

Configuration Guide

CUSTOMER

Replicate Profit Center from SAP S/4HANA Public Cloud Edition to
S/4HANA Private Cloud

Feb 2025

English

Replicate Profit Center from SAP S/4HANA Public Cloud Edition to S/4HANA Private Cloud



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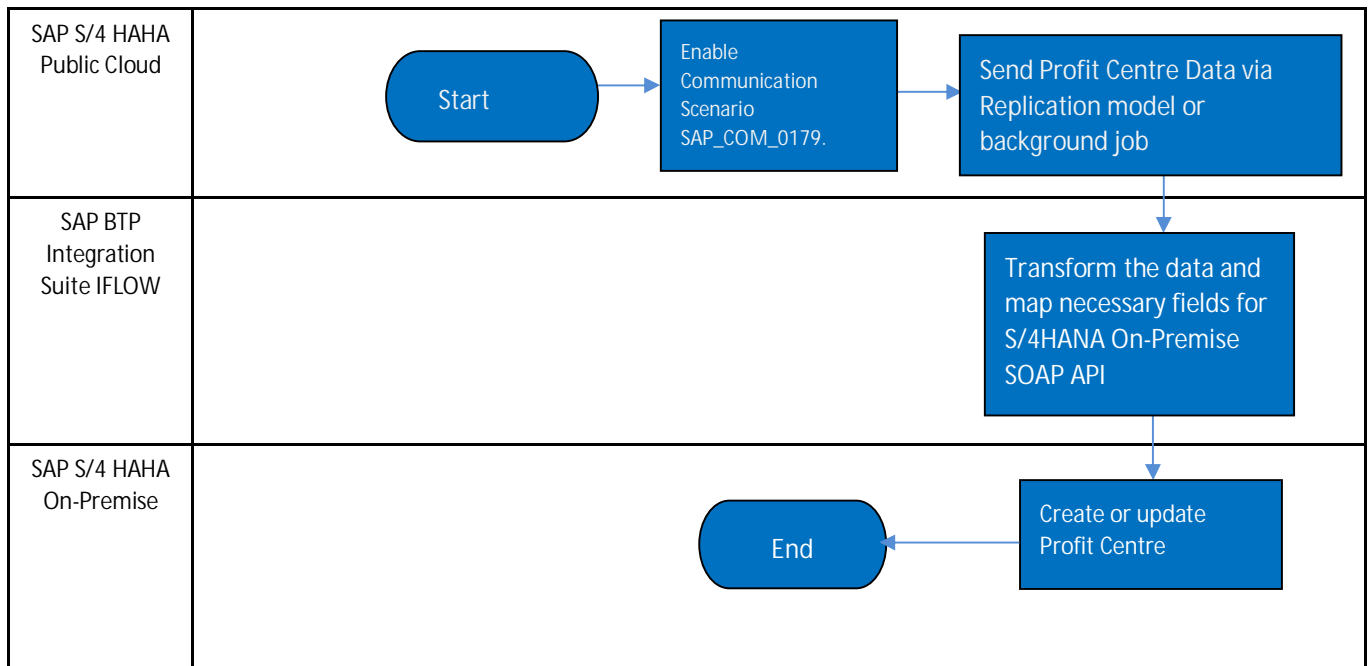
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1 Prerequisites

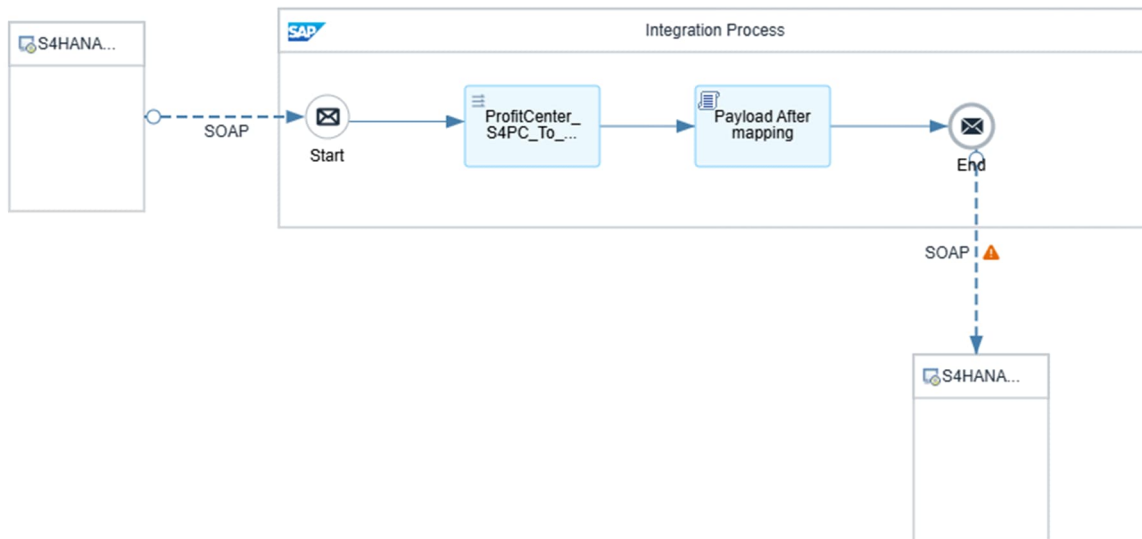
The following configurations are required when implementing this interface:

1. Cloud Connector is recommended to be setup for the connectivity between SAP BTP Integration Suite and S/4HANA On-Premise system.
2. Communication Scenario SAP_COM_0179 is activated in S/4HANA Public Cloud.
3. Data Replication Framework Configuration is completed within S/4HANA Public Cloud.
4. SOAMANAGER Logical Ports are setup in S/4HANA On-Premise.

2 Documentation



Profit Centre Replication Process Flow



Profit Centre Replication Integration Flow

3 Configuration steps on SAP Cloud Integration

3.1 Configure Sender Adapter

The following needs to be configured in the Sender Adapter:

The screenshot shows the 'SOAP' configuration page for a Sender Adapter. The 'Connection' tab is selected. The 'CONNECTION DETAILS' section contains the following fields:

- Address:** A text field with the value `/ProfitCenterReplication`.
- Service Definition:** A dropdown menu set to `Manual`.
- Use WS-Addressing:** An unchecked checkbox.
- Message Exchange Pattern:** A dropdown menu set to `Request-Reply`.
- Authorization:** A dropdown menu set to `User Role`.
- User Role:** A text field with the value `ESBMessaging.send` and a `Select` button to its right.

Sender Adapter Configuration	
Address	Configure a meaningful unique Address after a slash. This will be used from the S/4HANA Public Cloud Communication Arrangement URL.
Service Definition	Manual
User Role	This will depend on the preference of the organization, whether to use 'ESBMessaging.send' or Certificate Authentication

3.2 Configure Receiver Adapter

The following needs to be configured in the Receiver Adapter:

SOAP

Externalize ?

General

Connection

Processing

CONNECTION DETAILS

Address: * <Define Value> /profitcenterreplication/profitcen

URL to WSDL:

Select

Service:

Endpoint:

Operation Name:

Proxy Type:

On-Premise

Location ID:

Authentication:

Basic

Credential Name: *

Timeout (in ms):

Keep-Alive: ☒

Compress Message: ☐

Allow Chunking: ☒

Return HTTP Response Code as Header: ☐

Clean-up Request Headers: ☒

Receiver Adapter Configuration	
Address	This will consist of the URL to the S/4HANA On-premise system and the indicated suffix in the standard package. The corresponding Client System ID has to be added as well.
URL to WSDL	<Maintain the same URL indicated>
Endpoint	<Maintain the same Endpoint indicated>
Operation Name	<Maintain the same Operation Name indicated>
Proxy Type	On-Premise (for Cloud Connector setup)
Location ID	Cloud Connector Location ID if applicable
Authentication	Basic
Credential Name	This is the Credential created within the SAP BTP Security Material section
Timeout	60000

4 Configuration steps on S/4HANA Public Cloud

4.1 Communication System

A communication system is a way for the SAP BTP Integration Suite to call standard Business Partner relevant APIs. The hostname is the application URL for the BTP application. This is then secured with OAUTH2 and client credentials for outbound, this is secured with BASIC for inbound.

4.2 Communication Arrangement

Needs to be set up to link the communication system with the scenario. In this case it will be using the standard communication scenario SAP_COM_0179.

The screenshot shows the SAP Communication Arrangements configuration page for scenario ZSAP_COM_0179. The page is divided into several sections:

- Common Data:** Arrangement Name: ZSAP_COM_0179, Communication System: ZSAP_COM_BTP, Own SAP Cloud System: [Redacted], API-URL: [Redacted].
- Inbound Communication:** User Name: R_PC_BTP_INT, Authentication Method: User ID and Password.
- Inbound Services:** A table listing services and their application protocols.
- Outbound Communication:** Certificate: Client Default, Authentication Method: SSL Client Certificate.

Service	Application Protocol	Service URL (Service Interface)	WSDL/Service Metadata	Additional Properties
Cost Center Group Hierarchy	SOAP	[Redacted]	https://api.bct/rt/vcs_ext/api/costcentergroupshierarchyreq	
Cost Center	SOAP	[Redacted]	https://api.bct/rt/vcs_ext/api/costcenterreplicationbulkreq	
Profit Center Group Hierarchy	SOAP	[Redacted]	https://api.bct/rt/vcs_ext/api/profitcentergroupshierarchyreq	
Profit Center - Create, Delete	SOAP	[Redacted]	https://api.bct/rt/vcs_ext/api/profitcenterreplicationbulkreq	
Cost Center Hierarchy	OData V4	[Redacted]	https://api/costcenter_hierarchy/uvd_s2x/api/costcenterhierarchy/0001/	

In this section, the URL to the BTP Integration Suite IFLOW should also be added so the S/4HANA Public Cloud knows which URL to send the data to once the DRF is triggered.

The screenshot shows the SAP Communication Arrangements configuration page for scenario ZSAP_COM_0179, specifically the configuration for the Profit Center - Send service.

Service Configuration:

- Service Status: ☒ Active
- Application Protocol: SOAP
- Port: 443
- Path: /api/ProfitCenterReplication_DEV
- Service URL: https://integration-suite-nrh-prod-yw0048.8-cp002-rt.ctapps.ap10.hana.ondemand.com:443/...
- Use WSRM: ☐

Job Execution Details:

- Job Status: ☐ Active
- Run Every: 00 (minutes)
- Package Size: 00000000

Additional Properties:

Property Name	Property Value
Replication Model	ZRM_PC_OP
Output Mode	D
Languages (separated by ";" or ":")	
Package Size	1

Triggering the Profit Centre interface.

<

SAP

Replicate by Replication Model

?

MM

Replicate

Display Filter Criteria

?

Select Replication Scope

Replication Model: * ZRM_PC_OP - Profit Center

Edition:

Select Target System

<input checked="" type="checkbox"/>	System ID	Description
<input checked="" type="checkbox"/>	ZPC_SC_100	ZPC_SC_100
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

Select Business Objects to be Replicated

<input checked="" type="checkbox"/>	Business Object
<input checked="" type="checkbox"/>	Profit Center
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Replication Mode

☒ Initialization

☐ Changes

☐ Manual

Select Replication Option

☐ Parallel Processing

Server Group:

Number of Processes: 0

☐ Test Run Only

☐ File Download

☐ Background Mode

Configuration Guide

Error! Reference source not found.

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5 Configuration steps on S/4HANA On-Premise

Profit Centre is received within SAP S/4HANA On-Premise system via Standard SOAMANAGER SOAP API.

5.1 Activation of Standard SOAMANAGER Service

SOAMANAGER Logical Port

The Profit Centre data requires a Standard Service Definition to be activated with its Logical Port configured via SOAMANAGER to enable the receipt of data within S/4HANA On-Premise:

Service Definition: PROFITCENTREREPLICATIONBULKREQ

Logical Port: ProfitCenterReplication

The screenshot displays the SAP Web Service Configuration interface for a system named DEV;251. The 'Configurations' tab is selected, showing the details for the service definition 'PROFITCENTREREPLICATIONBULKREQ'. Below the tabs, there is a section titled 'Define Services and Bindings' with a toolbar containing buttons for 'Create Service', 'Activate', 'Deactivate', 'Delete', 'Republish', and 'Display as List'. A table lists the configured services and bindings.

Service/Binding	Actions	State	Description	Creation Type
✓ PROFITCENTERREPLICATION		Active		
ProfitCenterReplication				Manually created

6 Security and Authentication

6.1 SAP BTP Integration Suite Security Material

SAP BTP Integration Suite will have the following to connect to SAP S/4HANA On-Premise system (depending on which instance – Sandbox, DEV, UAT). These will be referenced in the Integration Flows:

Overview / Manage Security Material

Security Material (68)						OP_SOA X Q Create v Upload v ↺ ⚙	
Name	Type	Status	Deployed By	Deployed On			
S4HANA_OP_SOA_CREDENTIALS_UAT_320	User Credentials	Deployed	[REDACTED]@sap.com	Jun 12, 2024, 15:19:04			
S4HANA_OP_SOA_CREDENTIALS_UAT	User Credentials	Deployed	[REDACTED]@sap.com	Jun 04, 2024, 12:13:52			
S4HANA_OP_SOA_CREDENTIALS_DEV	User Credentials	Deployed	[REDACTED]@sap.com	May 13, 2024, 10:26:59			
S4HANA_OP_SOA_CREDENTIALS_SAT	User Credentials	Deployed	[REDACTED]@sap.com	Mar 20, 2024, 21:17:25			

6.2 S/4HANA Public Cloud Security

The communication user will need to be created in the S/4HANA Public Cloud. This is then referenced in the ZSAP_COM_0179 Communication Arrangement/Communication System.

SAP

Communication System

Search

Refresh

Help

Alerts

MM

ZSAP_COM_BTP

ZSAP_COM_BTP

Edit

Display Changes

Delete

General

Users for Inbound Communication

Users for Outbound Communication

Business Partners

Communication Arrangements

Users for Inbound Communication

Authentication Method

User Name/Client ID

User ID and Password

R_PC_BTP_INT

6.3 S/4HANA On-Premise Security

S/4HANA On-premise User and Password will need to be prepared by the SAP Security team and ensured that it has the appropriate authorizations to receive and process the Profit Centre API.

7 Error Handling

7.1 SAP S/4HANA Public Cloud Interface Monitoring

AIF Monitor:

Ensure that the user has the following access to AIF Namespace (/FINAC for Financial Accounting) in view "Assign Recipients to Users":

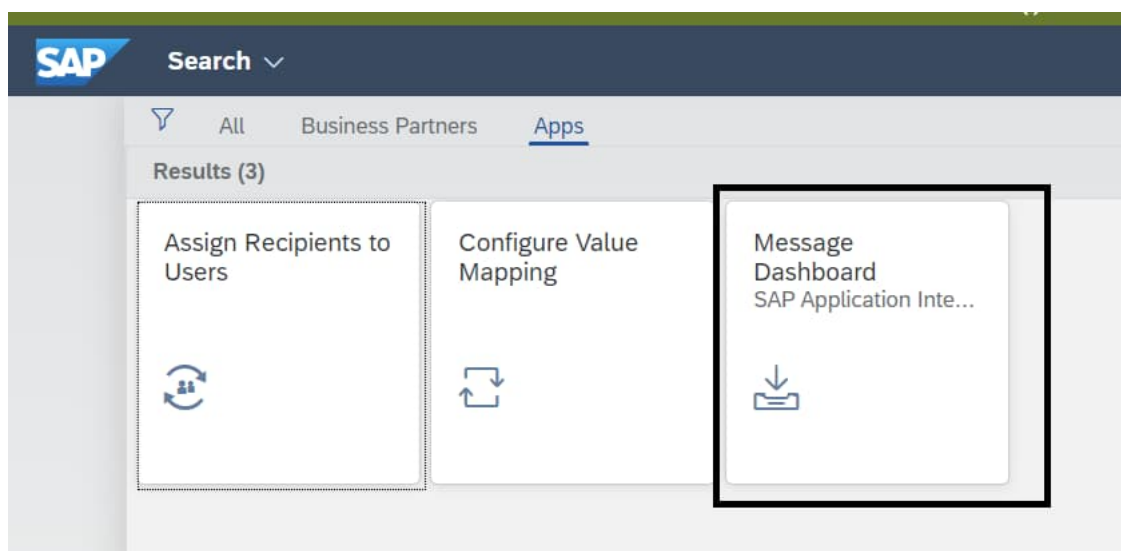
Recipients for User

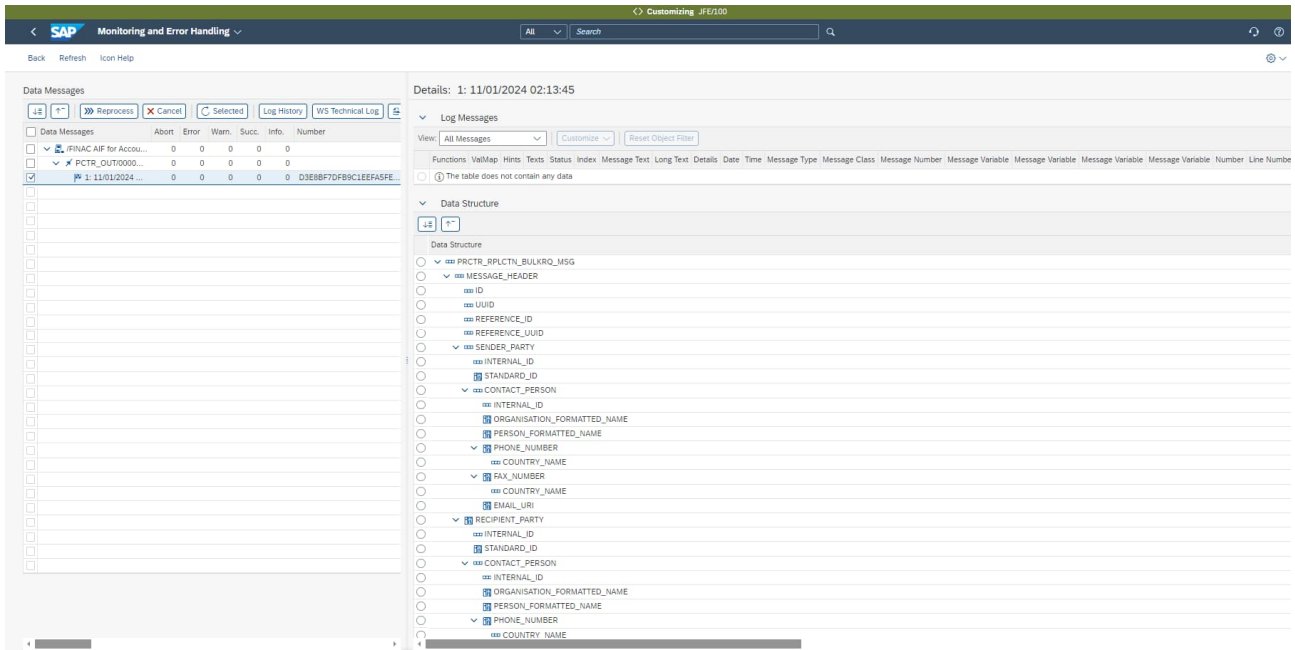
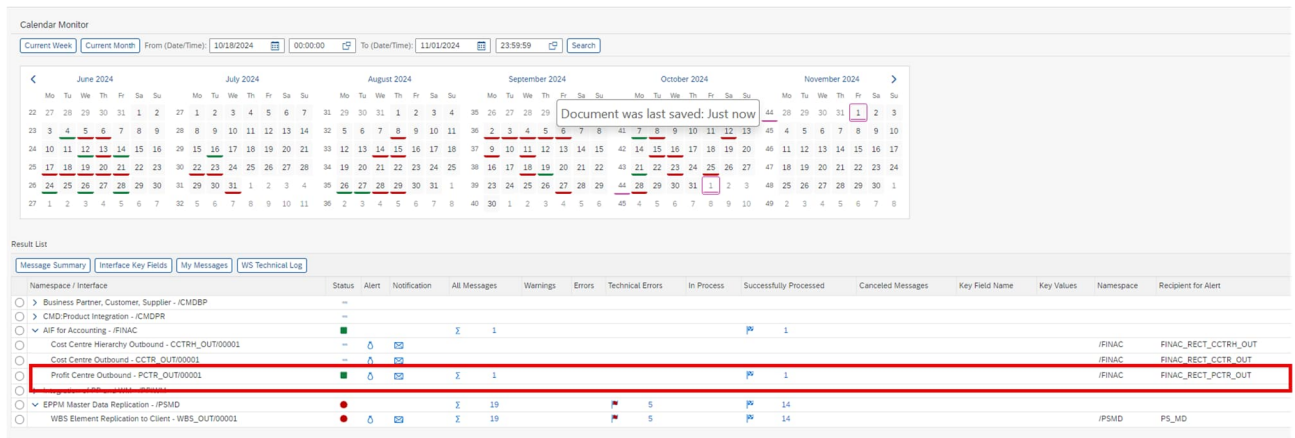
User ID: 720999

Recipients for User (7) Assign Unassign

<input type="checkbox"/> Namespace	Recipient Name	Message Type	Overview	Technical User
<input type="checkbox"/> /CMDDBP	CMD_BP	Application E... <input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> /CMDPR	CMD_PRODUCT	Application E... <input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> /FINAC	FINAC_RECT_CCTR...	Application E... <input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> /FINAC	FINAC_RECT_CCTR...	Application E... <input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> /FINAC	FINAC_RECT_PCTR...	Application E... <input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> /PPIWM	IRFC_PPWM_INTE...	Application E... <input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> /PSMD	PS_MD	Application E... <input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Standard AIF Monitoring can be accessed via the App 'Message Dashboard SAP – Application Interface Framework'





7.2 S/4HANA On-Premise

User can monitor the error log via transaction code /n/IWFND/ERROR_LOG or SRT_UTIL or SRT_MONI.