Building block Configuration Guide
Send Employee Information to Fidelity SFTP Server
November 2022
English

Send Employee Information to Fidelity SFTP Server

SAP

Document History

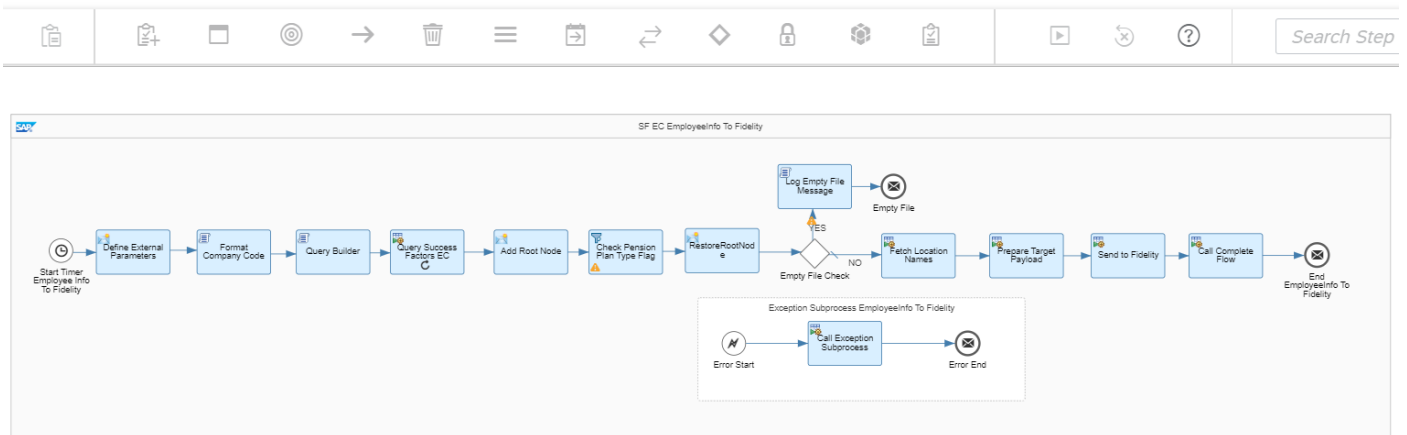| Revision	Date	Author

Content

1 Prerequisites

The following are the prerequisites to use this integration flow:
- Access to Success Factors Employee Central
- SFTP access to Fidelity server

2 Documentation

Send Employee Information to Fidelity SFTP Server   Deployment Status: Not Deployed

Steps Used:

This is the main Integration Process flow. It contains the trigger point and is responsible for calling the individual local processes in sequence.

1. The interface is scheduled to run once a week using the timer event.
2. The query for delta mode is built using the groovy script to filter employees based on legal entity. The following activities are also done in the script:
   ➢ If the LastModifiedOn external parameter is maintained, the query is built using the same, else the last execution timestamp is retrieved from the CPI variables and used in the query.
   ➢ The parameters for the query are dynamically set based on whether it is the first run of the day or not.
3. The Local integration process Query Success Factors EC is invoked to retrieve employee data in loops. The records are fetched in batches based on the page size configured on receiver SF adapter.
4. Hence fetched records are concatenated and enveloped with root node for further processing.
5. Check for empty response from EC and end the flow if so
6. The local integration process - Prepare Target Payload is called in order to carry out the mapping and other modifications required by the target.
7. The local integration process - Send to Fidelity is called to send the resulting file from the previous step to the Fidelity SFTP server.
8. The flow is completed by calling the Local integration process 'Complete Flow'.
9. Any exceptions are caught using Local integration process 'Exception subprocess'.
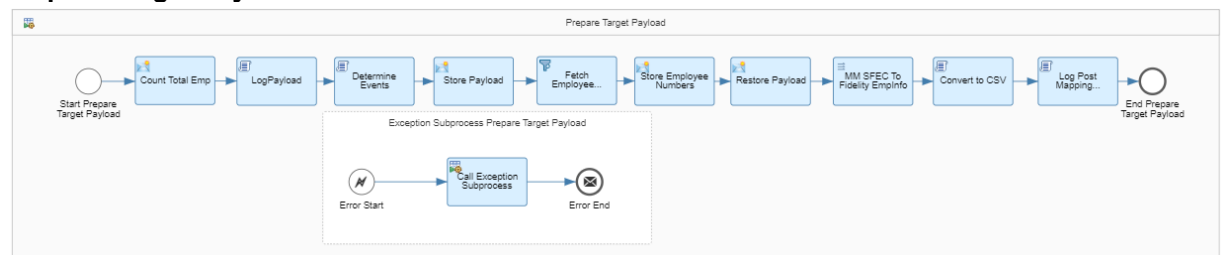
Local Integration Flows:

1. Query Success Factors EC
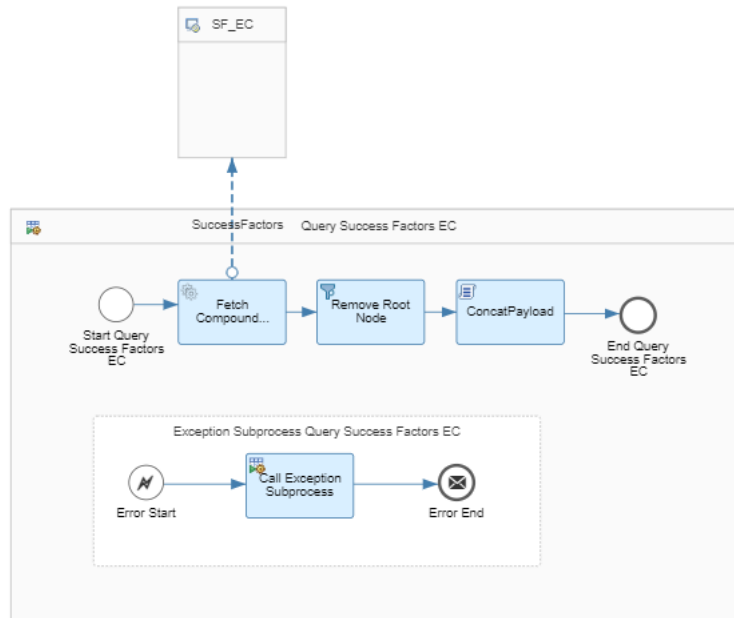
This looping local process is responsible for querying the employee information from Success Factors Employee Central based on the query which was built in the previous step. It concatenates the individual payloads and sends the data back to the main flow.

Loop condition: ${property.SF_EC.SuccessFactors_Rcv_EmployeeData.hasMoreRecords} contains 'true'

2. **Prepare Target Payload**

This local integration process is responsible for the following:

1. Take a count of the total number of employees which are being processed which will be added in the custom header in the monitoring page.
2. Log the Payload received from SF. The payloads are logged appropriately based on EnableLogging external parameter and when trace level == 'DEBUG' or 'TRACE'.
3. Determine Events - Script to determine the records which are applicable for the employees based on the events/data change.
4. Take a backup of the payload in the form of a property. Then fetch the employee numbers and store them in a property for logging purposes. Restore the payload and proceed for mapping.
5. Message Mapping to map the data into the required structure, keeping the fixed fields lengths intact.
6. Script to convert the post mapping payload into a flat file structure. No delimiter is used for the same. The fields are appended one after the other keeping the spaces (if any) intact.
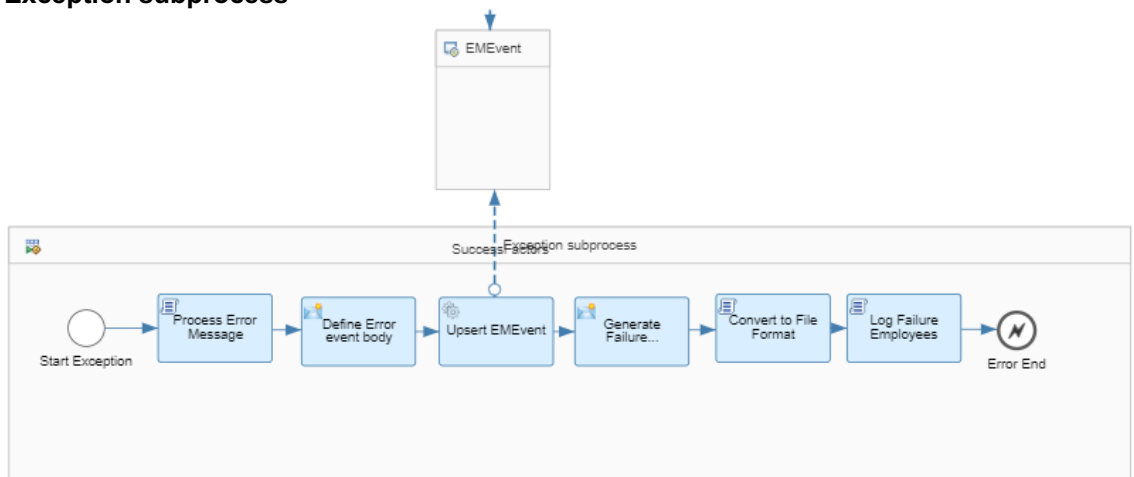7. Log the post mapping payload

3. Send to Fidelity
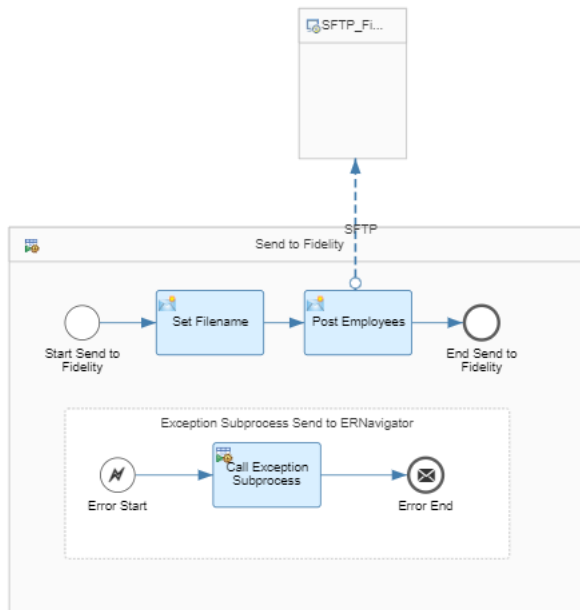
This local integration process is responsible for sending the data to the Fidelity SFTP Server. A dynamic filename is used for the same:
Fidelity-SNA${date:now:yyyyMMddHHmmss}.FID

4. Exception subprocess

This local integration process is responsible for exception handling. Whenever the main integration flow fails, or one of the local flows fail, this integration process will be called.

1. This process prints the error message as a custom header log in the monitoring screen of CPI.
2. It then prints the list of failed employees in a flat file format as an attachment.
3. It also upserts the error details into the execution manager of Success Factors Employee Central.

5. Complete Flow
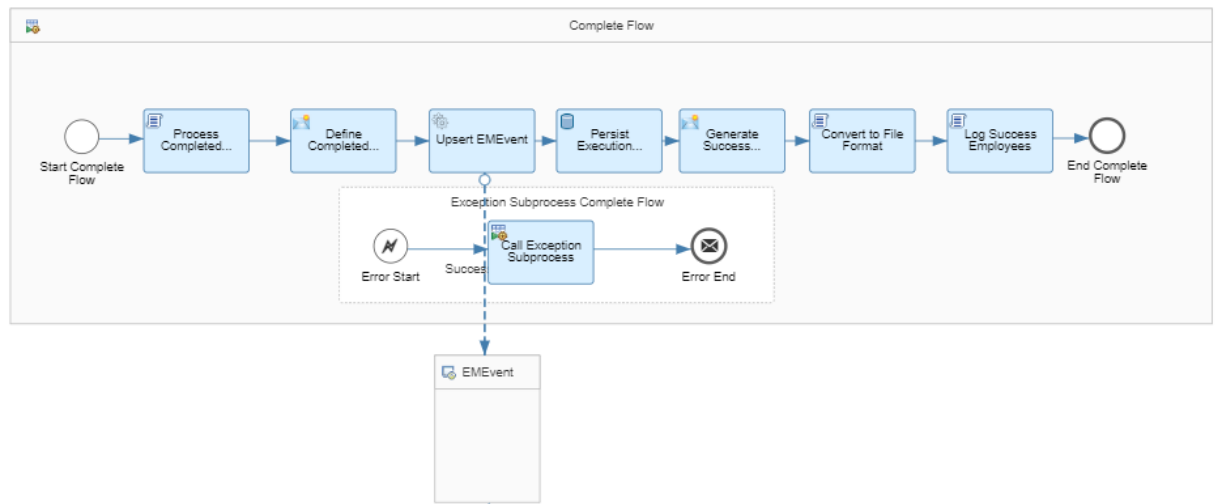
This local integration process is responsible for carrying out the following activities post successful completion of the main process flow:

1. Print the summary report in the monitoring screen of SAP CPI.
2. Upsert the successful entry into the Execution Manager of SuccessFactors Employee Central.
3. If successful, persist the current date timestamp as the last successful run, in the CPI variables. For the next run, this variable will be fetched, and the query will be formed accordingly.
4. It also prints the list of successful employees in a flat file format as an attachment.

3 Configuration steps on SAP Cloud Integration

3.1 Configure Sender Adapter

System Name: SF_EC

1. **Address**: Enter the URL for the Success Factors Employee Central system
2. **Authentication**: Enter the authentication mechanism: Basic/OAuth2 SAML Bearer Assertion
3. **Credential Name**: Enter the name of the deployed artifact which contains the Employee Central Credentials.
4. **Page Size**: Enter the desired page size of the payload which determines the no of records per page fetch.
5. **Timeout**: Maximum time system waits before the operation is terminated.

3.2 Configure Receiver Adapter

System Name: SFTP_Fidelity

1. **Directory**: Enter the target directory in which the file is to be placed.
2. **Address**: Enter the SFTP address of the Fidelity server.
3. **Authentication**: Enter the authentication mechanism – public key/UserName Password/Dual/Dynamic
4. **Username**: Enter the username to be used for authentication.
5. **Timeout**: Enter the maximum waiting time for the SFTP adapter.
6. **Maximum Reconnect Attempts**: Maximum number of attempts allowed to reconnect to the SFTP server.