

Replicate User Data from Fieldglass to Concur

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Purpose

Quick start to develop an interface which extract contractor's basic data from Fieldglass and create account in Concur.

Integration Specification

Type of Integration (outbound or inbound)	Outbound
Data Source Entities	SAP Fieldglass through soap service
Average Number of Records	1 or more
Maximum number of Records	50K+
Processing Type	Delta
Job Schedule	Daily
Data Description (xml, comma delimited etc...)	CSV
Target Location	SAP Concur SFTP server

This IFLOW pulls user (contractor) data from Fieldglass through Fieldglass connector, , creates an encrypted CSV file based on Concur Employee Import 305 file schema, and uploads it to the Concur SFTP server.

Fieldglass Connector

Fieldglass Connector is a standard integration function which provides both upload and download of Fieldglass data. It can be accessed through Fieldglass Web Service. For Fieldglass Web Service technical specification, please check following help document on Help Portal.

- <https://help.sap.com/viewer/19bd369173524cacb58b6a2b0ca91bab/cloud/en-US/631753725a744d91905fff0e4e939cf1.html>

As a prerequisite, Connector Active Work Order Download should be configured on Fieldglass. For detailed information about this connector, please check following help document on Help Portal.

- <https://help.sap.com/viewer/9cfd5c12ee3046d59453e73974f9c4b7/cloud/en-US/fd195f4b26084bda851c568e2db357a2.html>

NOTE: This IFLOW extracts work order from Fieldglass and creates account on Concur for each work order. If one contractor has several work orders, this IFLOW will create several accounts on Concur. If this doesn't match your requirement, you can select/customize appropriate Fieldglass Connector and develop your own mapping logic based on this IFLOW.

Concur Employee Import 305 File

Concur provides API to add new users, however currently the accounts created by API will not be fully configured and ready for use. Additional work to the user profiles must be completed, either with manual edits or updates via the user import. You can check more detailed information about Concur API on following help document on Help Portal.

- <https://developer.concur.com/api-reference/user/index.html>

This IFLOW uses Concur Employee Import 305 file to create account. For detailed information about Employee Import 305 file, please check document on Concur Technical Documentation Site.

- http://www.concurtraining.com/customers/tech_pubs/ Docs_ExpHelp.htm#imp

NOTE: Each customer has their own customized fields in Concur user profile. If there are fields not provided in this IFLOW when creating Concur account, you can modify the mapping script in the IFLOW.

Data Mapping Logic

Import settings in Concur Employee Import 305 file can be found in following table.

No.	Field [No.] Name	Mapping Logic	Comment
1	[1] Transaction Type	Hardcode to 100	
2	[2] Error Threshold	Hardcode to 0	
3	[3] Password Generation	Hardcode to "welcome"	
4	[4] Existing Record Handling	Hardcode to "UPDATE"	
5	[5] Language Code		Can be configured in IFLOW.
6	[6] Validate Expense Group	Hardcode to "N"	
7	[7] Validate Payment	Hardcode to "N"	

	Group		
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The mapping logic of Fieldglass user data to Concur account can be found in following table.

No.	Target Field [No.] Name in Concur	Source Field in Fieldglass Connector	Mapping Logic	Comment
1	[1] Transaction Type		Hardcode to 305	
2	[2] First Name	Worker First Name		
3	[4] Last Name	Worker Last Name		
4	[5] Employee ID	Work Order ID		
5	[6] Login ID	Work Order ID	Work Order ID + "@" + domain	Format of user@domain required. Domain can be configured in IFLOW.
6	[8] Email Address	Work Order ID	Same as Login ID	
7	[9] Locale Code			Can be configured in IFLOW.
8	[10] Country Code			Can be configured in IFLOW.

9	[12] Ledger Code			Can be configured in IFLOW.
10	[13] Reimbursement Currency Code			Can be configured in IFLOW.
11	[15] Active		Hardcode to "Y"	
12	[42] Employee Custom 21			Expense Group Hierarchy. Can be configured in IFLOW.

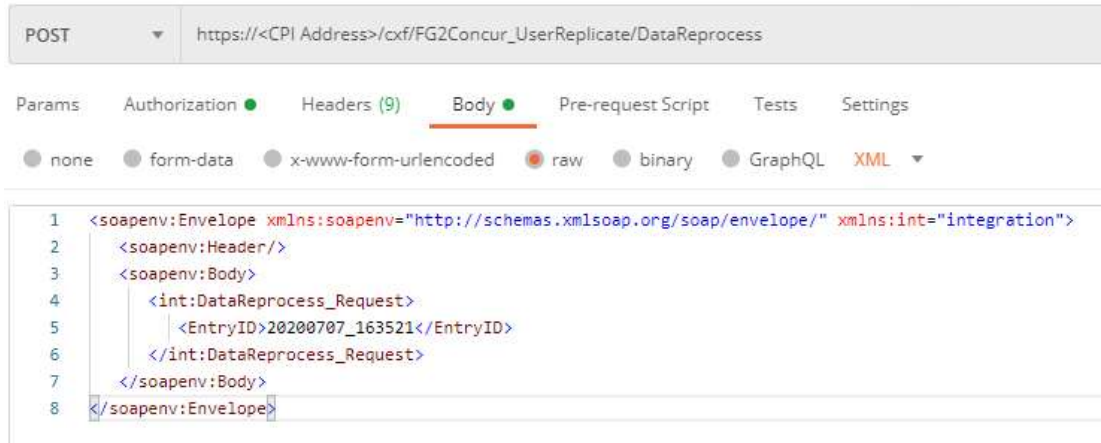
Data Reprocess

The data returned in Fieldglass Connector is the latest change of user data since Connector last call. If there are errors occurred during IFlow running after fetching Fieldglass data, the IFLOW will be stopped with failed status. If the content in the file which upload to Concur SFTP is not correct, regenerate the file is needed after checking the data mapping logic. There are 2 ways to reprocess the Fieldglass Connector data after fixing the IFLOW issue:

- Modify the last run date in Fieldglass side and wait for next IFlow scheduler run.
- Call IFLOW through web service and provide the Entry ID of which data want to reprocess.

After fetching Fieldglass data, the IFLOW will store it in CPI Data Store. Data Store name is FGUserData. The Entry ID is a kind of key to identity each calling result. Entry ID is created using the date when IFLOW runs, format as yyyyMMdd_HHmss.

The URL and WSDL can be found in IFLOW monitor after deployment. Following screenshot shows a sample of calling IFLOW using Postman.



Security Material

Before deploying the IFLOW, following security material should be deployed first.

- User credential (username and password) for accessing Fieldglass Connector
- Public key provided by Concur for encrypting the Employee Import 305 file
- Key pairs for logon Concur SFTP server
- Add Concur SFTP server Host Key to SSH Known Hosts file

Parameters Usage Guide

Configure "Replicate User Master Data from Fieldglass to Concur"

Timer Receiver More

Timer: Start Timer 1 [StartEvent_92409860] ▼

Run Once

Schedule on Day

Schedule to Recur

Schedule to Recur

Daily ▼

On Time

06:00 AM 🕒

Every

1 min ▼ Between 00:00 ▼ and 01:00 ▼

Time Zone

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

Name	Remarks
Scheduler	When you want the IFLOW to run, fetch Fieldglass data and send to Concur SFTP.

Configure "Replicate User Master Data from Fieldglass to Concur"

Timer Receiver More

Receiver: Fieldglass

Adapter Type: HTTP

Address: <Fieldglass Web Service URL>

Connection

Name	Remarks
FG_ADDRESS	Endpoint url of the Fieldglass service. Example of test environment: <a href="https://<env_code>.fgvms.com/ws2/services/connectorn">https://<env_code>.fgvms.com/ws2/services/connectorn Example of production environment: https://www.fieldglass.net/ws2/services/connectorn

Configure "Replicate User Master Data from Fieldglass to Concur"

Timer **Receiver** More

Target

Receiver:

Adapter Type:

Directory:

Address:

User Name:

Private Key Alias:

Name	Remarks
CONCUR_SFTP_DIRECTORY	Directory on Concur SFTP to upload Employee Import file, normally should be under folder in.
CONCUR_SFTP_ADDRESS	Concur SFTP server address
CONCUR_SFTP_USER_NAME	Concur SFTP server logon username
CONCUR_SFTP_KEY_ALIAS	Key alias of key pairs deployed in CPI, used when logon Concur SFTP server.

Configure "Replicate User Master Data from Fieldglass to Concur"

Timer Receiver More

Type:	All Parameters ▼
CONCUR_CTRY_CODE:	<Country Code in Concur file>
CONCUR_CURRENCY_CODE:	<Reimbursement Currency Code in Concur file>
CONCUR_DOMAIN:	<Domain in Concur file>
CONCUR_EXPENSE_GROUP:	<Expense Group Hierarchy in Concur file>
CONCUR_LANGUAGE_CODE:	<Language Code in Concur file>
CONCUR_LEDGER_CODE:	<Ledger Code in Concur file>
CONCUR_LOCALE_CODE:	<Locale Code in Concur file>
ENABLE_PAYLOAD_LOGGING:	false
ENCRYPT_USER_KEY:	<Encryption User ID>
FG_CONNECTOR:	Active Work Order Download
FG_CREDENTIAL:	<Fieldglass Connector Credential Name>

Name	Remarks
CONCUR_CTRY_CODE	Country Code in Concur Employee Import 305 file
CONCUR_CURRENCY_CODE	Concur Reimbursement Currency Code in Concur Employee Import 305 file
CONCUR_DOMAIN	Domain in Concur Employee Import 305 file
CONCUR_EXPENSE_GROUP	Expense Group Hierarchy in Concur Employee Import 305 file

CONCUR_LANGUAGE_CODE	Language code in Concur Employee Import 305 file
CONCUR_LEDGER_CODE	Ledger code in Concur Employee Import 305 file
CONCUR_LOCALE_CODE	Locale code in Concur Employee Import 305 file
ENABLE_PAYLOAD_LOGGING	Configurable parameter to allow logging of payloads (value set to true to print payloads, otherwise set to false)
ENCRYPT_USER_KEY	Encryption User ID of public key provided by Concur for encrypting the Employee Import 305 file.
FG_CONNECTOR	Fieldglass Connector name to download user data, default is Active Work Order Download
FG_CREDENTIAL	User credential name deployed in CPI to access Fieldglass Connector.

Scripting

Name	Description
generateRequestBody	Generates request for Fieldglass Connector call.
handleException	Handle errors when calling Fieldglass and when reprocess stored Fieldglass data.
logParameters	Logs entryId (entryId is used to hold a key generated for each

	Fieldglass call and to uniquely identify it. It is generated in the format <code>\${date:now:yyyyMMdd'_'HHmmss}</code>
logPayload	If parameter ENABLE_PAYLOAD_LOGGING is set to true then this script logs responses from service calls and payloads after mapping.
mapData	Maps data to the 305 file format required by Concur