



Integration Guide | PUBLIC
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Portugal eInvoice: Setting Up SAP Cloud Platform Integration (SAP S/4HANA Cloud) - Cloud Foundry

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1 Introduction

You use SAP Cloud Platform Integration to establish the communication with external systems and transfer to them the electronic documents you have created using the SAP Document Compliance solution. This document describes the setup steps that you must perform in your SAP S/4HANA Cloud tenant and SAP Cloud Platform Integration tenant so that the integration between the systems works.

The setup steps are typically done by an SAP Cloud Platform Integration consulting team, which is responsible for configuring the SAP S/4HANA Cloud tenant and the connection with SAP Cloud Platform Integration. This team may be also responsible for maintaining the integration content and certificates/credentials on the SAP Cloud Platform Integration tenant.

i Note

This document describes functionality that is provided by the Integration Package itself, that is, by the artifacts that are deployed in the SAP Cloud Platform Integration tenant. It may happen, however, that in the SAP S/4HANA Cloud tenant the access to such functionality is only partially implemented. Additionally, it may also happen that the tax authority servers do not provide all services that are described in this document. Please refer to the relevant SAP S/4HANA Cloud documentation and to the relevant tax authority information, respectively.

2 Prerequisites

Before you start with the activities described in this document, ensure that you have performed all initial setup steps described in [Initial Setup of SAP Cloud Platform Integration in Cloud Foundry Environment](#) . After completing the Provisioning the Tenant step, you have created your own tenant URL. This is the URL needed to complete the steps described in the Configuration Steps section of this guide.

3 Configuration Steps in SAP Cloud Platform Integration

The following sections tell you the necessary configuration you do in SAP Cloud Platform Integration.

3.1 General Information

The package **SAP Document Compliance: Electronic Invoicing for Portugal** contains the following iFlows:

iFlows for eDocument for Portugal

iFlow Name in WebUI	Project Name/Artifact Name
Portugal Send Invoice	com.sap.GS.Portugal.SendInvoice
Portugal Receive Message	com.sap.GS.Portugal.ReceiveMessage

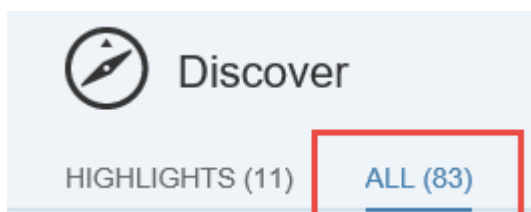
3.2 Copying Integration Flows

Context

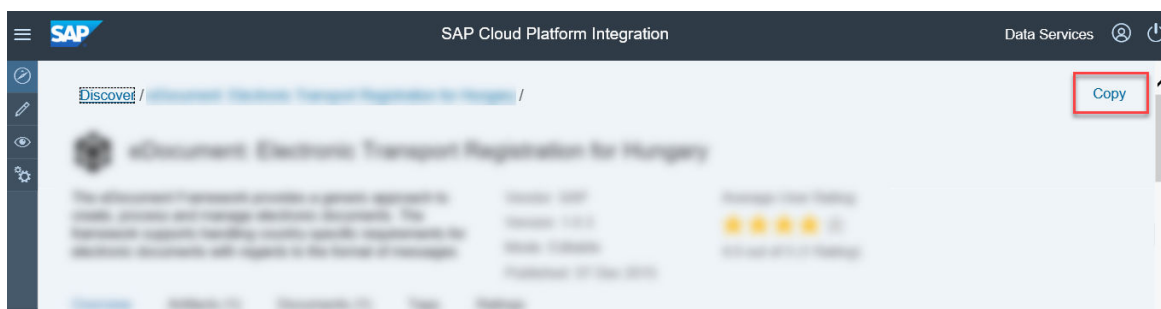
Copy all iFlows in the package SAP Document Compliance: Electronic Invoicing for Portugal to the target tenant as follows:

Procedure

1. In your browser, go to the WebUI of the tenant (URL: <Tenant URL>/itspaces/#shell/discover).
2. Choose **Discover** > **All** > .



3. Search for **SAP Document Compliance: Electronic Invoicing for Portugal**.
4. Select the Package and choose *Copy*.



3.3 Configuring Integration iFlows

Provides instructions for Configuring Integration iFlows.

You configure the package that you have copied as described in the step before.

There are 2 *Artifacts* in the integration package SAP Document Compliance: Electronic Invoicing for Portugal:

- Portugal: Send Invoice
- Portugal: Receive Message

i Note

Not all external parameters exist for each integration flow. Configure only the ones which are available.

3.3.1 Configuring Portugal: Send Invoice

Provides instructions for Configuring Integration iFlow for Portugal: Send Invoice.

Procedure

1. Choose **Actions > Configure > More** tab (in some versions it may be *Externalized Parameters*)
 - Use the `Mode` parameter to set up the integration package usage mode:

Value	Description
TEST	To use the test system of the service provider.

Value	Description
PROD	To use the productive (that is, legally binding) system of the service provider.

- Use the `Enable Logging` parameter to configure whether you want to activate logging functionally for all the messages:

Value	Description
true	The system adds log files to a message.
false	Logging disabled.

- Use the `PROD_API_URL` and `TEST_API_URL` parameters to configure the URL address of the service provider API endpoint for productive and test system respectively.

Configure "Portugal Send Invoice"

Sender **More**

Type:

Enable Logging:

Mode:

PROD_API_URL:

TEST_API_URL:

2. Choose the *Sender* tab.
 - Use the `Address` parameter to set up the integration package address. Normally you don't have to change this field. In case you change the field, make sure to use the same address when configuring the logical ports in the next chapter.

Configure "Portugal Send Invoice"

Sender More

Sender:

Adapter Type:

Connection

Address:

3. Choose *Save* and *Deploy* to deploy it actively to server. Note down the URLs of the endpoints for each service.

3.3.2 Configuring Portugal: Receive Message

Provides instructions for Configuring Integration iFlow for Portugal: Receive Message.

Procedure

1. Choose **Actions > Configure > More** tab (in some versions it may be *Externalized Parameters*)
 - Select *Partner_PushMessage* as sender.
 - Under Connections, use *DCPortugal.ReceiveMessage* as user role.

Note

If you choose a user role other than *DCPortugal.ReceiveMessage*, then ensure that you use the same role name when you create a custom role.

The screenshot shows the configuration page for a connection. The 'Sender' dropdown is set to 'Partner_PushMessage'. The 'Adapter Type' is 'HTTPS'. The 'Address' is '/PortugalReceiveMessages'. The 'Authorization' dropdown is 'User Role'. The 'User Role' dropdown is set to 'DCPortugal.ReceiveMessage', which is highlighted with a red box. A 'Select' button is visible next to the User Role dropdown.

2. Choose *Save* and *Deploy* to deploy it actively to server. Note down the URLs of the endpoints for each service.

3.4 Service Provider

Provides a description of the service provider.

Saphety is one of the registered service providers for signing eInvoices in Portugal. SAP establishes communication with Saphety.

eSPAP (Entidade de Servicos Partilhados da Administracao Publica, I.P.) is the Portuguese government organization responsible for eInvoice. It provides the formats of eInvoice for Portugal.

A customer is an organization with tax identification. A customer is identified in Saphety's network by its country code and tax identification, for example: PT123456789. Handling multiple tax identifications is possible. Each tax identification is a different customer.

Each customer requires a provisioning process.

3.4.1 Creating a Custom Role

Provides a description of how a service user enables the service provider to access the SAP Cloud Platform tenant. The integration package requires that you create a custom role for the authentication in SAP Cloud Platform Integration.

Prerequisites

- You must have created a subaccount as described in [Creating a Subaccount and Enabling Cloud Foundry](#) and you did not assign the standard user role.

Procedure

1. Go to the tenant URL <https://<tenant>.cfapps.<data center>.hana.ondemand.com/itspaces>.
2. In the *Operations* view, click the *User Roles* tile.
3. Choose *Add* and enter a role name (such as **DCPortugal.ReceiveMessage**) and a role description and click *Add*.

For more information, see [Managing Custom Roles in the Cloud Foundry Environment](#).

4. To assign the custom role to the integration, go to *SAP Platform Cockpit*, choose your subaccount and create an instance as described in this topic [Creating Service Instances](#).

i Note

In step 3.e, enter the user role you created in step 3 as described in this document. To do so, go back to the *Operations* view, choose the user role you created and choose *Download JSON* to get the user role in JASON format. Enter the code in the text field and choose *Next*.

5. Proceed with the steps to create a service key as described in [Creating Service Instances](#).

You generate a service key that holds the authentication information with the custom role.

3.4.2 Sharing Details with the Service Provider

Provides a description of how to share details with the service provider.

In SAP Cloud Platform Integration, go to **► Operations ► Manage Integration Content ► All ►** and search for *Portugal Receive Message*.

Share the following details with the service provider: Service URL (see highlighted part in screenshot), Technical User ID, Password.

Portugal Receive Message

[Restart](#) [Undeploy](#) [Download](#)

Deployed On: [REDACTED] ID: com.sap.GS.Portugal.ReceiveMessage

Deployed By: [REDACTED] Version: 1.0.0

Package: SAP Document Compliance: Electronic Invoicing for Portugal

[Endpoints](#) [Status Details](#) [Artifact Details](#) [Log Configuration](#)

https://[REDACTED]hana.ondemand.com/cxf/PortugalDeleteMessages	
WSDL	
WSDL without policies	
https://[REDACTED]hana.ondemand.com/http/PortugalReceiveMessages	
https://[REDACTED]hana.ondemand.com/cxf/PortugalPullMessages	
WSDL	
WSDL without policies	

⚠ Caution

- If the service provider informs you with the error code “404”, check if the iflow was successfully deployed and the URL is available to receive the messages
- If the service provider informs with the error code “403”, check the following details:
 - The technical user is assigned with an appropriate role (DCPortugal.ReceiveMessage)
 - The user credentials are correct.

3.4.3 Creating Credentials

Provides a description of how to enter the credentials from the service provider in SAP Cloud Platform Integration.

Context

To get access to the webservice provided by the service provider, the credentials received from the service provider are entered in SAP Cloud Platform Integration.

Procedure

1. Use the URL which you got during the provisioning process. The URL has the following format **https:**
\xxxxx.hana.ondemand.com\itspaces.
2. Navigate to the *Manage Security* section and choose *Security Material*.
3. Choose *Add User Credentials* and enter the following data and choose *Deploy* to save the changes.

Option	Description
<i>Name</i>	<VAT_code>_<SystemType> where <VAT_code> is the company's VAT in the SAP system <SystemType> is TEST or PROD depending on the type of your tenant Example: PT123456789_TEST
<i>Description</i>	Enter the name of the company.
<i>User</i>	Enter the username from the service provider.
<i>Password</i>	Enter the password received from the service provider.

4. Choose *Deploy* to save the changes.

4 Configuration Steps for SAP S/4HANA Cloud

The following sections tell you the necessary configuration you do in SAP S/4HANA Cloud.

4.1 Configuring a Communication System

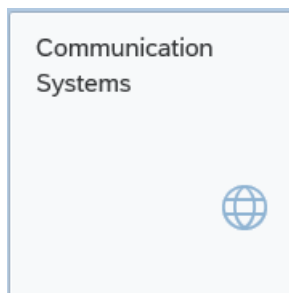
Create a communication system that represents your SAP Cloud Platform Integration tenant.

Prerequisites

- Live SAP Cloud Platform Integration test or productive tenant must be available.
- Communication systems and communication arrangements are not transportable. Configure them in both your quality and production systems.
- The SAP S/4HANA Cloud user, who configures communication systems and communication arrangements, must be assigned to the business catalog role `SAP_BCR_CORE_COM` (*Communication Management*) for accessing communication management apps.

Procedure

1. Log in to your S/4HANA Cloud tenant.
2. Find and launch the *Communication Systems* app. Choose *New*.



A *New Communication System* dialog box appears.

3. Create a system ID and give it a descriptive name.

New Communication System

*System ID:

*System Name:

Create Cancel

4. Choose *Create*.

An editing screen for the communication system appears.

5. In the *Technical Data* section, enter the host name and HTTPS port of your SAP Cloud Platform Integration tenant.

To find the host name for your tenant, in SAP Cloud Platform Integration, do as follows:

1. From the menu on the left, choose the *Operations* view.
2. Select *Manage Integration Content (All)*.
3. Search for the integration flow for the scenario you are configuring.
4. Find the host name in the *Endpoints* tab.

The endpoint URL is a concatenation of host name and path: **https://<host name>/<path>** .

6. In the *User for Outbound Communication* section, choose +.

Contact Information

Contact Person Name: Phone Number:

E-Mail:

OAuth 2.0 Identity Provider

Enabled:

User for Inbound Communication +

Authentication Method	User Name
No data	

User for Outbound Communication +

Authentication Method	User Name/Certificate/Client ID
No data	

7. Select an authentication method, which is used to connect to your SAP Cloud Platform Integration tenant. Proceed as follows:

New Outbound User

*Authentication Method: **User Name and Password** ▼

*User Name:

*Password:

SSL Client Certificate

OAuth 1.0

OAuth 2.0

None

Cancel

- If you select the authentication method *User Name and Password*, for *User Name* enter the value for the **clientid** and for *Password*, the value for the **clientsecret**. You create these values for your service instance in SAP Cloud Platform Integration. For more information, see [Creating Service Instances](#).

New Outbound User

*Authentication Method: **User Name and Password** ▼

*User Name:

*Password:

Create Cancel

- If you select the authentication method *SSL Client Certificate*, select the *Default Client Certificate* type and choose *Create*.

New Outbound User

*Authentication Method: **SSL Client Certificate** ▼

Certificate Type: **Default Client Certificate** ▼

Create Cancel

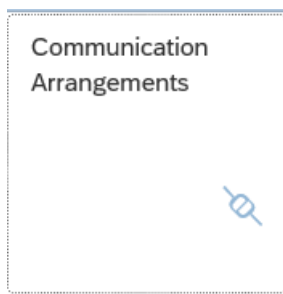
8. Choose *Save*.

4.2 Configuring Communication Arrangement

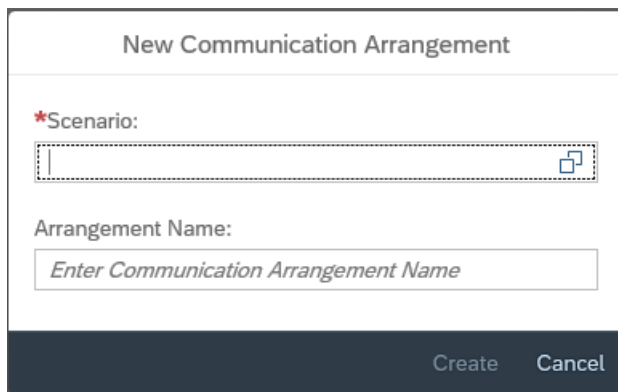
Configuration steps for SAP S/4HANA Cloud Communication Arrangement.

Procedure

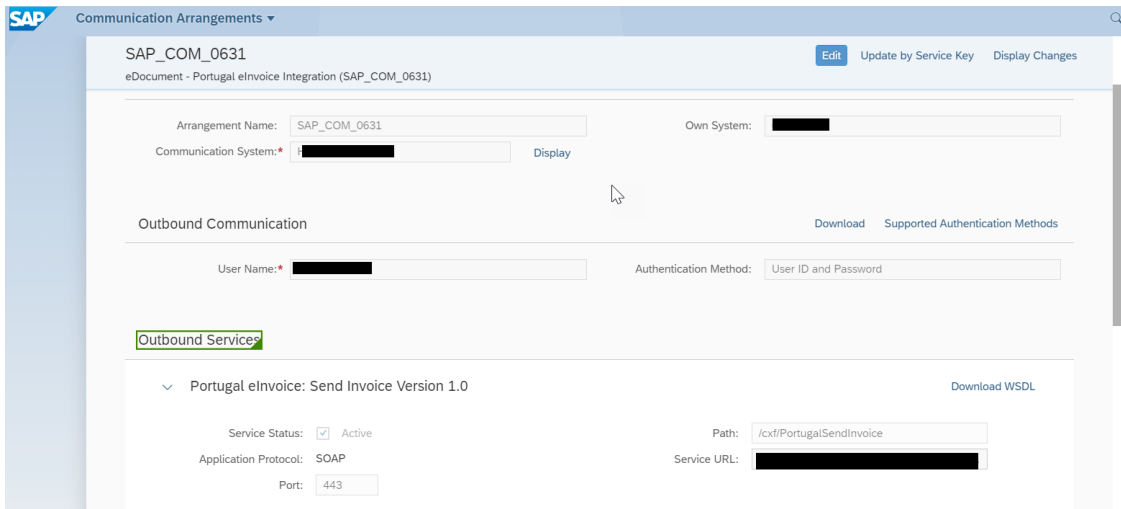
1. Login to your S/4HANA Cloud tenant with the Cloud User.
2. Find and launch the application *Communication Arrangements*.



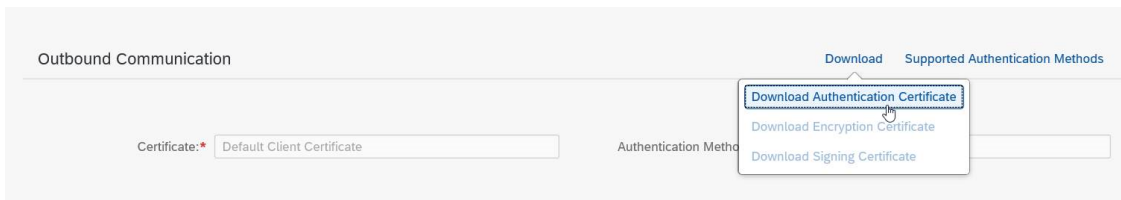
3. Choose *New*. In the new pop-up window, enter the scenario *eDocument - Portugal eInvoice Integration* (SAP_COM_0631). This is the scenario designated for communication with the tax authority via SAP Cloud Platform Integration package) and an Arrangement Name. For Communication Arrangement name it is recommended to choose a name like SAP_COM_0631_<name of SAP Cloud Platform Integration tenant>.

A screenshot of the 'New Communication Arrangement' pop-up window. The window has a title bar 'New Communication Arrangement'. Below the title bar, there is a field labeled '*Scenario:' with a dropdown menu. Below that, there is a field labeled 'Arrangement Name:' with a text input field containing the placeholder text 'Enter Communication Arrangement Name'. At the bottom of the window, there are two buttons: 'Create' and 'Cancel'.

4. Choose *Create*.
5. In the new window, choose the communication system created in the previous step and the authentication method, relevant to the communication system.
 - If the authentication is by user ID, then select *User Name and Password* from the *Outbound Communication* list.



- If you use a certificate-based authentication, then download this certificate by choosing *Download Authentication Certificate*:



You must configure this certificate in SAP Cloud Platform Integration too. For that you create a service instance using the required grant_type as explained in [Creating a Service Instance in the Cloud Foundry Environment](#). After the instance creation, you create the service key using the certificate uploaded to the SAP S/4HANA Cloud as explained in [Defining a Service Key for the Instance in the Cloud Foundry Environment](#).

6. Scroll down and enter the path part for your integration flow URL for all outbound services.

Outbound Services

Portugal eInvoice: Send Invoice Version 1.0

Service Status: Active
 Application Protocol: SOAP
 Port:

Path:
 Service URL:

Portugal eInvoice: Send Credit Note Version 1.0

Service Status: Active
 Application Protocol: SOAP
 Port:

Path:
 Service URL:

Portugal eInvoice: Pull Message Version 1.0

Service Status: Active
 Application Protocol: SOAP
 Port:

Path:
 Service URL:

Portugal eInvoice: Delete Message Version 1.0

Service Status: Active
 Application Protocol: SOAP
 Port:

Path:
 Service URL:



7. Choose [Save](#).

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