for the My Assortment Lists app includes enhancements and bug fixes.

SAP Notes for SAP Promotion Management

i Note

Always consult the table for SAP Customer Activity Repository, regardless of your scenario. Notes listed there are often common corrections, applicable to all consuming applications.

SAP Notes for SAP Promotion Management




Implement	Area	SAP Note	Description
After the upgrade	Front-End	2606408  <i>Promotional Offers CARAB 2.0 SPS05 (FP03)</i>	Mandatory. Fiori - Latest version of Manage Promotional Offers


SAP Notes for SAP Allocation Management





i Note

Always consult the SAP Notes for SAP Customer Activity Repository, regardless of your scenario. Notes listed there are common corrections, applicable to all consuming applications.

SAP Notes for SAP Allocation Management

Implement	Area	SAP Note	Description
After the upgrade	Back-end and front-end	2778617  <i>SAP Allocation Management 4.0 - Collection of Corrections Before RTC for FP01</i>	This note comprises all corrections for SAP Allocation Management for all architecture layers (SAP Fiori, ABAP (Gateway and back-end), and SAP HANA DB) up to the RTC date of 4.0 FPS01.
After the upgrade	Follow-On System	2618509  <i>Blacklisted RFC for Crea- tion of Alloca- tion Table in S4H System</i>	Implement the correction to facilitate the creation of allocation tables from SAP Allocation Management in the SAP S/4HANA follow-on system.
After the upgrade	Back-end	2631613  <i>SAP Allocation Management - Customizing - Define Busi- ness Scenarios</i>	Follow the instructions to create a valid business scenario ID.

Implement	Area	SAP Note	Description
After the upgrade	Back-end	2632881 	This note contains corrections regarding the SAP HANA database. <i>SHDB: Low and High Values are clipped during conversion of Selection Tables into WHERE clauses</i>
After the upgrade	Back-end	2502917 	This note is only relevant if the back-end component SAP_GWFND 752 is below SP 2. <i>Unable to register the service /AMR/OD_WORKLOAD_SRV with namespace</i>
After the upgrade	Back-end	2474287 	 <i>Handling of units of measure inside SAP Allocation Management</i>
After the upgrade	SAP S/4HANA Retail for merchandise management	2522603 	 <i>Wrapper RFC for ATP via Controller</i>
After the upgrade	Back-end	2641286 	 <i>Internal server error LCX_MISSING_PARAMETER in CL_SADL_ABQ</i>
After the upgrade	Back-end	2636746 	 <i>OData Navigation not working</i>

Implement	Area	SAP Note	Description
After the upgrade	Back-end	2441184 	Static ABAP generation error of classes /AMR/CL... when installing CARAB 1.0 FPO3, CARAB 2.0, and CARAB 4.0
After the upgrade	Back-end	2777415 	Mandatory correction SAP Allocation Management : Activating /AMR/* views ends in Error
After the upgrade	Follow-On System	2416853 	Enhanced functionality for the transfer of allocation data to an ECC system. RFC function module to create allocation table for SAP Allocation Management
After the upgrade	Follow-On System	2524857 	Creation of an allocation table from SAP Allocation Management in SAP S/4HANA system for the transfer of allocation plans. RFC function module to create allocation table for SAP Allocation Management in S4H system

Parent topic: [Prepare the Upgrade \[page 24\]](#)

Next: [Verify Correct Schema Mapping \[page 36\]](#)

4.2 Verify Correct Schema Mapping

In SAP HANA studio, verify that all authoring schemas of SAP Customer Activity Repository applications bundle are mapped to the correct physical schema of your customer back-end system. If necessary, create any mappings that are missing. This procedure is mandatory for all the applications.

Context

What are Authoring Schemas and Physical Schemas

The SAP HANA content of SAP Customer Activity Repository applications bundle is delivered with several authoring schemas (for different scenarios and different source master data systems).

You must map multiple *authoring schemas* to the same *physical schema*:

- The *authoring schema* is the logical database schema with which the SAP HANA objects were originally created in the SAP source system. The authoring schema is listed in each object's properties. Different objects can have different authoring schemas.
- The target system is your customer-specific back-end system. Its database schema is the *physical schema*. The tables of the source master data system are replicated to this back-end system and physical schema. This is why all authoring schemas must be mapped to this one physical schema of your customer system (n:1 relationship).

What is Your SAP<SID> Name (Schema Name, User Name)

In this guide your physical schema is referred to as SAP<SID>. This is your customer-defined database system ID.

There are two ways how you can find the SAP<SID> name for your system landscape:

- Log on to your ABAP back-end system using SAP Logon. Choose [System Status](#). In the lower right-hand section titled [Database data](#), see the name for [Schema](#).
- In SAP HANA studio, the schema name is listed as an object under [Catalog](#).

Substitute this schema name whenever the SAP<SID> variable is used in this guide.

Why Schema Mapping

- Schema mapping allows transporting SAP HANA objects from a source system to a target system. For example, from the SAP delivery system to your test system, or from your test system to your production system.
- Schema mapping is a prerequisite for the successful activation of the SAP HANA content.
- Schema mapping is also a prerequisite for the SLT replication of the source master data system tables. Example: Your source master data system is SAP S/4HANA. During table replication with the SAP Landscape Transformation Replication Server, you replicate the SAP S/4HANA tables from the SAP_S4H authoring schema to the physical schema in your SAP Customer Activity Repository applications bundle system.

Authoring Schemas

You have two sets of authoring schemas:

Authoring Schemas in SAP Customer Activity Repository applications bundle

SAP_CAR	SAP HANA objects for SAP Customer Activity Repository
SAP_DDF	SAP HANA objects for Demand Data Foundation and Unified Demand Forecast
SAPOSA	SAP HANA objects for On-Shelf Availability
SAP_RAP	SAP HANA objects for consuming applications
SAP_RTLRAP_AMR	SAP HANA objects for SAP Allocation Management

Authoring Schemas for Source Master Data Systems

SAP_CRM	SAP Customer Relationship Management
SAP_CUAN	SAP Marketing
SAP_ECC	SAP ERP (SAP Retail)
SAP_S4H	SAP S/4HANA Retail

Procedure

1. In SAP HANA studio, log on to your back-end system.
2. Choose **Window** > **Perspective** > **Open Perspective** > **SAP HANA Modeler**.
3. Choose **Help** > **Quick View** > **Schema Mapping**.
4. Select the system and choose **Next**.
5. Do the following for the two sets of schemas:
 - Map **all authoring schemas of the first table above** to the same physical schema (SAP<SID>) in your customer system. If necessary, add new mappings.
 - Map **each authoring schema of the second table above** to the physical schema for the respective **source master data system** in your customer system. If necessary, add new mappings.
6. Choose **Finish**.

Parent topic: [Prepare the Upgrade \[page 24\]](#)

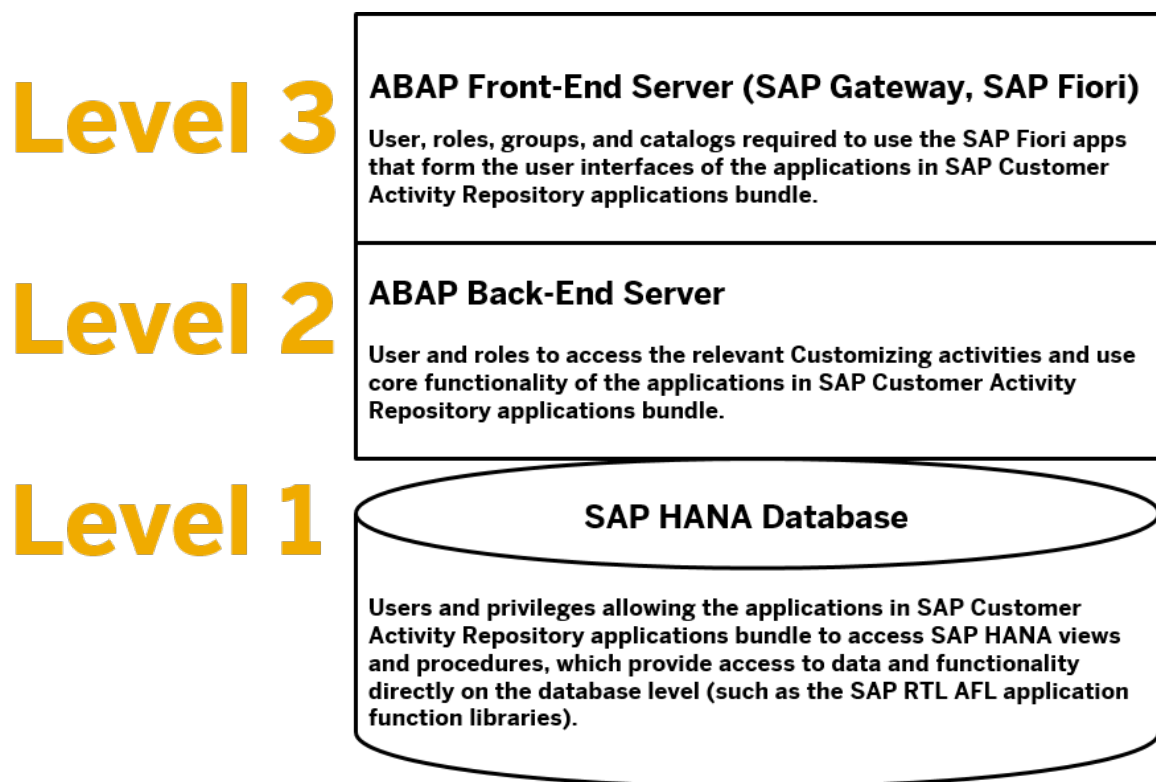
Previous: [Implement SAP Notes for the Upgrade \[page 24\]](#)

Next: [Verify SAP HANA Users and Privileges \[page 38\]](#)

4.3 Verify SAP HANA Users and Privileges

SAP Customer Activity Repository applications bundle requires a layered system landscape (SAP HANA database, ABAP back-end server, ABAP front-end server with SAP Gateway and SAP Fiori). Each layer requires specific users and privileges. In this procedure, you set up the users and privileges for the SAP HANA database (level 1).

Overview



Authorization Levels in SAP Customer Activity Repository applications bundle

⚠ Caution

Level 1: You must set up the users and privileges for the SAP HANA database **before** upgrading SAP Customer Activity Repository applications bundle on the back-end server and the front-end server.

i Note

Level 2 and level 3: You can only set up these authorizations **after** the upgrade, and you will get to them later in this guide:

- Level 2 back-end authorizations are described in the *Common Installation Guide* under *Verify Back-End Users and Roles*.

- Level 3 front-end authorizations are described in the *Common Installation Guide* under *Assign Roles, Catalogs, and Groups in SAP Fiori Launchpad* (SAP Assortment Planning), *Assign Roles, Catalogs, and Groups in SAP Fiori Launchpad* (SAP Allocation Management), and [Set Up Standalone SAP Fiori Apps for SAP Customer Activity Repository \[page 100\]](#) (optional, app-specific).

Procedure

1. Ensure that the SAP HANA database users listed below exist and that they have the required roles/privileges.

⚠ Caution

Users marked * must be identical on all three levels: that is, on the SAP HANA database level, on the back-end server, and on the front-end server.

Users	Privileges / Roles
SAP<SID>	<ul style="list-style-type: none"> ◦ Privilege REPO.IMPORT ◦ Privilege ROLE ADMIN ◦ Privilege STRUCTUREDPRIVILEGE ADMIN ◦ Privilege EXECUTE on procedure TRUNCATE_PROCEDURE_OBJECTS ◦ Privilege EXECUTE on procedure GET_PROCEDURE_OBJECTS ◦ Role CONTENT_ADMIN ◦ Role AFLPM_CREATOR_ERASER_EXECUTE
This is the generic database user specified for the connection from the SAP NetWeaver back-end server to the SAP HANA database.	<p>This role must be assigned to execute functions of the PAL library (required by SAP Assortment Planning, for example). For more information, see Enable Usage of PAL Functions [page 41] and SAP Note 2046767.</p> <ul style="list-style-type: none"> ◦ Role AFL__SYS_AFL_OFL_AREA_EXECUTE ◦ Grant the following additional privileges, with option <i>Grantable to others</i>, on these schemas: On schema _SYS_BIC: <ul style="list-style-type: none"> ◦ Privilege CREATE ANY ◦ Privilege ALTER ◦ On schema <SAP Retail or SAP S/4HANA schema name>: <ul style="list-style-type: none"> ◦ Privilege SELECT

Users	Privileges / Roles
<code>_SYS_REPO</code>	<ul style="list-style-type: none"> Privilege <code>SELECT</code>, with option <i>Grantable to others</i>, on the following physical database schemas: <ul style="list-style-type: none"> Physical database schema of your back-end system, this is referred to as <code>SAP<SID></code> in this guide (Physical database schema that contains the SAP Retail or SAP S/4HANA tables Physical database schema that contains the SAP CRM tables Physical database schema that contains the SAP Marketing tables <p>You can use the following example SQL statement to grant the privilege:</p> <pre>GRANT SELECT ON SCHEMA <Your schema name> TO _SYS_REPO WITH GRANT OPTION;</pre> Role <code>UDF_DEPLOY_SYS_REPO</code>. For information about the privileges automatically assigned via this role, see the <i>Common Installation Guide</i>, section <i>Set Up Authorizations for Unified Demand Forecast (UDF)</i>. For SAP Allocation Management, you need the following additional privileges: <ul style="list-style-type: none"> Privilege <code>CREATE ANY</code> Privilege <code>CREATE SCHEMA</code>
<code><Your User Name> *</code>	<ul style="list-style-type: none"> Privilege <code>SELECT</code> on schema <code>_SYS_BI</code> Privilege <code>SELECT</code> on schema <code>SAP<SID></code> Privilege <code>EXECUTE</code> on procedure <code>REPOSITORY_REST</code> The <i>Session Client</i> of this database user must be set to the appropriate back-end system client. This step is necessary to use the SAP Assortment Planning planning framework, where SAP Analysis for Microsoft Office workbooks obtain data from SAP HANA views. For more information, see the <i>Assign Default Client</i> section in the <i>SAP HANA Modeling Guide</i>. <ol style="list-style-type: none"> Log on to SAP HANA studio. Open the <i>Modeler</i> perspective and use the <i>Navigator</i> to access your back-end system. Under <i>Security</i>, select a user. Set the <i>Session Client</i> to the client number created in the <i>Set Up SAP Client</i> procedure in the <i>Common Installation Guide</i>.

Parent topic: [Prepare the Upgrade \[page 24\]](#)

Previous: [Verify Correct Schema Mapping \[page 36\]](#)

Next: [Configure AFL Usage \[page 41\]](#)

4.4 Configure AFL Usage

Perform configuration tasks to enable the usage of application function libraries (such as the PAL and the OFL) for the applications SAP Assortment Planning and SAP Allocation Management.

1. [Enable Usage of PAL Functions \(SAP Assortment Planning\) \[page 41\]](#)
To enable the usage of the PAL algorithm for SAP Assortment Planning, perform the required setup steps.
2. [Check the OFL Installation \[page 42\]](#)
Confirm that the OFL algorithm was installed successfully as prerequisite for SAP Assortment Planning and SAP Allocation Management.

Parent topic: [Prepare the Upgrade \[page 24\]](#)

Previous: [Verify SAP HANA Users and Privileges \[page 38\]](#)

4.4.1 Enable Usage of PAL Functions (SAP Assortment Planning)

To enable the usage of the PAL algorithm for SAP Assortment Planning, perform the required setup steps.

Use

The installation of SAP HANA Platform includes the installation of the PAL algorithm, a prerequisite for SAP Assortment Planning.

To enable the usage of the PAL algorithm, as required by SAP Assortment Planning, perform the following procedure.

i Note

You do not need to create the `AFL_WRAPPER_GENERATOR` or `AFL_WRAPPER_ERASER` procedures, nor do you need to generate any special PAL procedures; this is done automatically.

Procedure

1. To confirm that the PAL functions were installed successfully, you can run `SELECT` statements in the three relevant public views as follows:
 - `SELECT * FROM SYS.AFL_AREAS WHERE AREA_NAME = 'AFLPAL';`
In the case of a successful installation, the statement should return 1 row.

- `SELECT * FROM SYS.AFL_PACKAGES WHERE AREA_NAME = 'AFLPAL';`

In the case of a successful installation, the statement should return 1 row.

- `SELECT * FROM SYS.AFL_FUNCTIONS WHERE AREA_NAME = 'AFLPAL';`

In the case of a successful installation, the statement should return many rows. Verify that the function KMEANS is part of the list.

<code>select * from SYS.AFL_FUNCTIONS WHERE AREA_NAME = 'AFLPAL'</code>							
	FUNCTION_OID	SCHEMA_NAME	AREA_NAME	PACKAGE_NAME	FUNCTION_NAME	CREATE_TIMESTAMP	INPUT_PARAMETER_COUNT
101	574,505,979	_SYS_AFL	AFLPAL	PAL	KMEANS	Apr 20, 2017 4:45:41.852 AM	2
102	574,505,980	_SYS_AFL	AFLPAL	PAL	KMEANS_OVERLOAD_2_4	Apr 20, 2017 4:45:41.86 AM	2
103	574,505,981	_SYS_AFL	AFLPAL	PAL	KMEANS_OVERLOAD_2_5	Apr 20, 2017 4:45:41.869 AM	2
104	574,505,982	_SYS_AFL	AFLPAL	PAL	KMEDOIDS	Apr 20, 2017 4:45:41.877 AM	2
105	574,505,983	_SYS_AFL	AFLPAL	PAL	KMEDIANS	Apr 20, 2017 4:45:41.885 AM	2
106	574,505,984	_SYS_AFL	AFLPAL	PAL	VALIDATEKMEANS	Apr 20, 2017 4:45:41.893 AM	3

More Information

- Section [Upgrade the Prerequisites \[page 16\]](#) ► [Common Prerequisites](#) ► [SAP HANA Platform](#) ►
- http://help.sap.com/hana_platform ► [<Version>](#) ► [Reference](#) ► [SAP HANA Predictive Analysis Library \(PAL\)](#) ►

Parent topic: [Configure AFL Usage \[page 41\]](#)

Next: [Check the OFL Installation \[page 42\]](#)

4.4.2 Check the OFL Installation

Confirm that the OFL algorithm was installed successfully as prerequisite for SAP Assortment Planning and SAP Allocation Management.

Use

The installation of SAP HANA Platform includes the installation of the OFL algorithm, a prerequisite for SAP Assortment Planning.

Procedure

1. To confirm that the OFL was installed successfully, you can run `SELECT` statements in the three relevant public views as follows:

- `SELECT * FROM SYS.AFL_AREAS WHERE AREA_NAME = 'OFL_AREA';`

In the case of a successful installation, the statement should return 1 row.

- **SELECT * FROM SYS.AFL_PACKAGES WHERE AREA_NAME = 'OFL_AREA';**
In the case of a successful installation, the statement should return 1 row.
- **SELECT * FROM SYS.AFL_FUNCTIONS WHERE AREA_NAME = 'OFL_AREA';**
In the case of a successful installation, the statement should return 4 rows. Verify that the function GENIOS_SOLVE is part of the list.

SQL Result

SELECT * FROM SYS.AFL_FUNCTIONS WHERE AREA_NAME = 'OFL_AREA'

	FUNCTION_OID	SCHEMA_NAME	AREA_NAME	PACKAGE_NAME	FUNCTION_NAME	CREATE_TIMESTAMP	INPUT_PARAMETER_COUNT	RETURN_VALUE_COUNT	FUNCTION_TYPE	TECHNICAL_CATEGORY
1	574,508,051	_SYS_AFL	OFL_AREA	OFL	GENIOS_SOLVE	Apr 20, 2017 4:46:11.926 AM	7	3	LFunc	var_none
2	574,508,052	_SYS_AFL	OFL_AREA	OFL	NETWORK_SIMPLEX_SOLVE	Apr 20, 2017 4:46:11.932 AM	2	1	LFunc	var_none
3	574,508,053	_SYS_AFL	OFL_AREA	OFL	COST_SCALING_SOLVE	Apr 20, 2017 4:46:11.937 AM	2	1	LFunc	var_none
4	574,508,054	_SYS_AFL	OFL_AREA	OFL	LPIV_SOLVE	Apr 20, 2017 4:46:11.942 AM	2	4	LFunc	var_none

Parent topic: [Configure AFL Usage \[page 41\]](#)

Previous: [Enable Usage of PAL Functions \(SAP Assortment Planning\) \[page 41\]](#)

5 Upgrade the Software

For a correct **upgrade**, you must first verify that the required prerequisites and pre-upgrade SAP Notes are implemented. Then you upgrade the back-end components and the front-end components. Lastly, you check for SAP Notes that must be implemented after the upgrade.

1. [Verify Prerequisites and SAP Notes \[page 45\]](#)
Before upgrading to the current release of SAP Customer Activity Repository applications bundle 4.0 FPS01, you must ensure that your system landscape is fully prepared. In this procedure, you verify that all the prerequisites for your scenario are installed and that all the preparatory SAP Notes have been implemented.
2. [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#)
Install compatible revisions of the SAP RTL AFL FOR SAP HANA component, the SAP HANA AFL component, and the SAP HANA database. You must do this **before** you upgrade the back-end product version of SAP Customer Activity Repository applications bundle.
3. [Upgrade SAP Customer Activity Repository applications bundle \(Back-End Product Version\) \[page 48\]](#)
Upgrade to the SAP CARAB 4.0 FPS01 back-end product version of SAP Customer Activity Repository applications bundle 4.0 FPS01.
4. [Upgrade Product-Specific SAP Fiori UI Component \(Front-End Product Version\) \[page 50\]](#)
Upgrade your front-end system to the SAP FIORI FOR SAP CARAB 4.0 FPS01 front-end product version. This product version contains the SAP Fiori apps for SAP Customer Activity Repository applications bundle. First create a stack XML file with Maintenance Planner. Then install this file with Software Update Manager (SUM).
5. [Check SAP Notes and RINs \[page 53\]](#)
There are notes that can only be implemented **after** you have upgraded the back-end product version and the front-end product version. You must therefore do this additional check and implement the required notes, before you do the next steps.
6. [Install Alternate Storage \(Optional\) \[page 54\]](#)
You only need to implement this procedure if you plan on using the [Table Content Aging](#) report delivered with SAP Customer Activity Repository. This report allows you to copy your transaction log (TLOG) data and its extensions from your SAP HANA database to an alternate storage technology (such as SAP IQ or Apache Hadoop), thereby reducing your total cost of hardware ownership.

5.1 Verify Prerequisites and SAP Notes

Before upgrading to the current release of SAP Customer Activity Repository applications bundle 4.0 FPS01, you must ensure that your system landscape is fully prepared. In this procedure, you verify that all the prerequisites for your scenario are installed and that all the preparatory SAP Notes have been implemented.

Procedure

1. Ensure that you have installed and configured the common prerequisites and the prerequisites specific to your application, as described under [Upgrade the Prerequisites \[page 16\]](#).
2. Ensure that you have implemented all SAP Notes listed in [Implement SAP Notes for the Upgrade \[page 24\]](#) that are required for your application and that must be implemented **before** the upgrade.

→ Tip

Always consult the table for SAP Customer Activity Repository in that section. Notes listed there are often common corrections, applicable to all the applications.

Parent topic: [Upgrade the Software \[page 44\]](#)

Next: [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#)

5.2 Download and Install the Application Function Library (SAP RTL AFL FOR SAP HANA)

Install compatible revisions of the SAP RTL AFL FOR SAP HANA component, the SAP HANA AFL component, and the SAP HANA database. You must do this **before** you upgrade the back-end product version of SAP Customer Activity Repository applications bundle.

Overview

There is one software component in SAP Customer Activity Repository applications bundle that you must always upgrade first: SAP RTL AFL FOR SAP HANA.

You must download **compatible revisions** of SAP RTL AFL FOR SAP HANA, SAP HANA AFL, and SAP HANA DATABASE, and install them together. For this, you need to be aware of the following dependencies.

Dependencies Between AFLs and the SAP HANA Database

Even though SAP RTL AFL FOR SAP HANA is part of SAP Customer Activity Repository applications bundle, it is released independently.

That is because AFL components (such as SAP RTL AFL FOR SAP HANA and SAP HANA AFL) follow the release cycle of the SAP HANA database. The releases are called “revisions”. Whenever a new revision of the SAP HANA database is released, a new revision of each AFL is released. As a result, there are always multiple revisions of each component available for download.

⚠ Caution

For each revision of an AFL component, there is **only one compatible revision** of the SAP HANA database. Whenever you upgrade the AFLs, you must also upgrade the database to the compatible revision. Whenever you upgrade the database, you must also upgrade the AFLs.

i Note

When you download an AFL from the SAP Support Portal, the compatible revision of the SAP HANA database is always indicated.

Download and Install SAP RTL AFL FOR SAP HANA

1. Determine which revision of the SAP HANA database and the AFL components you need.
To select the best revision for your scenario, see the following:
 - In section [Upgrade the Prerequisites \[page 16\]](#), see [Common Prerequisites > SAP HANA Platform](#). Here you can find the **minimum revisions** of the SAP HANA database and the AFL components. You need at least these revisions for the current release.
 - If you want to use a **higher revision** for your scenario, select one of the “Datacenter Service Point (DSP)” revisions. These are specially verified revisions, which you can find listed in SAP Note [2378962](#) for SAP HANA Platform 2.0.
For a helpful overview of the different types of SAP HANA revisions, see the *SAP HANA Revision Strategy* slide deck linked from this note.
 - SAP Note [1948334](#): This note lists the supported **database update paths** for SAP HANA Maintenance Revisions. Consult this note for valid revision combinations for your scenario.
 - If you need more information on the release and maintenance strategy of the SAP HANA Platform, see <http://support.sap.com> [Download Software > By Alphabetical Index \(A-Z\) > H > SAP HANA PLATFORM EDITION > <your edition> > INFO](#).Once you have selected a revision, this gives you the compatible revisions of the other components.
2. Download the compatible revisions from the SAP Support Portal at <http://support.sap.com> [Download Software](#):

→ Tip

Alternatively, you can log in to the SAP ONE Support Launchpad at <https://launchpad.support.sap.com/#/softwarecenter/> and follow the navigation from there.

- SAP RTL AFL FOR SAP HANA:
This component is included in the SAP CARAB back-end product version. You can find the available revisions under [By Alphabetical Index \(A-Z\) > C > CAR RETAIL APPLICATIONS BUNDLE > SAP CARAB 4.0 > Support Packages and Patches > DOWNLOADS > COMPRISED SOFTWARE COMPONENT VERSIONS > SAP RTL AFL FOR SAP HANA 200](#).
 - SAP HANA AFL and SAP HANA DATABASE:
These components are included in the SAP HANA Platform. You can find the available revisions under [By Alphabetical Index \(A-Z\) > H > SAP HANA PLATFORM EDITION > SAP HANA PLATFORM EDITION 2.0 > Support Packages and Patches > DOWNLOADS > SAP HANA AFL 2.0](#) and [SAP HANA DATABASE 2.0](#).
 - If applicable, other AFLs provided with the SAP HANA Platform that might be relevant for your scenario. For an overview, see the *Managing SAP HANA System Components* section of the *SAP HANA Server Installation and Update Guide* under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM [<Version> > Installation and Upgrade](#).
3. Upgrade your back-end system to the selected revisions of SAP RTL AFL FOR SAP HANA, SAP HANA AFL, and SAP HANA DATABASE.

Overview of Upgrade Scenarios

You wish to upgrade from a release of...	What you do is...
SAP Customer Activity Repository applications bundle 1.0	You replace the AFL revisions UDFAFL_INST 100 and POSAFL_INST 100 of the lower release with the SAP RTL AFL FOR SAP HANA revision that you have selected for the current release.
SAP Customer Activity Repository applications bundle 2.0	You replace the existing revision of SAP RTL AFL FOR SAP HANA with the revision that you have selected for the current release.
SAP Customer Activity Repository applications bundle 4.0	You replace the existing revision of SAP RTL AFL FOR SAP HANA with the revision that you have selected for the current release.

See SAP Note [2377894](#) and carefully follow the steps for the upgrade scenario.

→ Tip

If you encounter issues during the upgrade, see the [Troubleshooting \[page 152\]](#) section for possible solutions.

Parent topic: [Upgrade the Software \[page 44\]](#)

Previous: [Verify Prerequisites and SAP Notes \[page 45\]](#)

Next: [Upgrade SAP Customer Activity Repository applications bundle \(Back-End Product Version\) \[page 48\]](#)

5.3 Upgrade SAP Customer Activity Repository applications bundle (Back-End Product Version)

Upgrade to the SAP CARAB 4.0 FPS01 back-end product version of SAP Customer Activity Repository applications bundle 4.0 FPS01.

Prerequisites

- A valid start release (add-on product version) is already installed. It serves as the basis for the upgrade.
- You know how to use SAP Solution Manager to perform uploads into Maintenance Planner on the SAP Support Portal. If you need more information, see section *Uploading Landscape Data Into SAP Support Portal* under <https://support.sap.com> ► *Maintenance* ► *Maintenance Planner* ► *Maintenance Planner Product Information* ► *Maintenance Planner User Guide*.
- You have completed all of the procedures listed in the previous sections of this guide, in particular, in section *Prepare the Upgrade* [page 24].
- You have installed compatible revisions of the SAP HANA database, the SAP HANA AFL component, and the SAP RTL AFL FOR SAP HANA component. If you need information on the required minimum revision, see *Upgrade the Prerequisites* [page 16].

Overview

In the procedures below you do the following:

Use this tool...	To do this...
Maintenance Planner More information: https://help.sap.com/viewer/p/MAINTENANCE_PLANNER	Create a stack XML file based on the required product versions.
Software Update Manager (SUM) More information: https://support.sap.com/en/tools/software-logistics-tools/software-update-manager.html	Install or upgrade components using the stack XML file.

Note

It may be possible to install or upgrade components using the SAP Add-On Installation Tool as an alternative, but this alternative procedure is not described in this guide. For information on whether this is possible for your scenario and on how to proceed, see SAP Note [1803986](#).

Create the Stack XML File Using Maintenance Planner

Note

If you encounter issues in Maintenance Planner, see the following SAP Notes for possible solutions:

- [2596901](#): NetWeaver 7.51 and 7.52 targets are not available when selecting the option "Update SAP NetWeaver" in Maintenance Planner
- [2535751](#): Can not select the higher release for Netweaver in Maintenance Planner
- [2314463](#): Required file K-XXXXXXX.SAR is not visible for your user Sxxxxxxx

1. Navigate to the SAP Support Portal at <https://support.sap.com>.
2. Upload the current system state of your installed ABAP back-end server (with a valid add-on product version installed for the upgrade) into Maintenance Planner.
3. Choose [Access Maintenance Planner](#).
4. Choose [Plan](#).
5. Determine whether you need to update your SAP NetWeaver version for the current release of SAP Customer Activity Repository applications bundle. This can vary, depending on the release that you wish to upgrade **from**, on the SAP NetWeaver version currently installed in your system, and on the minimum SAP NetWeaver version required for the current release.
Depending on your decision, select either [Update SAP NetWeaver](#) or [Maintain SAP NetWeaver](#).
6. Select one of the following product versions and support package stacks:
 - ABAP FND 1709 ON HANA and SPS02 (05/2018) (or a higher support package stack)
 - ABAP FND 1809 ON HANA and Initial Shipment Stack (or a higher support package stack)
7. Select a valid instance (for example, SAP Foundation).
8. Choose [Confirm Selection](#).
9. Choose [Install or Maintain an Add-On](#).
10. If you are upgrading from a release of SAP Customer Activity Repository applications bundle 2.0: Maintenance Planner automatically detects that the installed add-on product needs to be replaced by SAP CARAB 4.0 - CAR Retail Applications Bundle and inserts this in the [Target Software Details](#) section.
11. Select the SAP CARAB 4.0 FPS01 back-end product version and the Q2/2019 instance.
12. Choose [Confirm Selection](#).
13. Choose [Next](#).
14. Select the operating system and database for your scenario.
15. Choose [Confirm Selection](#).
16. Review the details of your stack dependent and independent files, then choose [Next](#).
17. Choose [Download Stack XML](#).
You have created the stack XML file.

Install the Stack XML File Using Software Update Manager (SUM)

1. Download and install the SUM tool:
 1. Navigate to the SAP Support Portal at <https://support.sap.com/en/tools/software-logistics-tools/software-update-manager.html>.

2. Consult the information for SUM 2.0 SP xx and follow the instructions.
2. In SUM, install your add-on product using the stack XML file that you have created in the first procedure.

Result

You have successfully upgraded the back-end product version.

i Note

With this upgrade, the SAP HANA content for Unified Demand Forecast (UDF) has already been activated automatically. This saves you a manual activation step later on.

Continue with the next section.

Parent topic: [Upgrade the Software \[page 44\]](#)

Previous: [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#)

Next: [Upgrade Product-Specific SAP Fiori UI Component \(Front-End Product Version\) \[page 50\]](#)

5.4 Upgrade Product-Specific SAP Fiori UI Component (Front-End Product Version)

Upgrade your front-end system to the SAP FIORI FOR SAP CARAB 4.0 FPS01 front-end product version. This product version contains the SAP Fiori apps for SAP Customer Activity Repository applications bundle. First create a stack XML file with Maintenance Planner. Then install this file with Software Update Manager (SUM).

Overview

In the procedures below you do the following:

Use this tool...	To do this...
Maintenance Planner More information: https://help.sap.com/viewer/p/MAINTENANCE_PLANNER	Plan your system landscape and create a stack XML file based on the required product versions.

Use this tool...

To do this...

Software Update Manager (SUM)

Install or upgrade components using the stack XML file.

More information: <https://support.sap.com/en/tools/software-logistics-tools/software-update-manager.html>

Note

It may be possible to install or upgrade components using the SAP Add-On Installation Tool as an alternative, but this alternative procedure is not described in this guide. For information on whether this is possible for your implementation scenario and on how to proceed, see SAP Note [1803986](#).

Prerequisites

- A valid start release (add-on product version) must already be installed in your system landscape. It serves as the basis for the upgrade.
- You know how to use SAP Solution Manager to perform uploads into Maintenance Planner on the SAP Support Portal. If you need more information, see section *Uploading Landscape Data Into SAP Support Portal* under <https://support.sap.com> ► *Maintenance* ► *Maintenance Planner* ► *Maintenance Planner Product Information* ► *Maintenance Planner User Guide*.

Create the Stack XML Using Maintenance Planner

Note

If you encounter issues in Maintenance Planner, see the following SAP Notes for possible solutions:

- [2596901](#): *NetWeaver 7.51 and 7.52 targets are not available when selecting the option "Update SAP NetWeaver" in Maintenance Planner*
- [2535751](#): *Can not select the higher release for Netweaver in Maintenance Planner*
- [2314463](#): *Required file K-XXXxxxxxxxxx.SAR is not visible for your user Sxxxxxxx*

1. Navigate to the SAP Support Portal at <https://support.sap.com>.
2. Upload the current system state of your installed front-end server (with a valid add-on product version installed for the upgrade) into Maintenance Planner.
3. Choose *Access Maintenance Planner*.
4. Choose *Plan*.
5. Determine whether you need to update your SAP NetWeaver version for the current release of SAP Customer Activity Repository applications bundle. This can vary, depending on the release that you wish to upgrade **from**, on the SAP NetWeaver version currently installed in your system, and on the minimum SAP NetWeaver version required for the current release.
Depending on your decision, select either *Update SAP NetWeaver* or *Maintain SAP NetWeaver*.

6. Select a valid product version and a valid support package stack.
7. Select a valid instance.
8. Choose *Confirm Selection*.
9. Choose *Install or Maintain an Add-On*.
10. Select the SAP FIORI FOR SAP CARAB 4.0 FPS01 front-end product version.
11. Select a valid front-end server instance.
12. Choose *Confirm Selection*.
13. Choose *Next*.
14. Select the operating system and database for your scenario.
15. Choose *Confirm Selection*.
16. Review the details of your stack-dependent and stack-independent files, then choose *Next*.
17. Choose *Download Stack XML*.
You have created the stack XML file.

Install the Stack XML File Using Software Update Manager (SUM)

1. Download and install the SUM tool:
 1. Navigate to the SAP Support Portal at <https://support.sap.com/en/tools/software-logistics-tools/software-update-manager.html>.
 2. Consult the information for SUM 2.0 SP xx and follow the instructions.
2. In SUM, use the stack XML file that you have created in the first procedure to install your add-on product.

Result

You have successfully upgraded to the front-end product version for this release.

Continue with the next section.

Parent topic: [Upgrade the Software \[page 44\]](#)

Previous: [Upgrade SAP Customer Activity Repository applications bundle \(Back-End Product Version\) \[page 48\]](#)

Next task: [Check SAP Notes and RINs \[page 53\]](#)

5.5 Check SAP Notes and RINs

There are notes that can only be implemented **after** you have upgraded the back-end product version and the front-end product version. You must therefore do this additional check and implement the required notes, before you do the next steps.

Prerequisites

Make sure that you have the up-to-date version of each note, which you can find on the SAP Support Portal at <http://support.sap.com/notes>.

The release information notes (RINs) in particular are continuously updated, as corrections for the current release of SAP Customer Activity Repository applications bundle become available.

Procedure

1. Consult the [Implement SAP Notes for the Upgrade \[page 24\]](#) section and verify that all *After the upgrade* notes that are required for your scenario have been implemented.

i Note

Always consult the table for SAP Customer Activity Repository. Notes listed there are often common corrections, applicable to all consuming applications.

2. Consult the back-end RIN [2708055](#) and implement any required corrections. The note contains back-end corrections for the current release of SAP Customer Activity Repository applications bundle.
3. Consult the front-end RIN [2708040](#) and implement any required corrections. The note contains front-end corrections for the current release of SAP Customer Activity Repository applications bundle.

Task overview: [Upgrade the Software \[page 44\]](#)

Task overview: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous: [Upgrade Product-Specific SAP Fiori UI Component \(Front-End Product Version\) \[page 50\]](#)

Next: [Install Alternate Storage \(Optional\) \[page 54\]](#)

Next: [Verify Authorizations for On-Shelf Availability \(OSA\) \[page 67\]](#)

5.6 Install Alternate Storage (Optional)

You only need to implement this procedure if you plan on using the *Table Content Aging* report delivered with SAP Customer Activity Repository. This report allows you to copy your transaction log (TLOG) data and its extensions from your SAP HANA database to an alternate storage technology (such as SAP IQ or Apache Hadoop), thereby reducing your total cost of hardware ownership.

Use

For more information, see SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> ► <Version> ► *Application Help* ► *SAP Customer Activity Repository* ► *POS Data Transfer and Audit* ► *Implementing a POS Transaction Data Storage Strategy* ► *Using the Table Content Aging Report* ►.

i Note

If your scenario includes demand modeling and forecasting with the Unified Demand Forecast (UDF) module, we recommend retaining the historical sales data in memory.

Process Flow

In order to successfully install alternate storage, you must execute the following procedures:

1. Do one of the following:
 - Install and set up integration with SAP IQ, **or**
 - Install and set up integration with Apache Hadoop, **or**
 - Install and set up integration with SAP HANA Dynamic Tiering
2. Create the remote source in SAP HANA studio (not applicable for integration with SAP HANA Dynamic Tiering).
3. Create the virtual table.
4. Set the deploy mode in SAP HANA Transport for ABAP.

Parent topic: [Upgrade the Software \[page 44\]](#)

Previous task: [Check SAP Notes and RINs \[page 53\]](#)

5.6.1 Install and Set Up Integration with SAP IQ

You use these procedures to install and set up SAP IQ to support the *Table Content Aging* report (transaction /CAR/TABLE_AGING) delivered with SAP Customer Activity Repository.

The SAP HANA database points to your SAP IQ database using SAP HANA smart data access (SDA), which exposes data from SAP IQ remote sources as virtual tables.

For more information, see SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> > <your release> > *Application Help* > *SAP Customer Activity Repository* > *POS Data Transfer and Audit* > *Implementing a POS Transaction Data Storage Strategy* > *Using the Table Content Aging Report* > .

Install SAP IQ

A detailed procedure is described in the *SAP IQ Installation and Update Guide*.

For more information, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_IQ > *Installation and Upgrade* > *SAP IQ Installation and Update Guide for <your operating system>* > .

Configure SAP IQ

1. Allocate sufficient space into which your data will be loaded.

i Note

The default DBSpaces provided during installation are intended to be used for SAP IQ system management. You should create your own DBSpace under the *Main* store with a DB File that is large enough to satisfy your sizing requirements.

For more information, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_IQ > *Reference* > *SAP IQ SQL Reference* > *SQL Statements* > *CREATE DBSPACE Statement* > .

2. Create an in-memory row-level versioning (RLV) store.

For more information, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_IQ > *Administration* > *Administration: In-Memory Row-Level Versioning* > *About In-Memory Row-Level Versioning* > .

i Note

Click *View All* if topic does not appear in initial list.

3. Create a database under the content created at the beginning of this procedure.

i Note

Ensure the following:

- The SAP IQ stores are configured with a large enough cache configuration, main memory, and temporary memory.
- The page size should be set to 128KB.
- The concurrency aligns with the amount of processes that will be triggered during the data copy.

For more information, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_IQ > *Configuration* > *Performance and Tuning Guide* > .

4. Create the following tables in the DBSpace created at the beginning of the procedure:

- /POSDW/TLOGF
- /POSDW/TLOGF_EXT
- /POSDW/TLOGF_X
- /POSDW/PLOGF

i Note

These tables should have the same structure as the tables in your SAP HANA system. One possible way is to export the table structure via Export SQL on the SAP HANA side, and import it on the SAP IQ side using the SQL console.

The SQL statement requires some modifications, such as:

- Converting all the column names in the exported SQL statement to lower case (for example, "RETAILSTOREID becomes "retailstoreid").
You can simply convert the entire SQL statement into lower case and then only convert the table name to upper case to keep the table name unchanged.
- Renaming of NVARCHAR to VARCHAR.
- Removing references to CS_* (for example, CS_FIXED).

5. Enable the RLV for the tables you just created.
6. Set the snapshot versioning property of the transaction to row-level.

❖ Example

```
set option Snapshot_Versioning = 'Row-level';
```

7. Enable connection blocking and set the blocking timeout threshold.

❖ Example

```
set option blocking = 'On';  
set option blocking_timeout = '0';
```

Install SAP IQ Drivers

Install and configure the ODBC database drivers required to connect to the remote source.

i Note

Each data source driver setup is described in its own section. The prerequisites are given as a simple guide; you will need to consult the original driver documentation provided by the driver manufacturer for more detailed information.

A detailed procedure is described in the [SAP HANA Administration Guide](#).

For more information, see SAP Help Portal at http://help.sap.com/viewer/p/SAP_HANA_PLATFORM

► [Administration](#) ► [SAP HANA Administration Guide](#) ► [Data Provisioning](#) ► [SAP HANA Smart Data Access](#) ► [Setting Up ODBC Drivers](#) ► [SAP IQ ODBC Driver](#) ►.

5.6.2 Install and Set Up Integration with Apache Hadoop

You use these procedures to install and set up Apache Hadoop to support the *Table Content Aging* report (transaction /CAR/ TABLE_AGING) delivered with SAP Customer Activity Repository.

The SAP HANA database points to your Hadoop cluster using SAP HANA smart data access (SDA), which exposes data from Hadoop remote sources as virtual tables.

For more information, see SAP Help Portal at <http://help.sap.com/viewer/p/CARAB> > <Version> > *Application Help* > *SAP Customer Activity Repository* > *POS Data Transfer and Audit* > *Implementing a POS Transaction Data Storage Strategy* > *Using the Table Content Aging Report*.

Process Flow

To successfully install and set up integration with Apache Hadoop, you must execute the following procedures:

1. Install Apache Hadoop.
2. Do one of the following:
 - Install and set up the Apache Hive ODBC driver, **or**
 - Install and set up the SAP HANA Spark controller.
3. Create and partition tables in Apache Hive.
4. Create a NFS mount on SAP NetWeaver.

Install Apache Hadoop

According to the *SAP HANA Administration Guide*, SAP HANA smart data access is supported by Hortonworks Distribution for Apache Hadoop: version 2.3 (supported on Intel-based hardware platforms only).

For more information on integration between SAP HANA and Apache Hadoop, see SAP Help Portal at http://help.sap.com/viewer/p/SAP_HANA_PLATFORM > *Administration* > *SAP HANA Administration Guide* > *Data Access* > *SAP HANA Smart Data Access*.

For more information on installing Apache Hadoop, see <http://docs.hortonworks.com> > *All* > *HDP* > *2.3* > *HDP 2.3.0 (GA)*.

Install and Set Up Apache Hive ODBC Driver

Note

Integration between SAP HANA and Apache Hadoop requires **either** an Apache Hive ODBC driver **or** an SAP HANA Spark controller.

Implement this procedure only if you wish to integrate SAP HANA with Apache Hadoop via the Apache Hive ODBC driver.

1. According to the [SAP HANA Administration Guide](#), SAP HANA smart data access is supported by Hortonworks Distribution for Apache Hadoop: version 2.3 (This includes Apache Hadoop version 1.0.3 and Apache Hive 0.9.0; supported on Intel-based hardware platforms only).
For more information on integration between SAP HANA and Apache Hadoop, see SAP Help Portal at http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► [Administration](#) ► [SAP HANA Administration Guide](#) ► [Data Access](#) ► [SAP HANA Smart Data Access](#) ►.
2. Set up the driver as described in the [SAP HANA Administration Guide](#) at http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► [Administration](#) ► [SAP HANA Administration Guide](#) ► [Data Access](#) ► [SAP HANA Hadoop Integration](#) ►.

Install and Set Up the SAP HANA Spark Controller

Note

Integration between SAP HANA and Apache Hadoop requires **either** an Apache Hive ODBC driver **or** a SAP HANA Spark controller.

Implement this procedure only if you wish to integrate SAP HANA with Apache Hadoop via the SAP HANA Spark controller.

1. Confirm the right combination of versions required between SAP HANA, Apache Spark, and the SAP HANA Spark controller. Use the [SAP HANA Spark Controller Compatibility Matrix](#) to do this. This document is available under https://help.sap.com/viewer/p/SAP_HANA_SPARK_CONTROLLER. Navigate to ► [Additional Information](#) ► [SAP HANA Spark Controller Compatibility Matrix](#) ►.
2. Install and set up the SAP HANA Spark controller as described in SAP Note [2273047](#) ►.

For more information on installing and setting up the SAP HANA Spark controller, see SAP Help Portal at http://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► [Administration](#) ► [SAP HANA Administration Guide](#) ► [Data Access](#) ► [SAP HANA Hadoop Integration](#) ► [SAP HANA Spark Controller](#) ►.

Create and Partition Tables

Create the SAP schema, tables, and table partitions as described in SAP Note [2317597](#) ►.

Create a NFS Mount on SAP NetWeaver

The TLOG data and its extensions are copied from your SAP HANA database to Hadoop using the HDFS NFS Gateway on your Hadoop system. To enable this you must create a mount point on your SAP NetWeaver system for the data files to be created directly in the Hadoop File System (HDFS).

i Note

The following steps are only **guidelines** which provide an example of how to mount Network File System (NFS) on an SAP NetWeaver Linux-based client.

1. Make sure the NFS client is installed based on the examples provided:

Operating System	Command
Red Hat, CentOS	<code>sudo yum install nfs-utils</code>
Ubuntu	<code>sudo apt-get install nfs-common</code>
SUSE	<code>sudo zypper install nfs-client</code>

2. List the NFS shares exported on the server.

Example

```
showmount -e <host>
```

3. Set up a mount point for an NFS share.

Example

```
sudo mkdir <folder>
```

i Note

You must ensure that the folder paths share the same naming conventions, as follows:

Temporary data folder	<code>/tmp/tct_csv_out/temp</code>
Data folder	<code>/tmp/tct_csv_out/data</code>

4. Mount the cluster using NFS.

Example

```
sudo mount -o hard, nolock <host> <folder>
```

On your HDFS, the different tables are stored under a folder using the following convention:

```
<data_directory>/<schema>/<table>/<businessdaydate=partition_value>/{files}
```

On the SAP NetWeaver file system, the Hadoop files are stored under a physical path and file name that is derived from a customer-definable logical path or file name. The configuration is provided via the `FILE` transaction. Inside the `FILE` transaction, you also need to make use of parameters `PARAM_1` and `PARAM_2`. `PARAM_1` will be populated during runtime by the program (generated file name) and `PARAM_2` will be populated by the program during runtime `<schema>/<table>/<businessdaydate=partition_value>`.

Example (Data Directory)

If the Hadoop data files are stored in Unix/Linux folder `<schema>/<table>/businessdaydate=partition_value/{files}` `PARAM_1.CSV` and physical directory `/tmp/tct_csv_out/data/hdp/apps/hive/warehouse/<PARAM_2><FILENAME>`.

You create the following logical path in the **FILE** transaction as follows:

Logical path	/CAR/HDFS_DATA
Name	HDFS Data
Syntax group	UNIX
Physical path	/tmp/tct_csv_out/data/hdp/apps/hive/ warehouse/<PARAM_2><FILENAME>

You create the following logical file in the **FILE** transaction as follows:

Logical file	/CAR/HDFS_DATA
Name	HDFS Data
Physical file	<PARAM_1>.CSV
Data format	WK1
Application area	IS
Logical path	/CAR/HDFS_DATA

Example (Temporary Directory)

/tmp/tct_csv_out/data/hdp/apps/hive/warehouse/On top of the Hadoop data files, you also need to provide a temporary directory in which the program will populate script files and also temporarily store data files to be compressed.

If the temporary files are stored in Unix/Linux folder /tmp/tct_csv_out/temp/{files}, you create the following logical path in the **FILE** transaction as follows:

Logical path	/CAR/HDFS_TEMP
Name	HDFS Temp
Syntax group	UNIX
Physical path	/tmp/tct_csv_out/temp/<FILENAME>

You create the following logical file in the **FILE** transaction as follows:

Logical file	/CAR/HDFS_TEMP
Name	HDFS Temp
Physical file	<PARAM_1>.SH
Data format	

Application area	IS
Logical path	/CAR/HDFS_TEMP

5.6.3 Install and Set Up Integration with SAP HANA Dynamic Tiering

You use these procedures to install and set up SAP HANA Dynamic Tiering to support the *Table Content Aging* report (transaction /CAR/TABLE_AGING) delivered with SAP Customer Activity Repository.

SAP HANA Dynamic Tiering adds the SAP HANA dynamic tiering service to your SAP HANA system. You use this service to create the extended store and extended tables. Extended tables behave like all other SAP HANA tables, but their data resides in the disk-based extended store.

For more information, see SAP Help Portal at <http://help.sap.com/viewer/p/CARAB> > <your release> > *Application Help* > *SAP Customer Activity Repository* > *POS Data Transfer and Audit* > *Implementing a POS Transaction Data Storage Strategy* > *Using the Table Content Aging Report*.

Install SAP HANA Dynamic Tiering

A detailed procedure is described in the *SAP HANA Dynamic Tiering: Installation and Update Guide*.

For more information, see SAP Help Portal at http://help.sap.com/hana_options_dt > *Installation and Update* > *Installation and Update*.

Create Extended Storage

A detailed procedure is described in the *SAP HANA Dynamic Tiering: Administration Guide*.

For more information, see SAP Help Portal at http://help.sap.com/hana_options_dt > *System Administration* > *SAP HANA Dynamic Tiering: Administration Guide* and consult the following subsections:

- > *System Administration* > *Managing Extended Storage* > *Create Extended Storage*
- > *System Administration* > *Managing Tables* > *Extended Store Tables* > *Convert HANA Tables to Extended Store Tables Using the SAP HANA Cockpit*

5.6.4 Create the Remote Source in SAP HANA Studio

i Note

This step is not applicable if you are integrating the alternate storage feature with SAP HANA Dynamic Tiering.

Create a remote source by selecting the appropriate adapter and configuring the connection properties and user credentials.

A detailed procedure is described in the [SAP HANA Administration Guide](#).

For more information, see SAP Help Portal at http://help.sap.com/viewer/p/SAP_HANA_PLATFORM
► [Administration](#) ► [SAP HANA Administration Guide](#) ► [Data Access](#) ► [SAP HANA Smart Data Access](#) ► [Creating a Remote Source](#) ►.

5.6.5 Create the Virtual Table

Create the following virtual tables to access the data stored in remote tables:

Virtual Table	Remote Table
VT_TLOGF_NLS	/POSDW/TLOGF
VT_TLOGF_X_NLS	/POSDW/TLOGF_X
VT_TLOGF_EXT_NLS	/POSDW/TLOGF_EXT
VT_PLOGF_NLS	/POSDW/PLOGF

A detailed procedure is described in the [SAP HANA Administration Guide](#).

For more information, see SAP Help Portal at http://help.sap.com/viewer/p/SAP_HANA_PLATFORM
► [Administration](#) ► [SAP HANA Administration Guide](#) ► [Data Provisioning](#) ► [SAP HANA Smart Data Access](#) ► [Managing Virtual Tables](#) ►.

5.6.6 Activate Alternate Storage

1. In your back-end system, execute report /CAR/ACTIVATE_HTA.
2. Confirm or set the following:
 - In the [ECC Mode](#) section, choose the relevant ECC mode for your system.
 - In the [External Systems](#) section, choose [Nearline Storage](#).
3. Press [Execute](#).

This deploys package `sap.is.retail.car.nls` for ECC mode SAP ERP, or `sap.is.retail.car_s4h.nls` for ECC mode S/4HANA. Each package contains views that combine TLOG data from SAP HANA with TLOG data from the alternate storage system.

6 Set Up the Applications

You have upgraded the back-end components and front-end components of SAP Customer Activity Repository applications bundle. Now you must first do the setup steps under ► [SAP Customer Activity Repository ► Core \(Mandatory for All Applications\)](#) ►. These steps are required for **all the applications**. Then you either continue with the setup steps under ► [SAP Customer Activity Repository ► Advanced \(Optional\)](#) ► or do the setup steps for your application.

For **SAP Allocation Management**, first consult the information in section [SAP Allocation Management \[page 290\]](#). Then do the setup steps under ► [SAP Customer Activity Repository ► Core \(Mandatory for All Applications\)](#) ►.

6.1 SAP Customer Activity Repository

Set up SAP Customer Activity Repository after the upgrade. The [Core](#) steps are always mandatory. You must do them for any application or scenario of SAP Customer Activity Repository applications bundle.

[Core \(Mandatory for All Applications\) \[page 64\]](#)

Perform the core steps to set up SAP Customer Activity Repository as the common platform. The core steps are mandatory for SAP Customer Activity Repository and for all the consuming applications.

[Advanced \(Optional\) \[page 82\]](#)

Perform optional steps to set up specific functionality in SAP Customer Activity Repository.

[Troubleshooting \[page 152\]](#)

Diagnose and resolve issues that may arise when you install, upgrade, and set up your scenario. If you need to report a customer incident, see the information at the end of this section.

6.1.1 Core (Mandatory for All Applications)

Perform the core steps to set up SAP Customer Activity Repository as the common platform. The core steps are mandatory for SAP Customer Activity Repository and for all the consuming applications.

⚠ Caution

Always do the core steps first. Then you can continue with the *Advanced (Optional)* steps for SAP Customer Activity Repository or with the setup steps for your application.

1. [Check SAP Notes and RINs \[page 53\]](#)

There are notes that can only be implemented **after** you have upgraded the back-end product version and the front-end product version. You must therefore do this additional check and implement the required notes, before you do the next steps.

2. [Verify Authorizations for On-Shelf Availability \(OSA\) \[page 67\]](#)

In SAP HANA studio, verify that the `AFL__SYS_AFL_POSDM_AREA_EXECUTE` role has been granted to the `SAP<SID>` user. If it hasn't, grant the role as described below. This short procedure is mandatory for **all the scenarios**, because it is required for the successful activation of the SAP HANA content later on.

3. [Verify Authorizations for Unified Demand Forecast \(UDF\) \[page 68\]](#)

In an **upgrade scenario**, the authorizations should already be available in SAP HANA studio. Verify that the three roles for UDF with the required privileges are assigned to the required users. If authorizations are missing, set them up as described. The correct setup is mandatory for the successful activation of the SAP HANA content later on.

4. [Create/Replicate Source Master Data System Tables \[page 71\]](#)

Ensure that **all the tables** required for your source master data system have been created and replicated to your SAP Customer Activity Repository system using the SAP Landscape Transformation Replication Server. Be aware that upgrade scenarios might require additional tables. For your reference, a spreadsheet is available on SAP Help Portal that lists the required tables by source master data system (database schema).

5. [Activate SAP HANA Content \[page 72\]](#)

Activate the SAP HANA content for your scenario by executing an activation report in the back-end system. You can run this report as many times as your scenario requires.

6. [Activate SAP HANA Content for Distribution Curves \[page 74\]](#)

If you plan to calculate distribution curves for your scenario, activate the required SAP HANA content in this additional procedure.

7. [Verify that SAP HANA Script Server Is Active \[page 76\]](#)

Verify that the script server for the SAP HANA database is still active. If necessary, restart it manually. This step is mandatory for all the applications.

8. [Verify that OData Services are Active \[page 77\]](#)

First verify that all the common OData services for SAP Fiori are active. Then verify that the OData services for your specific application and SAP Fiori apps are active as well.


9. [Configure Calculation of SAPUI5 Application Index \[page 81\]](#)

Configure and run the report to calculate the SAPUI5 application index. You can run the report manually, but we recommend that you schedule it as a regular background job on your front-end server. The report is `/UI5/APP_INDEX_CALCULATE` (*Calculation of SAPUI5 Application Index for SAPUI5 Repositories*).

6.1.1.1 Check SAP Notes and RINs

There are notes that can only be implemented **after** you have upgraded the back-end product version and the front-end product version. You must therefore do this additional check and implement the required notes, before you do the next steps.

Prerequisites

Make sure that you have the up-to-date version of each note, which you can find on the SAP Support Portal at <http://support.sap.com/notes> .



The release information notes (RINs) in particular are continuously updated, as corrections for the current release of SAP Customer Activity Repository applications bundle become available.

Procedure

1. Consult the [Implement SAP Notes for the Upgrade \[page 24\]](#) section and verify that all *After the upgrade* notes that are required for your scenario have been implemented.

i Note

Always consult the table for SAP Customer Activity Repository. Notes listed there are often common corrections, applicable to all consuming applications.

2. Consult the back-end RIN [2708055](#)  and implement any required corrections. The note contains back-end corrections for the current release of SAP Customer Activity Repository applications bundle.
3. Consult the front-end RIN [2708040](#)  and implement any required corrections. The note contains front-end corrections for the current release of SAP Customer Activity Repository applications bundle.

Task overview: [Upgrade the Software \[page 44\]](#)

Task overview: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous: [Upgrade Product-Specific SAP Fiori UI Component \(Front-End Product Version\) \[page 50\]](#)

Next: [Install Alternate Storage \(Optional\) \[page 54\]](#)

Next: [Verify Authorizations for On-Shelf Availability \(OSA\) \[page 67\]](#)

6.1.1.2 Verify Authorizations for On-Shelf Availability (OSA)

In SAP HANA studio, verify that the `AFL__SYS_AFL_POSDM_AREA_EXECUTE` role has been granted to the `SAP<SID>` user. If it hasn't, grant the role as described below. This short procedure is mandatory for **all the scenarios**, because it is required for the successful activation of the SAP HANA content later on.

Context

The `AFL__SYS_AFL_POSDM_AREA_EXECUTE` role enables the `SAP<SID>` user to call the OSA application function library (part of the `SAP_RTL_AFL_FOR_SAP_HANA` component) in the SAP HANA database.

Prerequisites

- You have installed the `SAP_RTL_AFL_FOR_SAP_HANA` component as described in [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#).
- You have an `SAP<SID>` user and an `SAP<SID>` physical schema in your SAP HANA database. **The names must be identical.** If you need more information on database users and schema mapping, see [Verify SAP HANA Users and Privileges \[page 38\]](#) and [Verify Correct Schema Mapping \[page 36\]](#).
- You have database administrator rights so that you can grant roles to users.

Procedure

→ Tip

- If you encounter issues related to authorization or authentication, see the *Security-Related Issues* section of the *SAP HANA Troubleshooting and Performance Analysis Guide*, which you can find under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► *<Version>* ► *Administration* .
- We have also provided an example SQL statement below that you can adapt as needed for your system landscape.

1. In SAP HANA studio, access your back-end system and open the [SAP HANA Administration Console](#).
2. Choose ► *Security* ► *Users* .
3. Select your `SAP<SID>` user and open the user details (or double-click the user).
4. On the *Granted Roles* tab, choose the plus icon and select `AFL__SYS_AFL_POSDM_AREA_EXECUTE` as the role name.
SQL example: `grant AFL__SYS_AFL_POSDM_AREA_EXECUTE to SAP<SID>;`
5. Save your changes by choosing the *Deploy (F8)* icon at the top right.

Result

You have successfully set up the authorizations for OSA.

Parent topic: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous task: [Check SAP Notes and RINs \[page 53\]](#)

Next: [Verify Authorizations for Unified Demand Forecast \(UDF\) \[page 68\]](#)

6.1.1.3 Verify Authorizations for Unified Demand Forecast (UDF)

In an **upgrade scenario**, the authorizations should already be available in SAP HANA studio. Verify that the three roles for UDF with the required privileges are assigned to the required users. If authorizations are missing, set them up as described. The correct setup is mandatory for the successful activation of the SAP HANA content later on.

Context

The three roles for UDF have the following purpose:

Role	Purpose
UDF_EXECUTE	Required to execute UDF. Enables the SAP<SID> user to call the UDF application function library (AFL) in the SAP HANA database.
UDF_DEPLOY	Required to activate the SAP HANA content for UDF. Enables the SAP<SID> user to deploy the SAP HANA content for UDF.
UDF_DEPLOY_SYS_REPO	Required to activate the SAP HANA content. Defines additional privileges for the __SYS_REPO standard user.

Prerequisites

- You have installed the SAP RTL AFL FOR SAP HANA component as described in [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#). This component contains the application function library for UDF.
- You have an SAP<SID> user and an SAP<SID> physical schema in your SAP HANA database. **The names must be identical.** For more information, see [Verify SAP HANA Users and Privileges \[page 38\]](#).

- You know what the name of the SAP<SID> user is in your system landscape. For information on how to find this name, see [Verify Correct Schema Mapping \[page 36\]](#).
- You have database administrator rights so that you can create roles, grant privileges, and assign roles to users.

Procedure

→ Tip

- If you encounter issues related to authorization or authentication, see the *Security-Related Issues* section of the *SAP HANA Troubleshooting and Performance Analysis Guide*, which you can find under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM▯<Version>▯Administration▯.
- We have also provided example SQL statements below that you can adapt as needed for your system landscape.

1. In SAP HANA studio, log on to your back-end system and open the [SAP HANA Administration Console](#).
2. Navigate to ▯ [Security](#) ▯ [Roles](#) ▯ and select [New Role](#) from the context menu.
3. In the [Role Name](#) field, specify [UDF_EXECUTE](#).
SQL example: `create role UDF_EXECUTE;`
4. Make the following settings for this role:
 - On the [Granted Roles](#) tab: Choose the plus icon and select the [AFL__SYS_AFL_UDFCORE_AREA_EXECUTE](#) role from the list.
SQL example: `grant AFL__SYS_AFL_UDFCORE_AREA_EXECUTE to UDF_EXECUTE;`
 - On the [Object Privileges](#) tab: Add the following catalog objects and grant them the following privileges:
 - Catalog object (schema name) SAP<SID>: privileges [SELECT, INSERT, UPDATE, DELETE](#)
SQL example: `grant SELECT, INSERT, UPDATE, DELETE on schema SAP<SID> to UDF_EXECUTE;`
 - Catalog object (schema name) _SYS_BIC: privileges [SELECT, EXECUTE](#)
SQL example: `grant SELECT, EXECUTE on schema _SYS_BIC to UDF_EXECUTE;`
 - On the [Analytic Privileges](#) tab: Add the [_SYS_BI_CP_ALL](#) privilege.
SQL example: `call GRANT_ACTIVATED_ANALYTICAL_PRIVILEGE('_SYS_BI_CP_ALL', 'UDF_EXECUTE');`
5. Save your changes by choosing the [Deploy \(F8\)](#) icon at the top right.
6. Navigate to ▯ [Security](#) ▯ [Users](#) ▯.
7. Select the SAP<SID> user from the list and open the details screen (or double-click the user).
8. On the [Granted Roles](#) tab, add the [UDF_EXECUTE](#) role.
SQL example: `grant UDF_EXECUTE to SAP<SID>`
9. Save your changes by choosing the [Deploy \(F8\)](#) icon at the top right.

i Note

You have created the first role with the required privileges and granted the role to the SAP<SID> user.

10. Now create the second role. Navigate again to ▯ [Security](#) ▯ [Roles](#) ▯ and select [New Role](#) from the context menu.

11. In the *Role Name* field, specify **UDF_DEPLOY**.
SQL example: `create role UDF_DEPLOY;`
12. Make the following settings for this role:
 - On the *Granted Roles* tab: Choose the plus icon and select the **CONTENT_ADMIN** role from the list.
SQL example: `grant CONTENT_ADMIN to UDF_DEPLOY;`
 - On the *System Privileges* tab: Add the **CATALOG READ** privilege.
SQL example: `grant CATALOG READ to UDF_DEPLOY;`
13. Save your changes by choosing the *Deploy (F8)* icon at the top right.
14. Navigate again to **Security > Users**.
15. Select the **SAP<SID>** user from the list and open the details screen (or double-click the user).
16. On the *Granted Roles* tab, add the **UDF_DEPLOY** role.
SQL example: `grant UDF_DEPLOY to SAP<SID>;`
17. Save your changes by choosing the *Deploy (F8)* icon at the top right.

Note

You have created the second role and granted the role to the **SAP<SID>** user.

18. Now create the third role. Navigate again to **Security > Roles** and select *New Role* from the context menu.
19. In the *Role Name* field, specify **UDF_DEPLOY_SYS_REPO**.
SQL example: `create role UDF_DEPLOY_SYS_REPO;`
20. On the *Object Privileges* tab, make these settings:
Add catalog object (schema name) **SAP<SID>** and grant the privileges **SELECT**, **INSERT**, **UPDATE**, and **DELETE**.
SQL example: `grant SELECT, INSERT, UPDATE, DELETE on schema SAP<SID> to UDF_DEPLOY_SYS_REPO;`
21. Save your changes by choosing the *Deploy (F8)* icon at the top right.
22. Navigate again to **Security > Users**.
23. Select the **_SYS_REPO** user from the list and open the details screen (or double-click the user).
24. On the *Granted Roles* tab, add the **UDF_DEPLOY_SYS_REPO** role.
SQL example: `grant UDF_DEPLOY_SYS_REPO to _SYS_REPO;`
25. Save your changes by choosing the *Deploy (F8)* icon at the top right.

Note

You have created the third role with the required privileges and granted the role to the **_SYS_REPO** user.

Result

You have successfully set up the authorizations for UDF.

Parent topic: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous: [Verify Authorizations for On-Shelf Availability \(OSA\) \[page 67\]](#)

Next: [Create/Replicate Source Master Data System Tables \[page 71\]](#)

6.1.1.4 Create/Replicate Source Master Data System Tables

Ensure that **all the tables** required for your source master data system have been created and replicated to your SAP Customer Activity Repository system using the SAP Landscape Transformation Replication Server. Be aware that upgrade scenarios might require additional tables. For your reference, a spreadsheet is available on SAP Help Portal that lists the required tables by source master data system (database schema).

⚠ Caution

Following an upgrade, it is important that you create and replicate any additional tables required by the new release. This is necessary or the activation of the SAP HANA content will fail.

Procedure

1. Download the spreadsheet for your version of SAP Customer Activity Repository applications bundle:
 1. Navigate to SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> and select the desired version at the top right.
 2. Download the *SLT Tables for SAP Customer Activity Repository applications bundle 4.0* archive from under *Installation and Upgrade* and extract the spreadsheet.
2. Ensure that all the tables required for your source master data system (database schema) are created and replicated.

i Note

If you need information about the SLT replication server, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_LANDSCAPE_TRANSFORMATION_REPLICATION_SERVER.

Parent topic: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous: [Verify Authorizations for Unified Demand Forecast \(UDF\) \[page 68\]](#)

Next task: [Activate SAP HANA Content \[page 72\]](#)

6.1.1.5 Activate SAP HANA Content

Activate the SAP HANA content for your scenario by executing an activation report in the back-end system. You can run this report as many times as your scenario requires.

Prerequisites

You have successfully completed all of the procedures listed in the previous sections of this guide.

Context

The `/CAR/ACTIVATE_HTA` report activates the SAP HANA Transport for ABAP (HTA) objects for your scenario. One HTA object is activated for each SAP HANA content package.

Procedure

1. **i Note**

You must only do this first step if your source master data system is **SAP S/4HANA 1809 or higher**. If it is not, continue directly with step 2.

Run a special SLT report to create the tables required for data replication with the SAP Landscape Transformation Replication Server:

- a. In your back-end system, start transaction `SE38`.
- b. Enter `/DMF/CREATE_SLT_TABLES` as the program and choose *Execute* (`F8`).
- c. Select system `S/4HANA` and version `1809` (or a higher version).
- d. Make the other settings as required for your system landscape:
 - *Physical Source Schema*: Enter the name of your physical schema that you have previously mapped to the `SAP_S4H` authoring schema.
 - *Physical Dummy Schema*: Enter the name of your physical schema that you have previously mapped to the `SAP_ECC` authoring schema.

i Note

If you need information on the mapped schemas, see [Verify Correct Schema Mapping \[page 36\]](#).

- *Mode*: Select *Simulation*.
- e. Choose *Execute* to run the report in simulation mode.
 - f. Resolve any messages that might be raised.
 - g. Deselect the simulation mode and run the report for real.

The SLT tables for SAP S/4HANA 1809 (or higher) are created. Now you can activate the SAP HANA content for your scenario.


2. Start transaction `SE38`.
3. Enter `/CAR/ACTIVATE_HTA` as the program and choose *Execute* (`F8`).
4. Select all the options for which you wish to activate the SAP HANA content. Use the following table for reference:

You want to activate the SAP HANA content for...	Select at least these options...
SAP Allocation Management	<p>Do not select <i>Allocation Management</i> and run the report.</p> <p>Follow the instructions in section Activate SAP Allocation Management SAP HANA Content [page 295] instead.</p>
Distribution Curves (without SAP Allocation Management)	Follow the instructions in Activate SAP HANA Content for Distribution Curves [page 74] .
SAP Assortment Planning	<ul style="list-style-type: none"> ◦ <i>ECC Mode</i>: Select your source master data system. If you use <i>Fashion Management</i>, select it. ◦ <i>Business Scenarios Activation</i>: Select <i>Assortment Planning</i>.
Unified Demand Forecast (UDF) and demand planning SAP Fiori apps (<i>Analyze Forecast, Adjust Forecast, Manage Demand Influencing Factors</i>)	<p>You do not need to run the report for these scenarios.</p> <p>The SAP HANA content should already be active at this point. It was activated automatically during the upgrade of the back-end product version.</p>
On-Shelf Availability	<ul style="list-style-type: none"> ◦ <i>ECC Mode</i>: Select your source master data system. ◦ <i>Business Scenarios Activation</i>: Select <i>On-Shelf Availability</i> and <i>Customer Activity Repository</i>.
Omnichannel Article Availability and Sourcing (OAA)	<ul style="list-style-type: none"> ◦ <i>ECC Mode</i>: Select your source master data system. ◦ <i>Business Scenarios Activation</i>: Select <i>Omnichannel Article Availability</i>.
SAP Merchandise Planning	Follow the instructions in Activate SAP HANA Content for SAP Merchandise Planning [page 166] .
SAP Promotion Management	No action required.

5. Perform the prerequisite check to validate the selections:
 - a. Select *Perform Prerequisite Check* and choose *Execute* (`F8`).
 - b. Read the system log before applying any database changes.
 - c. Resolve any issues found during the check.

If you encounter issues, see the [Troubleshooting \[page 152\]](#) section for possible solutions.

6. Activate the SAP HANA content for real:
 - a. Deselect *Perform Prerequisite Check*.
 - b. Choose *Execute* (`F8`) again.
7. Check that the activation was successful. You have several options:
 - a. Simply rerun the report. The system lists the scenarios that are now active.

- b. Or: Execute transaction SCTS_HTA. Specify a SAP HANA content package (for example, `sap.is.retail`), select *Include subpackages*, and choose *Execute* (). The system lists the contents of the package and indicates the status of each object.
- c. Or: Navigate to the same package in SAP HANA studio and check whether all its views are active.

Results

You have successfully activated the SAP HANA content for your scenario. Continue with the next section.

Task overview: [Core \(Mandatory for All Applications\) \[page 64\]](#)


Previous: [Create/Replicate Source Master Data System Tables \[page 71\]](#)

Next: [Activate SAP HANA Content for Distribution Curves \[page 74\]](#)

6.1.1.6 Activate SAP HANA Content for Distribution Curves

If you plan to calculate distribution curves for your scenario, activate the required SAP HANA content in this additional procedure.

Prerequisite

You have installed SAP Note [2692291](#)  *SAP Allocation Management 4.0 - Distribution Curve Configuration - SLT report /DMF/CREATE_SLT_TABLES fails for S4H 1709 Source system.*

Run the Dummy Schema and Dummy Table Creation Report

The report checks for a missing physical schema and creates this physical schema and the corresponding dummy tables in the schema if necessary. The successful completion of this step is a prerequisite for the SAP HANA content activation for distribution curves.

Note

The running of the report requires a database user in the ABAP system with the authorization to create the dummy schema. Check the application log for the report if there were errors.

1. In your back-end system, start transaction SE38. Enter `/DMF/CREATE_SLT_TABLES` (*Create SLT Tables*) as the program and choose *Execute*.
2. Select your source system. For *S/4HANA*, enter the version.

3. Enter the physical source and dummy schema names. For the *Physical Source Schema*, enter the physical schema name into which your SLT tables should be replicated. For the *Physical Dummy Schema*, enter the name for the schema to be created. If the physical source schema already exists in the SAP HANA database, then only the dummy tables in this schema are created when you execute the report.
4. Select the simulation mode for a test run. After the simulation run, you can check for errors in the application log.

Maintain Schema Mapping

Check the names you use for your physical schema. If you are using the default names below, no further action is required:

- `SAP_S4H`, for your SAP S/4HANA schema
- `SAP_ECC`, for your SAP Retail (ECC or FMS) schema

If you have chosen names for your physical schema that are **different from the names above**, you must do the following:

Maintain a schema mapping in your SAP HANA database where your customer-specific names are used as authoring schemas for the physical schema.

Set Pework Done for DDF Packages

A precondition for the activation of SAP HANA Transport for ABAP (HTA) objects is that the `PREWORK_DONE` indicator is set for all packages with activation mode `P` – `prework needed`. You can check this setting in the table `CTS_HOT_PACKAGE` in field `HOT_ACTIVATION_MODE`.

Set the `PREWORK_DONE` indicator for all Demand Data Foundation (DDF) packages relevant for the distribution curve functionality:

- `sap.is.ddf.ecc`
 - `sap.is.ddf.fms`
 - `sap.is.ddf.fms_s4h`
 - `sap.is.ddf.cross.ecc`
 - `sap.is.ddf.cross.fms`
 - `sap.is.ddf.cross.fms_s4h`
 - `sap.is.ddf.cross`
1. Call transaction `SE16` (*Data Browser*) and display the contents of table `CTS_HOT_PREWORK` (*HANA Transport for ABAP: Pework for SAP HANA Deployment*).
 2. Enter `ABAP_HANA_PACKAGE_ID` for all DDF packages listed above. You can obtain the `ABAP_HANA_PACKAGE_ID` for the `HANA_PACKAGE_ID` from table `CTS_HOT_PACKAGE`.
 3. Check if the indicator `PREWORK_DONE` is set to **X** for **all** these packages. If not, set the indicator to **X**.

Check and Activate DDF SAP HANA Content

Based on your scenario, there can be inactive packages in DDF, even though you have activated the content earlier via the report `/CAR/ACTIVATE_HTA` (*Activate SAP HANA Content for SAP CARAB*), as described in section [Activate SAP HANA Content \[page 72\]](#).

1. Call transaction `SCTS_HTA_DEPLOY` (*SAP HANA Transport for ABAP - Deployment*) to check and to deploy (if not already deployed) the following packages, in **strictly the sequence** in which they are listed. Do **not** select the option to *Include subpackages*:
 - `sap.is.ddf.ecc`
 - `sap.is.ddf.fms`
 - `sap.is.ddf.fms_s4h`
 - `sap.is.ddf.cross.ecc`
 - `sap.is.ddf.cross.fms`
 - `sap.is.ddf.cross.fms_s4h`
 - `sap.is.ddf.cross`

i Note

The package names are case-sensitive.

Parent topic: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous task: [Activate SAP HANA Content \[page 72\]](#)

Next task: [Verify that SAP HANA Script Server Is Active \[page 76\]](#)

6.1.1.7 Verify that SAP HANA Script Server Is Active

Verify that the script server for the SAP HANA database is still active. If necessary, restart it manually. This step is mandatory for all the applications.

Context

The script server is an auxiliary SAP HANA server that is required to execute application function libraries (AFLs). For example, this applies to the `SAP_HANA_AFL` component (which includes the SAP HANA Predictive Analysis Library (PAL) and other libraries) and to the `SAP_RTL_AFL_FOR_SAP_HANA` component (which includes the libraries for Unified Demand Forecast and On-Shelf Availability).


i Note

The operating system process is `hdbscriptserver`.

The service name is `scriptserver`.

The operating system process can be started while the SAP HANA database is already running.

Procedure

1. In SAP HANA studio, verify if the script server is active.
2. If the script server is not active, restart it manually as described in SAP Note [1650957](#)  *SAP HANA Database: Starting the Script Server*.

Task overview: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous: [Activate SAP HANA Content for Distribution Curves \[page 74\]](#)

Next: [Verify that OData Services are Active \[page 77\]](#)

6.1.1.8 Verify that OData Services are Active

First verify that all the common OData services for SAP Fiori are active. Then verify that the OData services for your specific application and SAP Fiori apps are active as well.









Context

For security reasons, the OData services are delivered in an inactive state:

- The **common OData services** are delivered as part of the SAP Fiori front-end server. They are required for the SAP Fiori launchpad and you must always activate them.
- The **application-specific OData services** are delivered with SAP Customer Activity Repository applications bundle. You only need to activate the services that are relevant for your application.

Procedures

Mandatory: Verify that Common OData Services for SAP Fiori are Active

1. Log on to your front-end server (your SAP Gateway system).
2. In transaction [SPRO](#), navigate to  [SAP Reference IMG](#)  [SAP NetWeaver](#)  [SAP Gateway](#)  [OData Channel](#)  [Administration](#)  [General Settings](#)  [Activate and Maintain Services](#)  and execute the Customizing activity.

→ Tip

As a quick shortcut to the same screen, use transaction `/n/IWFND/MAINT_SERVICE`.

The [Service Catalog](#) shows you all the services that are currently active in your SAP Gateway system.

3. Verify that all the common OData services for SAP Fiori are active:

Common OData Services for SAP Fiori

/UI2/PAGE_BUILDER_CONF

/UI2/PAGE_BUILDER_CUST

/UI2/PAGE_BUILDER_PERS

/UI2/TRANSPORT

/UI2/INTEROP

If a service is not active, activate it as follows:

1. Choose [Add Service](#).
The [Add Selected Services](#) screen is displayed.
1. In [System Alias](#), select the alias of your local back-end system.
This is the alias that you have created in [Connect SAP Gateway to your Back-End System \[page 88\]](#).
For example, LOCAL.
2. In [Technical Service Name](#), specify **/UI2***.
3. Choose [Get Services](#) (or press .
4. Choose [Add Selected Services](#) and follow the instructions.

Result

The common OData services are now active in your SAP Gateway system.

Verify that Application-Specific OData Services for SAP Customer Activity Repository applications bundle are Active

1. Log on to your front-end server (your SAP Gateway system).
2. In transaction **SPRO**, navigate to **SAP Reference IMG** **SAP NetWeaver** **SAP Gateway** **OData Channel** **Administration** **General Settings** **Activate and Maintain Services** and execute the Customizing activity.

→ Tip

As a quick shortcut to the same screen, use transaction `/n/IWFND/MAINT_SERVICE`.

The [Service Catalog](#) shows you all the services that are currently active in your SAP Gateway.

3. Activate the services that are required for your application:
 1. Choose [Add Service](#).
The [Add Selected Services](#) screen is displayed.
 2. In [System Alias](#), select the alias of your back-end system.
 3. Choose [Get Services](#) (or press .The available services are displayed.

4. Use the following table for reference and verify that the services for your application are active:

For this Application...	Activate These OData services...
SAP Customer Activity Repository	<ul style="list-style-type: none"> ○ For POS Data Transfer and Audit: none ○ For Multichannel Transaction Data Management: none ○ For Unified Demand Forecast and the demand planning apps (<i>Analyze Forecast</i>, <i>Adjust Forecast</i>, <i>Manage Demand Influencing Factors</i>): <ul style="list-style-type: none"> ○ /DMF/OD_FC_TIME_SERIES_VIZ_SRV ○ /DMF/DEMAND_PLAN_UTILITIES_SRV ○ /DPL/OD_ADJUST_FORECAST_SRV ○ For Demand Data Foundation (optional, alternative to the DRF data replication framework for importing master data): <ul style="list-style-type: none"> ○ /DMF/API_DOCUMENT ○ /DMF/API_GENERIC_TIME_SERIES ○ /DMF/API_INVENTORY ○ /DMF/API_LOCATION ○ /DMF/API_LOCATION_HIERARCHY ○ /DMF/API_PRODUCT ○ /DMF/API_PRODUCT_HIERARCHY ○ /DMF/API_PRODUCT_LOCATION ○ /DMF/API_SALES_HISTORY ○ /DMF/API_TRANSPORTATION_LANE ○ /DMF/API_ATTRIBUTES ○ /DMF/API_IMAGES ○ /DMF/API_MERCHANDISE_PLAN_KPI ○ /DMF/API_PHPS ○ For the <i>Manage Product Attributes</i> app: <ul style="list-style-type: none"> /DMF/API_ATTRIBUTES_SRV (optional, to import external attributes) ○ For Omnichannel Promotion Pricing: none ○ For Omnichannel Article Availability and Sourcing (part of Inventory Visibility): <ul style="list-style-type: none"> ○ With SAP S/4HANA back-end: <ul style="list-style-type: none"> /OAA/F3391_MSN_SRV (new with SAP Customer Activity Repository) /OAA/F2586_MSS_SRV /OAA/F2659_MSC_SRV /OAA/F3392_MS_SRV (new with SAP Customer Activity Repository) ○ With SAP Retail back-end: <ul style="list-style-type: none"> /OAA/F2530_MSN_SRV /OAA/F2586_MSS_SRV /OAA/F2659_MSC_SRV /OAA/F3003_MS_SRV ○ For On-Shelf Availability: <ul style="list-style-type: none"> /OSA/ON_SHELF_AVAILABILITY ○ For SAP Smart Business for Multichannel Sales Analytics: none
Distribution Curves	/DMF/DIST_CURVE

For this Application...	Activate These OData services...
SAP Allocation Management	<ul style="list-style-type: none"> ◦ /AMR/OD_ALLOCATIONPLAN_SRV ◦ /AMR/OD_COMMON_SRV ◦ /AMR/OD_MARKETUNIT_SRV ◦ /AMR/OD_PARAM_SRV ◦ /AMR/OD_WORKLOAD_SRV ◦ /AMR/OD_PRODUCT_FLOW_SRV ◦ /AMR/OD_KPI_CONFIG_SRV ◦ /AMR/OD_ALLOCATIONRESULT_SRV ◦ /AMR/OD_BASKET_SRV ◦ /AMR/OD_ALLOCATIONPLAN_SEARCH_SRV
SAP Assortment Planning	<ul style="list-style-type: none"> ◦ /DMF/CURRENCY_LIST_SRV ◦ /DMF/LOCATION_CLUSTERSET_SRV ◦ /DMF/MASTER_DATA_SRV ◦ /DMF/MODULE_MANAGEMENT_SRV ◦ /DMF/OBJ_ATTRIBUTE_SRV ◦ /DMF/PLAN_CONFIG_SRV ◦ /DMF/SEARCH_LOCATIONS_SRV ◦ /DMF/SEARCH_PRODUCTS_SRV ◦ /DMF/SEASONS_SRV ◦ /RAP/ASSORTMENT_LIST_SRV ◦ /RAP/OPTION_PLAN_SRV ◦ /RAP/PHP_MATCH_SRV ◦ /RAP/VALIDITY_PERIOD_SRV ◦ /RAP/V_OP_KPI_Q_CDS_CDS ◦ /RAP/OPT_PLN_KPI_SRV ◦ /RAP/V_OP_OCLST_PRSL_Q_CDS_CDS
SAP Merchandise Planning	Not applicable (this application has no SAP Fiori apps)
SAP Promotion Management	<ul style="list-style-type: none"> ◦ /DMF/PROD_MD_SRV (Master Data Retrieval) ◦ /DMF/OFFER_MANAGEMENT_V2_SRV (Manage Promotional Offers) ◦ /DMF/PRODUCT_GROUP_SRV (Manage Product Groups) ◦ /DMF/LOCATION_SUBGROUP_SRV (Manage Location Subgroups) ◦ /PRM/OFFER_CONTENT_SRV (Offer Content Assignment)

4. If a required service is not active, select it and choose [Add Selected Services](#). Follow the instructions.

Note

User roles are only needed if you want to have connections to multiple back-end systems or multiple clients on the same back-end. The user roles are system-specific and are not delivered by default. If required, you must create them manually. If you define multiple user roles for different connections, make sure you have only one role assigned to your user at any time. If you need to change roles, first remove the old role from your user, then assign the new role.

Result

The services that you have selected for your application are now active in SAP Gateway.

Parent topic: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous task: [Verify that SAP HANA Script Server Is Active \[page 76\]](#)

Next: [Configure Calculation of SAPUI5 Application Index \[page 81\]](#)

6.1.1.9 Configure Calculation of SAPUI5 Application Index

Configure and run the report to calculate the SAPUI5 application index. You can run the report manually, but we recommend that you schedule it as a regular background job on your front-end server. The report is `/UI5/APP_INDEX_CALCULATE` (*Calculation of SAPUI5 Application Index for SAPUI5 Repositories*).

Context

The SAPUI5 application index provides an indexing and caching mechanism for data related to SAP Fiori apps, components, and libraries that are contained in SAPUI5 repositories on the SAP NetWeaver Application Server for ABAP.







This index is calculated and updated each time you run the report. The index makes it possible to find the data significantly faster.

Use

Run the report and update the index in all front-end systems of your system landscape:

- after any changes to the content of the SAPUI5 ABAP repository
- after installing a new version of the SAPUI5 distribution layer
- after implementing an SAP Note containing changes to an SAP Fiori app

Procedure

1. Read SAP Note [2227577](#)  (*Recalculation of the SAPUI5 Application Index After Implementing an SAP Note*).
2. Determine the SAP NetWeaver version on your front-end server.
3. Follow the instructions specific to your SAP NetWeaver version:
 - For SAP Gateway for SAP NetWeaver 7.52:
https://help.sap.com/viewer/p/SAP_NETWEAVER_AS_ABAP_752  [<Version>](#)  [Application Help](#) 
[UI Technologies in SAP NetWeaver \(SAP_UI 750\)](#)  [SAPUI5: UI Development Toolkit for HTML5](#) 

Parent topic: [Core \(Mandatory for All Applications\)](#) [page 64]

Previous: [Verify that OData Services are Active](#) [page 77]

6.1.2 Advanced (Optional)

Perform optional steps to set up specific functionality in SAP Customer Activity Repository.

6.1.2.1 Replicate Optional Tables

6.1.2.1.1 Replicate SAP CRM Tables (Optional)

Use

In this optional procedure, you set up the replication of tables from your SAP CRM source system. You only need to perform this procedure if you have an SAP CRM system in your SAP Customer Activity Repository landscape and you are planning to use the standard SAP implementation of customer identification delivered with the SAP Customer Activity Repository.

Procedure

1. Ensure that the SAP LT Replication Server is installed and that a user with the appropriate authorizations is set up in the target SAP HANA database.

If you have already ensured proper installation of the SAP LT Replication Server during previous procedures, skip to the next step. Otherwise, refer to one of the following for more information:

- <http://help.sap.com/hana> > SAP HANA > SAP HANA Options > SAP HANA Real-Time Replication > SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server > Installation Information
- <http://help.sap.com/hana> > SAP HANA > SAP HANA Options > SAP HANA Real-Time Replication > SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server > System Administration and Maintenance Information > Technical Prerequisites and Authorization Aspects

2. Set up a user in the source SAP CRM system and grant relevant authorizations to this user.

For more information, see <http://help.sap.com/hana> > SAP HANA > SAP HANA Options > SAP HANA Real-Time Replication > SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server > System Administration and Maintenance Information > Configuration Information and Replication Concepts > System Connections and Authorizations

3. Specify a configuration in SAP LT Replication Server, which contains the definition of the connections between:

- The source SAP CRM system and the SAP LT Replication Server
- The SAP LT Replication Server and the target SAP HANA database

For more information, see <http://help.sap.com/hana> ► SAP HANA ► SAP HANA Options ► SAP HANA Real-Time Replication ► SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server ► System Administration and Maintenance Information ► Accessing the Configuration and Monitoring Dashboard ►.

The name that you assign to your configuration will be also be used as the name of the database catalog schema that is automatically created on the target SAP HANA database. This is the schema to which you will replicate the tables from the source SAP CRM system.

Once you save the configuration, a schema GUID and a mass transfer ID are automatically created and assigned to the configuration. Furthermore, several dictionary tables are automatically replicated from your source system to your target SAP HANA database.

For more information, see <http://help.sap.com/hana> ► SAP HANA ► SAP HANA Options ► SAP HANA Real-Time Replication ► SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server ► System Administration and Maintenance Information ► Important Transactions and Control Tables ►.

4. Define client transformation rules for all the SAP CRM tables that you plan to replicate.
In most cases, you need to apply transformation rules to map the client of the source SAP CRM system to the client on the target SAP Customer Activity Repository system.

⚠ Caution

Transformation rules must be defined **prior** to replicating tables.

For more information, refer to one of the following:






- Set Up SAP Client section in the *Common Installation Guide*.
 - <http://help.sap.com/hana> ► SAP HANA ► SAP HANA Options ► SAP HANA Real-Time Replication ► SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server ► System Administration and Maintenance Information ► Important Transactions and Control Tables ► Data Transformation Capabilities within SAP Landscape Transformation Replication Server ►
 - SAP Note [1733714](#) ►
5. Specify which SAP ERP tables to replicate using information from one of the two following sources:
 - SAP Note [2538135](#) ►, for installations based on the SAP_ECC schema
 - SAP Note [2538187](#) ►, for installations based on the SAP_S4H schema

For more information, see:

- <http://help.sap.com/hana> ► Installation, Security, Configuration, and Operations Information ► Administrator's Guide ► Configuration Steps ► Replicate Data (Side-by-Side Only) ►
- <http://help.sap.com/hana> ► SAP HANA ► SAP HANA Options ► SAP HANA Real-Time Replication ► SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server ► System Administration and Maintenance Information ► Configuration Information and Replication Concepts ► (<Managing the Replication Process Using the SAP HANA Studio> and <Important Transactions and Control Tables>) ►

6. Map the authoring schema `SAP_CRM` to your particular physical database schema which contains the SAP CRM tables. If the physical database schema is already named `SAP_CRM`, this schema mapping is not required.


Authoring Schema	Physical Schema
<code>SAP_CRM</code>	<code><Name of Your Schema for Storing SAP_CRM Data></code>

For more information, see http://help.sap.com/hana_platform  *Development and Modeling*  *SAP HANA Modeling Guide*  *Importing Table Definitions and Data*  *Map Authoring Schema to the Physical Schema* .

i Note

Every time you make changes to the schema mapping, the SAP HANA content must be redeployed.

You can do this using one of two methods:

- Execute the `/CAR/ACTIVATE_HANA_CONTENT` report as described in SAP Note [2330386](#) .
- Manually redeploy only those SAP HANA objects which are impacted by your schema mapping change.

6.1.2.1.2 Replicate SAP Marketing Tables (Optional)

Use

In this optional procedure, you set up the replication of tables from your SAP Marketing source system. You only need to perform this procedure if you have a SAP Marketing system in your SAP Customer Activity Repository landscape and you are planning to use the standard SAP implementation of customer identification delivered with the SAP Customer Activity Repository.

Procedure

1. If you plan to implement SAP Marketing co-deployed with SAP Customer Activity Repository, the SAP Marketing tables will not be replicated because they already exist in the same SAP HANA database and the same database schema.

i Note

Client transformation is not possible without table replication, therefore a co-deployed scenario is only possible if the client numbers in the two back-end systems are identical.

For more information, see *Set Up SAP Client* section in the *Common Installation Guide*.

2. If you plan to implement SAP Marketing side-by-side with SAP Customer Activity Repository, do the following:
 1. Define client transformation rules for all the SAP Marketing tables that you plan to replicate.
In most cases, you need to apply transformation rules to map the client of the source SAP Marketing system to the client on the target SAP Customer Activity Repository system.

⚠ Caution

Transformation rules must be defined **prior** to replicating tables.

For more information, refer to one of the following:

- *Set Up SAP Client* section in the *Common Installation Guide*.
- <http://help.sap.com/hana> ► SAP HANA ► SAP HANA Options ► SAP HANA Real-Time Replication ► SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server ► System Administration and Maintenance Information ► Important Transactions and Control Tables ► Data Transformation Capabilities within SAP Landscape Transformation Replication Server ►
- SAP Note [1733714](#) ►
- 2. Specify which SAP ERP tables to replicate using information from one of the two following sources:
 - SAP Note [2538135](#) ►, for installations based on the SAP_ECC schema
 - SAP Note [2538187](#) ►, for installations based on the SAP_S4H schema

For more information, see:

- <http://help.sap.com/hana> ► Installation, Security, Configuration, and Operations Information ► Administrator's Guide ► Configuration Steps ► Replicate Data (Side-by-Side Only) ►
- <http://help.sap.com/hana> ► SAP HANA ► SAP HANA Options ► SAP HANA Real-Time Replication ► SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server ► System Administration and Maintenance Information ► Configuration Information and Replication Concepts ► (<Managing the Replication Process Using the SAP HANA Studio> and <Important Transactions and Control Tables>) ►
- 3. Regardless of whether you implement SAP Marketing co-deployed or side-by-side with SAP Customer Activity Repository, map the authoring schema SAP_CUAN to your particular physical database schema that contains the SAP CRM tables. If the physical database schema is already named SAP_CUAN, this schema mapping is not required.

Authoring Schema	Physical Schema
SAP_CUAN	<Name of Your Schema for Storing SAP Marketing Data>

For more information, see http://help.sap.com/hana_platform ► Development and Modeling ► SAP HANA Modeling Guide ► Importing Table Definitions and Data ► Map Authoring Schema to the Physical Schema ►.

i Note

Every time you make changes to the schema mapping, the SAP HANA content must be redeployed.

You can do this using one of two methods:

- Execute the `/CAR/ACTIVATE_HANA_CONTENT` report as described in SAP Note [2330386](#).
- Manually redeploy only those SAP HANA objects that are impacted by your schema mapping change.

Side-by-Side Scenario (SLT)

1. Define client transformation rules for all the SAP Marketing tables that you plan to replicate.
In most cases, you need to apply transformation rules to map the client of the source SAP Marketing system to the client on the target SAP Customer Activity Repository system.

⚠ Caution

Transformation rules must be defined **prior** to replicating tables.

For more information, refer to one of the following:

- *Set Up SAP Client* section in the *Common Installation Guide*.
 - <http://help.sap.com/hana> ► *SAP HANA* ► *SAP HANA Options* ► *SAP HANA Real-Time Replication* ► *SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server* ► *System Administration and Maintenance Information* ► *Important Transactions and Control Tables* ► *Data Transformation Capabilities within SAP Landscape Transformation Replication Server* ►
 - SAP Note [1733714](#).
2. Read SAP Note [1897025](#) and replicate the tables listed in the `.txt` file attached to this SAP Note.
For more information, see <http://help.sap.com/hana> ► *SAP HANA* ► *SAP HANA Options* ► *SAP HANA Real-Time Replication* ► *SAP HANA Trigger-Based Data Replication Using SAP LT Replication Server* ► *System Administration and Maintenance Information* ►.

6.1.2.2 Configure SAP Smart Business for Multichannel Sales Analytics

The steps in this section are optional and depend on your specific implementation requirements.

6.1.2.2.1 Configure SAP Web Dispatcher for the SAP Smart Business Modeler Apps

SAP Web Dispatcher lies between the Internet and your SAP system. It is the entry point for HTTP(s) requests into your system. As a “software web switch”, SAP Web Dispatcher can reject or accept connections. It contributes to security and also balances the load in your SAP system.

Where to Find Configuration Information

To find the SAP Web Dispatcher information for your SAP NetWeaver release, see the following:

- Central SAP Web Dispatcher note: [908097](#)  *SAP Web Dispatcher: Release, Installation, Patches, Documentation*
- Product documentation: https://help.sap.com/viewer/p/SAP_NETWEAVER. Choose your SAP NetWeaver Platform and select the support package stack at the top right.
For configuration information, search for “Administration of the SAP Web Dispatcher”.
For a configuration example, search for “SAP Web Dispatcher Configuration Reference”.
For architecture information, search for “Architecture and Functions of the SAP Web Dispatcher”.

How to Configure SAP Web Dispatcher for the SAP Smart Business Modeler Apps

The following parameters values are required:

- Source master data system: SAP ECC
Parameter `wdisp/system_542` requires the following URL: `/sap/is/retail/car/mcsa/odata`
Resulting setting: `wdisp/system_542 /sap/is/retail/car/mcsa/odata`
- Source master data system: SAP S/4HANA
Parameter `wdisp/system_542` requires the following URL: `/sap/is/retail/car_s4h/mcsa/odata`
Resulting setting: `wdisp/system_542 /sap/is/retail/car_s4h/mcsa/odata`

Other Solutions

If you use any other reverse proxy, see the manufacturer's documentation for more information.

6.1.2.3 Configure SAP NetWeaver Gateway

6.1.2.3.1 Connect SAP Gateway to Your Back-End System

Set up the connection between SAP Gateway on your front-end server and your back-end system. In other words, set up the OData Channel (ODC).

Use

The steps are not specific to this guide and are described in the product documentation for your SAP NetWeaver version.

Procedure

1. Determine the SAP NetWeaver version on your front-end server.
2. Set up the OData Channel as described in the product documentation for your SAP NetWeaver version. For SAP Gateway for SAP NetWeaver 7.52, see https://help.sap.com/viewer/p/SAP_NETWEAVER_AS_ABAP_752 ► <Version> ► Application Help ► SAP Gateway Foundation (SAP_GWFND) ► SAP Gateway Foundation Configuration Guide ► SAP Gateway Configuration ► User, Developer, and Administrator Roles ► and Connection Settings for the SAP Gateway Hub System.
3. Set up the required roles on the front-end server and assign your user to these roles.
4. Specify the connection settings on the SAP Gateway hub system. They include:
 - Connection from SAP Gateway to consumer systems
These settings allow you to connect the SAP Gateway host to the consumer systems (clients from which you access the SAP Fiori apps).
 - Connection from SAP Gateway to SAP back-end system
These settings allow you to connect SAP Gateway to your back-end system. They include the following steps:
 - Creating a type 3 connection from the SAP Gateway host to your back-end system
 - Defining a trust relationship between your back-end system and the SAP Gateway host
 - Configuring your back-end system to accept SAP assertion tickets from the SAP Gateway host
 - Configuring your SAP Gateway host to accept SAP assertion tickets from your back-end system
 - Configuring the necessary system aliases

6.1.2.3.2 Activate SAP Gateway

Before you can use SAP Gateway, you must activate it globally on your front-end server.

Use

The steps are not specific to this guide and are described in the product documentation for your SAP NetWeaver version.

Procedure

1. Determine the SAP NetWeaver version on your front-end server.
2. Carry out the instructions specific to your SAP NetWeaver version:
For SAP Gateway for SAP NetWeaver 7.52, see https://help.sap.com/viewer/p/SAP_NETWEAVER_AS_ABAP_752 ► <Version> ► Application Help ► SAP Gateway Foundation (SAP_GWFND) ► SAP Gateway Foundation Configuration Guide ► SAP Gateway Configuration ► Activating SAP Gateway ►.

6.1.2.3.3 Verify that OData Services are Active

First verify that all the common OData services for SAP Fiori are active. Then verify that the OData services for your specific application and SAP Fiori apps are active as well.

Context

For security reasons, the OData services are delivered in an inactive state:

- The **common OData services** are delivered as part of the SAP Fiori front-end server. They are required for the SAP Fiori launchpad and you must always activate them.
- The **application-specific OData services** are delivered with SAP Customer Activity Repository applications bundle. You only need to activate the services that are relevant for your application.

Procedures

Mandatory: Verify that Common OData Services for SAP Fiori are Active

1. Log on to your front-end server (your SAP Gateway system).

2. In transaction **SFPRO**, navigate to **SAP Reference IMG** > **SAP NetWeaver** > **SAP Gateway** > **OData Channel** > **Administration** > **General Settings** > **Activate and Maintain Services** and execute the Customizing activity.

→ Tip

As a quick shortcut to the same screen, use transaction `/n/IWFND/MAINT_SERVICE`.

The **Service Catalog** shows you all the services that are currently active in your SAP Gateway system.

3. Verify that all the common OData services for SAP Fiori are active:

Common OData Services for SAP Fiori

`/UI2/PAGE_BUILDER_CONF`

`/UI2/PAGE_BUILDER_CUST`

`/UI2/PAGE_BUILDER_PERS`

`/UI2/TRANSPORT`

`/UI2/INTEROP`

If a service is not active, activate it as follows:

1. Choose **Add Service**.
The **Add Selected Services** screen is displayed.
1. In **System Alias**, select the alias of your local back-end system.
This is the alias that you have created in **Connect SAP Gateway to your Back-End System** [page 88].
For example, `LOCAL`.
2. In **Technical Service Name**, specify `/UI2*`.
3. Choose **Get Services** (or press `ENTER`).
4. Choose **Add Selected Services** and follow the instructions.

Result

The common OData services are now active in your SAP Gateway system.

Verify that Application-Specific OData Services for SAP Customer Activity Repository applications bundle are Active

1. Log on to your front-end server (your SAP Gateway system).
2. In transaction **SFPRO**, navigate to **SAP Reference IMG** > **SAP NetWeaver** > **SAP Gateway** > **OData Channel** > **Administration** > **General Settings** > **Activate and Maintain Services** and execute the Customizing activity.

→ Tip

As a quick shortcut to the same screen, use transaction `/n/IWFND/MAINT_SERVICE`.

The **Service Catalog** shows you all the services that are currently active in your SAP Gateway.

3. Activate the services that are required for your application:
 1. Choose **Add Service**.

The *Add Selected Services* screen is displayed.

2. In *System Alias*, select the alias of your back-end system.
 3. Choose *Get Services* (or press ENTER).
- The available services are displayed.

4. Use the following table for reference and verify that the services for your application are active:

For this Application...	Activate These OData services...
SAP Customer Activity Repository	<ul style="list-style-type: none"> ○ For POS Data Transfer and Audit: none ○ For Multichannel Transaction Data Management: none ○ For Unified Demand Forecast and the demand planning apps (<i>Analyze Forecast, Adjust Forecast, Manage Demand Influencing Factors</i>): <ul style="list-style-type: none"> ○ /DMF/OD_FC_TIME_SERIES_VIZ_SRV ○ /DMF/DEMAND_PLAN_UTILITIES_SRV ○ /DPL/OD_ADJUST_FORECAST_SRV ○ For Demand Data Foundation (optional, alternative to the DRF data replication framework for importing master data): <ul style="list-style-type: none"> ○ /DMF/API_DOCUMENT ○ /DMF/API_GENERIC_TIME_SERIES ○ /DMF/API_INVENTORY ○ /DMF/API_LOCATION ○ /DMF/API_LOCATION_HIERARCHY ○ /DMF/API_PRODUCT ○ /DMF/API_PRODUCT_HIERARCHY ○ /DMF/API_PRODUCT_LOCATION ○ /DMF/API_SALES_HISTORY ○ /DMF/API_TRANSPORTATION_LANE ○ /DMF/API_ATTRIBUTES ○ /DMF/API_IMAGES ○ /DMF/API_MERCHANDISE_PLAN_KPI ○ /DMF/API_PHPS ○ For the <i>Manage Product Attributes</i> app: <ul style="list-style-type: none"> /DMF/API_ATTRIBUTES_SRV (optional, to import external attributes) ○ For Omnichannel Promotion Pricing: none ○ For Omnichannel Article Availability and Sourcing (part of Inventory Visibility): <ul style="list-style-type: none"> ○ With SAP S/4HANA back-end: <ul style="list-style-type: none"> /OAA/F3391_MSN_SRV (new with SAP Customer Activity Repository) /OAA/F2586_MSS_SRV /OAA/F2659_MSC_SRV /OAA/F3392_MS_SRV (new with SAP Customer Activity Repository) ○ With SAP Retail back-end: <ul style="list-style-type: none"> /OAA/F2530_MSN_SRV /OAA/F2586_MSS_SRV /OAA/F2659_MSC_SRV /OAA/F3003_MS_SRV ○ For On-Shelf Availability: <ul style="list-style-type: none"> /OSA/ON_SHELF_AVAILABILITY ○ For SAP Smart Business for Multichannel Sales Analytics: none
Distribution Curves	/DMF/DIST_CURVE

For this Application...	Activate These OData services...
SAP Allocation Management	<ul style="list-style-type: none"> ◦ /AMR/OD_ALLOCATIONPLAN_SRV ◦ /AMR/OD_COMMON_SRV ◦ /AMR/OD_MARKETUNIT_SRV ◦ /AMR/OD_PARAM_SRV ◦ /AMR/OD_WORKLOAD_SRV ◦ /AMR/OD_PRODUCT_FLOW_SRV ◦ /AMR/OD_KPI_CONFIG_SRV ◦ /AMR/OD_ALLOCATIONRESULT_SRV ◦ /AMR/OD_BASKET_SRV ◦ /AMR/OD_ALLOCATIONPLAN_SEARCH_SRV
SAP Assortment Planning	<ul style="list-style-type: none"> ◦ /DMF/CURRENCY_LIST_SRV ◦ /DMF/LOCATION_CLUSTERSET_SRV ◦ /DMF/MASTER_DATA_SRV ◦ /DMF/MODULE_MANAGEMENT_SRV ◦ /DMF/OBJ_ATTRIBUTE_SRV ◦ /DMF/PLAN_CONFIG_SRV ◦ /DMF/SEARCH_LOCATIONS_SRV ◦ /DMF/SEARCH_PRODUCTS_SRV ◦ /DMF/SEASONS_SRV ◦ /RAP/ASSORTMENT_LIST_SRV ◦ /RAP/OPTION_PLAN_SRV ◦ /RAP/PHP_MATCH_SRV ◦ /RAP/VALIDITY_PERIOD_SRV ◦ /RAP/V_OP_KPI_Q_CDS_CDS ◦ /RAP/OPT_PLN_KPI_SRV ◦ /RAP/V_OP_OCLST_PRSL_Q_CDS_CDS
SAP Merchandise Planning	Not applicable (this application has no SAP Fiori apps)
SAP Promotion Management	<ul style="list-style-type: none"> ◦ /DMF/PROD_MD_SRV (Master Data Retrieval) ◦ /DMF/OFFER_MANAGEMENT_V2_SRV (Manage Promotional Offers) ◦ /DMF/PRODUCT_GROUP_SRV (Manage Product Groups) ◦ /DMF/LOCATION_SUBGROUP_SRV (Manage Location Subgroups) ◦ /PRM/OFFER_CONTENT_SRV (Offer Content Assignment)

4. If a required service is not active, select it and choose [Add Selected Services](#). Follow the instructions.

Note

User roles are only needed if you want to have connections to multiple back-end systems or multiple clients on the same back-end. The user roles are system-specific and are not delivered by default. If required, you must create them manually. If you define multiple user roles for different connections, make sure you have only one role assigned to your user at any time. If you need to change roles, first remove the old role from your user, then assign the new role.

Result

The services that you have selected for your application are now active in SAP Gateway.

Parent topic: [Core \(Mandatory for All Applications\) \[page 64\]](#)

Previous task: [Verify that SAP HANA Script Server Is Active \[page 76\]](#)

Next: [Configure Calculation of SAPUI5 Application Index \[page 81\]](#)

6.1.2.4 Adjust Totals When Excluding Post-Voided Transactions

This activity is relevant for the POS Data Transfer & Audit component.

If you have existing transactional data prior to this upgrade, you must run transaction `/POS DW/REFI` against all relevant stores and posting dates in order to adjust displayed totals when post-voided transactions are filtered out of search results.

⚠ Caution

This process is time- and performance-intensive. SAP recommends that the moment of execution be chosen wisely.

6.1.2.5 Configure On-Shelf Availability

Configure the On-Shelf Availability (OSA) module in SAP Customer Activity Repository. All steps are **optional** and depend on your implementation scenario.

i Note

The configuration of OSA is **mandatory** if you want to generate intraday forecasts. For information about this feature, see <https://help.sap.com/viewer/p/CARAB> ► *<Version>* ► *Application Help* ► *SAP Customer Activity Repository* ► *Unified Demand Forecast* ► *General Services* ► *Generate Intraday Forecasts* ►.

i Note

If you encounter any issues when upgrading OSA, see [Troubleshooting \[page 152\]](#) for a possible solution.

6.1.2.5.1 Generate Run IDs for OSA Processing Steps

Use

Each scheduled run of a processing step of On-Shelf Availability (OSA) has a generated run ID. This is the unique identification for a job.

The run ID is used to distinguish several runs within one period. Each processing step has its own ID generator:

Processing Step	Transaction for the ID Generator
Intraweek Pattern	<code>/OSA/NR_IWP</code>
Estimation	<code>/OSA/NR_EST</code>
Monitoring	<code>/OSA/NR_MON</code>
Analysis	<code>/OSA/NR_ANA</code>

For each of the four ID generator transactions, you must define the range of run IDs.

Procedure

Do the following steps for each transaction:

1. Log on to your back-end system.
2. Execute the transaction by specifying either `/n<transaction>` or `/o<transaction>`.
Example for the first transaction: `/n/OSA/NR_IWP`
3. Choose *Intervals* in change mode.
4. In the first row of the table, enter the following values for the following fields:
 - Field *No*: `01`
 - Field *From No.*: `0000000000000001`
 - Field *To Number*: `9999999999999999`
5. Save your changes.

6.1.2.5.2 Check Field Contents in SAP HANA Content for On-Shelf Availability

Use

There are two OSA-specific SAP HANA views that can be customized:

- `AN_TRANSACTION`

- PROMOTION_TRANS

You must check if the fields in these views contain the mappings or formulas you need.

⚠ Caution

If you need to modify a view, be aware that a new installation will rewrite the modifications. It is therefore recommended to back up the modified views.

Procedure

To change the mapping or the formula of a field, do these steps:

1. Define the data foundation that is the source for the view, that is, the table `/POSDW/TLOGF`.
2. Define filters for the view.
3. Map the fields from source to target.
4. Create measures and calculation fields.

For more information, see the documentation under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM

► <Version> ► Development ►.

Definitions for a View (Using the AN_TRANSACTION View as an Example)

The following definitions are set by default for the AN_TRANSACTION view:

- The source of the view is the table `/POSDW/TLOGF`.
- Examples of filters for the views:
 - `RECORDQUALIFIER = '5'`: Only sales records are used.
 - `DATASTATUS in ('2' , '3')`: Only those records are used that passed the SAP Customer Activity Repository validation.
 - `RETAILQUANTITY > 0.0`: Negative quantities are not used by On-Shelf Availability.
 - `VOIDEDLINE = ''`: Canceled transactions are not used by On-Shelf Availability.
- Examples of fields mappings:
 - `MANDT`: Client ID. This field is mapped to the `MANDT` column of the `/POSDW/TLOGF` table.
 - `STORE_ID`: Store ID. This field is mapped to the `RETAILSTOREID` column of the `/POSDW/TLOGF` table.
 - `BUSINESSDAYDATE`: Business day. This field is mapped to the `BUSINESSDAYDATE` column of the `/POSDW/TLOGF` table.
- Examples of measures:
 - `RETAILQUANTITY`: Amount of units sold. Refers to the `SALESUOM` (Sales Unit of Measure) field that is also defined in the `/POSDW/TLOGF` table. Contains the value of the `RETAILQUANTITY` field.
 - `PRICE`: Price specified in the store currency. Contains the value of the `ACTUALUNITPRICE` field.
- Examples of calculated fields:
 - `TRANS_TIME_DBL`: Value of the `TRANS_TIME` output field of type `DOUBLE`. The format of the transaction time that is stored in `BEGINTIMESTAMP` and `ENDTIMESTAMP` is `<YYYYMMDDhhmmss>`.
 - `DISCOUNT`: Total relative discount applied on the item.
Calculated as $(ITEMDISC + DISTDISC) / (RETAILQUANTITY * ACTUALUNITPRICE)$. If the price is not a positive number, 0 is returned.

Definitions:

- DISTDISC: global discount on the whole purchase; currently not used.
- ITEMDISC: item-specific discount; currently used.

6.1.2.6 Complete UDF Setup

Set up the Unified Demand Forecast (UDF) module in SAP Customer Activity Repository to enable demand modeling and forecasting. The steps in this section are optional and depend on the scenario that you wish to implement.

Use

UDF supports the following scenarios:

Scenario	Set Up and Configure UDF
Demand planning apps in SAP Customer Activity Repository (Analyze Forecast , Adjust Forecast , Manage Demand Influencing Factors)	Mandatory
SAP Promotion Management	Mandatory (for what-if forecasts) Optional (without what-if forecasts)
SAP Allocation Management	Mandatory (if associated with your scenario)
SAP Assortment Planning	
SAP Merchandise Planning	

Procedure

i Note

If you encounter issues during the setup, see the [Troubleshooting \[page 152\]](#) section for possible solutions.

Perform Mandatory Setup Steps

1. Only relevant if you are upgrading **from a release prior to** SAP Customer Activity Repository 3.0 FP1 (released as part of SAP Customer Activity Repository applications bundle 2.0 SPS2):
Read SAP Note [2449880](#) to decide whether you need to implement the redesigned Customizing for modeling and forecasting.
2. Log on to your ABAP back-end system.

3. In transaction **SPRO**, do the Customizing for UDF that you need for your scenario:

i Note

For more information about the following Customizing activities, see the accompanying system documentation.

What to do...	Your scenario is...	Customizing
Define the time series source with historical demand data that you wish to import to DDF.	All scenarios	▶ Cross-Application Components > Demand Data Foundation > Imported Data > Time Series > Define Time Series for Key Figure Configuration >
	You want to generate what-if forecasts in SAP Promotion Management.	Additionally, configure the following activity for this scenario: ▶ Cross-Application Components > Demand Data Foundation > Data Maintenance > Define Time Series Source >
Define general settings for modeling and forecasting.	All scenarios	Activities under ▶ Cross-Application Components > Demand Data Foundation > Modeling and Forecasting >

4. Check and, if necessary, change the default setting for how the covariance matrix is generated during modeling.
 1. Navigate to [▶ Cross-Application Components](#) > [Demand Data Foundation](#) > [Modeling and Forecasting](#) > [Define Modeling Control Settings](#) >.
 2. Execute the Customizing activity and choose [New Entries](#).
 3. Configure the MOD_COV_REDUCED parameter to generate either the “full” or the “reduced” covariance matrix:

Your scenario is...	What to do...
<ul style="list-style-type: none"> ○ You want to calculate hierarchical priors (HPRs). ○ You want to use SAP Promotion Management, but without generating the forecast confidence index (FCI). ○ You do not want to use SAP Promotion Management. 	<p>The reduced covariance matrix is sufficient for those scenarios and also saves runtime.</p> <p>Enable the MOD_COV_REDUCED parameter:</p> <p>Enter the parameter name under Configuration Type Code and set the Value to X to override the default.</p> <p>Make the other settings as required and save your changes.</p>

Your scenario is...	What to do...
You want to generate the FCI in SAP Promotion Management.	<p>The full covariance matrix is mandatory for the FCI.</p> <p>No additional configuration is required (the <code>MOD_COV_REDUCED</code> parameter is disabled by default, which is correct for this scenario).</p> <p>Be aware that the generation of the full covariance matrix is performance-intensive.</p>

Note

To calculate either the full or the reduced covariance matrix, the `MOD_OUTPUT_COV` parameter must be enabled. As it is enabled by default, no additional configuration is required unless you have previously disabled the parameter for a different scenario.

- Configure the modeling and forecasting features that you wish to use in your scenario.
See the *Configuring Unified Demand Forecast (UDF)* section of the *SAP Customer Activity Repository Administration Guide*.

Perform Optional Setup Steps

You have the following additional options:

- Implement the following SAP Note(s) if relevant for your scenario:
 - [2161484](#): Information about an ABAP report that you can use to validate the input data for modeling and forecasting and identify potential issues
 - [2560853](#): This note is relevant if you are upgrading from a release prior to SAP Customer Activity Repository applications bundle 2.0 SPS03 (SAP Customer Activity Repository 3.0 FP2) and have existing data in the modeling and forecast tables. The note explains how to update the time granularity entries in UDF output tables to prevent modeling and forecasting issues.
- Set up table partitioning for your scenario.
See the *Partition Tables for UDF and DDF* section of the *SAP Customer Activity Repository Administration Guide*.
- Set up the demand planning apps (*Analyze Forecast*, *Adjust Forecast*, *Manage Demand Influencing Factors*).
See [Set Up Standalone SAP Fiori Apps for SAP Customer Activity Repository \[page 100\]](#).

More Information

For integration information for UDF and DDF, see the *Introduction to SAP Customer Activity Repository* section of the *SAP Customer Activity Repository Administration Guide*.

6.1.2.7 Set Up Standalone SAP Fiori Apps for SAP Customer Activity Repository

Check that the prerequisites are fulfilled and prepare the system landscape for the standalone apps included in SAP Customer Activity Repository.

Note

Depending on your scenario, some prerequisites might already be available in your system landscape.

General Prerequisites

- **Front-end server:** You have installed the required version of SAP FIORI FRONT-END SERVER. For version information, see [Upgrade the Prerequisites \[page 16\]](#) under [Common Prerequisites > SAP Fiori](#).
- **SAP Fiori launchpad:** You have set up the launchpad as described in the *Common Installation Guide*, section *Configure SAP Fiori Launchpad*.
- **SAP Fiori launchpad designer:** You have set up the designer as described for the SAP NetWeaver version on your front-end server. See https://help.sap.com/viewer/p/SAP_NETWEAVER [SAP NetWeaver Platform > <Version> > Application Help > UI Technologies in SAP NetWeaver > SAP Fiori Launchpad > Setting up the Launchpad](#) and *Using the Launchpad Designer*.
For some apps, app-specific settings will be required in the designer.
- **SAP Gateway:** You have done the general SAP Gateway configuration and you have activated the central OData services and Internet Communication Framework (ICF) services. See the following:
 - *Common Installation Guide*, section *Configure SAP Gateway*, including all subsections
 - SAP Note [1560585](#) (SAP Gateway 2.0 Release Note)

Prerequisites Specific to SAP Customer Activity Repository applications bundle

1. You have upgraded to the SAP RTL AFL FOR SAP HANA component for the current release. See [Download and Install the Application Function Library \(SAP RTL AFL FOR SAP HANA\) \[page 45\]](#).
2. You have upgraded the back-end product version. This step ensures that all app features of the current release are supported by the back-end. See [Upgrade SAP Customer Activity Repository applications bundle \(Back-End Product Version\) \[page 48\]](#).
3. You have upgraded the front-end product version. This step ensures that you get the newest app UI on the front-end. See [Upgrade Product-Specific SAP Fiori UI Component \(Front-End Product Version\) \[page 50\]](#).
4. You have implemented all the mandatory SAP Notes for the apps that you wish to set up. See [Implement SAP Notes for the Upgrade \[page 24\]](#) and consult the release information notes (RINs) mentioned there as well as the table for SAP Customer Activity Repository.
5. You have performed all mandatory setup steps for SAP Customer Activity Repository. For example, this includes activating the OData services for the apps or calculating the SAPUI5 application index. For a complete list of the steps, see [Core \(Mandatory for All Applications\) \[page 64\]](#).

6. You have set up the system connections:
 - You have set up dedicated RFC connections between your front-end system and your back-end system, and between your front-end system and your source master data system.
 - You have defined a system alias for your back-end system.

⚠ Caution

You must set the back-end system client to the same value for the SAP Gateway OData services (via the system alias and the RFC connection) and the SAP HANA services (via the `bk-client` parameter in the SAP Fiori launchpad designer). Otherwise, the apps will not work correctly.

7. For the demand planning apps (*Analyze Forecast*, *Adjust Forecast*, *Manage Demand Influencing Factors*): You have set up the Unified Demand Forecast (UDF) module as the forecasting engine in the back-end. You must at least complete the mandatory setup steps. See [Complete UDF Setup \[page 97\]](#).
8. Only for *Analyze Forecast*:
 - **SAP Web Dispatcher:** You have configured the dispatcher and set up the routing rules for browser requests as described in section [Configuring SAP Web Dispatcher](#).

i Note

If you encounter issues during the setup, see the following sections for possible solutions:

- Central SAP Note for SAP Web Dispatcher: [908097](#) (SAP Web Dispatcher: Release, Installation, Patches, Documentation)
 - [SAP Help Portal for SAP NetWeaver](#): Choose your SAP NetWeaver Platform and select your support package stack at the top right. Search for “Architecture and Functions of the SAP Web Dispatcher” and “Administration of the SAP Web Dispatcher”.
 - If you use any other reverse proxy, see the manufacturer's documentation for more information.
- **SAP Fiori system landscape with SAP HANA Extended Application Services, classic model:** You have set up the system landscape as described in https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION ► Version: SAP NW 7.40 4.0 ► Installation and Upgrade ► Setup of SAP Fiori System Landscape ► Setup of SAP Fiori System Landscape with SAP HANA XS.
- For system landscape diagrams, see https://help.sap.com/viewer/p/SAP_FIORI ► Implementation Information for SAP Fiori for SAP Business Suite ► Setup of SAP Fiori System Landscape for SAP Business Suite ► SAP Fiori for SAP Business Suite: Implementation Information ► Setup of SAP Fiori System Landscape for SAP Business Suite with SAP HANA XS.

Result

After you have prepared the system landscape in this way, you can now set up the apps that you wish to use.

[Set Up the Analyze Forecast App \(Upgrade Scenarios\) \[page 102\]](#)

Upgrade *Analyze Forecast* to the current release. Depending on the release that you wish to **upgrade from**, different steps are required on the back-end server and the front-end server.

[Set Up the Adjust Forecast App \(Upgrade Scenarios\) \[page 107\]](#)

Perform several tasks on the front-end server and the back-end server to set up the *Adjust Forecast* app.

[Set Up the Manage Demand Influencing Factors App \(Upgrade Scenarios\) \[page 113\]](#)

Perform several tasks on the front-end server and the back-end server to set up the *Manage Demand Influencing Factors* app.

[Set Up the Manage Product Attributes App \[page 117\]](#)

Perform several tasks on the front-end server and the back-end server to set up the *Manage Product Attributes* app. This transactional app is delivered with SAP Customer Activity Repository and supports different scenarios and consuming applications (such as SAP Allocation Management and SAP Assortment Planning). The app enables planning administrators to create, configure, assign, and maintain product attributes for a selected product hierarchy.

[Set Up Additional Standalone Apps Included in SAP Customer Activity Repository \[page 120\]](#)

In addition to the apps described in this guide, SAP Customer Activity Repository includes additional apps that support different scenarios and consuming applications.

6.1.2.7.1 Set Up the Analyze Forecast App (Upgrade Scenarios)

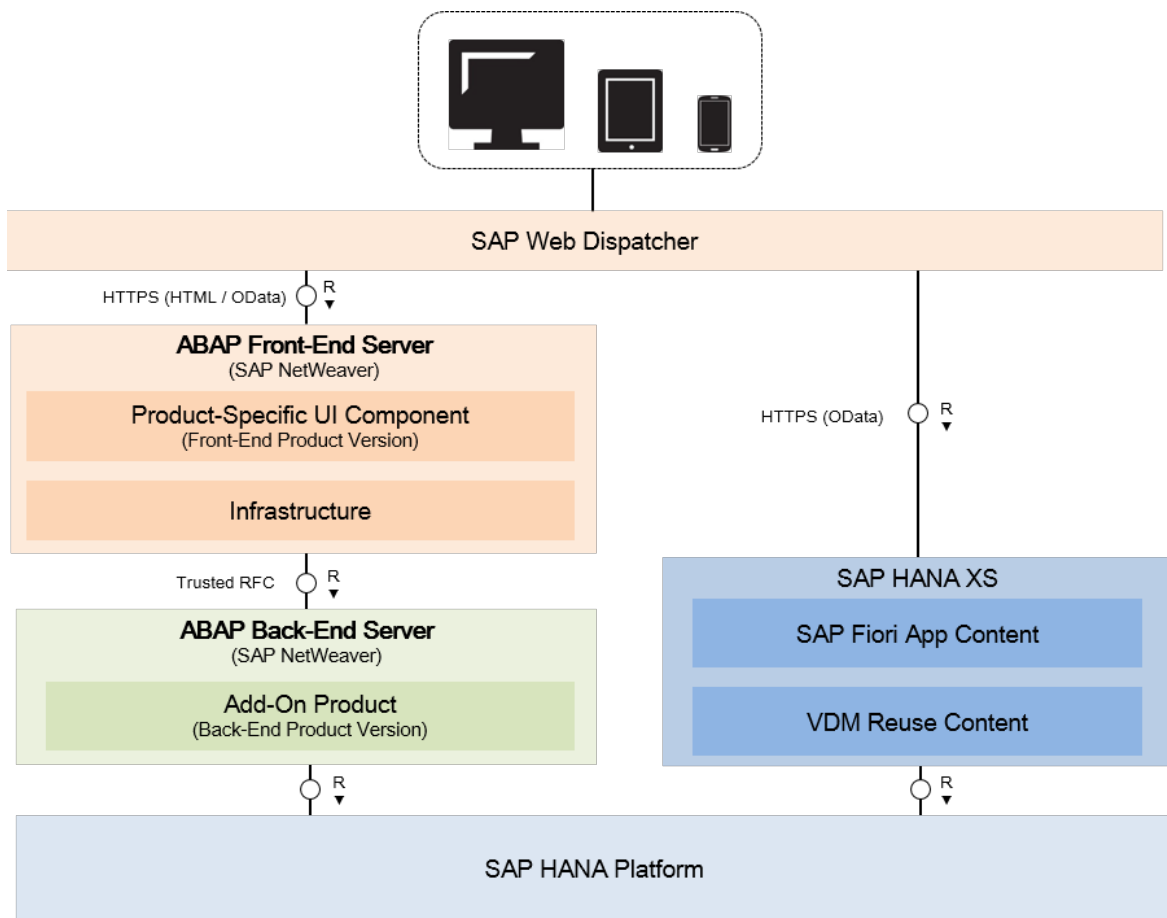
Upgrade *Analyze Forecast* to the current release. Depending on the release that you wish to **upgrade from**, different steps are required on the back-end server and the front-end server.

Prerequisites

- You are aware that the technical setup for *Analyze Forecast* (app ID: F1773A) differs in some points from that of the other apps:
 - The app requires **SAP Web Dispatcher**.
 - The app does not use SAP HANA XSA (SAP HANA Extended Application Services, advanced model). Instead, it requires SAP HANA XS Classic (SAP HANA Extended Application Services, classic model).

i Note

The SAP HANA Extended Application Services are a layer on top of the SAP HANA database. This layer provides the platform for running SAP HANA-based Web applications.



System Landscape Example with SAP Web Dispatcher and SAP HANA XS

- You are aware of the implementation information for the app in the SAP Fiori apps reference library: For the latest delivery (latest wave), see <https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/index.html?appId=F1773A>.

Upgrade Scenarios

The following scenarios require a new setup of the app:

Scenario 1: Upgrade from SAP FIORI FOR SAP CARAB 1.0 SP04 (Delivery Date 12/2015)

In this scenario, your existing version of the app was delivered via the following:

- Front-end product version: SAP FIORI FOR SAP CARAB 1.0 SP04
- Software component: UISCAR01 100
- Technical name / SAPUI5 application: UDF_ANALYZFCST

Scenario 2: Upgrade from SAP FIORI FOR SAP CARAB 2.0 (Any Version; Delivery Date of Initial Shipment Stack 06/2016)

In this scenario, your existing version of the app was delivered via the following:

- Front-end product version: SAP FIORI FOR SAP CARAB 2.0 SPxx

- Software component: UICAR001 100
- Technical name / SAPUI5 application: ANALYZFCST_V2

Scenario 3: Upgrade from SAP FIORI FOR SAP CARAB 3.0 (Any Version; Delivery Date of Initial Shipment Stack 11/2016)

In this scenario, your existing version of the app was delivered via the following:

- Front-end product version: SAP FIORI FOR SAP CARAB 3.0 SPxx
- Software component: UICAR001 200
- Technical name / SAPUI5 application: ANALYZFCST_V2

The following scenario requires only specific upgrade steps:

Scenario 4: Upgrade from SAP FIORI FOR SAP CARAB 4.0 Initial Shipment Stack (Delivery Date 10/2018)

In this scenario, your existing version of the app was delivered via the following:

- Front-end product version: SAP FIORI FOR SAP CARAB 4.0 Initial Shipment Stack
- Software component: UICAR001 400
- Technical name / SAPUI5 application: ANALYZFCST_V2

Scenarios 1, 2, 3: Upgrade Steps

Set up the app as described in the following sections of the *Common Installation Guide* under <https://help.sap.com/viewer/p/CARAB> ► <Version> ► *Installation and Upgrade* ►:

1. To check the prerequisites and prepare the system landscape, see section [Set Up Standalone SAP Fiori Apps for SAP Customer Activity Repository \[page 100\]](#) *Set Up Standalone Apps for SAP Customer Activity Repository*.

i Note

Depending on your upgrade scenario, some of the required components might already be installed and configured in your system landscape (such as the SAP Fiori front-end server or the SAP Web Dispatcher).

2. To perform the app-specific setup, see the *Set Up the Analyze Forecast App* section of the *Common Installation Guide*.

Scenario 4: Upgrade Steps

i Note

Depending on your scenario, you may already have performed some of the following steps.

→ Tip

If you encounter issues during the upgrade, see the [Troubleshooting \[page 152\]](#) section for possible solutions.

As an alternative solution, do a new setup of the app. See the *Set Up the Analyze Forecast App* section of the *Common Installation Guide*.

1. **Verify that the general and the specific prerequisites are fulfilled so that the system landscape is prepared.**
See [Set Up Standalone SAP Fiori Apps for SAP Customer Activity Repository \[page 100\]](#).
2. **Complete the setup on the front-end server.**
 1. Log on to your front-end server and execute transaction **LPD_CUST**.
 2. Choose **UICAR001 TRANSACTIONAL > AnalyzeForecast >** and verify that the app-specific Internet Communication Framework (ICF) services are active:
 - `/sap/bc/bsp/sap/analyzfcst_v2`
 - `/sap/bc/lrep`
 - `/sap/bc/ui5_ui5/sap/analyzfcst_v2`
 - `/sap/bc/bsp/sap/udfreuse`
 - `/sap/bc/ui5_ui5/sap/udfreuse`If a service is not active, activate it as follows:
 1. Execute transaction **SICF**.
 2. As *Service Path*, specify the **<service path/service name>** and execute the search.
 3. As *Virtual Hosts / Services*, select the `analyzfcst_v2` entry and choose **Service/Host > Activate >**.
3. **Complete the setup on the back-end server.**
 1. Log on to the back-end server and execute transaction **PFCG** to open the *Role Maintenance* screen.
 2. Choose **Role > Create > Role >**.
 3. Check if the now obsolete role `/DPL/FCC` is still listed. If so, delete it.
 4. Copy the provided standard role `/DMF/DPL` and enter a name from the customer namespace.

i Note

`/DMF/DPL` is the back-end server authorization role. It is also required if you wish to set up the cross-navigation from the *Analyze Forecast* app to the *Adjust Forecast* app.

5. Adjust the copied role as needed for your scenario. If you need more information on adjusting standard roles, see section [Changing Standard Roles](#) in *User and Role Administration of Application Server ABAP*.
6. Save your changes.

→ Tip

If you already have an SAP Fiori launchpad open, clear your browser cache to apply all the changes.

Optional Setup Steps

If relevant for your scenario, implement any of the following options:

- **Single Sign-On (SSO):** If you haven't already done so, set up SSO between the front-end server and the back-end server.
For available SSO mechanisms depending on the system landscape, see:
 - https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION > <Version> > SAP Fiori: Security > User Authentication and Single Sign-On (SSO) >
 - https://help.sap.com/viewer/p/SAP_HANA_PLATFORM > <Version> > Security > SAP HANA Security Guide > SAP HANA Authentication and Single Sign-On > Single Sign-On Integration >For information on how to set up SSO for SAP HANA XS in particular, see https://help.sap.com/viewer/p/SAP_HANA_PLATFORM > <Version> > Administration > SAP HANA Administration Guide > Application Run-Time Services > Maintaining the SAP HANA XS Classic Model Run Time > Maintaining Single Sign-On for SAP HANA XS Applications >.
- **Area of Responsibility (AOR):** Assign an AOR (recommended).
This step is required if you wish to use the *Product Hierarchy* filter option in the app. If so, each front-end user of the app must also have a user in the back-end system. You assign an area of responsibility to this back-end user so that the front-end user can see the assigned product hierarchies in the app.
To assign an AOR, use the *Maintain Area of Responsibility* service in transaction NWBC. For instructions, see <https://help.sap.com/viewer/p/CARAB> > <Version> > Application Help > SAP Customer Activity Repository > Demand Data Foundation > General Services > Maintenance Services > Maintain Area of Responsibility >.
- **App Extensibility:** Extend the app with custom content.
For information on the available extension points and controller hooks, see the SAP Fiori apps reference library at <https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/index.html?appId=F1773A>. Choose *IMPLEMENTATION INFORMATION*, select the delivery, and consult the information under *Extensibility*.

Result

You have successfully set up the *Analyze Forecast* app for your upgrade scenario.

6.1.2.7.2 Set Up the Adjust Forecast App (Upgrade Scenarios)

Perform several tasks on the front-end server and the back-end server to set up the *Adjust Forecast* app.

Prerequisites

You have checked that the prerequisites described in [Set Up Standalone SAP Fiori Apps for SAP Customer Activity Repository](#) [page 100] are fulfilled.

You are aware of the implementation information for the app in the SAP Fiori apps reference library: For the latest delivery (wave), see: <https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/index.html?appld=F3479>

You have set up the SAP Fiori app *Analyze Forecast*, as described in [Set Up the Analyze Forecast App \(Upgrade Scenarios\)](#) [page 102].

Upgrade from 4.0 FPS00 to 4.0 FPS01

A new *Demand Plan OData Service for Reuse* (/DMF/DEMAND_PLAN_UTILITIES_SRV) is included. Make sure that it is active as described in step 4 b) of the procedure.

The back-end server role /DPL/FCC is **replaced by the new role *Demand Planner (Retail)*** (/DMF/DPL). /DMF/DPL is the back-end server authorization role for the *Adjust Forecast* and the *Manage Demand Influencing Factors* apps. Make sure to implement a copy of the new role in the *Role Maintenance* (PFCG) of the back-end server in step 5 of the procedure.

Procedure

To set up *Adjust Forecast*, follow these steps:

1. To prepare the setup, read the app-specific information on SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> ► <Version> ► *Application Help* ► *SAP Customer Activity Repository* ► *SAP Fiori for SAP Customer Activity Repository* ► *Standalone SAP Fiori Apps for SAP Customer Activity Repository* ► *Adjust Forecast* ►.
2. Customize the navigation target for the app in the SAP Fiori launchpad on the front-end server. In *Launchpad Customizing* (transaction **LPD_CUST**), choose **UIDPL001 TRANSACTIONAL *Demand Planning Apps*** and make the app-specific settings for all of the apps:
Application Settings for *Adjust Forecast*
 - **Link Text:** AdjustForecast
 - **Application Type:** URL
 - **URL:** /sap/bc/ui5_ui5/sap/adjustforecast

- *Application Alias*: AdjustForecast
- *Additional Information*: SAPUI5.Component=retail.dpl.adjustforecast
- *Portal Parameters*: Leave the default settings.
- *Switch Support*: Leave the default settings.

Application Settings for *Forecast Correction Overlapping Rules*

- *Link Text*: Forecast Correction Overlapping Rules
- *Application Type*: TRA Transaction
- *Transaction Code*: /DMF/FCC_MAINT_RULES
- *System Alias*: Enter the HTTP connection to the back-end client in the format SYSID_CLNT_HTTPS
- *Application Alias*: ForecastCorrOverlapRules
- *GUI Type*: WEB_GUI_SAP GUI for HTML
- *Entries Once Started*: S Initial Screen
- *Portal Parameters*: Leave the default settings.
- *Switch Support*: Leave the default settings.

Application Settings for *Forecast Correction Classification*

- *Link Text*: Forecast Correction Classification
- *Application Type*: TRA Transaction
- *Transaction Code*: /DMF/FCC_MAINT_CLSCF
- *System Alias*: Enter the HTTP connection to the back-end client in the format SYSID_CLNT_HTTPS
- *Application Alias*: ForecastCorrClassification
- *GUI Type*: WEB_GUI_SAP GUI for HTML
- *Entries Once Started*: s Initial Screen
- *Portal Parameters*: Leave the default settings.
- *Switch Support*: Leave the default settings.

If you need more information about navigation targets, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_NETWEAVER and choose your SAP NetWeaver Platform. Select your support package stack at the top right and search for “Customizing Navigation Targets in LPD_CUST”.

3. Configure the SAP Fiori launchpad designer for *CAR Demand Planning Apps*.
 1. Launch the SAP Fiori launchpad designer either in the CUST or in the CONF mode:
 - CUST mode:
Use this mode for client-specific configurations, specifying the respective client. For the CUST mode, use this URL:
`https://<server>:<port>/sap/bc/ui5_ui5/sap/arsrv_upb_admn/main.html?sap-client=<client>#/Catalog/X-SAP-UI2-CATALOGPAGE:SAP_DPL_TC_T`
 - CONF mode:
Use this mode for global configurations across all clients. Note that in this URL, you additionally specify the **scope** parameter.
For the CONF mode, use this URL:
`https://<server>:<port>/sap/bc/ui5_ui5/sap/arsrv_upb_admn/main.html?sap-client=<client>&scope=CONF#/Catalog/X-SAP-UI2-CATALOGPAGE:SAP_DPL_TC_T`
Use this mode for global configurations across all clients. Note that in this URL, you additionally specify the **scope** parameter.
 2. Configure the app tiles in the SAP Fiori launchpad designer.

Note

By default, the tiles for *Adjust Forecast*, *Analyze Forecast*, *Forecast Correction Classification*, and *Forecast Correction Overlapping Rules* are in the SAP: CAR – Demand Planning Apps catalog (SAP_DPL_TC_T) which is shipped with launchpad configuration.

If the app tiles have not yet been created, create them as static tiles using the following settings:

Adjust Forecast

- **Title:** **Adjust Forecast**
- **Icon:** **sap-icon://Fiori5/F0819**
- **Use semantic object navigation:** Select this option.
- **Semantic Object:** **ForecastDemand**
- **Action:** **editUDFAdjustForecast**
- Leave the other options empty.

Forecast Correction Classification

- **Title:** **Forecast Correction Classification**
- **Icon:** **sap-icon://group-2**
- **Information:** **/DMF/FCC_MAINT_CLSCF**
- **Use semantic object navigation:** Select this option.
- **Semantic Object:** **DemandPlanConfiguration**
- **Action:** **create**
- Leave the other options empty.

Forecast Correction Overlapping Rules

- **Title:** **Forecast Correction Overlapping Rules**
- **Icon:** **sap-icon://Fiori2/F0306**
- **Information:** **/DMF/FCC_MAINT_RULES**
- **Use semantic object navigation:** Select this option.
- **Semantic Object:** **DemandPlanConfiguration**
- **Action:** **manage**
- Leave the other options empty.

If you need more information about configuring tiles, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_NETWEAVER and choose your SAP NetWeaver Platform. Select your support package stack at the top right and search for “Static App Launcher Tiles”.

3. Configure the target mapping in the SAP Fiori launchpad designer.

If the target mapping has not yet been created, choose *Target Mappings* and create entries with the following settings:

Adjust Forecast

- **Semantic Object:** **ForecastDemand**
- **Action:** **editUDFAdjustForecast**
- **Application Type:** **SAP Fiori App using LPD_CUST**
- **Launchpad Role:** **UIDPL001**
- **Launchpad Instance:** **TRANSACTIONAL**
- **Application Alias:** **AdjustForecast**
- **Device Types:** Select *Desktop* and *Tablet*.
- **Allow additional parameters:** Select this option.

Forecast Correction Classification

- Semantic Object: **DemandPlanConfiguration**
- Action: **create**
- Application Type: **SAP Fiori App using LPD_CUST**
- Launchpad Role: **UIDPL001**
- Launchpad Instance: **TRANSACTIONAL**
- Application Alias: **ForecastCorrClassification**
- Information: **/DMF/FCC_MAINT_CLSCF**
- Device Types: Select *Desktop* and *Tablet*.
- Allow additional parameters: Select this option.

Forecast Correction Overlapping Rules

- Semantic Object: **DemandPlanConfiguration**
- Action: **manage**
- Application Type: **SAP Fiori App using LPD_CUST**
- Launchpad Role: **UIDPL001**
- Launchpad Instance: **TRANSACTIONAL**
- Application Alias: **ForecastCorrOverlapRules**
- Information: **/DMF/FCC_MAINT_RULES**
- Device Types: Select *Desktop* and *Tablet*.
- Allow additional parameters: Select this option.

If you need more information about configuring target mappings, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_NETWEAVER and choose your SAP NetWeaver Platform. Select your support package stack at the top right and search for “Configuring Target Mappings”.

4. Complete the implementation on the front-end server.

i Note

You can find the general SAP Fiori Help section for this step at https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION ► *Version: SAP NW 7.40* ► *Implementation* ► *App Implementation* ► *App Implementation for Analytical Apps* ► *Implementation Tasks on Front-End Server* ►.

Use this section as your starting point. However, to configure *Adjust Forecast*, you only need to perform a subset of the steps described there. Proceed as follows:

1. Check that the app-specific Internet Communication Framework (ICF) service *AdjustForecast* / `/sap/bc/ui5_ui5/sap/adjustforecast` is active. If the service is not active, activate it as follows:
 1. Execute transaction **SICF**.
 2. As *Service Path*, specify the **<service path/service name>** and execute the search.
 3. As *Virtual Hosts / Services*, select the **ADJUSTFORECAST** entry and choose ► *Service/Host* ► *Activate* ►.

For more information on how to activate ICF services and OData services, see ► *Implementation Tasks on Front-End Server* ► *Front-End Server: Activate ICF Services of SAPUI5 Application* ►.

2. **Activate and Maintain OData Services**

Call up transaction [Activate and Maintain Services](#) (/IWFND/MAINT_SERVICE) and check if the following services are already existing in your service catalog:

- Adjust Forecast OData Service
 - [Type](#): BEP
 - [Technical Service Name](#): ZOD_ADJUST_FORECAST_SRV
 - [Service Description](#): DPL Fiori Adjust Forecast App OData Service
 - [External Service Name](#): OD_ADJUST_FORECAST_SRV
 - [Namespace](#): /DPL/

If the service is not available, choose [Add Service](#), enter back-end system alias, and choose [Get Services](#). Search for /DPL/OD_ADJUST_FORECAST_SRV, select the entry and choose [Add Selected Services](#). Take over the provided data and enter the local package assignment.

- Time Series OData Service
 - [Type](#): BEP
 - [Technical Service Name](#): ZOD_FC_TIME_SERIES_VIZ_SRV
 - [Service Description](#): OData Srv. for Forecast-Related Time Series Visualization
 - [External Service Name](#): OD_FC_TIME_SERIES_VIZ_SRV
 - [Namespace](#): /DMF/

If the service is not available, choose [Add Service](#), enter back-end system alias, and choose [Get Services](#). Search for /DMF/OD_FC_TIME_SERIES_VIZ_SRV, select the entry and choose [Add Selected Services](#). Take over the provided data and enter the local package assignment.

- Demand Plan OData Service for Reuse
 - [Type](#): BEP
 - [Technical Service Name](#): ZDEMAND_PLAN_UTILITIES_SRV
 - [Service Description](#): Demand Plan OData Service for Reuse
 - [External Service Name](#): DEMAND_PLAN_UTILITIES_SRV
 - [Namespace](#): /DMF/

If the service is not available, choose [Add Service](#), enter back-end system alias, and choose [Get Services](#). Search for /DMF/DEMAND_PLAN_UTILITIES_SRV, select the entry and choose [Add Selected Services](#). Take over the provided data and enter the local package assignment.

3. Copy the SAP_DPL_TCR_T PFCG role on the front-end server and enter a name from the customer namespace. Assign the required launchpad catalogs and groups. SAP_DPL_TCR_T is the front-end server authorization role delivered for all demand planning apps in SAP Customer Activity Repository.

→ Tip

If you already have an SAP Fiori launchpad open, clear your browser cache to apply the modifications to your user roles. Otherwise, you cannot see the changes on the user interface.

Follow the steps in ► [Implementation Tasks on Front-End Server](#) ► [Create PFCG Role on Front-End and Assign Launchpad Catalogs and Groups](#) ►.

4. Set up the catalogs, groups, and roles in the SAP Fiori launchpad.
Follow the steps in ► [Implementation Tasks on Front-End Server](#) ► [Setup of Catalogs, Groups, and Roles in the SAP Fiori Launchpad](#) ►.
5. Take the front-end PFCG role that you created before and assign it to the users of the app. The role contains the catalogs, groups, and start authorizations for the OData service that the users need.

Follow the steps in ► [Implementation Tasks on Front-End Server](#) ► [Front-End Server: Assign Roles to Users](#) ►.

5. **Complete the implementation on the back-end server.**

Copy the role `/DMF/DPL` in the [Role Maintenance](#) (PF03) of the back-end server and enter a name from the customer namespace. `/DMF/DPL` is the back-end server authorization role. It is also required for accessing the [Adjust Forecast](#) app via forward navigation from the [Analyze Forecast](#) app in SAP Customer Activity Repository.

6. **(Optional) Assign area of responsibility.**

This step is only required if you wish to use the [Product Hierarchy](#) filter in the app. In this case, each user of the app must have an area of responsibility (AOR) assigned to their ABAP back-end user. This assignment enables the display of product hierarchies in the app. You assign AORs using the [Maintain Area of Responsibility](#) Web Dynpro service in DDF.

Follow the steps in the [Maintain Area of Responsibility](#) section under <https://help.sap.com/viewer/p/CARAB> ► [<Version>](#) ► [Application Help](#) ► [SAP Customer Activity Repository](#) ► [Demand Data Foundation](#) ► [General Services](#) ► [Maintenance Services](#) ►.

7. **(Optional) Set up Single Sign-On (SSO) between the front-end server and the back-end server.**

For information on available SSO mechanisms depending on your system landscape, see the following:

- https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION ► [<Version>](#) ► [SAP Fiori: Security](#) ► [User Authentication and Single Sign-On \(SSO\)](#) ►
- https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► [<Version>](#) ► [Security](#) ► [SAP HANA Security Guide](#) ► [SAP HANA Authentication and Single Sign-On](#) ► [Single Sign-On Integration](#) ►

→ Tip

If you encounter issues during the setup, see the [Troubleshooting \[page 152\]](#) section for possible solutions.

Result

You have successfully set up the [Adjust Forecast](#) app.

Related Information

[Verify that OData Services are Active \[page 77\]](#)

6.1.2.7.3 Set Up the Manage Demand Influencing Factors App (Upgrade Scenarios)

Perform several tasks on the front-end server and the back-end server to set up the *Manage Demand Influencing Factors* app.

Prerequisites

You have checked that the prerequisites described in [Set Up Standalone SAP Fiori Apps for SAP Customer Activity Repository \[page 100\]](#) are fulfilled.

You are aware of the implementation information for the app in the SAP Fiori apps reference library: For the latest delivery (wave), see: <https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/index.html?appld=F3885>

Procedure

To set up *Manage Demand Influencing Factors*, follow these steps:

1. To prepare the setup, read the app-specific information on SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> ► <Version> ► *Application Help* ► *SAP Customer Activity Repository* ► *SAP Fiori for SAP Customer Activity Repository* ► *Standalone SAP Fiori Apps for SAP Customer Activity Repository* ► *Manage Demand Influencing Factors* ►.
2. Customize the navigation target for the app in the SAP Fiori launchpad on the front-end server.
In *Launchpad Customizing* (transaction **LPD_CUST**), choose UIDPL001 TRANSACTIONAL *Demand Planning Apps* and make the app-specific settings for all of the apps:
Application Settings for *Manage Demand Influencing Factors*
 - *Link Text*: ManageDemandInfluencingFactors
 - *Application Type*: URL
 - *URL*: /sap/bc/ui5_ui5/sap/managedifs
 - *Application Alias*: DIFManagement
 - *Additional Information*: SAPUI5.Component=retail.dpl.managedif
 - *Portal Parameters*: Leave the default settings.
 - *Switch Support*: Leave the default settings.Application Settings for *Demand Influencing Factors Library*
 - *Link Text*: Demand Influencing Factors Library
 - *Application Type*: TRA Transaction
 - *Transaction Code*: /DMF/DIF_LIBRARY
 - *System Alias*: Enter the HTTP connection to the back-end client in the format SYSID_CLNT_HTTPS
 - *Application Alias*: DIFLibrary
 - *GUI Type*: WEB_GUI_SAP GUI for HTML
 - *Entries Once Started*: S Initial Screen

- *Portal Parameters*: Leave the default settings.
- *Switch Support*: Leave the default settings.

If you need more information about navigation targets, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_NETWEAVER and choose your SAP NetWeaver Platform. Select your support package stack at the top right and search for “Customizing Navigation Targets in LPD_CUST”.

3. Configure the SAP Fiori launchpad designer for *CAR Demand Planning Apps*.

1. Launch the SAP Fiori launchpad designer either in the CUST or in the CONF mode:

- CUST mode:

Use this mode for **client-specific configurations**, specifying the respective client. For the CUST mode, use this URL:

`https://<server>:<port>/sap/bc/ui5_ui5/sap/arsrv_upb_admn/main.html?sap-client=<client>#/Catalog/X-SAP-UI2-CATALOGPAGE:SAP_DPL_TC_T`

- CONF mode:

Use this mode for global configurations across all clients. Note that in this URL, you additionally specify the **scope** parameter.

For the CONF mode, use this URL:

`https://<server>:<port>/sap/bc/ui5_ui5/sap/arsrv_upb_admn/main.html?sap-client=<client>&scope=CONF#/Catalog/X-SAP-UI2-CATALOGPAGE:SAP_DPL_TC_T`

Use this mode for global configurations **across all clients**. Note that in this URL, you additionally specify the **scope** parameter.

2. Configure the app tiles in the SAP Fiori launchpad designer.

→ Tip

By default, the tiles for *Manage Demand Influencing Factors* and *Demand Influencing Factors Library* are in the SAP: CAR – Demand Planning Apps catalog (which is shipped with launchpad configuration).

If the app tile for *Manage Demand Influencing Factors* has not yet been created, create it as static tile using the following settings:

Manage Demand Influencing Factors

- **Title:** **Manage Demand Influencing Factors**
- **Icon:** **sap-icon://create-entry-time**
- **Use semantic object navigation:** Select this option.
- **Semantic Object:** **ForecastDemand**
- **Action:** **manage**
- Leave the other options empty.

Demand Influencing Factors Library

- **Title:** **Demand Influencing Factors Library**
- **Icon:** **sap-icon://FioriInAppIcons/Hierarchical Tree**
- **Information:** **/DMF/DIF_LIBRARY**
- **Use semantic object navigation:** Select this option.
- **Semantic Object:** **ForecastDemand**
- **Action:** **change**
- Leave the other options empty.

If you need more information about configuring tiles, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_NETWEAVER and choose your SAP NetWeaver Platform. Select your support package stack at the top right and search for “Static App Launcher Tiles”.

3. Configure the target mapping in the SAP Fiori launchpad designer.
If the target mapping has not yet been created, choose [Target Mappings](#) and create entries with the following settings:

Manage Demand Influencing Factors

- *Semantic Object:* **ForecastDemand**
- *Action:* **manage**
- *Application Type:* **SAP Fiori App using LPD_CUST**
- *Launchpad Role:* **UIDPL001**
- *Launchpad Instance:* **TRANSACTIONAL**
- *Application Alias:* **DIFManagement**
- *Device Types:* Select *Desktop* and *Tablet*.
- *Allow additional parameters:* Select this option.

Demand Influencing Factors Library

- *Semantic Object:* **ForecastDemand**
- *Action:* **change**
- *Application Type:* **SAP Fiori App using LPD_CUST**
- *Launchpad Role:* **UIDPL001**
- *Launchpad Instance:* **TRANSACTIONAL**
- *Application Alias:* **DIFLibrary**
- *Device Types:* Select *Desktop*
- *Allow additional parameters:* Select this option.

If you need more information about configuring target mappings, see SAP Help Portal at https://help.sap.com/viewer/p/SAP_NETWEAVER and choose your SAP NetWeaver Platform. Select your support package stack at the top right and search for “Configuring Target Mappings”.

4. Complete the implementation on the front-end server.

i Note

You can find the general SAP Fiori Help section for this step at https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION ► *Version: SAP NW 7.40* ► *Implementation* ► *App Implementation* ► *App Implementation for Analytical Apps* ► *Implementation Tasks on Front-End Server* ►.

Use this section as your starting point. However, to configure *Manage Demand Influencing Factors*, you only need to perform a subset of the steps described there. Proceed as follows:

1. Check that the app-specific Internet Communication Framework (ICF) service *ManageDemandInfluencingFactors* /sap/bc/ui5_ui5/sap/managedifs is active. If the service is not active, activate it as follows:
 1. Execute transaction **SICF**.
 2. As *Service Path*, specify the **<service path/service name>** and execute the search.
 3. As *Virtual Hosts / Services*, select the **MANAGEDIFS** entry and choose ► *Service/Host* ► *Activate* ►.

For more information on how to activate ICF services and OData services, see ► *Implementation Tasks on Front-End Server* ► *Front-End Server: Activate ICF Services of SAPUI5 Application* ►.

2. **Activate and Maintain OData Services**

Call up transaction [Activate and Maintain Services](#) (/IWFND/MAINT_SERVICE) and check if the following services are already existing in your service catalog:

- Demand Plan OData Service
 - [Type](#): BEP
 - [Technical Service Name](#): ZOD_DEMAND_PLAN_SRV
 - [Service Description](#): Demand Plan OData Service
 - [External Service Name](#): OD_DEMAND_PLAN_SRV
 - [Namespace](#): /DMF/

If the service is not available, choose [Add Service](#), enter back-end system alias, and choose [Get Services](#). Search for /DMF/OD_DEMAND_PLAN_SRV, select the entry and choose [Add Selected Services](#). Take over the provided data and enter the local package assignment.

- Demand Plan OData Service for Reuse
 - [Type](#): BEP
 - [Technical Service Name](#): ZDEMAND_PLAN_UTILITIES_SRV
 - [Service Description](#): Demand Plan OData Service for Reuse
 - [External Service Name](#): DEMAND_PLAN_UTILITIES_SRV
 - [Namespace](#): /DMF/

If the service is not available, choose [Add Service](#), enter back-end system alias, and choose [Get Services](#). Search for /DMF/DEMAND_PLAN_UTILITIES_SRV, select the entry and choose [Add Selected Services](#). Take over the provided data and enter the local package assignment.

3. Copy the SAP_DPL_TCR_T PFCG role on the front-end server and enter a name from the customer namespace. Assign the required launchpad catalogs and groups. SAP_DPL_TCR_T is the front-end server authorization role delivered for all demand planning apps in SAP Customer Activity Repository.

→ Tip

If you already have an SAP Fiori launchpad open, clear your browser cache to apply the modifications to your user roles. Otherwise, you cannot see the changes on the user interface.

Follow the steps in ► [Implementation Tasks on Front-End Server](#) ► [Create PFCG Role on Front-End and Assign Launchpad Catalogs and Groups](#) ►.

4. Set up the catalogs, groups, and roles in the SAP Fiori launchpad.

Follow the steps in ► [Implementation Tasks on Front-End Server](#) ► [Setup of Catalogs, Groups, and Roles in the SAP Fiori Launchpad](#) ►.

5. Take the front-end PFCG role that you created before and assign it to the users of the app. The role contains the catalogs, groups, and start authorizations for the OData service that the users need.

Follow the steps in ► [Implementation Tasks on Front-End Server](#) ► [Front-End Server: Assign Roles to Users](#) ►.

5. **Complete the implementation on the back-end server.**

Copy the [Demand Planner \(Retail\)](#) role (/DMF/DPL) in the [Role Maintenance](#) (PFCG) of the back-end server and enter a name from the customer namespace. Assign the users. This role /DMF/DPL is the back-end server authorization role delivered for accessing the [Manage Demand Influencing Factors](#) app.

6. **(Optional) Assign area of responsibility.**

This step is only required if you wish to use the [Product Hierarchy](#) filter in the app. In this case, each user of the app must have an area of responsibility (AOR) assigned to their ABAP back-end user. This assignment enables the display of product hierarchies in the app. You assign AORs using the [Maintain Area of Responsibility](#) Web Dynpro service in DDF.

Follow the steps in the *Maintain Area of Responsibility* section under <https://help.sap.com/viewer/p/CARAB> ► <Version> ► *Application Help* ► *SAP Customer Activity Repository* ► *Demand Data Foundation* ► *General Services* ► *Maintenance Services* ►.

7. **(Optional) Set up Single Sign-On (SSO) between the front-end server and the back-end server.**

For information on available SSO mechanisms depending on your system landscape, see the following:

- https://help.sap.com/viewer/p/FIORI_IMPLEMENTATION ► <Version> ► *SAP Fiori: Security* ► *User Authentication and Single Sign-On (SSO)* ►
- https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► *Security* ► *SAP HANA Security Guide* ► *SAP HANA Authentication and Single Sign-On* ► *Single Sign-On Integration* ►

→ Tip

If you encounter issues during the setup, see the [Troubleshooting \[page 152\]](#) section for possible solutions.

Result

You have successfully set up the *Manage Demand Influencing Factors* app.

Related Information

[Verify that OData Services are Active \[page 77\]](#)

6.1.2.7.4 Set Up the Manage Product Attributes App

Perform several tasks on the front-end server and the back-end server to set up the *Manage Product Attributes* app. This transactional app is delivered with SAP Customer Activity Repository and supports different scenarios and consuming applications (such as SAP Allocation Management and SAP Assortment Planning). The app enables planning administrators to create, configure, assign, and maintain product attributes for a selected product hierarchy.

Prerequisites

- You are aware of the technical implementation information for the app in the SAP Fiori apps reference library:
For the latest delivery (latest wave), see: <https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/index.html?appId=F0829A>

- You have implemented any mandatory corrections for the app in the current release:
 - For the app in SAP Customer Activity Repository 4.0 FPS01, implement SAP Notes [2762819](#) and [2763472](#). The notes are required for the new `SAP_ISR_BR_DDF_ADMIN` role, which is mandatory for the app and which you will need in the steps below.

To set up the app, do the steps in the following sections.

i Note

If your scenario includes SAP Allocation Management or SAP Assortment Planning, some of the steps might already have been performed in your system landscape. If so, skip the step and continue with the next one.

Verify that ICF Services are Active

Context

After an upgrade, you must ensure that the Internet Communication Framework (ICF) services required for the app are still active.

Procedure

1. Log on to your front-end server.
2. Execute transaction `SICF`.
3. In the *Define Services* screen, make the following selections:
 - *Hierarchy Type*: **SERVICE**
 - *Virtual Host*: **DEFAULT_HOST**
 - *Service Path*: `/sap/bc/ui5_ui5/sap/attribmgmt_v2/`
4. Choose *Execute* (**F8**).
5. Under *Virtual Hosts / Services*, double-click the `attribmgmt_v2/` service to open the *Create/Change a Service* screen.
6. To activate the service, choose **Service/Host** > **Activate**.

i Note

You can check the activation status by selecting the service and opening the context menu. If the *Activate Service* option is grayed out, this means the service is already active.

7. Repeat steps 3 to 6 for the `/sap/bc/ui5_ui5/sap/ddfreuse_v2/` service.

Enable the App for SAP Fiori Launchpad

Context

To be able to access the app from the SAP Fiori launchpad, your front-end system user must have the necessary role(s) assigned. Based on the role(s) assigned to your user, you can access the business catalogs and business catalog groups required for the app.

SAP Customer Activity Repository is delivered with the following predefined objects for the app:

Front-End Business Content			Front-End Technical Content	
Business Role	Business Catalog	Business Catalog Group	Technical PFCG Role	Technical Catalog
SAP_RAP_BCR_PLANNING_ADMIN	SAP_RAP_BC_PLANNING_ADMIN_T	SAP_RAP_BCG_PLANNING_ADMIN_T	SAP_RAP_TCR_T	SAP_RAP_TC_T

Procedure

1. Log on to your front-end system.
2. Execute transaction SU01 to open the [User Maintenance](#) screen.
3. Enter your front-end user name in the [User](#) field and choose [Change](#).
4. On the [Roles](#) tab, assign the following roles to your user:
 - SAP_RAP_BCR_PLANNING_ADMIN ([Planning Administrator](#))
 - SAP_ISR_BR_DDF_ADMIN ([Demand Data Foundation Administrator](#))
5. Save your changes.

⚠ Caution

If you already have an SAP Fiori launchpad open, clear your browser cache or you won't be able to see the changes.

6. Verify the app and role settings for the SAP Fiori launchpad.
 1. Execute transaction LPD_CUST to open the [Overview of Launchpads](#).
 2. Double-click the role UIRAP001 to view the role details.
 3. Expand the role [Planning Administrator](#) and select the [Manage Product Attributes](#) app.
 4. Display the advanced parameters and check that the app has all the mandatory settings listed below. You do not need to make any additional settings.
 - [Link Text](#): [Manage Product Attributes](#)
 - [Application Type](#): URL
 - [URL](#): /sap/bc/ui5_ui5/sap/attribmgmt_v2
 - [Application Alias](#): AssignProductAttribute
 - [Additional Information](#): SAPUI5.Component=retail.ddf.attributemgmtv2
 - [Navigation Mode](#): EXT_HEAD Leaderless Portal Window
 - [History Mode](#): [1 Navigation Entry can Occur Once in History](#)
 - [Parameter Forwarding](#): [G Get Parameters](#)

Verify that OData Services are Active

There are common OData services for SAP Fiori that must be activated for any scenario. (mandatory). Then select the OData services for your specific application and activate those as well. /DMF/API_ATTRIBUTES_SRV (optional, to import external attributes for integration scenarios with a third-party source master data system)

1. Follow the instructions in [Verify that OData Services are Active \[page 77\]](#).

Assign Area of Responsibility (AOR) to ABAP Back-End User

You can only display and select product hierarchies in the app that have been assigned as AOR to your ABAP back-end user.

1. Log on to your ABAP back-end system.
2. Execute transaction `NWBC` to open the SAP NetWeaver Business Client.
3. Choose ► *Services* ► *Maintain Area of Responsibility* ► *Product Hierarchy* ►.
4. Select your ABAP back-end user, choose *Continue*, and define the AOR.
For instructions, see the *Maintain Area of Responsibility* section in the application help for SAP Customer Activity Repository at <https://help.sap.com/viewer/p/CARAB>.

6.1.2.7.5 Set Up Additional Standalone Apps Included in SAP Customer Activity Repository

In addition to the apps described in this guide, SAP Customer Activity Repository includes additional apps that support different scenarios and consuming applications.

For information on the additional apps, see SAP Note [2774098](#) .

6.1.2.8 Configure Omnichannel Article Availability and Sourcing for Use with SAP Customer Activity Repository

You need to integrate SAP S/4HANA or SAP Retail, SAP Customer Activity Repository, SAP Commerce, and SAP Commerce, integration package for SAP for Retail, as well as set up asynchronous order management and the data replication between SAP S/4HANA or SAP Retail, SAP Commerce, and SAP Customer Activity Repository.

6.1.2.8.1 Set up Data Replication Between SAP S/4HANA or SAP Retail, and SAP Commerce

In SAP S/4HANA or SAP Retail, and SAP Commerce, set up the **asynchronous order management scenario** as follows:

1. Set up **asynchronous replication of articles** via the Data Hub from SAP S/4HANA or SAP Retail to SAP Commerce.
For more information, see the documentation for SAP Commerce at <https://help.hybris.com/latest/hcd/8bc6b884866910148532f2e1e500f95f.html> *Getting Started with SAP S/4HANA or SAP ERP Integration*. Follow the steps for the asynchronous order management scenario.
2. Set up **asynchronous replication of orders** via the Data Hub from SAP Commerce to SAP S/4HANA or SAP Retail (see link above).

3. Configure asynchronous order management.

For more information, see the documentation for SAP Commerce at <https://help.hybris.com/latest/hcd/e2be57a501da41cc9ebdf7cf7d3aa229.html> *Configuring Order Management for SAP Commerce with One or More SAP Back Ends*.

6.1.2.8.2 Set Up Data Replication Between SAP Commerce and SAP Customer Activity Repository

1. In SAP Commerce, in the Backoffice application under ► *SAP Integration* ► *HTTP Destination* , create the HTTP destination of SAP Customer Activity Repository that is used for availability calculation and sourcing.
2. In SAP Commerce, in the Backoffice application under ► *SAP Integration* ► *SAP Global Configuration* ► *Backend Connectivity* , enter the HTTP destination of SAP Customer Activity Repository created before.

Note

In the standard Solr configuration for products in SAP Commerce, `ProductStoreStockValueProvider` is used to replicate the store availability situation from the SAP Commerce database into the Solr index.

If you use OAA, availability information is provided through synchronous calls into SAP Customer Activity Repository for every article/store combination instead. If your product catalog is rather large, this is why indexing the complete product catalog can take very long. In this case, we recommend to either deactivate the value provider or to create a custom one. If you deactivate the value provider, faceted search according to store availability is not possible in the product catalog. OAA functionality is not affected.

6.1.2.8.3 Set Up Live Connection Between SAP Customer Activity Repository and SAP Analytics Cloud

This step is optional. You only need to execute it if you want to use the set of OAA analyses that has been predefined in SAP Analytics Cloud and that is part of the standard delivery of SAP Analytics Cloud. If you are using a different analytics tool, or if you do not run analytics at all, you may skip this step.

Context

Procedure

1. Configure SAP Customer Activity Repository to support cross-origin resource sharing (CORS), for cross-domain communication from the browser.

For more information, see [Live Data Connection to SAP BW Using a Direct Connection and Password Authentication](#), steps 1 and 2 of the procedure.

2. In SAP Analytics Cloud, navigate to ► [Home](#) ► [Connection](#) ► and select live connection `SAPRTOAA` ([SAP Retail Omnichannel Article Availability and Sourcing](#)). This connection is part of the standard delivery.
3. Click [Edit Connection](#) and enter your custom details for [Host](#), [HTTPS Port](#), and [Client](#).

6.1.2.8.4 Check Version of SAP Customer Activity Repository in SAP Commerce

SAP Commerce can be connected against different versions of SAP Customer Activity Repository. As there were incompatible changes in the OAA REST service APIs, a Spring profile property in SAP Commerce controls the mapping to the different API versions.

Context

Check the `spring.profiles.active` property in the `local.properties` file of your SAP Commerce installation, for example from `<hybris_installation_path>/hybris/config/local.properties`.

The following profiles are supported:

Version of SAP Customer Activity Repository	Profile Value
CAR 3.0 (CARAB 2.0) or higher	<code>sapooa_carApiVersionLatest</code>
CAR 2.0 FP3 (CARAB 1.0 FP3)	<code>sapooa_carApiVersion1</code>

As of SAP Commerce, integration package for SAP for Retail 2.4 / SAP Commerce 6.4, the property is set automatically to `sapooa_carApiVersionLatest`.

6.1.2.8.5 Adapt Customizing for Eligible Sources in OAA Profile

Context

If you have used OAA in version 2.0 FP3 of SAP Customer Activity Repository already and are upgrading to version 3.0 or higher, and if you want to continue using OAA profile mode, you need to adapt your Customizing for the eligible sources assigned to the OAA profile (Customizing path: ► [SAP Customer Activity Repository](#) ►

[Omnichannel Article Availability and Sourcing \(OAA\)](#) > [OAA Profile Mode](#) > [Define OAA Profiles](#) > at the start of your project using report `/OAA/SPLIT_SOURCES`. This report enables you to continue using your 2.0 FP3 Customizing settings for eligible sources. In version 2.0 FP3, there was one single Customizing view that covered DCs and stores alike, while in version 3.0, this view was replaced with three new views, one each for DCs, stores, and external vendors. The report moves your entries to the new views.

Procedure

1. In transaction **SE38**, execute report `/OAA/SPLIT_SOURCES`.

The report checks your entries for eligible sources in the old view and transfers those for DCs to the new view for DCs and those for stores to the new view for stores.

2. Check the error log.

For all entries that do not fall into either category, the system issues an error message.

3. Process the entries in the error log manually.

6.1.2.8.6 Adapt Customizing for RFC Destination (SAP S/4HANA Only)

As of SAP S/4HANA 1709 FPS2, setting the RFC destination that is used for the replication of the ATP snapshot from SAP S/4HANA to SAP Customer Activity Repository was moved to the new Customizing activity [Define System Connections](#).

Context

If you have used OAA in combination with a version of **SAP S/4HANA 1709 prior to FPS2** and want to upgrade to **SAP S/4HANA 1709 FPS2** or higher, you need to manually adapt your Customizing for the RFC destination.

In **Customizing for SAP S/4HANA**, proceed as follows:

Procedure

1. Go to [Sales and Distribution](#) > [Basic Functions](#) > [Availability Check and Transfer of Requirements](#) > [Availability Check](#) > [Availability Check with ATP Logic or Against Planning](#) > [Retail: Omnichannel Article Availability and Sourcing \(OAA\)](#) > [Define System Connections](#).
2. Create a system connection ID for the RFC destination that is used for the replication of the ATP snapshot from SAP S/4HANA to SAP Customer Activity Repository.

3. Go to [Sales and Distribution](#) > [Basic Functions](#) > [Availability Check and Transfer of Requirements](#) > [Availability Check](#) > [Availability Check with ATP Logic or Against Planning](#) > [Retail: Omnichannel Article Availability and Sourcing \(OAA\)](#) > [Define ATP Parallelization Profiles for DC Articles](#).
4. Enter the system connection ID into your ATP parallelization profile.

6.1.2.8.7 Activate BAdI Implementation for Using OAA with Vendor Articles

If you use vendors from SAP S/4HANA or SAP Retail as sources in OAA and want to benefit from the automatic creation of purchase requisitions, BAdI implementation `VENDOR_OAA_SALES_PUR_REQ` of BAdI `BADI_SD_SALES_ME_REQ` must be set to active.

Context

The implementation serves to enter the fixed vendor, the net price of the article, and the purchasing organization into the purchase requisition that is automatically created for the vendor articles, from the sales order. As a default, this BAdI implementation is delivered in an inactive state.

As of the following versions of your back-end application you can activate this BAdI implementation via a Customizing activity, from the following path: [Sales and Distribution](#) > [Basic Functions](#) > [Availability Check and Transfer of Requirements](#) > [Availability Check](#) > [Availability Check with ATP Logic or Against Planning](#) > [Retail: Omnichannel Article Availability and Sourcing \(OAA\)](#) > [Implementation: Data Required for Purchase Requisitions for Vendor Articles](#).

- SAP S/4HANA 1709 SPS3
- SAP Retail 6.0 EHP7 SP17
- SAP Retail 6.0 EHP8 SP11

If you currently use a lower version of SAP S/4HANA or SAP Retail and want to upgrade to an SP that is still lower than the SPs mentioned above, you need to manually activate this BAdI implementation. Proceed as follows:

Procedure

1. Go to transaction SE19.
2. Enter `VENDOR_OAA_SALES_PUR_REQ` as enhancement implementation and choose [Edit](#).
3. Select [Implementation is active](#) and save your changes.


Results

You need to activate this BAdI implementation again using transaction `SE19` each time you implement a new support package of SAP S/4HANA or SAP Retail.

Only when you reach the support package that holds the new Customizing activity (see above) do you activate the BAdI implementation directly in Customizing. This setting will then last with all future upgrades.

6.1.2.8.8 Check the REST Services of Your Implementation

Context

As of SAP Customer Activity Repository 3.0, the REST services for omnichannel article availability and sourcing were modified. For more information, see SAP Note [2434053](#) .

6.1.2.8.9 Activate OData Services for Omnichannel Article Availability and Sourcing

A number of OData services are required to run the SAP Fiori apps for omnichannel article availability and sourcing (OAA).

Context

Make sure that you have activated the OData services required for OAA, as described and listed in [Verify that OData Services are Active \[page 77\]](#). Depending on your back end, different services are required.

6.1.2.8.10 Upgrade Data Structures of Sources

Sales channel mode only: With SAP Customer Activity Repository 4.0, the OAA data structures for sources, for the SAP Fiori app [Manage Sources](#), were changed. You need to run two reports to upgrade the data structures.

Prerequisites

You have not used the SAP Fiori app [Manage Sources](#) with SAP Customer Activity Repository 4.0 or higher productively yet.

Context

Execution of the reports is mandatory for all upgrade scenarios where you upgrade from a version prior to 4.0 to version 4.0 or higher. You need to execute the reports once only.

Procedure

1. In SAP Customer Activity Repository, in transaction SE38, execute report /OAA/CREATE_TRIGGERS.

In addition to the trigger that updates temporary reservations, this report now also creates a trigger that creates and exposes data structures for the source properties you maintain in the SAP Fiori app [Manage Sources](#). Each time a new source becomes available in SAP Customer Activity Repository, the trigger is set off.

2. In SAP Customer Activity Repository, in transaction SE38, execute report /OAA/SOURCE_UPGRADE.
 - If you have not used the app in an earlier version of SAP Customer Activity Repository yet, report /OAA/SOURCE_UPGRADE creates and exposes the new data structures for the sources that are already available in the system, thus enabling use of the enhanced app.
 - If you have already used the app in an earlier version of SAP Customer Activity Repository, the report moves the source properties, such as status, general capacity, capacity exceptions for weekdays and individual dates, from the old data structures to the new data structures. This enables you to seamlessly continue using the app and the data already available in the app.

6.1.2.8.11 Use New Apps (SAP S/4HANA Only)

With SAP Customer Activity Repository 4.0, the [Manage Sources](#) and [Manage Sourcing Networks](#) apps were renamed and duplicated, in order to split apps between back ends.

Context

The functional scope of each pair of apps is identical. The apps are called as follows:

Old App	Split Into
Manage Sources (Fiori ID F3003)	Manage Sources -SAP S/4HANA (Fiori ID F3392) Manage Sources - SAP Retail (Fiori ID F3003)
Manage Sourcing Networks (Fiori ID F2530)	Manage Sourcing Networks -SAP S/4HANA (Fiori ID F3391) Manage Sourcing Networks - SAP Retail (Fiori ID F2530)

Procedure

If your back end is SAP S/4HANA, use the new apps. Your existing data was migrated to the new apps automatically.

Note

Make sure that the corresponding OData services have been activated before. For more information, see [Verify that OData Services are Active \[page 77\]](#).

If your back end is SAP Retail, you may continue using the former apps.

6.1.2.8.12 Use New Tracing Tables for Analytics

With SAP Customer Activity Repository 4.0 FPS01, the programming tables introduced in version 4.0 and used to store tracing information were rendered obsolete and were replaced with new tables that are better suited for analytics.

Context

The tables were replaced as follows:

Trace Table in SAP Customer Activity Repository 4.0	Replaced with Trace Table in SAP Customer Activity Repository 4.0 FPS01
/OAA/TRC_DS_ES Trace table for building block Read Sources	/OAA/TRC_SRC_ES New trace table for sources
/OAA/TRC_BO_1DEL Trace table for business objective Apply Rule: One Consignment Today	/OAA/TRC_REASON Failure reason trace table
/OAA/TRC_BO_AFC Trace table for business objective Apply Rule: As Few Consignments as Fast as Possible	/OAA/TRC_REASON + /OAA/TRC_BO_CONS Failure reason and consignments trace tables
/OAA/TRC_BO_AFCA Trace table for business objective Apply Rule: As Few Consignments as Fast as Possible (Advanced)	/OAA/TRC_REASON + /OAA/TRC_BO_CONS Failure reason and consignments trace tables

The old trace tables are not filled any longer. Instead, the new tables are used.

Procedure

1. If you have used tracing for custom analytics in version 4.0 of SAP Customer Activity Repository and want to continue using this functionality when upgrading to version 4.0 FPS01 or higher, adapt your custom coding for analytics so that the new tables are referenced instead of the old ones.
2. If you want to continue using your historic tracing data, adapt your custom coding for analytics so that historic trace data and new trace data can be analyzed together.

6.1.2.9 Configure Omnichannel Promotion Pricing for Use with SAP Customer Activity Repository

1. In Customizing for SAP Customer Activity Repository under ► *Omnichannel Promotion Pricing* ► *Configure Omnichannel Promotion Pricing* ►, activate and configure omnichannel promotion pricing.
Optional: If you want to use *Product Groups* instead of *Simple Product Groups* (default), you have to do the following:
In Customizing for SAP Customer Activity Repository under ► *Omnichannel Promotion Pricing (OPP)* ► *Configure Omnichannel Promotion Pricing* ► set the indicator *Activate Enhanced Product Groups*.
Additionally, you have to activate product groups for the promotion pricing service. For more information about the configuration of product groups, see the *Development and Extension Guide for OPP* on SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> ► *<Version>* ► *Development* ► *Development and Extension Guide for Omnichannel Promotion Pricing* ► under ► ► *Promotion Pricing Service* ► *PPS Module calcengine-gk* ► *Default Settings and Properties* ►.
2. In transaction **SPFW5**, activate business function DRF_FOUNDATION.
This activates the Data Replication Framework (DRF) functionality. You need DRF to send regular prices and OPP promotions to an external system via IDocs.
3. In Customizing for SAP Customer Activity Repository under ► *Omnichannel Promotion Pricing (OPP)* ► *Define Number Ranges* ►, you can maintain a number range interval for OPP promotions outbound processing.
4. To use the central promotion pricing service, you have to install the XS Advanced (XSA) as Java runtime. For information about the installation of the XS Advanced runtime, see the *SAP HANA Server Installation and Update Guide* on SAP Help Portal at https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► *<Version>* ► *Installation and Upgrade* ► *SAP HANA Server Installation and Upgrade* ► *Installing an SAP HANA System* ► *Installing XS Advanced Runtime* ►.

→ Tip

For more information about the configuration of the promotion pricing service in SAP Commerce, see the *Administrator Guide* of SAP Commerce, integration package for SAP for Retail on SAP Help Portal under <https://help.sap.com/viewer/p/IPR> ► *<Version>* ► *Administration* ► *Omnichannel Promotion Pricing* ► *Configuration* ►.

Related Information

[Outbound Processing for Regular Prices and OPP Promotions \[page 130\]](#)

[Central Deployment of the Promotion Pricing Service \[page 143\]](#)

[Update the PPS XSA Application \[page 151\]](#)

6.1.2.9.1 Outbound Processing for Regular Prices and OPP Promotions

Related Information

[Local Deployment of the Promotion Pricing Service \[page 130\]](#)

[Location-Specific Outbound Processing of OPP Promotions \[page 138\]](#)




6.1.2.9.1.1 Local Deployment of the Promotion Pricing Service

For a local deployment scenario, you have to replicate regular prices and OPP promotions from the central price and promotion repository (SAP Customer Activity Repository) to an external system to create a local storage for prices and promotions. For that, you have to configure application link enabling (ALE) for the distribution of IDocs, and Data Replication Framework (DRF). For OPP promotions, there are two options to configure this replication: the promotion-centric outbound processing and the location-specific outbound processing.

Prerequisites

- You have performed the configuration steps during post-installation. For more information, see [Configure Omnichannel Promotion Pricing for Use with SAP Customer Activity Repository \[page 129\]](#).
- You have defined receiving systems and clients in the system landscape directory (SLD).

Application Link Enabling

In Customizing for *SAP NetWeaver*, under  *Application Server*  *IDoc Interface / Application Link Enabling (ALE)* , see the system documentation to check the settings for distributing data between application systems based on Application Link Enabling and IDoc interface technology. With omnichannel promotion pricing, this functionality is used to distribute OPP promotions and regular prices from SAP Customer Activity Repository to an external system, for example an SAP Commerce system. You need to perform the following steps:

Transaction **BD54**: Defining a Logical System

With ALE IDoc distribution, you can exchange data between logical systems. You use the logical system name to identify a system uniquely within the network. If you already use ALE IDoc distribution, the logical system for

the sending system has already been defined. In this case, you only need to define a logical system for the receiving system. In SAP Customer Activity Repository, do the following:

In *Display View "Logical System": Overview*, create a new logical system. Enter the following values:

Field Name	Value
<i>Log. System</i>	<receiving system>
<i>Name</i>	<receiving system>

Transaction **SM59**: Defining an RFC Destination

1. Create the RFC destination in the *HTTP Connections to External Server* folder and enter the following values:

Field Name	Value
<i>RFC Destination</i>	<name of the RFC destination>
<i>Connection Type</i>	Enter connection type <i>G HTTP Connection to External Server</i> .
<i>Description</i>	Enter at least <i>Description 1</i> in the description section.

2. In *Technical Settings*, enter the following values for *Target System Settings*:

Field Name	Value
<i>Target Host</i>	<name of the target host>
<i>Path Prefix</i>	/sapppspricing/idocinbound
<i>Port</i>	<service number for https or http connection>

i Note

With OPP, an https connection is recommended.

3. In *Logon and Security*, select *Basic Authentication* for *Logon with User*, and enter the following values:

Field Name	Value
<i>User</i>	<user name that you have created in SAP Commerce Backoffice >

Field Name	Value
<i>Password</i>	<password that you have created in SAP Commerce Backoffice >

In *Security Options* select *SSLActive* to send your data via https connection and enter an appropriate certificate.

Note

We strongly recommend to use Secure protocols (SSL, SCN) whenever possible.

For more information, see *Transport Layer Security and Web Services Security* in the *SAP NetWeaver Security Guide*.

Transaction WE21: Defining a Port

1. Create this ALE port in the *XML HTTP* folder and enter the following values:

Field Name	Value
<i>Port</i>	<name of port>
<i>Description</i>	<description of port>
<i>RFC destination</i>	<name of the RFC destination created in the previous step>

2. Select *Text/XML* for Content Type.

Transaction WE20: Defining a Partner Profile

A partner profile contains parameters that define the electronic interchange of data between systems using the IDoc interface. There is only one partner profile required for the receiving system and it needs to contain all the parameters that your scenario requires for sending OPP promotions and regular prices to that receiving system.

Basic Partner Profile Information

To set up the basic partner profile information, do the following:

1. In *Partner Profiles*, create a logical system partner. Enter the following values:

Field Name	Value
<i>Partner No.</i>	<partner number>, which must be the same as the receiving system that you defined in section <i>Defining a Logical System</i>
<i>Partner Type</i>	LS for regular prices and OPP promotions sent via promotion-centric outbound processing

2. In the *Post processing: permitted agent* tab, enter the following values:

Field Name	Value
<i>Ty.</i>	US (for User)
<i>Agent</i>	<users to be notified> should be an agent who can process IDocs with errors
<i>Lang.</i>	<notification language>

Outbound Parameters

Field Name	Value
<i>Message Type</i>	<ul style="list-style-type: none"> • /ROP/BASE_PRICE for regular prices • /ROP/PROMOTION for OPP promotions
<i>Outbound Options tab</i>	
<i>Receiver port</i>	<receiver port> as defined in section <i>Defining a Port</i>
<i>Output Mode</i>	<ul style="list-style-type: none"> • Pass IDoc Immediately <ul style="list-style-type: none"> ◦ Select this option to transfer IDocs directly after creation for a better integration to the DRF transfer log. ◦ Select this option to make sure that IDocs are sent in the same order in which they have been created. • Collect IDocs <ul style="list-style-type: none"> ◦ Select this option to collect IDocs and transfer them sequentially with transaction WE14.
<i>IDoc Type</i>	<ul style="list-style-type: none"> • /ROP/BASE_PRICE01 for regular prices • Depending on the receiving system /ROP/PROMOTION01 or /ROP/PROMOTION02 for OPP promotions
<i>Cancel Processing After Syntax Error</i>	Ensure that this field is selected to avoid sending erroneous IDocs.

Data Replication Framework

In Customizing for *Cross-Application Components* under **Processes and Tools for Enterprise Applications** **Master Data Governance, Central Governance** **General Settings** **Data Replication** **Overall Information**, see the system documentation to check how data is sent to one or more target systems. With OPP, the Data

Replication Framework functionality is used to send regular prices and OPP promotions from an SAP Customer Activity Repository system to external systems. You need to perform the following steps:

Transaction **DRFIMG**: Defining Custom Settings for Data Replication

In Customizing, you have to perform the following configuration steps under ► [Data Replication](#) ► [Define Custom Settings for Data Replication](#) ⌵:

1. In Customizing activity [Define Technical Settings for Business Systems](#), define a business system and a logical system for the receiving systems. The following business object types are available to send OPP promotions and regular prices, and can be assigned to the business system:

Business Object Type	Description	Communication Channel
ROP_PROMO	OPP promotion	Replication via IDoc
ROP_PRICE	Regular price	Replication via IDoc

2. In Customizing activity [Define Replication Models](#), specify the content of the replication model (regular prices or OPP promotions), the outbound implementation that is to be used, and the business system to which this object is to be sent. You can specify a different destination system for each outbound implementation that contains business object, filter object, and business logic. You can also add an expiration time for the log. The following predefined outbound implementations exist:

Outbound Implementation	Description	Supported Replication Model	Filter Object
ROP_PRICE	Outbound implementation for regular prices	Initialization, Change, and Manual	ROP_PRICE
ROP_PROMO	Outbound implementation for OPP promotions sent via promotion-centric outbound processing	Initialization, Change, and Manual	ROP_PROMO

i Note

For this outbound implementation, the filter application time needs to be set to [Filter Before Change Analysis](#).

Outbound Parameters

The following outbound parameters must be assigned to each replication model:

Outbound Parameter for Regular Prices	Description	Typical Value*
/ROP/PACK_SIZE_BULK	<p>This parameter sets the maximum number of regular prices that are processed per IDoc. This is an approximate value because regular prices are assigned to different IDocs for each group of business unit with items and prices.</p> <div> i Note <p>If this parameter is set to 0, restricting regular prices is not possible and it is only the number of products that determines the IDoc size.</p> </div>	20,000-100,000
PACK_SIZE_BULK	<p>This parameter controls the number of products for which regular prices can be stored in a compressed format at the same time, and sets the maximum number of products that are processed per IDoc.</p> <div> i Note <p>If this parameter is not set, the default is 1. If you increase this value, performance at runtime is improved since fewer IDocs need to be processed.</p> </div>	200-1,000
TASK_SIZE_PROCMMSG	<p>This parameter is only relevant if you execute the data replication using parallel processing . This parameter sets the maximum number of products that are processed per parallel package. It must be greater or equal to the PACK_SIZE_BULK parameter.</p> <div> i Note <p>This parameter value does not define the number of regular prices per package. If this parameter is set to 0, all products are processed in one package. This means that parallel processing is not possible.</p> </div>	400-2,000
/ROP/SEQ_READ_SIZE	<p>This parameter sets the maximum number of products for which the regular prices are read in one select statement. In this way you can limit memory consumption for products with a large number of regular prices.</p> <div> i Note <p>If this parameter is set to 0, all products of the corresponding package are read within one call.</p> </div>	100-200

Outbound Parameter for Regular Prices	Description	Typical Value*
/ROP/DAY_OFFSET_PAST	<p>This parameter is only used, if the selection of prices in the past is restricted with the validity end date as a filter criteria and if the validity end date is not too far in the past.</p> <p>During a delta replication, this parameter defines a time range in days that lies before the date of the last replication run. The system subtracts this value from the last replication date and uses the resulting date to construct the select-option for the validity end date.</p> <p>During an initial replication the system calculates a date (current date minus the time range in days defined in this parameter). If the date that you entered for the validity end is earlier than the calculated date, the calculated date is used automatically.</p> <p>In this way you ensure that also regular prices with a validity end date in the specified past time range are transferred.</p> <div> <p>i Note</p> <p>If this parameter is not set, relevant regular prices might not be transferred. See SAP Note 2338714. In this case the default is set to 30 days.</p> </div>	30
Outbound Parameter for OPP Promotions	Description	Typical Value*
PACK_SIZE_BULK	<p>This parameter sets the maximum number of OPP promotions that are processed per IDoc. It must be smaller than the TASK_SIZE_PROCMMSG parameter and is relevant for both, the sequential and the parallel execution of DRF outbound.</p> <div> <p>i Note</p> <p>If this parameter is not set, the default is 1. If you increase this value, performance at runtime is improved since fewer IDocs need to be processed.</p> </div>	100-1,000

Outbound Parameter for OPP Promotions	Description	Typical Value*
TASK_SIZE_PROCMMSG	This parameter is only relevant with parallel processing . It sets the maximum number of OPP promotions that are processed per parallel package. It must be greater or equal to the PACK_SIZE_BULK parameter.	100-5,000
<div> <div>i Note</div> <p>This parameter value does not define the number of OPP promotions per package. If this parameter is set to 0, independently of the value that you enter in transaction DRFOUT, parallel processing is not possible.</p> </div>		
/ROP/Generic_ENH_MAP	This parameter activates the automatic mapping of customer-specific fields that are stored in the CI-Inlcudes of promotional entities to the corresponding extension segments in the OPP promotion IDocs.	x
<div> <div>i Note</div> <p>Internal tables, structures, and so on, are not supported.</p> </div>		

*This value gives you an idea of usable values for the replication of regular prices and OPP promotions, it is not a recommendation.

- Optional: In Customizing activity [Define Business Object Settings](#), specify the application link enabling (ALE) message type that is to be used for each business object. In this way, you can determine the retention period for change pointers that are related to the business object. For the outbound processing of regular prices, no change pointers are used and the retention period is not relevant. The following message types are relevant for the outbound processing of regular prices and OPP promotions from the central price and promotion repository:

Business Object Type	Message Type
ROP_PRICE	/ROP/BASE_PRICE
ROP_PROMO	/ROP/PROMOTION

For more information, see Customizing for [Cross Application Components](#) under [Processes and Tools for Enterprise Applications](#) > [Master Data Governance, Central Governance](#) > [General Settings](#) > [Data Replication](#) > [Overall Information](#).

Transaction **DRFF**: Defining Filter Criteria

In [Define Filter Criteria](#), specify your data selection for each replication model and business object. The filter criteria are valid for [Initial](#) replication and [Change](#) replication.




6.1.2.9.1.2 Location-Specific Outbound Processing of OPP Promotions

The location-specific outbound processing of OPP promotions enables you to distribute a location-specific view of OPP promotions. With this outbound option OPP promotions are sent from the central price and promotion repository to its assigned locations. You can use this option if you, for example, want to send OPP promotions to POS systems in your physical stores. This section describes how to configure the Application Link Enabling (ALE) layer and Data Replication Framework (DRF) for the sending of IDocs.

Prerequisites

- You have performed the configuration steps during post-installation. For more information, see [Configure Omnichannel Promotion Pricing for Use with SAP Customer Activity Repository \[page 129\]](#).
- You have defined receiving systems and clients in the system landscape directory (SLD).

Application Link Enabling

In Customizing for *SAP NetWeaver*, under  *Application Server*  *IDoc Interface / Application Link Enabling (ALE)* , see the system documentation to check the settings for distributing data between application systems based on Application Link Enabling and IDoc interface technology. With omnichannel promotion pricing, this functionality is used to distribute OPP promotions and regular prices from SAP Customer Activity Repository to an external system, for example an SAP Commerce system. You need to perform the following steps:

Transaction **SM59**: Defining an RFC Destination

For each receiving system that initially receives the created IDocs, you have to create an RFC destination. If you use a middleware, this RFC destination refers to the host in which the middleware is running. If you use a 1:1 connection, all receiving systems require a separate RFC destination. The attributes of the RFC destination are determined by the receiving system. In the following we assume that we want to setup a location-specific outbound processing to a local promotion pricing service in a SAP Commerce system that is directly connected to the SAP Customer Activity Repository.

1. In *Technical Settings*, enter the following values for *Target System Settings*:

Field Name	Value
<i>Target Host</i>	<name of the target host>
<i>Path Prefix</i>	/sapppspricing/idocinbound

Field Name	Value
<i>Port</i>	<service number for https or http connection>
<div> <div>i Note</div> <div>With OPP, an https connection is recommended.</div> </div>	

- In *Logon and Security*, select *Basic Authentication* for *Logon with User*, and enter the following values:

Field Name	Value
<i>User</i>	<user name that you have created in SAP Commerce Backoffice >
<i>Password</i>	<password that you have created in SAP Commerce Backoffice >

In *Security Options* select *SSLActive* to send your data via https connection and enter an appropriate certificate.

i Note

We strongly recommend to use Secure protocols (SSL, SCN) whenever possible.

For more information, see *Transport Layer Security and Web Services Security* in the *SAP NetWeaver Security Guide*.

Transaction **WE21**: Defining a Port

- Create this ALE port in the *XML HTTP* folder and enter the following values:

Field Name	Value
<i>Port</i>	<name of port>
<i>Description</i>	<description of port>
<i>RFC destination</i>	<name of the RFC destination created in the previous step>

- Text/XML*.

Transaction **WE20**: Defining a Partner ProfileSelect a content type supported with the receiving system. If you configure a local promotion pricing service choose

A partner profile contains parameters that define the electronic interchange of data between systems using the IDoc interface. There is only one partner profile required for the receiving system and it needs to contain all the parameters that your scenario requires for sending OPP promotions and regular prices to that receiving system.

Basic Partner Profile Information

To set up the basic partner profile information, do the following:

1. In [Partner Profiles](#), create a logical system partner. Enter the following values:

Field Name	Value
Partner No.	External ID of the receiving DDF location
Partner Type	LO for OPP promotions replicated via location-specific outbound processing

Note

For this partner type, only the first 10 characters of the DDF location ID are taken into account, the location type and logical system are ignored. If you want to use a different logic, use transaction **WE44** to define a different partner type or to change the validation logic.

Select a content type supported with the receiving system. If you configure a localIf you need a different implementation of BAdI /ROP/PROMO_STORE_OUTBOUND, see Customizing for SAP Customer Activity Repository and choose [► Omnichannel Promotion Pricing \(OPP\) ► Business Add-Ins \(BAdIs\) ► Outbound Processing of OPP Promotions ► BAdI: Location-Specific Outbound Processing ►](#).

2. In the [Post processing: permitted agent](#) tab, enter the following values:

Field Name	Value
Ty.	US (for User)
Agent	<users to be notified> , which should be an agent who can process IDocs with errors.
Lang.	<notification language>

Outbound Parameters

Field Name	Value
Message Type	/ROP/PROMOTION for OPP promotions
Outbound Options tab	
Receiver port	<receiver port> as defined in section Defining a Port

Field Name	Value
<i>Output Mode</i>	<ul style="list-style-type: none"> • <i>Pass IDoc Immediately</i> <ul style="list-style-type: none"> ◦ Select this option to transfer IDocs directly after creation for a better integration to the DRF transfer log. ◦ Select this option to make sure that IDocs are sent in the same order in which they have been created. • <i>Collect IDocs</i> <ul style="list-style-type: none"> ◦ Select this option to collect IDocs and transfer them sequentially with transaction WE14.
<i>IDoc Type</i>	Depending on the receiving system /ROP/PROMOTION01 or /ROP/PROMOTION02 for OPP promotions
<i>Cancel Processing After Syntax Error</i>	Ensure that this field is selected to avoid sending erroneous IDocs.

Data Replication Framework

In Customizing for *Cross-Application Components* under ► *Processes and Tools for Enterprise Applications* ► *Master Data Governance, Central Governance* ► *General Settings* ► *Data Replication* ► *Overall Information* , see the system documentation to check how data is replicated to one or more target systems. With OPP, the Data Replication Framework functionality is used to send regular prices and OPP promotions from an SAP Customer Activity Repository system to external systems. You need to perform the following steps:

Transaction **DRFIMG**: Defining Custom Settings for Data Replication

In Customizing, you have to perform the following configuration steps under ► *Data Replication* ► *Define Custom Settings for Data Replication* :

1. In Customizing activity *Define Technical Settings for Business Systems*, define a business system and a logical system for the receiving systems. The following business object types are available to replicate OPP promotions and regular prices, and can be assigned to the business system:

Business Object Type	Description	Communication Channel
ROP_PRO_ST	Location-specific outbound processing of OPP promotions	Replication via IDoc

2. In Customizing activity *Define Replication Models*, specify the content of the replication model (regular prices or OPP promotions), the outbound implementation that is to be used, and the business system to which this object is to be sent. You can specify a different destination system for each outbound

implementation that contains business object, filter object, and business logic. You can also add an expiration time for the log. The following predefined outbound implementations exist:

Outbound Implementation	Description	Supported Replication Model	Filter Object
ROP_PRO_ST	Outbound implementation for OPP promotions sent via location-specific outbound processing	Initialization, Change, and Manual	ROP_PRO_ST

Outbound Parameters

The following outbound parameters must be assigned to each replication model:

Outbound Parameter for OPP Promotions	Description	Typical Value*
PACK_SIZE_BULK	<p>This parameter sets the maximum number of OPP promotions that are processed per IDoc. It must be smaller than the TASK_SIZE_PROCMMSG parameter and is relevant for both, the sequential and the parallel execution of DRF outbound.</p> <p>i Note</p> <p>If this parameter is not set, the default is 1. If you increase this value, performance at runtime is improved since fewer IDocs need to be processed.</p>	100-1,000
TASK_SIZE_PROCMMSG	<p>This parameter is only relevant with parallel processing . It sets the maximum number of OPP promotions that are processed per parallel package. It must be greater or equal to the PACK_SIZE_BULK parameter.</p> <p>i Note</p> <p>This parameter value does not define the number of OPP promotions per package. If this parameter is set to 0, independently of the value that you enter in transaction DRFOUT, parallel processing is not possible.</p>	100-5,000
/ROP/Generic_ENH_MAP	<p>This parameter activates the automatic mapping of customer-specific fields that are stored in the CI-Includes of promotional entities to the corresponding extension segments in the OPP promotion IDocs.</p> <p>i Note</p> <p>Internal tables, structures, and so on, are not supported.</p>	x

*This value gives you an idea of usable values for the replication of regular prices and OPP promotions, it is not a recommendation.

- Optional: In Customizing activity [Define Business Object Settings](#), specify the application link enabling (ALE) message type that is to be used for each business object. In this way, you can determine the retention period for change pointers that are related to the business object. For the outbound processing of regular prices, no change pointers are used and the retention period is not relevant. The following message types are relevant for the outbound processing of regular prices and OPP promotions from the central price and promotion repository:

Business Object Type	Message Type
ROP_PRICE	/ROP/BASE_PRICE
ROP_PROMO	/ROP/PROMOTION

For more information, see Customizing for [Cross Application Components](#) under ► [Processes and Tools for Enterprise Applications](#) ► [Master Data Governance, Central Governance](#) ► [General Settings](#) ► [Data Replication](#) ► [Overall Information](#) ►.

Transaction **DRFF**: Defining Filter Criteria

In [Define Filter Criteria](#), specify your data selection for each replication model and business object. The filter criteria are valid for [Initial](#) replication and [Change](#) replication.

6.1.2.9.2 Central Deployment of the Promotion Pricing Service

The promotion pricing service (PPS) is an SAP HANA XS advanced (XSA) application. Therefore the configuration of, for example, database services and back-end connection information, is done before or during the deploy time. The needed configuration settings are provided via command line interface, or in an extension descriptor file.

Prerequisites

- You have installed SAP HANA XSA version 1.0.88 or higher.
- You have access to the XSA [command-line](#) tool version 1.0.82 or higher.
- Your SAP HANA XSA user has the user parameter XS_CONTROLLER_ADMIN assigned.
- Your SAP HANA XSA user has the user parameter XS_USER_ADMIN assigned.
- You have downloaded the SCV file XSACOPPPPS02_<patch_level>.ZIP (for example patch level 0 for the initial delivery) for the PPS from the SAP Support Portal at <https://support.sap.com> ►.

For more information about SAP HANA XS advanced, see the *SAP HANA Developer Guide for SAP HANA XS Advanced Model* on SAP Help Portal at https://help.sap.com/viewer/product/SAP_HANA_PLATFORM/

► [<Version>](#) ► [Development](#) ► [SAP HANA Developer Guide](#) ►.

For more information about the installation of SAP HANA XS advanced, see the *SAP HANA Server Installation and Update Guide* on SAP Help Portal at https://help.sap.com/viewer/product/SAP_HANA_PLATFORM/
 ► <Version> ► *Installation and Upgrade* ► *SAP HANA Server Installation and Upgrade Guide* ► *Installing an SAP HANA System* ► *Installing XS Advanced Runtime* ►.

Used XSA Services

The PPS application uses the following XSA services:

Service Instance	Service	Plan	Resource Type	Description
ppeHANA	User-defined	n/a	org.cloudfoundry.existing-service	Service to access the database.
ppServiceUaa	xsuaa	space	com.sap.xs.uaa-space	Service for authentication and authorization services. Plan space allows the installation of the PPS app in different XSA spaces.
ppServiceAuditLog	auditlog	free	com.sap.xs.auditlog	Audit log broker on the XSA platform.

Note

The services `ppServiceUaa` and `ppServiceAuditLog` are created and bound automatically during the installation of the PPS application.

Creating the Database Service

To make the promotion pricing service run, you have to create the database service `ppeHana`. To do so, you have to execute the following `xs` command:

Source Code

```
xs create-user-provided-service ppeHana -p '{"user\":"<DB_USER>","password\":"<DB_USER_PASSWORD>","url\":"jdbc:sap://<HOSTNAME>:<PORT>","driver\":"com.sap.db.jdbc.Driver","port\":"<PORT>","host\":"<HOSTNAME>:<PORT>"}
```


Adjust the entries in angle brackets (<...>) in the command line:

Entry	Comment
<DB_USER>	Replace this entry with a valid database user of your SAP Customer Activity Repository system.
<DB_USER_PASSWORD>	Replace this entry with the password of your database user (in clear text) in your SAP Customer Activity Repository system.
<HOSTNAME>	Replace this entry with the database host name of your SAP Customer Activity Repository system.
<PORT>	Replace this entry with the database port of your SAP Customer Activity Repository system.

i Note

When you have created the database service, clear the command history to prevent unauthorized disclosure of the password.

For more information about security, see the Administration Guide on SAP Help Portal at <https://help.sap.com/viewer/product/CARAB/> under **>> <Version> > SAP Customer Activity Repository <Version> Administration Guide > Security Information > Security for Omnichannel Promotion Pricing Using SAP HANA XS Advanced**.

Creating the Extension Descriptor File

1. Create a text file with suffix `.mtaext`, for example `config-op.mtaext`.
2. To create the extension descriptor file, copy the following content to the new file that you have created in step 1:

i Note

This content includes the minimum settings that are necessary to create the extension descriptor file. Specific configuration settings, for example settings for caching, can be added to this file as required.

≡ Source Code

```
_schema-version: "2.0.0"
ID: com.sap.retail.ppservice.XSAC_OPP_PPS
extends: com.sap.retail.ppservice.XSAC_OPP_PPS
modules:
  - name: ppservice-approuter
    parameters:
      memory: 128M
  - name: ppservice-webapp-central
    parameters:
      memory: 1024M
    properties:
```

```
DISABLE_SUCCESSFUL_LOGIN_AUDIT_LOG: "<AUDIT_LOG_FLAG>"
JBP_CONFIG_RESOURCE_CONFIGURATION: "['tomcat/webapps/ROOT/WEB-INF/
classes/ppe-schema-orm.xml': {'sap.dataaccess-
common.schema': '<DB_SCHEMA>'}, 'tomcat/webapps/ROOT/META-INF/context.xml':
{'ppeHana-service-name': 'ppeHana'}]"
JBP_CONFIG_JAVA_OPTS: 'java_opts: -Dsap.dataaccess-
common.db.client="<DB_CLIENT>" -Dsap.dataaccess-common.logSys=<LOGSYS>'
provides:
  - name: java
```

Note

This configuration is written in YAML format. Make sure that you copy the format of the code block correctly.

- Adjust the entries in angle brackets (<...>) in the file:

Entry	Comment
<AUDIT_LOG_FLAG>	If you set this flag to true, the system only creates audit log messages for failed login attempts. If set to false, every login is recorded. This is of limited use for an A2A communication. To achieve optimal performance, SAP recommends to set this flag to true.
<DB_SCHEMA>	Replace this entry with the database schema of your SAP Customer Activity Repository system.
<DB_CLIENT>	Replace this entry with the client of your SAP Customer Activity Repository system.
<LOGSYS>	<p>Replace this entry with the logical system ID of your master data system that is connected to your SAP Customer Activity Repository client.</p> <p>If you want to support multiple master data systems in your SAP Customer Activity Repository client, you need different promotion pricing services for each system.</p>

Note

If you need higher values for memory settings, especially for `ppservice-webapp-central`, you can choose larger cache sizes.

- Assuming that your extension descriptor file is called `config-op.mtaext` and that the command is called from the directory in which your extension descriptor file is stored, execute the following command to install the application:

Source Code

```
xs install <pathToScvFile>/XSACOPPPPS<software_component_version>.ZIP -e
config-op.mtaext
```

5. Save the extension descriptor file for later update or patch activities.

i Note

If you want to reinstall the same software component version, add the following parameter to the install command `-o ALLOW_SC_SAME_VERSION`.

For more information about possible additional parameters, see the documentation of this install command.

Configuring Authentication and Authorization Settings

To secure access to the promotion pricing service, you have to configure users and roles in SAP HANA user and role management.

For more information about the XSA security concept, see the *SAP HANA Administration Guide* on SAP Help Portal at https://help.sap.com/viewer/product/SAP_HANA_PLATFORM/<Version>AdministrationSAP_HANA_Administration_GuideApplication_Run-Time_ServicesMaintaining_the_SAP_HANA_XS_Advanced_Run_Time_ModelSetting_Up_Security_Artifacts.

Creating SAP HANA Users

This section describes how to create the SAP HANA users that you need for the authentication configuration of the XSA server:

1. **A system/admin user**

Contact your system administrator to create this user.

2. **A user for the XSA user management**

Use the system/admin user created in step 1 to create the corresponding SAP HANA user. This user needs the *System Privileges* `USER ADMIN` and `ROLE ADMIN` and the *Granted Role* `sap.hana.ide.roles:SecurityAdmin`. You can create this user, for example, via the SAP HANA Studio.

3. **A user for the application role management**

Use the XSA user management user created in step 2 to create the corresponding role builder user. The application role management user needs the *Application Role Collections* `XS_AUTHORIZATION_ADMIN` and `XS_USER_ADMIN`. You can assign these parameters with the user for XSA user management created in step 2 via xs commands (as described below in step 6 of the section *Creating and Assigning a Role Collection*) or via the XSA Cockpit.

For more information, see the documentation of the following xs command (this command lists all available xs commands):

Source Code

```
xs help-a
```

or the *SAP HANA Administration Guide* at https://help.sap.com/viewer/product/SAP_HANA_PLATFORM/<Version>AdministrationSAP_HANA_Administration_Application_Run-Time_ServicesMaintaining_the_SAP_HANA_XS_Advanced_Model_Run_TimeMaintaining_the_XS_Advanced_Run_Time_Environment_with_Graphical_User_Interface.

Creating and Assigning a Role Collection

This section describes how to define a role for the central promotion pricing service (ppservice-webapp-central application) using the role builder.

For more information about building roles, see the *SAP HANA Administration Guide*, at https://help.sap.com/viewer/product/SAP_HANA_PLATFORM/1910.000.000-20190901/Administration/SAP_HANA_Administrator_Guide/Application_Run-Time_Services/Maintaining_the_SAP_HANA_XS_Advanced_Model_Run_Time/Building_Roles_for_SAP_HANA_XS_Advanced_Model_Applications.

1. Create a role collection for the promotion pricing service with the following xs command:

Source Code

```
xs create-role-collection <NAME> [<DESCRIPTION>]
e.g., xs create-role-collection PPE_ROLE_COLLECTION "PPE ROLE COLLECTION"
```

2. Navigate to the space where the PPS has been installed with the following xs command:

Source Code

```
xs target-s <SPACE_NAME>
```

3. Check if the role template ppservice-webapp-central is listed in the space with the following xs command:

Source Code

```
xs role-templates
```

If the installation has been successful, this role template must be listed in this space.

4. Create a role with the PPS role template:

Source Code

```
xs create-role <APP> <ROLE_TEMPLATE> <ROLE_NAME> <DESCRIPTION>
e.g., xs create-role ppservice-webapp-central PPE_ROLE_TEMPLATE
PPE_ROLE_XYZ "PPE role for xyz"
```

5. Add the new role to the new role collection:

Source Code

```
xs update-role-collection <ROLE_COLLECTION> --add-role <ROLE>
e.g., xs update-role-collection PPE_ROLE_COLLECTION --add-role PPE_ROLE_XYZ
```

6. Assign the new role collection to a SAP HANA (XSA) user of your choice:

Source Code

```
xs assign-role-collection <ROLE_COLLECTION> <USER>
e.g., xs assign-role-collection PPE_ROLE_COLLECTION PPSUSER
```

→ Tip

You can call `xs help -a` to get an overview of other `xs` commands regarding role management.

7. With a REST Client, verify that the promotion pricing service user that you have created in the prior step is working. For this, you have to set the following parameters in your REST Client (like Postman for Chrome):
 - Request method = POST
 - **Authorization**
 - Type = Basic Authentication
 - User name = <name of the user created in prior step>
 - Password = <password of the user created in prior step>

i Note

If your password policy prompts users to change their password when they log on to the system for the first time, this needs to be done before a request is sent via Rest Client.

- **Headers**
 - Accept = application/xml
 - Content-Type = application/xml
- **URL**
 - Call the command `xs apps` and check for the URL of the `ppservice-approuter` app.
 - You can use this URL in a browser to import or download the corresponding certificate to your REST Client.
 - Append `/restapi/` to the URL and enter this information in your REST Client.
- Body = `<PriceCalculate xmlns="http://www.sap.com/IXRetail/namespace"/>`

If you send this request, you get HTTP response code **400 (Bad Request)** because you send an empty request body.

If you receive HTTP response code **401 (Unauthorized)** or **403 (Forbidden)**, there is something wrong with your service user, or application. Double-check all steps that you have performed in this chapter.

Additional Configuration Settings (Optional)

There are a lot of settings that are not mandatory in a default case. However, they provide facilities to adapt the promotion pricing service to your specific needs.

Configuration of Caches

By default, all database accesses to OPP promotion and regular price entities are cached. For this, you can use the following two types of caches:

- Object cache based on JPA
In this case, OPP promotions and their child entities (price rules, texts, and so on) are stored in the L2 object cache of the JPA provider, for example EclipseLink.
- Query result cache based on Spring Framework
In this case, regular prices and the results of search queries for IDs of price derivation rule eligibilities are stored in a cache. This cache is used via Spring cache abstraction. The cache provider determines the

settings for the query result cache (regular prices, eligibility IDs). Guava is the default cache provider and allows the configuration of the cache via a cache specification string per cache region.

❖ Example

How to Set the Query Result Caches Related to Promotional Information and Regular Prices

≡ Source Code

```
# Use Spring caching for promotional information and base prices - true
is the default setting!
sap.dataaccess-common.cachenamedqueries=true
# Spring cache for promotional information
sap.dataaccess-
common.promocachespec=maximumSize=10000,expireAfterAccess=10m,expireAfterWrite=20m
# Spring cache for base prices
sap.dataaccess-
common.basepricecachespec=maximumSize=10000,expireAfterAccess=10m,expireAfterWrite=20m
```

To apply these settings, they have to be part of the extension descriptor within the JBP_CONFIG_JAVA_OPTS property.

≡ Source Code

```
...
JBP_CONFIG_JAVA_OPTS: 'java_opts: -Dsap.dataaccess-
common.db.client="<DB_CLIENT>" -Dsap.dataaccess-common.logSys=<LOGSYS>'
-Dsap.dataaccess-common.cachenamedqueries=true -Dsap.dataaccess-
common.promocachespec=maximumSize=10000,expireAfterAccess=10m,expireAfterWrite=20m -Dsap.dataaccess-
common.basepricecachespec=maximumSize=10000,expireAfterAccess=10m,expireAfterWrite=20m
...
```

For more information about optional properties that can be set via the extension descriptor, see the module descriptions and the corresponding property files in the *Development and Extension Guide for Omnichannel Promotion Pricing* on SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> > <Version> > *Development and Extension Guide* >.

For more information about caching options, see the *Development and Extension Guide for Omnichannel Promotion Pricing* on SAP Help Portal at <https://help.sap.com/viewer/p/CARAB> > <Version> > *Development* > under > *Promotion Pricing Service* > *PPS Module dataaccess-common* >.

Related Information

<https://github.com/google/guava/wiki/CachesExplained> >

<http://www.eclipse.org/eclipselink/documentation/2.6/concepts/cache.htm#CDEFHHEH> >

<https://docs.spring.io/spring/docs/current/spring-framework-reference/html/cache.html> >

6.1.2.9.3 Update the PPS XSA Application

The promotion pricing service is an SAP HANA XS advanced (XSA) application. Therefore, you have to download the latest XSA component to update or patch the service. The minimum required XSA version is 1.0.88.

Procedure

The following steps describe how to update the XSA component from version 1.1.0 to 1.2.0:

1. Check the current version of your XSA component with the following command:

Source Code

```
xs list-components
```

The following output is displayed:

Source Code

```
Getting software components in org "<ORG>" / space "<SPACE>" as <USER>...
Found software components:
software component
version
-----
XSAC_OPP_PPS (sap.com)    1.1.0
```

2. Download the new SCV file XSACOPPPPS<software_component_version>.ZIP from the SAP Support Portal at <https://support.sap.com>.
3. Assuming your extension descriptor file is config-op.mtaext, execute the following command to install the new or patched application.
In this case, the command is called from the directory of your extension descriptor file.

Source Code

```
xs install <pathToScvFile>/XSACOPPPPS<software_component_version>.ZIP -e
config-op.mtaext
```

4. Execute the command used in step 1 and the following output is displayed:

Source Code

```
Getting software components in org "<ORG>" / space "<SPACE>" as <USER>...
Found software components:
software component
version
-----
XSAC_OPP_PPS (sap.com)    1.2.0
```

6.1.3 Troubleshooting

Diagnose and resolve issues that may arise when you install, upgrade, and set up your scenario. If you need to report a customer incident, see the information at the end of this section.

→ Tip

For quick access to support information, log in to the SAP ONE Support Launchpad at <https://launchpad.support.sap.com/#/productsearch> and search for SAP CARAB (back-end) or SAP FIORI FOR SAP CARAB (front-end). Find SAP Knowledge Base Articles, Documentation, Guided Answers, Questions & Blogs, and Download information — all on one page.



Troubleshoot Installation, Upgrade, and Implementation Issues


Installation, Upgrade, and Implementation Issues

Area	Symptom	Cause	Possible Solutions
Installation / Upgrade	You want to download a revision of software component SAP RTL AFL FOR SAP HANA.	You need the exact download path on the SAP Support Portal at http://support.sap.com .	See section Download and Install the Application Function Library (SAP RTL AFL FOR SAP HANA) [page 45].
Installation / Upgrade	You get an error indicating that software component SAP RTL AFL FOR SAP HANA is not compatible.	You must install compatible releases ("revisions") of the following: <ul style="list-style-type: none">• SAP RTL AFL FOR SAP HANA• SAP HANA DATABASE• SAP HANA AFL	See section Download and Install the Application Function Library (SAP RTL AFL FOR SAP HANA) [page 45].
Installation / Upgrade	You want to know what AFLs (application function libraries) are installed and active in your SAP HANA database.	For example, you want to check if an AFL was installed or upgraded correctly.	SAP Note 2188129
Installation / Upgrade	You want to verify if your revision of SAP HANA Platform is compatible with your version of SAP HANA studio.	For example, you might be experiencing compatibility issues following an upgrade.	SAP Note 2375176

Area	Symptom	Cause	Possible Solutions
Installation / Upgrade	You have upgraded to compatible revisions of the following components but are still experiencing issues: SAP RTL AFL FOR SAP HANA, SAP HANA AFL, SAP HANA DATABASE	Something went wrong during the upgrade.	Revisit SAP Note 2377894 and make sure that you have carefully followed all the steps for your scenario.
Installation / Upgrade	You want to install or upgrade an application function library (such as SAP RTL AFL FOR SAP HANA) and are experiencing issues with the SAP HANA Lifecycle Management tool (hdb1cm, hdb1cmgui).	You need information on possible causes and solutions.	<ul style="list-style-type: none"> SAP Note 2078425 SAP Note 2082466 SAP HANA Server Installation and Update Guide for your SAP HANA Platform version under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ▶ <Version> ▶ Installation and Upgrade ▶
Installation / Upgrade	You get an import error when installing the RTLAPPS software component of the SAP CARAB back-end product version.	A program error must be fixed.	SAP Note 2377525
Installation / Upgrade	You get the error <i>CAR RETAIL APPLSAP DBTech JDBC: [258]: insufficient privilege: Not authorized.</i>	You are using the SAP HANA AFL software component and have performed an upgrade of your SAP HANA Platform. Previously assigned privileges might have been lost during the upgrade.	SAP Note 2022080




Area	Symptom	Cause	Possible Solutions
Installation / Upgrade	<p>In an upgrade, you get the following error when running program RUTDDLSCREATE:</p> <p><i>3 ETW678Xstart export of R3TRDDLSCDS view name> ...</i></p> <p><i>3WETW000 DDLS <CDS view name> is not activated.</i></p> <p><i>2EETW190 "DDLS" <CDS view name> has no active version.</i></p> <p><i>4 ETW679 end export of R3TRDDLSCDS view name>.</i></p>	An issue with CDS views must be fixed.	SAP Note 2340418 
Installation / Upgrade	You have implemented an SAP Note with a correction for the SAPUI5 application or for the calculation of the application index. The SAPUI5 application index is not recalculated automatically.	You need to start the recalculation manually.	SAP Note 2227577 
SAP HANA content	You have run the /CAR/ACTIVATE_HTA activation report but the selected SAP HANA content is not activated.	You want to know which objects have not been activated correctly and what errors have occurred.	<ul style="list-style-type: none"> Execute transaction SLG1 to display the report log: Towards the bottom of the log you will generally find a section that lists the objects with activation errors. Keep in mind, though, that those objects might not have any issues themselves but that the root cause can also be in dependent objects. In transaction SCTS_HTA_DEPLOY, try to reproduce the errors by manually redeploying the objects.



Area	Symptom	Cause	Possible Solutions
SAP HANA content	You have run the /CAR/ACTIVATE_HTA activation report but get the error <i>Insufficient privilege: Not authorized.</i>	The SAP HANA user needs additional authorizations (privileges).	SAP Note 2586850 
SAP HANA content	You have run the /CAR/ACTIVATE_HTA activation report but the selected SAP HANA content is not activated.	You might have an authorization issue.	<ul style="list-style-type: none"> Check if SAP HANA database user <code>_SYS_REPO</code> has been assigned privilege <code>SELECT</code> with option <i>Grantable to others</i>. If not, you can grant the missing privilege using the following example SQL statement: GRANT SELECT ON SCHEMA <your schema name> TO _SYS_REPO WITH GRANT OPTION; Check that other required authorizations have been set up correctly. For more information, see section <i>Verify Back-End Users and Roles</i> of the <i>Common Installation Guide</i>.
SAP HANA content	You have run the /CAR/ACTIVATE_HTA activation report but the selected SAP HANA content is not activated.	You might have a circular dependency issue. In particular, you get an error that a SQLScript procedure (such as <code>SP_SR_GET_PROD_HR_XR_BY_DATE</code>) cannot be activated.	SAP Note 2404872 

Area	Symptom	Cause	Possible Solutions
SAP HANA content	<p>After running the /CAR/ACTIVATE_HTA activation report, you get two conflicting messages:</p> <ul style="list-style-type: none"> <i>The following scenario was deployed successfully...</i> <i>But returned error/warning/information message(s)...</i> 	You want to know whether the activation was successful and whether any additional action is required.	SAP Note 2467113 
SAP HANA content	You want to generate pre-season sales projections in SAP Assortment Planning but get an error.	You might not have activated all the required SAP HANA content.	When you run the /CAR/ACTIVATE_HTA activation report, make sure to select the required options. See Activate SAP HANA Content [page 72] .
SAP HANA content	You want to check the dependencies of a specific view.	You might need this information to solve a dependency or activation issue for SAP HANA views.	<ul style="list-style-type: none"> In SAP HANA studio: Select the view and choose Auto Documentation from the context menu. This generates a file with detailed information on the view. Consult the Cross References section. If you are using the SAP HANA Live View Browser app: Select the view and choose Cross References.







Area	Symptom	Cause	Possible Solutions
SAP HANA content	You get an error indicating that you are attempting to access inactive or invalid SAP HANA content.	You have not installed software component SAP_RTL_AFL_FOR_SAP_HANA. The component contains back-end functionality for the Unified Demand Forecast module and the On-Shelf Availability module in SAP Customer Activity Repository. If you don't intend to use those modules, you don't need to configure them. However, you must always install the software component.	See section Download and Install the Application Function Library (SAP RTL AFL FOR SAP HANA) [page 45].
SAP HANA content	You get the error <i>Table ABAP:/DMF_ORG_ASSIGN not found</i> .	A program error must be fixed.	<ul style="list-style-type: none"> SAP Note 2218875 SAP Note 2224582
SAP HANA content	You get the error <i>Object DDF_ORG_ASSIGN (Calculation View), package sap.is.ddf.udf.data_validation, was processed with errors</i> .	A program error must be fixed.	SAP Note 2224582
SAP HANA content	You get the error <i>SQLScript: Could not derive table type for variable "UDF_FC_HORIZON"</i> .	A program error must be fixed.	SAP Note 2125672
SAP HANA content	SAP HANA views in the <code>sap.is.ddf.fms</code> package do not activate properly.	A program error must be fixed.	SAP Note 2203930







Area	Symptom	Cause	Possible Solutions
SAP HANA content	You need to manually deploy SAP HANA objects and packages.	The automatic deployment to the SAP HANA repository of the target system has failed.	<ul style="list-style-type: none"> Search for the following sections in the product documentation of your SAP NetWeaver platform at https://help.sap.com/viewer/p/SAP_NETWEAVER:SAP_HANA_Transport_for_ABAP_and_Manually_Deploying_SAP_HANA_Objects_and_Packages. Follow the instructions. Execute transaction SCTS_HTA_DEPLOY for the manual deployment of SAP HANA content and consult the accompanying system documentation.
SAP HANA content	<p>You get any of the following errors:</p> <ul style="list-style-type: none"> <i>View "/AMR/..." does not exist in data base</i> <i>"DDL Source" "/"AMR/...." could not be activated</i> <i>"DDL Source" "/"DMF/DIST_..." could not be activated</i> 	The root cause is the usage of CDS (Core Data Services) on top of external views.	You can ignore the error messages and continue with the installation or upgrade process. For explanations, see SAP Note 2330184 .
SAP HANA content	You get the error <i>SQL Script message: invalid table name: Could not find table/view /AMR/V.</i>	The root cause is the usage of CDS (Core Data Services) on top of external views.	You can ignore the error messages and continue with the installation or upgrade process. For explanations, see SAP Note 2441184 .

Area	Symptom	Cause	Possible Solutions
SAP HANA content	You get the error <i>View with par. <CDS view name>: data element <data element> par. & does not exist or not active.</i>	<p>A data element that is new or has been redefined is used in the new definition in a Core Data Services (CDS) view with parameters for the definition of a parameter.</p> <p>The system does not consider the dependency between data elements and the type definition of the parameters for views with parameters.</p>	SAP Note 2289913 
SAP HANA content	<p>When doing ATC (ABAP Test Cockpit) checks of database objects or runtime objects, you get errors related to reference tables and reference fields:</p> <ul style="list-style-type: none"> • Priority 1 error: <i>View <view_name> is not consistent</i> • Priority 1 error: <i><view_name-field> is not consistent</i> • Inconsistencies in fields related to reference tables and reference fields 	The system does not consider base information of the AMDP table function entity.	SAP Note 2374190 
SAP HANA Platform	<p>You cannot install the SAP HANA XS advanced (XSA) runtime.</p> <p>For example, you need XSA to use the Omnichannel Promotion Pricing (OPP) module in SAP Customer Activity Repository.</p>	You cannot install XSA as long as SAP HANA dynamic tiering is active on the same host.	SAP Note 2388443 


Area	Symptom	Cause	Possible Solutions
SAP HANA Platform	You are encountering performance issues in the SAP HANA Platform.	Several causes are possible.	<ul style="list-style-type: none"> SAP Note 2600030  (Parameter Recommendations in SAP HANA Environments) SAP Note 2100040  (FAQ: SAP HANA CPU) SAP HANA Troubleshooting and Performance Analysis Guide for your SAP HANA Platform version under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM  <Version>  Administration 
SAP HANA Platform	You are not sure if the installed SAP HANA revision is compatible with the installed SAP HANA studio version.	Consult the list of compatible revisions and versions.	SAP Note 2375176 
Hierarchies	You get errors when creating or updating location hierarchies and/or product hierarchies.	The system does not generate the flat structures for the hierarchies. You need to do some configuration steps so that the hierarchies get flattened automatically.	<ul style="list-style-type: none"> See section <i>Configure Automatic Flattening of Hierarchies</i> of the <i>Common Installation Guide</i>. See the following sections of the <i>SAP Customer Activity Repository Administration Guide</i> under https://help.sap.com/viewer/p/CARAB  <Version>  Administration : <ul style="list-style-type: none"> Configuring Demand Data Foundation (DDF) Configuring Data Replication from SAP ERP to DDF
Hierarchies	You get errors when importing article hierarchies (product hierarchies) from your master data system.	A program error must be fixed.	<ul style="list-style-type: none"> SAP Note 2244521  SAP Note 2245134 

Area	Symptom	Cause	Possible Solutions
Hierarchies	You want to know which locations are included in each version of an offer.	You can implement an easy enhancement for table /DMF/OFR_LG_LOC.	SAP Note 2208619
Hierarchies	An error occurs for a DDL SQL view when you execute the CREATE VIEW statement.	A program error must be fixed.	SAP Note 2377525
DRF data replication framework (transaction DRFOUT)	You have deleted a vendor from the /DMF/D_VENDOR table but this deletion is not replicated to the master data system.	A program error must be fixed.	SAP Note 1872136
DRF data replication framework (transaction DRFOUT)	You get an error when using the DRF with the PMPL SAP ERP outbound implementation.	A program error must be fixed.	<ul style="list-style-type: none"> SAP Note 1904782 SAP Note 2167629 See the application help for SAP Customer Activity Repository at https://help.sap.com/viewer/p/CARAB <Version> Application Help SAP Customer Activity Repository Demand Data Foundation Integration Information Master Data Replication from SAP ERP to Demand Data Foundation
DRF data replication framework (transaction DRFOUT)	You get the error <i>Product &1, location &2: The Valid From time for &3 must be 00:00:00</i> (message 364 in message class /DMF/MSG_HL).	A program error must be fixed.	SAP Note 2163602

Area	Symptom	Cause	Possible Solutions
DRF data replication framework (transaction DRFOU T)	You have changed the listing information in your source master data system and replicated the changes to your SAP Customer Activity Repository system. However, the listing information there is not updated correctly.	A program error must be fixed.	SAP Note 1932525 
Performance	You are experiencing performance issues in your SAP HANA database.	You need information on how to troubleshoot and resolve those issues and how to enhance performance in general.	See the <i>SAP HANA Troubleshooting and Performance Analysis Guide</i> under https://help.sap.com/viewer/p/SAP_HANA_PLATFORM  <Version>  Administration 
Performance	You get a runtime error or exit message and need information about possible causes and solutions.	Different causes are possible.	Use the ABAP dump analysis (transaction ST22) to search for short dumps and call up detailed error information.
Performance	You are using the <i>Update Sales Projection</i> function in SAP Assortment Planning (workbooks <i>Product Planning</i> and <i>Size Planning</i>). You are experiencing performance issues when using the function with large data volumes.	You can enhance the performance by implementing an SAP Note.	SAP Note 2080423 
OData	During the execution of an OData service based on SADL with CDS, an assertion fails in class <code>CL_SADL_SQL_STATEMENT</code> , method <code>EXECUTE_PREPARED_STATEMENT</code> . The OData request uses the system query option <code>\$count</code> .	The Core Data Services (CDS) view uses a table function that is not active in the database. The trigger that is supposed to activate it fails because of missing parameters if only <code>\$count</code> is queried.	SAP Note 238998 

Area	Symptom	Cause	Possible Solutions
Support	You have a customer incident and need to set up a service connection to SAP.	You need information on how to set up the service connection.	<ul style="list-style-type: none"> SAP Note 35010  (overview) SAP Note 1634848  (service connection for SAP HANA database) SAP Note 1592925  (service connection for SAP HANA studio)
Source Master Data Systems	You get the error SYSTEM_ABAP_ACCESS_DENIED .	The error is caused by the Blacklist Monitor in SAP S/4HANA on premise.	SAP Note 2249880 
SAP Fiori	<ul style="list-style-type: none"> You want to start an SAP Fiori app for a key user and get the error Application is not configured. Find details in SAP Note 2283716. You want to activate extensibility for key users. 	You must set up the adaptation transport organizer (ATO) to be able to transport key user extensions.	SAP Note 2283716 
SAP Fiori	You want to check the SAPUI5 version installed in your system.	There are several methods how you can check the version.	SAP Note 2282103 

Area	Symptom	Cause	Possible Solutions
SAP Fiori	You cannot open the Analyze Forecast app.	Several reasons are possible. See the checklist at the right and verify that the app is set up correctly.	<p>Use section <i>Set Up the Analyze Forecast App</i> in the <i>Common Installation Guide</i> for reference and check the following:</p> <ol style="list-style-type: none"> 1. In transaction SE80, navigate to package UICAR001, subpackage UISCAR01. Check that the BSP Applications for the app (ANALYZFCST_V2) and the reuse library (UDFREUSE) are deployed. 2. In Launchpad Customizing (transaction LPD_CUST), check that the Internet Communication Framework (ICF) services for ANALYZFCST_V2 and for UDFREUSE are active. 3. Clear the cache on the server side by running the following reports in transaction SE38: <ul style="list-style-type: none"> ◦ /UI5/ APP_INDEX_CALCULATE: Select Single SAPUI5 Repository Only and run the report once for ANALYZFCST_V2 and once for UDFREUSE. ◦ /UI2/ INVALIDATE_GLOBAL_CACHES: Run this report in execution mode. ◦ /UI2/ INVALIDATE_CLIENT_CACHES: Run

Area	Symptom	Cause	Possible Solutions
			<p>this report for all users.</p> <ol style="list-style-type: none"> 4. Clear the browser cache. 5. Check if you can now access the app.
Upgrade On-Shelf Availability Dispatcher (transaction /OSA/DISPATCH)	The following error occurs when executing the On-Shelf Availability (OSA) Dispatcher: "SQL Error Code 274 : inserted value too large for column"	Local temporary tables (LOCAL_EXCL_PRODUCT, LOCAL_LISTED_PRODUCT, and LOCAL_PS_CONF) created and used by OSA for internal dispatcher processing are not dropped automatically during runtime therefore new tables, such as any containing CHAR40 fields, cannot get created. This causes an SQL error when a CHAR40 material is supplied. Subsequent structural change to the definition of these tables requires manual intervention in cases where the tables may already exist.	SAP Note 2576497 

Troubleshoot Operation Issues

You also may encounter issues during the day-to-day running of your application. For troubleshooting information, see the application-specific *Administration Guides* under <https://help.sap.com/viewer/p/CARAB>

► <Version> ► Administration ►:

- *SAP Customer Activity Repository Administration Guide*: section *Troubleshooting for SAP Customer Activity Repository Modules*
- *SAP Allocation Management Administration Guide*: section *Troubleshooting*
- *SAP Assortment Planning Administration Guide*: section *Troubleshooting*
- *SAP Merchandise Planning Administration Guide*: section *Troubleshooting*
- *SAP Promotion Management Administration Guide*: section *Management of SAP Promotion Management*

Report a Customer Incident

- If you encounter an issue with your system, we recommend that you first search the SAP Knowledge Base and SAP Notes for existing solutions. For more information, see <http://support.sap.com/> ► [My Support](#) ► [Knowledge Base](#) ►.
- To view or report an incident, see <http://support.sap.com/> ► [My Support](#) ► [Incidents](#) ►.
- For more information on reporting incidents for SAP Customer Activity Repository, see the *Support Desk Management* section of the *SAP Customer Activity Repository Administration Guide*.

6.2 SAP Merchandise Planning

This upgrade guide describes upgrading from *SAP Merchandise Planning 4.0 FP00* to *SAP Merchandise Planning 4.0 FPS01*. You must have completed the upgrade activities in this guide under ► [SAP Customer Activity Repository](#) ► [Core \(Mandatory\)](#) ►.

6.2.1 Activate SAP HANA Content for SAP Merchandise Planning

Activate all SAP HANA Transport for ABAP (HTA) objects that are required for SAP Merchandise Planning application.

Prerequisites

As a mandatory prerequisite for a successful activation of SAP HANA content for SAP Merchandise Planning, you must have successfully completed all of the procedures listed in the previous sections of this guide as pertains to ► [SAP Customer Activity Repository](#) ► [Core \(Mandatory for All Applications\)](#) ►. In particular, you must have created all the necessary tables, as described in [Create/Replicate Source Master Data System Tables](#) [page 71].

You must also have mapped all the necessary schemas, as described in [Verify Correct Schema Mapping](#) [page 36].

Context

In this procedure you perform the final activation of SAP HANA content (views and stored procedures) required by the SAP Merchandise Planning application. This final activation results in a **full** activation of the SAP HANA content for SAP Merchandise Planning. Several SAP HANA views depend on local BI Content objects. The SAP

HANA views have to be activated before activating the BI Content objects as described in [Activate Application BI Content Upgrade \[page 168\]](#) .

For more information, see <http://help.sap.com/hana> ► *HANA Platform* ► Section *Activating Objects of the SAP HANA Developer Guide SAP*.

Procedure

1. In your back-end system, start transaction **SE38**.
2. Enter `/CAR/ACTIVATE_HTA` and choose *Execute*.
3. Select all applicable *ECC modes* and the business scenarios *Demand Data Foundation* and *Merchandise Planning* to activate the SAP HANA content. If all applicable scenarios show *(Active)* you can skip to step 6.
4. Optionally, select the *Perform Prerequisite Check* option to validate the processing and read the system log prior to applying any database changes.
5. Choose *Execute*. Exit the screen when completed.
6. Ensure that the `_SYS_REPO` user has the authorizations required to successfully activate SAP HANA content.

Provide user `_SYS_REPO` with object privilege `SELECT`, with option *"Grantable to others"*, on the following physical DB schemas:

- Physical database schema of your back-end system, typically this is called `SAP<SID>`.
- Physical database schema that contains the SAP ERP tables

You can use the following example SQL statement to grant the required privilege:

```
GRANT SELECT ON SCHEMA <Your schema name> TO _SYS_REPO WITH GRANT OPTION;
```

7. Log on to SAP HANA Studio.
8. Open the *Modeler* and use the *Navigator* to access your back-end system.
9. Expand the *Content* folder located under your system name in the *Navigator*.
10. Expand the listed packages to verify the underlying folders listed below are active.

Based on the selected *ECC Mode* in the above report the following packages should exist:

- *SAP ERP*:
 - `sap.is.ddf.ecc`
 - `sap.is.retail.ecc`
- *Fashion Management*:
 - `sap.is.ddf.ecc`
 - `sap.is.retail.ecc`
 - `sap.is.ddf.fms`
- *S/4HANA*:
 - `sap.is.ddf.fms`
 - `sap.is.retail.fms_s4h`

11. The following packages should exist resulting from the standard installation:

- `sap.is.ddf.ddf`

- `sap.is.retail.rap.ap`
- `sap.is.retail.rap.common_bw`
- `sap.is.retail.rap.mpr`
- `sap.is.retail.rap.mpr_oc`

If any of these packages are missing, you must activate those relative to the order above due to dependencies. Use transaction `SCTS_HTA_DEPLOY` to activate each missing packages.

6.2.2 Activate Application BI Content Upgrade

⚠ Caution

Proper authorization is required to complete these steps.

These instructions are to activate content under the *Merchandise Planning Omni Channel* (/RAP/MPOC) InfoArea for the following objects types:

- Advanced DataStore Objects
- Workbooks (will automatically activate:)
 - Composite Providers
 - Aggregation Levels
 - Queries

Activation Steps

The object types must be activated in the order above. Each object type and the detail objects are listed in the tables below and should be compared to the activated objects in your environment. To activate, use transaction `RSOR` to launch the BW workbench.

1. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Locate and expand *Source System*.
 4. Double click *Select Objects* to ensure that the back-end system is selected as the source system in the pop up window.
 5. Choose *Transfer Selections* in the same window.
 6. In the title bar of the right-hand frame, above the list of *Collected Objects*, choose *Grouping* and select *Only Necessary Objects* in the context menu.
 7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.
2. If you have modified standard /RAP/* *BI Content* objects in your local environment, you must enable the *Match (X) or copy* option. Otherwise go to step 3.
 1. During the activation of each *BI Content* object type, you will be asked to carry out an additional *Transfer selections* step. In this step, select to install the *Active Version* (that is, your modified version) or the *Content Version* (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

3. Activate the InfoObject catalog. If at any point during the installation of *BI Content* objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

Activate Advanced DataStore Objects

i Note

A window being referenced, may be hidden. Use the *Data Warehousing Workbench* menu in the main window title bar to hide/unhide the following windows: *Navigation*, *All Objects*, and *Collected Objects*.

- Use transaction RSOR to launch the BW workbench Transport Connection.
- In the navigation window, locate and select *Object Types*. In the window *All Objects According to Types*, expand node *DataStore Objects (advanced)* and double click *Select Objects*. In the popup window, select the following objects and select button *Transfer Selections*.

DataStore Object (advanced)

aDSO Description	aDSO
Market Hierarchy CR based on Planning Configuration Set	/RAP/MHDS1
Market Hierarchy CR aDSO for LY and LLY	/RAP/MHDS2
aDSO for actuals of LY and LLY KPIs	/RAP/MPDS0
MP - Regional Month Sales Target for Omni Channel	/RAP/MPDS1
MP - Local Month Sales Inventory Targets for Retail and E-Co	/RAP/MPDS2
MP - Local Month Sales and Inventroy Targets for Whol-sale	/RAP/MPDS3
Product Hierarchy CR based on Planning Configuration Set	/RAP/PHDS1
Product Hierarchy CR aDSO for LY and LLY	/RAP/PHDS2
Merchandise Plan YSCT Characteristic Relationship	/RAP/SCTDS

- Select *Yes* to the system prompt *Do you want to add the objects to the personal list*.
- When prompted for *Source System*, do not choose any and select *OK*.
- For each aDSO, right click on the object and select option *Install All Below*.
- *Install* and *Activate* each aDSO.

Activate Analysis Office Excel Workbooks 2.0

In this section you will continue from the above step and activate the workbooks.

- From the left navigation panel for *BI Content* locate and expand folder *More Types*. Expand *Analysis Office Excel Workbook* and double click *Select Objects*. Use the filter in the popup window to define a filter on column *Object Name* having values of */RAP/MP_**.
In the pop up window, select the following objects and select button *Transfer Selections*.

Workbooks

Workbook Object Name
/RAP/MP_ECOM_PHN5_WB_01
/RAP/MP_OTB_OTS_PHN5_WB_01
/RAP/MP_OTB_OTS_PHN5_WB_02
/RAP/MP_RTL_PHN5_WB_01
/RAP/MP_RT_PHN5_M_WB_01
/RAP/MP_RT_PHN7_WB_01
/RAP/MP_RT_SSN_PHN5
/RAP/MP_WHS_PHN5_M_WB_01

- Select *Yes* to the system prompt *Do you want to add the objects to the personal list*.
- For each workbook, right click and select option *Install All Below*.
- Install* and *Activate* each workbook.

Verify Installed Objects

In addition to the *advanced DataStore Objects* in the above steps, see the tables below to verify all expected objects are installed.

Composite Providers

Composite Provider Description	Composite Provider
Merchandise Financial Plan Omni Channe	/RAP/CP15

Aggregation Levels

Aggregation Description	Aggregation Name
MP Regional Targets Sales Mix - PHN 5	/RAP/C15A01
MP Regional Targets SSN Sales Mix - PHN 5	/RAP/C15A02
MP Regional Targets SSN Sales Mix - PHN 7	/RAP/C15A03
MP Local Targets - ECommerce - Sales Mix - PHN 5	/RAP/C15A11

Aggregation Description	Aggregation Name
MP Local Targets - ECommerce - Sales Mix - PHN 5 - PF	/RAP/C15A12
MP Local Targets - Retail - Sales Mix - PHN 5	/RAP/C15A21
MP Local Targets - Retail - Sales Mix - PHN 5 - PF	/RAP/C15A22
MP Local Targets - WHS - Sales Mix - PHN 5	/RAP/C15A31
MP Local Targets - WHS - Sales Mix - PHN 5 - PF	/RAP/C15A32
MP - OTB - Retail - ECom - WHS	/RAP/C15A41
AL for Market Hier CR for LY and LLY	/RAP/MHDSA2
Product Hierarchy CR based on Planning Configuration Set	/RAP/PHDSA1
SCT CR based on Planning Configuration Set	/RAP/SCTDA1
AL for Product Hier CR for LY and LLY	/RAP/PHDSA2
Market Hierarchy Aggregation Level	/RAP/MHDSA1
AL for Actuals of LY and LLY KPIs	/RAP/MPDSA0

Queries

Query Name	Technical Name
MP - Regional Targets - Prompt Query - PHN5	/RAP/CP15A01_Q01
MP - Regional Targets - Sales Mix - PHN5	/RAP/CP15A01_IRQ01
MP - Regional Targets - Season Prompt Query - PHN5	/RAP/CP15A02_Q01
MP - Regional Targets - Season Flow - PHN5	/RAP/CP15A02_IRQ00
MP - Regional Targets - Season Sales Mix - PHN5	/RAP/CP15A02_IRQ01
MP - Regional Targets - Season Flow Chart - PHN5	/RAP/CP15A02_Q00
MP - Regional Targets - Season Flow - PHN7	/RAP/CP15A03_IRQ00
MP - Regional Targets - Season Sales Mix - PHN7	/RAP/CP15A03_IRQ01
MP - Regional Targets - Season Flow Chart - PHN7	/RAP/CP15A03_Q00
MP - Regional Targets - Prompt Query - PHN7	/RAP/CP15A03_Q01
MP - Local Targets - ECom - Sales Mix - PHN5	/RAP/CP15A11_IRQ01
MP - Local Targets - ECom - Inventory Mix - PHN5	/RAP/CP15A11_IRQ02

Query Name	Technical Name
MP - Local Targets - ECom - Prompt Query - PHN5	/RAP/CP15A11_Q01
MP - Local Targets - Rtl - Sales Mix - PHN5	/RAP/CP15A21_IRQ01
MP - Local Targets - Rtl - Inventory Mix - PHN5	/RAP/CP15A21_IRQ02
MP - Local Targets - Rtl - Prompt Query - PHN5	/RAP/CP15A21_Q01
MP - Local Targets- WHS - Sales Mix - PHN5	/RAP/CP15A31_IRQ01
MP - Local Targets - WHS - Inventory Mix - PHN5	/RAP/CP15A31_IRQ02
MP - Local Targets - WHS - Prompt Query - PHN5	/RAP/CP15A31_Q01
MP - OTB Reconciliation Report - Prompt Query	/RAP/CP15_Q001
MP - OTB Reconciliation Report	/RAP/CP15_Q01
MP - OTB Reconciliation Season Prompt Query	/RAP/CP15_Q002
MP - OTB Reconciliation Report - Season	/RAP/CP15_Q02

Merchandise Planning Workbooks

Workbook Description	Workbook Technical Name
1.1 Regional Monthly Plan	/RAP/MP_RT_PHN5_M_WB_01
1.2 Regional Seasonal Plan	/RAP/MP_RT_SSN_PHN5
1.3 Regional Seasonal Plan	/RAP/MP_RT_PHN7_WB_01
2.1 Retail Monthly Plan	/RAP/MP_RTL_PHN5_WB_01
3.1 Wholesale Monthly Plan	RAP/MP_WHL_PHN5_M_WB_01
4.1 Ecommerce Monthly Plan	/RAP/MP_ECOM_PHN5_WB_01
5.1 OTB & OTS Reconciliation	/RAP/MP_OTB_OTS_PHN5_WB_01
5.2 OTB & OTS Sseason Reconciliation	/RAP/MP_OTB_OTS_PHN5_WB_02

Merchandise Planning Retail Workbooks

Workbook Description	Workbook Technical Name
01 - Channel Mix	/RAP/MPCHANNELMIXV2
03 - Merchandise Plan - Class	/RAP/MPCLASSV2
02 - Merchandise Plan - Department	/RAP/MPDEPARTMENTV2

Workbook Description	Workbook Technical Name
01 - Merchandise Plan - Division	/RAP/MPDIVISIONV2
05 - Merchandise Plan - OTB Reconciliation Report	/RAP/MPOTBRECONCILIATIONV2
05 - Channel Plan - Store Area Plan	/RAP/MPSTOREAREAV2
02 - Channel Plan - Store Comparability	/RAP/MPSTORECOMPV2
03 - Channel Plan - Multi Store	/RAP/MPSTOREMULTIV2
04 - Channel Plan - Single Store	/RAP/MPSTORESINGLEV2
04 - Merchandise Plan - Subclass	/RAP/MPSUBCLASSV2

6.2.3 Verify Time Data

Ensure that the previously generated calendar time data is still for running your SAP Merchandise Planning process.

Procedure

Ensure that the time data for the Gregorian Calendar, and, if required, the Fiscal Calendar, has been generated far enough into the past and future.

For more information, see the following:

- *Generate Time Data - Gregorian Calendar* and *Maintain Fiscal Year Variants* sections of the *Common Installation Guide*

6.3 SAP Assortment Planning

This section lists the steps for the different SAP Assortment Planning upgrade scenarios.

6.3.1 4.0 to 4.0 FPS01

Upgrade information.

This section is intended for existing SAP Assortment Planning for Retail customers who have installed and configured SAP Assortment Planning for Retail 4.0 and would like to upgrade to SAP Assortment Planning 4.0 FPS01.

6.3.1.1 Quick Guide

Upgrade to SAP Assortment Planning 4.0 FPS01.

Checklist

Prerequisites

Ensure that you have carried out all the steps listed in the previous sections of this guide.

Mandatory Steps

- ☐ Perform all the mandatory core steps for SAP Customer Activity Repository. See [Core \(Mandatory for All Applications\) \[page 64\]](#).
- ☐ Verify SAP HANA and back-end system roles. See *Verify Users, Privileges, and Roles*.
- ☐ Adjust Customizing settings.
- ☐ Reactivate SAP Assortment Planning planning framework content.
- ☐ Verify that data replication is running following the upgrade.
- ☐ Run the validation report.
- ☐ Verify that all SAP Assortment Planning OData services are active following the upgrade. For detailed information, see [Verify that OData Services are Active \[page 77\]](#).
- ☐ Verify that all the ICF services relevant to SAP Assortment Planning are active following the upgrade.
- ☐ Verify the definition of system aliases for back-end transactions.
- ☐ Troubleshoot front-end server upgrade.

6.3.1.2 Perform Core Steps for SAP Customer Activity Repository

To set up this application, you must first perform the **Core (Mandatory)** steps for SAP Customer Activity Repository. The core steps are mandatory for all the consuming applications.

Procedure

Perform all steps listed under [Core \(Mandatory for All Applications\)](#) [page 64].

6.3.1.3 Adjust Customizing Settings

Customizing to maintain following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

Following the upgrade, you need to make settings in Customizing to be able to use SAP Assortment Planning 4.0 FPS01.

Procedure

1. Log on to your back-end system.
2. If you use the Retail SAP BW Structure and you don't want to use planning configuration, do the following:
 - a. Disable [Use Planning Configuration](#) and [Prompt in Manage Location Clusters](#) (using transaction `SPRO`) under [Cross-Application Components](#) [Assortment Planning](#) [Imported Demand Data Foundation Settings](#) [Basic Settings](#) [Define Default Values](#).

You must disable this Customizing setting to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

- b. Disable the implementation of [BAdI: Read Merchandise Planning KPI Data](#) under [Cross-Application Components](#) [Demand Data Foundation](#) [Data Maintenance](#) [Planning Configuration](#) [Enhancements Using Business Add-Ins](#).

You must disable the implementation of this BAdI to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

If you use the Omnichannel SAP BW structure, make sure that [Use Planning Configuration](#) is enabled.

3. Maintain the monthly fiscal year variant (using transaction `SPRO`) under [Cross-Application Components](#) [Assortment Planning](#) [Imported Demand Data Foundation Settings](#) [Basic Settings](#) [Define Default](#)

[Values](#) > [Monthly FY Variant](#) . This is necessary to use the view *Sales & Inventory Analysis* in the *My Assortment Lists* app.

For more information, see [Fiscal Year Variant](#).

4. Define the business week (using transaction SPRO) under ► [Cross-Application Components](#) > [Demand Data Foundation](#) > [Basic Settings](#) > [Define Business Week](#) .
5. Maintain number ranges for planning configurations under ► [Cross-Application Components](#) > [Assortment Planning](#) > [Number Ranges](#) > [Maintain Number Range for Planning Configuration](#) .
6. Maintain number ranges for parameter configurations under ► [Cross-Application Components](#) > [Assortment Planning](#) > [Number Ranges](#) > [Maintain Number Range for Parameter Configuration](#) .
7. Make sure that the settings in Customizing activity *Assortment List Settings* fit to your planning process.

The *Assortment List Settings* activity is available in Customizing under ► [Cross-Application Components](#) > [Assortment Planning](#) > [Assortment Lists](#) .

8. If you want to allow users access to the *Analyze Forecast* app via links from the *My Assortment Lists* app, enable the *Create* option to generate a location hierarchy out of every location cluster set **activated** in SAP Assortment Planning. This option is available in the *Location Clustering Settings* Customizing activity under ► [Cross-Application Components](#) > [Assortment Planning for Retail](#) > [Imported Demand Data Foundation Settings](#) > [Data Maintenance](#) > [Location Clustering](#) > [Location Clustering Settings](#) .

If the *Create* option is not visible, choose *New Entries*.

9. To use forecasted values in the *Sales & Inventory Analysis* view within the *My Assortment Lists* app, configure Unified Demand Forecast (UDF). For more information, see the *SAP Customer Activity Repository Administration Guide*, section *Configuring Unified Demand Forecast (UDF)*.
10. Verify default implementation of *BAdI: Determine Product Season Classification* and, if necessary, provide a custom implementation.

The BAdI, *BAdI: Determine Product Season Classification* is available under ► [Cross-Application Components](#) > [Assortment Planning](#) > [Enhancements Using Business Add-Ins](#) .

6.3.1.4 Verify Fiscal Calendar

Time data to verify following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

i Note

Generate time data (fiscal calendar) since this is required for using the *Sales & Inventory Analysis* view in the *My Assortment Lists* app. The fiscal calendar is also required to initialize the SAP Assortment Planning BW structure, as it allows for planning on fiscal periods.

Procedure

If required and not already done, ensure that the time data has been generated far enough into the past and future for SAP Assortment Planning 4.0 FPS01.

For more information, see the following:

- *Generate Time Data - Fiscal Calendar* section of the *Common Installation Guide*
- *Management* section of the *SAP Assortment Planning Administration Guide*

6.3.1.5 Reactivate Planning Framework Content (SAP Assortment Planning)

There are two distinct BW structures supported in SAP Assortment Planning:

Omnichannel SAP BW Structure

⚠ Caution

New functionality will be only available for the Omnichannel SAP BW structure. Therefore, we recommend to use the Omnichannel SAP BW structure which provides an extensive feature set.

- If you already use the Omnichannel SAP BW structure, reactivate it.
- If you were using the previously existing Retail SAP BW structure, we recommend that you reactivate it during the upgrade. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Make sure that you have enabled the optimized in-memory planning capabilities of the integrated planning engine in SAP Business Warehouse. For more information, see the *Common Installation Guide*, section *Enable Optimized In-Memory Planning Capabilities of SAP BW Integrated Planning*.

Prerequisite

To use the Omnichannel SAP BW structure, the following prerequisites must be met:

- Enable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►. The Omnichannel SAP BW structure only works when planning configurations are used.
- Enable the implementation of [BADl: Read Merchandise Planning KPI Data](#) under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) ►.

The Omnichannel SAP BW structure consists of local BI Content only. To create workbooks on top of the Omnichannel SAP BW structure, contact SAP Digital Business Services for a custom implementation project.

Retail SAP BW Structure

⚠ Caution

If you were using the Retail SAP BW Structure in a previous release, we recommend that you reactivate this structure during the upgrade. The Retail SAP BW Structure will be supported with maintenance, however no new functionality will be developed for this structure. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Prerequisite

To use the Retail SAP BW structure, the following prerequisites must be met:

- Disable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) . You cannot use the Retail SAP BW structure with planning configurations.
- Disable the implementation of *BAdI: Read Merchandise Planning KPI Data* under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) .

6.3.1.6 Upgrade from Omnichannel SAP BW Structure

If you already use the Omnichannel SAP BW structure, activate the local BI Content objects as described in subsection [Activate Application BI Content \(Omnichannel SAP BW Structure\)](#).

6.3.1.6.1 Activate Application BI Content (Omnichannel SAP BW Structure)

Context

In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Omnichannel SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system

i Note

To ensure correct activation of the BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Result \[page 186\]](#), which can be ignored.

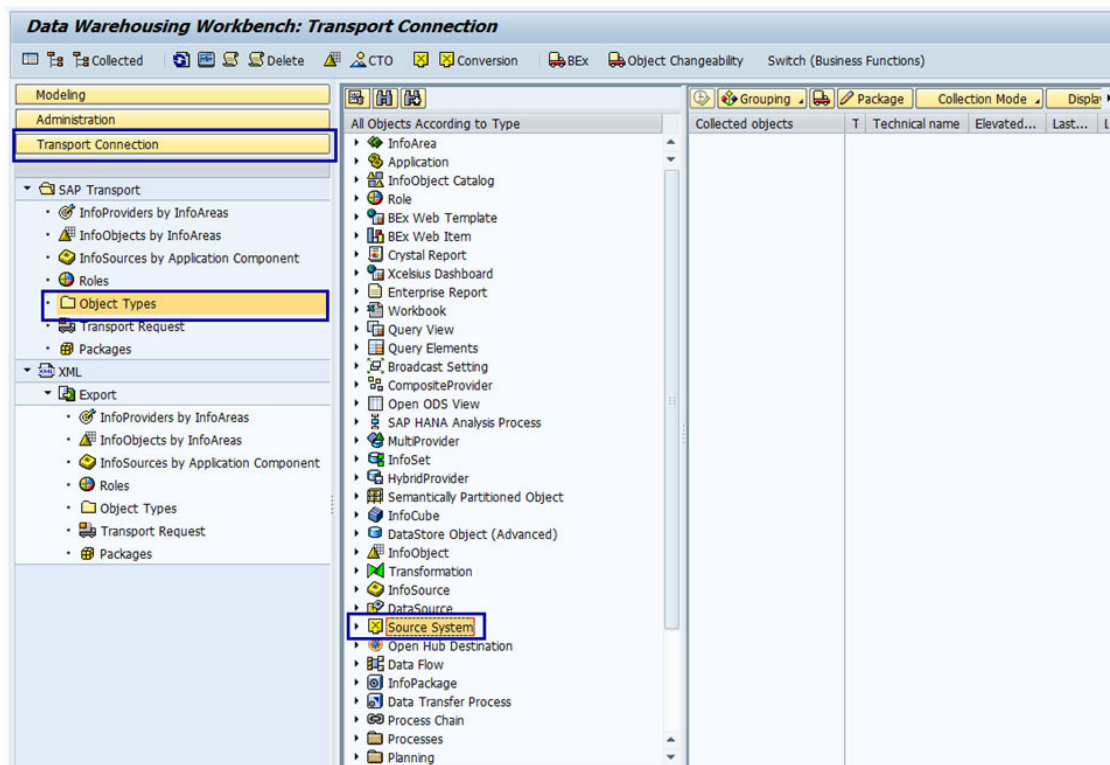
Also, do not disable the default BI setting to collect and activate all dependencies. The instructions below activate a minimum subset of objects, and it assumed that all their dependencies are collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see:

- *SAP Assortment Planning Administration Guide* under *Initial Load of Data to DDF Using DRFOUT*
- [173241](#)
- Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* ►.

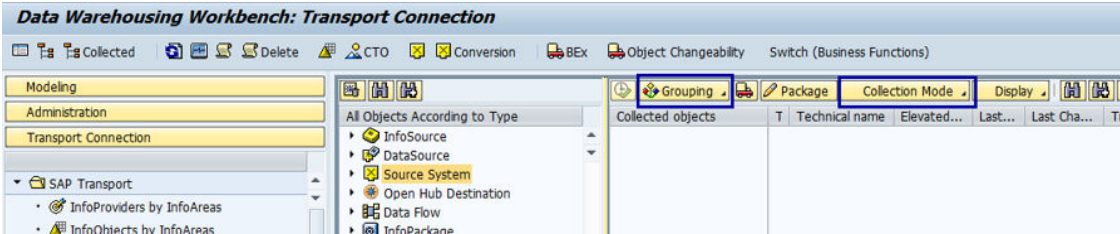
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction RSA1).
2. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Expand *Source System*.



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



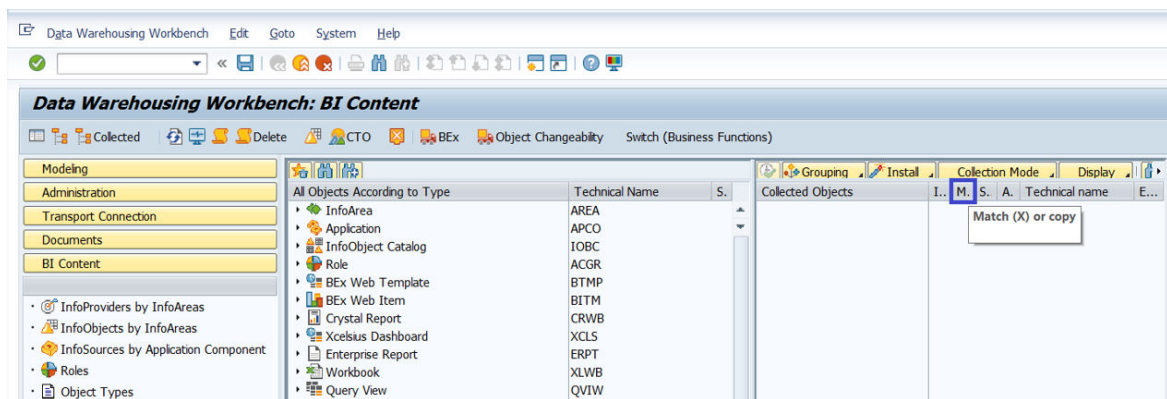
Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content, which you will activate in the subsequent steps.

Match(X) or copy Selection

Installation Type	Selection	
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹	Standard /RAP/* BI Content objects have been modified in your local environment¹
	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	<p>Enable the <i>Match (X) or copy</i> option.</p> <p>During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.</p>
<div> <div>⚠ Caution</div> <p>When you choose to install the <i>Content Version</i>, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.</p> </div>		

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



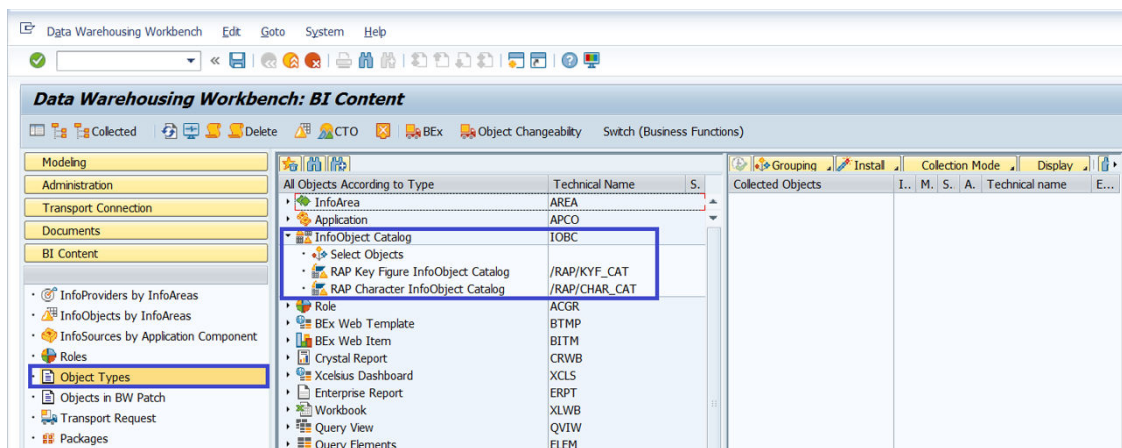
4. Activate InfoObject catalogs.

If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Result \[page 186\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoObject Catalog*.



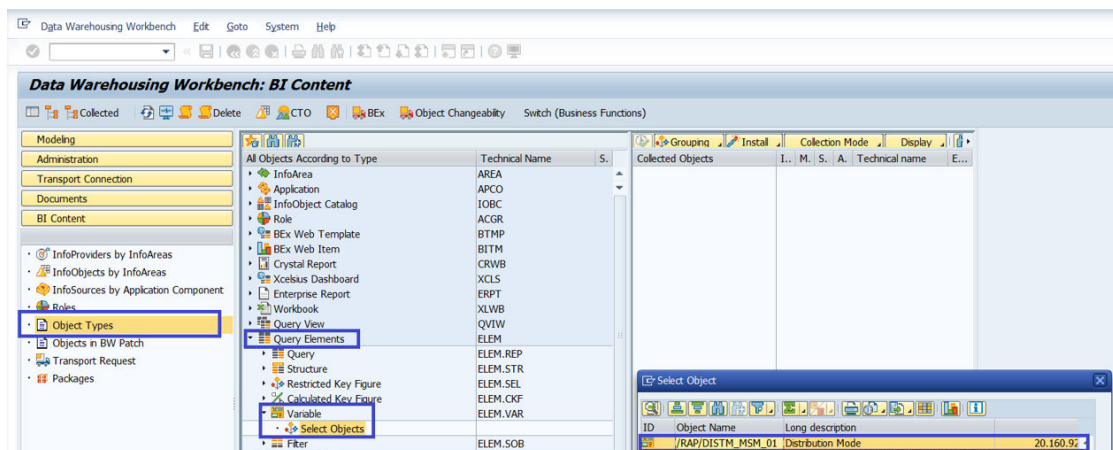
3. Use *Select Objects* to select the */RAP/CHAR_CAT* and the */RAP/KYF_CAT* catalogs.
 4. Choose *Transfer Selections*.
 5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
 6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
 7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
5. Activate *Variables*.

→ Remember

You can ignore activation warnings listed under [Result \[page 186\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand *Query Elements* followed by *Variable*.
3. Use *Select Objects* to select the following variables:
 - /RAP/PLCND_ESM_02
 - /RAP/PLCSET_ESM_02
 - /RAP/PCYCLE_EMM_01
 - /RAP/PLNHR_MSO_01
 - /RAP/PLNHN1_MSO_01 to /RAP/PLNHN9_MSO_01 (inclusive)
 - /RAP/PRDHN1_MMO_01 to /RAP/PRDHN9_MMO_01 (inclusive)



4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that all of the selected variables are listed and that the option in the *Install* column is enabled.
6. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
6. Maintain version master data.
 1. In the left-hand frame, select **Modeling** **InfoObjects**.
 2. In the right-hand frame under **Assortment Planning for Retail** **RAP Character InfoObject Catalog**, search in the object list for the InfoObject /RAP/VERSN.
 3. Right-click the InfoObject /RAP/VERSN, choose *Maintain Master Data* from the context menu, and maintain the following entries on the *Time Independent* tab:

Version	Short description
#	An empty version value that you must maintain
ALV	Assortment List Vsn
APF	Vsn of final plan

Note

Save your changes and activate them.

7. Activate Advanced DataStore Objects.

If during the installation, you are presented with a message stating that your source system is not active, navigate to the [Modeling](#) tab, locate your source system under [Source Systems](#), and activate it by right-clicking and selecting [Activate](#). If prompted, choose [Only Activate](#).

→ Remember

You can ignore activation warnings listed under [Result \[page 186\]](#).

1. Select [BI Content](#) in the left-hand frame.
2. Select [Object Types](#) and expand [DataStore Object \(advanced\)](#).
3. Use [Select Objects](#) to select all DataStore Objects starting with [/RAP/DS*](#).
4. Choose [Transfer Selections](#).
5. In the list of [Collected objects](#), verify that the option in the [Install](#) column is enabled for each of the objects.
6. Choose [► Display ► List ►](#).
7. Right-click the tree node [DataStore Object \(advanced\)](#) and choose [Install all Below](#).
8. Choose [Install](#). If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
9. Remodel the following Advanced DataStore Objects if a corresponding message appears: [/RAP/DS40](#), [/RAP/DS42](#), [/RAP/DS54](#), and [/RAP/DS55](#).

i Note

Set all affected Advanced DataStore Objects to [Load Mode](#) before starting the remodeling process. After the remodeling process, make sure that all new Advanced DataStore Objects are set to [Planning Mode](#).

→ Tip

To set an Advanced DataStore Object to Load Mode:

1. Select [Modeling](#) in the left-hand frame.
2. Select [InfoProvider](#) in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to set to [Load Mode](#).
4. Choose [► Planning-Specific Properties ► Change Real-Time Load Behavior ►](#).
5. Choose [Real-Time Data Target Can Be Loaded With Data; Planning Not Allowed](#) and confirm.

→ Tip

To remodel an Advanced DataStore Object:

1. Select *Modeling* in the left-hand frame.
2. Select *InfoProvider* in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to remodel.
4. Choose ► *Additional Functions* ► *Remodeling Monitor* ►.
5. Select a remodeling rule.
6. Choose *Start Request*. The *Start Time* window opens.
7. In the *Start Time* window, select a start time for the remodeling request and confirm.

8. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Result \[page 186\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *CompositeProvider*.
3. Use *Select Objects* to select all CompositeProviders from /RAP/CP40 to /RAP/CP46 (inclusive).
4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose ► *Display* ► *List* ►.
7. Right-click the tree node *DataStore Object (advanced)* and choose *Install all Below*.
8. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

9. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Result \[page 186\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.
3. Use *Select Objects* to select the following Aggregation Level:

Aggregation Levels

Aggregation Levels

/RAP/C44A01

/RAP/C44A02

/RAP/C44A03

Aggregation Levels

/RAP/C44A04

/RAP/C46A02

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

10. Activate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 186\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:

Planning Sequences

Planning Sequences

/RAP/D50A01_PS01

/RAP/D57A01_PS01

/RAP/C40A01_PS01

/RAP/C40A05_PS01

/RAP/C46A01_PS01

/RAP/C46A03_PS01

/RAP/C46A04_PS01

/RAP/C46A04_PS02

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

11. Activate Planning Function Type Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 186\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand **Planning** > *Function Type for Planning*.
3. Use *Select Objects* to select the following Planning Function:

Planning Functions

Planning Functions

/RAP/OP_BUFFER_DATA

4. Choose *Transfer Selections*.
 5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
12. Choose *Exit* to leave the transaction.

Results

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same
- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.1.7 Upgrade from Retail SAP BW Structure

If you were using the previously existing Retail SAP BW structure, activate the local BI Content objects and ensure that the previously generated time data (Gregorian calendar) is sufficient. For detailed information see the subsections *Activate Application BI Content (Retail SAP BW Structure)* and *Verify Gregorian Calendar*.

6.3.1.7.1 **Activate Application BI Content (Retail SAP BW Structure)**

Context

In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Retail SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system.






Caution

As of SAP Assortment Planning 2.0 FP2, a new (Omnichannel) SAP BW Structure has been introduced. Please contact SAP for assistance with your upgrade project.

Note

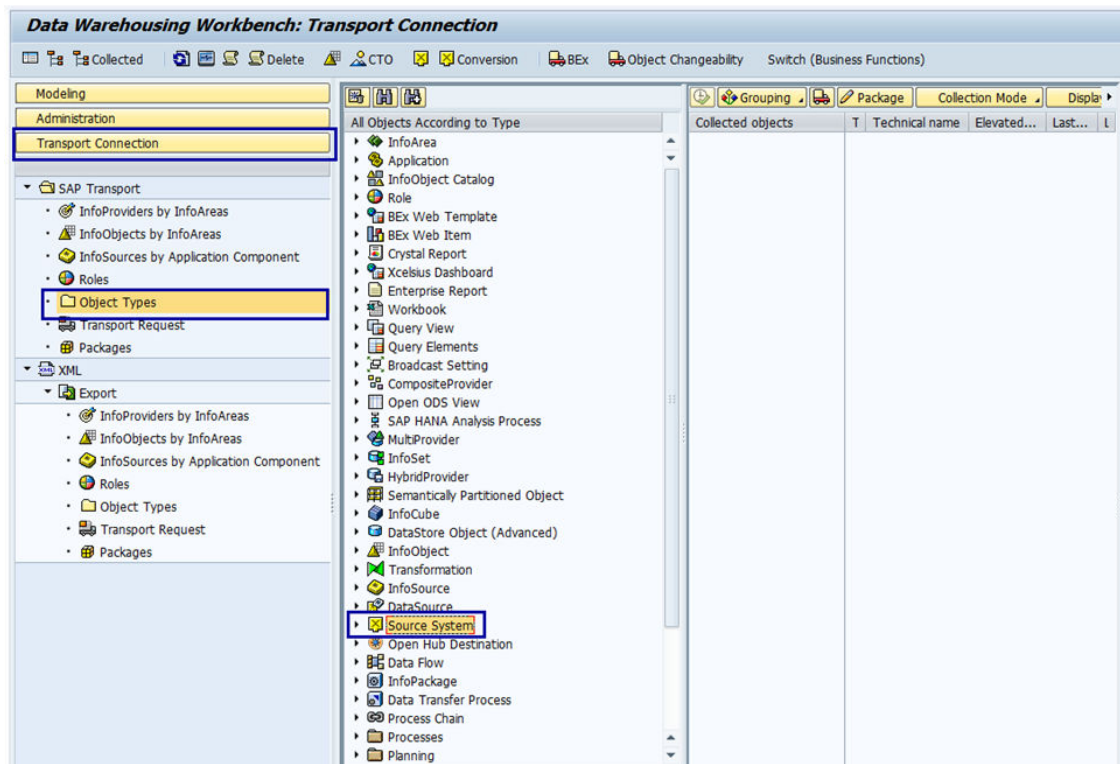
To ensure correct activation of the local BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Activation Warnings \[page 194\]](#), which can be ignored.

Also, the default BI setting to collect and activate all dependencies must not be disabled by the user. The instructions below activate a minimum subset of objects, and it is assumed that all their dependencies will be collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see [173241](#)  and Customizing activity [Maintain permitted extra characters](#) under  [SAP NetWeaver](#)  [Business Warehouse](#)  [General Settings](#) .

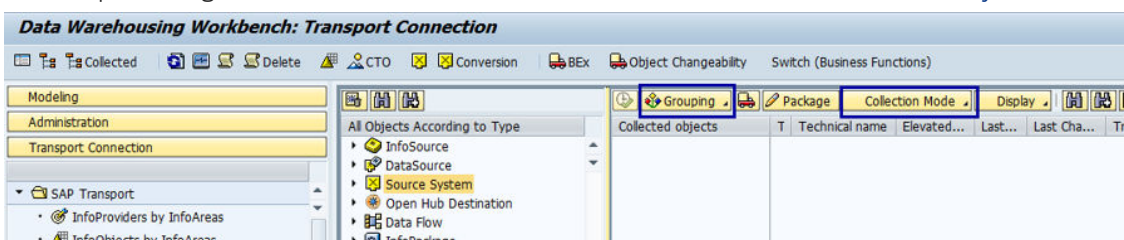
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction `RSA1`).
2. Verify transport connections.
 1. Select [Transport Connection](#) in the left-hand frame.
 2. Select [Object Types](#).
 3. Expand [Source System](#).



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content which you will activate in the subsequent steps.

Match(X) or copy Selection

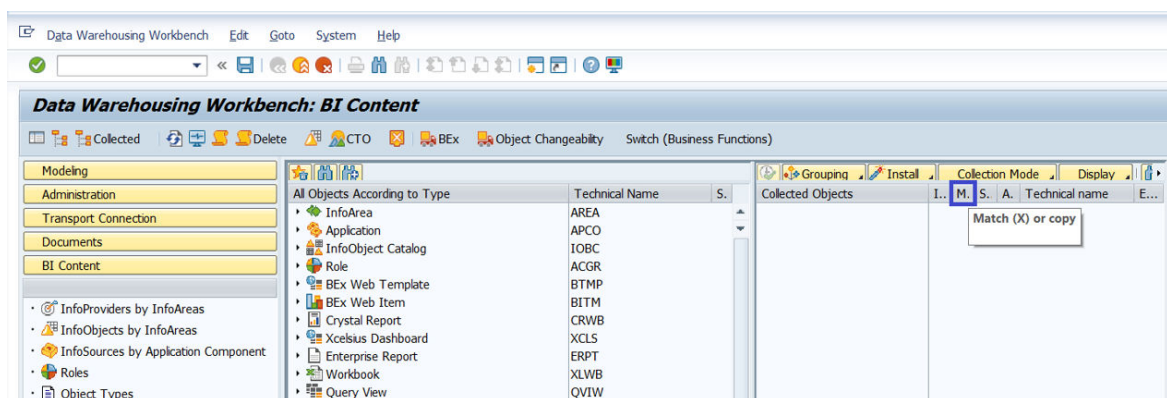
Installation Type	Selection
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.

Installation Type	Selection	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹ Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	Standard /RAP/* BI Content objects have been modified in your local environment¹ Enable the <i>Match (X) or copy</i> option. During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

⚠ Caution

When you choose to install the *Content Version*, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



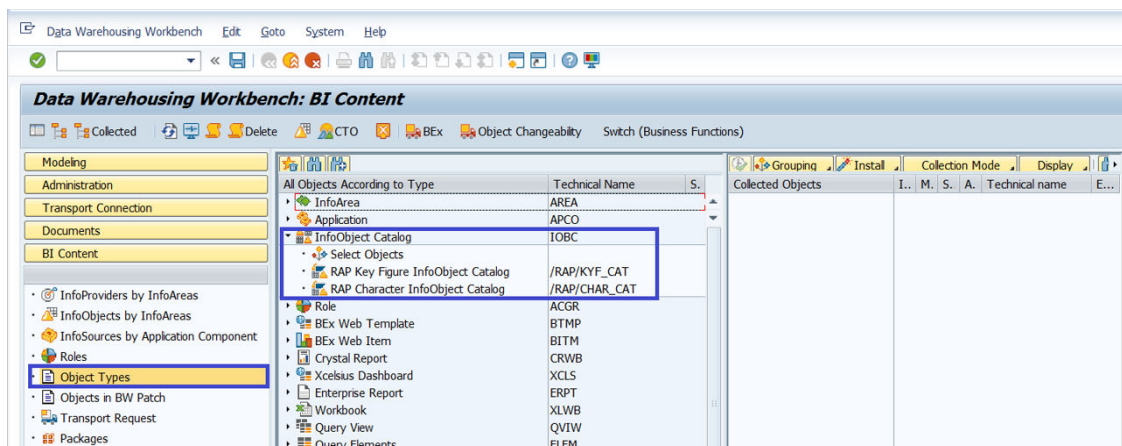
4. Activate InfoObject catalogs.

If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoObject Catalog*.



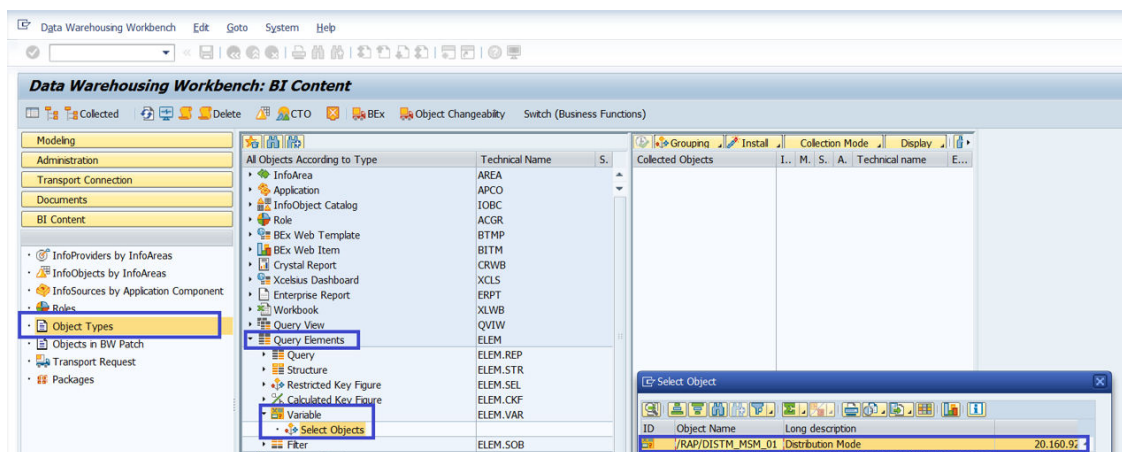
3. Use *Select Objects* to select the /RAP/CHAR_CAT and the /RAP/KYF_CAT catalogs.
4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

5. Activate *Variable* /RAP/DISTM_MSM_01.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *Query Elements*.
3. Use *Select Objects* to select the /RAP/DISTM_MSM_01 Variable.



4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that the /RAP/DISTM_MSM_01 Variable is listed and that the option in the *Install* column is enabled.
6. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

6. Maintain version master data.
- 1. Select *Modeling* in the left-hand frame.
 - 2. Expand *InfoObjects*.
 - 3. Search for InfoObject /RAP/VERSN, located under *Assortment Planning* > *RAP Character InfoObject Catalog*.
 - 4. Right-click the InfoObject /RAP/VERSN, choose *Maintain Master Data* from the context menu, and maintain the following entries on the *Time Independent* tab:

Version
- An empty version value that you must maintain
000
AP1
AP2
APF
AW1
AW2
OP1
OP2
PRJ
REF

Search: Version			
Results List: 76 results found for Version		Personal Value List	Show Search Criteria
Version	Short description		
#	Not assigned		
0	Actuals		
AP1	Plan Version 1		
AP2	Plan Version 2		

The supported planning versions are described in detail in the *Maintain Customizing Table /RAP/RS_VARCUST* section of the *Common Installation Guide*.

i Note

Save your changes and activate them.

7. Activate DataStore Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.
 2. Select *Object Types* and expand *DataStore Object (Classic)*.
 3. Use *Select Objects* to select all DataStore Objects starting with */RAP/**.
 4. Choose *Transfer Selections*.
 5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
If during the installation, you are presented with a dialog asking you to add objects to a personal list, select **No**.
8. Activate InfoCubes.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.
 2. Select *Object Types* and expand *InfoCube*.
 3. Use *Select Objects* to select all InfoCubes starting with */RAP/RC**.
 4. Similarly, select InfoCubes */RAP/VC20* and */RAP/VC21*.
 5. Choose *Transfer Selections*.
 6. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 7. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
9. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.
 2. Select *Object Types* and expand *CompositeProvider*.
 3. Use *Select Objects* to select all CompositeProviders from */RAP/CP20* to */RAP/CP37* (inclusive).
 4. Choose *Transfer Selections*.
 5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
10. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.
3. Use *Select Objects* to select the following Aggregation Levels:
These should be active from the previous installation, if not, select them to be installed again:

Aggregation Levels

Aggregation Level

/RAP/D20A01

/RAP/R20A02

/RAP/R20A06

/RAP/R20A08

/RAP/R20A11

/RAP/R20A12

/RAP/R20A15

/RAP/R20A17

/RAP/R23A01

4. Choose *Transfer Selections*.
 5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
11. Reactivate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:
These should be active from the previous installation, if not, select them to be installed again:

Planning Sequences

Planning Sequence

/RAP/C21A01_PS01

/RAP/C25A03_PS01

/RAP/D23A01_PS01

Planning Sequence

/RAP/D24A01_PS01

/RAP/R20A08_PS01

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

12. Reactivate Workbooks.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 194\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *More Types* ► *Analysis Office Excel Workbook* ►.
3. Use *Select Objects* to select the following workbooks:
These should be active from the previous installation, if not, select them to be installed again:

Workbooks

Workbook

/RAP/PLANASSORTMENT

/RAP/PLANOPTIONS

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

13. Choose *Exit* to leave the transaction.

Activation Warnings

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same

- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.1.7.2 Verify Gregorian Calendar

Ensure that the previously generated time data (Gregorian calendar) is sufficient for the current release of SAP Assortment Planning.

Context

Execute this procedure to generate time data (**Gregorian calendar**).

Procedure

1. Log on to SAP HANA studio.
2. In the *Modeler* perspective, on the *Quick Launch* tab, select your SAP Customer Activity Repository applications bundle system and choose *Generate Time Data*.
3. Select *Gregorian* as the *Calendar Type*.

For example, SAP HANA views included in SAP HANA content for SAP Customer Activity Repository require the presence of time data in `_SYS_BI.TIME_DIMENSION*` SAP HANA database tables.

4. Enter a range of years that includes all the years of data that you plan to store in SAP Customer Activity Repository.

Example: If you plan to start using SAP Assortment Planning on January 1, 2014, enter 2014 as your starting year. But if you plan to access sales documents created in SAP ERP that date from January 2013, you should specify 2013 as your starting year.

5. Define the granularity as *Day*, which is the minimum granularity required by SAP Customer Activity Repository. You can choose a finer level of granularity, for example *Hour*, if necessary.
6. Choose the day that is the first day of the week in your company.
7. Choose *Finish*.

For more information, see:

- https://help.sap.com/viewer/p/SAP_HANA_LIVE ► *Installation and Upgrade* ► *Administrator's Guide* ► *Configuration Steps* ► *Generate Time Data* ►

- https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Development ► SAP HANA Modeling Guide (for SAP HANA studio) ► Creating Information Views and Previewing its Output ► Generate Time Data ►

6.3.1.8 Verify that Data Replication is Running Following the Upgrade

Following the upgrade, ensure that all of the data replication described in the *Configure Data Replication* section of the *Common Installation Guide* is still running.

⚠ Caution

The data you replicate in this step is consumed by the SAP Assortment Planning application through local BI Content. Only a subset of ASCII characters is considered valid by SAP BW. As a result, object identifiers, which are mapped to external IDs in DDF (for example, `EXT_LOC_ID` or `EXT_PROD_ID`), should only consist of valid characters.

We recommend that you avoid the usage of invalid characters in the source master data system. This is controlled by the system administrator or the implementation team who define the value ranges and formatting for object identifiers (for example, product or location IDs).

If the recommended approach is not possible, then in your SAP Assortment Planning back-end system, you need to allow for additional special characters in Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* ►. For more information, see [173241](#) ►.

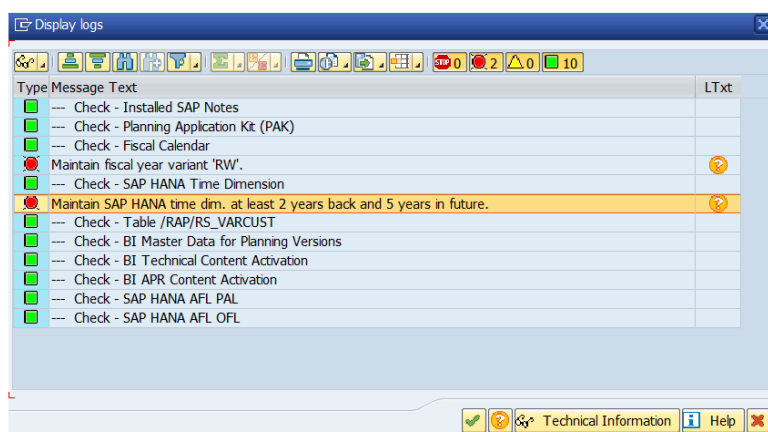
In particular, following the upgrade, you need to pay attention to the following:

- SAP Assortment Planning supports the use of time-dependent article hierarchies. This is enabled by implementing SAP Note [2196323](#) ► in the **connected SAP Retail or SAP S/4HANA system**. Following the implementation of these notes in SAP Retail or SAP S/4HANA, if your hierarchy is already a time-dependent hierarchy, you need to re-import the product hierarchies into SAP Assortment Planning using the DRFOUT framework.
 - SAP Retail Description: Article Hierarchy
 - DRFOUT Outbound Implementation: PAHY
 - DDF Inbound Interface: `/DMF/MDIF_PROD_HIER_INBOUND`
- All the tables listed in the spreadsheet of the *CARAB 2.0 - SLT Tables* archive for your version of SAP Customer Activity Repository applications bundle (SAP Assortment Planning) are being replicated. For more information, see the *Create/Replicate Source Master Data System Tables* section in the *Common Installation Guide*.
- Ensure that periodic tasks to load product attributes into SAP Assortment Planning are still running following the upgrade. (reports `/DMF/ATR_IMPORT` and `/DMF/PROD_ATR_IMPORT`)
- Ensure that season classification data is being loaded from the appropriate source. For more information, see the *Load Season Classification Data* section in the *SAP Assortment Planning Administration Guide*. You also need to set up the *Execute inbound SLT replication for season data* report (`/DMF/EXECUTE_SEASON_INBOUND` in transaction SE38) to run as a background job to regularly import any updates from SAP Fashion Management and SAP Retail to DDF.
- Ensure that wholesale data is being loaded. Set up the *Mapping report to convert sales orders into /DMF/TS_WS table* report (`/DMF/WHOLESALE_SO_SHP_TO_TS_WS` in transaction SE38) to run as a background

job to regularly import replicated sales order and shipment data into DDF. For more information, see the *Load Wholesale Data* section in the *SAP Assortment Planning Administration Guide*.

6.3.1.9 Run the Validation Report

1. Run transaction `/DMF/VAL_CAR_INSTALL`.
Alternatively, run transaction `SE38` and execute the `/DMF/VALIDATE_CAR_INSTALLATION` report.
2. Select the *Assortment Planning* scenario and select *Execute*.
In the dialog that appears, select whether to validate the Retail SAP BW structure, the Omnichannel SAP BW structure, or both. The SAP BW structure to validate depends on the structure that you have selected to reactivate during the upgrade in a previous step, see section *Reactivate SAP Assortment Planning Planning Framework Content*.
Running this report allows you to verify the success of the installation, providing a log of potential issues. For example, you may be presented with the following results:



Validation Report Results

View the long text associated with each message to see the link to the documentation describing the procedure you have to troubleshoot.

6.3.1.10 Activate SAP Assortment Planning ICF Services

Use

Following an upgrade, you must ensure that all ICF services required for the SAP Assortment Planning SAP Fiori apps are activated.

Procedure

1. Log on to your front-end server.
2. Open service maintenance (transaction SICF).
3. In the *Define Services* screen, select the Location Clustering service by specifying the following:
 - Hierarchy Type: **SERVICE**
 - Virtual Host: **DEFAULT_HOST**
 - Service Path: **/sap/bc/ui5_ui5/sap/locclsts_v2/**
4. Choose *Execute*.
5. To activate the service, choose *Service/host Activate*.
6. Repeat steps 3 to 5 to ensure that **all** of the following services are activated:
 - /sap/bc/ui5_ui5/sap/attribmgmt_v2/
 - /sap/bc/ui5_ui5/sap/assortlist/
 - /sap/bc/ui5_ui5/sap/ddfreuse_v2/
 - /sap/bc/ui5_ui5/sap/locclsts_v2/
 - /sap/bc/ui5_ui5/sap/modulemgmt_v2/
 - /sap/bc/ui5_ui5/sap/optionplan_v2/
 - /sap/bc/ui5_ui5/sap/phpmatch_v2/
 - /sap/bc/ui5_ui5/sap/plnconfig/

6.3.1.11 Define System Alias for Back-End Transactions

Use

A number of SAP Assortment Planning SAP Fiori apps, installed on your front-end system, launch transactions directly on the back-end system. For example, the *Manage Products* tile actually launches the Demand Data Foundation (DDF) `POWL_EASY` WebDynpro application.

Following an upgrade, you must ensure that all RFC connections and system alias definitions required by SAP Assortment Planning application remain set.

Procedure

1. Log on to your front-end system, that is, the system where you have installed the user interface (UI) components of the SAP Assortment Planning application.
2. Launch *Configuration of RFC Connections* (transaction SM59).
3. Create an RFC connection with the *RFC Destination* set to `SAP_ISR_CARAB` and *Connection Type* set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect to your back-end system, in particular, the *Target Host* entry on the *Technical Settings* tab.
4. Save your changes.

5. Create another RFC connection with the RFC Destination set to `SAP_ERP_ISR_CARAB` and *Connection Type* set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect your front-end system to the SAP Retail or SAP S/4HANA system, in particular, the *Target Host* entry on the *Technical Settings* tab.
6. Save your changes.
7. Open *Launchpad Customizing* (transaction `LPD_CUST`).
8. Select the SAP Assortment Planning role (`UIRAP001`), and choose *Display*.
The two catalogs, *Assortment Planner* and *Planning Administrator*, are displayed.
9. In each of the catalogs, selecting one app at a time, make the following settings:





Catalog	App	System Alias	Description
<i>Assortment Planner</i>	<i>View Log</i>	<code>SAP_ISR_CARAB</code>	This setting allows the <i>My Assortment Lists</i> app to launch transaction <code>SLG1</code> on the back-end system.
	<div>i Note</div> <p>This application is only used to configure a link to the back-end system, you do not need to add this app to your SAP Fiori launchpad.</p>		
	<i>View ExtAssort Listing Conditions</i>	<code>SAP_ERP_ISR_CARAB</code>	This setting allows the <i>My Assortment Lists</i> app to launch transaction <code>WSL10</code> on the connected SAP Retail or SAP S/4HANA system.
	<div>i Note</div> <p>This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.</p>		
	<i>View External Assortments</i>	<code>SAP_ERP_ISR_CARAB</code>	This setting allows the <i>My Assortment Lists</i> app to launch transaction <code>WRF_WSOA3</code> on the connected SAP Retail or SAP S/4HANA system.
	<div>i Note</div> <p>This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.</p>		
<i>Planning Administrator</i>	<i>Manage Category responsibilities</i>	<code>SAP_ISR_CARAB</code>	This setting allows the <i>Manage Category Responsibilities</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Market responsibilities</i>	<code>SAP_ISR_CARAB</code>	This setting allows the <i>Manage Market Responsibilities</i> app to launch the corresponding DDF WebDynpro application.

Catalog	App	System Alias	Description
	Manage Products	SAP_ISR_CARAB	This setting allows the Manage Products app to launch the corresponding DDF WebDynpro application.
	Manage Locations	SAP_ISR_CARAB	This setting allows the Manage Locations app to launch the corresponding DDF WebDynpro application.

6.3.1.12 Troubleshoot Front-End Server Upgrade

Use

Following the upgrade of the product version on the front-end server, you may not be able to see some of the SAP Assortment Planning SAP Fiori tiles in your launchpad. This section outlines how to troubleshoot these issues, should you experience them.

These steps are also listed in the *Troubleshooting* section of the *SAP Assortment Planning Administrator's Guide* available on the SAP Help Portal at <http://help.sap.com/viewer/p/CARAB>  [<Your Version>](#)  [Administration](#)  [SAP Assortment Planning Administration Guide](#) .

Process

Do the following:

1. Check that all of the required BSP applications are listed in the UIRAP001 package.
 1. Log on to your front-end system (your SAP Gateway system).
 2. Launch the [Object Navigator](#) (transaction SE80).
 3. In the [Repository Browser](#), open package UIRAP001.
 4. Expand all of the embedded packages of embedded package CONTENT_RAP_TRANS.

5. Verify that the following *BSP Applications* are listed:

Package	
UICAR001	
Object Name	Description
UICAR001	Structure package for Customer Activity Repository
Subpackages	
UIAMR001	Structure package for Allocation Management Retail
UIOAA001	Omnichannel Article Availability
UIPMR001	Structure package for Promotion Management Retail
UIRAP001	Structure package for UIRAP
Subpackages	
CONTENT_RAP_COMMON	Main package for common obejcts for RAP
CONTENT_RAP_TRANS	Main package for transactional for RAP
Subpackages	
RETAIL_DDF	Package for DDF
BSP Library	
BSP Applications	
ATTRIBMGMT_V2	Manage Product Attriubtes: Fiori ID F0829A
DDFREUSE_V2	Fiori Reuse Components for DDF: Fiori ID F0854A
LOCCLSTS_V2	Location Clustering: Fiori ID F0550A
MODULEMGMT_V2	Module Management: Fiori ID F1682A
PLNCONFIG	Planning configuration
RETAIL_RAP_AP	Package for RAP AP
BSP Library	
BSP Applications	
ASSORTLIST	Assortment List: Fiori ID F1567B
OPTIONPLAN_V2	Option Plan: Fiori ID F0830A
PHPMATCH_V2	PHP Matching: Fiori ID F0831A
UISCAR01	Strucutre Package for Customer activity repository


BSP Applications

6. If you do not see one or more of the BSP applications listed above, right-click on each of the RETAIL_DDF and RETAIL_RAP_AP packages, and select **Other Functions** > **Rebuild Object List**.

⚠ Caution

Do not rebuild objects on a higher package level.

2. Clean the cache.
 1. Log on to your front-end system (your SAP Gateway system).
 2. In Customizing (transaction SPRO), navigate to **SAP NetWeaver** > **UI Technologies** > **SAP Fiori** > **Data Administration** > **Invalidate Caches**.
This activity launches the /UI2/INVALIDATE_GLOBAL_CACHES report. This report invalidates all server-side caches in SAP NetWeaver user interface services, which can become out-of-date following an upgrade.
 3. If necessary, implement instructions listed in SAP Note [2147669](#).
3. Remove any previously customized versions of the UIRAP001 launchpad.
 1. Log on to your front-end system (your SAP Gateway system).
 2. Launch the **Overview for Launchpads** (transaction LPD_CUST).

3. Search for [Role](#) UIRAP001, and see whether any instances exist where the [User Name](#) is not [SAP](#). If so, this means that customized versions of the UIRAP001 launchpad exist, and these take precedence over the standard launchpad instance delivered by SAP.
4. Delete all but the launchpad instance delivered by SAP.
4. Recalculate SAPUI5 application index, following any changes to the content of the SAPUI5 ABAP repository (for example, installation of a new version of the SAPUI5 distribution layer or implementation of an SAP Note containing changes to an SAPUI5 app).
For more information, see the *Configure Index Calculation* section in the *Common Installation Guide* and SAP Note [2227577](#) .

6.3.2 2.0 SP4 to 4.0 FPS01

This section is intended for existing SAP Assortment Planning for Retail customers who have installed and configured SAP Assortment Planning for Retail 2.0 SP4 and would like to upgrade to SAP Assortment Planning 4.0 FPS01.

6.3.2.1 Quick Guide

Upgrade to SAP Assortment Planning 4.0 FPS01.

Checklist

Prerequisites

Ensure that you have carried out all the steps listed in the previous sections of this guide.

Follow-Up Activities

Mandatory Steps

- ☐ Perform mandatory core steps for SAP Customer Activity Repository. See [Core \(Mandatory for All Applications\)](#) [page 64].
- ☐ Verify SAP HANA and back-end system roles. See *Verify Users, Privileges, and Roles*.
- ☐ Adjust Customizing settings.
- ☐ Reactivate SAP Assortment Planning planning framework content.
- ☐ Verify that data replication is running following the upgrade.
- ☐ Run the validation report.
- ☐ Run the SAP Assortment Planning 2.0 FP3 update report.
- ☐ Run the SAP Assortment Planning 4.0 update report.
- ☐ If you want to purge assortment lists using the `/DMF/PURGE_AGENT` report, you must execute the `/DMF/WUF_MIGRATE_ASRTLST` report **once** using transaction SE38.

For detailed information, read the system documentation associated with the report.

- ☐ Verify that all SAP Assortment Planning OData services are active following the upgrade. For detailed information, see [Verify that OData Services are Active \[page 77\]](#).
- ☐ Verify that all the ICF services relevant to SAP Assortment Planning are active following the upgrade.
- ☐ Verify the definition of system aliases for back-end transactions.
- ☐ Troubleshoot front-end server upgrade.

6.3.2.2 Perform Core Steps for SAP Customer Activity Repository

To set up this application, you must first perform the **Core (Mandatory)** steps for SAP Customer Activity Repository. The core steps are mandatory for all the consuming applications.

Procedure

Perform all steps listed under [Core \(Mandatory for All Applications\) \[page 64\]](#).

6.3.2.3 Adjust Customizing Settings

Customizing to maintain following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

Following the upgrade, you need to make settings in Customizing to be able to use SAP Assortment Planning 4.0 FPS01.

Procedure

1. Log on to your back-end system.
2. If you use the Retail SAP BW Structure and you don't want to use planning configuration, do the following:
 - a. Disable [Use Planning Configuration](#) and [Prompt in Manage Location Clusters](#) (using transaction SPRO) under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►.

You must disable this Customizing setting to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

- b. Disable the implementation of *BAdI: Read Merchandise Planning KPI Data* under [Cross-Application Components > Demand Data Foundation > Data Maintenance > Planning Configuration > Enhancements Using Business Add-Ins](#).

You must disable the implementation of this BAdI to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

If you use the Omnichannel SAP BW structure, make sure that *Use Planning Configuration* is enabled.

3. Maintain the monthly fiscal year variant (using transaction `SPRO`) under [Cross-Application Components > Assortment Planning > Imported Demand Data Foundation Settings > Basic Settings > Define Default Values > Monthly FY Variant](#). This is necessary to use the view *Sales & Inventory Analysis* in the *My Assortment Lists* app.

For more information, see [Fiscal Year Variant](#).

4. Define the business week (using transaction `SPRO`) under [Cross-Application Components > Demand Data Foundation > Basic Settings > Define Business Week](#).
5. Maintain number ranges for planning configurations under [Cross-Application Components > Assortment Planning > Number Ranges > Maintain Number Range for Planning Configuration](#).
6. Maintain number ranges for parameter configurations under [Cross-Application Components > Assortment Planning > Number Ranges > Maintain Number Range for Parameter Configuration](#).
7. Make sure that the settings in Customizing activity *Assortment List Settings* fit to your planning process.

The *Assortment List Settings* activity is available in Customizing under [Cross-Application Components > Assortment Planning > Assortment Lists](#).

8. If you want to allow users access to the *Analyze Forecast* app via links from the *My Assortment Lists* app, enable the *Create* option to generate a location hierarchy out of every location cluster set **activated** in SAP Assortment Planning. This option is available in the *Location Clustering Settings* Customizing activity under [Cross-Application Components > Assortment Planning for Retail > Imported Demand Data Foundation Settings > Data Maintenance > Location Clustering > Location Clustering Settings](#).

If the *Create* option is not visible, choose *New Entries*.

9. To use forecasted values in the *Sales & Inventory Analysis* view within the *My Assortment Lists* app, configure Unified Demand Forecast (UDF). For more information, see the *SAP Customer Activity Repository Administration Guide*, section *Configuring Unified Demand Forecast (UDF)*.
10. Verify default implementation of *BAdI: Determine Product Season Classification* and, if necessary, provide a custom implementation.

The BAdI, *BAdI: Determine Product Season Classification* is available under [Cross-Application Components > Assortment Planning > Enhancements Using Business Add-Ins](#).

6.3.2.4 Verify Fiscal Calendar

Time data to verify following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

Note

Generate time data (fiscal calendar) since this is required for using the [Sales & Inventory Analysis](#) view in the [My Assortment Lists](#) app. The fiscal calendar is also required to initialize the SAP Assortment Planning BW structure, as it allows for planning on fiscal periods.

Procedure

If required and not already done, ensure that the time data has been generated far enough into the past and future for SAP Assortment Planning 4.0 FPS01.

For more information, see the following:

- *Generate Time Data - Fiscal Calendar* section of the *Common Installation Guide*
- *Management* section of the *SAP Assortment Planning Administration Guide*

6.3.2.5 Reactivate Planning Framework Content (SAP Assortment Planning)

There are two distinct BW structures supported in SAP Assortment Planning:

Omnichannel SAP BW Structure

Caution

New functionality will be only available for the Omnichannel SAP BW structure. Therefore, we recommend to use the Omnichannel SAP BW structure which provides an extensive feature set.

- If you already use the Omnichannel SAP BW structure, reactivate it.
- If you were using the previously existing Retail SAP BW structure, we recommend that you reactivate it during the upgrade. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Make sure that you have enabled the optimized in-memory planning capabilities of the integrated planning engine in SAP Business Warehouse. For more information, see the *Common Installation Guide*, section *Enable Optimized In-Memory Planning Capabilities of SAP BW Integrated Planning*.

Prerequisite

To use the Omnichannel SAP BW structure, the following prerequisites must be met:

- Enable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►. The Omnichannel SAP BW structure only works when planning configurations are used.
- Enable the implementation of *BAdI: Read Merchandise Planning KPI Data* under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) ►.

The Omnichannel SAP BW structure consists of local BI Content only. To create workbooks on top of the Omnichannel SAP BW structure, contact SAP Digital Business Services for a custom implementation project.

Retail SAP BW Structure

⚠ Caution

If you were using the Retail SAP BW Structure in a previous release, we recommend that you reactivate this structure during the upgrade. The Retail SAP BW Structure will be supported with maintenance, however no new functionality will be developed for this structure. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Prerequisite

To use the Retail SAP BW structure, the following prerequisites must be met:

- Disable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►. You cannot use the Retail SAP BW structure with planning configurations.
- Disable the implementation of *BAdI: Read Merchandise Planning KPI Data* under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) ►.

6.3.2.6 Upgrade from Omnichannel SAP BW Structure

If you already use the Omnichannel SAP BW structure, activate the local BI Content objects as described in subsection [Activate Application BI Content \(Omnichannel SAP BW Structure\)](#).

6.3.2.6.1 Activate Application BI Content (Omnichannel SAP BW Structure)

Context



In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Omnichannel SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system

i Note

To ensure correct activation of the BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Result \[page 214\]](#), which can be ignored.

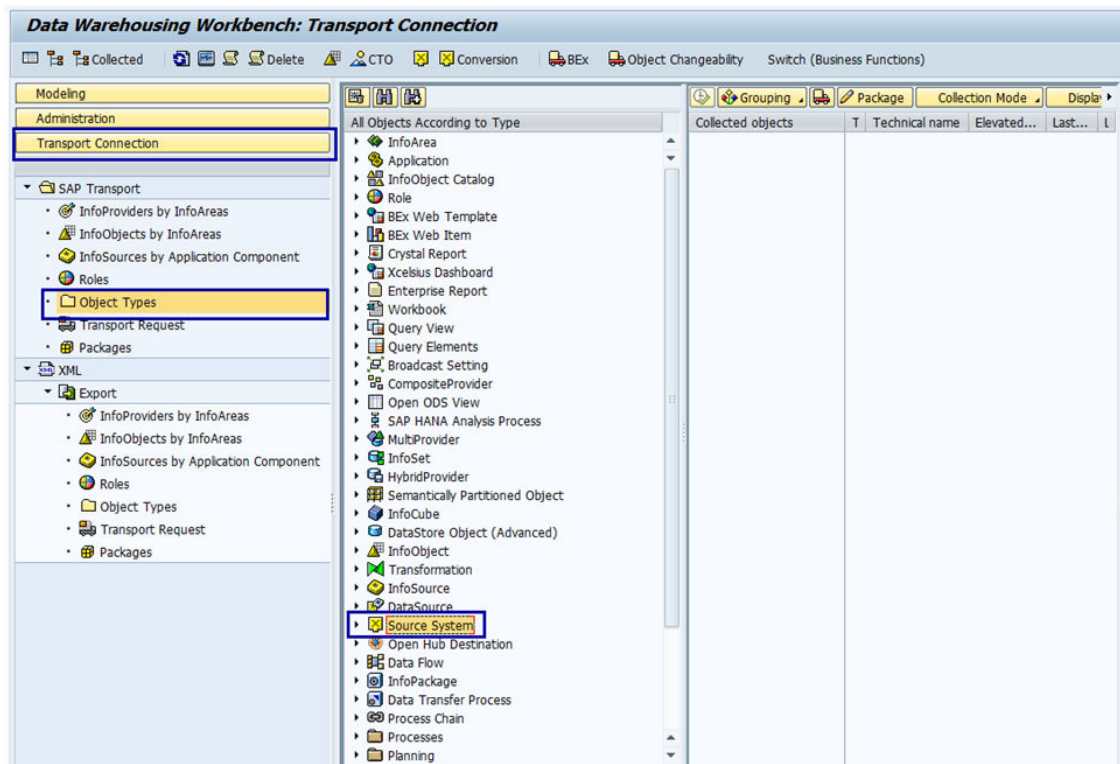
Also, do not disable the default BI setting to collect and activate all dependencies. The instructions below activate a minimum subset of objects, and it is assumed that all their dependencies are collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see:

- *SAP Assortment Planning Administration Guide* under *Initial Load of Data to DDF Using DRFOUT*
- [173241](#) 
- Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* .

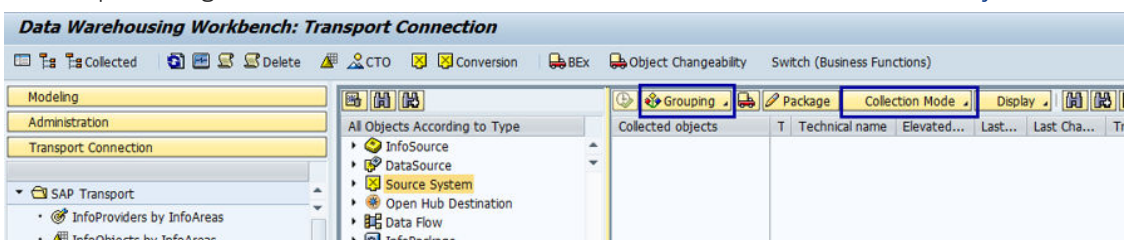
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction *RSA1*).
2. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Expand *Source System*.



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content, which you will activate in the subsequent steps.

Match(X) or copy Selection

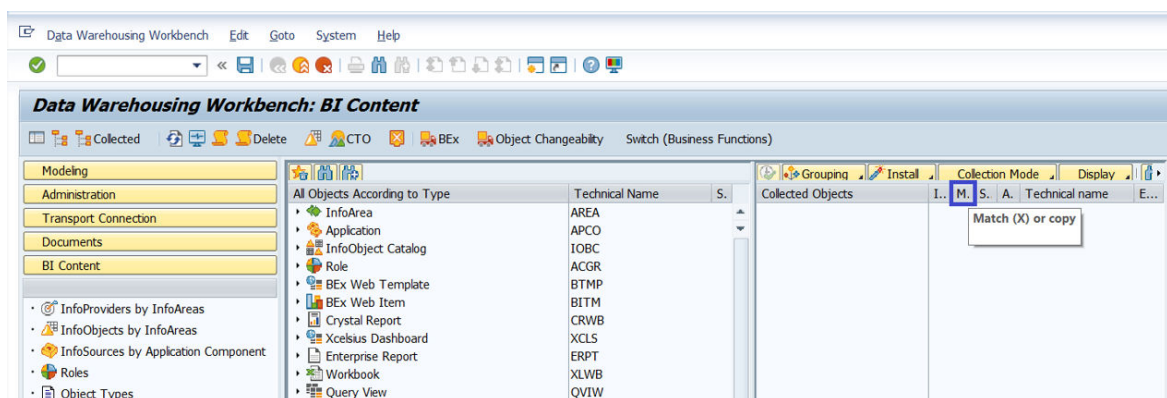
Installation Type	Selection
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.

Installation Type	Selection	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹ Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	Standard /RAP/* BI Content objects have been modified in your local environment¹ Enable the <i>Match (X) or copy</i> option. During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

⚠ Caution

When you choose to install the *Content Version*, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



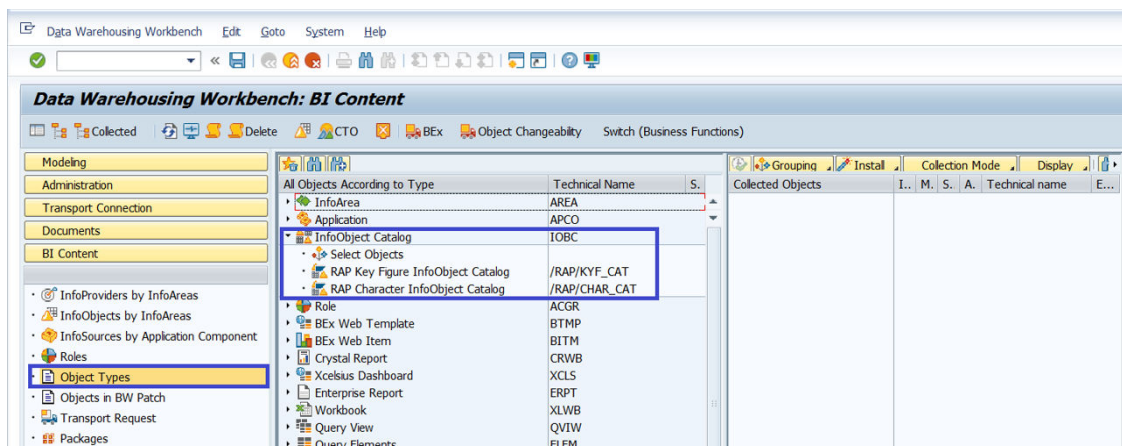
4. Activate InfoObject catalogs.

If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Result \[page 214\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoObject Catalog*.



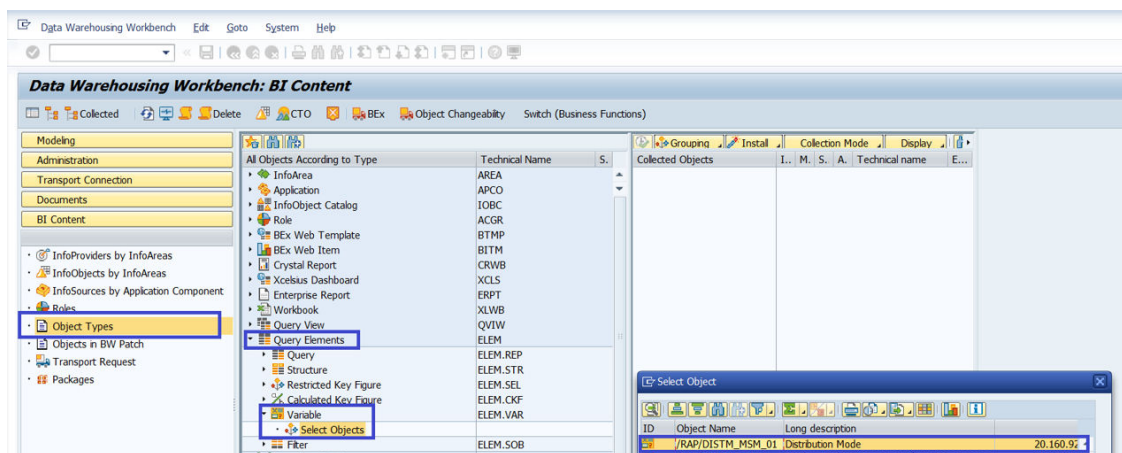
3. Use *Select Objects* to select the /RAP/CHAR_CAT and the /RAP/KYF_CAT catalogs.
4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

5. Activate *Variables*.

→ Remember

You can ignore activation warnings listed under [Result \[page 214\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *Query Elements* followed by *Variable*.
3. Use *Select Objects* to select the following variables:
 - /RAP/PLCND_ESM_02
 - /RAP/PLCSET_ESM_02
 - /RAP/PCYCLE_EMM_01
 - /RAP/PLNHR_MSO_01
 - /RAP/PLNHN1_MSO_01 to /RAP/PLNHN9_MSO_01 (inclusive)
 - /RAP/PRDHN1_MMO_01 to /RAP/PRDHN9_MMO_01 (inclusive)



4. Choose [Transfer Selections](#).
 5. In the right-hand frame, in the list of [Collected objects](#), verify that all of the selected variables are listed and that the option in the [Install](#) column is enabled .
 6. Choose [Install](#).
If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
6. Maintain version master data.
1. In the left-hand frame, select [Modeling](#) [InfoObjects](#) [InfoObjects](#).
 2. In the right-hand frame under [Assortment Planning for Retail](#) [RAP Character InfoObject Catalog](#), search in the object list for the InfoObject [/RAP/VERSN](#).
 3. Right-click the InfoObject [/RAP/VERSN](#), choose [Maintain Master Data](#) from the context menu, and maintain the following entries on the [Time Independent](#) tab:

Version	Short description
#	An empty version value that you must maintain
ALV	Assortment List Vsn
APF	Vsn of final plan

Note

Save your changes and activate them.

7. Activate Advanced DataStore Objects.

If during the installation, you are presented with a message stating that your source system is not active, navigate to the [Modeling](#) tab, locate your source system under [Source Systems](#), and activate it by right-clicking and selecting [Activate](#). If prompted, choose [Only Activate](#) .

→ Remember

You can ignore activation warnings listed under [Result \[page 214\]](#).

1. Select [BI Content](#) in the left-hand frame.
2. Select [Object Types](#) and expand [DataStore Object \(advanced\)](#).
3. Use [Select Objects](#) to select all DataStore Objects starting with [/RAP/DS*](#).
4. Choose [Transfer Selections](#).
5. In the list of [Collected objects](#), verify that the option in the [Install](#) column is enabled for each of the objects.
6. Choose [Display](#) [List](#) [List](#).
7. Right-click the tree node [DataStore Object \(advanced\)](#) and choose [Install all Below](#).
8. Choose [Install](#). If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
9. Remodel the following Advanced DataStore Objects if a corresponding message appears: [/RAP/DS40](#), [/RAP/DS42](#), [/RAP/DS54](#), and [/RAP/DS55](#).

Note

Set all affected Advanced DataStore Objects to [Load Mode](#) before starting the remodeling process. After the remodeling process, make sure that all new Advanced DataStore Objects are set to [Planning Mode](#).

→ Tip

To set an Advanced DataStore Object to Load Mode:

1. Select [Modeling](#) in the left-hand frame.
2. Select [InfoProvider](#) in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to set to [Load Mode](#).
4. Choose ► [Planning-Specific Properties](#) ► [Change Real-Time Load Behavior](#) ►.
5. Choose [Real-Time Data Target Can Be Loaded With Data; Planning Not Allowed](#) and confirm.

→ Tip

To remodel an Advanced DataStore Object:

1. Select [Modeling](#) in the left-hand frame.
2. Select [InfoProvider](#) in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to remodel.
4. Choose ► [Additional Functions](#) ► [Remodeling Monitor](#) ►.
5. Select a remodeling rule.
6. Choose [Start Request](#). The [Start Time](#) window opens.
7. In the [Start Time](#) window, select a start time for the remodeling request and confirm.

8. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Result \[page 214\]](#).

1. Select [BI Content](#) in the left-hand frame.
 2. Select [Object Types](#) and expand [CompositeProvider](#).
 3. Use [Select Objects](#) to select all CompositeProviders from [/RAP/CP40](#) to [/RAP/CP46](#) (inclusive).
 4. Choose [Transfer Selections](#).
 5. In the list of [Collected objects](#), verify that the option in the [Install](#) column is enabled for each of the objects.
 6. Choose ► [Display](#) ► [List](#) ►.
 7. Right-click the tree node [DataStore Object \(advanced\)](#) and choose [Install all Below](#).
 8. Choose [Install](#). If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
- ## 9. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Result \[page 214\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.
3. Use *Select Objects* to select the following Aggregation Level:

Aggregation Levels

Aggregation Levels

/RAP/C44A01

/RAP/C44A02

/RAP/C44A03

/RAP/C44A04

/RAP/C46A02

4. Choose *Transfer Selections*.
 5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
10. Activate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 214\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:

Planning Sequences

Planning Sequences

/RAP/D50A01_PS01

/RAP/D57A01_PS01

/RAP/C40A01_PS01

/RAP/C40A05_PS01

/RAP/C46A01_PS01

Planning Sequences

/RAP/C46A03_PS01

/RAP/C46A04_PS01

/RAP/C46A04_PS02

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

11. Activate Planning Function Type Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 214\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Function Type for Planning* ►.
3. Use *Select Objects* to select the following Planning Function:

Planning Functions

Planning Functions

/RAP/OP_BUFFER_DATA

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

12. Choose *Exit* to leave the transaction.

Results

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same

- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.2.7 Upgrade from Retail SAP BW Structure

If you were using the previously existing Retail SAP BW structure, activate the local BI Content objects and ensure that the previously generated time data (Gregorian calendar) is sufficient. For detailed information see the subsections *Activate Application BI Content (Retail SAP BW Structure)* and *Verify Gregorian Calendar*.

6.3.2.7.1 Activate Application BI Content (Retail SAP BW Structure)

Context

In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Retail SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system.

⚠ Caution

As of SAP Assortment Planning 2.0 FP2, a new (Omnichannel) SAP BW Structure has been introduced. Please contact SAP for assistance with your upgrade project.

i Note

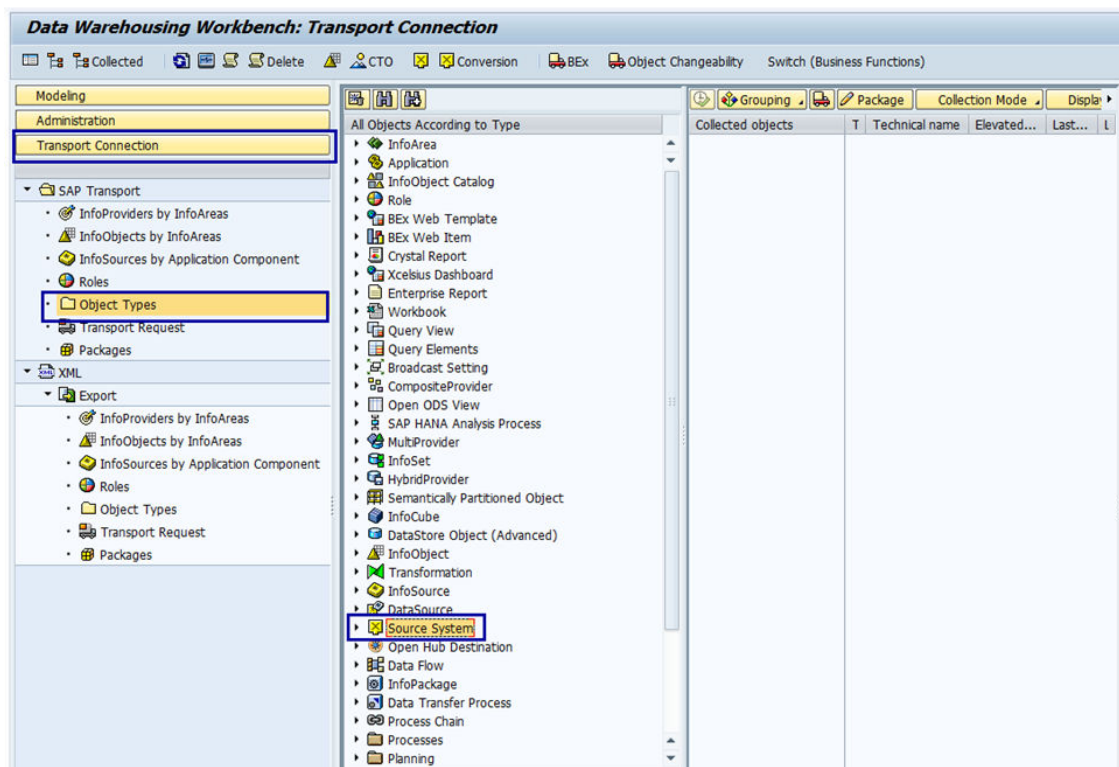
To ensure correct activation of the local BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Activation Warnings \[page 222\]](#), which can be ignored.

Also, the default BI setting to collect and activate all dependencies must not be disabled by the user. The instructions below activate a minimum subset of objects, and it is assumed that all their dependencies will be collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see [173241](#) and Customizing activity [Maintain permitted extra characters](#) under [SAP NetWeaver > Business Warehouse > General Settings](#).

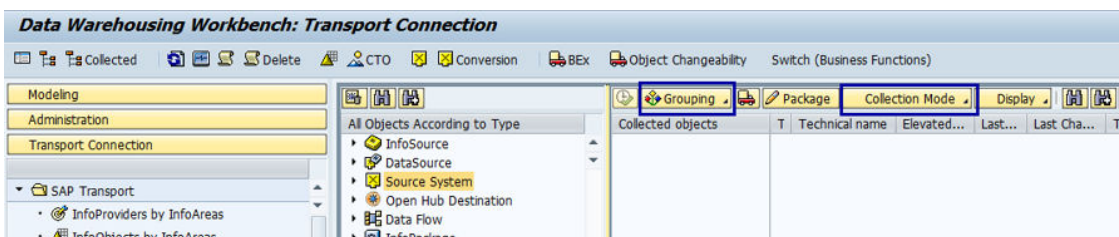
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction RSA1).
2. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Expand *Source System*.



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content which you will activate in the subsequent steps.

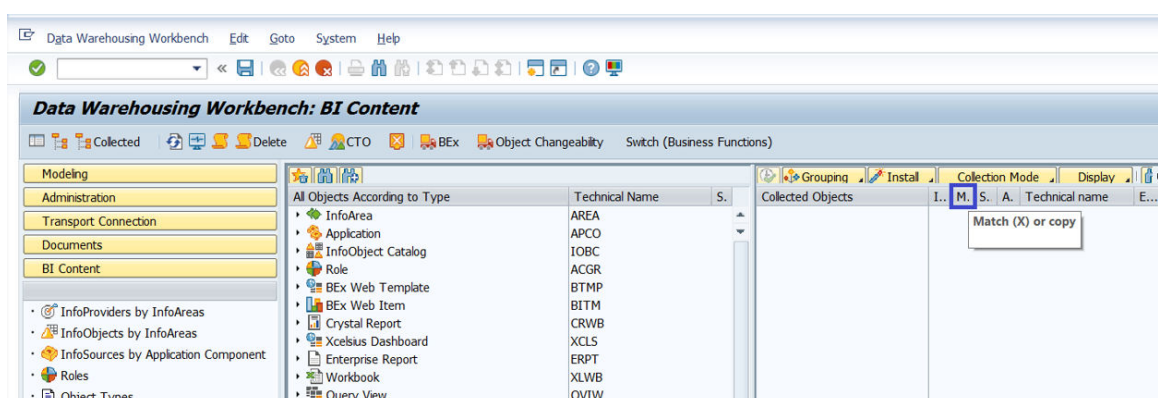
Match(X) or copy Selection

Installation Type	Selection	
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹	Standard /RAP/* BI Content objects have been modified in your local environment¹
	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	Enable the <i>Match (X) or copy</i> option. During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

⚠ Caution

When you choose to install the *Content Version*, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



4. Activate InfoObject catalogs.

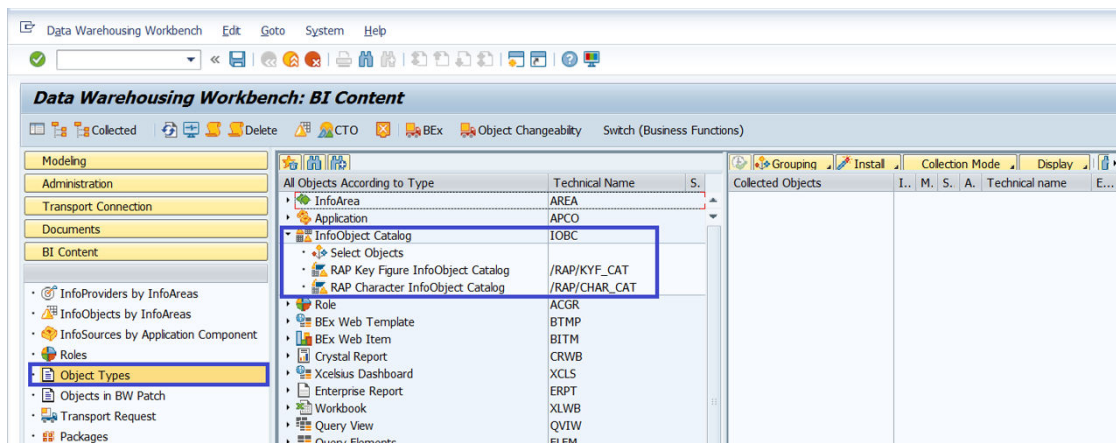
If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand *InfoObject Catalog*.



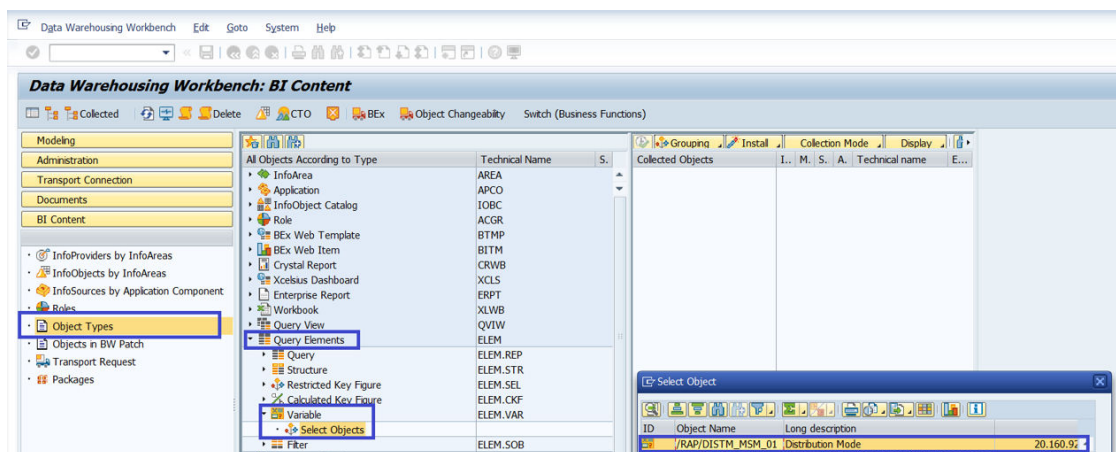
3. Use *Select Objects* to select the /RAP/CHAR_CAT and the /RAP/KYF_CAT catalogs.
4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

5. Activate *Variable* /RAP/DISTM_MSM_01.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *Query Elements*.
3. Use *Select Objects* to select the /RAP/DISTM_MSM_01 Variable.



4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that the /RAP/DISTM_MSM_01 Variable is listed and that the option in the *Install* column is enabled.
6. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

6. Maintain version master data.
- 1. Select *Modeling* in the left-hand frame.
 - 2. Expand *InfoObjects*.
 - 3. Search for InfoObject /RAP/VERSN, located under *Assortment Planning* > *RAP Character InfoObject Catalog*.
 - 4. Right-click the InfoObject /RAP/VERSN, choose *Maintain Master Data* from the context menu, and maintain the following entries on the *Time Independent* tab:

Version
- An empty version value that you must maintain
000
AP1
AP2
APF
AW1
AW2
OP1
OP2
PRJ
REF

Search: Version		
Results List: 76 results found for Version		Personal Value List Show Search Criteria
Version	Short description	
#	Not assigned	
0	Actuals	
AP1	Plan Version 1	
AP2	Plan Version 2	

The supported planning versions are described in detail in the *Maintain Customizing Table /RAP/RS_VARCUST* section of the *Common Installation Guide*.

i Note

Save your changes and activate them.

7. Activate DataStore Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *DataStore Object (Classic)*.
3. Use *Select Objects* to select all DataStore Objects starting with */RAP/**.
4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
If during the installation, you are presented with a dialog asking you to add objects to a personal list, select **No**.
8. Activate InfoCubes.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoCube*.
3. Use *Select Objects* to select all InfoCubes starting with */RAP/RC**.
4. Similarly, select InfoCubes */RAP/VC20* and */RAP/VC21*.
5. Choose *Transfer Selections*.
6. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
7. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
9. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *CompositeProvider*.
3. Use *Select Objects* to select all CompositeProviders from */RAP/CP20* to */RAP/CP37* (inclusive).
4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
10. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.

3. Use *Select Objects* to select the following Aggregation Levels:

These should be active from the previous installation, if not, select them to be installed again:

Aggregation Levels

Aggregation Level

/RAP/D20A01

/RAP/R20A02

/RAP/R20A06

/RAP/R20A08

/RAP/R20A11

/RAP/R20A12

/RAP/R20A15

/RAP/R20A17

/RAP/R23A01

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

11. Reactivate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:

These should be active from the previous installation, if not, select them to be installed again:

Planning Sequences

Planning Sequence

/RAP/C21A01_PS01

/RAP/C25A03_PS01

/RAP/D23A01_PS01

Planning Sequence

/RAP/D24A01_PS01

/RAP/R20A08_PS01

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

12. Reactivate Workbooks.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 222\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *More Types* ► *Analysis Office Excel Workbook* ►.
3. Use *Select Objects* to select the following workbooks:
These should be active from the previous installation, if not, select them to be installed again:

Workbooks

Workbook

/RAP/PLANASSORTMENT

/RAP/PLANOPTIONS

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

13. Choose *Exit* to leave the transaction.

Activation Warnings

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same

- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.2.7.2 Verify Gregorian Calendar

Ensure that the previously generated time data (Gregorian calendar) is sufficient for the current release of SAP Assortment Planning.

Context

Execute this procedure to generate time data (**Gregorian calendar**).

Procedure

1. Log on to SAP HANA studio.
2. In the *Modeler* perspective, on the *Quick Launch* tab, select your SAP Customer Activity Repository applications bundle system and choose *Generate Time Data*.
3. Select *Gregorian* as the *Calendar Type*.

For example, SAP HANA views included in SAP HANA content for SAP Customer Activity Repository require the presence of time data in `_SYS_BI.TIME_DIMENSION*` SAP HANA database tables.

4. Enter a range of years that includes all the years of data that you plan to store in SAP Customer Activity Repository.

Example: If you plan to start using SAP Assortment Planning on January 1, 2014, enter 2014 as your starting year. But if you plan to access sales documents created in SAP ERP that date from January 2013, you should specify 2013 as your starting year.

5. Define the granularity as *Day*, which is the minimum granularity required by SAP Customer Activity Repository. You can choose a finer level of granularity, for example *Hour*, if necessary.
6. Choose the day that is the first day of the week in your company.
7. Choose *Finish*.

For more information, see:

- https://help.sap.com/viewer/p/SAP_HANA_LIVE ► *Installation and Upgrade* ► *Administrator's Guide* ► *Configuration Steps* ► *Generate Time Data* ►

- https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Development ► SAP HANA Modeling Guide (for SAP HANA studio) ► Creating Information Views and Previewing its Output ► Generate Time Data ►

6.3.2.8 Verify that Data Replication is Running Following the Upgrade

Following the upgrade, ensure that all of the data replication described in the *Configure Data Replication* section of the *Common Installation Guide* is still running.

⚠ Caution

The data you replicate in this step is consumed by the SAP Assortment Planning application through local BI Content. Only a subset of ASCII characters is considered valid by SAP BW. As a result, object identifiers, which are mapped to external IDs in DDF (for example, `EXT_LOC_ID` or `EXT_PROD_ID`), should only consist of valid characters.

We recommend that you avoid the usage of invalid characters in the source master data system. This is controlled by the system administrator or the implementation team who define the value ranges and formatting for object identifiers (for example, product or location IDs).

If the recommended approach is not possible, then in your SAP Assortment Planning back-end system, you need to allow for additional special characters in Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* ►. For more information, see [173241](#) ►.

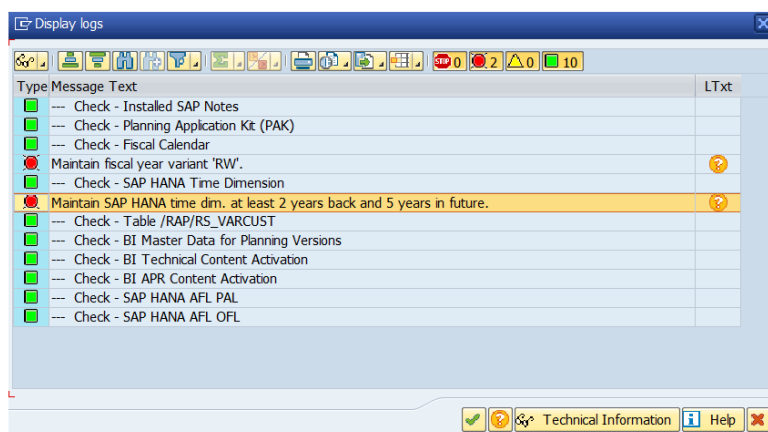
In particular, following the upgrade, you need to pay attention to the following:

- SAP Assortment Planning supports the use of time-dependent article hierarchies. This is enabled by implementing SAP Note [2196323](#) ► in the **connected SAP Retail or SAP S/4HANA system**. Following the implementation of these notes in SAP Retail or SAP S/4HANA, if your hierarchy is already a time-dependent hierarchy, you need to re-import the product hierarchies into SAP Assortment Planning using the DRFOUT framework.
 - SAP Retail Description: Article Hierarchy
 - DRFOUT Outbound Implementation: PAHY
 - DDF Inbound Interface: `/DMF/MDIF_PROD_HIER_INBOUND`
- All the tables listed in the spreadsheet of the *CARAB 2.0 - SLT Tables* archive for your version of SAP Customer Activity Repository applications bundle (SAP Assortment Planning) are being replicated. For more information, see the *Create/Replicate Source Master Data System Tables* section in the *Common Installation Guide*.
- Ensure that periodic tasks to load product attributes into SAP Assortment Planning are still running following the upgrade. (reports `/DMF/ATR_IMPORT` and `/DMF/PROD_ATR_IMPORT`)
- Ensure that season classification data is being loaded from the appropriate source. For more information, see the *Load Season Classification Data* section in the *SAP Assortment Planning Administration Guide*. You also need to set up the *Execute inbound SLT replication for season data* report (`/DMF/EXECUTE_SEASON_INBOUND` in transaction SE38) to run as a background job to regularly import any updates from SAP Fashion Management and SAP Retail to DDF.
- Ensure that wholesale data is being loaded. Set up the *Mapping report to convert sales orders into /DMF/TS_WS table* report (`/DMF/WHOLESALE_SO_SHP_TO_TS_WS` in transaction SE38) to run as a background

job to regularly import replicated sales order and shipment data into DDF. For more information, see the *Load Wholesale Data* section in the *SAP Assortment Planning Administration Guide*.

6.3.2.9 Run the Validation Report

1. Run transaction `/DMF/VAL_CAR_INSTALL`.
Alternatively, run transaction `SE38` and execute the `/DMF/VALIDATE_CAR_INSTALLATION` report.
2. Select the *Assortment Planning* scenario and select *Execute*.
In the dialog that appears, select whether to validate the Retail SAP BW structure, the Omnichannel SAP BW structure, or both. The SAP BW structure to validate depends on the structure that you have selected to reactivate during the upgrade in a previous step, see section *Reactivate SAP Assortment Planning Planning Framework Content*.
Running this report allows you to verify the success of the installation, providing a log of potential issues. For example, you may be presented with the following results:



Validation Report Results

View the long text associated with each message to see the link to the documentation describing the procedure you have to troubleshoot.

6.3.2.10 Run the SAP Assortment Planning for Retail 2.0 FP3 and 4.0 Update Reports

Context

Run this report to carry out back-end server changes required by the SAP Assortment Planning 4.0 FPS01 release.

Procedure

1. Run transaction SE38.
2. Execute the `/RAP/20_FP3_UPGRADE_APR` report.

Read the documentation associated with the report for important information on updates performed by the report.

3. Execute the `/RAP/40_UPGRADE_APR` report.

Read the documentation associated with the report for important information on updates performed by the report.

6.3.2.11 Activate SAP Assortment Planning ICF Services

Use

Following an upgrade, you must ensure that all ICF services required for the SAP Assortment Planning SAP Fiori apps are activated.

Procedure

1. Log on to your front-end server.
2. Open service maintenance (transaction SICF).
3. In the *Define Services* screen, select the Location Clustering service by specifying the following:
 - Hierarchy Type: **SERVICE**
 - Virtual Host: **DEFAULT_HOST**
 - Service Path: **/sap/bc/ui5_ui5/sap/locclsts_v2/**
4. Choose *Execute*.

5. To activate the service, choose [Service/host Activate](#).
6. Repeat steps 3 to 5 to ensure that **all** of the following services are activated:
 - `/sap/bc/ui5_ui5/sap/attribmgmt_v2/`
 - `/sap/bc/ui5_ui5/sap/assortlist/`
 - `/sap/bc/ui5_ui5/sap/ddfreuse_v2/`
 - `/sap/bc/ui5_ui5/sap/locclsts_v2/`
 - `/sap/bc/ui5_ui5/sap/modulemgmt_v2/`
 - `/sap/bc/ui5_ui5/sap/optionplan_v2/`
 - `/sap/bc/ui5_ui5/sap/phpmatch_v2/`
 - `/sap/bc/ui5_ui5/sap/plnconfig/`

6.3.2.12 Define System Alias for Back-End Transactions

Use

A number of SAP Assortment Planning SAP Fiori apps, installed on your front-end system, launch transactions directly on the back-end system. For example, the [Manage Products](#) tile actually launches the Demand Data Foundation (DDF) `POWL_EASY` WebDynpro application.

Following an upgrade, you must ensure that all RFC connections and system alias definitions required by SAP Assortment Planning application remain set.

Procedure

1. Log on to your front-end system, that is, the system where you have installed the user interface (UI) components of the SAP Assortment Planning application.
2. Launch [Configuration of RFC Connections](#) (transaction `SM59`).
3. Create an RFC connection with the [RFC Destination](#) set to `SAP_ISR_CARAB` and [Connection Type](#) set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect to your back-end system, in particular, the [Target Host](#) entry on the [Technical Settings](#) tab.
4. Save your changes.
5. Create another RFC connection with the RFC Destination set to `SAP_ERP_ISR_CARAB` and [Connection Type](#) set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect your front-end system to the SAP Retail or SAP S/4HANA system, in particular, the [Target Host](#) entry on the [Technical Settings](#) tab.
6. Save your changes.
7. Open [Launchpad Customizing](#) (transaction `LPD_CUST`).
8. Select the SAP Assortment Planning role (`UIRAP001`), and choose [Display](#).
The two catalogs, [Assortment Planner](#) and [Planning Administrator](#), are displayed.

9. In each of the catalogs, selecting one app at a time, make the following settings:

Catalog	App	System Alias	Description
<i>Assortment Planner</i>	<i>View Log</i>	SAP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction SLG1 on the back-end system.
			i Note This application is only used to configure a link to the back-end system, you do not need to add this app to your SAP Fiori launchpad.
	<i>View ExtAssort Listing Conditions</i>	SAP_ERP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction WSL10 on the connected SAP Retail or SAP S/4HANA system.
		AB	i Note This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.
	<i>View External Assortments</i>	SAP_ERP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction WRF_WSOA3 on the connected SAP Retail or SAP S/4HANA system.
		AB	i Note This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.
<i>Planning Administrator</i>	<i>Manage Category responsibilities</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Category Responsibilities</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Market responsibilities</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Market Responsibilities</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Products</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Products</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Locations</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Locations</i> app to launch the corresponding DDF WebDynpro application.

6.3.2.13 Troubleshoot Front-End Server Upgrade

Use

Following the upgrade of the product version on the front-end server, you may not be able to see some of the SAP Assortment Planning SAP Fiori tiles in your launchpad. This section outlines how to troubleshoot these issues, should you experience them.

These steps are also listed in the *Troubleshooting* section of the *SAP Assortment Planning Administrator's Guide* available on the SAP Help Portal at <http://help.sap.com/viewer/p/CARAB> > > <Your Version> > *Administration* > *SAP Assortment Planning Administration Guide* >.

Process

Do the following:

1. Check that all of the required BSP applications are listed in the UIRAP001 package.
 1. Log on to your front-end system (your SAP Gateway system).
 2. Launch the *Object Navigator* (transaction SE80).
 3. In the *Repository Browser*, open package UIRAP001.
 4. Expand all of the embedded packages of embedded package CONTENT_RAP_TRANS.

- Verify that the following *BSP Applications* are listed:

Package	
UICAR001	
Object Name	Description
UICAR001	Structure package for Customer Activity Repository
Subpackages	
UIAMR001	Structure package for Allocation Management Retail
UIOAA001	Omnichannel Article Availability
UIPMR001	Structure package for Promotion Management Retail
UIRAP001	Structure package for UIRAP
Subpackages	
CONTENT_RAP_COMMON	Main package for common obejcts for RAP
CONTENT_RAP_TRANS	Main package for transactional for RAP
Subpackages	
RETAIL_DDF	Package for DDF
BSP Library	
BSP Applications	
ATTRIBMGMT_V2	Manage Product Attriubtes: Fiori ID F0829A
DDFREUSE_V2	Fiori Reuse Components for DDF: Fiori ID F0854A
LOCCLSTS_V2	Location Clustering: Fiori ID F0550A
MODULEMGMT_V2	Module Management: Fiori ID F1682A
PLNCONFIG	Planning configuration
RETAIL_RAP_AP	Package for RAP AP
BSP Library	
BSP Applications	
ASSORTLIST	Assortment List: Fiori ID F1567B
OPTIONPLAN_V2	Option Plan: Fiori ID F0830A
PHPMATCH_V2	PHP Matching: Fiori ID F0831A
UISCAR01	Strucutre Package for Customer activity repository


BSP Applications

- If you do not see one or more of the BSP applications listed above, right-click on each of the RETAIL_DDF and RETAIL_RAP_AP packages, and select **Other Functions** > **Rebuild Object List**.

⚠ Caution

Do not rebuild objects on a higher package level.

- Clean the cache.
 - Log on to your front-end system (your SAP Gateway system).
 - In Customizing (transaction SPRO), navigate to **SAP NetWeaver** > **UI Technologies** > **SAP Fiori** > **Data Administration** > **Invalidate Caches**.
This activity launches the /UI2/INVALIDATE_GLOBAL_CACHES report. This report invalidates all server-side caches in SAP NetWeaver user interface services, which can become out-of-date following an upgrade.
 - If necessary, implement instructions listed in SAP Note [2147669](#).
- Remove any previously customized versions of the UIRAP001 launchpad.
 - Log on to your front-end system (your SAP Gateway system).
 - Launch the **Overview for Launchpads** (transaction LPD_CUST).

3. Search for [Role](#) UIRAP001, and see whether any instances exist where the [User Name](#) is not [SAP](#). If so, this means that customized versions of the UIRAP001 launchpad exist, and these take precedence over the standard launchpad instance delivered by SAP.
4. Delete all but the launchpad instance delivered by SAP.
4. Recalculate SAPUI5 application index, following any changes to the content of the SAPUI5 ABAP repository (for example, installation of a new version of the SAPUI5 distribution layer or implementation of an SAP Note containing changes to an SAPUI5 app).
For more information, see the *Configure Index Calculation* section in the *Common Installation Guide* and SAP Note [2227577](#) .

6.3.3 2.0 FP3 to 4.0 FPS01

This section is intended for existing SAP Assortment Planning for Retail customers who have installed and configured SAP Assortment Planning for Retail 2.0 FP3 and would like to upgrade to SAP Assortment Planning 4.0 FPS01.

6.3.3.1 Quick Guide

Upgrade to SAP Assortment Planning 4.0 FPS01.

Checklist

Prerequisites

Ensure that you have carried out all the steps listed in the previous sections of this guide.

Follow-Up Activities

Mandatory Steps

- ☐ Perform mandatory core steps for SAP Customer Activity Repository. See [Core \(Mandatory for All Applications\)](#) [page 64].
- ☐ Verify SAP HANA and back-end system roles. See *Verify Users, Privileges, and Roles*.
- ☐ Adjust Customizing settings.
- ☐ Reactivate SAP Assortment Planning planning framework content.
- ☐ Verify that data replication is running following the upgrade.
- ☐ Run the validation report.
- ☐ Run the SAP Assortment Planning 2.0 FP3 update report.
- ☐ Run the SAP Assortment Planning 4.0 update report.
- ☐ If you want to purge assortment lists using the `/DMF/PURGE_AGENT` report, you must execute the `/DMF/WUF_MIGRATE_ASRTLST` report **once** using transaction SE38.

For detailed information, read the system documentation associated with the report.

- ☐ Verify that all SAP Assortment Planning OData services are active following the upgrade. For detailed information, see [Verify that OData Services are Active \[page 77\]](#).
- ☐ Verify that all the ICF services relevant to SAP Assortment Planning are active following the upgrade.
- ☐ Verify the definition of system aliases for back-end transactions.
- ☐ Troubleshoot front-end server upgrade.

6.3.3.2 Perform Core Steps for SAP Customer Activity Repository

To set up this application, you must first perform the **Core (Mandatory)** steps for SAP Customer Activity Repository. The core steps are mandatory for all the consuming applications.

Procedure

Perform all steps listed under [Core \(Mandatory for All Applications\) \[page 64\]](#).

6.3.3.3 Adjust Customizing Settings

Customizing to maintain following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

Following the upgrade, you need to make settings in Customizing to be able to use SAP Assortment Planning 4.0 FPS01.

Procedure

1. Log on to your back-end system.
2. If you use the Retail SAP BW Structure and you don't want to use planning configuration, do the following:
 - a. Disable [Use Planning Configuration](#) and [Prompt in Manage Location Clusters](#) (using transaction SPRO) under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►.

You must disable this Customizing setting to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

- b. Disable the implementation of *BAdI: Read Merchandise Planning KPI Data* under ► *Cross-Application Components* ► *Demand Data Foundation* ► *Data Maintenance* ► *Planning Configuration* ► *Enhancements Using Business Add-Ins* .

You must disable the implementation of this BAdI to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

If you use the Omnichannel SAP BW structure, make sure that *Use Planning Configuration* is enabled.

3. Maintain the monthly fiscal year variant (using transaction *SPRO*) under ► *Cross-Application Components* ► *Assortment Planning* ► *Imported Demand Data Foundation Settings* ► *Basic Settings* ► *Define Default Values* ► *Monthly FY Variant* . This is necessary to use the view *Sales & Inventory Analysis* in the *My Assortment Lists* app.

For more information, see *Fiscal Year Variant*.

4. Define the business week (using transaction *SPRO*) under ► *Cross-Application Components* ► *Demand Data Foundation* ► *Basic Settings* ► *Define Business Week* .
5. Maintain number ranges for planning configurations under ► *Cross-Application Components* ► *Assortment Planning* ► *Number Ranges* ► *Maintain Number Range for Planning Configuration* .
6. Maintain number ranges for parameter configurations under ► *Cross-Application Components* ► *Assortment Planning* ► *Number Ranges* ► *Maintain Number Range for Parameter Configuration* .
7. Make sure that the settings in Customizing activity *Assortment List Settings* fit to your planning process.

The *Assortment List Settings* activity is available in Customizing under ► *Cross-Application Components* ► *Assortment Planning* ► *Assortment Lists* .

8. If you want to allow users access to the *Analyze Forecast* app via links from the *My Assortment Lists* app, enable the *Create* option to generate a location hierarchy out of every location cluster set **activated** in SAP Assortment Planning. This option is available in the *Location Clustering Settings* Customizing activity under ► *Cross-Application Components* ► *Assortment Planning for Retail* ► *Imported Demand Data Foundation Settings* ► *Data Maintenance* ► *Location Clustering* ► *Location Clustering Settings* .

If the *Create* option is not visible, choose *New Entries*.

9. To use forecasted values in the *Sales & Inventory Analysis* view within the *My Assortment Lists* app, configure Unified Demand Forecast (UDF). For more information, see the *SAP Customer Activity Repository Administration Guide*, section *Configuring Unified Demand Forecast (UDF)*.
10. Verify default implementation of *BAdI: Determine Product Season Classification* and, if necessary, provide a custom implementation.

The BAdI, *BAdI: Determine Product Season Classification* is available under ► *Cross-Application Components* ► *Assortment Planning* ► *Enhancements Using Business Add-Ins* .

6.3.3.4 Verify Fiscal Calendar

Time data to verify following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

Note

Generate time data (fiscal calendar) since this is required for using the [Sales & Inventory Analysis](#) view in the [My Assortment Lists](#) app. The fiscal calendar is also required to initialize the SAP Assortment Planning BW structure, as it allows for planning on fiscal periods.

Procedure

If required and not already done, ensure that the time data has been generated far enough into the past and future for SAP Assortment Planning 4.0 FPS01.

For more information, see the following:

- *Generate Time Data - Fiscal Calendar* section of the *Common Installation Guide*
- *Management* section of the *SAP Assortment Planning Administration Guide*

6.3.3.5 Reactivate Planning Framework Content (SAP Assortment Planning)

There are two distinct BW structures supported in SAP Assortment Planning:

Omnichannel SAP BW Structure

Caution

New functionality will be only available for the Omnichannel SAP BW structure. Therefore, we recommend to use the Omnichannel SAP BW structure which provides an extensive feature set.

- If you already use the Omnichannel SAP BW structure, reactivate it.
- If you were using the previously existing Retail SAP BW structure, we recommend that you reactivate it during the upgrade. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Make sure that you have enabled the optimized in-memory planning capabilities of the integrated planning engine in SAP Business Warehouse. For more information, see the *Common Installation Guide*, section *Enable Optimized In-Memory Planning Capabilities of SAP BW Integrated Planning*.

Prerequisite

To use the Omnichannel SAP BW structure, the following prerequisites must be met:

- Enable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►. The Omnichannel SAP BW structure only works when planning configurations are used.
- Enable the implementation of [BAdI: Read Merchandise Planning KPI Data](#) under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) ►.

The Omnichannel SAP BW structure consists of local BI Content only. To create workbooks on top of the Omnichannel SAP BW structure, contact SAP Digital Business Services for a custom implementation project.

Retail SAP BW Structure

⚠ Caution

If you were using the Retail SAP BW Structure in a previous release, we recommend that you reactivate this structure during the upgrade. The Retail SAP BW Structure will be supported with maintenance, however no new functionality will be developed for this structure. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Prerequisite

To use the Retail SAP BW structure, the following prerequisites must be met:

- Disable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►. You cannot use the Retail SAP BW structure with planning configurations.
- Disable the implementation of [BAdI: Read Merchandise Planning KPI Data](#) under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) ►.

6.3.3.6 Upgrade from Omnichannel SAP BW Structure

If you already use the Omnichannel SAP BW structure, activate the local BI Content objects as described in subsection [Activate Application BI Content \(Omnichannel SAP BW Structure\)](#).

6.3.3.6.1 Activate Application BI Content (Omnichannel SAP BW Structure)

Context



In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Omnichannel SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system

i Note

To ensure correct activation of the BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Result \[page 243\]](#), which can be ignored.

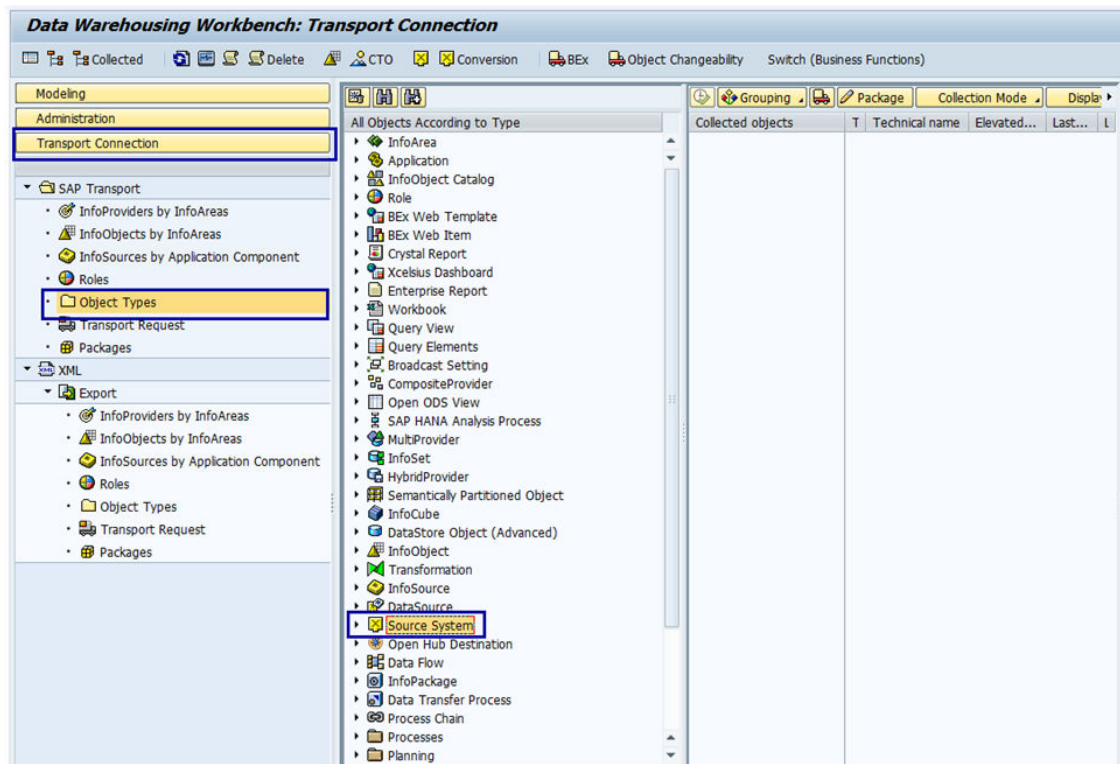
Also, do not disable the default BI setting to collect and activate all dependencies. The instructions below activate a minimum subset of objects, and it is assumed that all their dependencies are collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see:

- *SAP Assortment Planning Administration Guide* under *Initial Load of Data to DDF Using DRFOUT*
- [173241](#) 
- Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* .

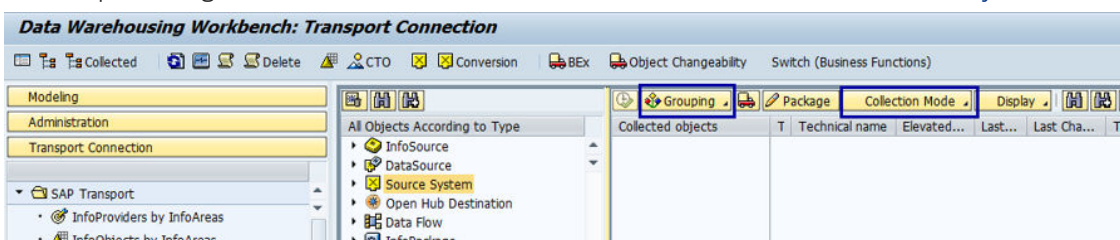
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction RSA1).
2. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Expand *Source System*.



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content, which you will activate in the subsequent steps.

Match(X) or copy Selection

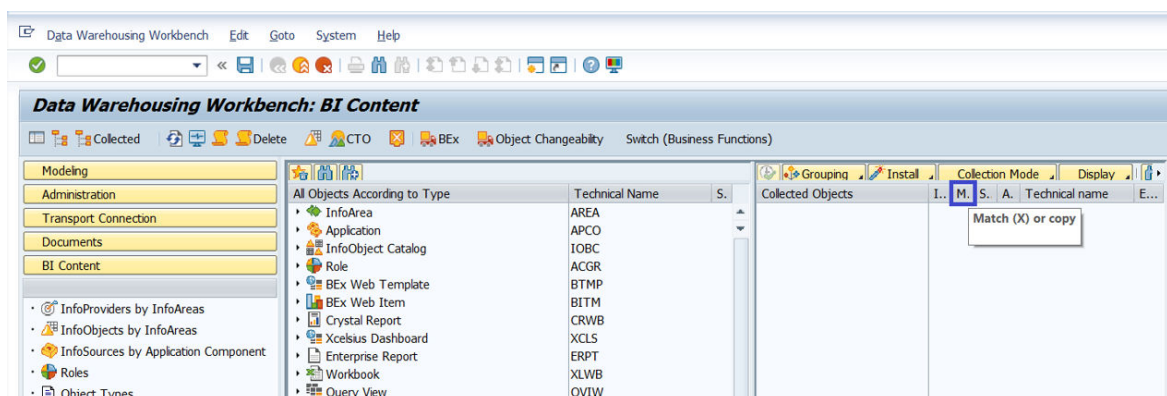
Installation Type	Selection
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.

Installation Type	Selection	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹ Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	Standard /RAP/* BI Content objects have been modified in your local environment¹ Enable the <i>Match (X) or copy</i> option. During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

⚠ Caution

When you choose to install the *Content Version*, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



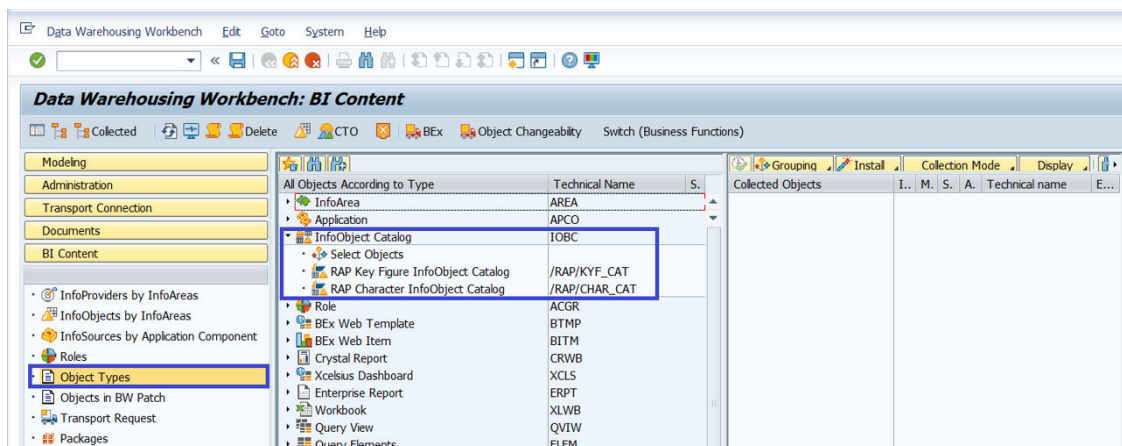
4. Activate InfoObject catalogs.

If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Result \[page 243\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoObject Catalog*.



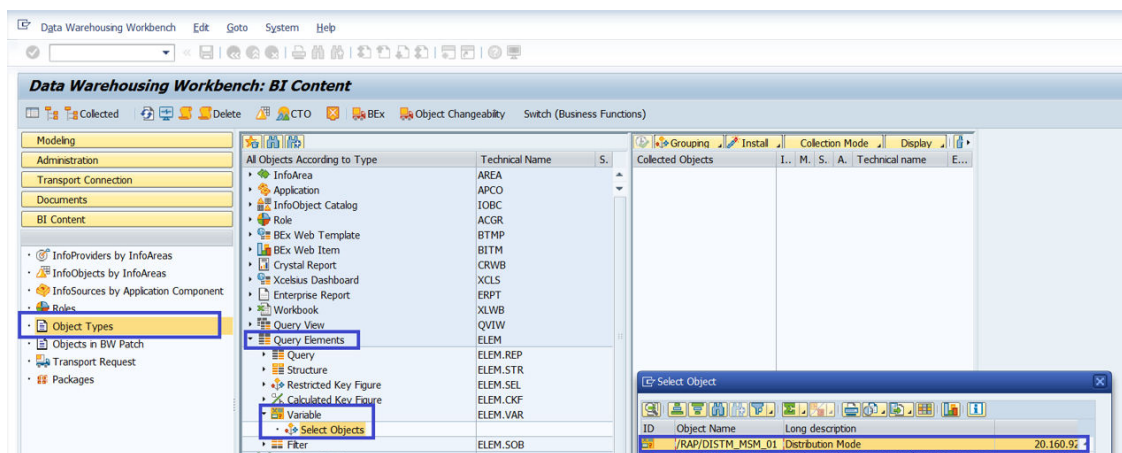
3. Use *Select Objects* to select the /RAP/CHAR_CAT and the /RAP/KYF_CAT catalogs.
4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.



5. Activate *Variables*.

→ Remember

You can ignore activation warnings listed under [Result \[page 243\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *Query Elements* followed by *Variable*.
3. Use *Select Objects* to select the following variables:
 - /RAP/PLCND_ESM_02
 - /RAP/PLCSET_ESM_02
 - /RAP/PCYCLE_EMM_01
 - /RAP/PLNHR_MSO_01
 - /RAP/PLNHN1_MSO_01 to /RAP/PLNHN9_MSO_01 (inclusive)
 - /RAP/PRDHN1_MMO_01 to /RAP/PRDHN9_MMO_01 (inclusive)



4. Choose [Transfer Selections](#).
 5. In the right-hand frame, in the list of [Collected objects](#), verify that all of the selected variables are listed and that the option in the [Install](#) column is enabled .
 6. Choose [Install](#).
If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
6. Maintain version master data.
1. In the left-hand frame, select [Modeling](#) [InfoObjects](#) .
 2. In the right-hand frame under [Assortment Planning for Retail](#) [RAP Character InfoObject Catalog](#) , search in the object list for the InfoObject `/RAP/VERSN`.
 3. Right-click the InfoObject `/RAP/VERSN`, choose [Maintain Master Data](#) from the context menu, and maintain the following entries on the [Time Independent](#) tab:

Version	Short description
#	An empty version value that you must maintain
ALV	Assortment List Vsn
APF	Vsn of final plan

Note


Save your changes and activate them.

7. Activate Advanced DataStore Objects.

If during the installation, you are presented with a message stating that your source system is not active, navigate to the [Modeling](#) tab, locate your source system under [Source Systems](#), and activate it by right-clicking and selecting [Activate](#). If prompted, choose [Only Activate](#) .

Remember

You can ignore activation warnings listed under [Result \[page 243\]](#).

1. Select [BI Content](#) in the left-hand frame.
2. Select [Object Types](#) and expand [DataStore Object \(advanced\)](#).
3. Use [Select Objects](#) to select all DataStore Objects starting with `/RAP/DS*`.
4. Choose [Transfer Selections](#).
5. In the list of [Collected objects](#), verify that the option in the [Install](#) column is enabled for each of the objects.
6. Choose [Display](#) [List](#) .
7. Right-click the tree node [DataStore Object \(advanced\)](#) and choose [Install all Below](#).
8. Choose [Install](#). If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
9. Remodel the following Advanced DataStore Objects if a corresponding message appears: `/RAP/DS40`, `/RAP/DS42`, `/RAP/DS54`, and `/RAP/DS55`.

Note

Set all affected Advanced DataStore Objects to [Load Mode](#) before starting the remodeling process. After the remodeling process, make sure that all new Advanced DataStore Objects are set to [Planning Mode](#).

→ Tip

To set an Advanced DataStore Object to Load Mode:

1. Select [Modeling](#) in the left-hand frame.
2. Select [InfoProvider](#) in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to set to [Load Mode](#).
4. Choose [► Planning-Specific Properties ► Change Real-Time Load Behavior ►](#).
5. Choose [Real-Time Data Target Can Be Loaded With Data; Planning Not Allowed](#) and confirm.

→ Tip

To remodel an Advanced DataStore Object:

1. Select [Modeling](#) in the left-hand frame.
2. Select [InfoProvider](#) in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to remodel.
4. Choose [► Additional Functions ► Remodeling Monitor ►](#).
5. Select a remodeling rule.
6. Choose [Start Request](#). The [Start Time](#) window opens.
7. In the [Start Time](#) window, select a start time for the remodeling request and confirm.

8. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Result \[page 243\]](#).

1. Select [BI Content](#) in the left-hand frame.
2. Select [Object Types](#) and expand [CompositeProvider](#).
3. Use [Select Objects](#) to select all CompositeProviders from [/RAP/CP40](#) to [/RAP/CP46](#) (inclusive).
4. Choose [Transfer Selections](#).
5. In the list of [Collected objects](#), verify that the option in the [Install](#) column is enabled for each of the objects.
6. Choose [► Display ► List ►](#).
7. Right-click the tree node [DataStore Object \(advanced\)](#) and choose [Install all Below](#).
8. Choose [Install](#). If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.

9. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Result \[page 243\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.
3. Use *Select Objects* to select the following Aggregation Level:

Aggregation Levels

Aggregation Levels

/RAP/C44A01

/RAP/C44A02

/RAP/C44A03

/RAP/C44A04

/RAP/C46A02

4. Choose *Transfer Selections*.
 5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
10. Activate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 243\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:

Planning Sequences

Planning Sequences

/RAP/D50A01_PS01

/RAP/D57A01_PS01

/RAP/C40A01_PS01

/RAP/C40A05_PS01

/RAP/C46A01_PS01

Planning Sequences

/RAP/C46A03_PS01

/RAP/C46A04_PS01

/RAP/C46A04_PS02

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

11. Activate Planning Function Type Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 243\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Function Type for Planning* ►.
3. Use *Select Objects* to select the following Planning Function:

Planning Functions

Planning Functions

/RAP/OP_BUFFER_DATA

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

12. Choose *Exit* to leave the transaction.

Results

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same

- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.3.7 Upgrade from Retail SAP BW Structure

If you were using the previously existing Retail SAP BW structure, activate the local BI Content objects and ensure that the previously generated time data (Gregorian calendar) is sufficient. For detailed information see the subsections *Activate Application BI Content (Retail SAP BW Structure)* and *Verify Gregorian Calendar*.

6.3.3.7.1 Activate Application BI Content (Retail SAP BW Structure)

Context

In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Retail SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system.

⚠ Caution

As of SAP Assortment Planning 2.0 FP2, a new (Omnichannel) SAP BW Structure has been introduced. Please contact SAP for assistance with your upgrade project.

i Note

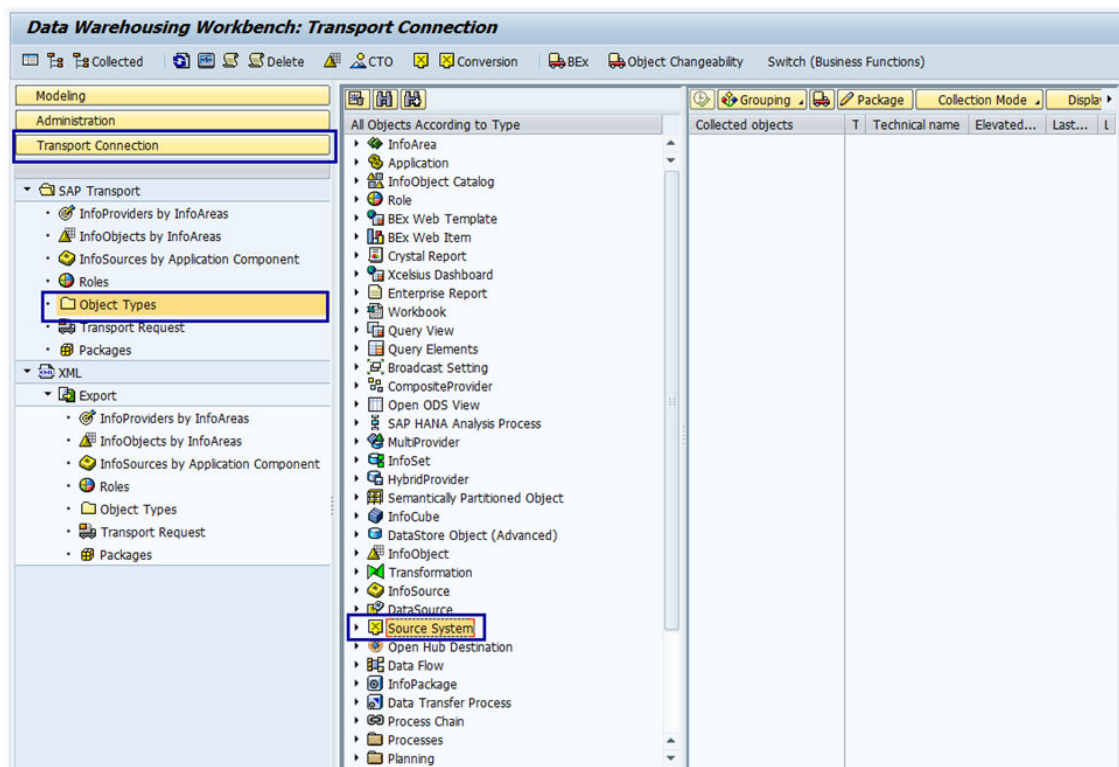
To ensure correct activation of the local BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Activation Warnings \[page 251\]](#), which can be ignored.

Also, the default BI setting to collect and activate all dependencies must not be disabled by the user. The instructions below activate a minimum subset of objects, and it is assumed that all their dependencies will be collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see [173241](#) and Customizing activity [Maintain permitted extra characters](#) under [SAP NetWeaver > Business Warehouse > General Settings](#).

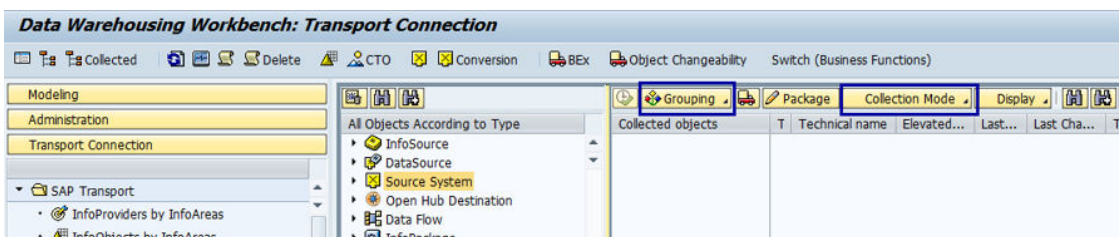
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction RSA1).
2. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Expand *Source System*.



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content which you will activate in the subsequent steps.

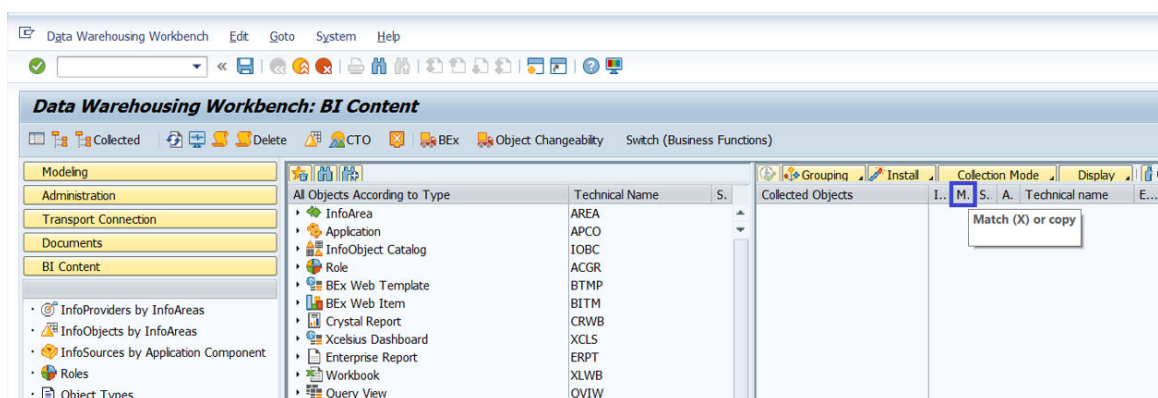
Match(X) or copy Selection

Installation Type	Selection	
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹	Standard /RAP/* BI Content objects have been modified in your local environment¹
	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	Enable the <i>Match (X) or copy</i> option. During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

⚠ Caution

When you choose to install the *Content Version*, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



4. Activate InfoObject catalogs.

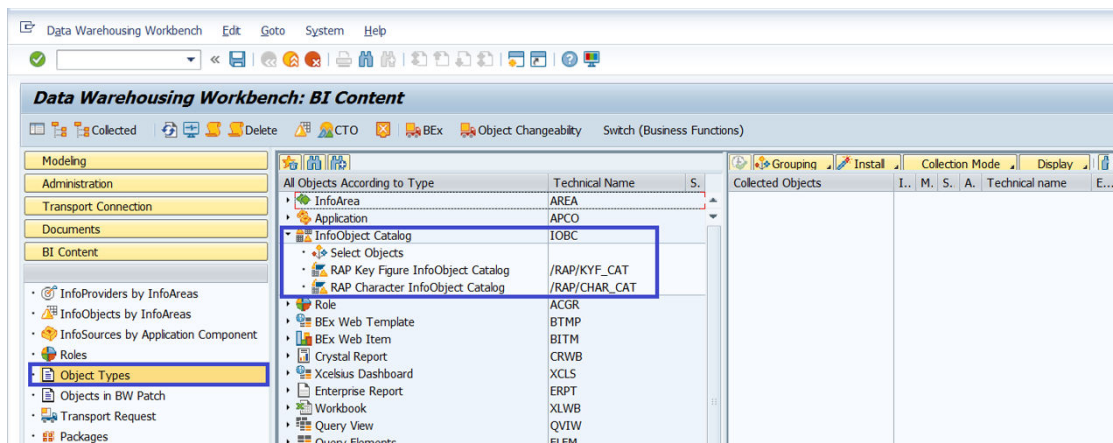
If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand *InfoObject Catalog*.



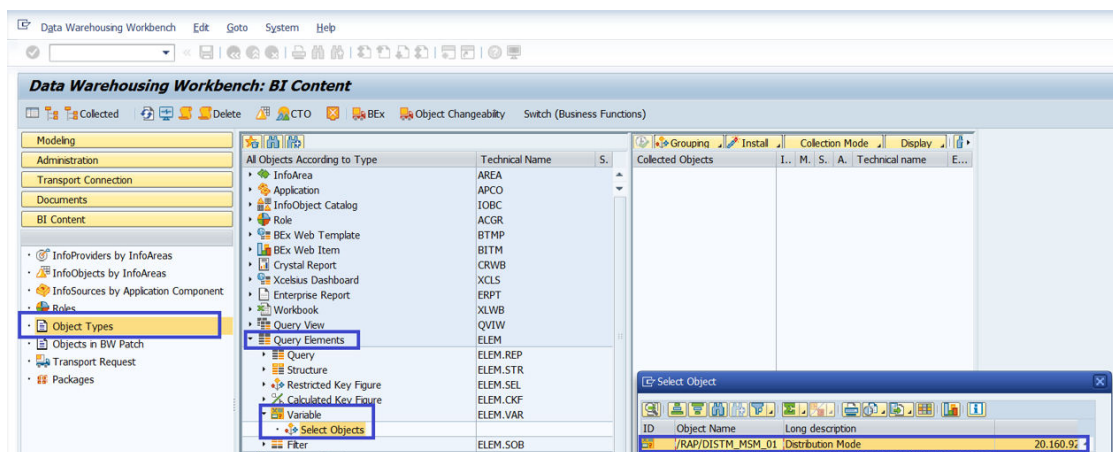
3. Use *Select Objects* to select the /RAP/CHAR_CAT and the /RAP/KYF_CAT catalogs.
4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

5. Activate *Variable* /RAP/DISTM_MSM_01.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *Query Elements*.
3. Use *Select Objects* to select the /RAP/DISTM_MSM_01 Variable.



4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that the /RAP/DISTM_MSM_01 Variable is listed and that the option in the *Install* column is enabled.
6. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

6. Maintain version master data.
- 1. Select *Modeling* in the left-hand frame.
 - 2. Expand *InfoObjects*.
 - 3. Search for InfoObject /RAP/VERSN, located under *Assortment Planning* > *RAP Character InfoObject Catalog*.
 - 4. Right-click the InfoObject /RAP/VERSN, choose *Maintain Master Data* from the context menu, and maintain the following entries on the *Time Independent* tab:

Version
- An empty version value that you must maintain
000
AP1
AP2
APF
AW1
AW2
OP1
OP2
PRJ
REF

Search: Version		
Results List: 76 results found for Version		Personal Value List Show Search Criteria
Version	Short description	
#	Not assigned	
0	Actuals	
AP1	Plan Version 1	
AP2	Plan Version 2	

The supported planning versions are described in detail in the *Maintain Customizing Table /RAP/RS_VARCUST* section of the *Common Installation Guide*.

i Note

Save your changes and activate them.

7. Activate DataStore Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *DataStore Object (Classic)*.
3. Use *Select Objects* to select all DataStore Objects starting with */RAP/**.
4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
If during the installation, you are presented with a dialog asking you to add objects to a personal list, select **No**.
8. Activate InfoCubes.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoCube*.
3. Use *Select Objects* to select all InfoCubes starting with */RAP/RC**.
4. Similarly, select InfoCubes */RAP/VC20* and */RAP/VC21*.
5. Choose *Transfer Selections*.
6. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
7. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
9. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *CompositeProvider*.
3. Use *Select Objects* to select all CompositeProviders from */RAP/CP20* to */RAP/CP37* (inclusive).
4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
10. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.

3. Use *Select Objects* to select the following Aggregation Levels:

These should be active from the previous installation, if not, select them to be installed again:

Aggregation Levels

Aggregation Level

/RAP/D20A01

/RAP/R20A02

/RAP/R20A06

/RAP/R20A08

/RAP/R20A11

/RAP/R20A12

/RAP/R20A15

/RAP/R20A17

/RAP/R23A01

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

11. Reactivate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:

These should be active from the previous installation, if not, select them to be installed again:

Planning Sequences

Planning Sequence

/RAP/C21A01_PS01

/RAP/C25A03_PS01

/RAP/D23A01_PS01

Planning Sequence

/RAP/D24A01_PS01

/RAP/R20A08_PS01

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

12. Reactivate Workbooks.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 251\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *More Types* ► *Analysis Office Excel Workbook* ►.
3. Use *Select Objects* to select the following workbooks:
These should be active from the previous installation, if not, select them to be installed again:

Workbooks

Workbook

/RAP/PLANASSORTMENT

/RAP/PLANOPTIONS

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

13. Choose *Exit* to leave the transaction.

Activation Warnings

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same

- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.3.7.2 Verify Gregorian Calendar

Ensure that the previously generated time data (Gregorian calendar) is sufficient for the current release of SAP Assortment Planning.

Context

Execute this procedure to generate time data (**Gregorian calendar**).

Procedure

1. Log on to SAP HANA studio.
2. In the *Modeler* perspective, on the *Quick Launch* tab, select your SAP Customer Activity Repository applications bundle system and choose *Generate Time Data*.
3. Select *Gregorian* as the *Calendar Type*.

For example, SAP HANA views included in SAP HANA content for SAP Customer Activity Repository require the presence of time data in `_SYS_BI.TIME_DIMENSION*` SAP HANA database tables.

4. Enter a range of years that includes all the years of data that you plan to store in SAP Customer Activity Repository.

Example: If you plan to start using SAP Assortment Planning on January 1, 2014, enter 2014 as your starting year. But if you plan to access sales documents created in SAP ERP that date from January 2013, you should specify 2013 as your starting year.

5. Define the granularity as *Day*, which is the minimum granularity required by SAP Customer Activity Repository. You can choose a finer level of granularity, for example *Hour*, if necessary.
6. Choose the day that is the first day of the week in your company.
7. Choose *Finish*.

For more information, see:

- https://help.sap.com/viewer/p/SAP_HANA_LIVE ► *Installation and Upgrade* ► *Administrator's Guide* ► *Configuration Steps* ► *Generate Time Data* ►

- https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Development ► SAP HANA Modeling Guide (for SAP HANA studio) ► Creating Information Views and Previewing its Output ► Generate Time Data ►

6.3.3.8 Verify that Data Replication is Running Following the Upgrade

Following the upgrade, ensure that all of the data replication described in the *Configure Data Replication* section of the *Common Installation Guide* is still running.

⚠ Caution

The data you replicate in this step is consumed by the SAP Assortment Planning application through local BI Content. Only a subset of ASCII characters is considered valid by SAP BW. As a result, object identifiers, which are mapped to external IDs in DDF (for example, `EXT_LOC_ID` or `EXT_PROD_ID`), should only consist of valid characters.

We recommend that you avoid the usage of invalid characters in the source master data system. This is controlled by the system administrator or the implementation team who define the value ranges and formatting for object identifiers (for example, product or location IDs).

If the recommended approach is not possible, then in your SAP Assortment Planning back-end system, you need to allow for additional special characters in Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* ►. For more information, see [173241](#) ►.

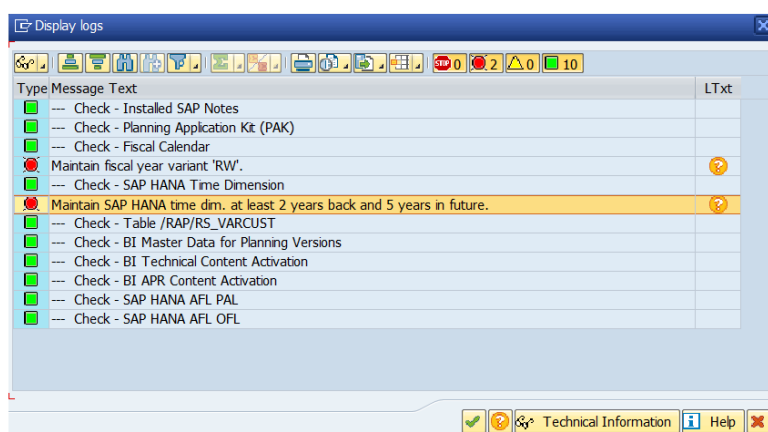
In particular, following the upgrade, you need to pay attention to the following:

- SAP Assortment Planning supports the use of time-dependent article hierarchies. This is enabled by implementing SAP Note [2196323](#) ► in the **connected SAP Retail or SAP S/4HANA system**. Following the implementation of these notes in SAP Retail or SAP S/4HANA, if your hierarchy is already a time-dependent hierarchy, you need to re-import the product hierarchies into SAP Assortment Planning using the DRFOUT framework.
 - SAP Retail Description: Article Hierarchy
 - DRFOUT Outbound Implementation: PAHY
 - DDF Inbound Interface: `/DMF/MDIF_PROD_HIER_INBOUND`
- All the tables listed in the spreadsheet of the *CARAB 2.0 - SLT Tables* archive for your version of SAP Customer Activity Repository applications bundle (SAP Assortment Planning) are being replicated. For more information, see the *Create/Replicate Source Master Data System Tables* section in the *Common Installation Guide*.
- Ensure that periodic tasks to load product attributes into SAP Assortment Planning are still running following the upgrade. (reports `/DMF/ATR_IMPORT` and `/DMF/PROD_ATR_IMPORT`)
- Ensure that season classification data is being loaded from the appropriate source. For more information, see the *Load Season Classification Data* section in the *SAP Assortment Planning Administration Guide*. You also need to set up the *Execute inbound SLT replication for season data* report (`/DMF/EXECUTE_SEASON_INBOUND` in transaction SE38) to run as a background job to regularly import any updates from SAP Fashion Management and SAP Retail to DDF.
- Ensure that wholesale data is being loaded. Set up the *Mapping report to convert sales orders into /DMF/TS_WS table* report (`/DMF/WHOLESALE_SO_SHP_TO_TS_WS` in transaction SE38) to run as a background

job to regularly import replicated sales order and shipment data into DDF. For more information, see the *Load Wholesale Data* section in the *SAP Assortment Planning Administration Guide*.

6.3.3.9 Run the Validation Report

1. Run transaction `/DMF/VAL_CAR_INSTALL`.
Alternatively, run transaction `SE38` and execute the `/DMF/VALIDATE_CAR_INSTALLATION` report.
2. Select the *Assortment Planning* scenario and select *Execute*.
In the dialog that appears, select whether to validate the Retail SAP BW structure, the Omnichannel SAP BW structure, or both. The SAP BW structure to validate depends on the structure that you have selected to reactivate during the upgrade in a previous step, see section *Reactivate SAP Assortment Planning Planning Framework Content*.
Running this report allows you to verify the success of the installation, providing a log of potential issues. For example, you may be presented with the following results:



Validation Report Results

View the long text associated with each message to see the link to the documentation describing the procedure you have to troubleshoot.

6.3.3.10 Run the SAP Assortment Planning for Retail 2.0 FP3 and 4.0 Update Reports

Context

Run this report to carry out back-end server changes required by the SAP Assortment Planning 4.0 FPS01 release.

Procedure

1. Run transaction SE38.
2. Execute the `/RAP/20_FP3_UPGRADE_APR` report.

Read the documentation associated with the report for important information on updates performed by the report.

3. Execute the `/RAP/40_UPGRADE_APR` report.

Read the documentation associated with the report for important information on updates performed by the report.

6.3.3.11 Activate SAP Assortment Planning ICF Services

Use

Following an upgrade, you must ensure that all ICF services required for the SAP Assortment Planning SAP Fiori apps are activated.

Procedure

1. Log on to your front-end server.
2. Open service maintenance (transaction SICF).
3. In the *Define Services* screen, select the Location Clustering service by specifying the following:
 - Hierarchy Type: **SERVICE**
 - Virtual Host: **DEFAULT_HOST**
 - Service Path: **/sap/bc/ui5_ui5/sap/locclsts_v2/**
4. Choose *Execute*.

5. To activate the service, choose [Service/host Activate](#).
6. Repeat steps 3 to 5 to ensure that **all** of the following services are activated:
 - `/sap/bc/ui5_ui5/sap/attribmgmt_v2/`
 - `/sap/bc/ui5_ui5/sap/assortlist/`
 - `/sap/bc/ui5_ui5/sap/ddfreuse_v2/`
 - `/sap/bc/ui5_ui5/sap/locclsts_v2/`
 - `/sap/bc/ui5_ui5/sap/modulemgmt_v2/`
 - `/sap/bc/ui5_ui5/sap/optionplan_v2/`
 - `/sap/bc/ui5_ui5/sap/phpmatch_v2/`
 - `/sap/bc/ui5_ui5/sap/plnconfig/`

6.3.3.12 Define System Alias for Back-End Transactions

Use

A number of SAP Assortment Planning SAP Fiori apps, installed on your front-end system, launch transactions directly on the back-end system. For example, the [Manage Products](#) tile actually launches the Demand Data Foundation (DDF) `POWL_EASY` WebDynpro application.

Following an upgrade, you must ensure that all RFC connections and system alias definitions required by SAP Assortment Planning application remain set.

Procedure

1. Log on to your front-end system, that is, the system where you have installed the user interface (UI) components of the SAP Assortment Planning application.
2. Launch [Configuration of RFC Connections](#) (transaction `SM59`).
3. Create an RFC connection with the [RFC Destination](#) set to `SAP_ISR_CARAB` and [Connection Type](#) set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect to your back-end system, in particular, the [Target Host](#) entry on the [Technical Settings](#) tab.
4. Save your changes.
5. Create another RFC connection with the RFC Destination set to `SAP_ERP_ISR_CARAB` and [Connection Type](#) set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect your front-end system to the SAP Retail or SAP S/4HANA system, in particular, the [Target Host](#) entry on the [Technical Settings](#) tab.
6. Save your changes.
7. Open [Launchpad Customizing](#) (transaction `LPD_CUST`).
8. Select the SAP Assortment Planning role (`UIRAP001`), and choose [Display](#).
The two catalogs, [Assortment Planner](#) and [Planning Administrator](#), are displayed.

9. In each of the catalogs, selecting one app at a time, make the following settings:

Catalog	App	System Alias	Description
<i>Assortment Planner</i>	<i>View Log</i>	SAP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction SLG1 on the back-end system.
			i Note This application is only used to configure a link to the back-end system, you do not need to add this app to your SAP Fiori launchpad.
	<i>View ExtAssort Listing Conditions</i>	SAP_ERP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction WSL10 on the connected SAP Retail or SAP S/4HANA system.
		AB	i Note This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.
	<i>View External Assortments</i>	SAP_ERP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction WRF_WSOA3 on the connected SAP Retail or SAP S/4HANA system.
		AB	i Note This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.
<i>Planning Administrator</i>	<i>Manage Category responsibilities</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Category Responsibilities</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Market responsibilities</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Market Responsibilities</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Products</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Products</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Locations</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Locations</i> app to launch the corresponding DDF WebDynpro application.

6.3.3.13 Troubleshoot Front-End Server Upgrade

Use

Following the upgrade of the product version on the front-end server, you may not be able to see some of the SAP Assortment Planning SAP Fiori tiles in your launchpad. This section outlines how to troubleshoot these issues, should you experience them.

These steps are also listed in the *Troubleshooting* section of the *SAP Assortment Planning Administrator's Guide* available on the SAP Help Portal at <http://help.sap.com/viewer/p/CARAB> > > <Your Version> > *Administration* > *SAP Assortment Planning Administration Guide* >.

Process

Do the following:

1. Check that all of the required BSP applications are listed in the UIRAP001 package.
 1. Log on to your front-end system (your SAP Gateway system).
 2. Launch the *Object Navigator* (transaction SE80).
 3. In the *Repository Browser*, open package UIRAP001.
 4. Expand all of the embedded packages of embedded package CONTENT_RAP_TRANS.

5. Verify that the following *BSP Applications* are listed:

Package	
UICAR001	
Object Name	Description
UICAR001	Structure package for Customer Activity Repository
Subpackages	
UIAMR001	Structure package for Allocation Management Retail
UIOAA001	Omnichannel Article Availability
UIPMR001	Structure package for Promotion Management Retail
UIRAP001	Structure package for UIRAP
Subpackages	
CONTENT_RAP_COMMON	Main package for common obejcts for RAP
CONTENT_RAP_TRANS	Main package for transactional for RAP
Subpackages	
RETAIL_DDF	Package for DDF
BSP Library	
BSP Applications	
ATTRIBMGMT_V2	Manage Product Attriubtes: Fiori ID F0829A
DDFREUSE_V2	Fiori Reuse Components for DDF: Fiori ID F0854A
LOCCLSTS_V2	Location Clustering: Fiori ID F0550A
MODULEMGMT_V2	Module Management: Fiori ID F1682A
PLNCONFIG	Planning configuration
RETAIL_RAP_AP	Package for RAP AP
BSP Library	
BSP Applications	
ASSORTLIST	Assortment List: Fiori ID F1567B
OPTIONPLAN_V2	Option Plan: Fiori ID F0830A
PHPMATCH_V2	PHP Matching: Fiori ID F0831A
UISCAR01	Strucutre Package for Customer activity repository


BSP Applications

6. If you do not see one or more of the BSP applications listed above, right-click on each of the RETAIL_DDF and RETAIL_RAP_AP packages, and select **Other Functions** > **Rebuild Object List**.

⚠ Caution

Do not rebuild objects on a higher package level.

2. Clean the cache.
 1. Log on to your front-end system (your SAP Gateway system).
 2. In Customizing (transaction SPRO), navigate to **SAP NetWeaver** > **UI Technologies** > **SAP Fiori** > **Data Administration** > **Invalidate Caches**.
This activity launches the /UI2/INVALIDATE_GLOBAL_CACHES report. This report invalidates all server-side caches in SAP NetWeaver user interface services, which can become out-of-date following an upgrade.
 3. If necessary, implement instructions listed in SAP Note [2147669](#).
3. Remove any previously customized versions of the UIRAP001 launchpad.
 1. Log on to your front-end system (your SAP Gateway system).
 2. Launch the **Overview for Launchpads** (transaction LPD_CUST).

3. Search for [Role](#) UIRAP001, and see whether any instances exist where the [User Name](#) is not [SAP](#). If so, this means that customized versions of the UIRAP001 launchpad exist, and these take precedence over the standard launchpad instance delivered by SAP.
4. Delete all but the launchpad instance delivered by SAP.
4. Recalculate SAPUI5 application index, following any changes to the content of the SAPUI5 ABAP repository (for example, installation of a new version of the SAPUI5 distribution layer or implementation of an SAP Note containing changes to an SAPUI5 app).
For more information, see the *Configure Index Calculation* section in the *Common Installation Guide* and SAP Note [2227577](#) .

6.3.4 2.0 SP6 to 4.0 FPS01

This section is intended for existing SAP Assortment Planning for Retail customers who have installed and configured SAP Assortment Planning for Retail 2.0 SP6 and would like to upgrade to SAP Assortment Planning 4.0 FPS01.

6.3.4.1 Quick Guide

Upgrade to SAP Assortment Planning 4.0 FPS01.

Checklist

Prerequisites

Ensure that you have carried out all the steps listed in the previous sections of this guide.

Follow-Up Activities

Mandatory Steps

- ☐ Perform mandatory core steps for SAP Customer Activity Repository. See [Core \(Mandatory for All Applications\) \[page 64\]](#).
- ☐ Verify SAP HANA and back-end system roles. See *Verify Users, Privileges, and Roles*.
- ☐ Adjust Customizing settings.
- ☐ Reactivate SAP Assortment Planning planning framework content.
- ☐ Verify that data replication is running following the upgrade.
- ☐ Run the validation report.
- ☐ Run the SAP Assortment Planning 4.0 update report.
- ☐ If you want to purge assortment lists using the `/DMF/PURGE_AGENT` report, you must execute the `/DMF/WUF_MIGRATE_ASRTLIST` report **once** using transaction SE38.
For detailed information, read the system documentation associated with the report.

- ☐ Verify that all SAP Assortment Planning OData services are active following the upgrade. For detailed information, see [Verify that OData Services are Active \[page 77\]](#).
- ☐ Verify that all the ICF services relevant to SAP Assortment Planning are active following the upgrade.
- ☐ Verify the definition of system aliases for back-end transactions.
- ☐ Troubleshoot front-end server upgrade.

6.3.4.2 Perform Core Steps for SAP Customer Activity Repository

To set up this application, you must first perform the **Core (Mandatory)** steps for SAP Customer Activity Repository. The core steps are mandatory for all the consuming applications.

Procedure

Perform all steps listed under [Core \(Mandatory for All Applications\) \[page 64\]](#).

6.3.4.3 Adjust Customizing Settings

Customizing to maintain following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

Following the upgrade, you need to make settings in Customizing to be able to use SAP Assortment Planning 4.0 FPS01.

Procedure

1. Log on to your back-end system.
2. If you use the Retail SAP BW Structure and you don't want to use planning configuration, do the following:
 - a. Disable [Use Planning Configuration](#) and [Prompt in Manage Location Clusters](#) (using transaction SPRO) under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►.

You must disable this Customizing setting to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

- b. Disable the implementation of *BAdI: Read Merchandise Planning KPI Data* under [Cross-Application Components > Demand Data Foundation > Data Maintenance > Planning Configuration > Enhancements Using Business Add-Ins](#).

You must disable the implementation of this BAdI to continue using the Retail SAP BW Structure. For more information, see section *Reactivate Planning Framework Content (SAP Assortment Planning)*.

If you use the Omnichannel SAP BW structure, make sure that *Use Planning Configuration* is enabled.

3. Maintain the monthly fiscal year variant (using transaction `SPRO`) under [Cross-Application Components > Assortment Planning > Imported Demand Data Foundation Settings > Basic Settings > Define Default Values > Monthly FY Variant](#). This is necessary to use the view *Sales & Inventory Analysis* in the *My Assortment Lists* app.

For more information, see [Fiscal Year Variant](#).

4. Define the business week (using transaction `SPRO`) under [Cross-Application Components > Demand Data Foundation > Basic Settings > Define Business Week](#).
5. Maintain number ranges for planning configurations under [Cross-Application Components > Assortment Planning > Number Ranges > Maintain Number Range for Planning Configuration](#).
6. Maintain number ranges for parameter configurations under [Cross-Application Components > Assortment Planning > Number Ranges > Maintain Number Range for Parameter Configuration](#).
7. Make sure that the settings in Customizing activity *Assortment List Settings* fit to your planning process.

The *Assortment List Settings* activity is available in Customizing under [Cross-Application Components > Assortment Planning > Assortment Lists](#).

8. If you want to allow users access to the *Analyze Forecast* app via links from the *My Assortment Lists* app, enable the *Create* option to generate a location hierarchy out of every location cluster set **activated** in SAP Assortment Planning. This option is available in the *Location Clustering Settings* Customizing activity under [Cross-Application Components > Assortment Planning for Retail > Imported Demand Data Foundation Settings > Data Maintenance > Location Clustering > Location Clustering Settings](#).

If the *Create* option is not visible, choose *New Entries*.

9. To use forecasted values in the *Sales & Inventory Analysis* view within the *My Assortment Lists* app, configure Unified Demand Forecast (UDF). For more information, see the *SAP Customer Activity Repository Administration Guide*, section *Configuring Unified Demand Forecast (UDF)*.
10. Verify default implementation of *BAdI: Determine Product Season Classification* and, if necessary, provide a custom implementation.

The BAdI, *BAdI: Determine Product Season Classification* is available under [Cross-Application Components > Assortment Planning > Enhancements Using Business Add-Ins](#).

6.3.4.4 Verify Fiscal Calendar

Time data to verify following an upgrade to SAP Assortment Planning 4.0 FPS01.

Context

Note

Generate time data (fiscal calendar) since this is required for using the [Sales & Inventory Analysis](#) view in the [My Assortment Lists](#) app. The fiscal calendar is also required to initialize the SAP Assortment Planning BW structure, as it allows for planning on fiscal periods.

Procedure

If required and not already done, ensure that the time data has been generated far enough into the past and future for SAP Assortment Planning 4.0 FPS01.

For more information, see the following:

- *Generate Time Data - Fiscal Calendar* section of the *Common Installation Guide*
- *Management* section of the *SAP Assortment Planning Administration Guide*

6.3.4.5 Reactivate Planning Framework Content (SAP Assortment Planning)

There are two distinct BW structures supported in SAP Assortment Planning:

Omnichannel SAP BW Structure

Caution

New functionality will be only available for the Omnichannel SAP BW structure. Therefore, we recommend to use the Omnichannel SAP BW structure which provides an extensive feature set.

- If you already use the Omnichannel SAP BW structure, reactivate it.
- If you were using the previously existing Retail SAP BW structure, we recommend that you reactivate it during the upgrade. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Make sure that you have enabled the optimized in-memory planning capabilities of the integrated planning engine in SAP Business Warehouse. For more information, see the *Common Installation Guide*, section *Enable Optimized In-Memory Planning Capabilities of SAP BW Integrated Planning*.

Prerequisite

To use the Omnichannel SAP BW structure, the following prerequisites must be met:

- Enable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►. The Omnichannel SAP BW structure only works when planning configurations are used.
- Enable the implementation of [BAdI: Read Merchandise Planning KPI Data](#) under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) ►.

The Omnichannel SAP BW structure consists of local BI Content only. To create workbooks on top of the Omnichannel SAP BW structure, contact SAP Digital Business Services for a custom implementation project.

Retail SAP BW Structure

⚠ Caution

If you were using the Retail SAP BW Structure in a previous release, we recommend that you reactivate this structure during the upgrade. The Retail SAP BW Structure will be supported with maintenance, however no new functionality will be developed for this structure. If later you would like to switch to the new Omnichannel SAP BW structure, please contact SAP for assistance with your upgrade project.

Prerequisite

To use the Retail SAP BW structure, the following prerequisites must be met:

- Disable the usage of planning configurations under ► [Cross-Application Components](#) ► [Assortment Planning](#) ► [Imported Demand Data Foundation Settings](#) ► [Basic Settings](#) ► [Define Default Values](#) ►. You cannot use the Retail SAP BW structure with planning configurations.
- Disable the implementation of [BAdI: Read Merchandise Planning KPI Data](#) under ► [Cross-Application Components](#) ► [Demand Data Foundation](#) ► [Data Maintenance](#) ► [Planning Configuration](#) ► [Enhancements Using Business Add-Ins](#) ►.

6.3.4.6 Upgrade from Omnichannel SAP BW Structure

If you already use the Omnichannel SAP BW structure, activate the local BI Content objects as described in subsection [Activate Application BI Content \(Omnichannel SAP BW Structure\)](#).

6.3.4.6.1 Activate Application BI Content (Omnichannel SAP BW Structure)

Context



In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Omnichannel SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system

i Note

To ensure correct activation of the BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Result \[page 272\]](#), which can be ignored.

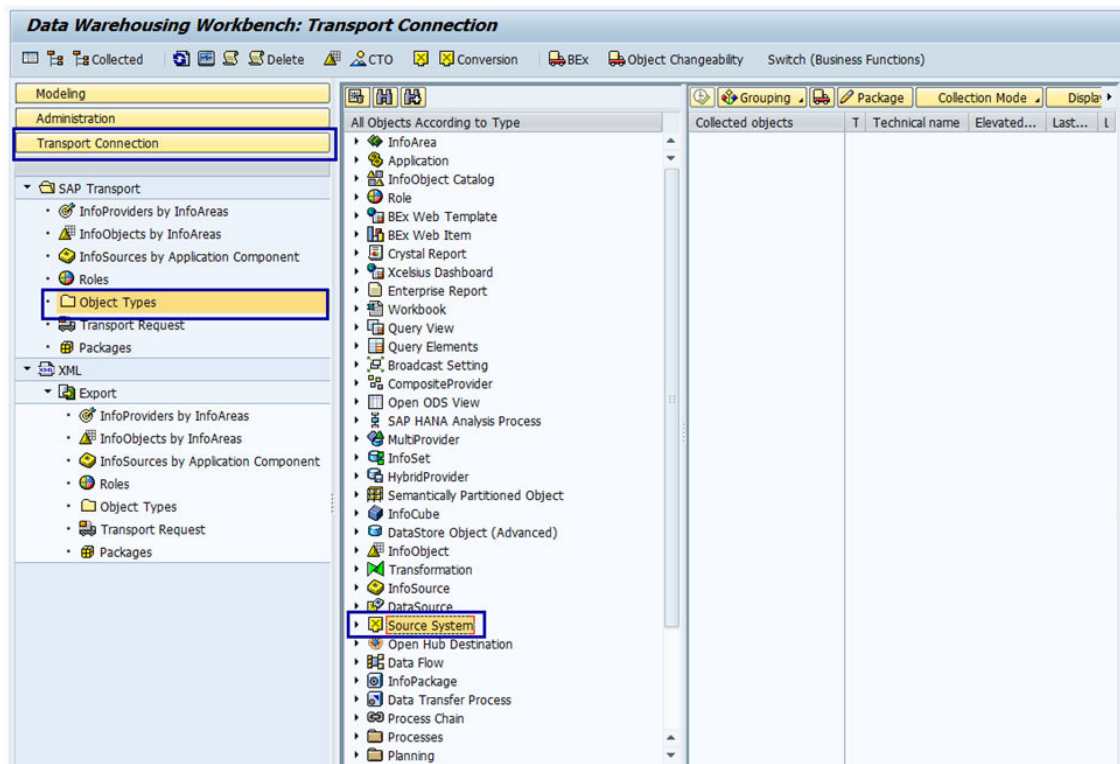
Also, do not disable the default BI setting to collect and activate all dependencies. The instructions below activate a minimum subset of objects, and it is assumed that all their dependencies are collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see:

- *SAP Assortment Planning Administration Guide* under *Initial Load of Data to DDF Using DRFOUT*
- [173241](#) 
- Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* .

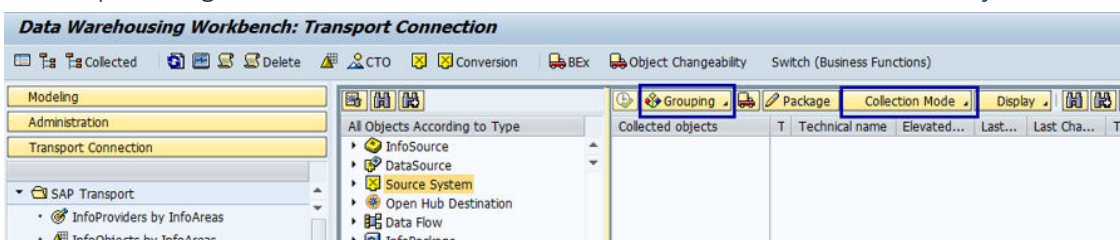
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction *RSA1*).
2. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Expand *Source System*.



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content, which you will activate in the subsequent steps.

Match(X) or copy Selection

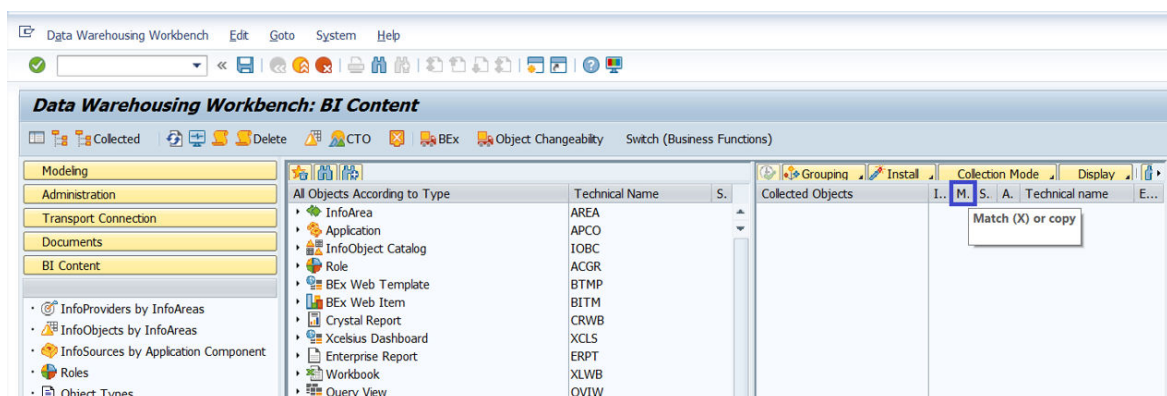
Installation Type	Selection
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.

Installation Type	Selection	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹ Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	Standard /RAP/* BI Content objects have been modified in your local environment¹ Enable the <i>Match (X) or copy</i> option. During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

⚠ Caution

When you choose to install the *Content Version*, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



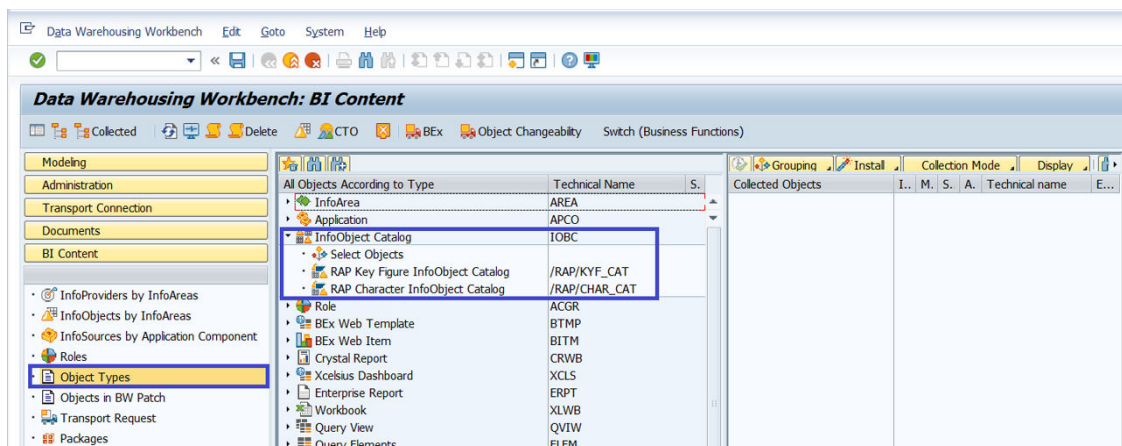
4. Activate InfoObject catalogs.

If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Result \[page 272\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoObject Catalog*.



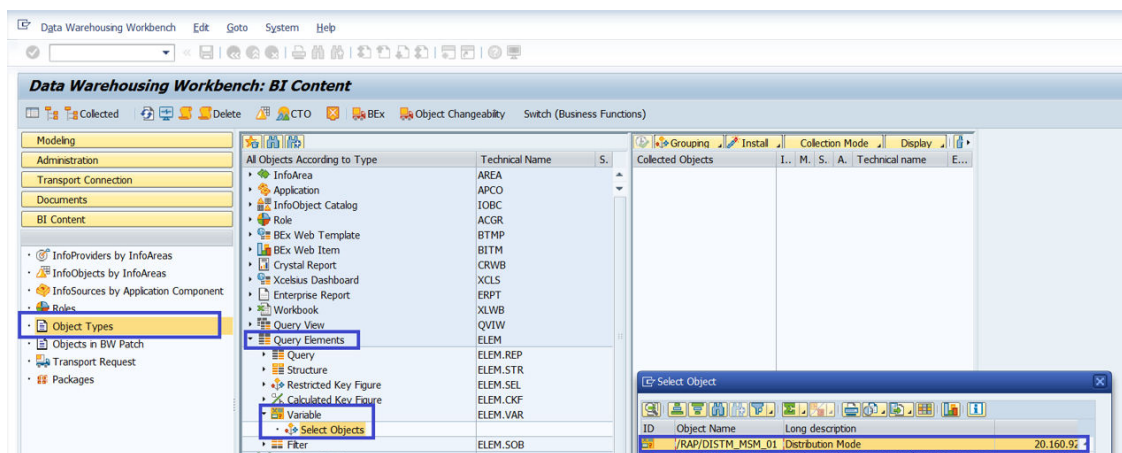
3. Use *Select Objects* to select the /RAP/CHAR_CAT and the /RAP/KYF_CAT catalogs.
4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

5. Activate *Variables*.

→ Remember

You can ignore activation warnings listed under [Result \[page 272\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *Query Elements* followed by *Variable*.
3. Use *Select Objects* to select the following variables:
 - /RAP/PLCND_ESM_02
 - /RAP/PLCSET_ESM_02
 - /RAP/PCYCLE_EMM_01
 - /RAP/PLNHR_MSO_01
 - /RAP/PLNHN1_MSO_01 to /RAP/PLNHN9_MSO_01 (inclusive)
 - /RAP/PRDHN1_MMO_01 to /RAP/PRDHN9_MMO_01 (inclusive)



4. Choose [Transfer Selections](#).
 5. In the right-hand frame, in the list of [Collected objects](#), verify that all of the selected variables are listed and that the option in the [Install](#) column is enabled .
 6. Choose [Install](#).
If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
6. Maintain version master data.
1. In the left-hand frame, select [Modeling](#) [InfoObjects](#) [InfoObjects](#).
 2. In the right-hand frame under [Assortment Planning for Retail](#) [RAP Character InfoObject Catalog](#), search in the object list for the InfoObject `/RAP/VERSN`.
 3. Right-click the InfoObject `/RAP/VERSN`, choose [Maintain Master Data](#) from the context menu, and maintain the following entries on the [Time Independent](#) tab:

Version	Short description
#	An empty version value that you must maintain
ALV	Assortment List Vsn
APF	Vsn of final plan

Note

Save your changes and activate them.

7. Activate Advanced DataStore Objects.

If during the installation, you are presented with a message stating that your source system is not active, navigate to the [Modeling](#) tab, locate your source system under [Source Systems](#), and activate it by right-clicking and selecting [Activate](#). If prompted, choose [Only Activate](#) .

→ Remember

You can ignore activation warnings listed under [Result \[page 272\]](#).

1. Select [BI Content](#) in the left-hand frame.
2. Select [Object Types](#) and expand [DataStore Object \(advanced\)](#).
3. Use [Select Objects](#) to select all DataStore Objects starting with `/RAP/DS*`.
4. Choose [Transfer Selections](#).
5. In the list of [Collected objects](#), verify that the option in the [Install](#) column is enabled for each of the objects.
6. Choose [Display](#) [List](#) [List](#).
7. Right-click the tree node [DataStore Object \(advanced\)](#) and choose [Install all Below](#).
8. Choose [Install](#). If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
9. Remodel the following Advanced DataStore Objects if a corresponding message appears: `/RAP/DS40`, `/RAP/DS42`, `/RAP/DS54`, and `/RAP/DS55`.

Note

Set all affected Advanced DataStore Objects to [Load Mode](#) before starting the remodeling process. After the remodeling process, make sure that all new Advanced DataStore Objects are set to [Planning Mode](#).

→ Tip

To set an Advanced DataStore Object to Load Mode:

1. Select [Modeling](#) in the left-hand frame.
2. Select [InfoProvider](#) in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to set to [Load Mode](#).
4. Choose [► Planning-Specific Properties ► Change Real-Time Load Behavior ►](#).
5. Choose [Real-Time Data Target Can Be Loaded With Data; Planning Not Allowed](#) and confirm.

→ Tip

To remodel an Advanced DataStore Object:

1. Select [Modeling](#) in the left-hand frame.
2. Select [InfoProvider](#) in the left-hand frame.
3. Right-click the Advanced DataStore Object that you want to remodel.
4. Choose [► Additional Functions ► Remodeling Monitor ►](#).
5. Select a remodeling rule.
6. Choose [Start Request](#). The [Start Time](#) window opens.
7. In the [Start Time](#) window, select a start time for the remodeling request and confirm.

8. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Result \[page 272\]](#).

1. Select [BI Content](#) in the left-hand frame.
 2. Select [Object Types](#) and expand [CompositeProvider](#).
 3. Use [Select Objects](#) to select all CompositeProviders from [/RAP/CP40](#) to [/RAP/CP46](#) (inclusive).
 4. Choose [Transfer Selections](#).
 5. In the list of [Collected objects](#), verify that the option in the [Install](#) column is enabled for each of the objects.
 6. Choose [► Display ► List ►](#).
 7. Right-click the tree node [DataStore Object \(advanced\)](#) and choose [Install all Below](#).
 8. Choose [Install](#). If an information dialog box appears, choose [Continue](#). Choose [Local Object](#) or enter a package if you need to transport the objects.
- ## 9. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Result \[page 272\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.
3. Use *Select Objects* to select the following Aggregation Level:

Aggregation Levels

Aggregation Levels

/RAP/C44A01

/RAP/C44A02

/RAP/C44A03

/RAP/C44A04

/RAP/C46A02

4. Choose *Transfer Selections*.
 5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
 6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
10. Activate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 272\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:

Planning Sequences

Planning Sequences

/RAP/D50A01_PS01

/RAP/D57A01_PS01

/RAP/C40A01_PS01

/RAP/C40A05_PS01

/RAP/C46A01_PS01

Planning Sequences

/RAP/C46A03_PS01

/RAP/C46A04_PS01

/RAP/C46A04_PS02

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

11. Activate Planning Function Type Objects.

→ Remember

You can ignore activation warnings listed under [Result \[page 272\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Function Type for Planning* ►.
3. Use *Select Objects* to select the following Planning Function:

Planning Functions

Planning Functions

/RAP/OP_BUFFER_DATA

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

12. Choose *Exit* to leave the transaction.

Results

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same

- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.4.7 Upgrade from Retail SAP BW Structure

If you were using the previously existing Retail SAP BW structure, activate the local BI Content objects and ensure that the previously generated time data (Gregorian calendar) is sufficient. For detailed information see the subsections *Activate Application BI Content (Retail SAP BW Structure)* and *Verify Gregorian Calendar*.

6.3.4.7.1 Activate Application BI Content (Retail SAP BW Structure)

Context

In this procedure, you perform a sequential, step-by-step activation of the local BI Content objects delivered in the **Retail SAP BW structure** of the SAP Assortment Planning application. SAP Assortment Planning uses this application BI Content to consume data stored in the back-end system.

⚠ Caution

As of SAP Assortment Planning 2.0 FP2, a new (Omnichannel) SAP BW Structure has been introduced. Please contact SAP for assistance with your upgrade project.

i Note

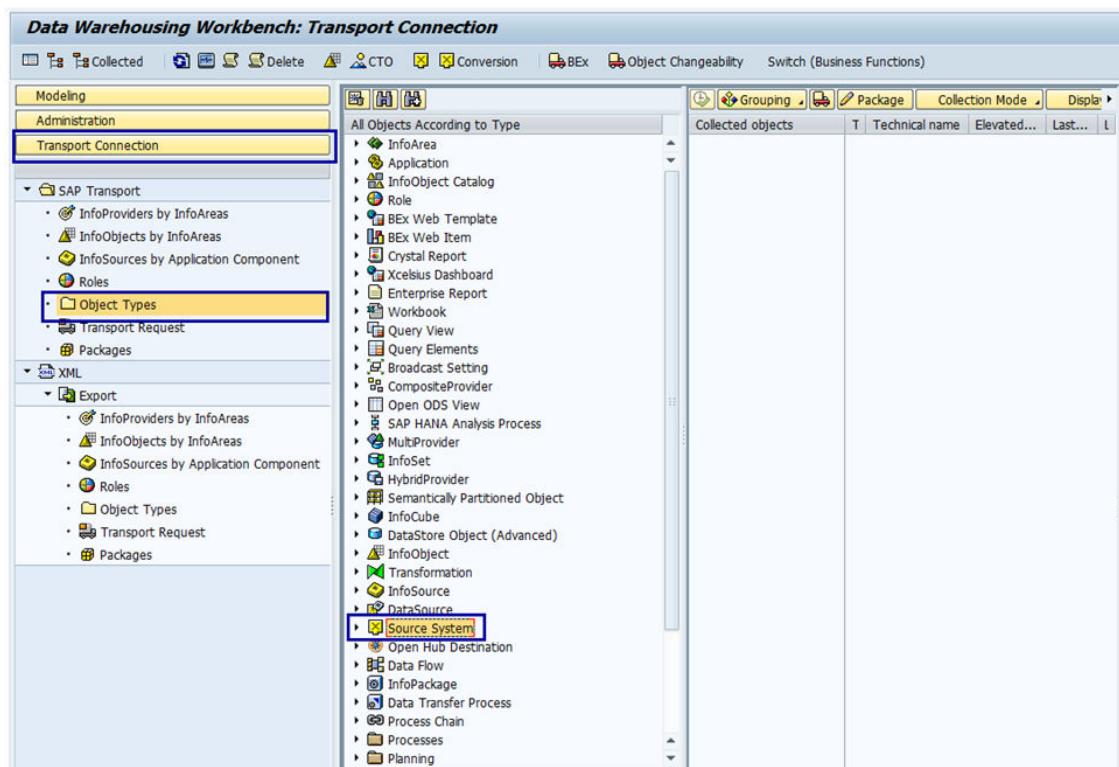
To ensure correct activation of the local BI Content objects, carry out the activation sequentially, as specified in the following procedures. Resolve any activation warnings, except for the ones listed under [Activation Warnings \[page 280\]](#), which can be ignored.

Also, the default BI setting to collect and activate all dependencies must not be disabled by the user. The instructions below activate a minimum subset of objects, and it is assumed that all their dependencies will be collected and activated.

The consumed data from the back-end system can be created by the SAP Assortment Planning application, or be replicated from a source master data system. In both cases, beware of limitations with regard to the characters allowed by SAP BW. For more information, see [173241](#) and Customizing activity [Maintain permitted extra characters](#) under [SAP NetWeaver > Business Warehouse > General Settings](#).

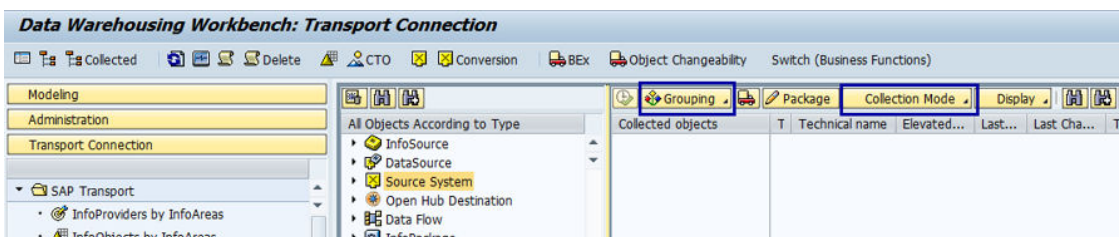
Procedure

1. On your back-end SAP Assortment Planning system, open the Data Warehousing Workbench (transaction RSA1).
2. Verify transport connections.
 1. Select *Transport Connection* in the left-hand frame.
 2. Select *Object Types*.
 3. Expand *Source System*.



Selecting Source Systems

4. Use *Select Objects* to ensure that the back-end system is selected as the source system.
5. Choose *Transfer Selections*.
6. At the top of the right-hand frame, above the list of *Collected objects*, choose *Grouping* and select *Only Necessary Objects*.
7. At the top of the right-hand frame, choose *Collection Mode* and select *Collect Automatically*.



Grouping and Collection Settings

3. Determine if you need to enable to *Match (X) or copy* option for the BI Content which you will activate in the subsequent steps.

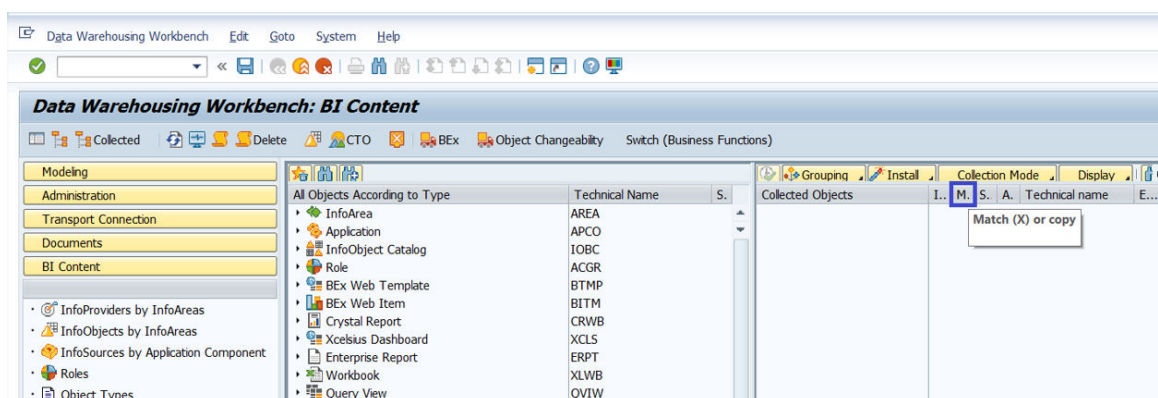
Match(X) or copy Selection

Installation Type	Selection	
New Installation	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	
Upgrade (Previously installed/ activated any of the /RAP/* BI Content)	Standard /RAP/* BI Content objects have not been modified in your local environment¹	Standard /RAP/* BI Content objects have been modified in your local environment¹
	Do not enable the <i>Match (X) or copy</i> option for any of the BI Content objects.	Enable the <i>Match (X) or copy</i> option. During the activation of each BI Content object type, you will be asked to carry out an additional <i>Transfer selections</i> step. In this step, select to install the <i>Active Version</i> (that is, your modified version) or the <i>Content Version</i> (that is, the SAP delivered, and possibly updated version of the object). The project implementation team should advise you on which option is required for each object.

⚠ Caution

When you choose to install the *Content Version*, the SAP delivered objects included in the current release will be installed regardless of any modifications made to the currently existing BI Content objects.

¹ As a system administrator, you may need to contact the SAP Assortment Planning project implementation team to learn if standard, SAP-delivered, BI Content objects have been modified in your local environment.



4. Activate InfoObject catalogs.

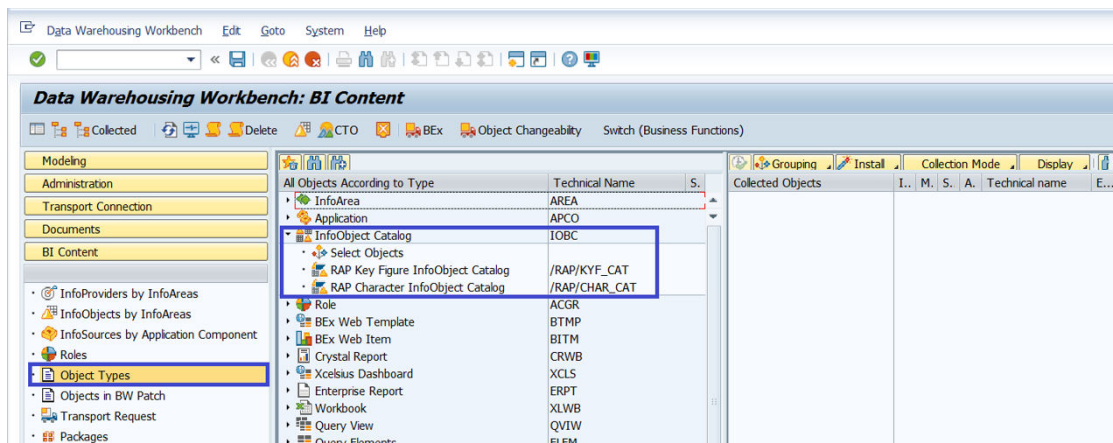
If at any point during the installation of BI Content objects you are presented with a dialog asking you to add objects to a personal list, we recommend that you select **No**.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand *InfoObject Catalog*.



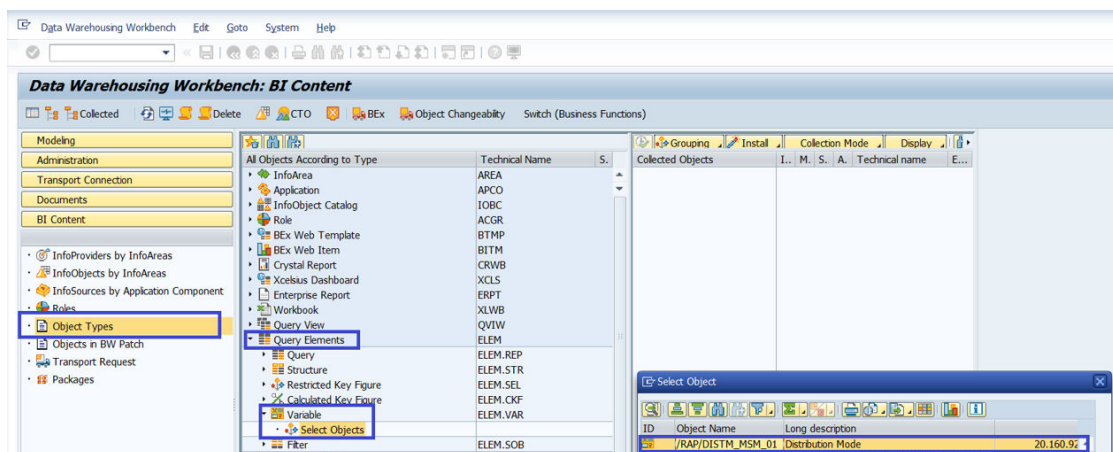
3. Use *Select Objects* to select the /RAP/CHAR_CAT and the /RAP/KYF_CAT catalogs.
4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that both InfoObject catalogs are listed.
6. Right-click on each of the InfoObject catalogs, and choose *Install all Below*.
7. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

5. Activate *Variable* /RAP/DISTM_MSM_01.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *Query Elements*.
3. Use *Select Objects* to select the /RAP/DISTM_MSM_01 Variable.



4. Choose *Transfer Selections*.
5. In the right-hand frame, in the list of *Collected objects*, verify that the /RAP/DISTM_MSM_01 Variable is listed and that the option in the *Install* column is enabled.
6. Choose *Install*.
If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

6. Maintain version master data.
- 1. Select *Modeling* in the left-hand frame.
 - 2. Expand *InfoObjects*.
 - 3. Search for InfoObject /RAP/VERSN, located under *Assortment Planning* > *RAP Character InfoObject Catalog*.
 - 4. Right-click the InfoObject /RAP/VERSN, choose *Maintain Master Data* from the context menu, and maintain the following entries on the *Time Independent* tab:

Version
- An empty version value that you must maintain
000
AP1
AP2
APF
AW1
AW2
OP1
OP2
PRJ
REF

Search: Version		
Results List: 76 results found for Version		Personal Value List Show Search Criteria
Version	Short description	
#	Not assigned	
0	Actuals	
AP1	Plan Version 1	
AP2	Plan Version 2	

The supported planning versions are described in detail in the *Maintain Customizing Table /RAP/RS_VARCUST* section of the *Common Installation Guide*.

i Note

Save your changes and activate them.

7. Activate DataStore Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *DataStore Object (Classic)*.
3. Use *Select Objects* to select all DataStore Objects starting with */RAP/**.
4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
If during the installation, you are presented with a dialog asking you to add objects to a personal list, select **No**.
8. Activate InfoCubes.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *InfoCube*.
3. Use *Select Objects* to select all InfoCubes starting with */RAP/RC**.
4. Similarly, select InfoCubes */RAP/VC20* and */RAP/VC21*.
5. Choose *Transfer Selections*.
6. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
7. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
9. Activate CompositeProviders.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand *CompositeProvider*.
3. Use *Select Objects* to select all CompositeProviders from */RAP/CP20* to */RAP/CP37* (inclusive).
4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.
10. Activate Aggregation Levels.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.

2. Select *Object Types* and expand ► *Planning* ► *Aggregation Level* ►.

3. Use *Select Objects* to select the following Aggregation Levels:

These should be active from the previous installation, if not, select them to be installed again:

Aggregation Levels

Aggregation Level

/RAP/D20A01

/RAP/R20A02

/RAP/R20A06

/RAP/R20A08

/RAP/R20A11

/RAP/R20A12

/RAP/R20A15

/RAP/R20A17

/RAP/R23A01

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

11. Reactivate Planning Sequence Objects.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *Planning* ► *Planning Sequence* ►.
3. Use *Select Objects* to select the following Planning Sequences:

These should be active from the previous installation, if not, select them to be installed again:

Planning Sequences

Planning Sequence

/RAP/C21A01_PS01

/RAP/C25A03_PS01

/RAP/D23A01_PS01

Planning Sequence

/RAP/D24A01_PS01

/RAP/R20A08_PS01

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

12. Reactivate Workbooks.

→ Remember

You can ignore activation warnings listed under [Activation Warnings \[page 280\]](#).

1. Select *BI Content* in the left-hand frame.
2. Select *Object Types* and expand ► *More Types* ► *Analysis Office Excel Workbook* ►.
3. Use *Select Objects* to select the following workbooks:
These should be active from the previous installation, if not, select them to be installed again:

Workbooks

Workbook

/RAP/PLANASSORTMENT

/RAP/PLANOPTIONS

4. Choose *Transfer Selections*.
5. In the list of *Collected objects*, verify that the option in the *Install* column is enabled for each of the objects.
6. Choose *Install*. If an information dialog box appears, choose *Continue*. Choose *Local Object* or enter a package if you need to transport the objects.

13. Choose *Exit* to leave the transaction.

Activation Warnings

If activation warnings similar to the ones displayed below appear, you can ignore them.

- CMP problem occurred in characteristic <CHAR> for InfoProvider <INFO_PROV>
- Rounding inaccuracies occur with data type FLOAT for AMOUNT and QUANTITY
- Characteristic <CHAR>: Lower case makes selection of char. values difficult
- Data type of char. <CHAR> (<TYPE1>) is not equal to data type of attribute <ATTR> (<TYPE2>)
- Length of characteristic <TEXT CHAR> (<LENGTH1>) and assigned attribute <ATTR> (<LENGTH2>) not same

- The short text of DataSource <SOURCE> is not maintained in language <LANG>
- Skip key figure <KYF>: aggregation type NO2 not supported
- Attribute <ATTR>: Conversion routine <CONV> ignored
- Attribute <ATTR>: Compounding ignored
- Datatype FLTP for datafield <FIELD> of the DSO is not allowed
- Conversion problems possible for source field <FIELD1> / target field <FIELD2>

6.3.4.7.2 Verify Gregorian Calendar

Ensure that the previously generated time data (Gregorian calendar) is sufficient for the current release of SAP Assortment Planning.

Context

Execute this procedure to generate time data (**Gregorian calendar**).

Procedure

1. Log on to SAP HANA studio.
2. In the *Modeler* perspective, on the *Quick Launch* tab, select your SAP Customer Activity Repository applications bundle system and choose *Generate Time Data*.
3. Select *Gregorian* as the *Calendar Type*.

For example, SAP HANA views included in SAP HANA content for SAP Customer Activity Repository require the presence of time data in `_SYS_BI.TIME_DIMENSION*` SAP HANA database tables.

4. Enter a range of years that includes all the years of data that you plan to store in SAP Customer Activity Repository.

Example: If you plan to start using SAP Assortment Planning on January 1, 2014, enter 2014 as your starting year. But if you plan to access sales documents created in SAP ERP that date from January 2013, you should specify 2013 as your starting year.

5. Define the granularity as *Day*, which is the minimum granularity required by SAP Customer Activity Repository. You can choose a finer level of granularity, for example *Hour*, if necessary.
6. Choose the day that is the first day of the week in your company.
7. Choose *Finish*.

For more information, see:

- https://help.sap.com/viewer/p/SAP_HANA_LIVE ► *Installation and Upgrade* ► *Administrator's Guide* ► *Configuration Steps* ► *Generate Time Data* ►

- https://help.sap.com/viewer/p/SAP_HANA_PLATFORM ► <Version> ► Development ► SAP HANA Modeling Guide (for SAP HANA studio) ► Creating Information Views and Previewing its Output ► Generate Time Data ►

6.3.4.8 Verify that Data Replication is Running Following the Upgrade

Following the upgrade, ensure that all of the data replication described in the *Configure Data Replication* section of the *Common Installation Guide* is still running.

⚠ Caution

The data you replicate in this step is consumed by the SAP Assortment Planning application through local BI Content. Only a subset of ASCII characters is considered valid by SAP BW. As a result, object identifiers, which are mapped to external IDs in DDF (for example, `EXT_LOC_ID` or `EXT_PROD_ID`), should only consist of valid characters.

We recommend that you avoid the usage of invalid characters in the source master data system. This is controlled by the system administrator or the implementation team who define the value ranges and formatting for object identifiers (for example, product or location IDs).

If the recommended approach is not possible, then in your SAP Assortment Planning back-end system, you need to allow for additional special characters in Customizing activity *Maintain permitted extra characters* under ► *SAP NetWeaver* ► *Business Warehouse* ► *General Settings* ►. For more information, see [173241](#) ►.

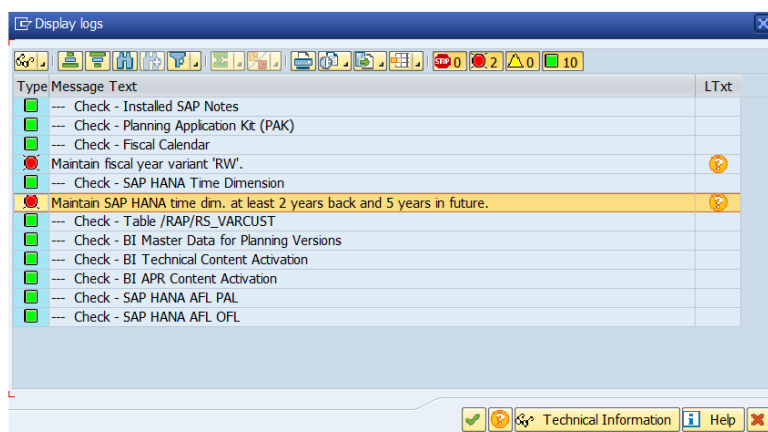
In particular, following the upgrade, you need to pay attention to the following:

- SAP Assortment Planning supports the use of time-dependent article hierarchies. This is enabled by implementing SAP Note [2196323](#) ► in the **connected SAP Retail or SAP S/4HANA system**. Following the implementation of these notes in SAP Retail or SAP S/4HANA, if your hierarchy is already a time-dependent hierarchy, you need to re-import the product hierarchies into SAP Assortment Planning using the DRFOUT framework.
 - SAP Retail Description: Article Hierarchy
 - DRFOUT Outbound Implementation: PAHY
 - DDF Inbound Interface: `/DMF/MDIF_PROD_HIER_INBOUND`
- All the tables listed in the spreadsheet of the *CARAB 2.0 - SLT Tables* archive for your version of SAP Customer Activity Repository applications bundle (SAP Assortment Planning) are being replicated. For more information, see the *Create/Replicate Source Master Data System Tables* section in the *Common Installation Guide*.
- Ensure that periodic tasks to load product attributes into SAP Assortment Planning are still running following the upgrade. (reports `/DMF/ATR_IMPORT` and `/DMF/PROD_ATR_IMPORT`)
- Ensure that season classification data is being loaded from the appropriate source. For more information, see the *Load Season Classification Data* section in the *SAP Assortment Planning Administration Guide*. You also need to set up the *Execute inbound SLT replication for season data* report (`/DMF/EXECUTE_SEASON_INBOUND` in transaction SE38) to run as a background job to regularly import any updates from SAP Fashion Management and SAP Retail to DDF.
- Ensure that wholesale data is being loaded. Set up the *Mapping report to convert sales orders into /DMF/TS_WS table* report (`/DMF/WHOLESALE_SO_SHP_TO_TS_WS` in transaction SE38) to run as a background

job to regularly import replicated sales order and shipment data into DDF. For more information, see the *Load Wholesale Data* section in the *SAP Assortment Planning Administration Guide*.

6.3.4.9 Run the Validation Report

1. Run transaction `/DMF/VAL_CAR_INSTALL`.
Alternatively, run transaction `SE38` and execute the `/DMF/VALIDATE_CAR_INSTALLATION` report.
2. Select the *Assortment Planning* scenario and select *Execute*.
In the dialog that appears, select whether to validate the Retail SAP BW structure, the Omnichannel SAP BW structure, or both. The SAP BW structure to validate depends on the structure that you have selected to reactivate during the upgrade in a previous step, see section *Reactivate SAP Assortment Planning Planning Framework Content*.
Running this report allows you to verify the success of the installation, providing a log of potential issues. For example, you may be presented with the following results:



Validation Report Results

View the long text associated with each message to see the link to the documentation describing the procedure you have to troubleshoot.

6.3.4.10 Run the SAP Assortment Planning for Retail 4.0 Update Report

Context

Run this report to carry out back-end server changes required by the SAP Assortment Planning 4.0 FPS01 release.

Procedure

1. Run transaction SE38.
2. Execute the `/RAP/40_UPGRADE_APR` report.

Read the documentation associated with the report for important information on updates performed by the report.

6.3.4.11 Activate SAP Assortment Planning ICF Services

Use

Following an upgrade, you must ensure that all ICF services required for the SAP Assortment Planning SAP Fiori apps are activated.

Procedure

1. Log on to your front-end server.
2. Open service maintenance (transaction SICF).
3. In the *Define Services* screen, select the Location Clustering service by specifying the following:
 - Hierarchy Type: **SERVICE**
 - Virtual Host: **DEFAULT_HOST**
 - Service Path: `/sap/bc/ui5_ui5/sap/locclsts_v2/`
4. Choose *Execute*.
5. To activate the service, choose *Service/host Activate*.
6. Repeat steps 3 to 5 to ensure that **all** of the following services are activated:
 - `/sap/bc/ui5_ui5/sap/attribmgmt_v2/`
 - `/sap/bc/ui5_ui5/sap/assortlist/`

- /sap/bc/ui5_ui5/sap/ddfreuse_v2/
- /sap/bc/ui5_ui5/sap/locclsts_v2/
- /sap/bc/ui5_ui5/sap/modulemgmt_v2/
- /sap/bc/ui5_ui5/sap/optionplan_v2/
- /sap/bc/ui5_ui5/sap/phpmatch_v2/
- /sap/bc/ui5_ui5/sap/plnconfig/

6.3.4.12 Define System Alias for Back-End Transactions

Use

A number of SAP Assortment Planning SAP Fiori apps, installed on your front-end system, launch transactions directly on the back-end system. For example, the [Manage Products](#) tile actually launches the Demand Data Foundation (DDF) `POWL_EASY` WebDynpro application.

Following an upgrade, you must ensure that all RFC connections and system alias definitions required by SAP Assortment Planning application remain set.

Procedure

1. Log on to your front-end system, that is, the system where you have installed the user interface (UI) components of the SAP Assortment Planning application.
2. Launch [Configuration of RFC Connections](#) (transaction `SM59`).
3. Create an RFC connection with the [RFC Destination](#) set to `SAP_ISR_CARAB` and [Connection Type](#) set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect to your back-end system, in particular, the [Target Host](#) entry on the [Technical Settings](#) tab.
4. Save your changes.
5. Create another RFC connection with the RFC Destination set to `SAP_ERP_ISR_CARAB` and [Connection Type](#) set to `H` (HTTP connection).
Ensure to maintain all of the settings required to connect your front-end system to the SAP Retail or SAP S/4HANA system, in particular, the [Target Host](#) entry on the [Technical Settings](#) tab.
6. Save your changes.
7. Open [Launchpad Customizing](#) (transaction `LPD_CUST`).
8. Select the SAP Assortment Planning role (`UIRAP001`), and choose [Display](#).
The two catalogs, [Assortment Planner](#) and [Planning Administrator](#), are displayed.

9. In each of the catalogs, selecting one app at a time, make the following settings:

Catalog	App	System Alias	Description
<i>Assortment Planner</i>	<i>View Log</i>	SAP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction SLG1 on the back-end system.
			i Note This application is only used to configure a link to the back-end system, you do not need to add this app to your SAP Fiori launchpad.
	<i>View ExtAssort Listing Conditions</i>	SAP_ERP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction WSL10 on the connected SAP Retail or SAP S/4HANA system.
		AB	i Note This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.
	<i>View External Assortments</i>	SAP_ERP_ISR_CARAB	This setting allows the <i>My Assortment Lists</i> app to launch transaction WRF_WSOA3 on the connected SAP Retail or SAP S/4HANA system.
		AB	i Note This application is only used to configure a link to the SAP Retail or SAP S/4HANA system, you do not need to add this app to your SAP Fiori launchpad.
<i>Planning Administrator</i>	<i>Manage Category responsibilities</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Category Responsibilities</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Market responsibilities</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Market Responsibilities</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Products</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Products</i> app to launch the corresponding DDF WebDynpro application.
	<i>Manage Locations</i>	SAP_ISR_CARAB	This setting allows the <i>Manage Locations</i> app to launch the corresponding DDF WebDynpro application.

6.3.4.13 Troubleshoot Front-End Server Upgrade

Use

Following the upgrade of the product version on the front-end server, you may not be able to see some of the SAP Assortment Planning SAP Fiori tiles in your launchpad. This section outlines how to troubleshoot these issues, should you experience them.

These steps are also listed in the *Troubleshooting* section of the *SAP Assortment Planning Administrator's Guide* available on the SAP Help Portal at <http://help.sap.com/viewer/p/CARAB> > > <Your Version> > *Administration* > *SAP Assortment Planning Administration Guide* >.

Process

Do the following:

1. Check that all of the required BSP applications are listed in the UIRAP001 package.
 1. Log on to your front-end system (your SAP Gateway system).
 2. Launch the *Object Navigator* (transaction SE80).
 3. In the *Repository Browser*, open package UIRAP001.
 4. Expand all of the embedded packages of embedded package CONTENT_RAP_TRANS.

- Verify that the following *BSP Applications* are listed:

Package	
UICAR001	
Object Name	Description
UICAR001	Structure package for Customer Activity Repository
Subpackages	
UIAMR001	Structure package for Allocation Management Retail
UIOAA001	Omnichannel Article Availability
UIPMR001	Structure package for Promotion Management Retail
UIRAP001	Structure package for UIRAP
Subpackages	
CONTENT_RAP_COMMON	Main package for common obejcts for RAP
CONTENT_RAP_TRANS	Main package for transactional for RAP
Subpackages	
RETAIL_DDF	Package for DDF
BSP Library	
BSP Applications	
ATTRIBMGMT_V2	Manage Product Attriubtes: Fiori ID F0829A
DDFREUSE_V2	Fiori Reuse Components for DDF: Fiori ID F0854A
LOCCLSTS_V2	Location Clustering: Fiori ID F0550A
MODULEMGMT_V2	Module Management: Fiori ID F1682A
PLNCONFIG	Planning configuration
RETAIL_RAP_AP	Package for RAP AP
BSP Library	
BSP Applications	
ASSORTLIST	Assortment List: Fiori ID F1567B
OPTIONPLAN_V2	Option Plan: Fiori ID F0830A
PHPMATCH_V2	PHP Matching: Fiori ID F0831A
UISCAR01	Strucutre Package for Customer activity repository


BSP Applications

- If you do not see one or more of the BSP applications listed above, right-click on each of the RETAIL_DDF and RETAIL_RAP_AP packages, and select **Other Functions** > **Rebuild Object List**.

⚠ Caution

Do not rebuild objects on a higher package level.

- Clean the cache.
 - Log on to your front-end system (your SAP Gateway system).
 - In Customizing (transaction SPRO), navigate to **SAP NetWeaver** > **UI Technologies** > **SAP Fiori** > **Data Administration** > **Invalidate Caches**.
This activity launches the /UI2/INVALIDATE_GLOBAL_CACHES report. This report invalidates all server-side caches in SAP NetWeaver user interface services, which can become out-of-date following an upgrade.
 - If necessary, implement instructions listed in SAP Note [2147669](#).
- Remove any previously customized versions of the UIRAP001 launchpad.
 - Log on to your front-end system (your SAP Gateway system).
 - Launch the **Overview for Launchpads** (transaction LPD_CUST).

3. Search for [Role](#) `UIRAP001`, and see whether any instances exist where the [User Name](#) is not [SAP](#). If so, this means that customized versions of the `UIRAP001` launchpad exist, and these take precedence over the standard launchpad instance delivered by SAP.
4. Delete all but the launchpad instance delivered by SAP.
4. Recalculate SAPUI5 application index, following any changes to the content of the SAPUI5 ABAP repository (for example, installation of a new version of the SAPUI5 distribution layer or implementation of an SAP Note containing changes to an SAPUI5 app).
For more information, see the *Configure Index Calculation* section in the *Common Installation Guide* and SAP Note [2227577](#) .

6.4 SAP Promotion Management

SAP Promotion Management 4.0 FP00 to SAP Promotion Management 4.0 FP01


There are no post-installation upgrades required for this release.

SAP Promotion Management 8.2 FP3 to SAP Promotion Management 4.0


There are no post-installation updates required for this release.

SAP Promotion Management 8.2 FP1 to SAP Promotion Management 8.2 FP3

Prerequisites


- Ensure that you have carried out all the steps listed in the previous sections of this guide.
- Please follow the instructions for `RTLAPPS` in SAP Note [2592695](#) .

Follow-Up Activities


1. Perform all the mandatory core steps for SAP Customer Activity Repository under [Core \(Mandatory for All Applications\)](#) [page 64].
2. Activate the following OData services:
 - `/DMFOFFER_MANAGMENT_V2_SRV`
 - `/DMF/LOCATION_SUBGROUP_SRV`
3. Update to the latest version of the UI by installing [2606408](#) .

SAP Promotion Management 8.2 FP 2.0 to SAP Promotion Management 8.2 FP3

Prerequisites


- Ensure that you have carried out all the steps listed in the previous sections of this guide.
- Please follow the instructions for `RTLAPPS` in the following [259265](#) 

Follow-Up Activities


1. Perform all the mandatory core steps for SAP Customer Activity Repository under [Core \(Mandatory for All Applications\) \[page 64\]](#).
2. Activate the following OData services:
 - `/DMFOFFER_MANAGMENT_V2_SRV`
 - `/DMF/LOCATION_SUBGROUP_SRV`
3. Update to the latest versions of the UI by installing [2606408](#) 

SAP Promotion Management 8.2 SP4 to SAP Promotion Management 8.2 FP3

Prerequisites

- Ensure that you have carried out all the steps listed in the previous sections of this guide.
- Please follow the instructions for the `STLAPPS` in the following [2606408](#) 

Follow-Up Activities

1. Perform all the mandatory core steps for SAP Customer Activity Repository under [Core \(Mandatory for All Applications\) \[page 64\]](#).
2. Activate the following OData services:
 - `/DMFOFFER_MANAGMENT_V2_SRV`
 - `/DMF/LOCATION_SUBGROUP_SRV`
3. Update to the latest version of the UI by installing [2606408](#) 

6.5 SAP Allocation Management

Post-upgrade setup for SAP Allocation Management

[1.5 \(CARAB 2.0 SPS0\) to 4.0 \[page 291\]](#)

Summary of follow-up activities to upgrade your SAP Allocation Management installation from release 1.5 to release 4.0.

[2.0 FP1 to 4.0 \[page 293\]](#)

Summary of follow-up activities to upgrade your SAP Allocation Management installation from release 2.0 FP1 to release 4.0.

[2.0 FP2 and FP3 to 4.0 \[page 294\]](#)

Summary of follow-up activities to upgrade your SAP Allocation Management installation from release 2.0 FP2 and 2.0 FP3 to release 4.0.

[Activate SAP Allocation Management SAP HANA Content \[page 295\]](#)

Once all previous steps are successfully completed, you can activate SAP Allocation Management SAP HANA content.

[Check Procedure Associated with Function GENIOS_SOLVE is Active \[page 299\]](#)

For SAP Allocation Management, confirm that the procedure associated with function GENIOS_SOLVE is active in the _SYS_AFL catalog.

[Troubleshooting for SAP Allocation Management \[page 299\]](#)

During the upgrade, several issues might arise in the context of CDS activation, SAP HANA content activation, external view activation, and usage, static ABAP generation, and so on. Then you can perform the troubleshooting activities. Please also refer to the notes listed in section **SAP Notes for the Upgrade**.

6.5.1 1.5 (CARAB 2.0 SPS0) to 4.0

Summary of follow-up activities to upgrade your SAP Allocation Management installation from release 1.5 to release 4.0.

i Note

SAP Allocation Management release 1.5 was included in the SAP Customer Activity Repository applications bundle 2.0 SPS0 release.

The following steps are required to upgrade your SAP Allocation Management system:

- Perform all mandatory core steps for SAP Customer Activity Repository
- Run SAP Allocation Management reports
- Prepare follow-on system

Perform Mandatory Core Steps for SAP Customer Activity Repository

First do the mandatory core steps for SAP Customer Activity Repository. The **core** steps are also mandatory for SAP Allocation Management.

i Note

To upgrade SAP Allocation Management from release 1.5 to 4.0, consider the following **major changes**:

- No matter which source master data system you are using (ECC or S4H), you must run the SLT table creation programs that create dummy tables in the schema you are not using. Tables for both schemas, ECC and S4H, need to be available **before you can activate the SAP HANA content**.
- The transport handling of HANA content has been migrated from HTC (HANA Transport Container) to HTA (HANA Transport for ABAP). Report /AMR/ACTIVATE_HANA_CONTENT has been deprecated. Instead, you must use report /CAR/ACTIVATE_HTA [Activate SAP HANA Content for SAP CARAB](#).

Perform all steps listed under [Core \(Mandatory for All Applications\) \[page 64\]](#).

Verify that all SAP Allocation Management OData services are active following the upgrade. Especially check the following new OData services:

- /AMR/OD_PRODUCT_FLOW_SRV Product Flow OData Service
- /AMR/OD_KPI_CONFIG_SRV KPI Configuration
- /AMR/OD_ALLOCATIONRESULT_SRV Fiori App Allocation Results
- /AMR/OD_BASKET_SRV Allocation Basket
- /AMR/OD_ALLOCATIONPLAN_SEARCH_SRV Fiori App Allocation Plan Search

Run Migration and Update Reports

- Run report /AMR/MIGRATE_MARKET_UNITS_V20 to default the source type for given market units.


Caution


This report must be run **before any new market unit** is created in SAP Allocation Management 2.0 and has to be executed exactly once in the system.

No market unit should be accessed in parallel while running this report.

- For the integration to SAP Assortment Planning, run the following two reports. The structure of the location cluster sets has changed from release to release. Check the report long texts for further instructions.
 1. To update location cluster set data created in SAP Assortment Planning 2.0 SPS1 to a format consumable by SAP Assortment Planning 2.0 FP1, run report [Update Location Clusters for SAP Assortment Planning for Retail 2.0 FP01](#) /DMF/CLSTS_UPDATE_2_0_FP1.
 2. To update location cluster set data created in SAP Assortment Planning 2.0 FP1 to a format consumable by SAP Assortment Planning 2.0 FP2, run report [Update Location Clusters for SAP Assortment Planning for Retail 2.0 FP2](#) /DMF/CLSTS_UPDATE_2_0_FP02.

Prepare Follow-On System

In the follow-on system, use the **new and enhanced** RFC function module for the creation of allocation tables in an **ECC** system. Follow the instructions in SAP Note [2416853](#)  *RFC function module to create allocation table for SAP Allocation Management*.

You can also transfer data to an **SAP S/4HANA** follow-on system. Follow the instructions in SAP Note [2524857](#)  *RFC function module to create allocation table for SAP Allocation Management in S4H system*.

Related Information

[Core \(Mandatory for All Applications\) \[page 64\]](#)

[Advanced \(Optional\) \[page 82\]](#)

6.5.2 2.0 FP1 to 4.0

Summary of follow-up activities to upgrade your SAP Allocation Management installation from release 2.0 FP1 to release 4.0.

The following steps are required to upgrade your SAP Allocation Management system:

- Perform all mandatory core steps for SAP Customer Activity Repository
- Prepare follow-on system

Perform Mandatory Core Steps for SAP Customer Activity Repository

First do the mandatory core steps for SAP Customer Activity Repository. The **core** steps are also mandatory for SAP Allocation Management.

i Note

For upgrade of SAP Allocation Management from version 2.0 FP1 to 4.0, please consider the following **major change**:

No matter which source master data system you are using (ECC or S4H), you must run the SLT table creation programs that create dummy tables in the schema you are not using. Tables for both schemas, ECC and S4H, need to be available **before you can activate the SAP HANA content**.

Perform all steps listed under [Core \(Mandatory for All Applications\) \[page 64\]](#).


Verify that all SAP Allocation Management OData services are active following the upgrade. Especially check the following new OData services:


- /AMR/OD_PRODUCT_FLOW_SRV Product Flow OData Service
- /AMR/OD_KPI_CONFIG_SRV KPI Configuration
- /AMR/OD_ALLOCATIONRESULT_SRV Fiori App Allocation Results
- /AMR/OD_BASKET_SRV Allocation Basket
- /AMR/OD_ALLOCATIONPLAN_SEARCH_SRV Fiori App Allocation Plan Search

Run Update Report for Integration to SAP Assortment Planning

The structure of the location cluster sets has changed from the previous release. To update location cluster set data created in SAP Assortment Planning 2.0 FP1 to a format consumable by SAP Assortment Planning 2.0 FP2, run report [Update Location Clusters for SAP Assortment Planning for Retail 2.0 FP2](#) /DMF/CLSTS_UPDATE_2_0_FP02.

Prepare Follow-On System

In the follow-on system, use the **new and enhanced** RFC function module for the creation of allocation tables in an **ECC** system. Follow the instructions in SAP Note [2416853](#)  *RFC function module to create allocation table for SAP Allocation Management*.

You can also transfer data to an **SAP S/4HANA** follow-on system. Follow the instructions in SAP Note [2524857](#)  *RFC function module to create allocation table for SAP Allocation Management in S4H system*.

Related Information

[Core \(Mandatory for All Applications\) \[page 64\]](#)

[Advanced \(Optional\) \[page 82\]](#)

6.5.3 2.0 FP2 and FP3 to 4.0

Summary of follow-up activities to upgrade your SAP Allocation Management installation from release 2.0 FP2 and 2.0 FP3 to release 4.0.

The following steps are required to upgrade your SAP Allocation Management system:

- Refer to the information and procedure description for SAP HANA content activation for SAP Allocation Management in section [Activate SAP Allocation Management SAP HANA Content \[page 295\]](#).

Note

No matter which source master data system you are using (ECC or S4H), you must run the SLT table creation programs that create dummy tables in the schema you are not using. Tables for both schemas, ECC and S4H, need to be available **before** you can activate the SAP HANA content.

- Perform all mandatory core steps for SAP Customer Activity Repository
- Prepare the follow-on system.

Perform Mandatory Core Steps for SAP Customer Activity Repository


First do the mandatory core steps for SAP Customer Activity Repository. The **core** steps are also mandatory for SAP Allocation Management.


Perform all steps listed under [Core \(Mandatory for All Applications\) \[page 64\]](#).

Verify that all SAP Allocation Management OData services and Core Data Services (CDS) views are active following the upgrade:

- For a list of required OData services, refer to the SAP Allocation Management *Administration Guide*.
- For CDS views, see [Troubleshooting: Missing Views in Database \[page 298\]](#).

Prepare Follow-On System

In the follow-on system, use the **new and enhanced** RFC function module for the creation of allocation tables in an **ECC** system. Follow the instructions in SAP Note [2416853](#)  *RFC function module to create allocation table for SAP Allocation Management*.

You can also transfer data to an **SAP S/4HANA** follow-on system. Follow the instructions in SAP Note [2524857](#)  *RFC function module to create allocation table for SAP Allocation Management in S4H system*.

Related Information

[Core \(Mandatory for All Applications\) \[page 64\]](#)

[Advanced \(Optional\) \[page 82\]](#)

6.5.4 Activate SAP Allocation Management SAP HANA Content

Once all previous steps are successfully completed, you can activate SAP Allocation Management SAP HANA content.

Prerequisites

Before you can start to activate the SAP Allocation Management SAP HANA content, perform these activities:

- Ensure that you have at least one of the `SAP_ECC` or `SAP_S4H` schemas in the SAP HANA database. Based on your source system for all SAP ERP data, you have either a `SAP_ECC` schema or a `SAP_S4H` schema (either physical schemas with these names, or at least authoring schemas). If you have both these systems, you must have two schemas.
- Ensure that all tables listed for SLT replication are available in the relevant schemas. The spreadsheet with tables that are relevant for replication and for SAP HANA content activation is available on the SAP Help Portal at <https://help.sap.com/viewer/p/CARAB>. Select the desired version at the top right and download the *SLT Tables for SAP Customer Activity Repository applications bundle* archive from under [Installation and Upgrade](#) and extract the spreadsheet.
Ensure that you have successfully set up the SLT tables in the schemas.

SAP HANA Content Activation Steps

1. Deploy SAP Allocation Management delivered procedures, functions, and views.
SAP Allocation Management delivers several native HANA objects as a part of the application. These objects are delivered via HANA transport for ABAP (HTA) and must be explicitly deployed into the SAP

HANA database. Without this deployment, you do not see these objects in the SAP HANA database. Once deployed, you can find the content via the path `sap.is.retail.rap.amr.db`.

2. Activate SAP Customer Activity Repository and Demand Data Foundation (DDF) SAP HANA content.

i Note

If the SAP Customer Activity Repository and DDF SAP HANA content is already active, you can skip this step.

SAP Allocation Management depends on active SAP HANA content for SAP Customer Activity Repository and DDF. Therefore, it is recommended that you first activate the SAP Customer Activity Repository and DDF SAP HANA content.

Run the program *Activate SAP HANA Content for SAP CARAB* (`/CAR/ACTIVATE_HTA`) and select the *ECC Mode* relevant to your installation. Under *Business Scenario Activation*, select the *Customer Activity Repository* and *Demand Data Foundation* options.

Execute the activation report. As a result, you have successfully activated and deployed the SAP HANA content for SAP Customer Activity Repository and DDF.

⚠ Caution

Do not select *Allocation Management* within this activation run for a simultaneous activation of SAP Allocation Management SAP HANA content as simultaneous activation leads to activation problems.

3. Set *Pework Done* for SAP Allocation Management packages.

A precondition for SAP HANA Transport for ABAP (HTA) activation is that the `PREWORK_DONE` indicator is set for all packages with activation mode `P - prework needed`. You can check this setting in the table `CTS_HOT_PACKAGE` in field `HOT_ACTIVATION_MODE`. Set the `PREWORK_DONE` indicator for all packages relevant for SAP Allocation Management:

1. Call transaction `SE16` (*Data Browser*) and display the content of table `CTS_HOT_PACKAGE`.
Search for package names `sap.is.retail.rap.amr*` in the field `HANA_PACKAGE_ID`. Please note, that the package names are case-sensitive.
You should find 163 entries that match the search criterion. Copy the package names from the result list of your search.
2. Display the selection screen of table `CTS_HOT_PREWORK`. Enter the `HANA_PACKAGE_ID` for all packages from the result list of your search in table `CTS_HOT_PACKAGE`.
3. Set the `PREWORK_DONE` indicator to **X** for all packages in the `CTS_HOT_PREWORK` table. The indicator shows that the SAP HANA content in all packages relevant for SAP Allocation Management is ready for deployment.

4. Run the dummy schema and dummy table creation reports.

The reports check for a missing physical schema and create this physical schema and the corresponding dummy tables in the schema if necessary. The successful completion of this step is a prerequisite for a successful SAP HANA content activation for SAP Allocation Management.

i Note

The running of the report requires a database user in the ABAP system with the authorization to create the dummy schema. Check the application log for the report if there were errors.

In your back-end system, start transaction `SE38` and execute the following two reports, in the **sequence** they are listed:

- `/DMF/CREATE_SLT_TABLES` (*Create SLT Tables*)

1. Select your source system. For [S/4HANA](#), enter the release.
2. Enter the physical source and dummy schema names. For the [Physical Source Schema](#), enter the physical schema name into which your SLT tables are replicating. For the [Physical Dummy Schema](#), enter the name for the schema to be created. If the physical source schema already exists in the SAP HANA database, then only the dummy tables in this schema are created when you execute the report.
3. Select the simulation mode for a test run. After the simulation run, you can check for errors in the application log.

- [/AMR/CREATE_DYNAMIC_SLT_TABLES](#) ([Create SLT Tables Dynamically](#))

1. Select your source system. For [S/4HANA](#), enter the release.
2. Enter the physical source and dummy schema names. For the [Physical Source Schema](#), enter the physical schema name into which your SLT tables are replicating. For the [Physical Dummy Schema](#), enter the name for the schema to be created. If the physical source schema already exists in the SAP HANA database, then only the dummy tables in this schema are created when you execute the report.
3. Select the simulation mode for a test run. After the simulation run, you can check for errors in the application log.

5. Grant Authorization

The two SLT table creation reports use the database user maintained in the ABAP system to create the dummy schemas. The `_SYS_REPO` user needs the exact same authorizations on the newly created dummy schema that this user already has on the physical source schema. In addition, to display the schema in the navigator, a `SELECT` authorization on the schema (with `GRANT` option) must be provided to the database user for the content activation.

i Note

This step must be performed by the SAP HANA database administrator, who has the authorization for these activities.

6. Check and maintain schema mapping.

Check the names you use for your physical schema. If you are using the default names below, no further action is required:

- `SAP_S4H`, for your S/4HANA schema
- `SAP_ECC`, for your ECC or FMS schema

If you have chosen names for your physical schema, which are **different from the names above**, you must do the following:

Maintain a schema mapping in your SAP HANA database, where your customer-specific names are used as authoring schemas for the physical schema.

7. Activate relevant inactive SAP HANA content for DDF.

Based on your scenario, there can be inactive packages in DDF, even though you have activated the content earlier via the report [/CAR/ACTIVATE_HTA](#) ([Activate SAP HANA Content for SAP CARAB](#)).

For the following packages in DDF, perform these actions:

- In the table `CTS_HOT_PREWORK`, set the `PREWORK_DONE` indicator to **X** for these packages.
- Call up transaction `SCTS_HTA_DEPLOY` ([SAP HANA Transport for ABAP - Deployment](#)) to check and to deploy (if not already deployed) these packages, in **strictly the sequence** they are listed. Do **not** select the option to [Include subpackages](#):
- `sap.is.ddf.ecc`
- `sap.is.ddf.fms`
- `sap.is.ddf.fms_s4h`
- `sap.is.ddf.cross.ecc`

- `sap.is.ddf.cross.fms`
- `sap.is.ddf.cross.fms_s4h`
- `sap.is.ddf.cross`

i Note

The package names are case-sensitive.

8. Once you have successfully deployed all content as described in the previous steps, call up transaction [SAP HANA Transport for ABAP - Deployment](#) (SCTS_HTA_DEPLOY). To deploy the SAP Allocation Management packages, enter package name **sap.is.retail.rap.amr*** and choose [Execute](#).

i Note

With this step, the SAP Allocation Management SAP HANA content is finally deployed. It is the last and most critical activation step.

Checking for Missing Views

If content activation errors occur, check for missing views in the database. For more information, see [Troubleshooting: Missing Views in Database \[page 298\]](#).

Related Information

[Create/Replicate Source Master Data System Tables](#)

[Activate SAP HANA Content \[page 72\]](#)

[Create/Replicate Source Master Data System Tables \[page 71\]](#)

6.5.4.1 Troubleshooting: Missing Views in Database

After the SAP HANA content activation, you can check for missing views in transaction DB02.

Check if SAP Allocation Management views are highlighted as objects missing in the database. There could be some missing objects, despite having received success messages from the previous step of activating SAP Allocation Management SAP HANA content.

1. Call up transaction [Diagnostics: Missing Tables and Indexes](#) (DB02)
2. Select **► Diagnostics ► Tables/Views ►** and enter the technical name.
3. Check if any SAP Allocation Management views are displayed as missing in the database.
4. If there are views missing in the database, raise a support ticket.

6.5.5 Check Procedure Associated with Function GENIOS_SOLVE is Active

For SAP Allocation Management, confirm that the procedure associated with function GENIOS_SOLVE is active in the _SYS_AFL catalog.

Prerequisites

You have configured the AFL usage and confirmed that the OFL algorithm was installed successfully as described in section [Check the OFL Installation \[page 42\]](#).

Context

Procedure

1. Go to SAP HANA Systems view in the SAP HANA Development Perspective.
2. In your system, filter for catalog _SYS_AFL.
3. In the _SYS_AFL catalog, filter on procedures to search for OFL_AREA_GENIOS_SOLVE_PROC
4. Confirm this procedure OFL_AREA_GENIOS_SOLVE_PROC is available.

6.5.6 Troubleshooting for SAP Allocation Management

During the upgrade, several issues might arise in the context of CDS activation, SAP HANA content activation, external view activation, and usage, static ABAP generation, and so on. Then you can perform the troubleshooting activities. Please also refer to the notes listed in section **SAP Notes for the Upgrade**.

After the SAP HANA content activation, some Core Data Services (CDS) views may not be active. In this case, you can run program RADMSG0 in transaction **SE38** for the collective activation of CDS views and external views. Select *Direct Objects* and enter */AMR/V** in the *View Name* selection field. Then execute the report.

Related Information

[Implement SAP Notes for the Upgrade \[page 24\]](#)

6.6 Configure Access to Documentation Provided on SAP Help Portal (Optional for All Applications)

In transaction SR13, you can configure your back-end system to point to documentation for your application that is provided on SAP Help Portal for SAP Customer Activity Repository applications bundle.

Context

You can configure your back-end system to access documentation provided on SAP Help Portal for SAP Customer Activity Repository applications bundle at <https://help.sap.com/viewer/p/CARAB>. For example, if your application is SAP Customer Activity Repository, you can configure access to the application help for SAP Customer Activity Repository.

Prerequisites

- The documentation you want to access must be available on SAP Help Portal.
- The users who access the documentation must have access to the Internet.
- You can configure an ABAP system to connect to only one combination of product and version. These are the values that you will specify as *Path* in the procedure below.

i Note

The product CARAB is valid for all the applications delivered with SAP Customer Activity Repository applications bundle.

The version depends on the release. For example, version 4.0.1 is valid for all the application versions delivered with SAP Customer Activity Repository applications bundle 4.0 FPS01.

If you cannot fulfill one or more of these prerequisites, you must install the documentation in your local system landscape using the download packages or DVDs/CDs provided.

i Note

For more information about installing the documentation in your local system landscape, see the [SAP Library Installation and Update Guide for SAP NetWeaver-Based Systems](#).

Procedure

1. Open transaction SR13.
2. Select the tab *PlainHTMLHttp*.
3. Choose *New Entries*.

⚠ Caution

You have to create entries for both documentation and XML documentation areas for each platform you are using and each language in which you want to provide documentation.

You must use the exact combination of uppercase and lowercase characters specified in the product and version.

4. To create entries for the documentation area, enter the following values:

Name	Value to be entered
Variant	Enter a name for the variant.
Platform	Select the platform relevant for your implementation from the list of available platforms, for example, WN32.
Area	Select Documentation from the list; this will display as IWBHELP in the table.
Server Names	https://help.sap.com/http.svc/ahp2
Path (<Product/Version>)	CARAB/4.0.1
Language	Select the language you need from the list.

5. To create entries for the XML documentation area, enter the following values:


Name	Value to be entered
Variant	Enter a name for the variant (any name).
Platform	Select the platform relevant for your implementation from the list of available platforms, for example, WN32.
Area	Select XML Documentation from the list; this will display as XML_DOCU in the table.
Server Names	https://help.sap.com/http.svc/ahp2
Path (<Product/Version>)	CARAB/4.0.1
Language	Select the language you need from the list.

6. Repeat steps 4 and 5 for each relevant platform and language.
7. Select one entry as the default language for each platform and area.
8. Save your entries.


Results

You have configured your back-end system to point to documentation that is provided on SAP Help Portal.

Related Information

[SAP Note 2149786 Customizing help settings in transaction SR13](#) 

[SAP Note 2652009 Connecting the help to the SAP Help Portal](#) 



[SAP Note 2572047 SAP provides user assistance \(documentation\) as HTML, PDF, or directly via SAP Help Portal](#) 

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