

# **SAP Customer Activity Repository 2.0**

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# Typographic Conventions

Table 1

| Example                                      | Description  |
|--|--|
| <Example>                                    | Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, "Enter your <User Name>".  |
| ► Example ► Example ▢                        | Arrows separating the parts of a navigation path, for example, menu options  |
| <b>Example</b>                               | Emphasized words or expressions  |
| <b>Example</b>                               | Words or characters that you enter in the system exactly as they appear in the documentation   |
| <a href="http://www.sap.com">www.sap.com</a> | Textual cross-references to an internet address  |
| <a href="#">/example</a>                     | Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web   |
| <a href="#">123456</a>                       | Hyperlink to an SAP Note, for example, SAP Note <a href="#">123456</a>   |
| <i>Example</i>                               | <ul style="list-style-type: none"> <li>Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options.</li> <li>Cross-references to other documentation or published works</li> </ul>  |
| Example                                      | <ul style="list-style-type: none"> <li>Output on the screen following a user action, for example, messages</li> <li>Source code or syntax quoted directly from a program</li> <li>File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools</li> </ul> |
| EXAMPLE                                      | Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE   |
| <span>EXAMPLE</span>                         | Keys on the keyboard   |

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# 1 Introduction

This guide provides technical information about upgrading SAP Customer Activity Repository 1.0 to SAP Customer Activity Repository 2.0.

SAP Customer Activity Repository 2.0 is an add-on of SAP NetWeaver 7.40.

## 1.1 About this Document

This guide can be used by consultants and system administrators who intend to upgrade from SAP Customer Activity Repository 1.0 to SAP Customer Activity Repository 2.0. This guide does not describe the installation of SAP HANA and SAP NetWeaver and does not provide information about the usage of upgrade or installation tools.

## 1.2 Before You Start

The following sections provide information about:

- Naming Conventions
- Information on the SAP Service Marketplace
- SAP Notes for the Upgrade

### 1.2.1 Naming Conventions

Throughout this document the following naming conventions apply.

#### Terminology

SAP Customer Activity Repository is also referred to as the *repository* throughout this guide.

Due to the inconsistency of the names of their underlying technical objects, the names of the following business objects are used interchangeably in this guide:

- Store: In most instances referred to as *store*, can also sometimes be referred to as *plant* or *location*.
- Article: In most instances referred to as *article*, can also sometimes be referred to as *material* or *product*.

#### Variables

Table 2

| Variables | Description                        |
|-----------|------------------------------------|
| <SAPSID>  | SAP system ID in uppercase letters |

| Variables | Description                               |
|-----------|---|
| <sapsid>  | SAP system ID in lowercase 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       |

## 1.2.2 Information Available on SAP Service Marketplace

More information is available as follows on SAP Service Marketplace.

Table 3: Documentation

| Description   | Internet Address  | Title   |
|---|---|---|
| Information on SAP Customer Activity Repository.  | ► <a href="http://help.sap.com/car">help.sap.com/car</a> ► <i>SAP Customer Activity Repository</i> ►  | <i>SAP Customer Activity Repository 2.0</i>   |
| Information on SAP Assortment Planning for Retail.  | ► <a href="http://help.sap.com/rap">help.sap.com/rap</a> ► <i>SAP Assortment Planning for Retail</i> ►  | <i>SAP Assortment Planning for Retail 1.0</i>   |
| Information on SAP Promotion Management for Retail.   | ► <a href="http://help.sap.com/retail-pm">help.sap.com/retail-pm</a> ► <i>SAP Promotion Management for Retail</i> ►   | <i>SAP Promotion Management for Retail 8.1</i>  |
| Information on the Demand Data Foundation and Unified Demand Forecast components in SAP Customer Activity Repository. | ► <a href="http://help.sap.com/car">help.sap.com/car</a> ► <i>SAP Customer Activity Repository</i> ► <i>Integration Information</i> ►   | <i>Administrator's Guide, Demand Data Foundation (DDF) 2.0 with Unified Demand Forecast (UDF) on SAP HANA Integration Guide, Demand Data Foundation (DDF) to SAP ERP Outbound Integration</i> |
| Information on installing SAP HANA.   | ► <a href="http://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>Installation and Upgrade Information</i> ► <i>SAP HANA Server Installation Guide (with or without SAP HANA unified installer, based on your SAP HANA SPS)</i> ► | <i>SAP HANA Server Installation Guide or SAP HANA Server Installation Guide (Unified Installer)</i>   |
| Information on installing SAP HANA database clients.  | ► <a href="http://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>Installation and Upgrade Information</i> ► <i>SAP HANA Client Installation Guide</i> ►  | <i>SAP HANA Database - Client Installation and Update Guide</i>   |
| Information on installing SAP HANA Studio.  | ► <a href="http://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>Installation and Upgrade Information</i> ► <i>SAP HANA Studio Installation Guide</i> ►  | <i>SAP HANA Database - Studio Installation and Update Guide</i>   |

| Description  | Internet Address   | Title  |
|--|--|--|
| Information on implementing SAP HANA Live for SAP Business Suite.  | ► <a href="https://help.sap.com/hba">help.sap.com/hba</a> ► <i>Installation, Security, Configuration, and Operations Information</i> ► <i>Administrator's Guide</i> ►  | <i>Administrator's Guide, SAP HANA Live for SAP Business Suite</i>   |
| Information on installing the SAP LT (Landscape Transformation) Replication Server for SAP HANA.   | ► <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guide – Trigger-Based Data Replication Using SAP LT Replication Server for SAP HANA</i> ►  | <i>Installation Guide, Trigger-Based Data Replication Using SAP Landscape Transformation Replication Server</i>  |
| Information on managing major operational aspects of the SAP LT Replication Server.  | ► <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>System Administration and Maintenance Information</i> ► <i>Application Operations Guide – Trigger-Based Data Replication Using SAP LT Replication Server for SAP HANA</i> ►   | <i>Application Operations Guide, SAP Landscape Transformation Replication Server</i>   |
| Information on using SAP HANA.   | ► <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>System Administration and Maintenance Information</i> ► <i>SAP HANA Administration Guides</i> ►   | <i>SAP HANA Administration Guide</i>   |
| Information for developers on how to use the SAP HANA development tools to create comprehensive analytical models and to build applications with SAP HANA's interfaces and integrated development. | ► <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>Development Information</i> ► <i>SAP HANA Developer Guide</i> ►   | <i>SAP HANA Developer Guide</i>  |
| Information for modelers (or business analysts) on how to define data models that will be used in SAP HANA.  | ► <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>Modeling Information</i> ► <i>SAP HANA Modeling Guide</i> ►   | <i>SAP HANA Modeling Guide</i>   |
| Information on installing SAP Solution Manager.  | ► <a href="https://help.sap.com/solutionmanager71">help.sap.com/solutionmanager71</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guide</i> ►<br>► <a href="https://help.sap.com/nw74">help.sap.com/nw74</a> ► <i>Installation and Upgrade Information</i> ► <i>Master Guide</i> ► | <i>Master Guide, SAP NetWeaver 7.4</i>   |
| Information on installing SAP NetWeaver 7.40.  | ► <a href="https://help.sap.com/nw74">help.sap.com/nw74</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guides</i> ► <i>SAP HANA Database</i> ►  | <i>Installation Guide, SAP Systems Based on the Application Server &lt;Your Server&gt; of SAP NetWeaver on &lt;Your Operating System&gt;: SAP HANA Database</i>          |
| Information on installing SAP ERP 6.0 Enhancement Package 5.   | ► <a href="https://help.sap.com/erp605">help.sap.com/erp605</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guide</i> ►  | <i>Installation Guide, SAP ERP 6.0 Including SAP Enhancement Package 5 - Technical Usage "Central Applications" &lt;Your Server&gt; on &lt;Your Operating System&gt;</i> |

| Description   | Internet Address  | Title  |
|---|---|--|
| Information on 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. | <a href="http://help.sap.com/crm702">help.sap.com/crm702</a> > <i>Installation and Upgrade Information</i> > <i>Installation Guide</i> > <i>Install</i> > <i>Installation Guides for SAP EHP 2 for SAP CRM 7.0</i> > <i>Installation Guide - SAP enhancement package 2 for CRM 7.0 - ABAP and Java</i><br><a href="http://help.sap.com/crmhana">help.sap.com/crmhana</a> > <i>Installation and Upgrade Information</i> > <i>Administrator's Guide</i> > <i>Administrator's Guide SAP CRM 7.0 EHP2, Version for SAP HANA</i> | <i>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</i> |

Table 4: General Quick Links

| Description                              | Internet Address   |
|--|--|
| SAP Help Portal                          | <a href="http://help.sap.com">help.sap.com</a>                                       |
| SAP Notes                                | <a href="http://service.sap.com/notes">service.sap.com/notes</a>                     |
| Released platforms and operating systems | <a href="http://service.sap.com/platforms">service.sap.com/platforms</a>             |
| System sizing                            | <a href="http://service.sap.com/sizing">service.sap.com/sizing</a>                   |
| Security                                 | <a href="http://service.sap.com/security">service.sap.com/security</a>               |
| SAP Solution Manager                     | <a href="http://service.sap.com/solutionmanager">service.sap.com/solutionmanager</a> |

### 1.2.3 SAP Notes for the Upgrade

The following list includes SAP Notes that you must read (and, when appropriate, implement) before you start the upgrade.

Make sure that you have the up-to-date version of each SAP Note, which you can find on SAP Service Marketplace at [service.sap.com/notes](http://service.sap.com/notes).

Table 5: SAP Notes for SAP Customer Activity Repository

| SAP Note Number         | Title  | Description   |
|-------------------------|--|---|
| <a href="#">1605140</a> | SAP HANA 1.0: Central Note - SAP LT Replication Server | Collective note for all the relevant SAP Notes for LT Replication Server for SAP HANA.  |
| <a href="#">1778607</a> | SAP HANA Live for SAP Business Suite                   | What to consider when implementing SAP HANA Live for SAP Business Suite.                |
| <a href="#">1791342</a> | Time Zone Support in SAP HANA                          | How to handle time zone functions <code>UTCTOLOCAL</code> and <code>LOCALTOUTC</code> . |

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## 2 Quick Guide

This section includes a checklist with all actions you have to perform. The actions are in chronological order, so that you can work through them like a checklist.

### Checklist

#### Prerequisites

##### Mandatory Steps

- ☐ • Update the SAP HANA database of your system to SPS 08 or higher.
- ☐ • Update SAP NetWeaver to version 7.4 SP08 or higher.

##### Optional Steps

- ☐ • Update SAP HANA Live for SAP ERP to SP 02 or higher.
- ☐ • Install the AFL for UDF.
- ☐ • Install the AFL for OSA.
- ☐ • Install SAP Jam, enterprise edition.

#### Upgrade Process

##### Mandatory Steps

- ☐ • Upgrade your product version in SAP Solution Manager.

##### Optional Steps

- ☐ • Install product-specific SAP Fiori UI components.

#### Follow-Up Activities

##### Mandatory Steps

- ☐ • Activate the SAP HANA content.
- ☐ • Replicate the new SAP ERP tables for SAP Customer Activity Repository.
- ☐ • Generate time data

##### Optional Steps

- ☐ • Configure SAP Smart Business for Multichannel Sales Analytics.
- ☐ • Configure SAP On-Shelf Availability.
- ☐ • Configure DDF
- ☐ • Complete setup of Unified Demand Forecast

## 3 Prerequisites

This section contains a list of all the prerequisite platforms, applications, and components that must be installed and configured prior to executing the installation instructions covered in this guide.


### Note


Installation of the following prerequisites should be performed by an experienced SAP Basis administrator. Documentation and support for each prerequisite is available on the SAP Help Portal and the SAP Service Marketplace.

The following table presents the prerequisites for each of the installation scenarios and provides links to the respective installation documentation:


Table 6

| Prerequisite  | Installation Information  | Mandatory/Optional for Scenario  |                                    |                                     |
|---|---|----------------------------------|------------------------------------|-------------------------------------|
|   |   | SAP Customer Activity Repository | SAP Assortment Planning for Retail | SAP Promotion Management for Retail |
| <b>SAP HANA Platform SPS 08 or higher</b><br><b>Revision 83 or higher</b><br>The PAL algorithms, used by SAP Assortment Planning for Retail, are implemented and shipped as an application function library (AFL) in the SAP HANA database.<br>You have to ensure that SAP HANA AFL 1.0 (software component version SAP HANA AFL 1.0) has been installed as part of your SAP HANA Platform. | <ul style="list-style-type: none"> <li>▶ <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ▶ <i>Installation and Upgrade Information</i> ▶ <i>SAP HANA Server Installation and Update Guide</i> ▶</li> <li>▶ <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ▶ <i>Reference Information</i> ▶ <i>SAP HANA Library References</i> ▶ <i>SAP HANA Predictive Analysis Library (PAL)</i> ▶</li> </ul> | Mandatory                        | Mandatory                          | Mandatory                           |

 **Caution**  
 If you were previously using SAP HANA Platform SP 07 or lower, and are upgrading to SAP HANA Platform SPS 08, you need to implement SAP Note [2022080](#).

| Prerequisite   | Installation Information   | Mandatory/Optional for Scenario  |                                    |                                     |
|--|--|----------------------------------|------------------------------------|-------------------------------------|
|  |  | SAP Customer Activity Repository | SAP Assortment Planning for Retail | SAP Promotion Management for Retail |
| <b>Demand Data Foundation (DDF) 2.0</b><br>A cross-industry reusable data layer supporting different consuming applications. DDF (software component version RTLDDF 200) is a component in SAP Customer Activity Repository and a prerequisite for using Unified Demand Forecast (UDF).  | <ul style="list-style-type: none"> <li>SAP Note <a href="#">2001688</a></li> <li>► <a href="#">service.sap.com/instguides</a> ► <i>Industry Solutions</i> ► <i>Industry Solution Guides</i> ► <i>SAP for Retail</i> ► <i>SAP Customer Activity Repository</i> ► <i>SAP Customer Activity Repository 2.0</i> ► <i>Administrator's Guide, Demand Data Foundation (DDF) 2.0</i> ►</li> </ul>  | Optional                         | Mandatory                          | Mandatory                           |
| <b>UDF AFL Revision 83 or higher</b><br>The Unified Demand Forecast application function library runs in the SAP HANA database and provides the demand modeling and demand forecasting services. The UDF AFL (software component version UDFAFL_INST 100) is a component in SAP Customer Activity Repository but is released independently by what is called "revisions". The UDF AFL requires Demand Data Foundation (DDF) 2.0 as a prerequisite. | <ul style="list-style-type: none"> <li>SAP Note <a href="#">2050229</a></li> <li>SAP Note <a href="#">2004952</a></li> </ul> <div>  <b>Caution</b><br/> There are dependencies between the UDF AFL, the SAP HANA database, and DDF. For more information, see the <i>Component Version Dependencies</i> section in the <i>Administrator's Guide, Demand Data Foundation (DDF) 2.0</i>. </div> | Optional                         | Optional                           | Recommended                         |
| <b>OSA AFL</b><br>The On-Shelf Availability (OSA) algorithms (software component version POSAFL_INST 100) are implemented and shipped as a separate application function library (AFL) for installation in the SAP HANA database.  | <ul style="list-style-type: none"> <li>SAP Note <a href="#">2004952</a></li> <li>SAP Note <a href="#">2016825</a></li> </ul>   | Optional                         | Optional                           | Optional                            |

| Prerequisite  | Installation Information  | Mandatory/Optional for Scenario   |                                     |                                     |
|---|---|---|-------------------------------------|-------------------------------------|
|   |   | SAP Customer Activity Repository  | SAP Assortment Planning for Retail  | SAP Promotion Management for Retail |
| <b>SAP Smart Business foundation component 1.0 SPS01</b>  | SAP Note <a href="#">2018360</a>  | Optional  | Not Applicable                      | Not Applicable                      |
| <b>SAP LT (Landscape Transformation) Replication Server for SAP HANA 2.0</b>  | ► <a href="https://help.sap.com/hana_platform">help.sap.com/hana_platform</a> ► <i>Installation and Upgrade Information</i> ► <i>SAP HANA Replication Installation Guides</i> ► <i>Installation Guide – Trigger-Based Data Replication Using SAP LT Replication Server for SAP HANA</i> ►   | Mandatory   | Mandatory                           | Not Applicable                      |
| <b>SAP Solution Manager</b><br>We recommend to always use the latest version of the SAP Solution Manager.   | <ul style="list-style-type: none"> <li>► <a href="https://help.sap.com/solutionmanager71">help.sap.com/solutionmanager71</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guide</i> ►</li> <li>► <a href="https://help.sap.com/nw74">help.sap.com/nw74</a> ► <i>Installation and Upgrade Information</i> ► <i>Master Guide</i> ►</li> </ul>  | Mandatory   | Mandatory                           | Mandatory                           |
| <b>SAP NetWeaver 7.40 SP 08</b><br>If you launch Web Dynpro applications from the back-end system, ensure that you have installed the SAP_UI 740 SP 10 component. If you have a lower version, ensure that you analyze and implement SAP Note <a href="#">2038829</a> . | ► <a href="https://help.sap.com/nw74">help.sap.com/nw74</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guides</i> ►  | Mandatory   | Mandatory                           | Mandatory                           |
| <b>SAP ERP 6.0</b><br>See adjacent columns for details regarding Enhancement Package version support.   | <ul style="list-style-type: none"> <li>► <a href="https://help.sap.com/erp605">help.sap.com/erp605</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guide</i> ►</li> <li>► <a href="https://help.sap.com/erp604">help.sap.com/erp604</a> ► <i>Installation and Upgrade Information</i> ► <i>Installation Guide</i> ►</li> <li>SAP Notes (applicable only for SAP ERP 6.0 EHP5 and higher): <ul style="list-style-type: none"> <li>◦ <a href="#">1983853</a></li> <li>◦ <a href="#">1994823</a></li> <li>◦ <a href="#">2004326</a></li> <li>◦ <a href="#">2032294</a></li> <li>◦ <a href="#">2069483</a></li> </ul> </li> </ul> | Enhancement Package 5 is mandatory when implementing SAP Customer Activity Repository with DDF with UDF. Otherwise, Enhancement Package 4 is mandatory at | Enhancement Package 5 is mandatory. | Enhancement Package 5 is mandatory. |

| Prerequisite  | Installation Information  | Mandatory/Optional for Scenario                  |                                    |                                     |
|---|---|--|------------------------------------|-------------------------------------|
|   |   | SAP Customer Activity Repository                 | SAP Assortment Planning for Retail | SAP Promotion Management for Retail |
|   | <ul style="list-style-type: none"> <li>◦ <a href="#">2068874</a></li> </ul>   | a bare minimum if not implementing DDF with UDF. |                                    |                                     |
| <b>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</b>   | <ul style="list-style-type: none"> <li>▶ <a href="http://help.sap.com/crm702">help.sap.com/crm702</a> ▶ <i>Installation and Upgrade Information</i> ▶ <i>Installation Guide</i> ▶</li> <li>▶ <a href="http://help.sap.com/crmhana">help.sap.com/crmhana</a> ▶ <i>Installation and Upgrade Information</i> ▶ <i>Administrator's Guide</i> ▶</li> </ul> | Optional   | Not Applicable                     | Not Applicable                      |
| <b>SAP HANA Live for SAP ERP SP 02 or higher</b> <div>  <b>Caution</b><br/> SAP Customer Activity Repository retail applications bundle does not require that you execute all of the installation steps exactly as they are described in the <i>Administrator's Guide</i>, <i>SAP HANA Live for SAP Business Suite</i>. You must read the <i>Install SAP HANA Live for SAP ERP</i> procedure in this guide prior to installing SAP HANA Live for SAP ERP. </div> | ▶ <a href="http://help.sap.com/hba">help.sap.com/hba</a> ▶ <i>Installation, Security, Configuration, and Operations Information</i> ▶ <i>Administrator's Guide</i> ▶  | Mandatory  | Mandatory                          | Not Applicable                      |
| <b>Client</b><br>To be able to run SAP Fiori apps, the runtime environment (such as the browser) of the client must support HTML5.  | Client-specific installation information  | Optional   | Mandatory                          | Not Applicable                      |

| Prerequisite  | Installation Information   | Mandatory/Optional for Scenario  |                                    |                                     |
|---|--|----------------------------------|------------------------------------|-------------------------------------|
|   |  | SAP Customer Activity Repository | SAP Assortment Planning for Retail | SAP Promotion Management for Retail |
| <b>SAP BusinessObjects Analysis, edition for Microsoft Office 1.4 SP 09 or higher</b><br><br>SAP Assortment Planning for Retail includes a number of SAP BusinessObjects Analysis workbooks. To be able to access assortment planning workbooks, you must ensure that SAP BusinessObjects Analysis, edition for Microsoft Office 1.4 SP 09 or higher is installed on your local system. | <a href="http://help.sap.com/boao">help.sap.com/boao</a> > <i>Installation, Security, Configuration, and Operations Information</i> > <i>Administrator's Guide</i> > | Not Applicable                   | Mandatory                          | Not Applicable                      |
| <b>SAP Jam, enterprise edition</b>  | <a href="http://help.sap.com/sapjam">help.sap.com/sapjam</a> > <i>System Administration and Maintenance Information</i> > <i>Administrator's Guide</i> >             | Optional                         | Optional                           | Not Applicable                      |

## 4 Upgrade Process

### 4.1 Install SAP Customer Activity Repository Retail Applications Bundle

We recommend using Maintenance Optimizer in SAP Solution Manager to install and update product versions. SAP Solution Manager calculates the required software components that have to be deployed on each server.

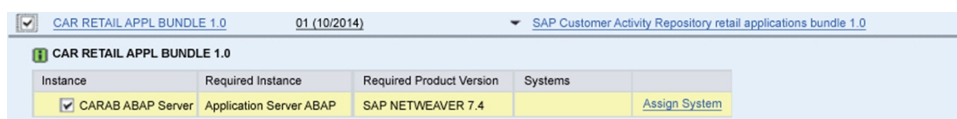
For more information about Maintenance Optimizer, see SAP Help Portal at ► [help.sap.com/solutionmanager71](https://help.sap.com/solutionmanager71) ► *Application Help* ► *SAP Library* ► *SAP Solution Manager* ► *Maintenance Management* ► *Maintenance Optimizer* ►.

Alternatively, you can download the required files directly from SAP Service Marketplace and deploy them manually.

In this procedure, you use Maintenance Optimizer to perform a stack XML installation of SAP Customer Activity Repository retail applications bundle 1.0.

#### Procedure

1. Log on to SAP Solution Manager and launch Maintenance Optimizer.  
For more information on using Maintenance Optimizer, see ► [service.sap.com/mopz](https://service.sap.com/mopz) ►.
2. In the Maintenance Optimizer work step that allows you to choose add-on products, select product version CAR RETAIL APPL BUNDLE 1.0 and product instance CARAB ABAP Server.



| <input checked="" type="checkbox"/>                   | CAR RETAIL APPL BUNDLE 1.0 | 01 (10/2014)             | ▼ SAP Customer Activity Repository retail applications bundle 1.0 |                               |
|---|----------------------------|--------------------------|---|-------------------------------|
| <b>CAR RETAIL APPL BUNDLE 1.0</b>                     |                            |                          |   |                               |
| Instance  | Required Instance          | Required Product Version | Systems   |                               |
| <input checked="" type="checkbox"/> CARAB ABAP Server | Application Server ABAP    | SAP NETWEAVER 7.4        |   | <a href="#">Assign System</a> |

Figure 1: Selection of Product Version and Product Instance

#### Caution

Do not deselect any ABAP components from the product instance.

3. Calculate and download the stack XML file.
4. Log on to your back-end server, that is, the ABAP system on which you are installing CAR Retail Appl Bundle - ABAP Instance.
5. Use the SAP Add-On Installation Tool (transaction SAINT) to load and install the stack XML generated using SAP Solution Manager Maintenance Optimizer.

For more information on transaction SAINT, refer to the system documentation available directly in the system when you run transaction SAINT and select the *Online Help* icon.

## 4.2 Install ABAP Front-End Server (Optional)

The following section only requires implementation if you plan on using the *SAP Smart Business for Multichannel Sales Analytics* cockpit.

For more information, see SAP Help Portal at ► [help.sap.com](https://help.sap.com) ► *Application Help* ► *SAP Smart Business for SAP Customer Activity Repository* ►.

### 4.2.1 Install SAP NetWeaver Gateway on the ABAP Front-End Server

The complete UI layer consisting of the central UI component, the product-specific UI components and the SAP NetWeaver Gateway is contained in the ABAP front-end server. SAP NetWeaver Gateway handles the communication between the client and the ABAP back-end server. For a visualization of how these components interact, see *Overall System Planning* [external document].

When you are implementing the Central Hub deployment option, you use separate servers for the back-end and front-end components in your landscape.

#### Procedure

Ensure that the necessary SAP NetWeaver version is installed on your front-end server. For more information, see SAP Library for SAP Fiori on SAP Help Portal at ► [help.sap.com/fiori\\_bs2013](https://help.sap.com/fiori_bs2013) ► *System Landscape Required for SAP Fiori* ► *Setup of SAP Fiori System Landscape with SAP HANA Database* ► *Installation* ►.

### 4.2.2 Install Central SAP Fiori UI Components

The complete UI layer consisting of the central UI component, the product-specific UI components and the SAP NetWeaver Gateway is contained in the ABAP front-end server. The central UI component contains the SAP UI5 control library and the SAP Fiori Launchpad.

When you are implementing the Central Hub deployment option, you use separate servers for the back-end and front-end components in your landscape. Your front-end server must have the required central UI component version.

#### Procedure

Ensure that **SAP\_UI 740 SP10** (which contains SAPUI5 Version 1.24.2 or higher) or equivalent is installed on your front-end server.

Depending on the version of SAP NetWeaver installed on your front-end server, the central UI component is either installed as an add-on (for example, for SAP EhP1 for SAP NetWeaver 7.3 or higher) or is integrated directly in the SAP NetWeaver installation (for example, SAP NetWeaver 7.4 SP04 or higher). In either case, to use the apps delivered as part of SAP Fiori 1.0 for SAP Customer Activity Repository retail applications bundle (SAP\_FIORI

FOR SAP CARAB 1.0), **SAP\_UI 740 SP10** (which contains SAPUI5 Version 1.24.2 or higher) or equivalent must be installed on your front-end server.

For more information, see SAP Library for SAP Fiori on SAP Help Portal at ► [help.sap.com/fiori\\_bs2013](https://help.sap.com/fiori_bs2013) ► *System Landscape Required for SAP Fiori* ► *Setup of SAP Fiori System Landscape with SAP HANA Database* ► *Installation* ► *Setup of Front-End Server* ► *Installation of Central UI Components* ►.

## 4.2.3 Install the SAP Smart Business Modeler Apps Framework

The SAP Smart Business for Multichannel Sales Analytics apps included in this installation are based on the SAP Smart Business Modeler Apps Framework. Installation and setup of this framework includes the following:

- Installation of SAP Smart Business Modeler apps on the front-end server
- Installation of SAP Smart Business products on the SAP HANA Server
- Installation of SAP Web Dispatcher
- Communication channels
- App implementation

For more information on these topics, see ► [help.sap.com/nw74](https://help.sap.com/nw74) ► *Application Help* ► *UI Technologies in SAP NetWeaver* ► *UI Frameworks based on HTML5, JavaScript and CSS* ► *SAPUI5 Application Frameworks* ► *SAP Smart Business* ► *Setting up the SAP Smart Business Modeler Apps Framework* ►.

## 4.2.4 Install Product-Specific SAP Fiori UI Components

The complete UI layer consisting of the central UI component, the product-specific UI components and the SAP Gateway is contained in the ABAP front-end server. The product-specific UI component contains the SAP Fiori user interface for the SAP Assortment Planning for Retail application and the SAP Smart Business for SAP Customer Activity Repository. This procedure describes the installation of this product-specific UI component.

### Procedure

1. Log on to SAP Solution Manager and launch Maintenance Optimizer.  
For more information about using Maintenance Optimizer, see ► [service.sap.com/mopz](https://service.sap.com/mopz) ►.
2. In the Maintenance Optimizer work step that allows you to choose add-on products, select product version **SAP\_FIORI\_FOR\_SAP\_CARAB\_1.0**.
3. Select the product instance based on the SAP NetWeaver version of your front-end server:
  - UI for SAP CARAB on NW 740
  - UI for SAP CARAB on NW 731
4. Calculate and download the stack XML file.
5. Log on to your front-end server.

- 
6. Use the SAP Add-On Installation Tool (transaction SAINT) to load and install the stack XML generated using SAP Solution Manager Maintenance Optimizer.

For more information on transaction SAINT, refer to the system documentation available directly in the system when you run transaction SAINT and select the [Online Help](#) icon.

## 5 Follow-Up Activities

### 5.1 Create SAP ERP Tables

In this section you must create the new SAP ERP tables that are required for SAP Customer Activity Repository 2.0. Create these tables using the instructions provided in SAP Note [1900038](#).

#### **i** Note

The creation of these tables is required before proceeding with the upgrade. Failure to do so will result in SAP HANA content activation and deployment failures.

### 5.2 Activate SAP HANA Content for SAP Customer Activity Repository

In this procedure, you activate all SAP HANA content (SAP HANA views and SQLScript procedures) required by SAP Customer Activity Repository.

For more information about activating SAP HANA content, see [help.sap.com/hana\\_platform](#) > *Development Information* > *SAP HANA Developer Guide* > *Activating Objects*.

#### Prerequisites

As a mandatory prerequisite for a successful activation of SAP HANA content for SAP Customer Activity Repository, you must have successfully completed all of the procedures listed in the previous sections of this guide.

#### Procedure

1. Ensure that the `_SYS_REPO` user has the authorizations required to successfully activate SAP HANA content.
  1. 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
    - Physical database schema that contains the SAP CRM tables

You can use the following example SQL statement to grant the required privilege:

```
GRANT SELECT ON <Your schema name> TO _SYS_REPO WITH GRANT OPTION;
```

2. Assign the required privileges described in ► [help.sap.com/car](https://help.sap.com/car) ► *Integration Information* ► *Demand Data Foundation (DDF) 2.0 with the SAP HANA Database* ► *Authorization Requirements for Unified Demand Forecast (UDF)* ►.
2. Use transaction SE38 to run program /CAR/ACTIVATE\_HANA\_CONTENT.  
The program activates all SAP HANA content required by SAP Customer Activity Repository. Note that this includes the SAP HANA content for Demand Data Foundation (DDF) and Unified Demand Forecast (UDF).
3. Log on to SAP HANA Studio.
4. Open the *Modeler* perspective and use the *Navigator* to access your back-end system.
5. Expand the *Content* folder located under your system name in the *Navigator*.
6. Expand each of the packages listed below and ensure that all the content in the underlying folders is active:
  - sap.is.ddf
  - sap.is.udf
  - sap.is.retail.car
  - sap.is.retail.ecc
  - sap.is.retail.posdm
  - sap.is.retail.syndication

## 5.3 Replicate Master Data Tables

In your previous installation of SAP Customer Activity Repository, you set up replication of master data tables. In this section, you replicate and add new tables that are included in the upgrade to SAP Customer Activity Repository 2.0.

Since you are already running a previous version of SAP Customer Activity Repository, you have already set up replication for some of the tables required. In this section you should identify the additional tables that you must replicate and add only these to your existing replication setup.

For the complete list of SAP ERP tables to replicate, see SAP Note [1897024](#).

### 5.3.1 Replicate SAP ERP Tables for SAP Customer Activity Repository

In this procedure, you ensure that all SAP ERP tables that are relevant for SAP Customer Activity Repository retail applications bundle have not only been created but have also been filled with data. More specifically, you replicate the contents of relevant tables from the source SAP ERP system to your back-end system.

The steps outlined in this procedure are required when you are implementing one of the SAP Customer Activity Repository system landscape variants that require data to be replicated from a source SAP ERP system. If your source SAP ERP system and the repository are co-deployed on the same SAP HANA database, proceed to the next procedure. For more information, see *System Landscape Variants* [external document].

## Procedure

1. Define client transformation rules for all SAP ERP tables that you plan to replicate.

In most cases, you need to apply transformation rules to map the client of the source SAP ERP 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* [external document]
- [help.sap.com/hana\\_platform](https://help.sap.com/hana_platform) > *System Administration and Maintenance Information* > *Application Operations Guide – Trigger-Based Data Replication Using SAP LT Replication Server for SAP HANA* > *Data Transformation Capabilities within SAP Landscape Transformation Replication Server* >
- SAP Note [1733714](#)

2. Specify which SAP ERP tables to replicate.

We recommend that you only replicate data for SAP ERP tables that are relevant to SAP Customer Activity Repository. Read SAP Note [1897024](#) and replicate only the tables listed in the file attached to this SAP Note.

However, if you are planning to use all of SAP HANA Live for SAP ERP views, then replicate all the tables listed in the file attached to SAP Note [1781992](#).

For more information, see:

- [help.sap.com/hba](https://help.sap.com/hba) > *Installation, Security, Configuration, and Operations Information* > *Administrator's Guide* > *Administrator's Guide, SAP HANA Live for SAP Business Suite* > *Configuration Steps* > *Replicate Data (Side-by-Side Only)* >
- [help.sap.com/hana\\_platform](https://help.sap.com/hana_platform) > *System Administration and Maintenance Information* > *Application Operations Guide – Trigger-Based Data Replication Using SAP LT Replication Server for SAP HANA* > (<Managing the Replication Process Using the SAP HANA Studio> and <Important Transactions and Control Tables>) > >

### Caution

This procedure includes the replication of tables from your source SAP ERP system. Trigger-based replication includes deletion in source tables by archiving activities (since on the database level it is impossible to distinguish between delete actions caused by archiving and regular deletion of data records). As a result, SAP LT (Landscape Transformation) Replication Server replicates archiving activities as delete actions in the SAP HANA database.

More specifically, when data is archived in your source SAP ERP system, records are deleted from their respective database tables. Therefore, when these tables are replicated to another SAP HANA system, the records that were archived in the source tables are deleted in the target database tables.

For example, sales document data is set up to be replicated from your source SAP ERP system to your target SAP HANA system. You may have set up your SAP ERP system to archive sales documents that are more than a year old. Given the SAP ERP archiving settings, in the SAP Customer Activity Repository system, you will not be able to run analytic reports on multichannel transaction data (which includes replicated SAP ERP sales documents) that is more than a year old.

When deciding on the frequency at which to archive data in the source SAP ERP system, you must consider and balance the performance requirements of your SAP ERP system and the amount of historical data that

must be available in the SAP Customer Activity Repository system for analysis. The general recommendation is that 18 to 24 months of historical sales data is available in the repository.

## 5.4 Configure SAP Smart Business for Multichannel Sales Analytics (Optional)

### 5.4.1 Activate SAP HANA Content for SAP Smart Business for Multichannel Sales Analytics (Optional)

In this procedure, you activate all SAP HANA content required by the SAP Smart Business for Multichannel Sales Analytics dashboards.

#### Prerequisites

You have completed activating all SAP HANA content (SAP HANA views and SQLScript procedures) required by SAP Customer Activity Repository.

For more information, see [Activate SAP HANA Content for SAP Customer Activity Repository \[page 21\]](#).

#### Procedure

1. Log on to the ABAP instance of the SAP Customer Activity Repository system.
2. Execute transaction SE38.
3. Specify SNHI\_NH DU\_POST\_PROCESS in the *Program* field and choose *Execute*.
4. If you are running SAP NetWeaver 7.4 SP05 or higher, make the following entries:

Table 7

| Parameter                             | Instruction                 |
|---------------------------------------|-----------------------------|
| <i>Transport Container Name</i>       | /CAR/HCO_RTLCAR_MCSA        |
| <i>Activate Delivery Unit Content</i> | Select the checkbox.        |
| <i>Activate HTC</i>                   | Do not select the checkbox. |

5. Choose *Execute*.

All objects belonging to the delivery unit will be activated in the SAP HANA repository. This process can take several minutes. Once the activation process is complete, you are notified whether or not the import and activation of the SAP HANA delivery unit was successful.

## 5.4.2 Configure SAP NetWeaver Gateway

### 5.4.2.1 Perform General SAP Gateway Configuration

Prior to connecting the SAP Gateway on your front-end server to your back-end system, you need to perform a series of general SAP Gateway configuration steps. These configuration steps include the setting of profile parameters, ICF (Internet Communication Framework) services, language settings, and so on.

These steps are not specific to this installation guide and are described in the SAP NetWeaver product documentation referenced below.

#### Procedure

1. Determine the SAP NetWeaver version on your front-end server.
2. Carry out the instructions specific to your SAP NetWeaver version:
  - SAP Gateway for SAP NetWeaver 7.31  
See ► [help.sap.com/nwgateway20](http://help.sap.com/nwgateway20) ► *Application Help* ► *SAP NetWeaver Gateway* ► *SAP NetWeaver Gateway Configuration Guide* ► *Basic Configuration Settings* ►.
  - SAP Gateway for SAP NetWeaver 7.40  
See ► [help.sap.com/nw74](http://help.sap.com/nw74) ► *Application Help* ► *Function-Oriented View* ► *SAP NetWeaver Gateway Foundation (SAP\_GWFND)* ► *SAP NetWeaver Gateway Foundation Configuration Guide* ► *Basic Configuration Settings* ►.

### 5.4.2.2 Connect SAP Gateway to your Back-End System

In this procedure, you configure the OData channel, that is, set up a connection between SAP Gateway on your front-end server and your back-end system.

These steps are not specific to this installation guide and are described in the SAP NetWeaver product documentation referenced below.

#### Procedure

1. Set up the required roles on the front-end server and assign your user to these roles.  
For more information, see ► [help.sap.com/nw74](http://help.sap.com/nw74) ► *Application Help* ► *Function-Oriented View* ► *SAP NetWeaver Gateway Foundation (SAP\_GWFND)* ► *SAP NetWeaver Gateway Foundation Configuration Guide* ► *OData Channel Configuration* ► *User, Developer and Administrator Authorizations* ►.
2. Specify the connection settings on the SAP Gateway hub system, which include:
  - Connection from the SAP Gateway to consumer systems  
These settings allow the connection between the SAP Gateway host and the consumer systems (clients from which you access the SAP Fiori user interfaces.)
  - Connection from the SAP Gateway to SAP back-end system

These settings allow the connection between SAP Gateway to your back-end system.

These settings include:

- 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.
- Configure the necessary system aliases.

## More Information

For SAP NetWeaver 7.31, see SAP Library for SAP NetWeaver Gateway on SAP Help Portal at ► [help.sap.com/nwgateway20](http://help.sap.com/nwgateway20) ► *Application Help* ► *Support Package Stack* ► *SAP NetWeaver Gateway* ► *SAP NetWeaver Gateway Configuration Guide* ► *OData Channel Configuration* ► *Connection Settings on the SAP NetWeaver Gateway Hub System* ►.

For SAP NetWeaver 7.4, see SAP Library for SAP NetWeaver on SAP Help Portal at ► [help.sap.com/nw74](http://help.sap.com/nw74) ► *Application Help* ► *Function-Oriented View* ► *SAP NetWeaver Gateway Foundation (SAP\_GWFND)* ► *SAP NetWeaver Gateway Foundation Configuration Guide* ► *OData Channel Configuration* ► *Connection Settings on the SAP NetWeaver Gateway Hub System* ►.

### 5.4.2.3 Activate SAP Gateway

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

These steps are not specific to this installation guide and are described in the SAP NetWeaver product documentation referenced below.

#### Procedure

1. Determine the SAP NetWeaver version of your front-end server.
2. Carry out the instructions specific to your SAP NetWeaver version:
  - For SAP NetWeaver 7.4, see SAP Help Portal at ► [help.sap.com/nw74](http://help.sap.com/nw74) ► *Application Help* ► *Function-Oriented View* ► *SAP NetWeaver Gateway Foundation (SAP\_GWFND)* ► *SAP NetWeaver Gateway Foundation Configuration Guide* ► *OData Channel Configuration* ► *Activating SAP NetWeaver Gateway* ►.
  - For SAP NetWeaver 7.31, see SAP Help Portal at ► [help.sap.com/nwgateway20](http://help.sap.com/nwgateway20) ► *Application Help* ► *SAP NetWeaver Gateway Configuration Guide* ► *SAP NetWeaver Gateway Configuration Guide* ► *OData Channel Configuration* ► *Activating SAP NetWeaver Gateway* ►.

### 5.4.2.4 Activate Common OData Services

A number of OData services are required to run the SAP Fiori launchpad. These OData services are delivered with the central UI component (SAP\_UI 740 SP10 or equivalent).

For security reasons, all OData services are delivered in an inactive state. To use the SAP Fiori launchpad, you must activate the common SAP Fiori OData services.

## Procedure

1. Log on to your front-end system (your SAP Gateway system).
2. Go to Customizing (transaction **SPRO**).
3. Navigate to ► **SAP NetWeaver** ► **Gateway** ► **OData Channel** ► **Administration** ► **General Settings** ► **Activate and Maintain Services** ►.

You are presented with the service catalog. This is a list of all the services that are currently active on your SAP Gateway.

4. Get common SAP Fiori OData services:
  1. Choose **Add Service**.  
The **Add Service** screen is displayed.
  2. Enter the system alias of your local front-end system (your SAP Gateway system).  
This is the alias created in the [Connect SAP NetWeaver Gateway to your Back-End System \[page 25\]](#) procedure. For example, **LOCAL**.
  3. Enter **/UI2\*** in the **Technical Service Name** field.
  4. Choose **Get Services**.  
The **Add Selected Services** screen is displayed.
  5. Select the common SAP Fiori OData services that you would like to activate, and choose **Add Selected Services**.

Table 8


| Service Name           |
|------------------------|
| /UI2/PAGE_BUILDER_CONF |
| /UI2/PAGE_BUILDER_CUST |
| /UI2/PAGE_BUILDER_PERS |
| /UI2/TRANSPORT         |
| /UI2/INTEROP           |

The selected OData services are now active in your SAP Gateway.

## More Information

- For SAP NetWeaver 7.31, see SAP Library for User Interface Add-On 1.0 on SAP Help Portal at ► [help.sap.com/nw-uiaddon](http://help.sap.com/nw-uiaddon) ► **Application Help** ► **User Interface Add-On for SAP NetWeaver** ► **SAP Fiori Launchpad** ► **Setting Up the Launchpad** ► **Activating SAP NetWeaver Gateway OData Services** ►.
- For SAP NetWeaver 7.4, see the documentation on SAP Help Portal at ► [help.sap.com/nw74](http://help.sap.com/nw74) ► **Application Help** ► **UI Technologies in SAP NetWeaver** ► **UI Frameworks based on HTML5, JavaScript and CSS** ► **SAP Fiori Launchpad** ► **Setting Up the Launchpad** ► **Activating SAP NetWeaver Gateway OData Services** ►.

## 5.4.3 Configure the SAP Web Dispatcher

To configure the SAP Web Dispatcher, see SAP Help Portal at [help.sap.com/nw\\_platform](https://help.sap.com/nw_platform) > *Application Help* > *Function-Oriented View* > *Application Server* > *Application Server Infrastructure* > *Components of SAP NetWeaver Application Server* > *SAP Web Dispatcher* > *Administration of the SAP Web Dispatcher* .





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

## 5.4.4 Configure Central UI Component

The central UI component (SAP\_UI 740 SP10 or equivalent) contains the SAP UI5 control library and the SAP Fiori Launchpad. Prior to being able to use the SAP Fiori apps that constitute the user interface of the applications included in the SAP Customer Activity Repository retail applications bundle, you may need to configure the SAP Fiori Launchpad.

These steps are not specific to this installation guide and are described in the SAP NetWeaver product documentation referenced below.

### Procedure

1. Determine the SAP NetWeaver version on your front-end server.
2. Carry out the instructions specific to your SAP NetWeaver version:
  - SAP Gateway for SAP NetWeaver 7.31
    - [help.sap.com/nw-uiaddon](https://help.sap.com/nw-uiaddon) > *Application Help* > *SAP Fiori Launchpad* , and
    - [help.sap.com/nw-uiaddon](https://help.sap.com/nw-uiaddon) > *Application Help* > *Administration Guide* > *Content Administration* > *SAP Fiori Launchpage* > *Setting Up the SAP Fiori Launch Page* .
  - SAP Gateway for SAP NetWeaver 7.40
    - [help.sap.com/nw74](https://help.sap.com/nw74) > *Application Help* > *UI Technologies in SAP NetWeaver* > *UI Framework based on HTML5, JavaScript and CSS* > *SAP Fiori Launchpad* , and
    - [help.sap.com/nw74](https://help.sap.com/nw74) > *Application Help* > *UI Technologies in SAP NetWeaver* > *UI Framework based on HTML5, JavaScript and CSS* > *SAP NetWeaver User Interface Services* > *Administration Guide* > *Content Administration* > *SAP Fiori Launchpage* > *Setting Up the SAP Fiori Launch Page* .

## 5.4.5 Configure SAP Jam (Optional)

Your retail application uses collaboration SAPUI5 components to define key ABAP-based SAP business object data that can be consumed by SAP Jam.

If you are using the SAP Jam social collaboration platform in your business, you can configure the integration between your retail application and SAP Jam. The integration, enabled by Social Media Integration, allows you to share, or expose, the pre-defined ABAP-based SAP business object data directly from your retail application with members of your organization, through SAP JAM.

The steps to enable the integration between your retail application and SAP Jam are not specific to this installation guide and are described in the User Interface Add-On 1.0 for SAP NetWeaver product documentation referenced below.

## Prerequisites

To enable the integration of your retail application with SAP Jam, you must have a license for SAP Jam Enterprise edition and your SAP Jam instance must be configured for productive use.

## Procedure

1. Read the documentation for User Interface Add-On available on SAP Help Portal at [help.sap.com/netweaver](https://help.sap.com/netweaver) > *User Interface Add-On for SAP NetWeaver* > *Application Help* > *Social Media Integration*.

This documentation provides important information on configuring the integration of your retail application with SAP Jam, including:

- Understanding the Overall Process for Integrating Collaboration for a Business Object
- Implementation of ABAP Social Media Integration (ABAP SMI)
- Implementation of Collaboration SAPUI5 Components
- Connecting SAP Jam with ABAP SMI
- Configuring ABAP SMI for SAP Fiori Apps

## More Information

For the latest updates on SAP Jam, see the SAP Help Portal at [help.sap.com/sapjam](https://help.sap.com/sapjam).

## 5.5 Install and Configure On-Shelf Availability (Optional)

### **i** Note

The steps in this section and all subsections are entirely **optional** and depend on your specific implementation requirements.

To use the On-Shelf Availability (OSA) functionality in SAP Customer Activity Repository, perform the following post-installation steps.

### 5.5.1 Install the Application Function Library

The On-Shelf Availability (OSA) algorithms are implemented and shipped separately in the SAP HANA database as an Application Function Library (AFL).

To install the AFL, consult SAP Note [2056102](#).

## 5.5.2 Generate Run IDs for OSA Processing Steps

Each scheduled run of an OSA processing step 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:

Table 9

| Processing step   | Transaction for the Generator |
|-------------------|-------------------------------|
| Intraweek Pattern | /OSA/NR_IWP                   |
| Estimation        | /OSA/NR_EST                   |
| Monitoring        | /OSA/NR_MON                   |
| Analysis          | /OSA/NR_ANA                   |

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

### Procedure

1. Execute transaction /OSA/NR\_<XXX>. <XXX> represents the part of the transaction name that is specific for a processing step.
2. In the first row of the table, enter the following values for the fields *No*, *From No.* and *To Number*:
  - *No*: 01
  - *From No.*: 0000000000000001
  - *To Number*: 9999999999999999

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

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

- AN\_TRANSACTION
- PROMOTION\_TRANS

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



### Caution

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

### Procedure

If you want to change the mapping or a formula of a field, perform the following 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 detailed information, see ► [help.sap.com/hana\\_appliance](http://help.sap.com/hana_appliance) ► *Modeling Information* ►

### Definitions for a view taking the example of the AN\_TRANSACTION view

The following definitions are set by default for the AN\_TRANSACTION view:

- 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 which passed the SAP Customer Activity Repository validation
  - RETAILQUANTITY > 0.0: Negative quantities are not used by On-Shelf Availability
  - VOIDEDLINE = '': Cancelled transactions are not used by On-Shelf Availability
- Examples of the 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 sold units. 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 positive number, 0 is returned.  
 Definitions:
    - DISTDISC: global discount on the whole purchase; currently not used.
    - ITEMDISC: item-specific discount; currently used.

## 5.5.4 Activate SAP HANA Content for On-Shelf Availability

In this procedure, you activate all SAP HANA content required by SAP On-Shelf Availability.

### Procedure

1. Log on to your back-end system.

2. Execute transaction SE38.
3. Specify SNHI\_NH DU\_POST\_PROCESS in the *Program* field and choose *Execute*.
4. If you are running SAP NetWeaver 7.4 SP05 or higher, make the following entries:

Table 10

| Parameter                             | Instruction                 |
|---------------------------------------|-----------------------------|
| <i>Transport Container Name</i>       | /OSA/HCO_POSDMEXT           |
| <i>Activate Delivery Unit Content</i> | Select the checkbox.        |
| <i>Activate HTC</i>                   | Do not select the checkbox. |

5. Choose *Execute*.

All objects belonging to the delivery unit will be activated in the SAP HANA repository. This process can take several minutes. Once the activation process is complete, you are notified whether or not the import and activation of the SAP HANA delivery unity was successful.

## 5.5.5 Verify that SAP HANA Content for On-Shelf Availability has been activated

### Procedure

1. Log on to SAP HANA database studio.
2. Open the Modeler.
3. In the *Navigator* window, expand the database system for which you have activated the views.
4. Expand the *Content* folder.
5. Expand the package hierarchy by choosing ► *sap* ► *is* ► *retail* ► *posdmext* ► *osa* ►.
6. Verify that the following views have been activated:
  - `sap.is.retail.posdmext.osa.tlog.an_transaction`
  - `sap.is.retail.posdmext.osa.tlog.promotion_trans`
  - `sap.is.retail.posdmext.osa.status_log_view`
  - `sap.is.retail.posdmext.osa.reporting.MON_ANA_VIEW`
  - `sap.is.retail.posdmext.osa.reporting.STATUS_LOG_VIEW`
7. Verify that the following procedures have been activated:
  1. Procedures in the package `sap.is.retail.posdmext.osa.common`:
    - `CREATE_LOG_ENTRY`
    - `PARSE_HOLIDAY_STRING`
    - `PARSE_TYPE_CODE_STRING`
  2. Procedures in the package `sap.is.retail.posdmext.osa.tlog.dao`:
    - `GET_TRX_FOR_PRODUCT`
    - `GET_TRX_FOR_STORE`
    - `GET_TRX_FOR_SUBDEP`

- GET\_TRX\_FOR\_SUBDEP\_WITH\_MIN
  - GET\_TRX\_INFO\_FOR\_PRODUCT
  - GET\_TRX\_FOR\_SUBDEP\_CURRENCY
3. Procedures in the package `sap.is.retail.posdmext.osa.pattern.dao`:
- PERSIST
  - GET\_INTRA\_WEEK\_PATTERN\_RUNS
  - GET\_INTRA\_WEEK\_PATTERN\_LATEST
  - GET\_INTRA\_WEEK\_PATTERN
  - GET\_INTRA\_WEEK\_PATTERN\_FOR\_PRODUCT
4. Procedures in the package `sap.is.retail.posdmext.osa.pattern.runner.internal`:
- CALL\_FUNCTION
  - CALL\_ALGO\_FOR\_STORE
  - CALL\_ALGO\_FOR\_SUBDEP
  - CALL\_ALGO\_PRODUCT\_IN\_SUBDEP
5. Procedures in the package `sap.is.retail.posdmext.osa.pattern.runner.public`:
- RUN\_FOR\_PRODUCT\_IN\_SUBDEP
  - RUN\_FOR\_STORE
  - RUN\_FOR\_SUBDEP
6. Procedure in the package `sap.is.retail.posdmext.osa.pattern.test`:
- TEST\_L\_INTEGRATION
7. Procedure in the package `sap.is.retail.posdmext.osa.estimation.config`:
- GET\_CONFIG
8. Procedures in the package `sap.is.retail.posdmext.osa.estimation.dao`:
- PERSIST
  - GET\_PARAMETER
  - GET\_PARAMETERS
9. Procedures in the package `sap.is.retail.posdmext.osa.estimation.runner.internal`:
- CALL\_FUNCTION
  - CALL\_ALGO\_PRODUCT\_IN\_SUBDEP
10. Procedure in the package `sap.is.retail.posdmext.osa.estimation.runner.public`:
- RUN\_FOR\_PRODUCT\_IN\_SUBDEP
11. Procedure in the package `sap.is.retail.posdmext.osa.estimation.test`:
- TEST\_L\_INTEGRATION
12. Procedures in the package `sap.is.retail.posdmext.osa.monitor.dao`:
- PERSIST
  - CREATE\_STATUS\_LOG\_ENTRIES
  - UPDATE\_STATUS\_TABLE
  - CREATE\_STATUS\_LOG\_ENTRIES\_FOR\_EXCL\_PRODUCTS
  - UPDATE\_STATUS\_TABLE\_FOR\_EXCL\_PRODUCTS
13. Procedures in the package `sap.is.retail.posdmext.osa.monitor.runner.internal`:

- CALL\_FUNCTION
  - CALL\_ALGO\_PRODUCT\_IN\_SUBDEP
  - RUN\_FOR\_PRODUCT\_IN\_SUBDEP
14. Procedures in the package `sap.is.retail.posdmext.osa.monitor.runner.public`:
- GET\_QUALIFIED\_PRODUCT\_FOR\_RUNNER
  - RUN\_MONITOR
15. Procedure in the package `sap.is.retail.posdmext.osa.monitor.test`:
- TEST\_L\_INTEGRATION
16. Procedure in the package `sap.is.retail.posdmext.osa.analysis.calc`:
- COMPUTE\_LOST\_SALES
17. Procedure in the package `sap.is.retail.posdmext.osa.analysis.dao`:
- PERSIST
18. Procedures in the package `sap.is.retail.posdmext.osa.analysis.runner.internal`:
- CALL\_FUNCTION
  - CALL\_ALGO\_PRODUCT\_IN\_SUBDEP
19. Procedure in the package `sap.is.retail.posdmext.osa.analysis.runner.public`:
- RUN\_FOR\_PRODUCT\_IN\_SUBDEP

## 5.5.6 Configure SAP NetWeaver Gateway and Activate OData Service

This configuration step is only required if you use separate products or developments on top of SAP Customer Activity Repository that communicate via OData service. After you have installed SAP NetWeaver Gateway, configure the Gateway system and configure the settings for OData service.

### Procedure

The main steps to do this are as follows:

1. Activate SAP NetWeaver Gateway.
2. Define RFC connections from SAP NetWeaver Gateway to your back-end system.
3. Define settings for OData service for the SAP NetWeaver Gateway.
4. Define settings for Push Functionality (optional).
5. Set up users and Authorizations for SAP NetWeaver Gateway.
6. Activate the OData Service in the SAP NetWeaver Gateway system (transaction `/IWFND/maint_service`) for the requested URI (for example: `/sap/opu/sdata/OSA/ON_SHELF_AVAILABILITY/`).

For detailed information, see SAP Library for SAP NetWeaver Gateway on SAP Help Portal at ► [help.sap.com/nwgateway](https://help.sap.com/nwgateway) ► *Application Help* ► *Support Package 06* ► *SAP NetWeaver Gateway Developer Guide* ► *OData Channel* ►.

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