

Configuration Guide
Replicate Cost Centre from SAP S4HANA Public Cloud Edition to
S4HANA Private Cloud
Feb 2025
English

CUSTOMER

Replicate Cost Centre from SAP S4HANA Public Cloud Edition to S4HANA Private Cloud



Content

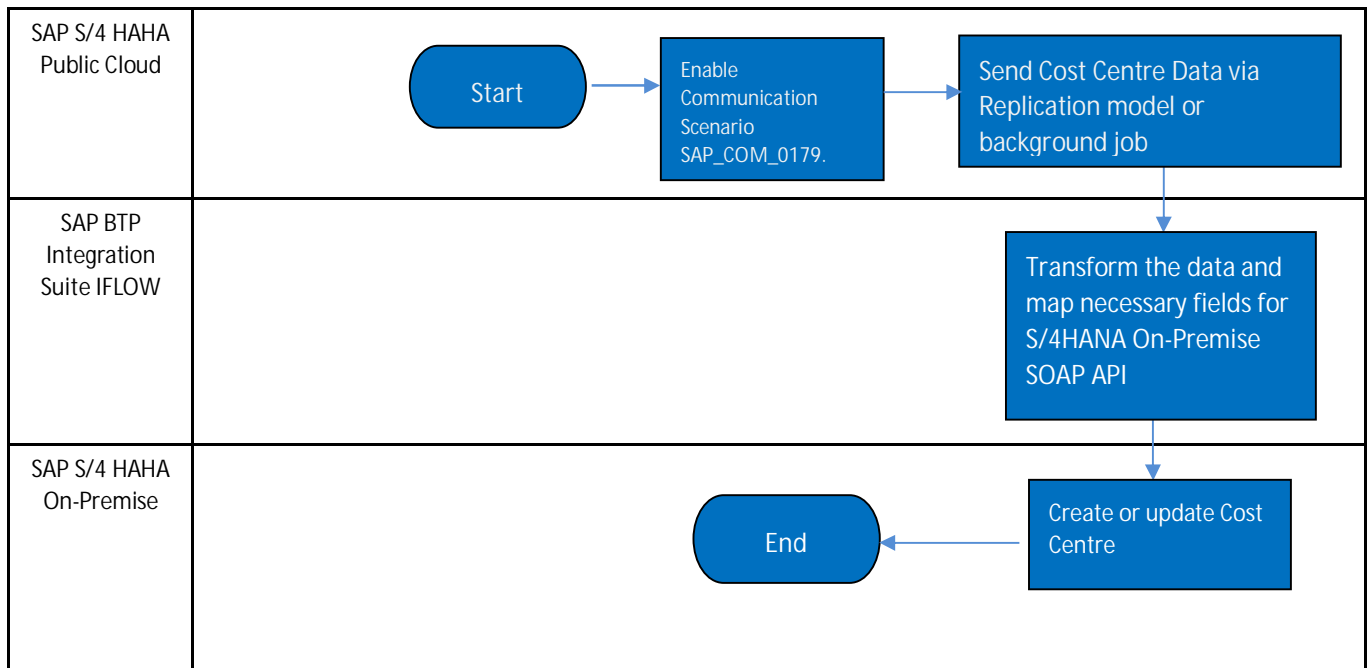
1 Prerequisites	4
2 Documentation	5
3 Configuration steps on SAP Cloud Integration	6
3.1 Configure Sender Adapter	6
3.2 Configure Receiver Adapter	6
4 Configuration steps on S/4HANA Public Cloud	8
4.1 Communication System	8
4.2 Communication Arrangement	8
5 Configuration steps on S/4HANA On-Premise	10
5.1 Activation of Standard SOAMANAGER Service	10
SOAMANAGER Logical Port	10
6 Security and Authentication	11
6.1 SAP BTP Integration Suite Security Material	11
6.2 S/4HANA Public Cloud Security	11
6.3 S/4HANA On-Premise Security	11
7 Error Handling	12
7.1 SAP S/4HANA Public Cloud Interface Monitoring	12
7.2 S/4HANA On-Premise	13
7.3 SAP BTP Integration Suite Monitoring	Error! Bookmark not defined.
7.4 S/4HANA On-Premise	Error! Bookmark not defined.

1 Prerequisites

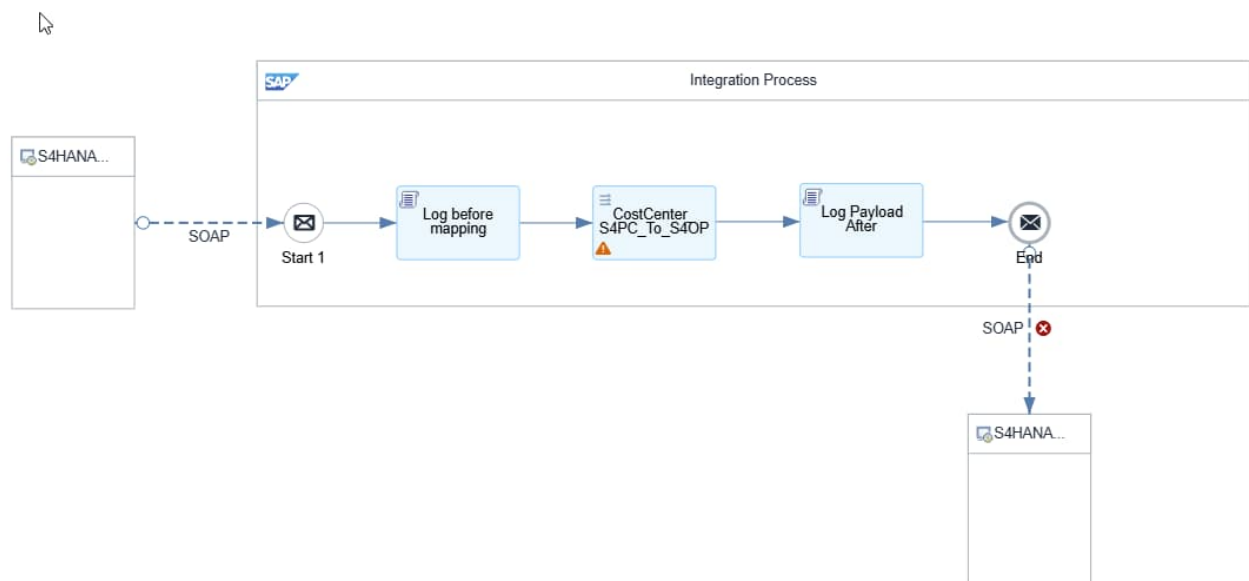
The following configurations are required when implementing this interface:

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



Cost Centre Replication Process Flow



Cost 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:

SOAP

General

Connection

WS-Security

Conditions

CONNECTION DETAILS

Address:

/CostCenterMasterDataReplicationBulkRe

Service Definition:

Manual

Use WS-Addressing:

Message Exchange Pattern:

Request-Reply

Authorization:

User Role

User Role:

ESBMessaging.send

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: *

http://<host>:<port>

/sap/bc/srt/xip/sap/costcentrereplicationb...

<Define Value>

/costcentrerepl_in/costcentrere...

URL to WSDL:

/wsdl/CostCentreRepl.wsdl

Select

Service:

p1:CostCentreRepl_In

Endpoint:

p1:CostCentreRepl_In

Operation Name:

p1:CostCentreReplicationBulkRequest_In

Proxy Type:

On-Premise

Location ID:

{{Location ID}}

Authentication:

Basic

Credential Name: *

<Define Value>

Timeout (in ms):

60000

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 must be added as well.
URL to WSDL	
Endpoint	
Operation Name	
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:** Contains fields for Arrangement Name (ZSAP_COM_0179), Communication System (ZSAP_COM_BTP), and Own SAP Cloud System (API-URL).
- Inbound Communication:** Contains fields for User Name (R_PC_BTP_INT) and Authentication Method (User ID and Password).
- Inbound Services:** A table listing services and their application protocols.
- Outbound Communication:** Contains fields for Certificate (Client Default) and Authentication Method (SSL Client Certificate).

Service	Application Protocol	Service URL (Service Interface)	WSDL/Service Metadata	Additional Properties
Cost Center Group Hierarchy	SOAP	[Redacted]	sap/bc/ur/cs_ext/sap/costcentergroup/hierarchyreq	Download
Cost Center	SOAP	[Redacted]	sap/bc/ur/cs_ext/sap/costcenterreplicationbulkreq	Download
Profit Center Group Hierarchy	SOAP	[Redacted]	sap/bc/ur/cs_ext/sap/profitcentergroup/hierarchyreq	Download
Profit Center - Create, Delete	SOAP	[Redacted]	sap/bc/ur/cs_ext/sap/profitcenterreplicationbulkreq	Download
Cost Center Hierarchy	OData V4	[Redacted]	sap/api_costcenter_hierarchy/uvd_a2x/sap/costcenter/hierarchy/0001/	Download

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.

Triggering the Cost Centre interface.

<

SAP

Replicate by Replication Model

>

Replicate

Display Filter Criteria

Select Replication Scope

Replication Model: * ZRM_CC_OP - Cost Center (new)

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"/>		

Select Business Objects to be Replicated

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

5 Configuration steps on S/4HANA On-Premise

Cost 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 Cost 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: CostCentreReplicationBulkRequest_In




Logical Port: CostCentreRepl_In










 Web Service Configuration (DEV;251) Help Back

Details of Service Definition: COSTCENTREREPLICATIONBULKRQ

Overview Configurations Classifications Details

Define Services and Bindings

Create Service   Activate Deactivate Delete Republish Display as List 

<input type="checkbox"/> Service/Binding	Actions	State	Description	Creation Type
<input checked="" type="checkbox"/> COSTCENTREREPL_IN	   	Active		
<input type="checkbox"/> CostCentreRepl_In	    			Manually created
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

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	Upload	Refresh	Settings
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

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 Cost Centre API.

7 Error Handling

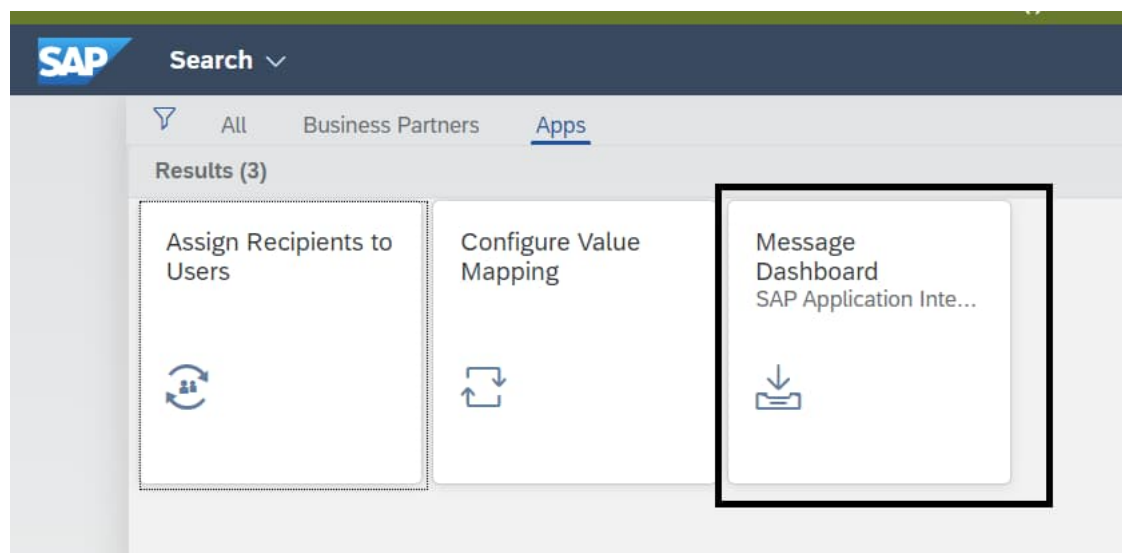
7.1 SAP S/4HANA Public Cloud Interface Monitoring

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 (7)					Assign	Unassign
<input type="checkbox"/> Namespace	Recipient Name	Message Type	Overview	Technical User		
<input type="checkbox"/> /CMDDBP	<i>i</i> CMD_BP	<i>i</i> Application E... ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> /CMDPR	<i>i</i> CMD_PRODUCT	<i>i</i> Application E... ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> /FINAC	<i>i</i> FINAC_RECT_CCTR...	<i>i</i> Application E... ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> /FINAC	<i>i</i> FINAC_RECT_CCTR...	<i>i</i> Application E... ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> /FINAC	<i>i</i> FINAC_RECT_PCTR...	<i>i</i> Application E... ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> /PPIWM	<i>i</i> IRFC_PPWM_INTE...	<i>i</i> Application E... ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/> /PSMD	<i>i</i> PS_MD	<i>i</i> Application E... ▼	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

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



SAP Message Dashboard

Calendar Monitor

Current Week | Current Month | From (Date/Time): 10/18/2024 00:00:00 | To (Date/Time): 11/01/2024 23:59:59 | Search

June 2024 | July 2024 | August 2024 | September 2024 | October 2024 | November 2024

Result List

Message Summary | Interface Key Fields | My Messages | WS Technical Log

Namespace / Interface	Status	Alert	Notification	All Messages	Warnings	Errors	Technical Errors	In Process	Successfully Processed	Canceled Messages	Key Field Name	Key Values	Namespace
> Business Partner, Customer, Supplier - /CMDBP	...												
> CMD-Product Integration - /CMDPR	...												
> AIF for Accounting - /FINAC	...			Σ	84				84				
Cost Centre Hierarchy Outbound - CCTRH_OUT/00001	...												/FINAC
Cost Centre Outbound - CCTRH_OUT/00001	...			Σ	83				83				/FINAC
Profit Centre Outbound - PCTR_OUT/00001	...			Σ	1				1				/FINAC
> Integration of PP and WM - /PPIWM	...												

SAP Monitoring and Error Handling

Back | Refresh | Icon Help

Data Messages

Abort | Error | Warn. | Suc

1: 11/01/2024 0... 0 0 0

2: 11/01/2024 0... 0 0 0

3: 11/01/2024 0... 0 0 0

4: 11/01/2024 0... 0 0 0

5: 11/01/2024 0... 0 0 0

6: 11/01/2024 0... 0 0 0

7: 11/01/2024 0... 0 0 0

8: 11/01/2024 0... 0 0 0

9: 11/01/2024 0... 0 0 0

10: 11/01/2024 ... 0 0 0

11: 11/01/2024 ... 0 0 0

12: 11/01/2024 ... 0 0 0

13: 11/01/2024 ... 0 0 0

14: 11/01/2024 ... 0 0 0

15: 11/01/2024 ... 0 0 0

16: 11/01/2024 ... 0 0 0

17: 11/01/2024 ... 0 0 0

18: 11/01/2024 ... 0 0 0

19: 11/01/2024 ... 0 0 0

Details: CCTRH_OUT/00001 Cost Centre Outbound (83)

Log Messages

View: All Messages | Customize | Reset Object Filter

Functions | ValMap | Hints | Texts | Status | Index | Message Text | Long Text | Details | Date | Time | Message Type | Message Class | Message Number | Message Variable

The table does not contain any data

Data Structure

Cost Center RPLCTN_BULK_RQ

MESSAGE_HEADER

ID

UUID

REFERENCE_ID

REFERENCE_UUID

SENDER_PARTY

INTERNAL_ID

STANDARD_ID

CONTACT_PERSON

INTERNAL_ID

ORGANISATION_FORMATTED_NAME

PERSON_FORMATTED_NAME

SAVE

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.