



Employee Central to Exchange

Data Reconciliation Implementation Guide

Version 1.1

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1.0	Initial version	February 2022
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2.0	Additional filter in selection screen	November 2022
2.1	Rebrand to Strada	November 2024

Summary of Changes

Item Number	Change Description	Chapter/Section
1.0	Initial version	All
1.1	Updates	Selection parameters and Value Mapping
1.2	Updates	All
2.0	Additional filter in selection screen	
2.1	Rebrand to Strada	All

Introduction

This document is a guide for users on how to implement the data reconciliation between EC and Exchange in the customer Cloud Integration tenant. The reader of the document should be familiar with SAP Cloud Integration.

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1 Introduction

This document covers the steps for setting up the new EC to Strada for reconciliation integration flow delivered in Exchange Release 26 as part of integration package: [SAP SuccessFactors Employee Central integration with Strada for payroll](#).

The document is intended for SAP EC integration consultant with admin access to SAP Business Technology Platform (BTP) and SAP Cloud Integration.

1.1 Product Naming

Strada is rebranding its applications. Exchange is the new branding for the application formerly known as Exchange or hrX Exchange. The Cloud Integration artifacts are not renamed yet to reflect this.

1.2 Data Reconciliation Purpose

The Strada Data Reconciliation tool is delivered allowing a user to request a reconciliation within Exchange for payroll between SAP Employee Central and Exchange. As a fully automated solution, this comparison does not require support from technical teams. The recommendation is to execute this prior to a payroll cut-off to ensure all data is in sync between HRIS and Exchange.

1.3 Data Reconciliation Solution

Once initiated, connections are made to the HRIS, Exchange and Strada Payroll to retrieve the current data from all three systems. Once the extract files are received, Exchange will perform a comparison of the data to confirm that the data which exists in HRIS also exists in Exchange and in the payroll system. The results of the comparison will be provided in a spreadsheet, which will report mismatches.

This is covered in the User Guide which is aimed at the end-user.

1.4 Payroll Systems Supported

euHReka and Strada Pay. When running the data reconciliation for TPV partners it will only compare the data between Exchange and EC.

1.5 Summary of Steps


A summary of the steps to perform:

- 1) Update to the latest version of the integration package in Cloud Integration
- 2) Configure the new integration flow for data reconciliation
- 3) Create a new OAuth client in SAP Business Technology Platform Cockpit
- 4) Authorize the client to execute webservice calls
- 5) Test the set-up
- 5) Provide details to Strada

The Strada estimate is that it this takes about 1 – 2 hours to complete.


2 Implementation Guide

The integration extracts a snapshot file from SuccessFactors Employee Central through a dedicated integration flow, **Package Integration - SF EC to Exchange Data Reconciliation** in Cloud Integration. The snapshot file is sent through webservice to Exchange for further processing as part of the data reconciliation process.

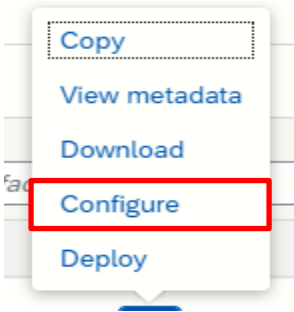
Package Integration - SF EC to Exchange Data Reconciliation Supports snapshot based integration for data reconciliation between Employee Central and Exchange Created	Integration Flow	24.11.0	
--	------------------	---------	---

2.1 Integration Flow Configurations

- Go to integration flow and click on Action.

Package Integration - SF EC to Exchange Data Reconciliation Supports snapshot based integration for data reconciliation between Employee Central and Exchange Created	Integration Flow	24.11.0	
--	------------------	---------	---

- Click on Configure



- The integration flow has 3 tabs, Sender, Receiver and More

2.1.1 TAB "SENDER"

Configure "Package Integration - SF EC to Exchange Data Reconciliation"

	Sender	Receiver	More
	Sender:	HrX_DataRecon	▼
	Adapter Type:	HTTPS	▼
Connection	Address:	/ECNextGenDataRecon/*	

2.1.2 TAB “RECEIVER”

For Receiver, you can copy the same configuration from the standard integration flow:
Package Integration - SF EC Payroll Integration to Exchange

Configure "Package Integration - SF EC Payroll Integration to Exchange"

Timer	Receiver	More
Connection	Receiver:	CompoundEmployee <input type="text"/>
	Adapter Type:	SuccessFactors <input type="text"/>
	Address:	https://<SFAPI end point url> <input type="text"/> Select
	Authentication:	Basic <input type="text"/>
Processing	Credential Name:	<SuccessFactors EC Credentials> <input type="text"/>
	Timeout (in min):	4 <input type="text"/>

Configure "Package Integration - SF EC Payroll Integration to Exchange"

Timer	Receiver	More
Connection	Receiver:	hrXReceiver <input type="text"/>
	Adapter Type:	SOAP <input type="text"/>
	Address:	https://<end point url> <input type="text"/>
	Credential Name:	<Web Service Credentials> <input type="text"/>
	Timeout (in ms):	240000 <input type="text"/>

2.1.3 TAB “MORE”

More Tab is the Selection Screen of the Integration Flow

Configure "Package Integration - SF EC to Exchange Data Reconciliation"

Sender Receiver **More**

Type: ▼

BusinessUnit:

ComponentID:

EmployeeClass:

IsEmailEnabled:

Location:

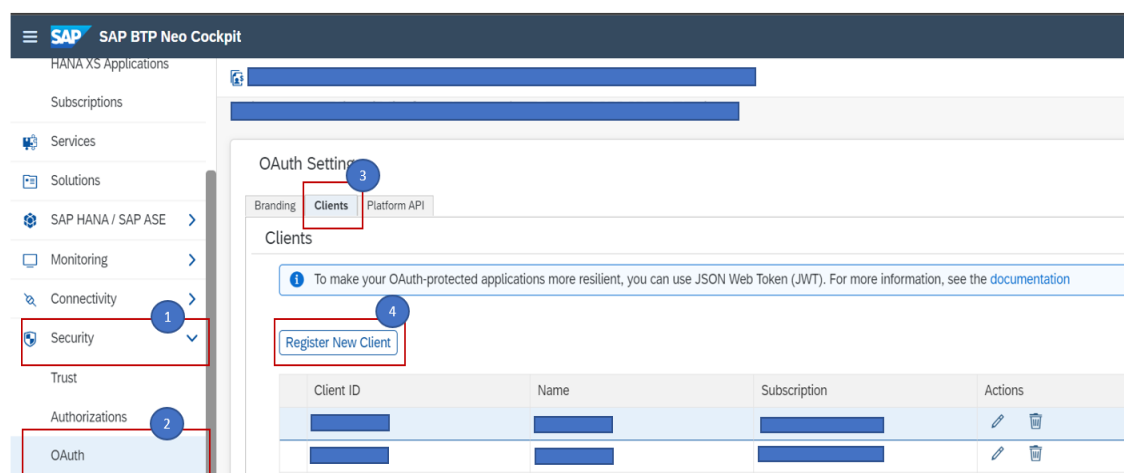
Parameter	Explanation	Default	Mandatory
Business Unit	Comma-delimited list filter (no blank spaces before/after comma) for specifying the business unit to include in the extract.	None	No
ComponentID	Maintain the Company ID of the Employee Central Instance	None	Yes
EmployeeClass	Comma-delimited list filter (no blank spaces before/after comma) for specifying the employee class to include in the extract	None	No
IsEmailEnabled	1 enables the email functionality	0	No
Location	Comma-delimited list filter (no blank spaces before/after comma) for specifying the location to include in the extract	None	No

- Once the setup is done, click **Save** and **Deploy**

2.2 Registering OAuth Client in Cloud Integration

The OAuth client allows Strada to authenticate to SAP Cloud Platform to initiate the data reconcile.

- Logon to your SAP BTP Cockpit (Administrator access is required) and select the applicable subaccount.
- Navigate to OAuth Settings under Security, select Clients tab. Click on Register New Client to register an OAuth client.



- Enter a meaningful OAuth client name (lower case), e.g. exchangeoauth, client id e.g. exchangeoauth, and secret. For ease of maintenance keep the same value for client name and client ID. In the subscription, select a value ending with iflpmap. Select client credentials in the Authorization Grant flows, key-in the secret and specify the token lifetime (recommended 15 minutes).
- Click Save to register the OAuth client named exchangeoauth.

Name: * exchangeoauth Translations

Description:

Subscription: * 1 Select subscription from dropdown with a value ending with ifimap

ID: * exchangeoauth 2 Regenerate ID

Authorization Grant: * Client Credentials 3

Confidential:

Secret: * 4

Token Lifetime: 5 Maximum lifetime is 180 days

6 Save Cancel

2.3 Assigning roles to OAuth Client

- Assigning Cloud Integration roles to the newly registered OAuth client. Navigate to Subscriptions under Applications, select subscription ending with iflmpap.

SAP BTP Neo Cockpit

Overview

Applications 1

Java Applications

HTML5 Applications

HANA XS Applications

Subscriptions 2

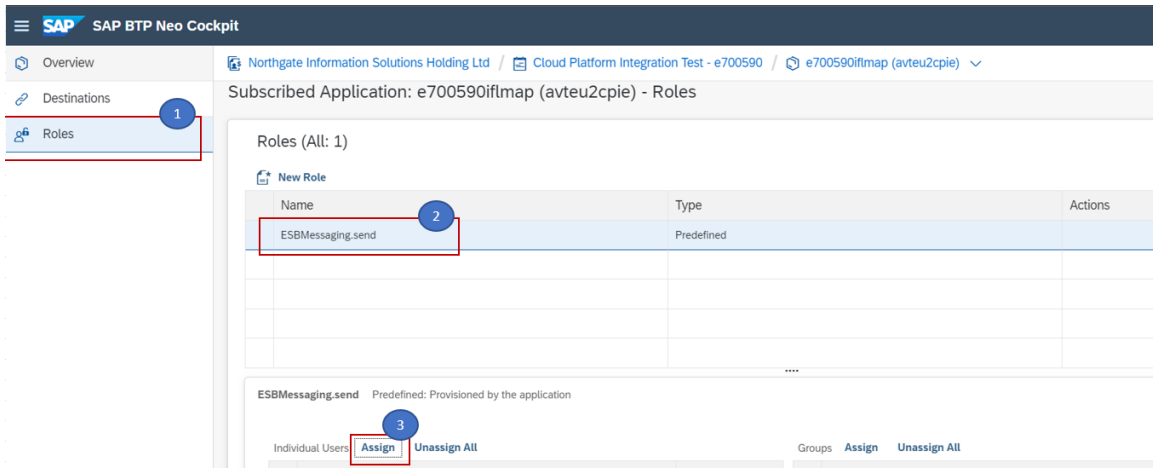
Services

Solutions

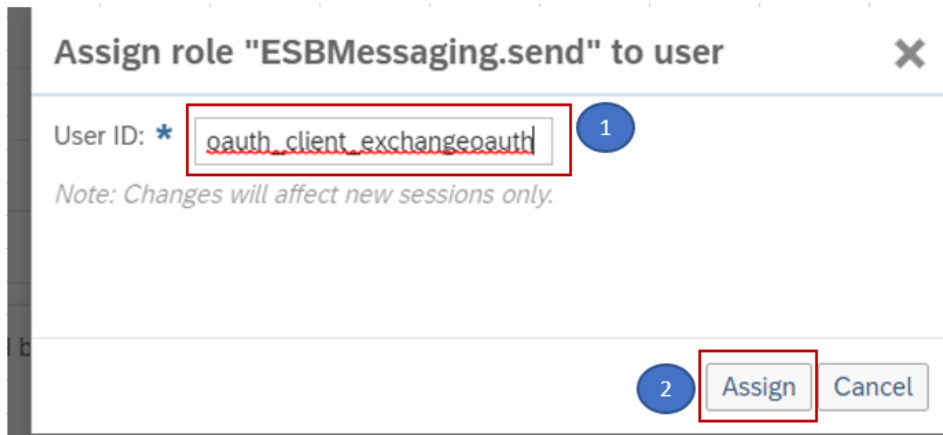
Subscribed Java Applications (All: 3)

State	Provider Subaccount	Application	Start Time
✓		iflmap 3	1 Jul 2023, 15:15:27 (GMT+08:00)
✓			1 Jul 2023, 14:02:59 (GMT+08:00)
✓			23 Jun 2023, 16:18:10 (GMT+08:00)

- Navigate to Roles, select **ESBMessaging.Send** role and click on “Assign” to assign the OAuth client the necessary SAP Cloud Platform Integration roles.



In Assign role dialog, enter OAuth client id in the format `oauth_client_{your_oauth_client_id}` (in our case, `oauth_client_exchangeoauth`). Click Assign to complete the action.




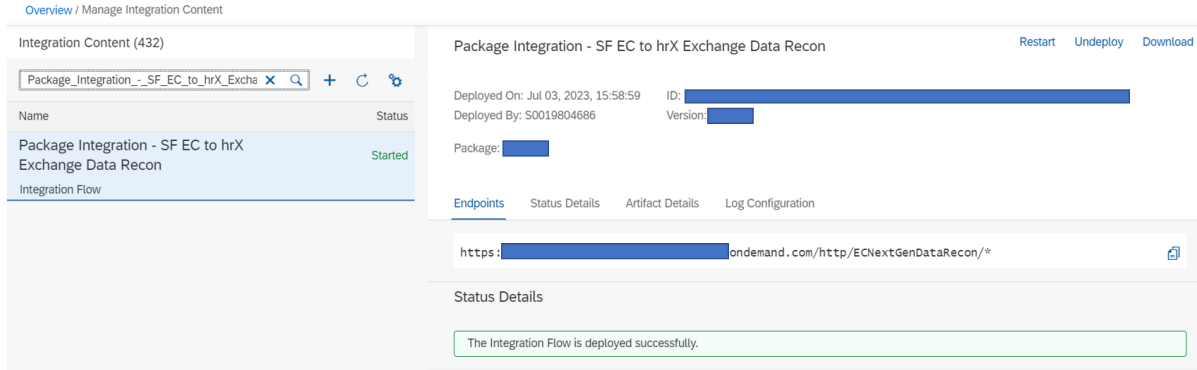
2.4 Testing the Integration Flow

To ensure all is correctly set up, perform a test. Here Postman is used for the testing, but any other tool can be used provided it can make HTTPS calls.

2.4.1 OBTAIN URLS

Logon to your SAP BTP Cockpit (Administrator access is required) and select the applicable subaccount. Navigate to OAuth Settings under Security, copy the OAuth Token Endpoint URL.

In your Cloud Integration tenant click  and click Manage Integration Content tile. Search “data recon” which should display the artifact you deployed in section 2.1.



Integration Content (432)

Package Integration - SF EC to hrX Exchange Data Recon

Deployed On: Jul 03, 2023, 15:58:59 ID: [REDACTED]
 Deployed By: S0019804686 Version: [REDACTED]

Package: [REDACTED]

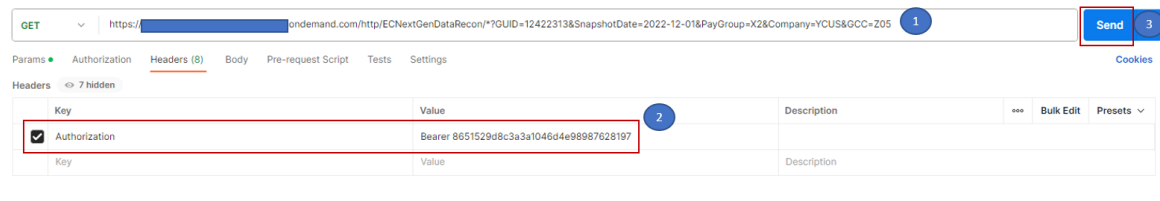
Endpoints Status Details Artifact Details Log Configuration

https://[REDACTED].ondemand.com/http/ECNextGenDataRecon/*

Status Details

The Integration Flow is deployed successfully.

In Postman go to the Header and copy the token from the previous token call and paste it to the Authorization with format: Bearer<space><<Generated Token> and send the request



GET https://[REDACTED].ondemand.com/http/ECNextGenDataRecon?* 1 Send 3

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/> Authorization	Bearer 8651529d8c3a3a1046d4e98987628197				
Key	Value	Description			

Sample response:



Body Cookies (4) Headers (58) Test Results Status: 200 OK Time: 3790 s Size: 4.55 MB Save Response

Pretty Raw Preview Visualize XML

```

1 <ECNextGenDataRecon>
2   <LogicalId>Z08-00000-1025</LogicalId>
3   <ComponentID>nextgate176_DM-ECNextGen</ComponentID>
4   <MessageID>AGS4nFQPH1zI3tTke32WwXDUr</MessageID>
5   <mode>snapshot</mode>
6   <Version>26.0</Version>
7   <GUID>12422313</GUID>
8   <PayGroup>X2</PayGroup>
9   <queryCompoundEmployeeResponse>
10     <CompoundEmployee>
11       <id>3557</id>
12       <person>
13         <action>INSERT</action>
14         <country_of_birth>USA</country_of_birth>
15         <created_by>heleneb</created_by>
16         <created_on_timestamp>2016-11-04T13:16:45.000Z</created_on_timestamp>
17         <date_of_birth>1983-06-07</date_of_birth>
18         <last_modified_by>rashik</last_modified_by>
19         <last_modified_on>2017-05-24T08:27:23.000Z</last_modified_on>

```

2.5 Client details to be shared with Strada

Strada needs to configure the integration with Cloud Integration and its authentication details.

Share the following information with your Strada contact person:

Field	Source	Value
Base Address	Endpoint when the integration flow is deployed minus <code>/*</code>	
Client ID	SAP BTP Cockpit. See section 2.2	
Client Secret	SAP BTP Cockpit. See section 2.2	
Token End point	Logon to your SAP BTP Cockpit (Administrator access is required) and select the applicable subaccount. Navigate to OAuth Settings under Security, copy the OAuth Token Endpoint URL.	

Copy this table in the email to Strada.

3 Sample Execution of Data Reconciliation

When data reconciliation is initiated to extract data from SuccessFactors Employee Central as HRIS, Exchange calls the new integration flow on-demand with the following parameters:

- **GUID** – Unique ID generated from Exchange that identifies a specific data reconciliation request.
- **SnapshotDate** – Defaults to the date when the data reconciliation request has been initiated. This date drives the results of the extraction of the integration flow in Cloud Integration.
- **PayGroup** – Exchange performs translation by looking at the customer configuration to feed to the integration flow the pay group value in SuccessFactors
- **Company** - Exchange performs translation by looking at the customer configuration to feed to the integration flow the company value in SuccessFactors for the LCC in Exchange
- **GCC** – Exchange sends the GCC. This is the Strada client identifier.
- **PeriodStart and PeriodEnd**– Exchange determines the PayPeriod Start Date and PayPeriod End Date when the data reconciliation request has been initiated by checking on the pay calendar configured in Exchange. These dates enable the integration flow in Cloud Integration to extract only the valid one-time payments for employees that falls within the pay period. Removing unwanted records for data reconciliation comparison.
- Once the data reconciliation request is initiated, the integration flow is triggered, and the specific execution appears in the Cloud Integration Monitoring.

The screenshot shows the SAP Cloud Integration 'Monitor Message Processing' interface. At the top, there are filters for Time (Past Week), Status (All), Artifact (data recon), and ID (AGSKNQPDPDhZgl3rTke32WWMXDUR). Below the filters, a table lists messages, with one message highlighted: 'Package Integration - SF EC to hrX Exchange Data Recon' with a status of 'Completed' and a processing time of '31 sec 517 ms'. To the right, a detailed view of the message is shown, including a green status bar indicating 'Message processing completed successfully.' and a 'Properties' section with fields for Message ID, Correlation ID, and Receiver.

- The parameters coming from Exchange webservice call are also visible in the Attachment tab.

This screenshot shows the 'Attachments' tab for the same message. A table lists the attachments, with one entry highlighted: 'Parameter:' with a type of 'text/plain', a size of '1 KB', and a download icon. The 'Attachments' tab is selected, and a red box highlights the 'Parameter:' entry.

This screenshot shows the 'Log' tab for the message. It displays the message name, status, and processing time. Below, the XML content of the attachment is shown, with a red box highlighting the XML structure:

```
<parameter>
<GUID>12422313</GUID>
<GCC>Z05</GCC>
<Company>YCUS</Company>
<SnapshotDate>2022-12-01</SnapshotDate>
<PayGroup>X2</PayGroup>
<PeriodStart></PeriodStart>
<PeriodEnd></PeriodEnd>
</parameter>
```

- Once the extraction has completed successfully in Cloud Integration, the extracted file is sent to Exchange for further data reconciliation processing.

- In Exchange, the data reconciliation extract files from SuccessFactors as the HRIS, Exchange, and euHReka as payroll system will be consolidated with the following output. This is only visible for authorized Exchange personnel:

Company Group	File	Sent Date	Last Modified	Sender	Status	Elapsed Time	Link to Batch Content
YourCorp Germany	Data recon	27/06/2023, 13:26	27/06/2023, 13:28	SuccessFactors SCPI	Closed - Success (No Events)	00:01:57	

General Event Information

27/06/2023, 13:26	Received (Payroll Exchange)
27/06/2023, 13:26	Waiting
27/06/2023, 13:28	Waiting: Submission (Euhreka)
27/06/2023, 13:28	Waiting: File Transfer
27/06/2023, 13:28	Waiting: Response (Euhreka)
27/06/2023, 13:28	Waiting: File Transfer
27/06/2023, 13:28	Waiting: Response (Euhreka)
27/06/2023, 13:28	Success
27/06/2023, 13:28	Closed - Success

[DATAARECONREPORT_Z01_DE001_D1_F33660500-14EE-11EE-BEE5-F87C61D32859.zip](#)

[More Details](#)
[New Ticket](#)
[Close Batch](#)

- After downloading the zip file:

Name	Date modified	Type	Size
DATAARECONEXCHANGE_Z01_DE001_D1_F3398BB00-14EE-11EE-BEE8-F87C...	27/06/2023 1:28 pm	JSON File	77 KB
DATAARECONHRIS_Z01_DE001_D1_F339922F0-14EE-11EE-BEE7-F87C61D328...	27/06/2023 1:28 pm	JSON File	1,480 KB
DATAARECONPY_Z01_DE001_D1_F3398D4D0-14EE-11EE-BEE6-F87C61D32859	27/06/2023 1:28 pm	JSON File	343 KB
DATAARECONREPORT_Z01_DE001_D1_F33660500-14EE-11EE-BEE5-F87C61D...	27/06/2023 1:28 pm	Microsoft Excel W...	134 KB

- Refer to the Strada Data Reconciliation User Guide available in Help Center for reviewing the data reconciliation report output.