



Integration Guide | PUBLIC
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Greece Electronic Tax Register Books (e-Books): Setting Up SAP Integration Suite (SAP S/4HANA Cloud) - Cloud Foundry Environment

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2 Introduction

The communication part of processing electronic documents in Greece is taken care of by SAP Integration Suite. In order to get SAP Integration Suite working, there are some required steps on both your SAP S/4HANA Cloud system and SAP Integration Suite tenant.

These steps are typically taken care of by an SAP Integration Suite consulting team, who is responsible for configuring the SAP S/4HANA Cloud and SAP Integration Suite connection and maintaining the integration content and certificates/credentials on the SAP Integration Suite 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 Integration Suite 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 SAP S/4HANA Cloud documentation and to the relevant tax authority information, respectively.

3 Prerequisites

Before you start with the activities described in this document, ensure that the following prerequisites are met.

You have set up your tenant as follows:

- If you have subscribed to Process Integration, perform all the initial setup steps described in [Initial Setup of SAP Cloud Integration in Cloud Foundry Environment](#).
- If you have subscribed to Integration Suite, perform all the initial setup steps described in [Initial Setup](#).

i Note

SAP Document and Reporting Compliance requires the *Cloud Integration capability*. You need to activate this capability in the step *Provisioning the Capabilities*.

3.1 Setup of Secure Connection

You establish a trustworthy SSL connection to set up a connection between the SAP S/4HANA Cloud tenant and the SAP Integration Suite. For more information, see [Connecting a Customer System to Cloud Integration](#).

Outbound HTTP connections are required, and are supported with specific, public certificates.

You use *Maintain Client Certificates* app to manage the certificates required for a trustworthy SSL connection. The certificates include public certificates to support outbound connections, as well as trusted certificate authority (CA) certificates to support iFlow authentication.

Refer to the system documentation for more information regarding the certificate deployment to SAP S/4HANA Cloud tenant.

For more information, see [Operating and Monitoring Cloud Integration](#).

i Note

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

Client Certificate

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

3.2 Retrieve and Save Public Certificates

Context

Find and save the public certificates from your SAP Integration Suite runtime.

Procedure

1. Access the SAP BTP cockpit, and navigate to your subaccount (tenant) page.
2. Click the subscriptions link to display the subscriptions for your subaccount.
3. Use the tenant URL you created as defined in the prerequisites of this document. The URL has the following format: **https://<tenant>.cfapps.<data center>.hana.ondemand.com**, where <tenant> corresponds to the dynamic part and is unique for each subaccount and <data center> corresponds to the data center you are using.
4. In the *Operations* view, choose *Manage Integration Content* and select *All* to display the integration flows available.
5. Select an integration flow to display its details.
6. Copy the URL listed within the *Endpoints* tab, and paste the URL into your web browser.
7. When prompted by the *Website Identification* window, choose *View certificate*.
8. Select the root certificate, and then choose *Export to file* to save the certificate locally.
9. Repeat these steps for each unique root, intermediate and leaf certificate, and repeat for both your test and production tenants.

4 Configuration Steps in SAP Integration Suite

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

4.1 General Information

The package *SAP Document and Reporting Compliance: Electronic Tax Register Books for Greece* contains the following iFlows:

iFlows for Document and Reporting Compliance for Greece

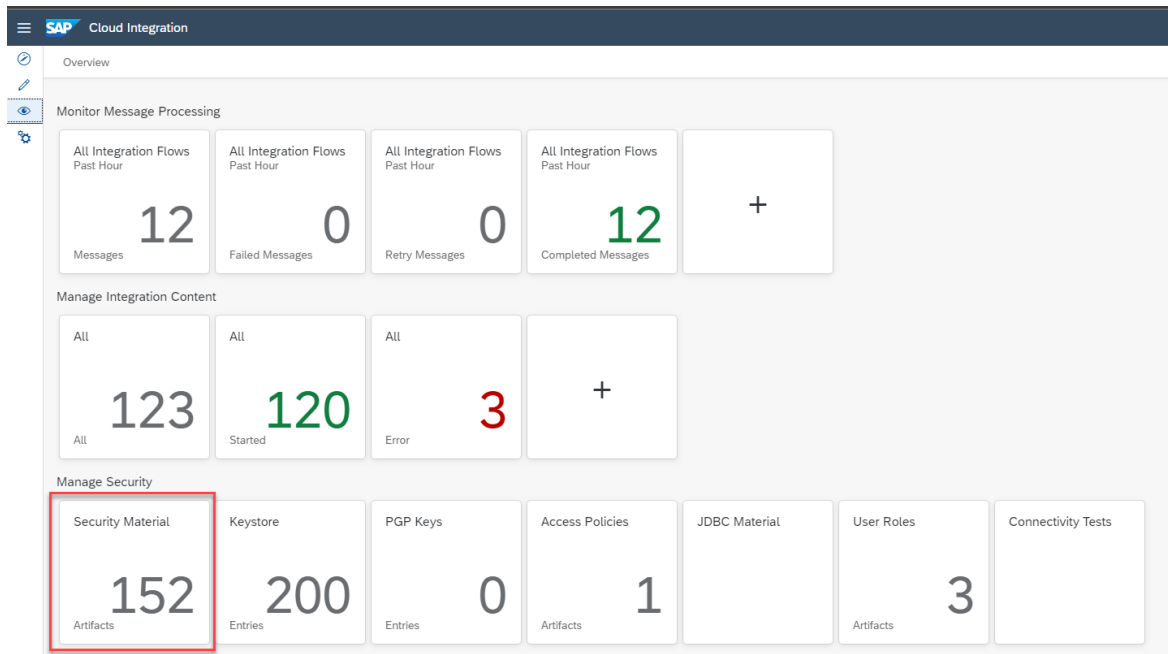
iFlow Name in WebUI	Project Name/Artifact Name
Greece Cancel Invoice	com.sap.GS.Greece.CancelInvoice
Greece Receive Documents	com.sap.GS.Greece.ReceiveInvoice
Greece Send Expense Classification	com.sap.GS.Greece.SendExpenseClassification
Greece Send Invoice	com.sap.GS.Greece.SendInvoice

4.2 Deploy Credentials to Tenants

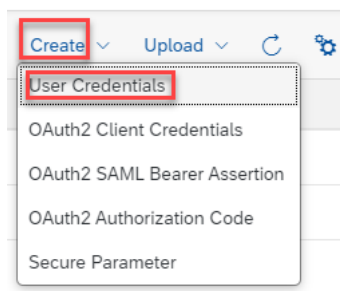
Procedure

Deploy the user ID and Subscription key that you've got from the tax authority (myDATA) to your SAP Integration Suite tenant.

- a. In your browser, go to the [Overview](#) tab and choose [Security Material](#).



b. Choose **Add** on the right corner and choose **User Credentials**.



c. Enter the name, username and password, and deploy them. There are two cases:

Add User Credentials

Name: *

Description:

Type: * **User Credentials**

User: *

Password:

Repeat Password:

Deploy **Cancel**

- You need to add a User Credentials for your company code. See details as follows:
 - Name has a specific format as follows:
 - edoc_greece_myDATA_test_<VAT ID>** for the test environment.

- **edoc_greece_myDATA_prod_<VAT ID>** for the productive environment.
- Username and password are the User ID and the Subscription key that are received from myDATA.

i Note

<VAT ID> needs to be replaced with the value of the company's VAT ID registered with myDATA. For example, "edoc_greece_myDATA_test_123456789" for the test environment.

- For companies that submit documents through an authorized accountant, you need to add another *User Credentials*. See details as follows:
 - The name format is the same as the above-mentioned format:
 - **edoc_greece_myDATA_test_<VAT ID>** for the test environment.
 - **edoc_greece_myDATA_prod_<VAT ID>** for the productive environment.
 - Username and password are the User ID and the Subscription key of the authorized accountant that are received from myDATA.

i Note

<VAT ID> needs to be replaced with the value of the authorized accountant's VAT ID of the authorized accountant registered with myDATA.

Submission through the authorized accountant is only enabled for the integration flow of Greece Send Expense Classification. Other integration flows are still submitted through company's VAT ID.

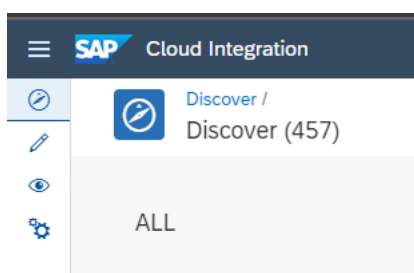
4.3 Copy Integration Flows

Context

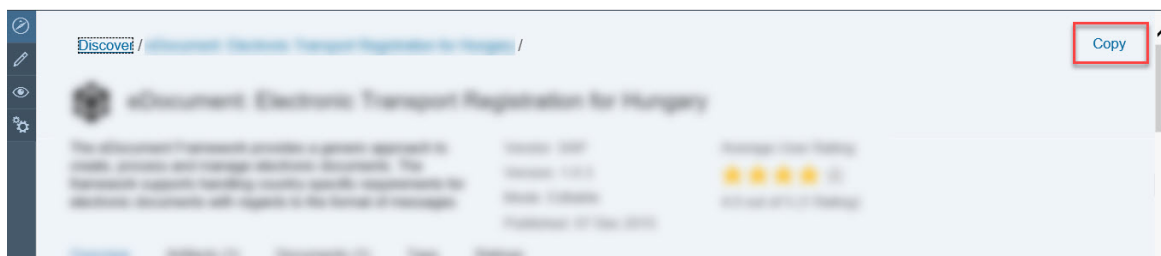
Copy all iFlows in the package *SAP Document and Reporting Compliance: Electronic Tax Register Books for Greece* to the target tenant as follows:

Procedure

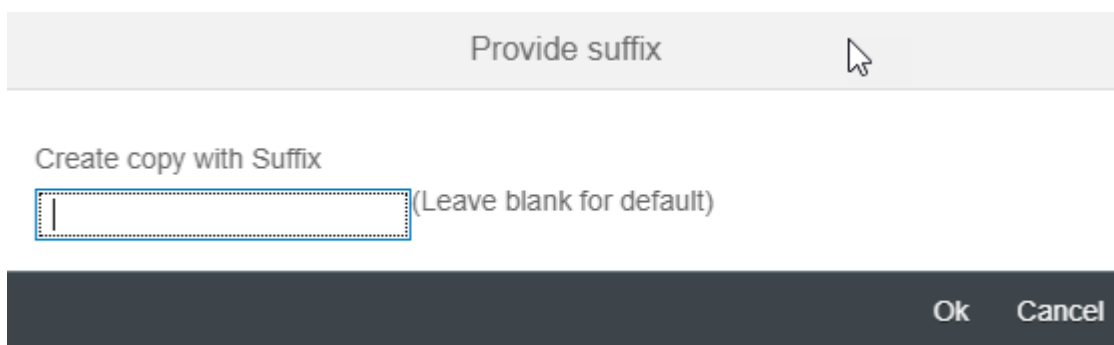
1. In your browser, go to the WebUI of the tenant (URL: <Tenant URL>/itspaces/#shell/catalog).
2. Choose **Discover** > **All**.



3. Search for *SAP Document and Reporting Compliance: Electronic Tax Register Books for Greece*.
4. Select the Package and choose *Copy*.



5. In the *Provide suffix* dialog box, leave the field blank, and choose *Ok*.



4.4 Configuring Integration Flows

Context

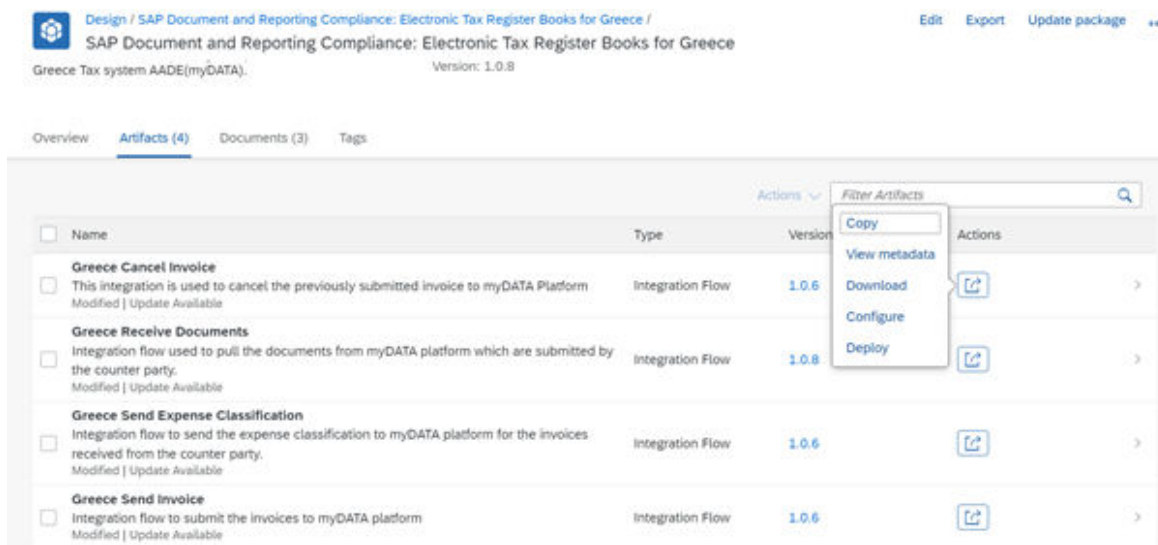
You configure the package that you've copied as described in *Copy Integration Flows*.

Procedure

1. Choose *Design* from the upper left corner of the page.
2. Click on the package that you copied from the original *SAP Document and Reporting Compliance: Electronic Tax Register Books for Greece* package.
3. Go to the *Artifacts* tab page.
4. There are six *Artifacts* in the integration package *SAP Document and Reporting Compliance: Electronic Tax Register Books for Greece*:
 - Greece Cancel Invoice
 - Greece Receive Documents
 - Greece Send Expense Classification
 - Greece Send Invoice

Take *Greece Send Invoice* as an example, similar steps should be done for the other iFlows:

5. Choose **Actions** > **Configure** for the artifact you're configuring.



6. Choose **Configure** > **More** tab (in some versions it may be *Externalized Parameters*).

- Use the *Enable Logging* field for switching logging on and off:

Value	Description
YES	Enable logging of the request and response messages
NO	Disable logging of the request and response messages parameter to set up the integration package usage mode:

- Use the *Mode*.

Value	Description
TEST	To use the test system of the tax authority.
PROD	To use the productive (that is, legally binding) system of the tax authority.

Enter the URL in its respective parameters.

Configure "Greece Send Invoice"

Sender **More**

Type: All Parameters

Enable Logging: YES

Mode: TEST

Receiver_PROD_URL:

Receiver_TEST_URL: https://mydataapidev.aade.gr/SendInvoices

i Note

When you configure the *Mode* as "TEST" or "PROD" the "TEST" or "PROD" APIs will be triggered along with the "TEST" or "PROD" credentials.

There are specific URLs for both Test and Production as follows you need to enter for different integration flows.

- Find the following URLs for Test:

Specific URLs for Test

Integration Flows	URL
Greece Cancel Invoice	https://mydataapidev.aade.gr/CancelInvoice
Greece Receive Documents	https://mydataapidev.aade.gr/RequestDocs
Greece Send Expense Classification	https://mydataapidev.aade.gr/SendExpensesClassification
Greece Send Invoice	https://mydataapidev.aade.gr/SendInvoices

- Find the following URLs for Production:

Specific URLs for Production

Integration Flows	URL
Greece Cancel Invoice	https://mydatapi.aade.gr/myDATA/CancelInvoice
Greece Receive Documents	https://mydatapi.aade.gr/myDATA/RequestDocs
Greece Send Expense Classification	https://mydatapi.aade.gr/myDATA/SendExpensesClassification
Greece Send Invoice	https://mydatapi.aade.gr/myDATA/SendInvoices

i Note

These service URLs are provided by the government and are subject to change.

Check the latest service URLs for Production at <https://www.aade.gr/mydata>.

7. Choose **Configure > 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.
- Use the **Authorization** parameter to configure the authorization type.

Value	Description
User Role	You want to use basic authentication (user/password).
Client Certificate	You want to use client certificate authentication.

- Use the **User Role** parameter to configure the role based on which the inbound authorization is checked. Choose **Select** to get a list of all available roles. The role **ESBMessaging.send** is provided by default.

Configure "Greece Send Invoice"

[Sender](#) More

Sender: ERP

Adapter Type: SOAP

Connection

Address: /GreeceSendInvoice

Authorization: User Role

User Role: ESBMessaging.send [Select](#)

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

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

i Note

Depending on the version of your tenant, after pressing these buttons, a warning message can appear. You can ignore these messages by choosing **Close**. The first two warnings are related to the

payload attachments; currently the invoice registration process doesn't support or require message attachments (for example, scanned copies of invoices) in any stage of processing and communication.

5 Configuration Steps for SAP S/4HANA Cloud

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

5.1 Configuring Communication System

Create a communication system that represents your SAP Integration Suite tenant.

Prerequisites

1. Live SAP Integration Suite test or productive tenant must be available.
2. Communication management setups are not transportable and must be explicitly maintained in quality and production systems.
3. The SAP S/4HANA Cloud user, who is following this guide, must be assigned to a business role that contains the business catalog `SAP_BCR_CORE_COM` (Communication Management) for accessing communication management apps.

Procedure

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



3. Choose *New*, and in the pop-up window, enter the *System ID* and *System Name* of your communication system. Naming convention of *System ID* is `EDOC_<name of SAP Integration Suite tenant>`. For example, if the tenant host name is `example-tmn.avt.eu1.hana.ondemand.com`, then System ID is `EDOC_EXAMPLE`.

New Communication System

System ID: * EDOC_EXAMPLE
System Name: * EDOC_EXAMPLE

Create

Cancel

4. Choose *Create*.
5. On the next page, enter the host name and port of your tenant. You can find the host name for your SAP Integration Suite tenant, as follows:
 1. From the menu on the left, choose *Monitor*.
 2. Select *Manage Integration Content (All)*.
 3. Search for the integration flow for the scenario you are configuring.
 4. Find the host name from the *Endpoints* tab.
 5. The composition of an endpoint URL is `https://<host name>/<path>`.

EDOC_EXAMPLE
EDOC_EXAMPLE

Changed By: Example ConfExpertBusNetint Editing Status: Draft
Changed On: 11.10.2022, 14:17

General Users for Inbound Communication Users for Outbound Communication Business Partners Communication Arrangements

General Data

System ID: * EDOC_EXAMPLE Notes:
System Name: * EDOC_EXAMPLE

Technical Data

General

Host Name: * UI Host Name:
Logical System: Business System:
Port:
Is Hub System:
Inbound Only:

6. Scroll down, and choose + next to *User for Outbound Communication*.

Users for Outbound Communication

Authentication Method	User Name / Certificate / Client ID

7. In the new pop-up window, select the appropriate authentication method to connect to your SAP Integration Suite tenant, as described in the Implementation Guide.

- For the authentication method *User Name and Password*, enter the user name and password of your SAP Integration Suite tenant user that allows the communication with SAP S/4HANA Cloud.
- For the authentication method *SSL Client Certificate*, select the *Default Client Certificate* type and choose *Create*.

Note

If you want to create your own Client Certificate, please refer https://help.sap.com/docs/SAP_S4HANA_CLOUD/55a7cb346519450cb9e6d21c1ecd6ec1/cb18de0f63b648d1a44bfe9bec1a4415.html?locale=en-US.

8. Choose *Save*.

5.2 Configuring Communication Arrangement

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

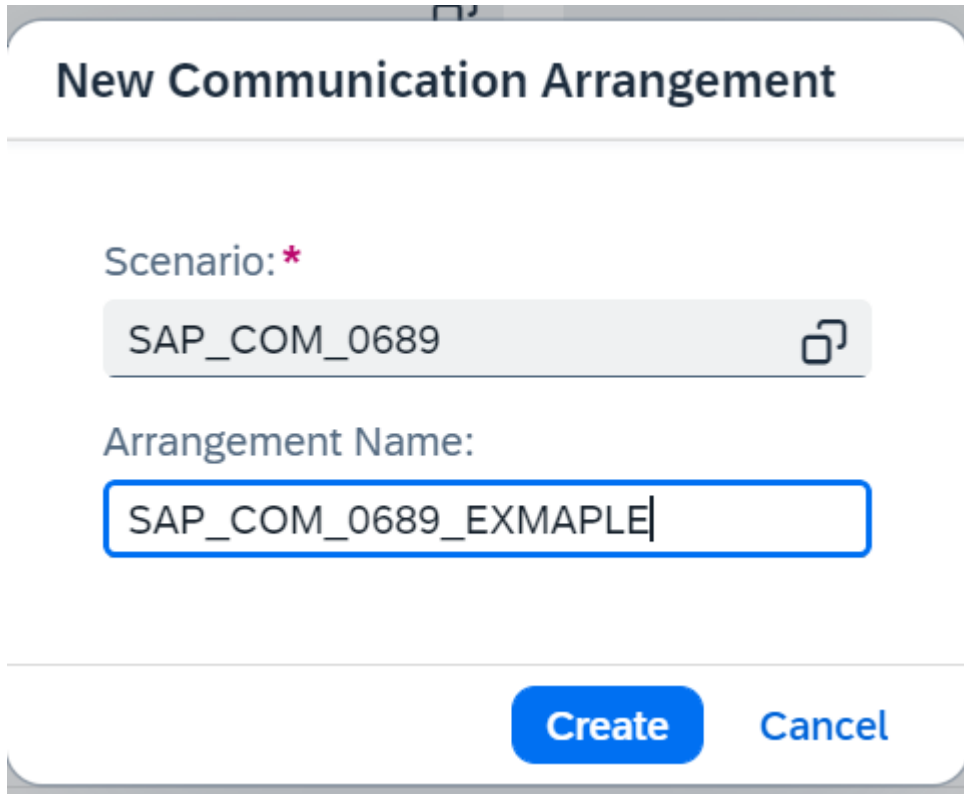
Procedure

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



3. Choose *New*. In the new pop-up window, enter the *Scenario* as *SAP_COM_0689* (which is the one designated for communication with the tax authority via SAP Integration Suite package) and an *Arrangement Name*. For *Arrangement Name* it is recommended to choose a name like *SAP_COM_0689_<name of SAP Integration Suite tenant>*.

For example, `SAP_COM_0689_EXAMPLE` for tenant host name beginning with `example-tmn.avt.eu1.hana.ondemand.com`.



New Communication Arrangement

Scenario: *

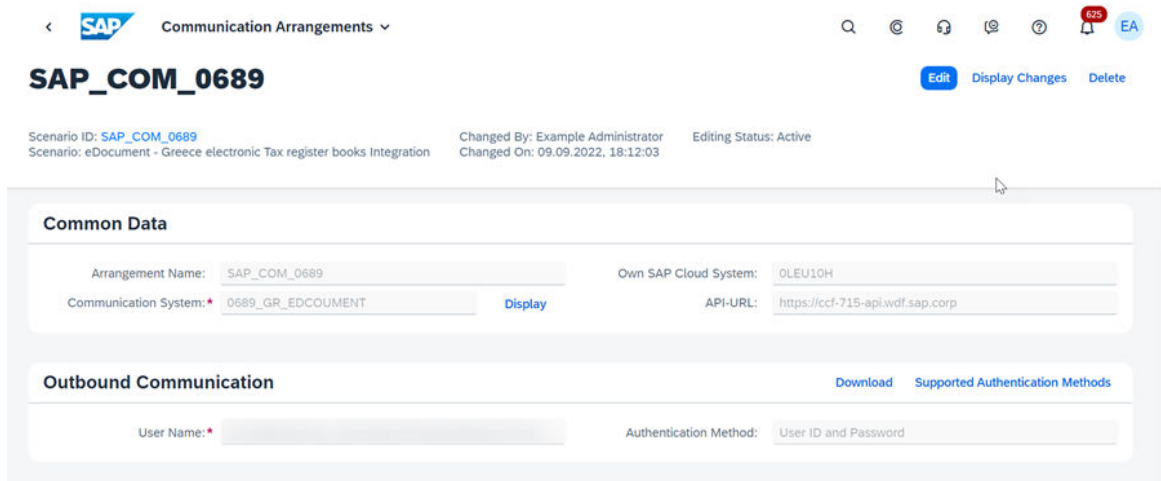
SAP_COM_0689

Arrangement Name:

SAP_COM_0689_EXMAPLE

Create Cancel

4. Choose *Create*.
5. In the new window, choose the communication system (for example, `EDOC_EXAMPLE`) and Outbound Communication created in the previous step.



SAP Communication Arrangements

SAP_COM_0689 Edit Display Changes Delete

Scenario ID: [SAP_COM_0689](#) Changed By: Example Administrator Editing Status: Active
Scenario: eDocument - Greece electronic Tax register books Integration Changed On: 09.09.2022, 18:12:03

Common Data

Arrangement Name:	SAP_COM_0689	Own SAP Cloud System:	OLEU10H
Communication System: *	0689_GR_EDCOUMENT Display	API-URL:	https://ccf-715-api.wdf.sap.corp

Outbound Communication [Download](#) [Supported Authentication Methods](#)

User Name: *		Authentication Method:	User ID and Password
--------------	--	------------------------	----------------------

6. For each outbound service, enter the *path* of the corresponding integration flow.

Outbound Services

▼ Greece Edocument Send Invoice [Download WSDL/Service Metadata](#)

Service Status: <input checked="" type="checkbox"/> Active	Path: /cxf/GreeceSendInvoice
Application Protocol: SOAP	Service URL: _____
Port: 443	Use WSRM: <input type="checkbox"/>

▼ Greece Edocument Cancel Invoice [Download WSDL/Service Metadata](#)

Service Status: <input checked="" type="checkbox"/> Active	Path: /cxf/GreeceCancelInvoice
Application Protocol: SOAP	Service URL: _____
Port: 443	Use WSRM: <input type="checkbox"/>

▼ Greece Edocument Send Expense Classification [Download WSDL/Service Metadata](#)

Service Status: <input checked="" type="checkbox"/> Active	Path: /cxf/GreeceSendExpensesClassification
Application Protocol: SOAP	Service URL: _____
Port: 443	Use WSRM: <input type="checkbox"/>

▼ Greece Edocument Request Document [Download WSDL/Service Metadata](#)

Service Status: <input checked="" type="checkbox"/> Active	Path: /cxf/GreeceRequestDocuments
Application Protocol: SOAP	Service URL: _____
Port: 443	Use WSRM: <input type="checkbox"/>



7. Choose *Save*.

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