

SAP S/4HANA Integration with SAP Service Cloud Version 2

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1 Purpose

This document describes the procedure to configure the integration between SAP S/4HANA Cloud and SAP Service Cloud Version 2 system using SAP Cloud Integration (SCI).

As these configuration steps are customer-specific, they can't be delivered by SAP, and must be completed by the customer. This document describes the general configuration steps to manually set up the configuration within the existing system landscape.

If you have any queries or feedback about this document, please create a ticket using the component `CA-GTF-INT-CFC`.

2 Preparation

2.1 Required Information

You're required to enter or provide system-specific information. To ensure a smooth and efficient integration of SAP S/4HANA Cloud and SAP Service Cloud Version 2, we recommend that you have the information listed in the following table before starting the integration process.

Information required:
SAP S/4HANA Cloud tenant details
SAP Cloud Integration (SCI) tenant details
SAP Service Cloud Version 2 (SCv2, also referred to as CNS) tenant details
SAP Business Technology Platform (SAP BTP) with Event Mesh Service Subscription

Note If you want to include event-based Equipment and Functional location replication in your scope, then you would also require a subaccount on SAP Business Technology Platform (SAP BTP) with the Event Mesh Service subscription.

2.2 Prerequisites

You've access to your SAP S/4HANA Cloud starter system. This includes:

- Initial user and access information for your SAP S/4HANA Cloud tenant.

You've access to SAP Service Cloud V2 system. This includes:

- Initial user and access information for your SAP Service Cloud V2 tenant provided via email by Cloud Management Service.

You've access to SAP Cloud Integration system. This includes:

- Initial user and access information for your SAP Cloud Integration tenant.
- SAP Cloud Integration Client Certificate

If you would like to include Registered Products and Installation Points integration in your scope, then there are special prerequisites for this scenario:

1. Scope item Business Event Handling (INN) is a prerequisite and needs to be activated in your SAP S/4HANA Cloud system.
2. You've a subaccount on SAP Business Technology Platform (SAP BTP) with Subscription to SAP Event Mesh service. This includes:

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Preparation

- Configuration of entitlements and adding a Service Plan (plan type: Default) for SAP Event Mesh service.
- Creation of an instance of SAP Event Mesh service
- Subscription to SAP Event Mesh service by administrator of the global account.
- User access to the SAP Event Mesh UI by assignment of role collection in the subaccount.

Note

For details on setting up SAP Event Mesh Service, visit the SAP help document for [What Is SAP Event Mesh](#). While creating an instance for SAP Event Mesh service please ensure that you use the [JSON scope](#) that includes topic rules for publish and subscribe. By registering your SAP S/4HANA Cloud System in SAP Business Technology Platform (SAP BTP), maintaining SAP BTP Extensions in SAP S/4HANA and adding service plans for SAP S/4HANA Cloud Extensibility and SAP Event Mesh, you can skip the manual creation of Communication Arrangement in SAP S/4HANA. For more details, visit [Create an SAP S/4HANA Extensibility Service Instance in the Cloud Foundry Environment](#). Before you perform the initial data load, you need to ensure that the steps described in scope item Sell from Stock (BD9) have been executed. With this scope item, business partners and material data become available in the SAP S/4HANA Cloud system.

Ensure that the SSL trust is established between all the applications. Contact system administrator for further details.

3 Configuration

The following sections describe all settings required for this scope item. This can be divided into the following main groups:

- Configuration in SAP Service Cloud Version 2
- Configuration in SAP Cloud Integration
- Configuration in SAP S/4HANA Cloud
- Configuration in SAP Event Mesh service
- Configuration using the self-service configuration user interface in SAP S/4HANA Cloud

3.1 Configuration in SAP Service Cloud Version 2

3.1.1 Create Value Mapping

Procedure

1. Log on to SAP Service Cloud Version 2.
2. Navigate to the user menu and click on [Settings](#).
3. Click on [All Settings](#) > [Integration](#) > [Value Mapping](#).
4. In [Mapping](#), click on the [add](#) icon.
5. From [Mapping Group](#), select one of the following:
Add new [Mapping Group](#) if you want to add a new group
Or
One of the existing groups
6. From [Code List Name](#), select the data type name.
7. From [Rule for Missing Mapping](#), select the rule.
8. Click on [Save](#).

3.1.2 Create Communication System

Procedure

1. Log on to SAP Service Cloud Version 2.
2. Navigate to the user menu and click on *Settings*.
3. Click on *All Settings > Integration > Communication Systems*.
4. Click on the *add* icon.
5. Enter *Display ID*.

Note: Display ID must be the Business System ID of your SAP S/4HANA system.

6. In the *Inbound tab*, do one of the following:
 - a. Enter the password in *Set Password*Or
 - b. Upload the file in Certificate File

Note: The communication user is created by default with the creation of communication system. The communication user ID is the same name as the communication system and the password is the one maintained in the inbound communication tab of the communication system.

7. In the *Outbound tab*, enter *Host Name*, *Authentication Method*, and *Description*.
8. Click on *Save and Activate*.

3.1.3 Create Communication Configuration

Procedure

9. Log on to SAP Service Cloud Version 2.
10. Navigate to the user menu and click on *Settings*.
11. Click on *All Settings > Integration > Communication Configuration*.
12. Select the *Integrate Master Data with SAP S/4HANA* template.
13. Click on the *copy* icon.

14. Navigate to the [Communication Configuration](#) page and click on the newly created communication configuration.
15. Edit [Communication System](#) and select the name of the communication system.
16. Edit [Value Mapping Group](#) and select the value mapping group.
17. Under [All Inbound Configurations](#), use the search icon to select the inbound configurations relevant to your scope.

Inbound Configurations
Replicate Business Partner from SAP S/4HANA
Replicate Product from SAP S/4HANA
Replicate Sales Organization from SAP S/4HANA
Replicate Registered Product from SAP S/4HANA
Replicate Sales Area from SAP S/4HANA
Replicate Functional Location from SAP S/4HANA
Replicate Sales Office from SAP S/4HANA
Replicate Sales Group from SAP S/4HANA
Confirm Business Partner Relationship Replication from SAP S/4HANA
Replicate Company from SAP S/4HANA
Confirm Business Partner Replication from SAP S/4HANA
Replicate Distribution Channel from SAP S/4HANA
Replicate Division from SAP S/4HANA
Replicate Incoterms Classification from SAP S/4HANA with Extension

18. In [Asynchronous Outbound Configuration](#), adjust [Target Message Entity API Path](#) for the respective outbound communication scenarios.

Outbound Asynchronous Configurations
Replicate Business Partner Relationships to SAP S/4HANA
Replicate Business Partner to SAP S/4HANA
Confirm Business Partner Relationship Replication to SAP S/4HANA
Confirm Product Replication to SAP S/4HANA

Outbound Asynchronous Configurations

Confirm Business Partner Replication to SAP S/4HANA

Note: The Target Message Entity API Path must match the respective iflow endpoints.

3.2 Configuration in SAP S/4HANA Cloud

3.2.1 Communication Arrangement

The communication arrangement needs to be activated in the SAP S/4HANA Cloud system for the communication with Web Services.

The communication scenarios used in this scope are as follows:

—

- SAP_COM_0008 Business Partner, Customer, and Supplier Integration
- SAP_COM_0009 Product Integration
- SAP_COM_0395 Asset Management Master Data Integration
- SAP_COM_0092 Event Mesh Integration
- SAP_COM_0179 Finance - Accounting Master Data Integration
- SAP_COM_0427 Sales Area Replication Integration

Prerequisite

Administrator has the catalog role ID SAP_CORE_BC_COM assigned in the SAP S/4HANA Cloud system.

3.2.1.1 Create Communication User

Use

The communication user defined in the SAP S/4HANA Cloud system is used for inbound communication, and for processing messages in the system. Technically, the user is used to call OData Services in SAP S/4HANA Cloud from SAP Cloud Integration.

Procedure

9. Access the SAP S/4HANA Cloud system and log in as an Administrator.
10. Open the [Maintain Communication Users](#) app (F1338).
11. Choose *New*.
12. On the next screen, create the following settings and choose *Create*:
 - *User Name*: <user name>, for example, CODINTEG
 - *Description*: <S4HANA Communication User>
 - *Password*: Enter a password
13. If you want to use the certificate-based authentication in the direction of SAP Cloud Integration (SCI) to SAP S/4HANA Cloud (inbound communication messages to S/4HANA), choose *Upload Certificate* and upload the SCI client certificate here. See chapter [How to Get the SAP Cloud Integration \(SCI\) Client Certificate](#) [page] 26.
14. Select *Create*.

Note Make a note of the technical User ID of this user. For example: C0000007668

3.2.1.2 Create Communication System for Integration

Procedure

1. Access the SAP S/4HANA Cloud system and log on as an administrator.
2. Open the [Maintain Communication Systems](#) app.
3. Choose *New*.
4. Enter the system ID. In the *System Name*, enter any descriptive name.

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Configuration

5. Choose [Create](#).
6. In the [Host Name](#) field, enter the SAP Cloud Integration Runtime URL without "https://". For more information, refer to chapter How to Get the SAP Cloud Integration runtime URL .
7. Enter the SAP Service Cloud Version 2's [Business System](#) in the [Business System ID](#) field.

Note The [Business System ID](#) can be obtained from SAP Service Cloud Version 2. Navigate to the user menu and choose [Settings](#). Click on [All Settings > Integration > Communication Systems](#). Search for "[default Communication system](#)". The business system ID is available under [Display ID](#).

8. Under the [User for Inbound Communication](#), choose [Add](#).
9. If you want to use certificate-based authentication between SCI and SAP S/4HANA Cloud (SCI > S/4HANA), choose [SSL Client Certificate](#) as authentication method. Select the [User Name](#) to which you've associated the SCI Client Certificate. For more information, refer to chapter Create Communication User.
10. Choose [OK](#).
11. Under [User for Outbound Authentication](#), choose [Add](#).
12. Choose:

- [Authentication Method: SSL Client Certificate](#)
- [Certificate Type: Default Client Certificate](#)

Choose [Download Certificate](#) tab. Save the downloaded file and convert it in the following way:

1. Open the downloaded certificate.
 2. Choose the [Details](#) tab.
 3. Choose [Copy To File](#).
 4. The [Certificate Export Wizard](#) opens.
 5. Choose [DER encoded binary X.509 \(.CER\)](#) as file format.
 6. Specify the name of the file you want to export.
 7. Finish the download.
13. Choose [Create](#).
 14. Choose [Save](#).
 15. The CER file can be uploaded to SAP CPI system for each iFlow. See chapter Configure and Deploy the iFlows Using Web UI.

3.2.1.3 Create Communication System and Technical Users for SAP Event Mesh

An outbound communication user is required to connect SAP S/4HANA Cloud to the SAP Business Technology Platform (SAP BTP), Event Mesh on Cloud Foundry. Skip this section if you've registered your SAP S/4HANA Cloud System in BTP global account, maintained SAP BTP Extensions in SAP S/4HANA and added service plans for SAP S/4HANA Cloud Extensibility and Event Mesh, in which case the communication System and arrangement (`SAP_COM_0092`) would be automatically created.

Note You can retrieve the required values from the Service Key of the EMS Service Instance in the SAP BTP cockpit. Here are the steps to navigate: SAP BTP cockpit global account that contains the Event Mesh service > subaccount that contains the Event Mesh service > space of your EMS Service Instances > select your EMS service instance Service Keys.

Procedure

1. Log on to the SAP S/4HANA Cloud system as an administrator.
2. Choose *Maintain Communication Systems* `cdtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END/ui?sap-language=EN#CommunicationSystem-maintain`.
3. On the screen *Communication Systems*, choose *New*.
4. In the dialog box *New Communication System*, specify the *System ID* and *System Name*, and choose *Create*.
5. In the screen area *Technical Data*, enter the following data:
 1. *Host Name*: Specify the host name, which refers to the URI contained in the service key of the SAP BTP, Event Mesh service instance, excluding `https://`.
 2. *Token Endpoint*: Specify the token endpoint, which refers to the service key ended with `/oauth/token`. Refer to the service key of the SAP BTP, Event Mesh service instance for the endpoint.
 3. *Auth.Endpoint*: Specify the authentication endpoint, which refers to the service key ended with `/oauth/authorize`. In the token endpoint, replace `token` with `authorize`.
6. In the screen area *Users for Inbound Communication*, choose to create or select an inbound communication by clicking the `+` icon.
7. In the *New Inbound Communication User* dialog box, assign or create a dummy user because inbound is currently not used.
8. In the screen area *Users for Outbound Communication*, choose the `+` icon to create an outbound communication user.
9. In the dialog box *New Outbound User*, specify the following fields:
 1. *Authentication Method*: OAuth 2.0.
 2. *OAuth 2.0 Client ID*: It's contained in the service keys of the Event Mesh service instance.
 3. *Client Secret*: It's contained in the service keys of the Event Mesh service instance.
10. Choose *Create*.
11. Choose *Save*.

3.2.1.4 Create Communication Arrangement

Use

The communication arrangement in the SAP S/4HANA Cloud system defines all relevant information for the communication with SAP Business Technology Platform (SAP BTP). For example, it contains the communication system, inbound and outbound authentication.

Note Some of the Communication Scenarios are handled by the Data Replication Framework (DRF). Although the creation of the replication model is handled automatically by SAP S/4HANA Cloud, you must specify a name for the replication model.

The replication model name can be used to view and analyze messages in the data replication log, available in the Monitor Replication app. For more information, see https://help.sap.com/viewer/product/SAP_S4HANA_CLOUD/ . Then, go to *Product Assistance > English > Generic Information > Data Replication Framework* .

Tips on how to gather required information to Communication Arrangement creation:

Field	Values
Host Name	See chapter How to Get the SAP Cloud Integration runtime URL [page] 26.
Port	443 (always)
Path	You can get it once the iFlow <i>Replicate Business Partner from SAP S4HANA</i> has been deployed. See chapter Configure and Deploy the iFlows Using Web UI [page] 27. In the SCI Web UI, navigate to <i>Monitor</i> . Search for the iFlow <i>Replicate Business Partner from SAP S4HANA under Manage Integration Content</i> . Notice the URL under the <i>Endpoint</i> tab. The second part of the listed endpoint is the needed service end point. Example: <code>/cxf/XXX/CNS/XXXXX</code>
Outbound Authentication (Basic Authentication): Username and password	Typically, p-user (SCN user) or s-user (support portal user). User requires role <code>ESBMessaging.send</code> .

3.2.1.4.1 Create Communication Arrangement SAP_COM_0008

Purpose

This communication scenario **SAP_COM_0008** provides end-points (inbound and outbound) for the replication of Business Partner, Customer, and Supplier master through SOAP services.

Note Business partner replication from SAP Service Cloud V2 to SAP S/4HANA Cloud does not work for the business partners with non reflexive partner functions.

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1. Log on to the SAP Fiori launchpad as an Administrator.
2. Open the *Communication Arrangements* (F1763) app.
3. To create a new communication arrangement, choose *New*.
4. In the *New Communication Arrangement* dialog box, enter the following data:

Field Name	Entry Value
<i>Scenario</i>	SAP_COM_0008 (Business Partner, Customer and Supplier Integration) Tip You can use the <i>Value Help</i> (F5) to search for a specific scenario.
<i>Arrangement Name</i>	<Arrangement Name>

5. Choose *Create*.
6. Maintain *Common Data*. In the *Communication System* field, select the **communication system** that you created in the Create Communication System section, the Inbound and Outbound Communication users are entered automatically.
Verify the below Inbound Services, and maintain Outbound Services.

Inbound Services	Outbound Services
Business Partner - Replicate from Client to SAP S/4HANA Cloud	Business Partner - Replicate from SAP S/4HANA Cloud to Client- Select
Business Partner Relationship - Replicate from Client to SAP S/4HANA Cloud	Business Partner Relationship - Replicate from SAP S/4HANA Cloud to Client- Select
Business Partner - Receive Confirmation from Client to SAP S/4HANA Cloud	Business Partner - Send Confirmation from SAP S/4HANA Cloud to Client - Select
BP Relationship - Receive Confirmation from Client to SAP S/4HANA Cloud	BP Relationship - Send Confirmation from SAP S/4HANA Cloud to Client - Select

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Configuration

- Under *Additional Properties*, choose *X (Yes)* for property *Integration with C4C enabled*. In the outbound service *Business Partner - Replicate from SAP S/4HANA Cloud to Client* go to *Additional Properties* and maintain the below values:

Property Name	Property Value
<i>Replication Model</i>	For example: <BP_S4ToSCV2>
<i>Replication Mode</i>	C (Change Replication)
<i>System Filters</i>	Leave this field empty till Initial Data Load from SAP S/4HANA Cloud is replicated. Select <i>X</i> after the Initial master data is replicated, this ensures continuous replication of data.
<i>Output Mode</i>	D (Direct Output)

This Replication Model will be used in the later in *Define Filter Criteria*.

Note In case you want to set filters for your replication, Select System Filters as X else, Select System Filter as Empty.

- Choose *Save*.
- The communication arrangement is now active.


3.2.1.4.2 Create Communication Arrangement SAP_COM_0009

Purpose

This communication scenario **SAP_COM_0009** provides end-points (inbound and outbound) for the replication of material masters through ALE IDOCs or SOAP services.

Procedure

- Log on to the SAP Fiori launchpad as an Administrator.
- Open the *Communication Arrangements* (F1763) app.
- To create a new communication arrangement, choose *New*.
- In the *New Communication Arrangement* dialog box, enter the following data:

Field Name	Entry Value
<i>Scenario</i>	SAP_COM_0009 (Product Integration) Tip You can use the <i>Value Help</i> () to search for a specific scenario.
<i>Arrangement Name</i>	<Arrangement Name>

- Choose *Create*.
- Maintain *Common Data*. In the *Communication System* field, select the `communication system` that you created in the Create Communication System section, the Inbound and Outbound Communication users are entered automatically.
Verify the below Inbound Services and maintain Outbound Services.

Inbound Services	Outbound Services
Replicate Product from Client to SAP S/4HANA system	Replicate Product from SAP S/4HANA system to Client - Deselect
Product Master - Create, Read, Update, Delete	Product Master - Replicate from SAP S/4HANA to Client - Select
Product Master - Replicate from Client to SAP S/4HANA	Product Master - Confirmation from SAP S/4HANA to Client - Deselect
Product Master - Confirmation from Client to SAP S/4HANA - Select	

- In the outbound service *Product Master - Replicate from SAP S/4HANA to Client* go to *Additional Properties* and maintain the below values:

Property Name	Property Value
<i>Replication Model</i>	For example: <code>PROD_REP</code>
<i>Replication Mode</i>	<i>C</i> (Change Replication)
<i>System Filters</i>	Leave this field empty till Initial Data Load from SAP S/4HANA Cloud is replicated. Select <i>X</i> after the Initial master data is replicated, this ensures continuous replication of data.
<i>Output Mode</i>	<i>D</i> (Direct Output)

This Replication Model is used later in *Define Filter Criteria*.

Note In case you want to set filters for your Product Replication, select *System Filters* as *X* otherwise, select *System Filter* as *Empty*.

- Choose *Save*.
- The communication arrangement is now active.


3.2.1.4.3 Create Communication Arrangement SAP_COM_0395

Purpose

This communication arrangement in the SAP S/4HANA Cloud system consists of inbound services for Asset Management Master Data Integration. The communication scenario SAP_COM_0395 provides endpoints for the replication of Equipment and Functional Location through OData services.

Procedure

1. Log on to the SAP Fiori launchpad as an Administrator.
2. Open the *Communication Arrangements* (F1763) app.
3. To create a new communication arrangement, choose *New*.
4. In the *New Communication Arrangement* dialog box, enter the following data:

Field Name	Entry Value
<i>Scenario</i>	SAP_COM_0395 (Asset Management Master Data Integration) Tip You can use the <i>Value Help</i> () to search for a specific scenario.
<i>Arrangement Name</i>	<Arrangement Name>

5. Choose *Create*.
6. Maintain *Common Data*. In the *Communication System* field, select the communication system *communication system* that you created in the *Create Communication System* section, the *Inbound Communication* user is entered automatically. Verify the below *Inbound Services*:

Inbound Services
Equipment

Note This communication is OData based, therefore, client certificate authentication is not supported. Please use basic user authentication for the outbound communication.

7. Choose *Save*.
8. The communication arrangement is now active.


3.2.1.4.4 Create Communication Arrangement SAP_COM_0092

This communication arrangement in the SAP S/4HANA Cloud system consists of outbound services for SAP Event Mesh Service on SAP Business Technology Platform (SAP BTP). The communication scenario `SAP_COM_0092` provides end-points for the SAP Event Mesh service, which is used in the equipment and functional location replication in this setup.

Skip this section if you've registered your SAP S/4HANA Cloud System in SAP Global account, maintained SAP BTP Extensions in SAP S/4HANA and added service plans for SAP S/4HANA Cloud Extensibility and SAP Event Mesh, in which case this Communication Arrangement would be automatically created.

Procedure

1. Log on to the SAP Fiori launchpad as an Administrator.
2. Open the *Communication Arrangements* (F1763) app.
3. To create a new communication arrangement, choose *New*.
4. In the *New Communication Arrangement* dialog box, enter the following data:

Field Name	Entry Value
<i>Scenario</i>	<code>SAP_COM_0092</code> (Event Mesh Integration) Tip You can use the <i>Value Help</i> () to search for a specific scenario.
<i>Arrangement Name</i>	<Arrangement Name>

5. Choose *Create*.
6. In the screen area *Common Data*, field *Communication System*, select the communication system you created previously in Create Communication System and Technical Users for SAP Event Mesh [page] 11 section for *SAP Event Mesh* from the value help.
7. Specify the following fields in the Additional Properties section.
 1. *Channel*: channel name
 2. *Description*: channel description
 3. *Topic Space*: topic space name. The Topic Space needs to match the namespace that will be defined in the SAP Event Mesh service instance.
Reconnect Attempts: number of reconnect attempts allowed if there are connection failures. It's recommended to enter 0 for an infinite number of reconnect attempts
 4. *QoS*: quality of service, defaulting to value 1

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Configuration

5. *Reconnect Attempts*: number of reconnect attempts allowed if there are connection failures. It's recommended to enter 0 for an infinite number of reconnect attempts
6. *Reconnect Wait Time(sec)*: idle time between 2 reconnect attempts 7. In the section Outbound Services, specify Path (for example: /protocols/mqtt311ws) and choose Save.
8. In the section *Outbound Services*, specify *Path* (for example: [/protocols/mqtt311ws](#)).

Note The *Service* path can be obtained from the *Service Key* of the SAP Event Mesh Service Instance, from the field URI listed under messaging.

9. Choose *Check Connection* to check whether a connection can be established between SAP S/4HANA Cloud and SAP BTP.

Note Skip this section if you've registered your SAP S/4HANA Cloud System in SCP Global account, maintained SAP BTP Extensions in SAP S/4HANA, and added service plans for SAP S/4HANA Cloud Extensibility and SAP Event Mesh, in which case this Communication Arrangement would be automatically created.

10. Choose *Save*.
11. The communication arrangement is now active.


3.2.1.4.5 Create Communication Arrangement SAP_COM_0179

Purpose

This communication scenario [SAP_COM_0179](#) provides end-points (inbound and outbound) for the replication of Company Code master through ALE IDOCs or SOAP services

Procedure

1. Log on to the SAP Fiori launchpad as an Administrator.
2. Open the *Communication Arrangements* (F1763) app.
3. To create a new communication arrangement, choose *New*.
4. In the *New Communication Arrangement* dialog box, enter the following data:

Field Name	Entry Value
<i>Scenario</i>	SAP_COM_0179
	Tip You can use the <i>Value Help</i> () to search for a specific scenario.
<i>Arrangement Name</i>	<Arrangement Name>

5. Choose *Create*.

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Configuration

6. Maintain *Common Data*. In the *Communication System* field, select the communication system `communication system` that you created in the *Create Communication System* section, the *Inbound Communication* user is entered automatically. Maintain the below *Outbound Services*:

Outbound Services
Company Code - Send

7. Under *Additional Properties*, maintain the below values:

Property Name	Property Value
<i>Replication Model</i>	For example: <code><COM_CODE></code>

This Replication Model will be used in the later in *Define Filter Criteria*.

8. Choose *Save*.
9. The communication arrangement is now active.

3.2.1.4.6 Create Communication Arrangement SAP_COM_0427

Purpose

This communication scenario provides endpoints (inbound and outbound) for the replication of Sales Office, Sales Group, and Sales Organization data through SOAP services.

Procedure

1. Log on to your SAP S/4HANA Cloud system as an Administrator.
10. Open the *Communication Arrangements* (F1763) app.
11. To create a new communication arrangement, choose *New*.
12. In the *New Communication Arrangement* dialog box, enter the following data:

Field Name	Entry Value
<i>Scenario</i>	SAP_COM_0427 (Sales Area Replication Integration) Tip You can use the <i>Value Help</i> (🔍) to search for a specific scenario.
<i>Arrangement Name</i>	<Arrangement Name>

13. Choose *Create*.

14. Maintain *Common Data*. In the *Communication System* field, select the *communication system* that you created in the Create Communication System for Integration section, the Inbound and Outbound Communication users are entered automatically.

Enter a replication model name in *Additional Properties* section, for example: **<SALES_ORG>**.

Communication scenario **SAP_COM_0427** (Sales Area Replication Integration) always performs an initialization replication, replicating all of the available sales area data each time. The changes (delta replication) and manual replication modes are supported.

15. Maintain the below Outbound Services

Outbound Services
Sales Organization - Replicate - Select
Distribution Channel Replicate - Select
Sales Division - Replicate - Select
Distribution Chain - Replicate - Deselect
Divisions Per Sales Organization - Replicate - Deselect
Sales Area - Replicate - Select
Sales Office - Replicate - Select
Sales Group - Replicate - Select

16. Choose *Save*.


17. The communication arrangement is now active.

3.2.2 Configuration of Channel Binding for Enterprise Event Enablement

Prerequisite

Scope item Business Event Handling (1NN) is activated in your SAP S/4HANA Cloud system.

Procedure

1. Log on to the SAP S/4HANA Cloud system as an administrator.
2. Open the *Enterprise Event Enablement* app.
3. Choose *Go* in order to list all the available channels.
4. The channel *Channel Name* created during the creation of communication arrangement of `SAP_COM_0092` is listed here. Please select it and the outbound topic bindings for this channel are displayed.
5. Select *Create* and use the *Value Help* () for *Topic* to add the following topics for this channel:
 - sap/s4/beh/equipment/v1/Equipment/Changed/v1
 - sap/s4/beh/equipment/v1/Equipment/Created/v1

3.2.3 Configuration for Filter Values

Purpose

Filter objects are used to remove the SAP S/4HANA Cloud outbound processing code values that aren't supported by the receiver system. During SAP S/4HANA Cloud inbound processing, these code values are added again.

Note The below steps are optional and should be performed based on your requirement.

Procedure

1. Log in to *SAP S/4HANA Cloud systemcdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END* as Administrator - Data Replication.
2. From *Data Replication* navigate to *Define Filter Criteria*
3. Select the relevant *Replication Model* (for example, **<BPS4TOSCV2>**) for Business Partner Replication and choose *Display*. A new window opens to *Display Filter Criteria*.
4. The Replication Models are maintained during communication arrangement configuration, for example, see chapter Create Communication Arrangement SAP_COM_0025 [page] Error! Bookmark not defined. for Business Partner Replication Model.
5. Select *Edit* and choose the *Filter Criteria* to Include Business Objects.
6. Select the BP role to be Include in your Business Partner replication to SAP Service Cloud Version 2.

Field	Operator	User Action Values
BP Role	<is>	<FLCU01>
BP Role	<is>	<BUP001>
BP Role	<is>	<BUP003>

7. Choose the *Show Segment* filter and choose the filter object *Business Partner Role-98601*.
8. Select *Edit* and choose the filter criteria to include Business Objects.
9. Select the *BP Role* to be included in your Business Partner replication to SAP Service Cloud Version 2.

Field	Operator	User Action Values
BP Role	<is>	<FLCU01>
BP Role	<is>	<BUP001>
BP Role	<is>	<BUP003>

10. Choose Save.
11. Go back to *Display Filters* criteria and choose the filter object *Business Partner Address Usage –98698*.
12. Select on *Edit*.
13. Select the Filter Criteria *Address Type* to be included in your Business Partner replication to SAP Service Cloud Version 2.

Field	Operator	User Action Values
Address Type	<is>	<XXDEFAULT>
Address Type	<is>	<POST_TO>
Address Type	<is>	<SHIP_TO>

Error! Reference source not found.

Configuration

14. Choose [Save](#).

Note Maintain the code list mapping for above values in SAP Service Cloud Version 2 system.

3.3 Configuration in SAP Event Mesh

In order to replicate Registered Product (Equipment) and Installation points (Functional Location), you need to create three queues,

1. Equipment queue
2. Functional location queue
3. Equipment error message queue
4. Functional locational error queue

Prerequisites

Ensure the prerequisites listed in the section [Preparation](#) that are relevant to SAP Event Mesh Service initial setup are met.

Procedure

1. Navigate to your SAP Event Mesh Application.
2. Select [Message Clients](#) from the navigation tree.
3. In the screen area [Message Clients](#), select your new SAP Event Mesh Service Instance.
4. On the [Queues](#) tab page, choose [Create Queue](#).
5. In the dialog box [Create a New Queue](#), enter a meaningful queue name, and choose [Create](#). Create Queues for the following:
 - Equipment
 - Functional Location
 - Functional Location error
 - Equipment Error
6. In the table row of your new queue, select [Queue Subscriptions](#) in the Actions field.
7. In the dialog box [Queue Subscriptions](#), enter in field topic name or topic pattern:

`<{Topic SpaceNamespace}/ce/{Topic SpaceBinding}>`

{Topic Namespace} needs to match the namespace that was defined in Create an SAP Event Mesh Service Instance.

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Configuration

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{Topic Binding} is the value configured as Outbound Topic in the SAP S/4HANA Enterprise Event Enablement app.

Example of a queue subscription for equipment created event:

```
sap/EMS1VP/1VPUID/ce/sap/s4/beh/equipment/v1/Equipment/Created/v1
```

Example of a queue subscription for equipment changed event:

```
sap/EMS1VP/1VPUID/ce/sap/s4/beh/equipment/v1/Equipment/Changed/v1
```

8. For Equipment Error Queue:

<A value path that is unique for this queue>

For Functional Location Error Queue:

<A value path that is unique for this queue>

9. Your Queue Subscriptions are as follows:

For Equipment Queue:

```
Topic Space/ce/Topic Binding for Created Equipment
```

```
Topic Space/ce/Topic Binding for Changed Equipment
```

For Functional Location Queue:

```
Topic Space/ce/Topic Binding for Created Functional Location
```

```
Topic Space/ce/Topic Binding for Changed Functional Location
```

10. Choose *Add*.

11. Create queue subscriptions for created and changed events for Functional Location queues.

12. Choose *Close*.

3.4 Configuration in SAP Cloud Integration

Note SAP provides prepackaged, generic integration content called integration flows (iFlows) for the integration of SAP Service Cloud Version 2 with SAP S/4HANA Cloud systems using SAP Cloud Integration (SCI).

Prerequisites

In order to import and deploy iFlows, you need the `AuthGroup.IntegrationDeveloper` role assigned to your user in your SCI tenant.

3.4.1 How to Get the SAP Cloud Integration runtime URL

The SAP Cloud Integration (SCI) runtime URL is included in the SCI provisioning email.

Alternatively, you can get it once the iFlow [Replicate Business Partner from SAP S4HANA](#) has been deployed. See chapter [Configure and Deploy the iFlows Using Web UI](#) [page] 27.

In the SCI Web UI, navigate to [Operations View](#). Choose the [Started](#) tile. Search for the iFlow [Replicate Business Partner from SAP S4HANA](#). Choose the status [Started](#). The first part of the listed endpoint is the required SCI tenant runtime URL. Example: `https://<tenant>-iflmap.hana.ondemand.com`

3.4.2 How to Get the SAP Cloud Integration (SCI) Client Certificate

In the SAP Cloud Integration (SCI) provisioning email, follow the link under [Certificate Information](#). On the next screen, choose X509 Certificate with option Binary CER. Download it to your local machine.

3.4.3 Upload Client Certificates for Authentication in SAP Cloud Integration

The client certificate that has been downloaded from the client systems (SAP S/4HANA Cloud or SAP Service Cloud Version 2) needs to be uploaded to the Keystore in the SAP Cloud Integration tenant.

1. Log on to your SAP Cloud Integration tenant.
2. Navigate to [Operations View](#).
3. Choose the tile [Keystore](#) from the section [Manage Security](#).
4. Choose [Add > Certificate](#).
5. Give a meaningful Alias.
6. Upload the certificate that you've downloaded from the target systems by choosing [Browse](#).
7. Choose [Add](#) the client certificate of the target system is now uploaded.

Note In case you are using basic authentication, please upload the Inbound Communication Users of the target systems (for example, SAP S/4HANA Cloud, SAP Service Cloud Version 2, SAP EMS).

Please enter the communication authentication type you are choosing for SAP S/4HANA cloud and SAP Service Cloud Version 2 systems.

In case you are using Basic authentication, please maintain the User Credential of the target System.

In case you are using Client Certificate authentication, please maintain the PV key alias for the target System.

Note The root certificates also need to be uploaded using the same procedure. The root certificates of the target systems can be obtained from the

browser of the target system's web application.

3.4.4 Copy Integration Package

Procedure

1. Connect to the tenant management node of the *SAP CPI systemcdrtype_CiasHref_CIAS.SYSTEM.CPI_WEBUI.ACCESS_URL.END* with the URL `http://<tenant management node URL>/itspaces`.
2. On the *Discover* tab, click on *All* and search for the package *SAP Service Cloud Version 2 Integration for Master Data with SAP S/4HANA or SAP S/4HANA Cloud*.
3. Choose *Copy* on the top-right corner of the package overview page.
4. If the integration package is being created for the first time, then you would see the message Integration Package Created. Otherwise, you can decide to either create a new copy of the package or overwrite the existing integration package content. Choose *Overwrite*.

3.4.5 Configure and Deploy the iFlows

Automation

The preconfiguration of iFlows is already done as part of this automation. Review the configuration of the iFlows by choosing *View All Execute Step* to automatically configure all the iFlows and to skip the manual configuration steps. parameters, then choose

Purpose

This procedure provides a generic description of iFlow configurations.

In the subsequent sections, you find more details on the configuration of iFlows. This contains the information on the communication scenario and outbound service from the sender and inbound service from the receiver for each iFlow.

With this information, the sender and receiver addresses and authentication details are easily retrieved for iFlow configuration.

Procedure

Note If you've redeployed key store (system.jks) in your SAP Cloud Integration (SCI) tenant, you need to redeploy all the iFlows or restart them to avoid any caching related issues.

1. Log on to the tenant management node of the SCI system with the URL:

Field	User Action or Values
URL	https://<tenant management node>/itspaces

2. To configure the iFlows, choose the *Design* mode from the navigation on the left.
3. Select the integration package copied.
4. All iFlows are displayed on the *Artifacts* tab of the package.
5. Choose the iFlows mentioned in the table below (one after the other) by choosing *Actions > Configure* .
6. Configure the *sender system* (in this example, S4) and *receiver system* (in this example, SCV2) details as follows:
 1. Choose the *Sender* tab and then choose *Authorization* as *Client Certificate*.
 2. *Browse* for the certificate and upload it. Refer to chapter Create Communication System for Integration [page] 10 for details on SAP S/4HANA Cloud client certificate
 3. Choose the *Receiver* tab and create the following entries:
 - *Host: SCV2 tenant's URL (without https://)*
 - *Port: 443*
 4. Choose *Proxy type* as *Internet*
 5. Choose *Allow Chunking*
 6. Deselect *Basic Authentication*
 7. Choose the *Private Key alias* as maintained in your CPI Keystore
 8. Choose *Save* and choose *Deploy*.
 9. Repeat the same procedure for all the iFlows that have the same sender (S4) and receiver (SCV2) systems.
7. Choose *iFlow* to configure the *sender system* (in this example SCV2) and *receiver system* (in this example S4HANA) details.
 1. Choose the *Sender* tab and then choose *Authorization* as *Client Certificate*
 2. *Browse* for the certificate. Import the SAP Service Cloud Version 2 communication arrangement X.509 certificate.
 3. Choose *Receiver* tab: Enter the *Protocol-Host-Port* name of the S/4HANA Cloud system. Contact your system administrator for these details.
 4. Choose *Proxy type* as *Internet*
 5. Choose the *Authentication* as *Client Certificate*
 6. Choose the *Private Key alias* as maintained in your CPI Keystore

7. Choose [Save](#) and choose [Deploy](#).
8. Repeat the same procedure for all the iFlows that have the same sender (SCV2) and receiver (S4) systems.
 - For the S/4HANA Cloud system URL, refer to chapter [How to Get the SAP S/4HANA Cloud System URL](#) [page] [Error! Bookmark not defined.](#)
 - For the iFlows, which have receiver as SCV2, the host of SCV2 is the URL of the SAP Service Cloud Version 2 system without HTTPS prefix, that is, myXXXXX.XXXX.XXXXXXX.com.
 - For [Private Key alias](#), specify an alias for the private key that is to be used to sign the response message. The tenant private key must be part of the tenant keystore.
8. The integration flows are deployed in the SCI tenant.
9. To see status of the deployed artifacts, check [Monitor > Integration Content Monitor](#).
10. The status of the iFlow should be green for successful deployment.

3.4.5.1 Configuration of Business Partner Replication iFlows

Name of the iFlow	Direction of the Message flow	Sender Communication Scenario : Outbound Service	Receiver Communication Scenario : Inbound Service
Replicate Business Partner from SAP S4HANA	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0008 : Business Partner - Replicate from SAP S/4HANA Cloud to Client	Replicate Business Partner from SAP S/4HANA
Replicate Business Partner Relationship from SAP S4HANA	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0008 : Business Partner Relationship - Replicate from SAP S/4HANA Cloud to Client	Replicate Business Partner Relationship from SAP S/4HANA
Confirm Business Partner Replication to SAP S4HANA	SCV2 (Sender) to S4 (Receiver)	Confirm Business Partner Replication to SAP S/4HANA	SAP_COM_0008 : Business Partner - Receive Confirmation from Client to SAP S/4HANA Cloud
Confirm Business Partner Relationship Replication to SAP S4HANA	SCV2 (Sender) to S4 (Receiver)	Confirm Business Partner Relationship Replication to SAP S/4HANA	SAP_COM_0008 : BP Relationship - Receive Confirmation from Client to SAP S/4HANA Cloud
Replicate Business Partner to SAP S4HANA	SCV2 (Sender) to S4 (Receiver)	Replicate Business Partner to SAP S/4HANA	SAP_COM_0008 : Business Partner - Replicate from Client to SAP S/4HANA Cloud

Name of the iFlow	Direction of the Message flow	Sender Communication Scenario : Outbound Service	Receiver Communication Scenario : Inbound Service
Confirm Business Partner Replication from SAP S4HANA	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0008 : Business Partner - Send Confirmation from SAP S/4HANA Cloud to Client	Confirm Business Partner Replication from SAP S/4HANA
Replicate Business Partner Relationship to SAP S4HANA	SCV2 (Sender) to S4 (Receiver)	Replicate Business Partner Relationships to SAP S/4HANA	SAP_COM_0008 : Business Partner Relationship - Replicate from Client to SAP S/4HANA Cloud
Confirm Business Partner Relationship Replication from SAP S4HANA	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0008 : BP Relationship - Send Confirmation from SAP S/4HANA Cloud to Client	Confirm Business Partner Relationship Replication from SAP S/4HANA

Note: In the **Replicate Business Partner from SAP** iflow configuration , in the “more” tab please set “Default S4 ID” to false.

3.4.5.2 Configuration of Product/Material Replication iFlows

Name of the iFlow (Description)	Direction of the Message Flow	Sender Communication Scenario: Service	Receiver Communication Scenario: Service
Confirm Product Replication to SAP S4HANA	SCV2 (Sender) to S4 (Receiver)	Confirm Product Replication to SAP S/4HANA	SAP_COM_0009: Product Master - Confirmation from Client to SAP S/4HANA Cloud
Replicate Product from SAP S4HANA	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0009: Product Master - Replicate from SAP S/4HANA Cloud to Client	Replicate Product from SAP S/4HANA

3.4.5.3 Configuration of Company Code Replication iFlows

Name of the iFlow (Description)	Direction of the Message Flow	Sender Communication Scenario: Service	Receiver Communication Scenario: Service
Replicate Company Code from SAP S4HANA	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0179: Company Code - Send	Replicate Company from SAP S/4HANA

3.4.5.4 Configuration of Sales Organization Structure Replication iFlows

Name of the iFlow (Description)	Direction of the Message Flow	Sender Communication Scenario: Service	Receiver Communication Scenario: Service
Replicate Sales Area from SAP Business Suite	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0427: Sales Area - Replicate	Replicate Sales Area from SAP S/4HANA
Replicate Sales Group from SAP Business Suite	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0427: Sales Group - Replicate	<input type="checkbox"/> Replicate Sales Group from SAP S/4HANA
Replicate Sales Office from SAP Business Suite	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0427: Sales Office - Replicate	Replicate Sales Office from SAP S/4HANA
Replicate Sales Organization from SAP Business Suite	S4 (Sender) to SCV2 (Receiver)	SAP_COM_0427: Sales Organization - Replicate	Replicate Sales Organization from SAP S/4HANA
Replicate Distribution Channel from SAP Business Suite	S4 (Sender) to CNS (Receiver)	SAP_COM_0427: Distribution Model - Replicate	Replicate Distribution Channel from SAP S/4HANA
Replicate Division from SAP Business Suite	S4 (Sender) to CNS (Receiver)	SAP_COM_0427: Division - Replicate	Replicate Division from SAP S/4HANA

3.4.5.5 Configuration of iFlows for Registered Products and Installation Point

Name of the iFlow (Description)	Direction of the Message Flow	Sender Communication Scenario: Service	Receiver Communication Scenario: Service
Replicate Registered Products from SAP Business Suite	EMS (Sender), S4 (Data supplier) to SCV2 (Receiver)	SAP_COM_0395: Equipment	Replicate Registered Product from SAP S/4HANA

Configuration of iFlows for Replication of Equipment from SAP S/4HANA to SAP Service Cloud V2

Configuration of iFlows for replication of Equipment from SAP S/4HANA to SAP Service Cloud V2 involves Event Mesh Service. Therefore, in the configuration EMS is the sender, and SAP S/4HANA Cloud and SAP Service Cloud V2 are both receivers:

- Replicate Registered Products from SAP Business Suite

This iFlow replicates created and changed equipments in SAP S/4HANA Cloud. In this iFlow configuration sender system is EMS service and receiver systems are SAP S/4HANA and SAP Service Cloud V2 systems.

Configuration Parameters	Value
Queue Name (Sender Tab)	<queue: Queue_name_created_for_equipment> For example: queue:sap/EMS1VP/1VPUID/funcLoc
Credential Name (Sender Tab)	<OAuth2 Client Credentials> Create an OAuth2 Client Credential and deploy it as security material URL, Client ID, and Client Secret to be obtained from service keys of the SAP Event Mesh Instance on SAP BTP.
Authentication (Sender Tab)	<EMS_Credential>
Port-Host-Port (Receiver Tab- S4 Receiver)	<https://myxxxxxx.s4hana.ondemand.com:443>
CNS-Host (Receiver Tab- CNS Receiver)	<myxxxxxx.xxxx.sapbydesign.com>
Authentication (Receiver Tab)	For S4 and SCV2: <Basic/Certificate> For SAP-EM-Error-Equipment: <OAuth2 Client Credentials>
Credential Name (Receiver Tab)	For S4: <S4HANACE_Credential>

Configuration Parameters	Value
	For SCV2: <SCV2_Credential>
Communication User (More Tab)	This is the technical User ID of the inbound communication user used in the Create Communication Arrangement SAP_COM_0395 [page] 17. To retrieve the technical User ID, search the inbound communication user in the app Maintain Communication Users in your SAP S/4HANA Cloud system.
Receiver Business System (More Tab)	Enter your SAP SCV2 Business system ID
Sender Business System (More Tab)	Enter your SAP S/4HANA Cloud Business system ID

The following configuration pertains to SAP-EM-Error as a receiver:

Configuration Parameters	Value
Host	<xxxxx.cfapps.sap.hana.ondemand.com>
Path	/protocols/amqp10ws
Credential Name	<EMS_Credential> (same credential that was used in the sender tab)
Destination Type	Topic
Destination Name	Topic: <Subscribed topic name in the error queue>
Delivery	Persistent (if the access type of the Queue is Exclusive) Non-Persistent (if the access type of the Queue is non-exclusive)

4 Master Data Replication

4.1 Initial Data Load from SAP S/4HANA Cloud

Purpose

This section describes how to execute the initial data load of material and customer master data from your SAP S/4HANA Cloud system to the SAP Service Cloud Version 2 system. Please replicate the master data in the order listed below.

4.1.1 Company Code

Note The prerequisite is that the Organizational structure is already maintained in the SAP S/4HANA system.

11. Log on to your *SAP S/4HANA Cloud systemcdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END* as Administrator – Data Replication.
12. Under *Data Replication*, choose the app *Replicate by Replication Model*.
13. In the *Replication Model* field, select the organizational structure replication model (for example, **<COM_CODE>**).
14. In the Replication Mode section, select the *Initialization* radio button.
15. Select *Company Code* Business Object.
16. Choose *Display Filter Criteria*.
17. Choose *Edit* to adapt the filter criteria.
18. Under *Filter Criteria to Include Business Object*, add the *Company Code* for the replication in the SAP Service Cloud V2 system.

Field	Operator	User Action Values
Company Code	<is>	<1010> or <1710>

19. Close the browser window and return to the *Replicate by Replication Model* screen.
20. Choose Replicate.

Note: Only manual loading is supported for division, distribution channel, sales organisation, sales office, sales area, sales group and company code.

4.1.2 Organization Structure

Note The prerequisite is that the Organizational structure is already maintained in the SAP S/4HANA system.

1. Log on to your *SAP S/4HANA Cloud systemcdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END* as Administrator – Data Replication.
2. Under *Data Replication*, choose the app *Replicate by Replication Model*.
3. In the *Replication Model* field, select the organizational structure replication model (for example, **<SALES_ORG>**).
4. In the Replication Mode section, select the *Initialization* radio button.
5. Click on the checkbox of *Business Object* to deselect all the business objects.
6. Select *Sales Function Unit* Business Object.
7. Choose *Display Filter Criteria*.
8. Choose *Edit* to adapt the filter criteria.
9. Under *Filter Criteria to Include Business Object*, add the *Sales Organization* for the replication in the SAP Service Cloud V2 system.

Field	Operator	User Action Values
Sales Organization	<is>	<1010> or <1710>

10. Close the browser window and return to the *Replicate by Replication Model* screen.
11. Choose Replicate.

Note This replication can be checked in real time in the SCV2 system (Navigate: *Administrator > General Settings* , verify *Org Structures* under *Company*).

12. Repeat the steps 6–11 for the following business objects.

Table 1: Business Object: Distribution Channel

Field	Operator	User Action Values
Distribution Channel	<is>	<10>

Table 1: Business Object: Division

Field	Operator	User Action Values
Division	<is>	<01>

Table 1: Business Object: Sales Area

Field	Operator	User Action Values
Sales Organization	<is>	<1010> or <1710>
Distribution Channel	<is>	<10>
Division	<is>	<01>

Table 1: Business Object: Sales Office

Field	Operator	User Action Values
Sales Office	<is>	<100> or <170>

Table 2: Business Object: Sales Group

Field	Operator	User Action Values
Sales Group	<is>	<100> or <170>

4.1.3 Customer Master / Relationships

Prerequisites

Error! Bookmark not defined.Procedure

1. Log on to your *SAP S/4HANA Cloud system* `cdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END` as Administrator - Data Replication.
2. Under *Data Replication*, choose the app *Replicate by Replication Model*.
3. In the *Replication Model* field, select **Business Partner Replication Model**, for example `<BPS4TOSCV2>`.
4. In the *Replication Mode* section, select the *Initialization* radio button.
5. Choose *Display Filter Criteria*.
6. Choose *Edit* to adapt the filter criteria. If you want to replicate specific business partner, then enter the filter criteria as follows:

Field	Operator	User Action Values
Business Partner	<is>	For example: <1710003>

- Choose [Save](#).
- Close the browser window and return to the [Replicate by Replication Model](#) screen.
- Choose [Replicate](#).

4.1.4 Material Master

Procedure

- Log on to your [SAP S/4HANA Cloud system](#) `cdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END` as Administrator - Data Replication.
- Under [Data Replication](#), choose the app [Replicate by Replication Model](#).
- In the [Replication Model](#) field, select **Product Replication Model**,

Example <PROD_REP>.

- In the [Replication Mode](#) section, select the [Initialization](#) radio button.
- Choose [Display Filter Criteria](#).
- Choose [Edit](#) to adapt the filter criteria.
- Under [Filter Criteria to Include Business Object](#), add the material for the replication in the SAP Service Cloud Version 2 system.

Field	Operator	User Action Values
Material	<is>	for example, <TG11>

- Choose [Save](#).
- Close the browser window and return to [Replicate by Replication by Model](#) screen.
- Choose [Replicate](#).

4.1.5 Equipment (Registered Product)

- Log on to your SAP S/4HANA Cloud system as Maintenance Planner.

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Master Data Replication

-
2. Go to app *Create Technical Object*.
 3. Choose *Technical Object Type* as *Equipment* from the dropdown.
 4. Enter *Technical Object Category*. For example, S (Customer Equipment) and choose *Continue*.
 5. Enter equipment data. The Mandatory data is as follows:
 - *General Data*: Description
 - *Organizational Data*: Partner Function (for example: <17100003>)
 - *Sales and Distribution*: Sales Organization (for example: <1710 or 1010>), Distribution Channel, Division
 - *Additional Functions > Show Serial Number Data: Material* , for example, <TG11>, *Serial Number*.
 6. Choose *Save* and note the *Technical Object* number which is the equipment number.

To initiate master data replication, log on to your SAP Cloud Integration tenant and deploy the iFlow Replicate Registered Products from SAP Business Suite - Initial Load.

Note To apply replication filter for this equipment configure the iFlow on the More tab, give Filter Condition as: <Equipment eq 'Technical Object Number'> and deploy the iFlow to run it once.

Note It is mandatory that the material and business partner master data that is used in the creation of the technical objects (equipment and functional location) are already replicated to the SCV2 system before the technical objects are replicated.

5 Appendix

5.1 Message Monitoring in SAP S/4HANA Cloud

5.1.1 Assign the Message Monitoring Authorizations to INTERNAL_SALES_REP

Use

This authorization is required to enable the business user <INTERNAL_SALES_REP> to monitor messages in the SAP S/4HANA Cloud system.

Prerequisite

To carry out the following activity, a business user (Administrator) with a business catalog role SAP_CA_BC_COM_CONF_PC (Communication Management - Message Monitoring Configuration) is required.

Procedure

1. Log on to SAP Fiori launchpad in the *SAP S/4HANA Cloud systemcdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END* as an Administrator.
2. Under *Message Monitoring*, choose *Assign Recipients to Users*.
3. On the *Assign Recipient* screen, add your business user <INTERNAL_SALES_REP> using the + sign. Make the following entries for Communication Arrangement SAP_COM_0025 and choose *Assign*:
 - *Namespace*: /SDCFC
 - *Recipient for Alert*: SDCFC_ALL
 - *Message Type*: Application Error or Technical Error
 - *Include on Overview*: Checked

Note You can also assign this message monitoring authorization to multiple business users based on your requirement.

- Choose *Assign*

4. Repeat the above steps for *Communication Arrangement* SAP_COM_0009
 - *Namespace*: /CMDBP
 - *Recipient for Alert*: CMD_BP
 - *Message Type*: Application Error or Technical Error
 - *Include on Overview*: Checked
5. Repeat the above steps for *Communication Arrangement* SAP_COM_0114
 - *Namespace*: /FDMD
 - *Recipient for Alert*: FND_MD
 - *Message Type*: Application Error or Technical Error
 - *Include on Overview*: Checked

5.1.2 Monitor Messages

Use

The procedure describes how to monitor messages in the SAP S/4HANA Cloud system.

Procedure

1. Log on to your *SAP S/4HANA Cloud system* `cdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END` as a Business User **<Internal Sales Representative>**, which you assigned as recipient.
2. Under *Message Monitoring*, choose *Message Dashboard*.
The *Interface Monitor* screen is displayed.
3. Use the *Calendar Monitor* to select the date range to view the triggered messages and choose *Search*.
4. In the *Result List*, select an interface and choose *All Messages* to display all messages for that interface.
5. To check the log, select the message entry. The log is displayed on the right-side of the screen.

6. Note The error messages are automatically reprocessed by a background job. The frequency of the job run is set to 5 minutes.

Additionally, you can manually reprocess the error message by choosing *Reprocess*.
You can also change the trace level of the interface to get a detailed log of the failed messages.

5.2 Ticket Component

Component	
CA-GTF-INT-CFC	For issues relevant to documentation
CEC-CRM-INT	For other technical issues

5.3 System ID for SAP S/4HANA Cloud System

1. Access the [SAP S/4HANA Cloud systemcdrtype_CiasHref_CIAS.SYSTEM.S4_FIORI.ACCESS_URL.END](#) and log on as an Administrator.
2. Choose [Communication Systems](#) from the ID [Communication Management](#) app.
3. Search for the [System ID](#) with system name [Own System](#).
4. The [System ID](#) that appears in the search result is the SAP S/4HANA Cloud system ID that is to be used in SAP Service Cloud Version 2.

Typographic Conventions

Type Style	Description
<i>Example</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.

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