



# **Integrating SAP Project Intelligence Network for Construction with SAP S/4HANA Cloud**

## Integration Guide

## TABLE OF CONTENTS

|     |   |   |
|-----|---|---|
| 1   | PREREQUISITES.....  | 3 |
| 1.1 | Systems and Roles.....  | 3 |
| 1.2 | Additional Information .....  | 3 |
| 2   | CONFIGURATION IN SAP S/4HANA CLOUD.....   | 3 |
| 2.1 | Create a Communication User .....   | 3 |
| 2.2 | Create a Communication System .....   | 3 |
| 2.3 | Create a Communication Arrangement.....   | 4 |
| 3   | CONFIGURATION IN SAP CLOUD PLATFORM INTEGRATION .....                                     | 5 |
| 3.1 | Deploy Credentials of the Technical User.....   | 5 |
| 3.2 | Copy the Integration Package .....  | 5 |
| 3.3 | Configuration of the Integration Flow “Import Project Plan from Enterprise Project” ..... | 5 |
| 4   | CONFIGURATION IN SAP PROJECT INTELLIGENCE NETWORK FOR CONSTRUCTION .....                  | 7 |
| 4.1 | Create a Destination to SAP Cloud Platform Integration .....                              | 7 |

This integration guide provides step-by-step instructions on how to configure SAP Project Intelligence Network for Construction to integrate with SAP S/4HANA Cloud.

## 1 PREREQUISITES

Before going through the following step-by-step procedures, ensure that the following prerequisites are fulfilled.

### 1.1 Systems and Roles

Your ERP System must be SAP S/4HANA Cloud and you require administrative access to the SAP S/4HANA Cloud tenant to create the communication setup.

You should have access to your SAP Cloud Platform Integration tenant to deploy and configure the integration package.

You should have access to the cloud cockpit of SAP Project Intelligence Network for Construction.

### 1.2 Additional Information

You are responsible for managing the integration content inside your SAP Cloud Platform Integration tenant. If you want to perform non-standard integrations, you can copy and modify the integration content.

## 2 CONFIGURATION IN SAP S/4HANA CLOUD

### 2.1 Create a Communication User

The communication user defined in the SAP S/4HANA Cloud system is used for inbound communication and processing messages in the system. Technically, the user is used to call services in SAP S/4HANA Cloud from SAP Cloud Platform Integration.

Procedure:

1. Access the *S/4 Cloud Fiori UI* and log in as an *SAP S/4HANA Cloud Administrator*.
2. Choose *Maintain Communication Users* from the *Communication Management* group.
3. Choose *New*.
4. On the next screen, specify the following settings and choose *Create*:
  - *User Name*: **username**, for example **COPIN**
  - *Description*: **SAP Project Intelligence Network for Construction**
  - *Password*: **Enter a password**

The screenshot shows a web-based form for creating a communication user. The form is titled 'General' and 'User Data'. It contains the following fields and values:

- \*User Name:** COPIN
- \*Description:** SAP Project Intelligence Network for Construction
- User ID:** CC0000000334
- Locked:**

### 2.2 Create a Communication System

A communication system represents an external system which is used for application integration, in this case the SAP Project Intelligence Network for Construction

Procedure:

1. Access the *S/4 Cloud Fiori UI* and log in as an *SAP S/4HANA Cloud Administrator*.
2. Choose *Communication Systems* from the *Communication Management* group.
3. Choose *New*.

4. Enter the ID as required, for example, **CPI\_System**. Enter a descriptive name in the *System Name* field.
5. Choose *Create*.
6. In the *Technical Data* section, enter the *Host Name* of your CPI tenant, for example in the following format: **sap.hana.ondemand.com**. If the host name is not known yet, a placeholder value can be used.

General

|                 |   |                      |                          |
|-----------------|---|----------------------|--------------------------|
| *Host Name:     | <input type="text" value="mytenant-iflmap.hcisb.int.sap.eu2.hana.ondemand..."/> | UI Host Name:        | <input type="text"/>     |
| Logical System: | <input type="text"/>  | Business System:     | <input type="text"/>     |
| HTTPS Port:     | <input type="text" value="443"/>  | Use Cloud Connector: | <input type="checkbox"/> |

7. Under *User for Inbound Communication*, click *Add* and assign the user previously created.

User for Inbound Communication

|                       |           |   |
|-----------------------|-----------|---|
|                       |           | + |
| Authentication Method | User Name |   |
| User ID and Password  | COPIN     | ⊗ |

8. Press *Save*.

### 2.3 Create a Communication Arrangement

The communication arrangement in the SAP S/4HANA Cloud system defines all relevant information for the communication with SAP Cloud Platform Integration.

Procedure:

1. Access the *S/4 Cloud Fiori UI* and log in as an *SAP S/4HANA Cloud Administrator*.
2. Choose *Communication Arrangements* from the *Communication Management* group.
3. Choose *New* and select the communication scenario **SAP\_COM\_0308**.
4. Choose *Create*.
5. Select the *Communication System* that was previously created. The inbound communication user will be automatically assigned.
6. Choose *Save*.

Common Data

|                        |   |             |                                      |
|------------------------|---|-------------|--------------------------------------|
| Arrangement Name:      | <input type="text" value="SAP_COM_0308"/>                                     | Own System: | <input type="text" value="OMB85UO"/> |
| *Communication System: | <input type="text" value="CPI_COPIN"/> <input type="button" value="Display"/> |             |                                      |

Inbound Communication Supported Authentication Methods

|             |   |                        |   |
|-------------|---|------------------------|---|
| *User Name: | <input type="text" value="COPIN"/> <input type="button" value="Display"/> | Authentication Method: | <input type="text" value="User ID and Password"/> |
|-------------|---|------------------------|---|

### 3 CONFIGURATION IN SAP CLOUD PLATFORM INTEGRATION

#### 3.1 Deploy Credentials of the Technical User

The credentials of the technical user that was previously created in SAP S/4HANA Cloud, must be configured in SAP Cloud Platform Integration.

Procedure:

1. Open the SAP Cloud Platform Integration service tenant WEB UI  
(for example, <https://<your SAP Cloud Platform, integration service tenant URL>/itspaces>)
2. On the tenant menu, Choose *Monitor*.
3. Choose *Security Material*.
4. Choose *Add* and select *User Credentials*.
5. Enter the following values:
  - *Name*: **credentials\_name**, for example **S4H\_CPI**
  - *Description*: **Communication with SAP S/4HANA Cloud**
  - *User*: **username**, as previously created
  - *Password*: **password**, as previously created

#### 3.2 Copy the Integration Package

The integration package contains all artifacts for the integration between SAP Project Intelligence Network for Construction and SAP S/4HANA Cloud.

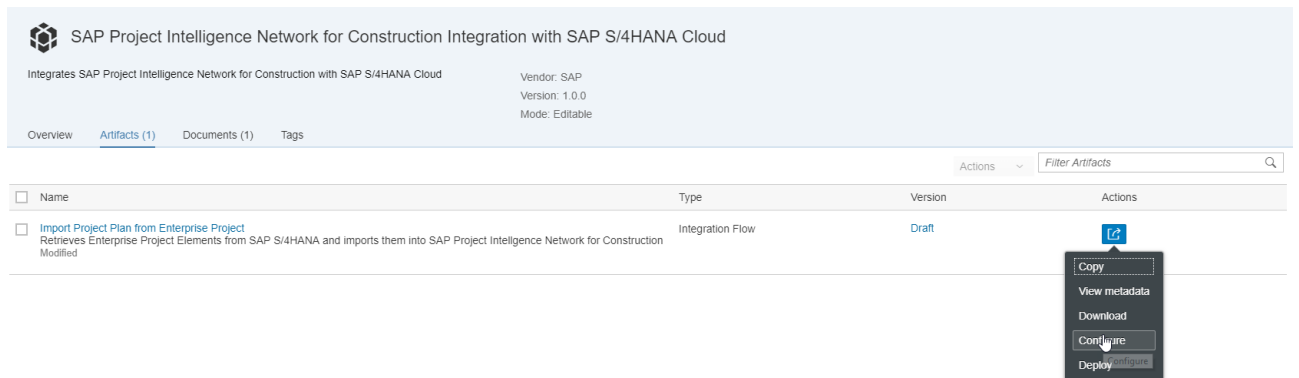
Procedure:

6. Open the SAP Cloud Platform Integration service tenant WEB UI  
(for example, <https://<your SAP Cloud Platform, integration service tenant URL>/itspaces>)
7. Choose *Discover* and find this integration package.
8. Select the integration package to open its details.
9. Choose *Copy* on the upper right corner.

#### 3.3 Configuration of the Integration Flow “Import Project Plan from Enterprise Project”

Procedure:

1. Open the SAP Cloud Platform Integration service tenant WEB UI  
(for example, <https://<your SAP Cloud Platform, integration service tenant URL>/itspaces>)
2. On the tenant menu, Choose *Design*.
3. Select the integration package that you copied before.
4. Find the integration flow *Import Project Plan from Enterprise Project* and choose *Configure* in the *Actions* column.



5. Specify the following values for the receiver *S4H*:

- *ODataBaseUrl*: The base URL of your SAP S/4HANA Cloud tenant, for example: <https://mytenant.s4h.ondemand.com>
- *Proxy Type*: **Internet**
- *Authentication*: **Basic**
- *Credentials Name*: **S4H\_CPI, as previously created**

Receiver

Receiver: S4H

Adapter Type: HCIOData

Address: {{ODataBaseUrl}}/sap/opu/odata/sap/API\_ENTERPRISE\_PROJECT\_SRV

ODataBaseUrl: https://mytenant.s4h.ondemand.com

Proxy Type: Internet

Authentication: Basic

Credential Name: S4H\_CPI

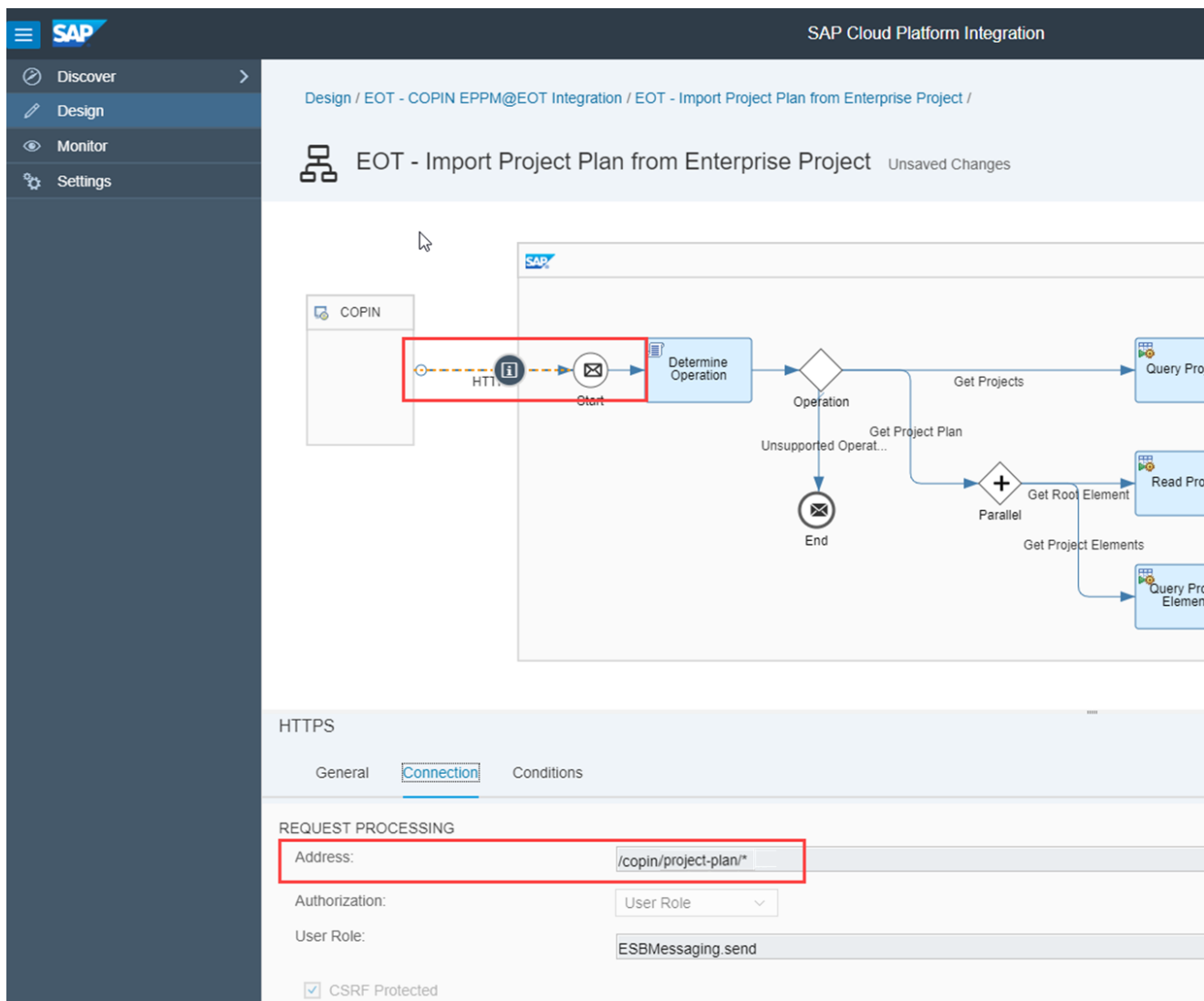
6. Choose *Save* and close the dialog.
7. Select *Deploy* from the *Actions* menu.
8. On the tenant menu, Choose *Monitor*.
9. Choose *Manage Integration Content, All*.
10. Verify that the integration flow is started (this can take several minutes).

| Name  | Status  |
|---|---------|
| Import Project Plan from Enterprise Project | Started |
| Integration Flow                            |         |

### 3.4 Define the URL for the integration flow

Procedure:

1. Open the SAP Cloud Platform Integration service tenant WEB UI (for example, <https://<your SAP Cloud Platform, integration service tenant URL>/itspaces>)
2. On the tenant menu, Choose *Design*.
3. Select the integration package that you copied before.
4. Click on “Artifacts” tab and open the iFlow in the iFlow modeler
5. Select the HTTPS connection between COPIN and the first iFlow activity “Determine Operation” and define the “Connection” “Address”. This is the request address to which the integration can be accessed from outside once the integration package is deployed. By default the URL is set to “/copin/project-plan/\*”



6. Choose *Save* and close the dialog.
7. Select *Deploy* from the *Actions* menu.

## 4 CONFIGURATION IN SAP CLOUD PLATFORM

### 4.1 Create a Destination to SAP Cloud Platform Integration

SAP Project Intelligence Network for Construction uses the SAP Cloud Platform’s destination configuration to configure the target URL of the integration.

Procedure:



1. Open the SAP Cloud Platform Cockpit for your subaccount that is subscribed to SAP Project Intelligence Network for Construction
2. Choose *Connectivity, Destinations*.
3. Choose *New Destination*.
4. Specify the following destination details:
  - **Name:** *destination\_name*, for example *copin\_project\_plan*
  - **Type:** **HTTP**
  - **URL:** URL that points to the integration flow in SAP Cloud Platform Integration, for example <https://tenant-iflmap.hcisb.int.sap.eu2.hana.ondemand.com/http/copin/project-plan>

**Note:** You can find this URL in SAP Cloud Platform Integration under *Monitor, Manage Integration Content* by clicking on the iFlow. Do not copy the trailing */\** which is displayed there.

- *Proxy Type:* Internet
  - *Authentication:* Basic Authentication
  - *User:* user in CPI tenant  
**Note:** The user must have the role “ESBMessaging.send” assigned in SAP Cloud Platform Integration
  - *Password:* password of CPI user
5. Create the following additional properties:
- **copin.int.display\_name:** S/4HANA Cloud (this name is shown in the user interface of SAP Project Intelligence Network for Construction to identify the system)
  - **copin.int.object:** ProjectPlan
6. Choose Save.

Destination Configuration

---

|                 |   |  |   |
|-----------------|---|--|---|
| *Name:          | copin_project_plan                                | Additional Properties  |   |
| Type:           | HTTP  | copin.int.display_...  | S/4HANA Cloud  |
| Description:    |   | copin.int.object   | ProjectPlan    |
| *URL:           | https://tenant-iflmap.hcisb.int.sap.eu2.hana.o... | <input checked="" type="checkbox"/> Use default JDK truststore |   |
| Proxy Type:     | Internet  |  |   |
| Authentication: | BasicAuthentication                               |  |   |
| *User:          | cpi-user  |  |   |
| Password:       | *****   |  |   |

---



© 2014 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. Please see <http://www.sap.com/corporate-en/legal/copyright/index.epx#trademark> for additional trademark information and notices. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors.  
National product specifications may vary.  
These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP SE or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP SE or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.  
In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

