

Building block Configuration Guide

CUSTOMER

Replicate Employee data from SAP S/4HANA HCM to SAP Concur

January 2022

English

Replicate Employee data from SAP S/4HANA HCM to SAP Concur

Document History

Revision	Date	Author
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1 Prerequisites

Access to the following systems:

1. SAP S/4HANA System (Technical User required)
2. BTP Subaccount for SAP Cloud Integration (Admin Roles)
3. SAP Cloud Integration (Configuration Roles)

2 Configuration steps on SAP Cloud Integration

In this scenario the SAP CI is used as a middleware in order to replicate the employee data from SAP S/4HANA OnPremise HCM to SAP Concur using a custom BAPI. The BAPI is not part of this documentation and needs to be developed by yourself in the ABAP environment. The BAPI should provide the following information (please be aware that changes in the Iflow/Mapping due to different BAPI development might be possible).

Input Parameter:

Funktionsbaustein: aktiv

Eigenschaften Import Export Changing Tabellen Ausnahmen Quelltext

Parametername	Typisi...	Bezugstyp	Vorschlagswert	Opti...	Wert...	Kurztext
IV_INSTITUTE_ID	TYPE	HROBJID		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Filter Institut
IV_LASTNAME	TYPE	PAD_NACHN		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Filter Nachname
IV_TOP	TYPE	INT4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Nur erste x Ergebnisse liefern
IV_SKIP	TYPE	INT4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Skip erste y Ergebnisse
IV_CHANGEDSINCE	TYPE	AEDAT		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Selektion letzte Änderung

Output Paramter

Funktionsbaustein: aktiv

Eigenschaften Import Export Changing Tabellen Ausnahmen Quelltext

Parametername	Typisierung	Bezugstyp	Wertüberga...	Kurztext
ET_PERNR	TYPE	Z_ HCM_RFC_PERNR_CONCU...	<input checked="" type="checkbox"/>	RFC - PerNR Concur
ET_ROLES	TYPE	Z_ HCM_RFC_ROLE_T	<input checked="" type="checkbox"/>	RFC - Roles

ET_PERNR

<input type="checkbox"/> PERNR	Type	▼ PERSNO	NUMC	8	0	0Personalnummer
<input type="checkbox"/> CONTRACTSTART	Type	▼ BEGDA	DATS	8	0	0Gültigkeitsbeginn
<input type="checkbox"/> CONTRACTEND	Type	▼ ENDDA	DATS	8	0	0Gültigkeitsende
<input type="checkbox"/> ISCONTRACTINTERRUPT	Type	▼ XFELD	CHAR	1	0	0Feld zum Ankreuzen
<input type="checkbox"/> CONTRACTINTERRUPT	Type	▼ DATUM	DATS	8	0	0Datum
<input type="checkbox"/> PHONE	Type	▼ AD_TLNMBR1	CHAR	30	0	0Erste Telefon-Nr.: Vorwahl + Anschluß
<input type="checkbox"/> EMAIL	Type	▼ AD_SMTPADR	CHAR	241	0	0E-Mail-Adresse
<input type="checkbox"/> MOBILE	Type	▼ AD_MBNMBR1	CHAR	30	0	0Erste Mobiltelefon-Nr.: Vorwahl + Anschluß
<input type="checkbox"/> DISPLAYNAME	Type	▼ EMNAM	CHAR	40	0	0Aufbereiteter Name des Mitarbeiters bzw. Bewerbers
<input type="checkbox"/> FIRSTNAME	Type	▼ PAD_VORNA	CHAR	40	0	0Vorname
<input type="checkbox"/> LASTNAME	Type	▼ PAD_NACHN	CHAR	40	0	0Nachname
<input type="checkbox"/> USERNAME	Type	▼ SYUNAME	CHAR	12	0	0Benutzername
<input type="checkbox"/> COUNTRYCODE	Type	▼ LAND1	CHAR	3	0	0Länderschlüssel
<input type="checkbox"/> CURRENCY	Type	▼ WAERS	CUKY	5	0	0Währungsschlüssel
<input type="checkbox"/> ACTIVE	Type	▼ CHAR1	CHAR	1	0	0Einstelliges Kennzeichen
<input type="checkbox"/> SYSID	Type	▼ SYSYSID	CHAR	8	0	0Name des SAP-Systems
<input type="checkbox"/> BUKRS	Type	▼ BUKRS	CHAR	4	0	0Buchungskreis
<input type="checkbox"/> WERKS	Type	▼ PERSA	CHAR	4	0	0Personalbereich
<input type="checkbox"/> BTRTL	Type	▼ BTRTL	CHAR	4	0	0Personalteilbereich
<input type="checkbox"/> PERSK	Type	▼ PERSK	CHAR	2	0	0Mitarbeiterkreis
<input type="checkbox"/> PERSG	Type	▼ PERSG	CHAR	1	0	0Mitarbeitergruppe
<input type="checkbox"/> COSTOBJTY	Type	▼ J_OBART	CHAR	2	0	0Objektart
<input type="checkbox"/> COSTOBJID	Type	▼ GEN_REC	CHAR	35	0	0Allgemeiner Empfänger
<input type="checkbox"/> PERNR_MANAGER	Type	▼ PERSNO	NUMC	8	0	0Personalnummer
<input type="checkbox"/> NAMEPREFIX	Type	▼ ANRED	CHAR	15	0	0Anrede
<input type="checkbox"/> NAMEAFFIX	Type	▼ NAMZU	CHAR	15	0	0Zusatzwort
<input type="checkbox"/> TITLE	Type	▼ TITEL	CHAR	15	0	0Titel
<input type="checkbox"/> GENDER	Type	▼ GESCH	CHAR	1	0	0Geschlechtsschlüssel
<input type="checkbox"/> BIRTHDATE	Type	▼ GBDAT	DATS	8	0	0Geburtsdatum
<input type="checkbox"/> BIRTHPLACE	Type	▼ GBORT	CHAR	25	0	0Geburtsort
<input type="checkbox"/> DEPARTMENT	Type	▼ ORGEH	NUMC	8	0	0Organisationseinheit
<input type="checkbox"/> INSTITUTE	Type	▼ HROBJID	NUMC	8	0	0Objekt-Id
<input type="checkbox"/> DIVISION	Type	▼ CHAR60	CHAR	60	0	0Char 60
<input type="checkbox"/> COSTCENTER	Type	▼ TEXT40	CHAR	40	0	0Text in der Länge 40
<input type="checkbox"/> LOCATION	Type	▼ TEXT40	CHAR	40	0	0Text in der Länge 40
<input type="checkbox"/> WORKFORCEID	Type	▼ TEXT40	CHAR	40	0	0Text in der Länge 40
<input type="checkbox"/> ORCIDID	Type	▼ TEXT40	CHAR	40	0	0Text in der Länge 40
<input type="checkbox"/> USERPERMISSION	Type	▼ CHAR1	CHAR	1	0	0Einstelliges Kennzeichen
<input type="checkbox"/> CHANGEDON	Type	▼ AEDAT	DATS	8	0	0Datum der letzten Änderung
<input type="checkbox"/> ISAPPROVER	Type	▼ CHAR1	CHAR	1	0	0Einstelliges Kennzeichen
<input type="checkbox"/> EXAPPROVAL	Type	▼ CHAR1	CHAR	1	0	0Einstelliges Kennzeichen
<input type="checkbox"/> TRAVELWIZARD	Type	▼ CHAR1	CHAR	1	0	0Einstelliges Kennzeichen

ET_ROLES

<input type="checkbox"/> PERNR	Type	▼ PERSNO	NUMC	8	0	0Personalnummer
<input type="checkbox"/> ROLECODE	Type	▼ ZI CTE_ROLECODE	CHAR	15	0	0Concur RoleCode (Satzart 400)
<input type="checkbox"/> PARAM1	Type	▼ TEXT50	CHAR	50	0	0Textfeld
<input type="checkbox"/> PARAM2	Type	▼ TEXT50	CHAR	50	0	0Textfeld

2.1 Connect to SAP Concur SFTP Server

Please follow the steps explained in [Cloud Integration – How to Setup Secure Connection to sftp Server](#):

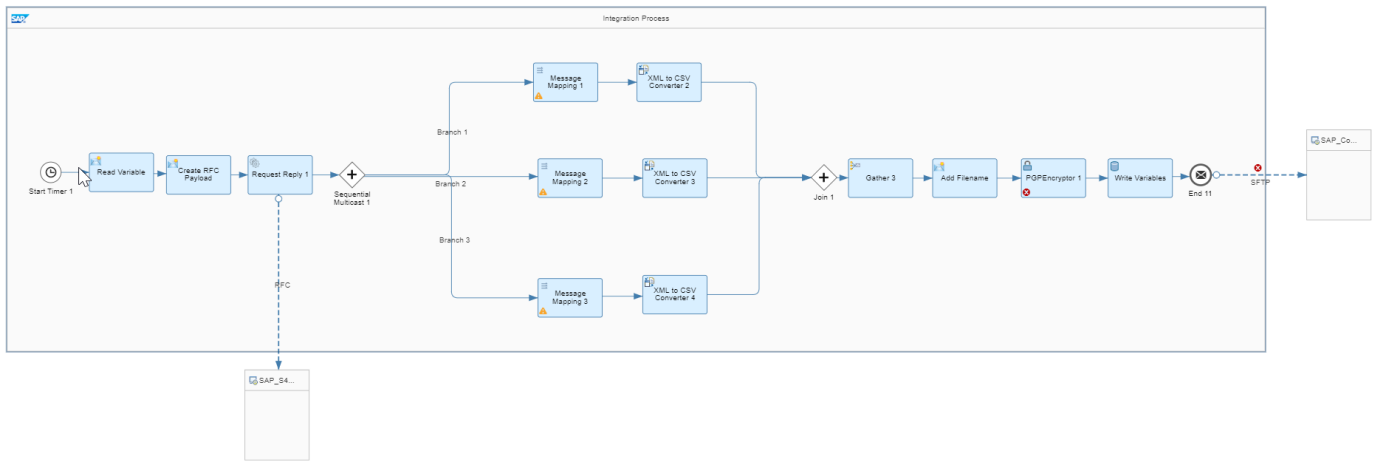
- IP Ranges
- Known Host
- SSH Key

2.2 Create PGP Key

In order to encrypt the message, one has to create a PGP Key in SAP CI.

2.3 Replicate Employee data from SAP S/4HANA to SAP Concur

The main process calls the custom BAPI Z_XXXHCM_PERNR_CONCUR via an RFC Destination and maps the result into three different CSV structures, which is uploaded to an SFTP Server in SAP Concur. The file will be PGP encrypted in the Flow.



2.4 Configuration Steps - Replicate Employee data from SAP S/4HANA HCM to SAP Concur

Timer:

Set the Timer on a daily regular basis.

Configure "Replicate Employee data from S4 Hana HCM to SAP Concur"

Timer Receiver More

Timer: Start Timer 1 [StartEvent_30]

Run Once
 Schedule on Day
 Schedule to Recur

Schedule to Recur

Daily

On Time 03:00 PM

Every 1 min Between 00:00 and 01:00

Time Zone (UTC 0:00) Greenwich Mean Time(Etc/GMT)

Receiver

SAP_ERP:

- Destination: RFC Destination, which has been defined in the SAP BTP Subaccount pointing to the SAP S/4HANA HCM.

Configure "Replicate Employee data from S4 Hana HCM to SAP Concur"

Timer Receiver More

Receiver: SAP_S4_HCM

Adapter Type: RFC

Connection

Destination: <SAP S4 RFC Destination>

SAP_CONCUR_SFTP:

- Directory: Inbound Directory of the SFTP Server
- Address: SFTP Server Host
- Proxy Type
- Authentication: Authentication method
- User Name: User Name
- Private Key Alias: Private Key Alias

Processing

- Handling for Existing Files

More

- LAST_SUCCESS_DATE_DEFAULT_DATE: Define Default Value since when the Iflow should be scheduled.
- PGP_User: PGP Encryption Key
- SFTP_FileName: File Name of the file

3 Value Mapping for Integration between SAP S/4HANA HCM to SAP Concur

The Value Mapping is used in order to map the SAP S/4HANA HCM system ID to a predefined SAP Concur Logsys.

Value Mappings for [Add](#)

CONCUR, VALUE		MAP, LOGSYS	
<input type="text" value="LOGSYS"/>	↔	<input type="text" value="<System ID from SAP S4 HCM>"/>	

4 SAP BTP – Subaccount RFC Destination

Configuration of the RFC Destination on the BTP subaccount

Destination Configuration

Name: *

Type:

Description:

Proxy Type:

User:

Password:

Alias User:

Repository User:

Repository Password:

Location ID:

Additional Properties

jco.client.client	100	
jco.client.gro...	PUBLIC	
jco.client.lang	EN	
jco.client.ms...		
jco.client.r3n...		

- Type: RFC
- Proxy Type: OnPremise
- User: communication user defined in the SAP S/4HANA HCM System
- Password: Password of this communication user
- LocationID: location ID of the cloud connector

Additional Properties:

- Jco.client.amshost: xxx (as defined in the Cloud Connector)
- jco.client.r3name: xxx (as defined in the Cloud Connector)
- Jco.client.client: SAP S/4HANA client
- Jco.client.lang: EN (System language)
- jco.client.group: PUBLIC

5 Cloud Connector

The cloud connector is used as a reverse inbound proxy in order to be able to communicate from Cloud to an OnPremise system. One has to configure the RFC Destination to the SAP S/4HANA HCM backend system.

Edit System Mapping

i Virtual host and port cannot be edited

Back-end Type: ABAP System

Protocol: RFC

Virtual Host:

Virtual Port:

*Internal Host:

*Internal Port:

SAProuter:

Principal Type: None

SNC Partner Name:

Host In Request Header: Use Virtual Host

Description:

Check Internal Host:

Save Cancel

Please also allow the following resource:

- Z_XXXHCM_PERNR_CONCUR