



SAP Success Factors Event- or Timer-based Integration with SAP Commission

Version 1.0



Contents

1. Introduction.....	4
1.1. Overview	4
1.2. About This Document.....	4
1.3. Intended Audience	4
1.4. Abbreviations	4
2. Integration Architecture.....	5
2.1. Replicate Organization Data from SAP Success factor Employee Central to SAP Commission	5
3. Integration Process Flow	5
3.1. Event Driven Integration	6
3.2. Data Replication on Schedule/Demand.....	7
3.2.1. Integration Run Options	8
4. Integration Configuration Controller.....	9
4.1. Source SuccessFactors Data Extract Setup	9
4.2. Target Commission Setup	9
4.2.1. Versioning.....	9
4.2.2. Field Validation	10
5. Integration Detailed Design.....	11
5.1. Integration Flow Design	11
6. System Preparation for Employee Master Data Replication	12
6.1. SAP SuccessFactors Employee Central Preparation for Employee Data Replication	12
6.1.1. Permissions for Accessing OData API.....	12
6.1.2. Granting Permissions for Event Driven Integration.....	12
6.1.3. Setting up the OAuth Configuration for Event Driven Integration	12
6.1.4. Creating Integration in Employee Central for the Event Driven Integration.....	13
6.2. SAP Commission Preparation for Employee Data Replication	13
6.2.1. API User Role and Permission.....	13
6.2.2. Business Unit and Unit Type	13
7. BTP Integration Suite Setup for Employee Data Replication	14
7.1. Prerequisites for using Business Technology Platform	14
7.1.1. BTP User Authentication and Component Access	14
7.2. Configuration of Integration Suite for Organization Data Replication.....	14
7.2.1. Configuring Certificates and Permissions	14



7.2.2.	Configuring Credentials for Communication between BTP Integration Suite and Integrated systems	14
7.2.3.	Configuring Key Pair for Communication between BTP Integration Suite and SAP Commission GoAnywhere	15
7.2.4.	Setup HTTP Inbound and Outbound Connection for Event Driven Integration.....	16
7.2.5.	Determine End Point URL	17
7.2.6.	Copying the Integration Package to Integration Suite Tenant	19
7.2.7.	Configuring the Integration Flow for Employee Master Data Replication	19
7.2.8.	Configuring the Integration Flow for Event Driven Replication	20
7.2.9.	Configuring the Integration Flow Process Parameters	21
8.	Logging and Monitoring Integrations	23
8.1.	Monitoring Integration Flow in BTP Integration Suite	23
8.2.	Logging and Monitoring in Employee Central.....	23
8.2.1.	Integration Monitor.....	23
8.2.2.	SFAPI Audit Log	23
9.	Error and Recovery	23
9.1.	Data Validation Errors.....	23
9.2.	Exceptions.....	24
9.3.	Reprocess Data Replication	24
9.3.1.	Event Driven Master Data Replication	24
9.3.2.	Employee Master Data Replication.....	24
10.	Transport Integration Package across Tenants	24

.....



1. Introduction

1.1. Overview

The document explains the technical specification and component requirement to establish an interface between SAP cloud applications – SAP Success Factors Employee Central and SAP Commission on BTP platform using Integration Suite.

The objectives of this document are to:

- Describe High-level Integration Architecture and Integration Package to implement the Use cases – Replicate Organization data from SAP Success Factors Employee Central to SAP Commission.
 - Load Payment Data from SAP Commission to Success Factors Employee Central. •

Serve as the “blueprint” for the Design, Build and Implement phases of the Integration.

1.2. About This Document

This document is intended to define the Integration Architecture, Process Flow and Detailed design of the Interface between SAP Success Factors and SAP Commission.

1.3. Intended Audience

This document is intended for the use of SAP consultants, partners and employees. It provides information and support for the Data Integration Project Manager and Team Members in an integration project.

1.4. Abbreviations

BTP – Business Technology Platform

CPI – Cloud Platform Integration aka Integration Suite

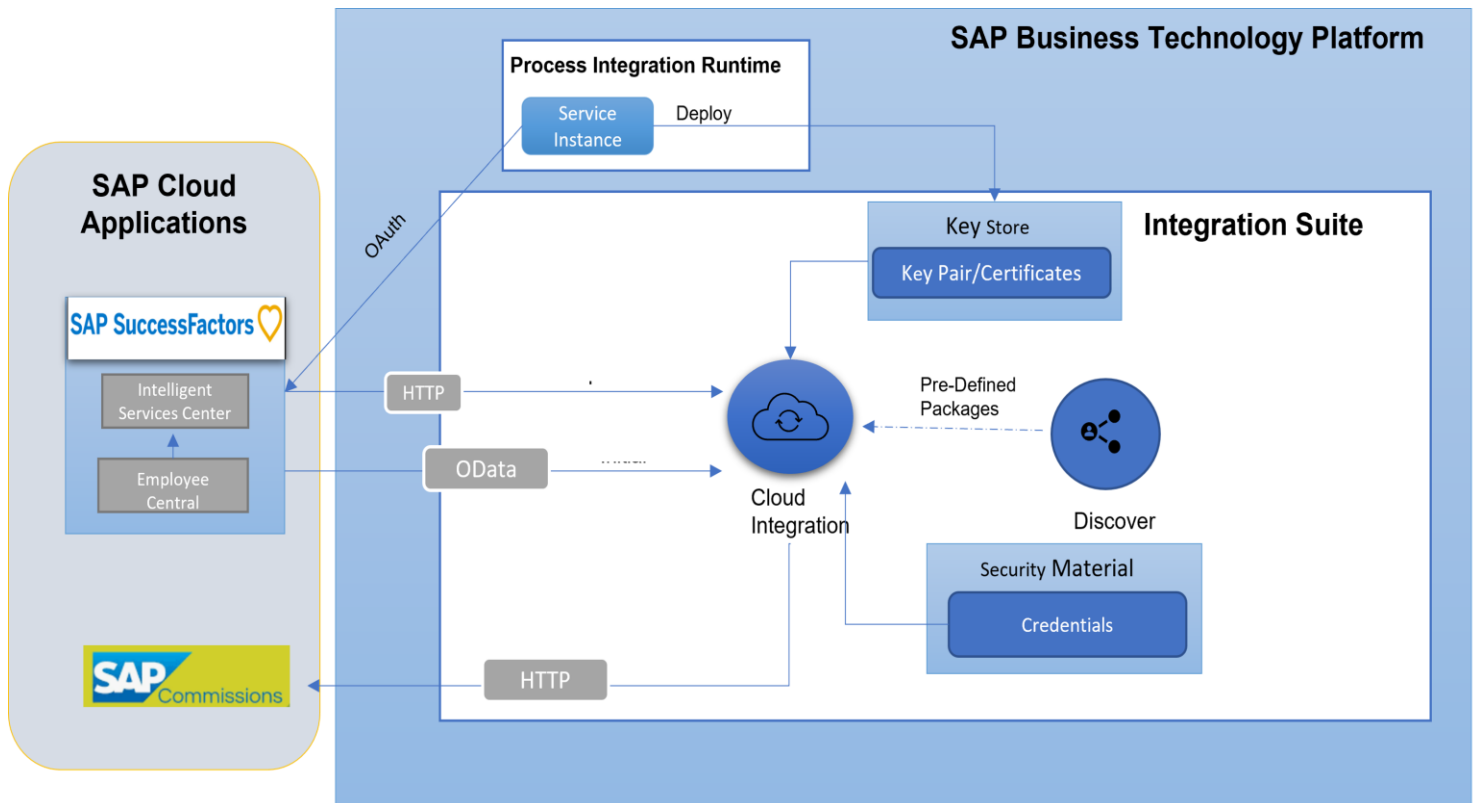
EM – Enterprise Messaging

EC – Employee Central

SF – SuccessFactors

2. Integration Architecture

2.1. Replicate Organization Data from SAP Success factor Employee Central to SAP Commission

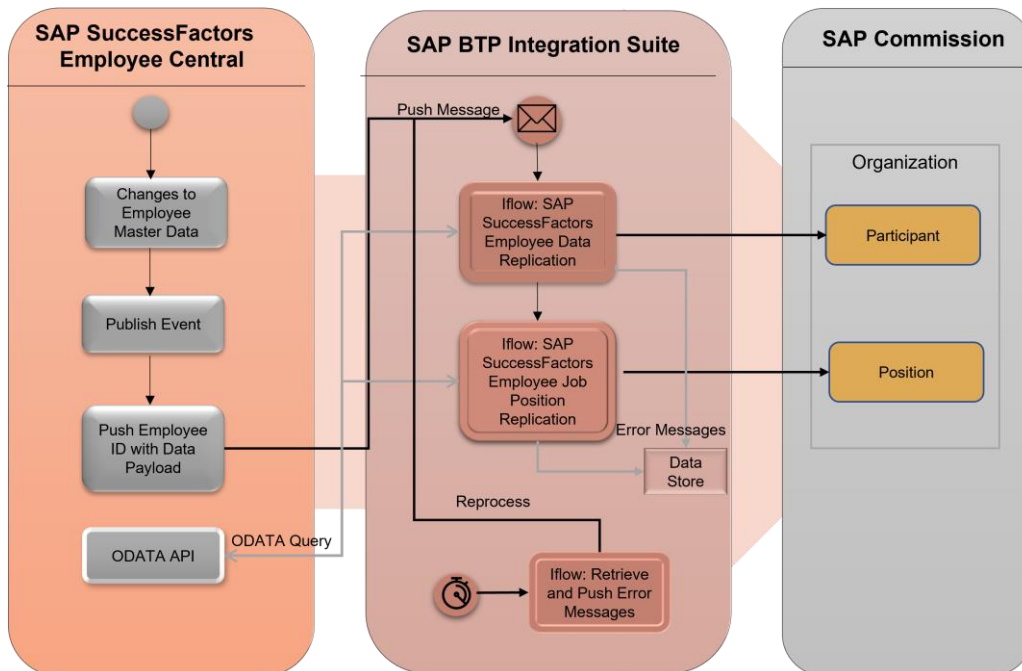


3. Integration Process Flow

The integration scenario for Organization Data replication from Employee Central to SAP Commission configured to run on demand or triggered by a predefined event published by Employee Central.

3.1. Event Driven Integration

Event Driven Integration flow used if there is a need to have data replication triggered immediately from Employee Central for certain job events. Below is a graphical overview of how the integration flows work and how the systems interact with each other.



Configuring the integration scenario for Event Driven Integration involves setting up three Integration flows.

- **Push Employee Data from SuccessFactors Employee Central to Commission Participant Entity**

The following steps describe the detailed flow:

1. This Integration flow is triggered by an event configured in Employee Central. EC publishes the message to the Integration Flow over the HTTP protocol.
2. The Integration flow calls the ODATA API of Employee Central to get the relevant data of the employee sent on consumed HTTP message.
3. Result payload data mapped to the Commission attributes based on the business logic defined in the Message Mapping.
4. Then it compares the new data payload against existing data in Commission to determine the REST URI to perform the DML action.
5. The results are then sent to the SAP Commission system in JSON format.

6. Upon successful completion, it invokes the Position Integration Flow.

- **Push Employee Job Position from SuccessFactors Employee Central to Commission Position Entity**

The following steps describe the detailed flow:

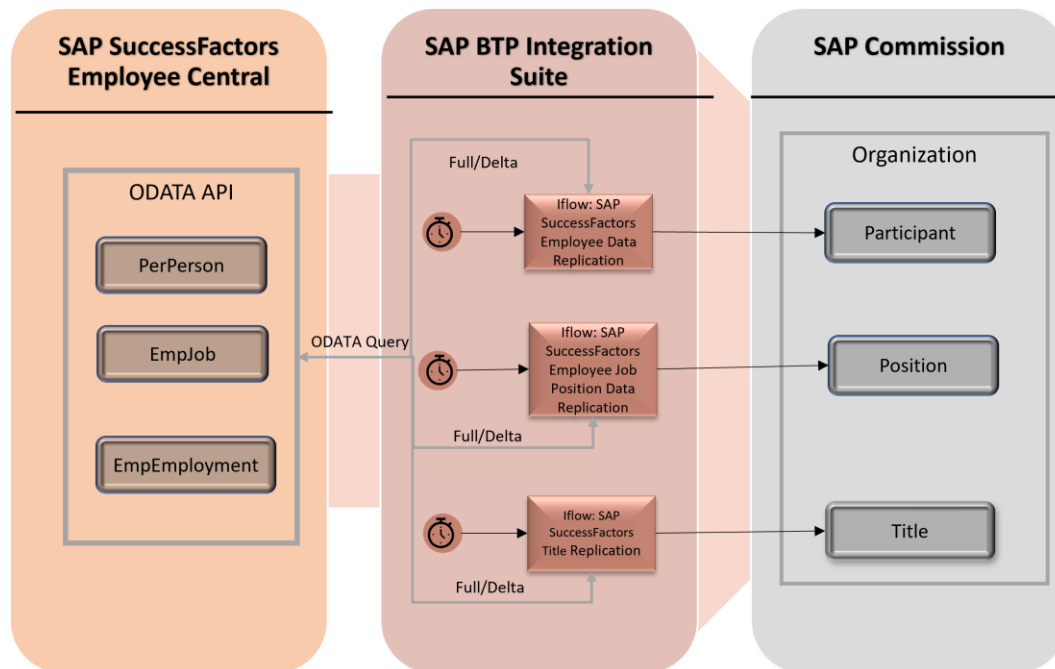
1. This Integration flow consumes the HTTP Inbound message from the Participant Integration flow.
2. The Integration flow calls the ODATA API of Employee Central to get relevant Employee Job Data of the employee sent on consumed HTTP message.
3. Result payload data mapped to the Commission attributes based on the business logic defined in the Message Mapping.
4. Then it compares the new data payload against existing data in Commission to determine the REST URI to perform the DML action.
5. The results are then sent to the SAP Commission system in JSON format.

- **Reprocess Error Event Message**

Use this Integration Flow if there is a need to reprocess the messages errored out during the event-driven data replication. It can be scheduled to run at a desired time.

3.2. Data Replication on Schedule/Demand

Below is a graphical overview of how the integration flows work and how the systems interact with each other.



Configuring the integration scenario for Data Replication Integration involves setting up three Integration flows.

- **Replicate Employee Data from SuccessFactors Employee Central to Commission Participant Entity 1.**
This Integration flow calls the ODATA API of Employee Central to get the Employee data.



2. Based on the configuration run options, the Integration mode is determined.
 3. Result payload data mapped to the Commission attributes based on the business logic defined in the Message Mapping.
 4. Then it compares the new data payload against existing data in Commission to determine the REST URI to perform the DML action.
 5. The results are then sent to the SAP Commission system in JSON format.
- **Replicate Employee Job Position from SuccessFactors Employee Central to Commission Position Entity**
 1. This Integration flow calls the ODATA API of Employee Central to get the Employee Job Position data.
 2. Result payload data mapped to the Commission attributes based on the business logic defined in the Message Mapping.
 3. Then it compares the new data payload against existing data in Commission to determine the REST URI to perform the DML action.
 4. The results are then sent to the SAP Commission system in JSON format.
 - **Replicate Title Data from SuccessFactors Employee Central to SAP Commission**
 1. This Integration flow calls the ODATA API of Employee Central to get the Job code information.
 2. Result payload data mapped to the Commission attributes based on the business logic defined in the Message Mapping.
 3. Then it compares the new data payload against existing data in Commission to determine the REST URI to perform the DML action.
 4. The results are then sent to the SAP Commission system in JSON format.

3.2.1. Integration Run Options

The Timer-Initiated Integration flow is enabled to run on different modes using externalized parameters.

- Full Load – Replicate all employees from EC to Commission.
Optional: Date and time from which you want to replicate the employee data.
- Delta Load – Replicate recent changes from EC to Commission based on the integration execution timestamp.
- Payee – Replicate data of Specific Payees.
 - Multiple Payee list separated by Comma
 - Exclusion Payee List prefixed with “!”



4. Integration Configuration Controller

Integration Configuration Controller allows you to define the settings for each Integration flows which control the behavior of the Integration. There are three value mappings defined for each Integration Flow – Participant, Position and Job Title Replication.

Bi-Directional Mapping Search

Agency	Identifier		Agency	Identifier
SuccessFactors	PerPosition		Commission	Position
SuccessFactors	PerTitle		Commission	Title
SuccessFactors	PerPerson		Commission	Participant

Value Mappings: Default Values:

Value Mappings for Search

SuccessFactors, PerPerson		Commission, Participant
EventVersion		salary
MandatoryFields		payeeld,userId,firstName,lastName,effective...
SFFields		emailNav/emailAddress,personalInfoNav/firs...
SFEntities		emailNav,personalInfoNav,personEmpTermi...
SFKey		employmentNav/userId

Usage:
ValueMap (Source agency, Source identifier, Source value, Target agency, Target identifier) = Target value;
Example:
ValueMap (SuccessFactors, PerPerson, EventVersion, Commission, Participant, salary) = Target value;
ValueMap (Commission, Participant, salary, SuccessFactors, PerPerson, EventVersion) = Target value;

Usage:

ValueMap (Source agency, Source identifier, Source value, Target agency, Target identifier) = Target value;

4.1.Source SuccessFactors Data Extract Setup

Reference SuccessFactors Employee Central ODATA API Data Dictionary to Identify the EC data entity and element you want to map against the Commission Attributes.

SFFields – Define the source fields you want to read from the SuccessFactors.

SFEntities – Define the Data entity that needs to be expanded to source the data fields.

SFKey – Key to be used to identify the Employee in relate to the Commission.

4.2.Target Commission Setup

4.2.1. Versioning

EventVersion enables to configure the events you want to create an object version in Commission. Add the target system attributes that store the relevant data. Multiple attributes separated by comma.



4.2.2. Field Validation

MandatoryFields enables to setup the mandatory fields in the Target system. The Integration Flow flags the record invalid if any of the fields defined in MandatoryFields missing data from source system. Multiple attributes separated by comma.

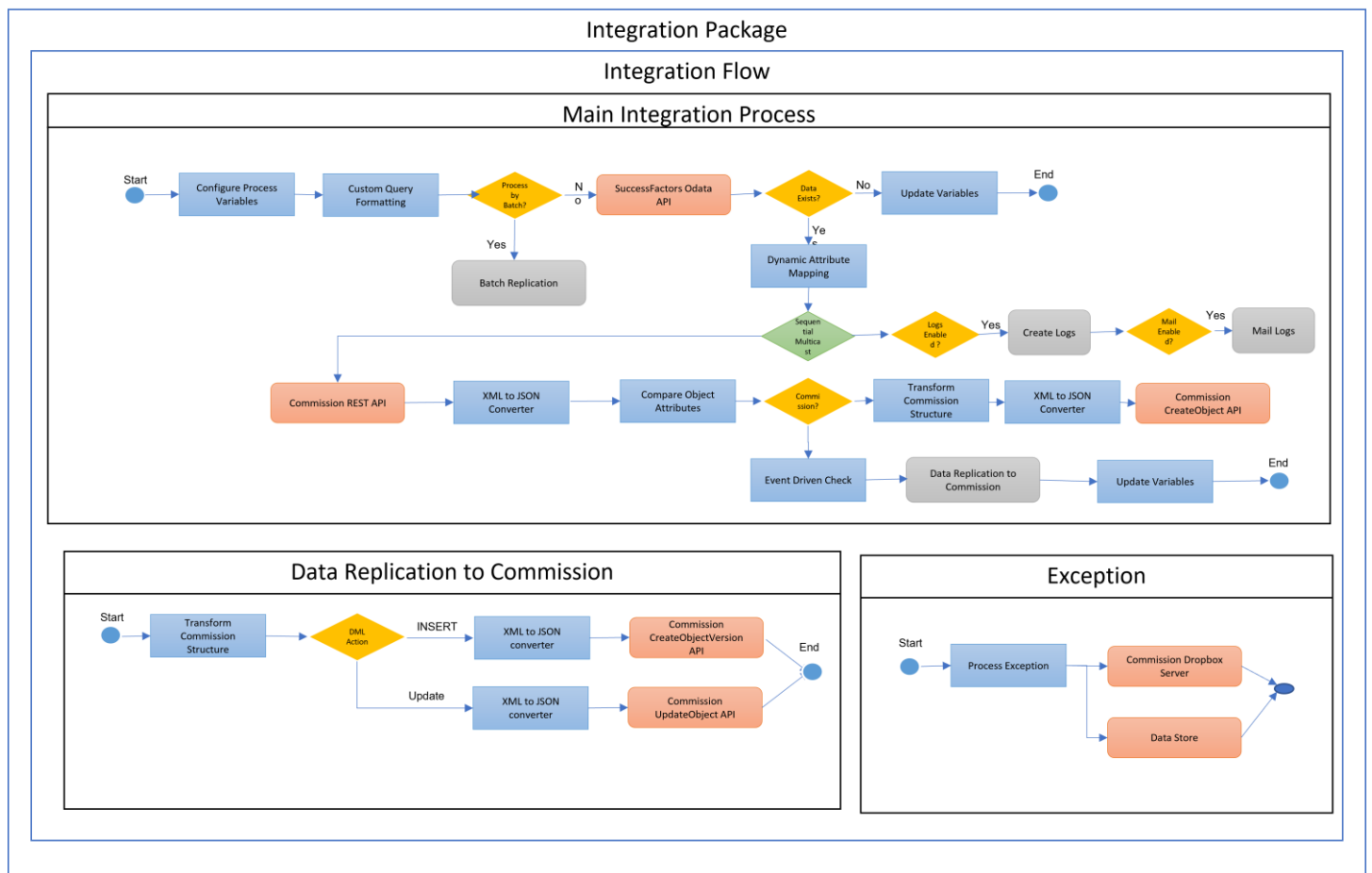
Procedure:

1. Go to Edit Integration Configuration Controller and choose the option Add if below fields not available. Otherwise, edit the below fields to configure the settings for each Data Replication Integration Flow.
2. SFFields -> Add the new source attributes
3. SFEntities -> Add the OData Entity names need to be expanded
4. SFKey -> Add the Key column to identify the employee in Source system.
5. MandatoryFields -> Define the Mandatory columns of the Target Object.
6. EventVersion -> Define the attribute changes that requires new version to be created in the Target Object.
7. Save and Deploy the Value Mapping

5. Integration Detailed Design

5.1. Integration Flow Design

This section describes the integration flow steps of the Organization data replication from SuccessFactors Employee Central to Commissions using SAP Cloud Integration suite.





6. System Preparation for Employee Master Data Replication

6.1. SAP SuccessFactors Employee Central Preparation for Employee Data Replication

6.1.1. Permissions for Accessing OData API

Set up the permissions needed by API users in Employee Central to use the SAP SuccessFactors OData API.

Procedure:

1. Go to Manage Permission Roles and select the role of the API user.
2. Select the Permission. Go to User Permissions and select the General User Permissions category.
3. Select the checkbox for the SFAPI User Login permission.
4. Select the Employee Central API category.
5. Select the checkboxes for the following permissions:
 - Employee Central Foundation OData API (read-only)
 - Employee Central HRIS OData API (read-only)
 - Employee Central Foundation OData API (editable)
 - Employee Central HRIS OData API (editable)

6.1.2. Granting Permissions for Event Driven Integration

Set the permission required by a user to configure the event-driven integration in SuccessFactors Procedure:

1. Go to Manage Permission Roles and select the role of the API user
2. Go to Manage Integration Tools Category and select the checkbox - Access to Integration Center.
3. Select the Intelligent Service Tools category.
4. Select the checkbox - Intelligent Services Center (ISC)
5. Select the Manage Security Center category.
6. Select the checkbox
Access to OAuth configurations – View, Create, Edit and Delete

6.1.3. Setting up the OAuth Configuration for Event Driven Integration

Set up the OAuth configuration to establish a secure HTTP connection with Integration Suite using Client Certificates.

Procedure:

1. Go to Admin Center and select Security Center
2. Add the Oauth Configuration

Field Name	User Action and Values
Configuration Name	Enter any name.
OAuth Type	OAuth 2.0
Grant Type	Client Credentials



Field Name	User Action and Values
Client ID	Enter << Client Id from the 'Process integration Runtime' servicekey>>
Client Secret	Enter << Client Secret Key from the 'Process integration Runtime' servicekey>>
Token URL	Enter << TokenURL from the 'Process integration Runtime' servicekey>>
Token Method	Select POST

6.1.4. Creating Integration in Employee Central for the Event Driven Integration

Create "Custom Integration" to push the events with data payload to the Data Replication Integration Flow in BTP Integration suite.

Procedure:

1. Go to Intelligent Services Center and Select the Event published by Employee Central
2. Select Custom Activities and Create New Integration
3. Select the Destination Type: Rest and Output Format: XML
4. Go to Configure Fields and select the fields from the Data Entities to be sent when the event is raised.
5. Select Destination Setting and select REST Server Settings
6. Enter a connection Name
7. Enter the Rest API URL: << target EndPoint URL of the Integration Flow>>/http/<<Address>>
8. Select the Authentication Type: OAuth
9. Select the OAuth Configurations configured in the previous step.
10. Select the HTTP Method: POST
11. Save the Integration and Deployed to IS server.

6.2. SAP Commission Preparation for Employee Data Replication

6.2.1. API User Role and Permission

Create new user and assign role needed by user to access the Commission REST API.

Procedure:

1. Go to User Administration -> Add Admin User
2. Select Role to access the Callidus Portal Application.

6.2.2. Business Unit and Unit Type

Setup the Unit Type that describes the data specific to Currency, Measure or Quantity.

Define the Business Unit of the Employee that to be synched from the Source system.



7. BTP Integration Suite Setup for Employee Data Replication

7.1. Prerequisites for using Business Technology Platform

7.1.1. BTP User Authentication and Component Access

User must be added to the tenant Identity provider for Identity Authentication in SAP BTP cockpit to access BTP Cockpit and BTP SubAccount in Cloud Foundry Environment.

Provision BTP Integration Suite Components and Services subscription to the Service Package.

User must be assigned to the below roles to develop and administer Integration Flows in Integration Suite.

- User Roles - PI Integration Developer, PI Integration Administrator, Integration Provisioning Admin.

7.2. Configuration of Integration Suite for Organization Data Replication

7.2.1. Configuring Certificates and Permissions

Configure certificates and permissions to enable a secure connection between SAP Commission system and BTP Integration suite. Even if basic authentication is used for this integration, certificates are needed to enable a secure HTTPS communication between BTP Integration suite and the SAP Commission system.

Procedure:

1. Export the SSL Certificate of the Commission Tenant site using any of the supported browsers.
2. Download the certificate to your local directory.
3. Go to BTP Integration Suite and choose Operations View from the top-level menu on the left.
4. Choose Key Store in the Manage Security section
5. To Add the root certificate, Select option Add -> Certificate Import the Certificate and enter an alias name for the certificate.

7.2.2. Configuring Credentials for Communication between BTP Integration Suite and Integrated systems

Create and deploy the credentials for the technical integration users. BTP Integration Suite requires the credentials for communication with SAP SuccessFactors Employee Central and with SAP Commission.

Procedure:

1. Go to BTP Integration Suite and choose Operations View from the top-level menu on the left.
2. Choose Security Material in the Manage Security section
3. To create a credentials artifact for the communication between BTP Integration suite and Employee Central, choose Create and select User Credentials and deploy a credentials artifact with the following attributes:

Field Name	User Action and Values
Name	Enter any name.

Field Name	User Action and Values
Type	Select SuccessFactors
User	Enter the name of the SAP SuccessFactors API user.
Password	Enter the password of the SAP SuccessFactors API user.
Company ID	Enter the name of your SAP SuccessFactors Employee Central instance.

- To create a credentials artifact for the communication between BTP Integration suite and SAP Commission, choose Create and select User Credentials and deploy a credentials artifact with the following attributes:

Field Name	User Action and Values
Name	Enter any name.
Type	Select User Credentials
User	Enter the name of the SAP Commission API user.
Password	Enter the password of the SAP Commission API user.

7.2.3. Configuring Key Pair for Communication between BTP Integration Suite and SAP Commission GoAnywhere

Each Integration Suite Tenant has its own SSH key, and this key cannot be shared across tenants.

Procedure:

- Go to BTP Integration Suite and choose Operations View from the top-level menu on the left.
- Choose Key Store in the Manage Security section
- Choose Create -> SSH key to create a key pair for the sftp connectivity.
- Deploy SSH Key with the following attributes:

Field Name	User Action and Values
Alias	Enter any name.
Key Type	Select RSA
Key Size	Select 2048
Signature Algorithm	Select SHA-512/RSA
Common Name (CN)	Enter any name.
Country/Region ©	Enter your country/region
Valid From	Select Validity Start Date
Valid Until	Select Validity End Date

- Download Public Open SSH Key of the deployed Key Pair.
- Create Callidus Support ticket to push the key to the SAP Commission GoAnywhere server.



7.2.4. Setup HTTP Inbound and Outbound Connection for Event Driven Integration

7.2.4.1. Creating Process Integration Runtime Service Instance and Service Key

Create Process Integration runtime service instance to access the endpoints after deploying the integration flows.

Procedure:

1. Navigate to Services> Service Marketplace
2. Choose Process Integration RunTime Service 3. Create an Instance with the following parameters:

Field Name	User Action and Values
Plan	Select Integration-Flow
Runtime Environment	Select Cloud Foundry
Space	Select Space
Instance Name	Enter any name.
Roles	Select ESBMessaging.send
Grant-Types	Client Credentials

7.2.4.2. Creating Service Key for the Runtime Service Instance

Create service keys to generate credentials to communicate directly with the Process Integration service instance.

Procedure:

1. Go to Instances and Subscriptions and Select the created Instance
2. Select Create Service Key and configure binding parameters
3. Select Key Type: Client Id/Secret
4. Define the Validity and select KeySize

7.2.4.3. Generating Load Balance Root Certificate

Use the Connectivity Test in the Integration suite Tenant to generate the Load Balance root certificate.

Procedure:

1. Launch the Integration Suite and Navigate to the section Manage Security in the Operations View
2. Select Connectivity Tests and Select TLS
3. Enter the URL of the Run time Node in the Host Field.
Run Time Node Url: Copy the URL from the service key created for Process Integration Runtime Instance (Exclude https://)



4. Select Port : 443
5. Select the Checkbox -Valid Server Certification Required
6. Execute the Connectivity Test
7. Response Screen provides the list of certificates from the load balancer.
8. Select Download option to download the certificates in your local directory.

7.2.4.4. Add Root Certificate to the Keystore

The Root certificate downloaded in the previous step is imported to the Keystore Procedure:

1. Select the option Add -> Certificate
2. Import the *.cer file of the root certificate
3. Enter an alias name for the imported certificate.

7.2.5. Determine End Point URL

End Point URL must be determined so that the senders and receivers of the Integration flows know which system they need to connect for the Integration.

7.2.5.1. Finding URL for Communication from BTP Integration suite to SuccessFactors Employee Central

Determine the endpoint URL of SAP SuccessFactors Employee Central that you need to enter in the Integration suite. To be able to trigger calls to Employee Central, the Integration Suite needs to know the OData API endpoint URL.

Procedure:

1. Check the SuccessFactors data center.
2. When setting up the integration flow, add the base URL of the SAP SuccessFactors system, depending on your data center. `https://{api-server}/odata/v2`

7.2.5.2. Finding URL for Communication from BTP Integration Suite to Commissions

Determine the endpoint URL of the Commission that you need to enter in the BTP Integration Suite.

To be able to access Commission REST API's to send data to the SAP Commission system, the integration flow for employee master data replication needs to know the endpoint URL.

Procedure:

1. The current Commission REST API version is v2 so all resources are located at:
`https://{domain-name}/api/v2`



- When setting the integration flow, add the base URL and the corresponding resource URI, depending on the Integration flow.

System	Protocol	Entity	API URL	Method
Participant				
Commission	Http	List Participants	https://{domainName}/api/v2/participants	GET
Commission	Http	Create Participants	https://{domainName}/api/v2/participants	POST
Commission	Http	Update Participants Version	https://{domainName}/api/v2/participants(:id)/versions	PUT
Position				
Commission	Http	List Positions	https://{domainName}/api/v2/positions	GET
Commission	Http	Create Positions	https://{domainName}/api/v2/positions	POST

Commission	Http	Update Position Version	https://{domainName}/api/v2/positions(:id)/versions	PUT
Title				
Commission	Http	List Titles	https://{domainName}/api/v2/titles	GET
Commission	Http	Create Titles	https://{domainName}/api/v2/titles	POST
Commission	Http	Update Title Version	https://{domainName}/api/v2/titles(:id)/versions	PUT

7.2.5.3. Finding URL for Communication from Employee Central to BTP Integration suite

Determine the endpoint URL of Integration Flow that you need to enter in the SAP SuccessFactors Employee Central. In the integration flow for event driven replication, Employee Central triggers the replication and therefore needs the endpoint URL of the Integration flow to push the messages.

Procedure:

- Go to Manage Integration Content in SAP Integration Suite.
- Copy the URL shown in the Endpoints section.

The URL looks like this: <https://<<RunTime URL of the SAP Integration Suite Environment>>/http/<<sender address>>>.

Note The sender address part is the suffix you enter in the Address field of the sender in Integration Suite when setting up the integration flow "Push Employee Data from SuccessFactors Employee Central to Commission". To get the complete endpoint URL, configure and deploy the integration flow first, then copy the URL from Manage Integration Content.



7.2.6. Copying the Integration Package to Integration Suite Tenant

SAP BTP Integration Suite Web UI used to access and manage integrations flows configured in Integration Suite tenant for Customer. Copy and deploy the integration content provided for employee master data replication from Employee Central to SAP Commission.

Procedure:

1. Go to the SAP Cloud Integration tenant for which you want to set up the integration content.
2. Browse the Discover content catalog to find the SAP SuccessFactors Employee Central Integration with SAP Commission package.
3. Copy the content of the integration package to your workspace to be able to configure and deploy it.
4. If you want to use event driven replication: Browse the Integration Flow to find the Push Integrations and configure the corresponding Integration flows and deploy it.

7.2.7. Configuring the Integration Flow for Employee Master Data Replication

Configure the sender and the receivers of the integration flow for replication of employee master data from Employee Central.

1. Configure the Employee Central sender, which is used by the Integration Suite to request the queried data from Employee Central

Field Name	User Action and Values
Adapter Type	Choose SuccessFactors
Address	Define \${property.SuccessFactors_URL} Note: Property must be defined in "Setup config Parameters" Content Modifier. SuccessFactors_URL designated to store the base address of the SAP SuccessFactors system.
Authentication	Choose either Basic or OAuth2 SAML Bearer Assertion.
Credential Name	If you've selected Basic for Authentication: Enter the name of the credential artifact with the type SuccessFactors. If you've selected OAuth2 SAML Bearer Assertion for Authentication: Enter the name of the credentials artifact with the type OAuth2 SAML Bearer Assertion.
Page Size	Recommend 400 to replicate master data of 400 employees at a time
Timeout (in min)	Use the default value.
Process In Pages	Enable for Batch Replication

2. Configure the Commission receiver, which is used by the Integration Suite to send the results from SuccessFactors Employee Central to Commission.

Field Name	User Action and Values
Adapter Type	Choose HTTP



Address	Define \${property.Commission_URL} Note: Property must be defined in "Setup config Parameters" Content Modifier. Commission_URL designated to store the base address of the SAP Commission system.
Authentication	Choose Basic Authentication
Credential Name	Basic for Authentication: Enter the name of the credential artifact with the type User Credentials.
Timeout (in ms)	Use the default value.
Throw Exception on Failure	Enable to capture Exceptions.

3. Configure the Commission GoAnywhere receiver, which is used by the Integration Suite to send the validation and HTTP errors to Commission.

Field Name	User Action and Values
Adapter Type	Choose SFTP
Address	Define \${property.GoAnywhere_URL} Note: Property must be defined in "Setup config Parameters" Content Modifier. GoAnywhere_URL designated to store the address of the SAP Commission GoAnywhere system.
Authentication	Choose Public Key
Username	Enter the Username of the GoAnywhere server

Private Key Alias	Enter the name of the credentials artifact with the type User Credentials.
Timeout (in ms)	Use the default value.
Maximum Reconnection Attempts	Use the default value.

File Access Parameters

Field Name	User Action and Values
Directory	Enter the Directory where you want to store the files.
File Name	Enter the File Name Pattern
Append Timestamp	Enable if you want to append timestamp to the file created.

7.2.8. Configuring the Integration Flow for Event Driven Replication

In addition to the above configuration "Configuring the Integration Flow for Employee Master Data Replication", make the following settings for the *Push Employee Data from SAP SuccessFactors Employee Central to Commission* integration flow.



Configure the sender, EC_Push_Event, which is used by Employee Central to send the push notification to the BTP Integration Suite.

Field Name	User Action and Values
Adapter Type	Choose HTTPS
Address	Enter a suffix, such as /employeejobinfo, which is added to the service endpoint URL (the access URL for communication from Employee Central to the Integration suite). The suffix must be unique for each process instance within the same BTP Integration suite environment. It's used to uniquely address this specific process instance. For example, if you enter /employeejobinfo here, the URL is : https://<runtime URL of your BTP Integration Suite environment>/http/employeejobinfo
Authorization	Choose either User Role or Client Certificate.
User Role	Choose ESBMessaging.send role or select the custom role configured.

7.2.9. Configuring the Integration Flow Process Parameters

External Parameters control the processing of the Integration flow. By default, these parameters disabled in the Integration Flow. To enable the process external parameters, follow the below procedure.

Procedure:

1. Go to the Integration Package, Choose the Integration Flow you want to configure, Select Edit.
2. Navigate to the **Setup Config Parameter** content modifier in the main Integration Process.
3. Configure the external parameters depending on the needed functionality.

Field Name	User Action and Values
ENABLE_BATCH_REPLICATION	Define Value True if you want to handle large data volume break down into data chunks. Data fetched and processed in batches from SAP SuccessFactors.
ENABLE_PAYLOAD_LOGGING	Define Value True if you want to enable extend log, the complete message payload containing all data fetch stored in the log. Enable the extended log for troubleshooting purposes only. Make sure the parameter disabled afterwards.



EXTRACT_DATE_START	<p>Extract start date is the date from which the data replication from Employee Central to the SAP Commission system begins. Only Employee records that are valid on or after the Extract Start Date are extracted from Employee Central.</p> <p>Define the Dates for Initial/Full load from Employee Central to Commission. Make sure parameter disabled for Delta Load.</p>
--------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



8. Logging and Monitoring Integrations

8.1. Monitoring Integration Flow in BTP Integration Suite

SAP BTP Integration Suite provides a web-based monitoring UI that allows you to check the status of messages and integration content artifacts for a tenant cluster. Use the log ID that you find in the monitoring to find the log of a specific process that didn't run successfully and to filter the log for detailed information.

Procedure:

1. Launch the BTP Integration Suite
2. Navigate to the section Monitor Message Processing in the Operations View
3. Enter the log ID of the Failed Integration Flow.
4. Otherwise, filter the Failed Integration flows based on a specified timeframe.

8.2. Logging and Monitoring in Employee Central

8.2.1. Integration Monitor

Employee Central provides an admin tool for monitoring the Event and Integration Processes. Use the Event Monitor to check the Events raised and Status of the Integration flow subscribed to the Events. Use Integration Monitor to view the Status, Alerts and Logs, Analyze error messages related to HTTP message sent to the BTP Integration Suite.

8.2.2. SFAPI Audit Log

The SFAPI Audit Log is intended to help with support and debugging of API usage to help resolve API-related support issues. The tool allows you to monitor the API calls and download payload information of each API call.

9. Error and Recovery

9.1. Data Validation Errors

The Integration Flow does basic validation check on the existence of the key columns defined in the Organization Data entity in the Commission system. Employee Records that missing the key column is flagged Invalid, skipped processing and send to the SAP Commission Go Anywhere system.



9.2. Exceptions

Exceptions that occur during execution of the Integration Flow has been captured in a file and send to Commission GoAnywhere server for troubleshooting. In case of Commission REST API errors that requires manual intervention for correction, Fix the data inside Commission system and re-run the Integration flow to synch up the employee data records.

9.3.Reprocess Data Replication

9.3.1. Event Driven Master Data Replication

The Integration Flow **Reprocess Error Event Messages** reads the errored-out messages from the datastore *SFEC_Comm_Errors* and attempt to re-process them until the message processed successfully.

9.3.2. Employee Master Data Replication

In case of Exceptions, the property *last modified date* will not be updated. When the Integration flow is re-run, it fetches all the employee records modified since the last successful run.

10. Transport Integration Package across Tenants

Cloud integration offers different options to transport Integration Content. Transport Management Service is highly recommended to transport Integration content across tenants. Non transportable content such as Key store entries and Client certificate must be deployed manually on the Target Tenant. Also, there is an option to do manual export and Import, but it's not recommended. Export downloads all the artifacts to the local system folder, depending on the browser settings. Then, the Integration Package can be imported to the target Tenant system.