

Configuration Guide

SMART PAYE full communication using REST APIs
Document Version: 1.0 – 2022-03-30

CUSTOMER

SAP Payroll Integration with Revenue Online Services gateway - Ireland

Using REST API with SAP Cloud Integration

Typographic Conventions

| Type Style | Description |
|----------------|--|
| <i>Example</i> | Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents. |
| Example | Emphasized words or expressions. |
| EXAMPLE | Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE. |
| Example | Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools. |
| Example | Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation. |
| <Example> | Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system. |
| EXAMPLE | Keys on the keyboard, for example, F2 or ENTER. |

Document History

| Version | Date | Change |
|---------|------------|-------------------------------|
| 1.0 | 2022-03-30 | Document created and released |

Contents

| | | |
|----------|---|----------|
| 1 | Introduction | 5 |
| 2 | Prerequisites..... | 6 |
| 2.1 | Installation of ' SMART PAYE Full Communication' Solution | 6 |
| 2.2 | Set Up of Secure Connection..... | 6 |
| 2.3 | Set Up SAP Cloud Integration Tenants..... | 7 |
| 2.4 | ROS SSL Certificate..... | 7 |
| 2.5 | ERN Certificates..... | 7 |
| 2.6 | Partner Directory URL..... | 7 |
| 2.7 | Partner Directory SSL Certificate | 8 |
| 2.8 | Partner Directory User | 8 |
| 3 | Configuration Steps in SAP Cloud Integration | 9 |
| 3.1 | General Information..... | 9 |
| 3.2 | Deploying Key Pairs and Certificates..... | 9 |
| 3.2.1 | Uploading of ROS SSL Certificate to Keystore | 9 |
| 3.2.2 | Uploading of ERN Certificates to Keystore..... | 10 |
| 3.2.3 | Uploading of Tenant Management SSL Certificate to Keystore | 10 |
| 3.3 | Store Sensitive Information into Security Material | 11 |
| 3.3.1 | Store Details of Partner Directory User Details..... | 11 |
| 3.4 | Copy Published Integration Package | 12 |
| 3.5 | Configure Integration Flows..... | 12 |
| 3.5.1 | Configuration of ROS Certificate management iFlow | 12 |
| 3.5.2 | Configuration of Check Payroll Submission iFlow..... | 13 |
| 3.5.3 | Configuration of Check PayrollByPeriod iFlow..... | 14 |
| 3.5.4 | Configuration of Check PayrollRun Request iFlow | 15 |
| 3.5.5 | Configuration of Create New RPN iFlow | 16 |
| 3.5.6 | Configuration of Look Up RPN By Date Last Updated iFlow | 17 |
| 3.5.7 | Configuration of Look Up RPN By Employee ID iFlow..... | 18 |
| 3.5.8 | Configuration of Look Up RPN By Employee IDs iFlow..... | 18 |
| 3.5.9 | Configuration of Look Up RPN By Employer Registration Number iFlow..... | 19 |
| 3.5.10 | Configuration of Look Up RPN By PPSN iFlow | 20 |
| 3.5.11 | Configuration of Payroll Submission iFlow | 21 |
| 3.5.12 | Configuration of Payroll Submission Compressed iFlow | 22 |
| 3.6 | Configuration of HTTP connections (RFC) for each iFlow | 23 |
| 3.7 | Table of RFC connections | 26 |
| 3.7.1 | Store of Enterprise User Details into Partner Directory | 27 |
| 3.7.2 | Password extractor program | 28 |

1 Introduction

You use SAP Cloud Integration to establish a secure communication with Revenue Online Services (ROS) and transfer electronic documents created using the SMART PAYE Full communication solution from SAP Ireland. This document lists the required setup steps needed in the SAP ERP or SAP SuccessFactors Employee Central Payroll and the SAP Cloud Integration tenant so that the integration between the systems works.

The setup steps are typically done by an SAP Cloud Integration consulting team, which is responsible for configuring the SAP back-end systems and the connection with SAP Cloud Integration. This team may also be responsible for maintaining the integration content and certificates/credentials on the SAP Cloud Integration tenant.

Note

This document describes functionality that is provided by the Integration Package (artifacts that are deployed in the SAP Cloud Integration tenant). Please refer to the relevant SAP back-end systems documentation for more information.

For the sake of simplicity in this guide, SAP back-end systems refers to both SAP ERP and SAP SuccessFactors Employee Central Payroll.

2 Prerequisites

2.1 Installation of ' SMART PAYE Full Communication' Solution

You installed and configured the "SMART PAYE FULL Communication" solution in your test and productive SAP back-end systems. If you did not install the latest support package for your system, refer to the latest SAP Note.

Note

Minimal SAP Notes which need to be in SAP ERP or SAP SuccessFactors Employee Central Payroll systems to be able to complete all the configurations steps described in this guide are as follows:

- 3170034 - SMART PAYE: Full Communication

2.2 Set Up of Secure Connection

You need to establish a trustworthy SSL connection between the SAP back-end systems and the SAP Cloud Integration.

Communication is always initiated from the SAP Backend systems, and as such HTTPS connections need to be set up.

You use the SAP ERP Trust Manager (transaction `STRUST`) to manage the certificates required for a SSL connection. The certificates are trusted certificate authority (CA) certificates to support iFlow authentication.

In addition, you will need to install certificates on SAP Cloud Integration to sign and encrypt data that is transmitted to ROS.

Refer to the system documentation for more information regarding the certificate deployment to SAP back-end systems. In case of issues, refer to the following SAP notes:

- **2368112** - Outgoing HTTPS connection does not work in AS ABAP
- **510007** - Setting up SSL on Application Server ABAP

For more information, refer to the "[Operations guide for SAP Cloud Integration](#)."

Note

If you encounter any issues in the information provided in the SAP Cloud Integration product page, open a customer incident against the `LOD-HCI-PI-OPS` component.

Client Certificate

If you are using a client certificate, this must be signed by one of the root certificates supported by the load balancer. A self-signed certificate is not suitable. For more information see, [Load Balancer Root Certificates Supported by SAP](#).

2.3 Set Up SAP Cloud Integration Tenants

Users in SAP Cloud Integration test and production tenants have the authorisation to copy the integration package and to configure and deploy the integration flows (iFlows).

When your tenants are provisioned, you receive an email with the Tenant Management (TMN) URL. You need this URL for the configuration of the SAP back-end systems.

To be able to deploy the security content, you must be assigned the `AuthGroup.Administrator` role.

If you are a first-time user, you must first set up your users (members) and their authorizations in the SAP BTP Cockpit.

2.4 ROS SSL Certificate

SSL certificates are needed to ensure the SSL encryption of the communication layer between SAP Cloud Integration and ROS servers. The ROS SSL certificate for HTTPS communication can be downloaded by accessing the ROS website and using the browser to download the certificate.

Note

Instructions how to download the SSL Certificate from <https://www.ros.ie/> by using the internet browser can be found on the internet by using a common internet search engine with the query "Download the SSL Certificate from a Website."

2.5 ERN Certificates

In addition to the SSL certificates mentioned above, ERN certificates are required to sign and encrypt the contents of the messages flowing between SAP Cloud Integration and ROS. These certificates can be downloaded or requested using the normal ROS help desk or support.

2.6 Partner Directory URL

The relationship between the ERN and the actual certificate itself is stored in the Partner directory. The Partner Directory is a secure storage area in the cloud and is accessed by the ODATA URL which can be found in the SAP BTP Cockpit → Applications → Application '<tenant>tmn' → Application URLs → URL ending with '/api'

i Note

More details about Partner Directory can be found also here:

<https://api.sap.com/package/IntegrationFlowDesignGuidelinesPartnerDirectoryGuidelines>

2.7 Partner Directory SSL Certificate

The actual SSL certificate for HTTPS communication with the Partner Directory API can be downloaded from the Partner Directory URL.

i Note

Instructions how to download the SSL Certificate from the Tenant Management URL by using the internet browser can be found on the internet by using a common internet search engine with the query "Download the SSL Certificate from a Website."

2.8 Partner Directory User

This guide will describe the connection to the Partner Directory by using a User with the required authorization as described on the SAP Help Portal:

<https://help.sap.com/viewer/368c481cd6954bd5d0435479fd4eaf/LATEST/en-US/0fe80dc9d3be4dfbbb89ee4c791d326e.html>

i Note

It's possible to also access the Partner Directory by other ways like OAuth2. More information can be found on: <https://blogs.sap.com/> e.g. here <https://blogs.sap.com/2017/07/25/cloud-integration-partner-directory-step-by-step-example/>.

3 Configuration Steps in SAP Cloud Integration

3.1 General Information

The package SAP Payroll Integration with Revenue Online Services gateway - Ireland contains the following iFlows:

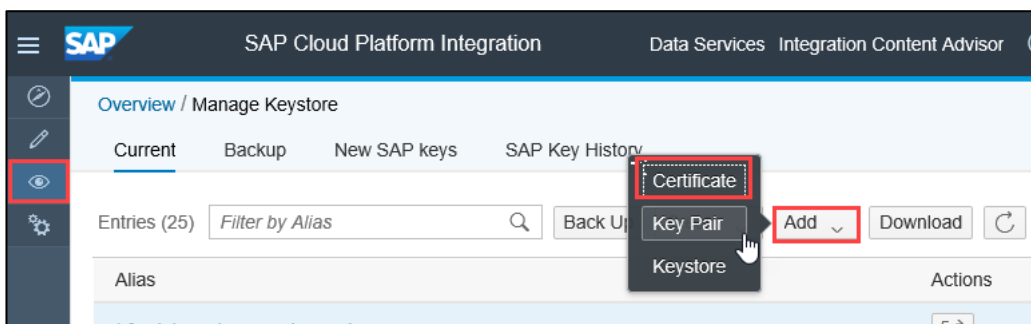
| iFlow Name in WebUI | Artifact ID |
|---|---|
| Payroll Submission | Payroll_Submissions |
| Payroll Submission Compressed | PayrollSubmissionsCompressed |
| Check Payroll Submission | Check_Payroll_Submissions |
| Check PayrollByPeriod | Check_PayrollByPeriods |
| Check PayrollRun Request | Check_PayrollRun_Requests |
| Create New RPN | Create_New_RPNs |
| Look Up RPN By Date Last Updated | Look_Up_RPNs_By_Date_Last_Updated |
| Look Up RPN By Employee ID | Look_Up_RPNs_By_Employee_ID |
| Look Up RPN By Employee IDs | Look_Up_RPNs_By_Employee_IDs |
| Look Up RPN By Employer Registration Number | Look_Up_RPN_By_Employer_Registration_Number |
| Look Up RPN By PPSN | Look_Up_RPN_By_PPSN |
| ROS Certificate management | ROS_Certificate_management |

3.2 Deploying Key Pairs and Certificates

You deploy the key pairs and certificates to the SAP Cloud Integration tenants.

3.2.1 Uploading of ROS SSL Certificate to Keystore

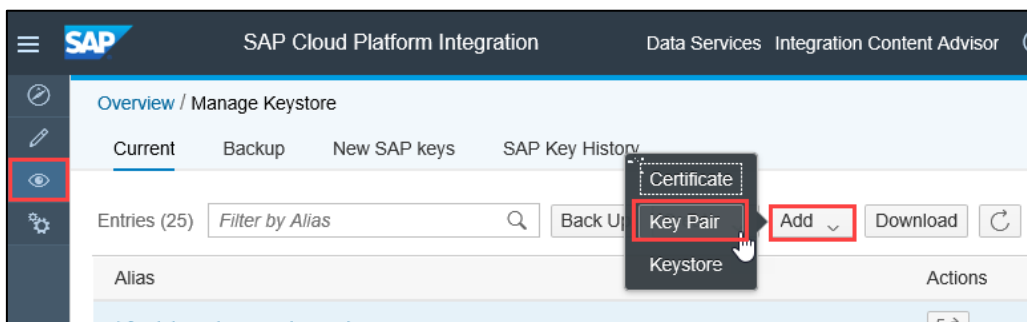
- 1) In the CI, open the [Overview](#) section
- 2) In the [Manage Security](#) section, click the **Keystore** tile
- 3) Click the [Add](#) button and select **Certificate**



- 4) In the pop-up window, enter the **Alias** for the Key Pair (e.g. ROS_ssl). Then select the file with ROS SSL Certificate. The file with the certificate should be in CRT or CER format.

3.2.2 Uploading of ERN Certificates to Keystore

- 1) In the SAP Cloud integration, open the *Overview* section
- 2) In the *Manage Security* section, click the **Keystore** tile
- 3) Click the *Add* button and select **Key Pair**

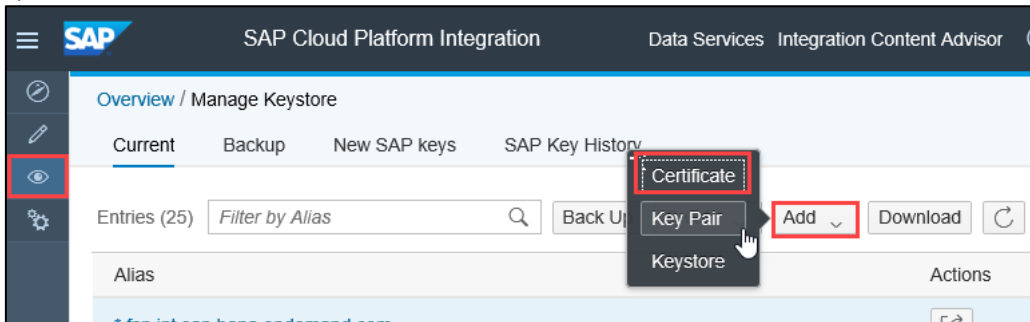


- 4) In the pop-up window, enter the **Alias** for the Key Pair if you would like one, otherwise if you leave this field blank, the system is auto populate the alias name. Then select the certificate and enter the corresponding password for this file in the **Password** field. The password needs to be extracted using the ABAP report HIEUPWDEXTRACTOR. See SAP back-end documentation for details on how to do this.

3.2.3 Uploading of Tenant Management SSL Certificate to Keystore

- 1) In the SAP Cloud integration, open the *Overview* section
- 2) In the *Manage Security* section, click the **Keystore** tile

- 3) Click the *Add* button and select **Certificate**



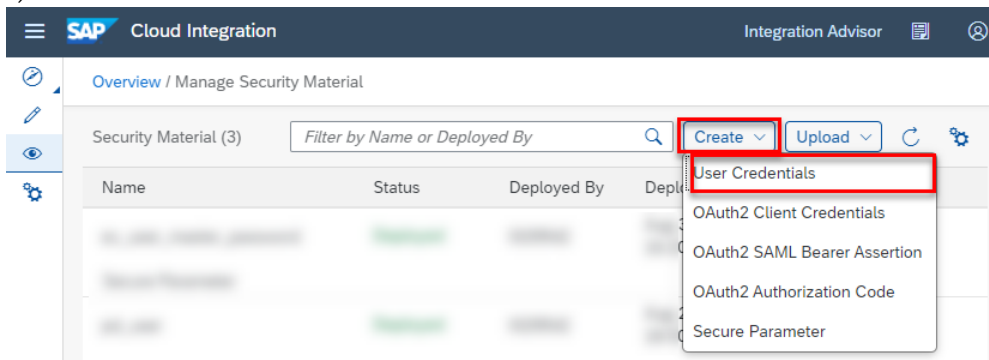
In the pop-up window, enter the **Alias** for the Key Pair (e.g. tmn_ss1). Then select the file with

- 4) Partner Directory SSL Certificate. The file with the certificate should be in CRT or CER format.

3.3 Store Sensitive Information into Security Material

3.3.1 Store Details of Partner Directory User Details

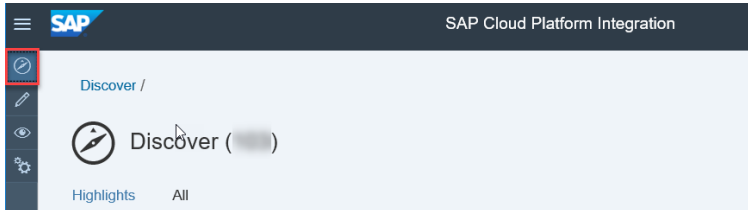
- 1) In the SAP Cloud integration, open the *Overview* section
- 2) In the *Manage Security* section, click the **Security Material** tile
- 3) Click the *Create* button and select **User Credential**



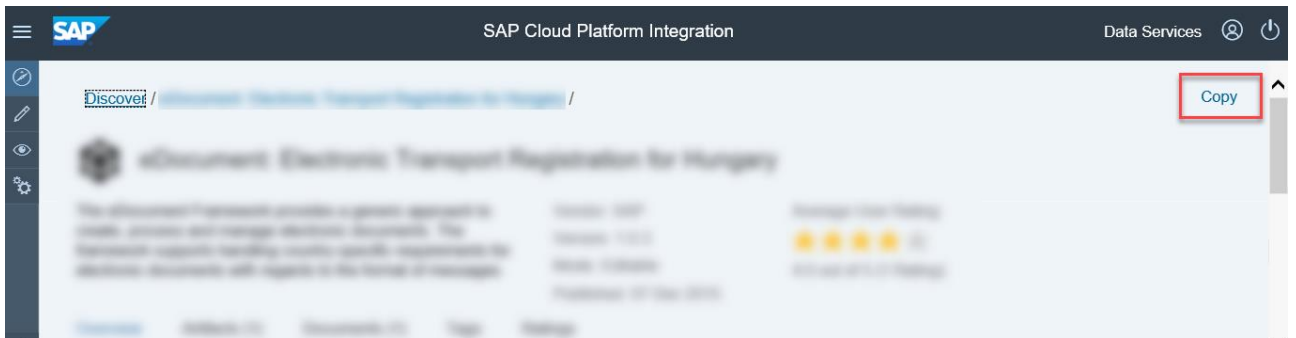
- 4) In the pop-up window, enter the **Name** for the User Credential as ERN_PD_USER . Fill in User Name and Password of the Partner Directory User.

3.4 Copy Published Integration Package

- 1) In the *Discover* section of your tenant, select the package SAP Payroll Integration with Revenue Online Services gateway - Ireland



2. Select the package and click *Copy* in the upper right corner.



3.5 Configure Integration Flows

i Note

The following steps must be executed for the package that was copied as described in chapter 3.4

3.5.1 Configuration of ROS Certificate management iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **ROS Certificate management** and choose **Configure**

| | | | | |
|--------------------------|--|------------------|-------|--|
| <input type="checkbox"/> | Payroll Submission Submit payroll data to ROS using REST interfaces. Part of the SMART PAYE total communication solution Created | Integration Flow | 1.0.0 | |
| <input type="checkbox"/> | PayrollSubmissionCompressed Submit payroll data to ROS using REST interfaces. Part of the SMART PAYE total communication solution. This interface compresses the data before sending it to ROS. Created | Integration Flow | 1.0.0 | <div style="border: 1px solid gray; padding: 2px;"> Copy View metadata Download </div> |
| <input type="checkbox"/> | ROS Certificate management CRUD maintenance of ROS certificate to ERN mapping using partner directory Created | Integration Flow | 1.0.0 | <div style="border: 1px solid gray; padding: 2px;"> Configure Deploy </div> |

Click the *Receiver* tab

- 4) Fill the Partner Directory URL as the value for *Address* field (e.g. `https://{tenant}-tmn.{something}.hana.ondemand.com/api/v1/`)
- 5) Select value "**Basic**" in the *Authentication* field
- 6) Fill in the name of Security Material with Partner Directory User (see chapter, Store Details of Partner Directory User Details) value for the *Credential Name* field (ERN_PD_USER)

Configure "ROS Certificate management"

Sender **Receiver**

Receiver: ODataPDCConnector

Adapter Type: HCIOData

Connection

Address: https://TMN-URL/api/v1

Authentication: Basic

Credential Name: ERN_PD_USER

Save Deploy Close

Select *Deploy*.

3.5.2 Configuration of Check Payroll Submission iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **Check Payroll Submission** and choose **Configure**

Header Overview **Artifacts (12)** Documents (1) Comments Tags

Add Delete Actions

| <input type="checkbox"/> | Name | Type | Version | Actions |
|--------------------------|--|------------------|---------|---|
| <input type="checkbox"/> | Check Payroll Submission | | | |
| <input type="checkbox"/> | Check the status of a payroll submission made to ROS using the payroll submission REST interface Created | Integration Flow | 1.0.0 | View metadata Download Configure Deploy |
| <input type="checkbox"/> | Check PayrollByPeriod | | | |
| <input type="checkbox"/> | Check status of a payroll submission using payroll periods Check the status of a payroll submission using payroll periods. The payroll submission was made to ROS using the payroll submission REST interface | Integration Flow | 1.0.0 | Deploy |

Click the *Sender* tab

- 4) Configure the User role with the role that you would like to assign to the user.

[Sender](#) More

Sender:

Adapter Type:

Connection

User Role:

[Save](#) [Deploy](#) [Close](#)

- 5) Select [Deploy](#).
 - 6) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.3 Configuration of Check PayrollByPeriod iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the [Artifacts](#) tab
- 3) Click on the [Actions](#) button that corresponds to integration flow **Check PayrollByPeriod** and choose **Configure**

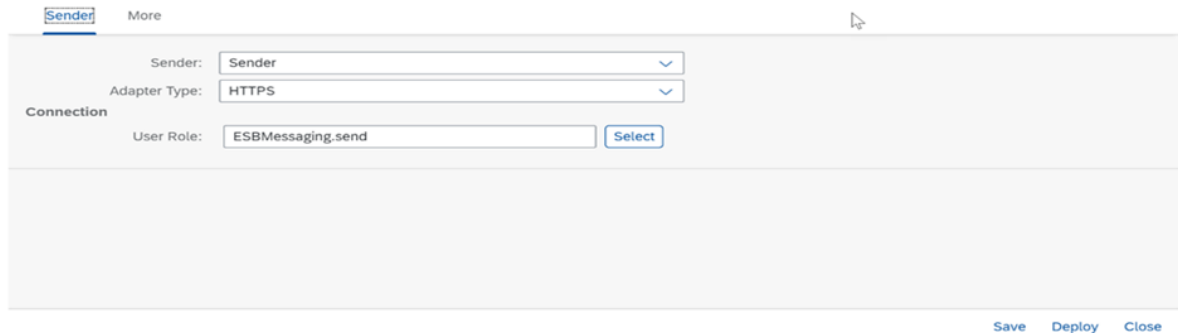
Overview [Artifacts \(12\)](#) Documents (1) Tags Comments

| Created | Name | Type | Version | Actions |
|---------|---|------------------|---------|--|
| | Check PayrollByPeriod Check status of a payroll submission using payroll periods Check the status of a payroll submission using payroll periods. The payroll submission was made to ROS using the payroll submission REST interface Created | Integration Flow | 1.0.0 | <input type="checkbox"/> <ul style="list-style-type: none"> Copy View metadata Download Configure Deploy |
| | Check PayrollRun Request Check the status of a payroll submission using the payroll run number. The submission was made to ROS using the payroll submission REST interface. | Integration Flow | 1.0.0 | <input type="checkbox"/> <ul style="list-style-type: none"> Configure |

Click the [Sender](#) tab

- 4) Configure the User role with the role that you would like to assign to the user.

- 5) Select *Deploy*.



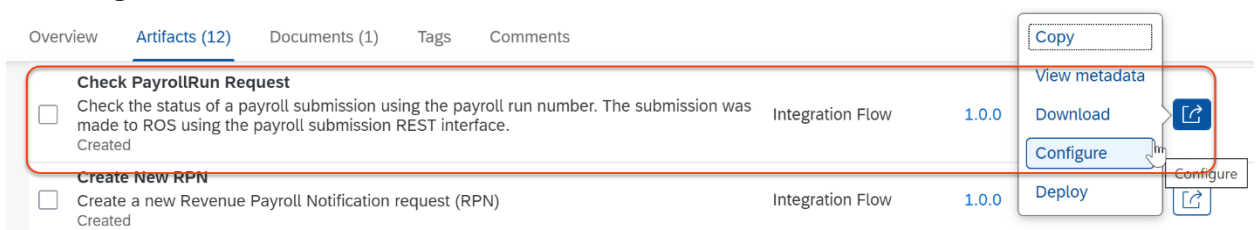
- 6) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- 7) In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.4 Configuration of Check PayrollRun Request iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **Check PayrollRun Request** and choose **Configure**



Click the *Sender* tab

- 4) Configure the *User role* with the role that you would like to assign to the user.
- 5) Select *Deploy*.

- 6) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- 7) In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

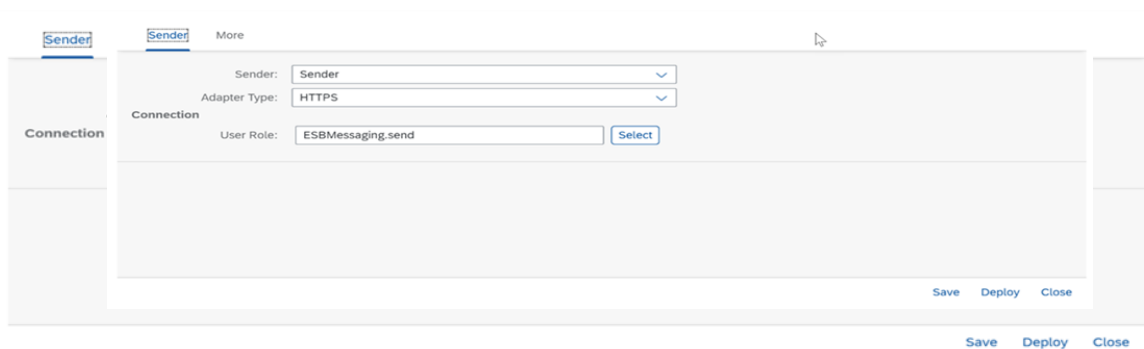
Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.5 Configuration of Create New RPN iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **Create New RPN** and choose **Configure**

| Overview | Artifacts (12) | Documents (1) | Tags | Comments |
|--------------------------|---|------------------|-------|--|
| <input type="checkbox"/> | Create New RPN Create a new Revenue Payroll Notification request (RPN) Created | Integration Flow | 1.0.0 | <div style="border: 1px solid gray; padding: 2px;"> Copy View metadata Download Configure Deploy </div> |
| <input type="checkbox"/> | Look Up RPN By Date Last Updated Lookup existing Revenue Payroll Notifications (RPNs) using dates as the key Created | Integration Flow | 1.0.0 | <div style="border: 1px solid gray; padding: 2px;"> Configure Configure </div> |

- 4) Click the *Sender* tab
- 5) Configure the *User role* with the role that you would like to assign to the user.



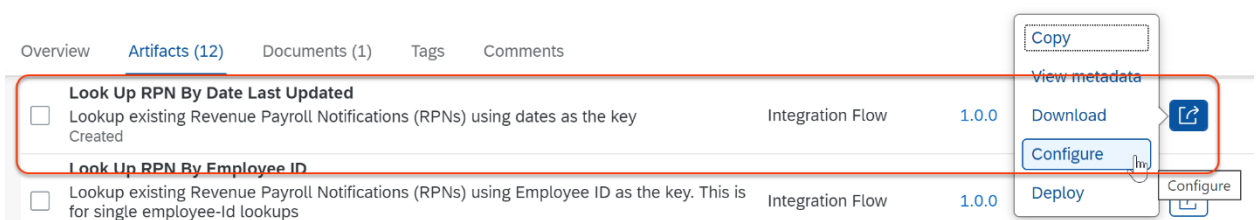
- 6) Select *Deploy*.
- 7) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- 8) In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.6 Configuration of Look Up RPN By Date Last Updated iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **Look Up RPN By Date Last Updated** and choose **Configure**



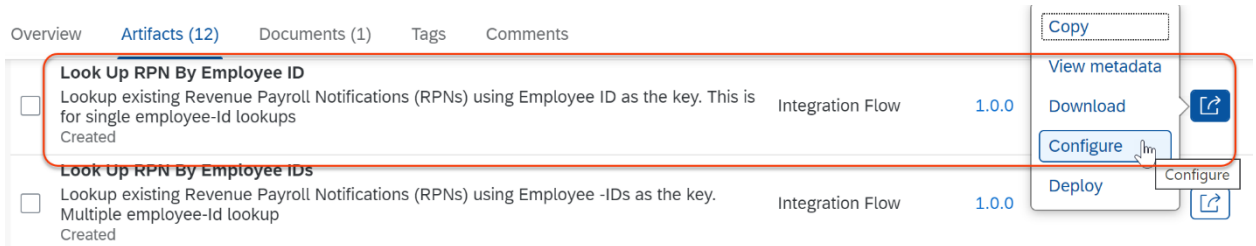
- 4) Click the *Sender* tab
 - 5) Configure the *User role* with the role that you would like to assign to the user.
 - 6) Select *Deploy*.
 - 7) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

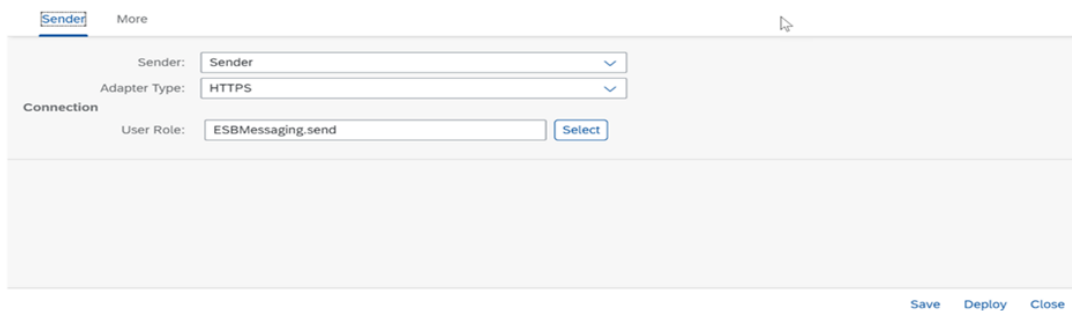
Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.7 Configuration of Look Up RPN By Employee ID iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **Look Up RPN By Employee ID** and choose **Configure**



- 4) Click the *Sender* tab
- 5) Configure the *User role* with the role that you would like to assign to the user.
- 6) Select *Deploy*.



- 7) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- 8) In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

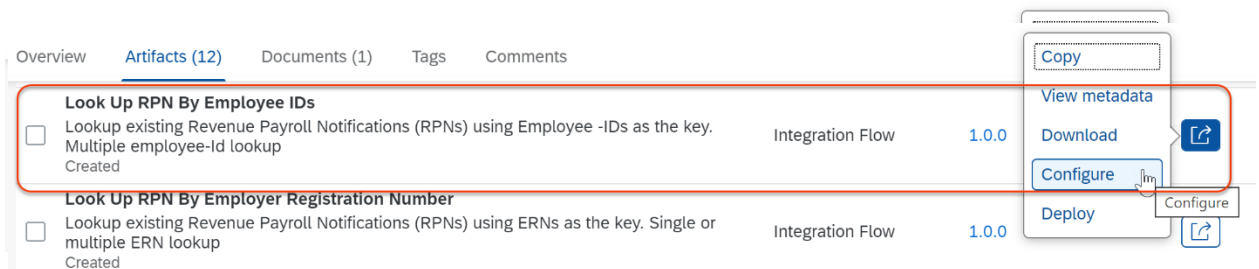
i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

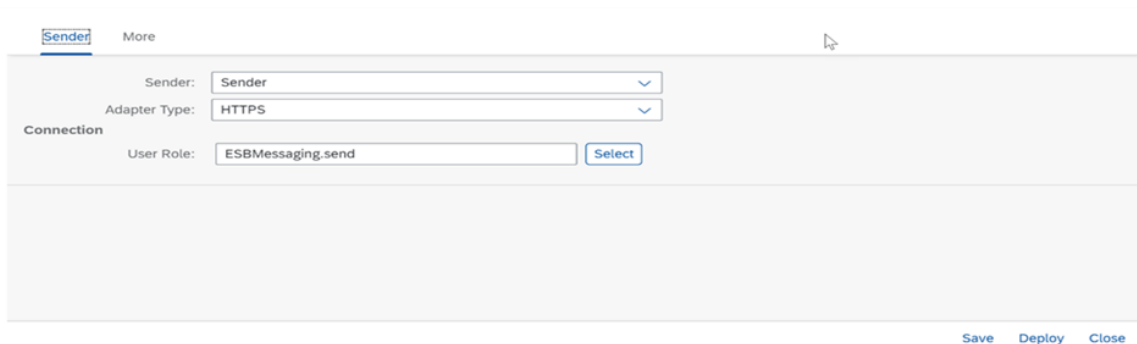
3.5.8 Configuration of Look Up RPN By Employee IDs iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab

- 3) Click on the [Actions](#) button that corresponds to integration flow **Look Up RPN By Employee IDs** and choose **Configure**



- 4) Click the [Sender](#) tab
- 5) Configure the [User role](#) with the role that you would like to assign to the user.
- 6) Select [Deploy](#).



- 7) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- 8) In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.9 Configuration of Look Up RPN By Employer Registration Number iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the [Artifacts](#) tab
- 3) Click on the [Actions](#) button that corresponds to integration flow **Look Up RPN By Employer Registration Number** and choose **Configure**

Overview **Artifacts (12)** Documents (1) Tags Comments

| | | | | | |
|--------------------------|--|------------------|-------|--|---------------|
| <input type="checkbox"/> | Multiple employee-Id lookup Created | Integration Flow | 1.0.0 | Copy | |
| <input type="checkbox"/> | Look Up RPN By Employer Registration Number Lookup existing Revenue Payroll Notifications (RPNs) using ERNs as the key. Single or multiple ERN lookup Created | Integration Flow | 1.0.0 | View metadata Download Configure | |
| <input type="checkbox"/> | Look Up RPN By PPSN Lookup existing Revenue Payroll Notifications (RPNs) using PPSNs as the key. Single or multiple RPN lookup Created | Integration Flow | 1.0.0 | Deploy | Configure |

- 4) Click the *Sender* tab
- 5) Configure the *User role* with the role that you would like to assign to the user.

Sender More

Sender:

Adapter Type:

Connection

User Role:

- 6) Select *Deploy*.
- 7) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll

In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.10 Configuration of Look Up RPN By PPSN iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **Look Up RPN By PPSN** and choose **Configure**

| | | | | | |
|--------------------------|--|------------------|-------|--|---------------|
| <input type="checkbox"/> | Look Up RPN By Employer Registration Number Lookup existing Revenue Payroll Notifications (RPNs) using ERNs as the key. Single or multiple ERN lookup Created | Integration Flow | 1.0.0 | Copy | |
| <input type="checkbox"/> | Look Up RPN By PPSN Lookup existing Revenue Payroll Notifications (RPNs) using PPSNs as the key. Single or multiple RPN lookup Created | Integration Flow | 1.0.0 | View metadata Download Configure | |
| <input type="checkbox"/> | Payroll Submission Submit payroll data to ROS using REST interfaces. Part of the SMART PAYE total communication solution Created | Integration Flow | 1.0.0 | Deploy | Configure |

- 4) Click the *Sender* tab
- 5) Configure the *User role* with the role that you would like to assign to the user.
- 6) Select *Deploy*.

- 7) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- 8) In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.11 Configuration of Payroll Submission iFlow

- 1) Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- 2) Click the *Artifacts* tab
- 3) Click on the *Actions* button that corresponds to integration flow **Payroll Submission** and choose
- 4) **Configure**

| Integration Flow | Version | Actions |
|--|------------------------|---|
| Look Up RPN By PPSN Lookup existing Revenue Payroll Notifications (RPNs) using PPSNs as the key. Single or multiple RPN lookup Created | Integration Flow 1.0.0 | Copy, View metadata, Download, Deploy, [Share] |
| Payroll Submission Submit payroll data to ROS using REST interfaces. Part of the SMART PAYE total communication solution Created | Integration Flow 1.0.0 | Copy, View metadata, Download, Configure , Deploy, [Share] |
| PayrollSubmissionCompressed Submit payroll data to ROS using REST interfaces. Part of the SMART PAYE total communication solution. This interface compresses the data before sending it to ROS. Created | Integration Flow 1.0.0 | Copy, View metadata, Download, Deploy, [Share] |

- 5) Click the *Sender* tab

- Configure the *User role* with the role that you would like to assign to the user.

- Select *Deploy*.
- Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll

In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.5.12 Configuration of Payroll Submission Compressed iFlow

- Go to the integration package that was copied from the original SAP Payroll Integration with Revenue Online Services gateway - Ireland.
- Click the *Artifacts* tab
- Click on the *Actions* button that corresponds to integration flow **PayrollSubmissionCompressed** and choose **Configure**

| | | | | |
|--------------------------|--|------------------|-------|--------------|
| <input type="checkbox"/> | Submit payroll data to ROS using REST interfaces. Part of the SMART PAYE total communication solution Created | Integration Flow | 1.0.0 | |
| <input type="checkbox"/> | PayrollSubmissionCompressed Submit payroll data to ROS using REST interfaces. Part of the SMART PAYE total communication solution. This interface compresses the data before sending it to ROS. Created | Integration Flow | 1.0.0 | |
| <input type="checkbox"/> | ROS Certificate management CRUD maintenance of ROS certificate to ERN mapping using partner directory Created | Integration Flow | 1.0.0 | |

- Click the *Sender* tab

- 5) Configure the *User role* with the role that you would like to assign to the user.

The screenshot shows a configuration window for a 'Sender'. The 'Adapter Type' is set to 'HTTPS'. Under the 'Connection' section, the 'User Role' is set to 'ESBMessaging.send'. There is a 'Select' button next to the user role field. At the bottom right, there are buttons for 'Save', 'Deploy', and 'Close'.

- 6) Select *Deploy*.
- 7) Configuration Steps in SAP ERP or SAP SuccessFactors Employee Central Payroll
- 8) In the SAP back-end system, you need to configure the HTTPS connection to the CI solution.

i Note

Some details (names of tabs etc.) might be slightly different depending on your release version.

3.6 Configuration of HTTP connections (RFC) for each iFlow

To set up the HTTPS connection, you need the URL of the tenant (the TMN URL you received when the tenant was provisioned). You can also find the URL in the CI Overview → Manage Integration Content → Select deployed iFlows. See example below.

i Note

To setup a secure HTTPS connection between the SAP back-end system and the SAP Cloud Integration tenant, add the load balancer root certificate to the SAP back-end system trust store.

- 1) Execute the transaction code **SM59**
- 2) To create a new connection, select *Edit → Create*
- 3) For the RFC destination, enter each of the values from the table below for the connection name
- 4) Set connection type **G** (HTTP Connection to External Server)
- 5) Enter **a description** in the *Description* field from the table below
- 6) On the *Technical Settings* tab, enter the following values
 - a) Target Host: < **IFLMAP URL for the CI tenant** >

i Note

*Make sure that you don't enter "https://" in the field, Target Host
Example: 1234567890-iflmap.hcisbp.eu3.hana.ondemand.com*

- b) Service No.: **443**
- c) Path Prefix: **enter the path prefix from the table below**
- d) HTTP Proxy Options <Enter own HTTP proxy values>

RFC Destination HR_IE_ROS_CPI_PAYROLL

Connection Test

RFC Destination:

Connection Type: HTTP Connection to External Serv Description

Description

Description 1:

Description 2:

Description 3:

Administration | **Technical Settings** | Logon & Security | Special Options

Target System Settings

Target Host: Service No.:

Path Prefix:

HTTP Proxy Options

Global Configuration

Proxy Host:

Proxy Service:

Proxy User:

Proxy PW Status:

Proxy Password:

- 7) Click the *Logon & Security* tab
There are two options for setting up the authentication: **basic authentication** or **client certificate-based authentication**. The more secure option is to use client certificates.

a) **Basic Authentication**

Create a user in Cloud Integration and assign the **ESBMessaging.send** role.

Note

More information can be found on SAP Help Portal

<https://help.sap.com/viewer/368c481cd6954bd5d0435479fd4eaf/Cloud/en-US/24585cc503334e6c917ef383efb5558a.html?q=ESBMessaging.send>

In the *Logon & Security* tab enter:

- i) *Logon with user*: Choose **Basic Authentication** and enter a valid **user** and **password** for logging on to CI
- ii) *Logon with ticket*: Select **Do Not Send Logon Ticket**
- iii) *Security options*: Select **SSL Active** and **SSL Certificate Default SSL Client (Standard)**

b) **Client certificate-based authentication**

Set up the client certificate in the SAP back-end system and upload to Cloud Integration in the certificate-to-user mapping as described in the blog [https://blogs.sap.com/2017/06/05/cloud-integration-how-](https://blogs.sap.com/2017/06/05/cloud-integration-how-to-setup-secure-http-inbound-connection-with-client-certificates/)

RFC Destination HR_IE_ROS_CPI_PAYROLL

Connection Test

RFC Destination: HR_IE_ROS_CPI_PAYROLL
 Connection Type: G HTTP Connection to External Serv
 Description: Payroll submission

Administration | Technical Settings | **Logon & Security** | Special Options

Logon with User

- Do not use a user
- Basic Authentication

User: [redacted]
 PW Status: saved
 Password: [redacted]

Logon with Ticket

- Do not send logon ticket
- Send ticket without reference to target system
- Send assertion ticket for dedicated target system

System ID: [redacted] Client: [redacted]

[to-setup-secure-http-inbound-connection-with-client-certificates/](#)

8) To perform a quick test, click on **Connection Test** button

If everything is correctly set then **HTTP Response Status** should be with Value **200**

Connection Test HTTP Destination HR_IE_ROS_CPI_PAYROLL

Destination: HR_IE_ROS_CPI_PAYROLL
 Type: HTTP connection to external server

Test Result | Response Header Fields | Response Body | Response Text

| Detail | Value |
|----------------------|--------|
| Status HTTP Response | 200 |
| Status Text | |
| Test Call Duration | 300 ms |

3.7 Table of RFC connections

Use the table below as a proposal to create RFC destinations for each of the ROS services you will use.

| REST Messages | RFC Destination | Description1 | Path Prefix |
|---|---------------------------------|--|--|
| Payroll Submission | HR_IE_ROS_CI_PAYROLL | Payroll submission | /http/POST/PayrollSubmission |
| Payroll Submission Compressed | HR_IE_ROS_CI_PAYSUB_COMPRESSION | Payroll submission using compression | /http/POST/PayrollSubmission/Compression |
| Check Payroll Submission | HR_IE_ROS_CI_PAYSUB | Check payroll submission | /http/GET/CheckPayrollSubmission |
| Check PayrollByPeriod | HR_IE_ROS_CI_PAYPERIOD | Check payroll submission by period | /http/GET/CheckPayrollByPeriod |
| Check PayrollRun Request | HR_IE_ROS_CI_PAYRUN | Check payroll submission using Payroll run | /http/GET/CheckPayrollRun |
| Create New RPN | HR_IE_ROS_CI_NEWRPNS | Create New RPNs | /http/POST/CreateNewRPN |
| Look Up RPN By Date Last Updated | HR_IE_ROS_CI_LOOKUPDATE | Lookup RPNs by Date | /http/GET/LookUpRPNByDate |
| Look Up RPN By Employee ID | HR_IE_ROS_CI_EMPID | Lookup RPNs by Employee ID (single) | /http/GET/LookUpRPNByEmployeeID |
| Look Up RPN By Employee IDs | HR_IE_ROS_CI_EMPIDS | Lookup RPN by Employee Ids (multiple) | /http/GET/LookUpRPNByEmployeeIDS |
| Look Up RPN By Employer Registration Number | HR_IE_ROS_CI_LOOKUPERN | Lookup RPNs by ERN | /http/GET/LookUpRPNByERN |
| Look Up RPN By PPSN | HR_IE_ROS_CI_PPSN | Lookup RPNs by PPSN | /http/GET/LookUpRPNByPPSN |
| ROS Certificate management | HR_IE_ROS_CI_CERT_MANAGEMENT | ERN to Certificate Link management | /http/POST/ERN/LINK |

Note

- 1) To setup a secure HTTPS connection between the SAP back-end system and the SAP Cloud Integration Tenant, add the load balancer root certificate to the SAP back-end system trust store.
- 2) The above table is just a proposal of values for the RFC destination and description. You can customize these to suit your organisations naming conventions
- 3) The host name is the < IFLMAP URL for the CI tenant> URL address of your CI tenant
- 4) Log on and security settings must be setup according to your organisations requirements.

- 1) Click the [Logon & Security](#) tab

There are two options for setting up the authentication: **basic authentication** or **client certificate-based authentication**. The more secure option is to use client certificates.

a) **Basic Authentication**

Create a user in Cloud Integration and assign the **ESBMessaging.send** role.

i Note

More information can be found on SAP Help Portal

<https://help.sap.com/viewer/368c481cd6954bd5d0435479fd4eaf/Cloud/en-US/24585cc503334e6c917ef383efb5558a.html?q=ESBMessaging.send>

In the *Logon & Security* tab enter:

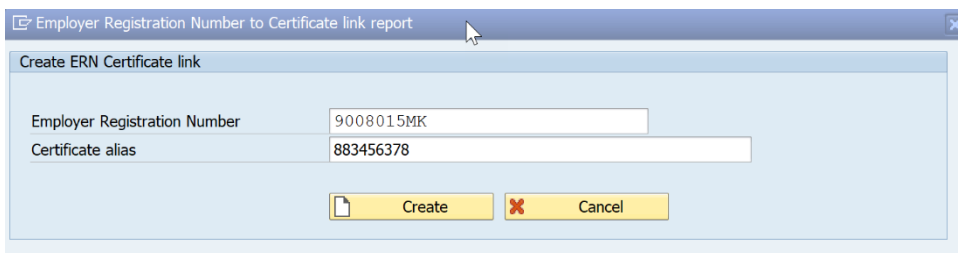
- i) *Logon with user*: Choose **Basic Authentication** and enter a valid **user** and **password** for logging on to CI
- ii) *Logon with ticket*: Select **Do Not Send Logon Ticket**
- iii) *Security options*: Select **SSL Active** and **SSL Certificate Default SSL Client (Standard)**

2) everything is correctly set then **HTTP Response Status** should be with Value **490**

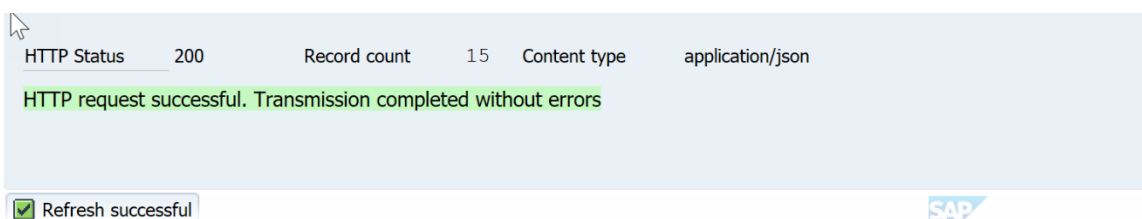
3.7.1 Store of Enterprise User Details into Partner Directory

To store Enterprise User Details into Partner Directory, follow these steps:

- 1) Execute the transaction code **PC00_M11_ERN_CERT**
- 2) A list of ERNs and associated certificate names will be displayed if already in the partner directory. Otherwise, you get a blank screen with the options to Create, Update and Delete entries
- 3) To create a new entry, press the Create link button.
- 4) Fill the **Employer Registration Number** and **Certificate alias** values according

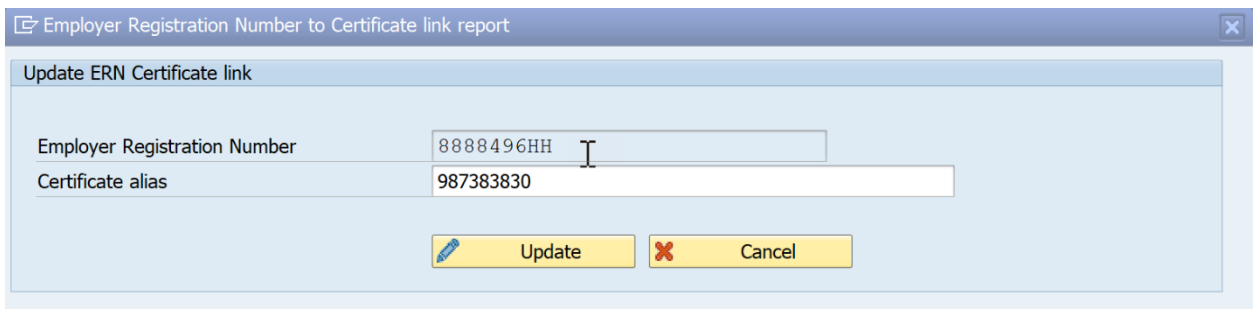


- 5) Click the *Create (F8)* button
- 6) If everything is *OK* then output will look like this:



- 7) To Update an existing record with a new certificate alias, select the line and press the *Update link* button.

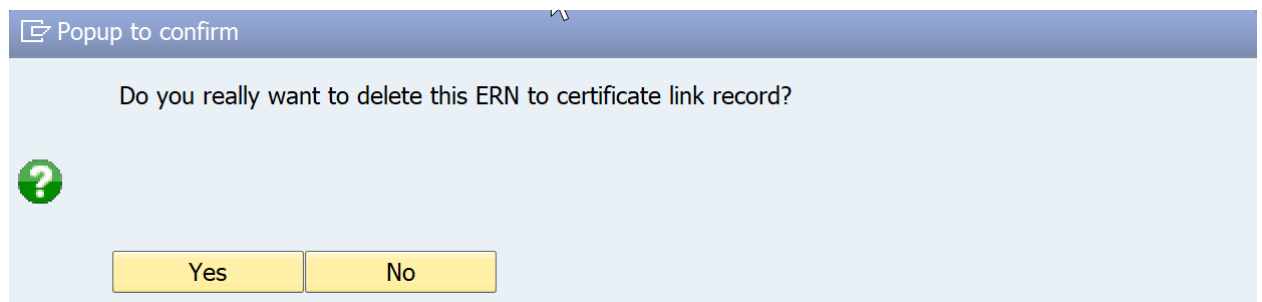
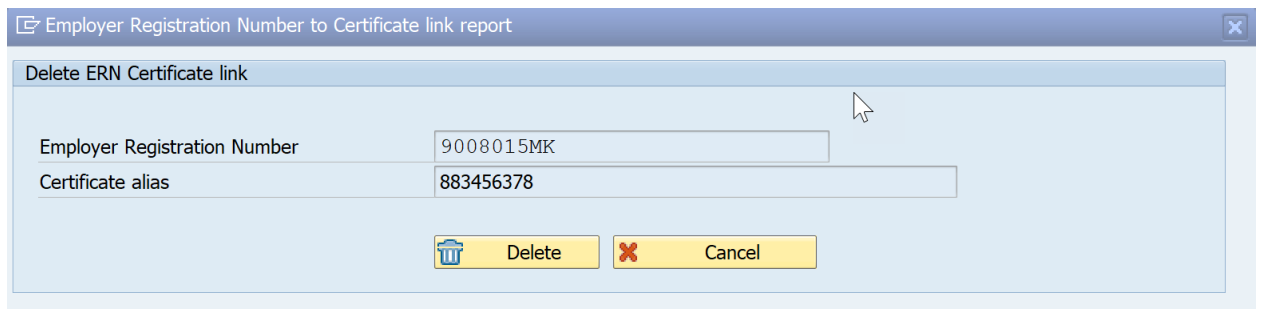
8) Enter the new alias and press the Update button



If successful, you will see the confirmation message at the bottom of the screen

9) To delete an existing record with a new certificate alias, select the line and press the *Delete link* button.


10) Confirm your intention to delete by confirming on the popup.



3.7.2 Password extractor program

The password that is sent to you when you request a new certificate for your ERN is encoded value. The actual password must be decoded and extracted from that value.

Certificate password generator

 Extract password

Password extractor



| Coded password | Extracted password |
|----------------|--------------------------|
| abcdefg | esZsDxSN6VGbi9JkMSxNZA== |
| | |
| | |
| | |
| | |
| | |

1. Execute the transaction code **PC00_M11_PWD_EXTRACT**
2. Enter the supplied coded password in the ALV list and press the execute button.
3. The decoded and extracted password is displayed.



www.sap.com/contactsap

© 2016 SAP SE or an SAP affiliate company. All rights reserved. No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. Please see <http://www.sap.com/corporate-en/legal/copyright/index.epx#trademark> for additional trademark information and notices.

Material Number: