

CUSTOMER

SAP S/4HANA Vendor and Vendor Group Replicate to SAP Concur
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English

SAP S/4HANA Vendor and Vendor Group Replicate to SAP Concur



Contents


1. Prerequisite	3
2. Overall Introduction.....	4
3. Configuration Steps on SAP Cloud Platform Integration	7
3.1 Configure Value Mapping VendorCurrencyValueMapping	7
3.1.1 Edit currency mapping rule.....	7
3.2 Configure iflow Get Concur Token.....	7
3.2.1 Configure the externalize parameter	7
3.3 Configure iflow Vendor and Vendor Group Replicate to Concur.....	8
3.3.1 Set timer start parameter	8
3.3.2 Set receiver parameter for ConcurAPI.....	8
3.3.3 Set receiver parameter for S4HANA.....	9
3.3.4 Set receiver parameter for CustomerMailServer.....	9
3.3.5 Set receiver parameter for Other Parameters.....	9

1. Prerequisite

- Customer should have access information to Concur API, like Concur API Address for example emea.api.concursolutions.com, and related client id, client secret and refresh token for authentication.
- Customer should install SAP Cloud Connector, and make sure the valid connection to on premise S/4HANA OData API, in this guide we would not explain the setup of SAP Cloud Connector, for more information, please refer to SAP Help:
https://help.sap.com/docs/CP_CONNECTIVITY/cca91383641e40ffbe03bdc78f00f681/e6c7616ab5710148cfcf3e75d96d596.html?locale=en-US
- Customer should have SMTP mail server for alert notification.




2. Overall Introduction

There are 3 artifacts in this package, the iflow “Get Concur Token” is used to get concur API call token every half hour and store it in global variable, the iflow “Vendor and Vendor Group Replicate to Concur” is the main iflow to process vendor and vendor group replicate from S/4HANA to Concur, the Value Mapping “VendorCurrencyValueMapping” is used to provide currency mapping logic in iflow “Vendor and Vendor Group Replicate to Concur”.

 Design / Repliate Vendor and Vendor group from S/4HANA to Concur /
Repliate Vendor and Vendor group from S/4HANA to Concur

SaveExportPublic

HeaderOverviewArtifacts (3)DocumentsCommentsTags

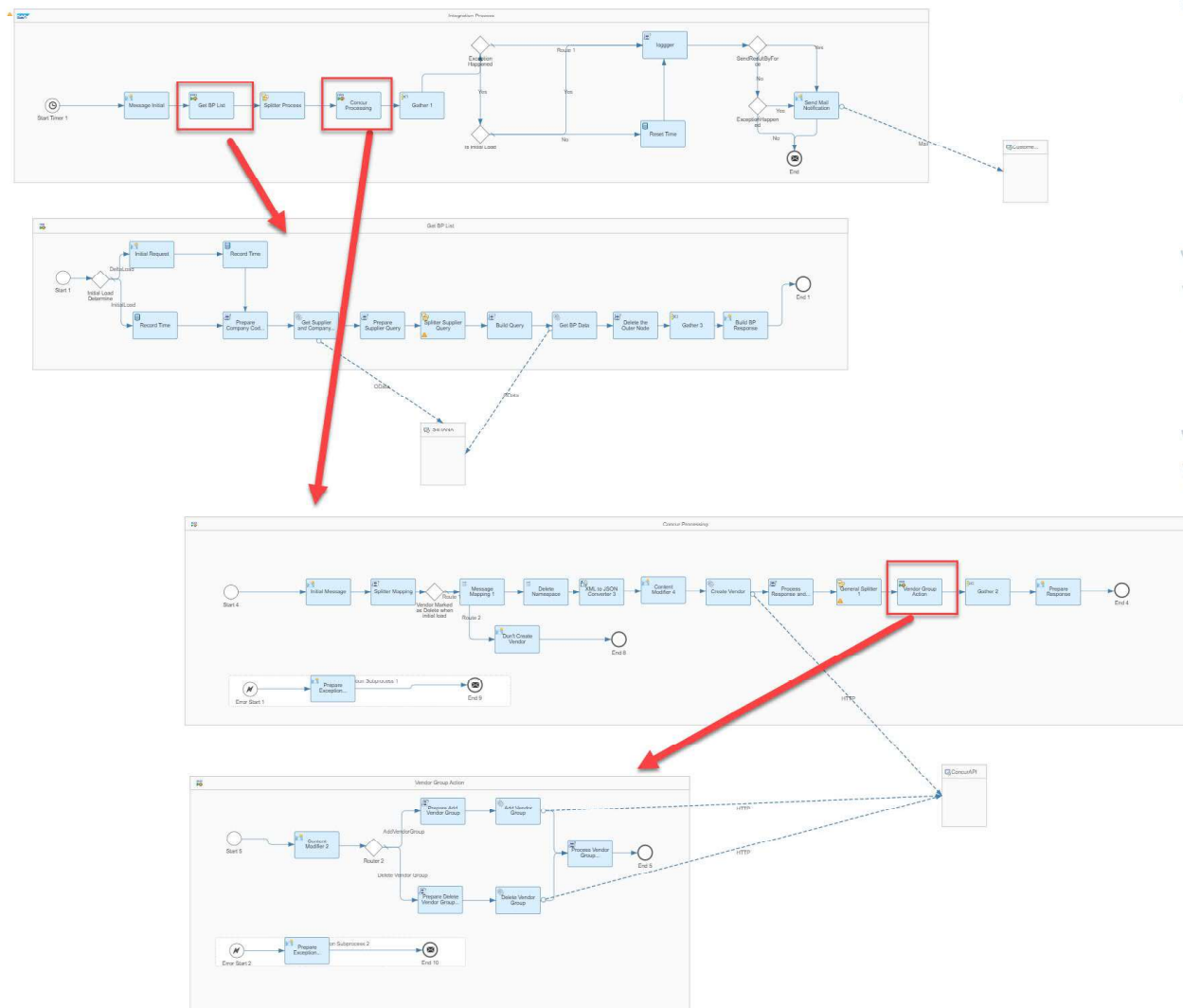
<input type="checkbox"/>	Name	Type	Version	Actions
<input type="checkbox"/>	Get Concur Token Get Concur session token every half hour Created	Integration Flow	1.0.3	
<input type="checkbox"/>	Vendor and Vendor Gourp Replicate to Concur Get S/4HANA BP Data from CPI, then create Vendor, update Vendor and create Vendor Group Created	Integration Flow	1.1.7	
<input type="checkbox"/>	VendorCurrencyValueMapping Created	Value Mapping	1.0.2	

Below is the iflow overall picture. This iflow is used to replicate vendor and vendor group information from S/4HANA to Concur system. First it will get the valid supplier information from S/4HANA via OData call, then it will update vendor information in concur one by one and update vendor group information as well, if any issue happened when calling Concur API, the iflow will not stop processing, it will gather the exception information and send the processing information to customer via mail notification.

Vendor Group is a Concur concept, in this case, we will create vendor group based on following rule, the vendor group name is the Company Code, and group member has 2 attributes “vendorCode” and “addressCode”, both of the attributes’ value is the vendor BP number belongs to this Company Code.

This iflow have full load and delta load mode, in case customer enable full load mode, the system will try to replicate (update) all vendor and vendor group information to Concur, in case customer enable delta load mode, the iflow will only replicate vendor and vendor group information changed after certain timestamp.

By default, this job is schedule every 1 hour, customer could change the frequency based on their requirement.



The detail process steps are:

1. Initial the message properties like full/delta load mode, company code, business partner group, S/4HANA client, etc.
2. Determine the full/delta load mode, based on that build different query and store processing start time.
3. Query S/4HANA supplier number and company code based on given company code list.
4. Query supplier detail information that should equal to supplier number that we have in previous step and should not belong to given business partner group, in case a supplier has business for different company code, and concur support only one currency code for one vendor, the iflow will use the first company code currency.
5. Currently Concur API doesn't support parallel processing, so the iflow will split each vendor information and process them one by one.
6. Update the Concur vendor information via API.

7. Update the Concur vendor group information via API.
8. Gather the processing response and if exception happens, system will alert customer via email with query information and error info inside.

3. Configuration Steps on SAP Cloud Platform Integration

3.1 Configure Value Mapping VendorCurrencyValueMapping

3.1.1 Edit currency mapping rule

Customer could edit the country code and currency code directly in this value mapping.



Design / Replacet Vendor and Vendor group from S/4HANA to Concur / VendorCurrencyValueMapping / VendorCurrencyValueMapping

Bi-Directional Mapping

Agency	Identifier		Agency
S4	Country		Concur

Value Mappings: Default Values:

Value Mappings for Search

S4, Country		Concur, Currency
IN		INR
RU		RUB
PL		PLN
SE		SEK
UK		GBP
NL		EUR
FR		EUR
DE		EUR
IT		EUR
ES		EUR

3.2 Configure iflow Get Concur Token

3.2.1 Configure the externalize parameter

Customer should maintain the 4 parameters here, for client id, client secret and refresh token, they should be provided by Concur side as well as the Concur OAuth URL. Below screenshot is an example.

Configure "Get Concur Token"

More

Type:	All Parameters
ClientID:	bc0d8cc4 f21b 498e 8f5f [REDACTED]
ClientSecret:	ab12e7a3-6ba2-4324-9607 [REDACTED]
ConcurTokenUrl:	https://emea.api.concursolutions.com/oauth2/v0/token
RefreshToken:	aea51e87-4754-445e [REDACTED]

3.3 Configure iflow Vendor and Vendor Group Replicate to Concur

3.3.1 Set timer start parameter

Customer could set the timer start to decide job frequency.

Configure "MM001 FI Business Partner Maintain"

Timer Receiver More

Timer: Start Timer 1 [StartEvent_85420118]

☐ Run Once

☐ Schedule on Day

☒ Schedule to Recur

Schedule to Recur

☐ On Time

☒ Every

Time Zone

04:18 AM

1 hr

Between 00:00 and 24:00

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

3.3.2 Set receiver parameter for ConcurAPI

Customer should maintain related concur API url here.

Configure "MM001 FI Business Partner Maintain"

Timer **Receiver** More

Receiver: ConcurAPI

Adapter Type: HTTP

Connection

Address: {{ConcurAPIAddress}}/api/v3.0/invoice/vendor/groups

ConcurAPIAddress: https://emea.api.concursolutions.com

3.3.3 Set receiver parameter for S4HANA

Customer should maintain the S/4HANA virtual host name that is maintain in Cloud Connector and port here in S/4VirtualHost, and the S/4HANA credential name in CPI here in Credential Name.

Configure "MM001 FI Business Partner Maintain"

Timer: Receiver More

Connection

Receiver: S4HANA

Adapter Type: HCIOData

Address: {{S/4VirtualHost}}/sap/opu/odata/sap/API_BUSINESS_PARTNER

S/4VirtualHost: http://hqprdapp01l:8009

Credential Name: ConcurTo

3.3.4 Set receiver parameter for CustomerMailServer

Customer should maintain the SMTP mail server and port information here in Address, the mail sender email address in From, and the receiver mail address (split by comma) in To.

Configure "Vendor and Vendor Group Replicate to Concur"

Timer: Receiver More

Connection

Receiver: CustomerMailServer

Adapter Type: Mail

Address: <smtpserver>;<port>

Processing

From: sender@address.com

To: receiver1@address.com,receiver2@address.com

3.3.5 Set receiver parameter for Other Parameters

Customer should maintain Business Partner Group ID that supplier should not belong to in S/4HANA (split by comma) in BusinessPartnerGrouping, Company Code that supplier should belong to in S/4HANA(split by comma) in CompanyCode and S/4HANA client number in SAP Client. For CheckPayload, if true, then the iflow will write the API response to attachment for customer to check, if false then no log attachment will be created. For Initialload, if true, then this iflow will replicate all vender and vendor group information to Concur, if false, iflow will only replicate delta vendor and vendor group info to Concur based on last successful run timestamp. For Parallelism, it determines how many threads will be used to concurrent process

OData query to S/4HANA to get supplier information, and for SplitterGroup it determines how many supplier queries should be combined in one group when parallel call S/4HANA OData API. From general recommendation perspective, use the default setting 10 and 100 as a starting point.

Configure "Vendor and Vendor Group Replicate to Concur"

Timer Receiver **More**

Type:	All Parameters
BusinessPartnerGrouping:	<BusinessPartnerGroup1>,<BusinessPartnerGroup1>
CheckPayload:	true or false
CompanyCode:	<CompanyCode1>,<CompanyCode2>
InitialLoad:	true or false
Parallelism:	10
SAP Client:	<S/4HANA client number>
SplitterGroup:	100