



Integration Guide | PUBLIC  
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# Thailand Electronic Invoicing: Setting Up SAP Cloud Integration (SAP S/4HANA Cloud) - Neo environment

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## 2 Introduction

You use SAP Integration Suite to establish the communication with your service provider and transfer to them the electronic documents in XML format you have created using the SAP Document and Reporting Compliance solution. This document lists the required setup steps you must perform in your SAP S/4HANA Cloud system and SAP Integration Suite tenant so that the integration between the systems works.

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

### i Note

Although the service name **SAP Integration Suite** is used in the guide title and throughout the guide, this guide **also applies to SAP Cloud Integration running in the Cloud Foundry environment**. If you were onboarded before July 2020, the service you use is SAP Cloud Integration. The initial setup steps for the two services are different, while the integration flow settings and configuration steps in your back-end system are the same. See the **Set Up Your Tenants** section for their respective initial setup steps.

### 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 system 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 documentation for SAP S/4HANA Cloud and to the relevant tax authority information, respectively.

# 3 Prerequisites

## [Register with a Service Provider \[page 5\]](#)

Register with a service provider to use their APIs to communicate with the Revenue Department (RD) of Thailand.

## [Configure the Creation of Electronic Documents in XML Format \[page 5\]](#)

Ensure that you have configured the creation of electronic documents in XML format in your test and productive SAP S/4HANA Cloud tenants.

## [Set Up SAP Cloud Integration Tenants \[page 6\]](#)

Ensure that your SAP Cloud Integration test and production tenants are live, and users in the tenants have the rights to copy the integration package and to configure and deploy the integration flows.

## 3.1 Register with a Service Provider

Register with a service provider to use their APIs to communicate with the Revenue Department (RD) of Thailand.

Parent topic: [Prerequisites \[page 5\]](#)

### Related Information

[Configure the Creation of Electronic Documents in XML Format \[page 5\]](#)

[Set Up SAP Cloud Integration Tenants \[page 6\]](#)

## 3.2 Configure the Creation of Electronic Documents in XML Format

Ensure that you have configured the creation of electronic documents in XML format in your test and productive SAP S/4HANA Cloud tenants.

### Documentation

To find documentation about the required configuration steps and business processes, follow the steps below:

1. Go to SAP Help Portal at <https://help.sap.com>.
2. Search with the keyword **SAP S/4HANA Cloud**.
3. From the suggested products, select **SAP S/4HANA Cloud**.
4. On the top right corner of the browser window, select your product version.
5. In the *Product Assistance* section, select a language.
6. From the navigation pane on the left, select **Country/Region-Specific Functions > Thailand > General Functions > Document and Reporting Compliance**.

**Parent topic:** [Prerequisites \[page 5\]](#)

## Related Information

[Register with a Service Provider \[page 5\]](#)

[Set Up SAP Cloud Integration Tenants \[page 6\]](#)

## 3.3 Set Up SAP Cloud Integration Tenants

Ensure that your SAP Cloud Integration test and production tenants are live, and users in the tenants have the rights to copy the integration package and to configure and deploy the integration flows.

When your tenants are provisioned, you receive an email with a Tenant Management (TMN) URL. You need this URL when configuring on your SAP S/4HANA Cloud tenant the communication with the SAP Cloud Integration tenant.

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.

### **i** Note

Your service provider might renew their SSL certificate every year. If they do so, then you must deploy a new SSL certificate on your tenant every year.

**Parent topic:** [Prerequisites \[page 5\]](#)

## Related Information

[Register with a Service Provider \[page 5\]](#)

[Configure the Creation of Electronic Documents in XML Format \[page 5\]](#)

# 4 Configuration Steps in SAP Cloud Integration

Required steps in SAP Cloud Integration.

## 4.1 Deploy Security Credentials

When attempting to communicate with your service provider, you go through an authentication step in which your service provider asks for some security credentials. You must configure these security credentials in your SAP Integration Suite tenant.

### Required Security Credentials

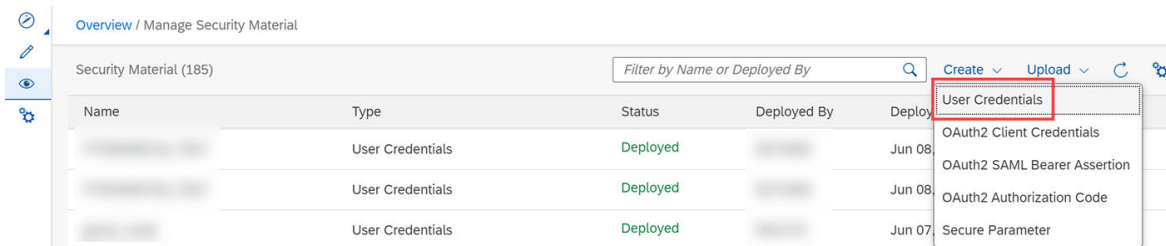
The required security credentials are as follows:

Name	Description
edoc_th_stream_auth_<tax id>	This credential is an authentication token provided by your service provider. It's used in calling all service provider APIs.  <tax id> is the combination of your 13-digit VAT registration number and 5-digit branch code, as follows:  <13-digit VAT registration number><5-digit branch code>
edoc_th_stream_apikey_<tax id>	This credential is an API key issued by your service provider. It's used in calling all service provider APIs.

### Procedure

To configure the above credentials, follow the steps below:

1. Log into your SAP Integration Suite tenant.
2. Go to *Monitor* (Operations view) and open the *Security Material* app.
3. Choose *Create* on the top right corner of the browser window. Select *User Credentials*.



- Make the following settings:
  - Name:** Enter **edoc\_th\_stream\_auth\_<tax id>**. Remember to replace <tax id> with your own value.
  - User:** Enter the value of the credential.
  - Password:** Enter the password.
  - Repeat Password:** Repeat the password.

### Create User Credentials

---

Name: \*

Description:

Type: \* User Credentials ▼

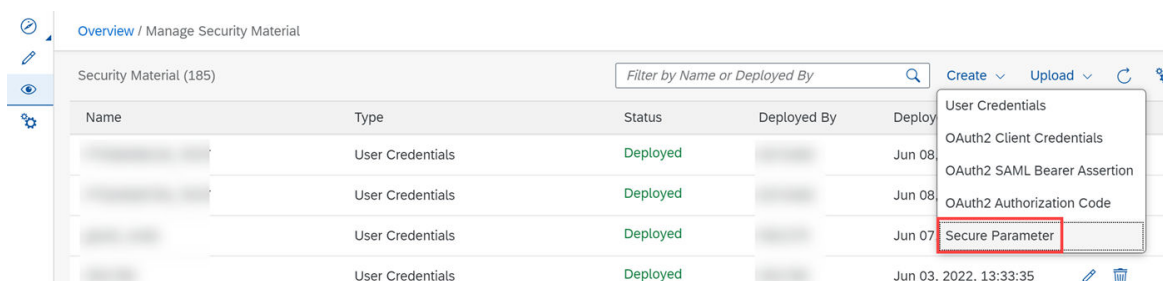
User: \*

Password:

Repeat Password:

Deploy
Cancel

- Choose **Deploy**. Go back to the initial screen of the **Security Material** app.
- Choose **Create** on the top right corner of the browser window. Select **Secure Parameter**.



- Make the following settings:
  - Name:** Enter **edoc\_th\_stream\_apikey\_<tax id>**. Remember to replace <tax id> with your own value.
  - Secure Parameter:** Enter the value of the credential.
  - Repeat Secure Parameter:** Repeat the value of the credential.



## Create Secure Parameter

---

Name: \*

Description:

Secure Parameter: \*

Repeat Secure Parameter: \*

---

[Deploy](#) [Cancel](#)

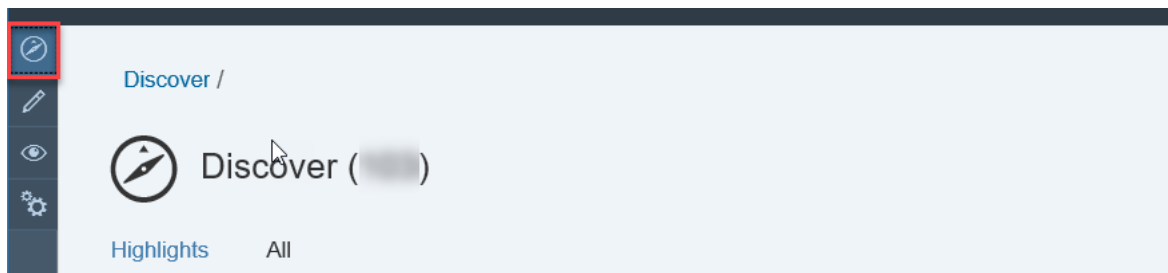
8. Choose *Deploy*.

## 4.2 Copy Published Package

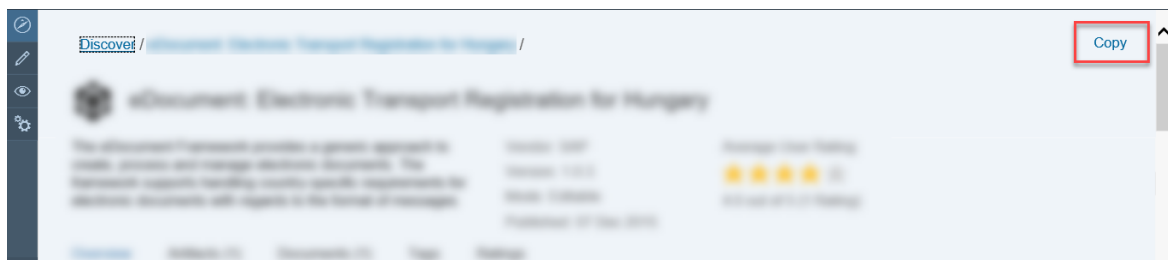
### Context

### Procedure

1. In the *Discover* section of your tenant, select the package *SAP Document and Reporting Compliance: Electronic Invoicing for Thailand*.



2. Select the package and choose *Copy*.



## 4.3 Deploy Integration Flows and Value Mappings

Required steps for configuring the integration flows and value mappings in this integration package.

### Context

The available integration flows and value mappings are as follows:




Artifact Type	Artifact Name	Functions
Integration Flow	Thailand Send Document	Sends electronic documents to your service provider, who then forwards them to the RD.
Integration Flow	Thailand Get Status	Gets processing statuses of electronic documents at the RD side from your service provider.
Value Mapping	Thailand Document Type Mapping	Maps document types used in your SAP system to message codes defined by your service provider.

#### i Note

If your service provider is Stream, you don't have to configure the *Thailand Document Type Mapping* value mapping by yourself. It's pre-configured by SAP.

### Procedure

1. Open the integration package that you copied.
2. Select the *Artifacts* tab.
3. Select an integration flow or value mapping. Choose the *Actions* icon and then *Configure*.

<input type="checkbox"/> Name	Type	Version	Actions
<input type="checkbox"/> <b>Thailand Document Type Mapping</b> Created	Value Mapping	Draft	 >
<input type="checkbox"/> <b>Thailand Get Status</b> Created	Integration Flow	Draft	 >
<input type="checkbox"/> <b>Thailand Send Document</b> Created	Integration Flow	Draft	 >

4. Make the required settings.

### i Note

If your service provider is Stream, you don't have to configure the *Thailand Document Type Mapping* value mapping by yourself. It's pre-configured by SAP.

5. Choose *Deploy*.
6. Configure the other integration flows that you want to use.

#### [Parameter Information \[page 11\]](#)

Learn how you should configure the parameters of each integration flow.

## 4.3.1 Parameter Information

Learn how you should configure the parameters of each integration flow.

The following table explains the parameters for each integration flow:

Integration Flow	Parameter	Explanation
<i>Thailand Send Document</i>	<i>Service URL</i> ( <i>More</i> tab → <i>All Parameters</i> type)	This parameter refers to the URL of a specific service from your service provider.
<i>Thailand Get Status</i>	<i>Enable Attachments</i> ( <i>More</i> tab → <i>All Parameters</i> type)	This parameter enables or disables the attachments function for message processing logs. To enable it, set this parameter to <b>X</b> . To disable it, set this parameter to blank.

→ Recommendation

Since the attachments function is very resource intensive, we suggest that you disable it if it's not very necessary.

Integration Flow	Parameter	Explanation
<i>Thailand Send Document</i>	<i>Product Code (More tab → All Parameters type)</i>	<div data-bbox="1007 344 1394 521" style="background-color: #f0f0f0; padding: 5px;"> <p><b>i Note</b></p> <p>This parameter is relevant only if your service provider is <b>TaxOne Stream</b>.</p> </div> <p>Enter the product code that you get from your service provider. The product code is then displayed in the ID field of the ExchangedDocument XML tag.</p> <p>If you leave this parameter empty, the system uses the company code (value of the ID field under SupplyChainTradeTransaction → ApplicableHeaderTradeAgreement → SellerTradeParty) as the product code. The company code is then displayed in the ID field of the ExchangedDocument XML tag. However, the company code may not be the same as the product code. You'll receive an error later on if the product code isn't correct.</p>

Parent topic: [Deploy Integration Flows and Value Mappings \[page 10\]](#)

# 5 Configuration Steps in SAP S/4HANA Cloud

Required steps on your SAP S/4HANA Cloud tenant.

## 5.1 Create Communication Configurations

Create the required communication configurations on your SAP S/4HANA Cloud tenant.

### Prerequisites

You have a business role that contains the *Communication Management* (SAP\_BCR\_CORE\_COM) business catalog.

### Context

Your SAP Cloud Integration tenant acts as a bridge between your SAP S/4HANA Cloud tenant and your service provider. SAP S/4HANA Cloud sends invoice XML files to SAP Cloud Integration. Then SAP Cloud Integration forwards XML files to your service provider. SAP Cloud Integration also forwards validation statuses of XML files back to SAP S/4HANA Cloud.

To set up the communication between SAP S/4HANA Cloud and SAP Cloud Integration, do the following:

- Create a communication system that represents your SAP Cloud Integration tenant
- Create a communication arrangement that describes the communication between your SAP S/4HANA Cloud tenant and SAP Cloud Integration tenant

#### **i** Note

Communication systems and communication arrangements are not transportable. Configure them in both your quality and production systems.

### Procedure

1. Log into SAP Fiori launchpad.

- Open the *Communication Systems* app. Choose *New* at the bottom right corner of the browser window.

A *New Communication System* dialog box appears.

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

For example, if the host name of your SAP Cloud Integration tenant is

v1234.cfapps.sap.hana.ondemand.com, use EDOC\_V1234 as the system ID.

### New Communication System

**\*System ID:**

**\*System Name:**

[Create](#)   [Cancel](#)

- Choose *Create*.

An editing screen for the communication system appears.

- In the *Technical Data* section, enter the host name and HTTPS port of the integration flow that you want to communicate with.

Technical Data

General

**\*Host Name:**

Logical System:

Port:

Is Hub System:

UI Host Name:

Business System:

You can find the host name of an integration flow, as follows:

- From the menu on the left, choose *Monitor*.
- Select *Manage Integration Content* (All).
- Search for the integration flow.
- Find the host name from the *Endpoints* tab.


The composition of an endpoint URL is **https://<host name>/<path>**.



Endpoints
Status Details
Artifact Details
Log Configuration



https://v1234.cfapps.sap.hana.ondemand.com/soap/sa/soapui/soapui

WSDL

WSDL without policies



6. In the *User for Outbound Communication* section, configure an outbound user, as follows:
  - a. Choose + (Add).

Users for Outbound Communication	
Authentication Method	User Name / Certificate / Client ID
No data	

A *New Outbound User* dialog box appears.

### New Outbound User

\*Authentication Method:

\*User Name:

\*Password:

[Create](#) [Cancel](#)

- b. Select the *User Name and Password* authentication method.
  - c. Enter the value of your `clientid` in the *User Name* field, and the value of your `clientsecret` in the *Password* field. You create these values for your service instance in SAP Cloud Integration. For more information, see [Creating Service Instances](#).
  - d. Choose *Create*.

7. Save the communication system.

Don't exit SAP Fiori launchpad.

8. Open the *Communication Arrangements* app. Choose *New* at the bottom right corner of the browser window.

A *New Communication Arrangement* dialog box appears.


9. Enter the scenario **SAP\_COM\_0851** and an arrangement name.

For example, if the host name of your SAP Cloud Integration tenant is `v1234.cfapps.sap.hana.ondemand.com`, use `SAP_COM_0851_V1234` as the communication arrangement name.

## New Communication Arrangement

---

Scenario: \*

SAP\_COM\_0851 

Arrangement Name:

SAP\_COM\_0851\_V1234

---

[Create](#) [Cancel](#)

10. Choose *Create*.

An editing screen for the communication arrangement appears.


11. In the *Communication System* field, enter the communication system that you created earlier.

In the *Outbound Communication* section, the system displays the outbound user that you defined when creating the communication system automatically.

**Common Data**

---


Arrangement Name:       Own System:

\*Communication System:   [New](#)

---

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

---

\*User Name:        Authentication Method:

12. In the *Outbound Services* section, activate the outbound services below. To activate an outbound service, select the *Active* checkbox and enter the path for the related integration flow.

Outbound Service	Function	Path
<a href="#">eDocument Thailand: Send Tax Invoice</a>	Sends electronic tax invoices to the Revenue Department (RD) in Thailand.	/cxf/th/sendinvoice
<a href="#">eDocument Thailand: Send Debit/Credit Note</a>	Sends electronic credit notes and debit notes to the RD.	/cxf/th/sendinvoice
<a href="#">eDocument Thailand: Send Receipt</a>	Sends electronic receipts to the RD.	/cxf/th/sendinvoice
<a href="#">eDocument Thailand: Get Status</a>	Gets processing statuses of electronic documents at the RD side.	/cxf/th/getstatus

13. Save your communication arrangement.



## 6 Test the Integration

Test the communication between your back-end SAP system, SAP Integration Suite, service provider, and the Revenue Department (RD) using your test tenants.

The topic of this guide describes how to find the documentation about the required configurations and business processes. To test the integration, perform the procedures described in the following topics in this documentation:



- [Creating and Sending an Electronic Invoice](#)
- [Creating and Sending an Electronic Receipt](#)

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