

Single Touch Payroll (Australia) Using SAP Cloud Platform Integration

CUSTOMER



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 .

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1 INTRODUCTION

Single Touch Payroll (STP) aims to align the employer's reporting of Pay As You Go (PAYG) withholding (PAYGW) and superannuation contributions with their payroll processes. Entities that report under STP are relieved from the obligation to provide payment summaries to individuals and a payment summary annual report to the Commissioner.

Every employer (including AU subsidiaries of overseas organizations) that uses its own payroll software must electronically report employees' payments and deductions to the Australian Taxation Office (ATO) on or after each payday, in real time, for each payroll run.

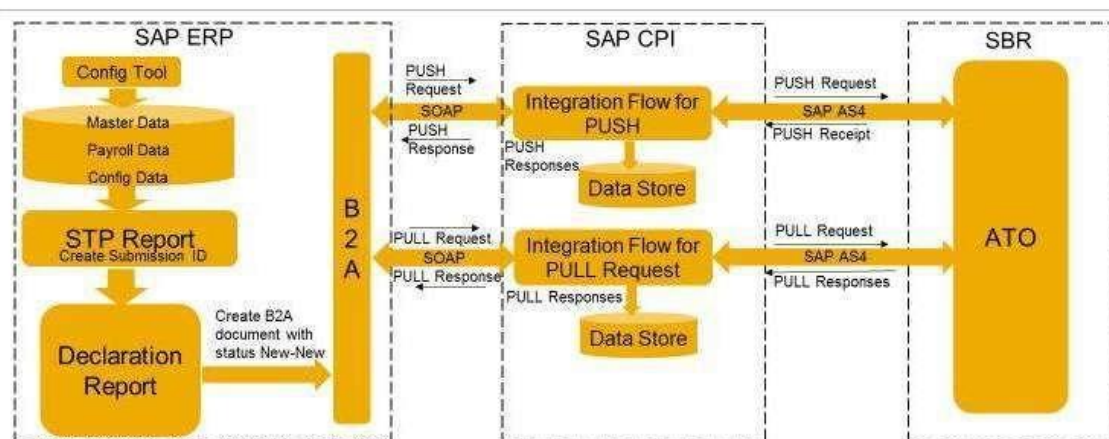
Electronic communication with the government gateway for customers in Australia is now enabled via SAP Cloud Platform Integration (SAP INTEGRATION SUITE).

To get SAP INTEGRATION SUITE working, some steps need to be performed on both the ERP system and the SAP INTEGRATION SUITE tenant. These steps are typically executed by an SAP INTEGRATION SUITE consulting team that is responsible for configuring the ERP-SAP INTEGRATION SUITE connection and maintaining the integration content and certificates/credentials on the SAP INTEGRATION SUITE tenant.

2 OVERVIEW OF INTEGRATION SCENARIOS

Throughout this topic we assume the following setup of technical components and communication paths:

Data flow between SAP ERP-ATO:



3 CHANGES TO EXISTING CONFIGURATION IN TEST SYSTEM

If you have already configured artifacts in the test system, do the following changes.

- Go to the Artifacts.
- Click on the configuration.
- Select on the receiver.
- Change in the ProductId: 32883
- Click on Save and Deploy.

Sender Receiver More

Receiver: Receiver

Adapter Type: AS4

Agreement: http://sbr.gov.au/agreement/Gateway/1.0/PushPKI

Address: [Redacted]

SAML Endpoint URL: https://softwareauthorisations.evte.ato.gov.au/R3.0/S007v1.2/service.svc

Private Key Alias: [Redacted]

Timeout (in sec): 300

Party Type: http://abr.gov.au/PartyIdType/ABN

Party ID: 51824753556

Role: http://sbr.gov.au/agency

Key	Value
ProductID	32883

Private Key Alias: [Redacted]

Save Deploy Close

For new configuration, do the following steps mentioned as below:

4 PREREQUISITES

Before you can connect the e-filing functionality to the government gateway using SASAP INTEGRATION SUITE), make sure that the following prerequisites are met:

4.1 Prerequisites on the SAP INTEGRATION SUITE side

Ensure that the SAP INTEGRATION SUITE tenant is provisioned and live.

Make sure a user is available with their password for the SAP INTEGRATION SUITE tenant in case you prefer to use BasicAuthentication for the communication from SAP ERP.

The user whom you will engage for the communication must be assigned the following permission:

- ESBMessaging.send on the <tenant>iflmap application

This permission is needed so that the SAP ERP and the SAP INTEGRATION SUITE systems can communicate with each other.

The following roles are required for other administrative and operations tasks in SAP INTEGRATION SUITE:

- AuthGroup.Administrator on the <tenant>tmn application

This permission is needed to add, replace or delete keystore entries in SAP INTEGRATION SUITE.

- 
- AuthGroup.IntegrationDeveloper on the <tenant>tmn application

This permission is needed so that the required integration flows (iFlows) can be deployed on the SAP INTEGRATION SUITE tenant.

Refer to the [SAP Help Portal](#).

4.2 Prerequisites on the SAP ERP side

Certificates must be uploaded and added to SSL Client Anonymous in the Trust manager (STRUST) of the SAP ERP system. The following SAP INTEGRATION SUITE certificates are required:

- SAP INTEGRATION SUITE public certificate - This can be downloaded from a browser using the SAP INTEGRATION SUITE endpoint. Example:
<https://<tenant>.hana.ondemand.com/cxf/au/ato/stp/push>
- Intermediate and root CA certificate – This can be downloaded from the website of the Certification Authority. Refer to [Load Balancer Root Certificates Supported by SAP](#) for root certificates supported by the CPI Load Balancer.

Refer to the ‘**How to Guide – Configure SSL in ABAP system**’ in the *Documents* section of the *Single Touch Payroll (STP) reporting – Australia* package in SAP INTEGRATION SUITE explained in [Section 4.1](#).

5 SETUP

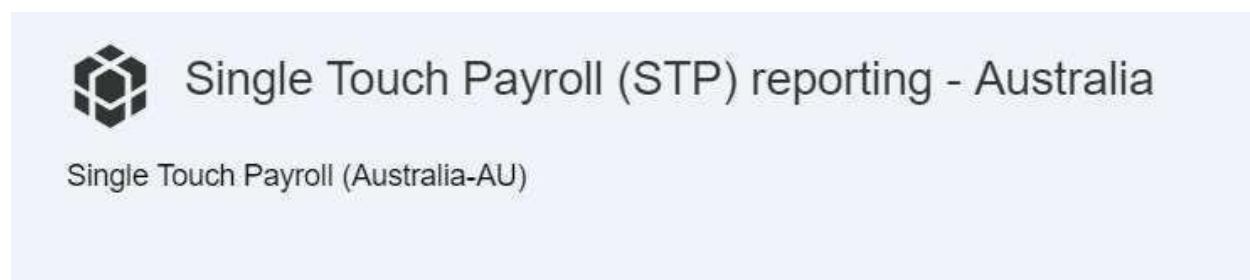
For establishing the communication of SAP ERP with the government gateway, setup is required on both the SAP INTEGRATION SUITE side and the SAP ERP side as follows:

5.1 Setup of SAP INTEGRATION SUITE

Single Touch Payroll (STP) reporting consists of one package, that is,

Single Touch Payroll (STP) reporting – Australia

This package consists of two iFlows that you deploy **once and for all** -- *Data Submission for STP Reporting* and *Receiving response for STP submission*. This package will remain the same every year.



Perform the following tasks to set up the iFlows on the SAP Cloud Platform Integration (SAP INTEGRATION SUITE) tenants:

Task	Frequency	Section in the Guide
1. Deploy certificates and credentials to the SAP INTEGRATION SUITE tenants	When the government gateway certificates expire	Deploy certificates and credentials to the SAP INTEGRATION SUITE tenants
2. Copy iFlows to workspace	Only once for the <i>Single Touch Payroll (STP) reporting – Australia</i> package	Copy iFlows to workspace
3. Configure iFlows		Configure iFlows
4. Deploy iFlows		Deploy iFlows on test and productive tenants

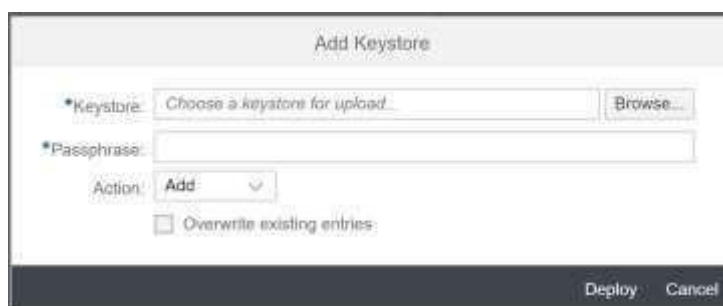
5.1.1 Deploy certificates and credentials to SAP INTEGRATION SUITE tenants

For the communication with the government gateway, you must make sure that the certificates from government authorities are part of the KeyStore that is uploaded to the SAP INTEGRATION SUITE tenant.

How do I deploy certificates to SAP INTEGRATION SUITE tenants?

Perform the following steps to download the certificates from the ATO website:

1. Register for a device M2M by logging in to your Relationship Authorisation Manager at <https://abr.gov.au/>. Follow the instructions from the Australian Business Register at <https://www.technicalhelpdesk.com.au/s/topic/0TO4a000000068zGAA/m2m?tabset-b2dd4=2>
2. The downloaded device M2M is in XML format whereas JKS format is needed for SAP INTEGRATION SUITE. Refer to the accompanying document on how to convert an XML M2M file to a JKS file, and convert the file accordingly.
3. Login to SAP INTEGRATION SUITE and go to the *Operations* view. In the *Manage Security* section, select the *KeyStore* tile. Using the *Add* dropdown button, select 'KeyStore'. Enter your device M2MKeyStore details from step 2. Deploy the KeyStore.



How do I test connectivity with the Government Gateway?

1. Go to the *Operations* view.
2. In the *Manage Security* section, select the *Connectivity Tests* tile.
3. Enter the host name and the port of the Government Gateway.
4. Test the connection.

Note: This is a connectivity test with the External Vendor Testing Environment (EVTE).



5.1.2 Copy iFlows to workspace

Execute the following steps to copy all iFlows in the package to your workspace:

1. In your browser, go to the web UI of the tenant (URL: <Tenant URL>/itspaces).
2. From the menu in the upper left corner, choose *Discover*.
3. Click the package name.
4. In the lower right corner, choose *Copy to Workspace*.



Single Touch Payroll (STP) reporting - Australia Copy

Single Touch Payroll (Australia-AU) Vendor: SAP
Version: 1.0.1

Overview Artifacts (2) Documents Tags

Description: This integration package is for Single Touch Payroll (STP) reporting for Australia. This integration package enables electronic communication with the government gateway via SAP Cloud Platform Integration (SCPI). Every employer (including AU subsidiaries of overseas organization) that uses its own payroll software, must electronically report employees' payments and deduction to Australian taxation Office (ATO) on or after each pay day, in real time, for each payroll run.

This package consists of two i-flows: Data submission for STP reporting; Receiving Response for STP Submission. These i-flows will not change annually, unless there is a Legal Change announced by the Australian government.

You must deploy all the i-flows published as part of this package to get the complete set of changes for Single Touch Payroll (STP) reporting.

Supported Platform: SAP Cloud Platform Integration

Category: Integration

Each iFlow corresponds to one service as part of STP reporting:

Package	iFlow
<i>Single Touch Payroll (STP) reporting - Australia</i>	Data Submission for STP Reporting
	Receiving response for STP submission

Note: In the case of an intermediary, one package should be created for each employer.

5.1.3 Configure iFlows

For each iFlow, there are several parameters that must be maintained. Therefore, you must follow the instructions below to configure each iFlow.

Note: The configurations provided in screenshot are different for EVTE and Production environment for specific fields.

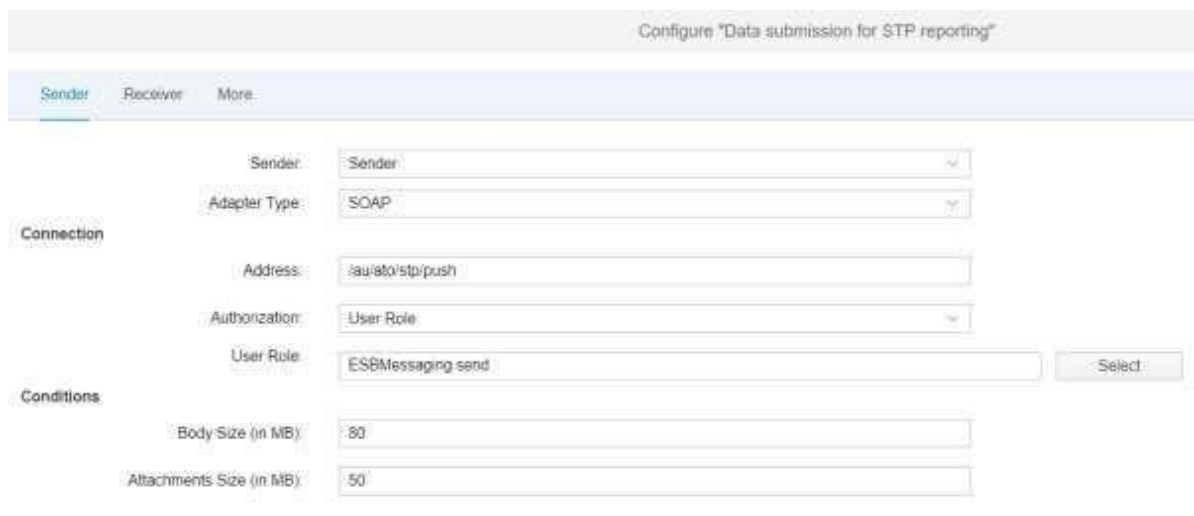
5.1.3.1 Configure iFlow - Data Submission for STP Reporting

Perform the following steps to configure the *Data Submission for STP Reporting* iFlow:

1. In your SAP INTEGRATION SUITE tenant, from the menu in the upper left corner, choose *Design*.
2. Click the package *Single Touch Payroll (STP) reporting – Australia*.
3. For the iFlow that you want to change, choose *Actions* -> *Configure*.



4. Change the relevant parameters in the *Sender* tab.



Connection	Address	The connection <i>Address</i> must be configured to generate the SOAP Endpoint URL. This must be unique for each iFlow across all packages in a CPI tenant
	Authorization	Select appropriate option either “User Role” or “Client Certificate” as per your setup and provide the related fields data
Conditions	Body Size (in MB)	Provide the suitable size in MB for message body
	Attachment Size (in MB)	Provide the suitable size in MB for message attachment

5. Change the relevant parameters in the *Receiver* tab as follows:

Note: These are sample configurations relevant only for the External Vendor Testing Environment (EVTE).

Sender Receiver More

Receiver: Receiver

Adapter Type: AS4

Connection

Agreement: http://sbr.gov.au/agreement/Gateway/1.0/PushPKI

Address: [REDACTED]

SAML Endpoint URL: https://softwareauthorisations.evte.ato.gov.au/R3.0/S007v1.2/service.svc

Private Key Alias: [REDACTED]

Timeout (in sec): 300

Processing

Party Type: http://abr.gov.au/PartyIdType/ABN

Party ID: 51824753556

Role: http://sbr.gov.au/agency

Key: [REDACTED] Value: [REDACTED]

ProductID: [REDACTED] 32883

Security

Private Key Alias: [REDACTED]

Save Deploy Close

Connection	Agreement	http://sbr.gov.au/agreement/Gateway/1.0/Push/PKI
	Address	EVTE: https://test2.ato.sbr.gov.au/services/BulkBatch-async-push PROD: https://prod2.ato.sbr.gov.au/services/BulkBatch-async-push
	SAML Endpoint URL	EVTE: https://softwareauthorisations.evte.ato.gov.au/R3.0/S007v1.2/service.svc PROD: https://softwareauthorisations.ato.gov.au/R3.0/S007v1.2/service.svc
	Private Key Alias	Alias name of M2M
	Timeout (in sec)	300
Processing	Party Type	http://abr.gov.au/PartyIdType/ABN
	Party ID	51824753556
	Role	http://sbr.gov.au/agency
	ProductID	EVTE: 32883 PROD: 573069
Security	Private Key Alias	Alias name of M2M

6. Configure the relevant parameters in *More* tab as follows:

Sender Receiver **More**

Type: All Parameters

AppliesTo: https://test.sbr.gov.au/services

ExpirationPeriod: 30

ResponseDatastore: ATO-Responses

TechnicalReceiptDatastore: ATO-TechnicalReceipts

ThresholdAlert: 2

Type	All Parameters
ExpirationPeriod	30
RetentionPeriod	2
TechnicalReceiptDatastore	ATO-TechnicalReceipts
AppliesTo	EVTE: ATO environment: ebMS3 EVTE3 AppliesTo value: https://test.sbr.gov.au/services ATO environment: Core Services EVTE AppliesTo value: https://test.sbr.gov.au/services PROD:

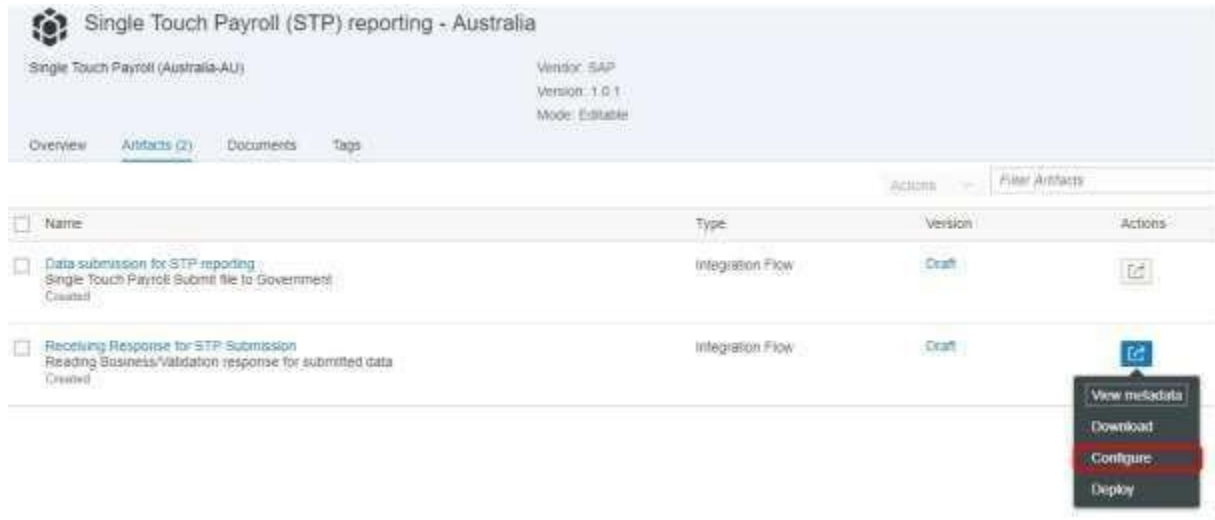
	ATO environment: ebMS3 PROD1, PROD2 AppliesTo value: https://sbr.gov.au/services ATO environment: Core Services PROD AppliesTo value: https://sbr.gov.au/services
--	--

Note: The *TechnicalReceiptDatastore* name must be unique across packages in a CPI tenant.

5.1.3.2 Configure iFlow - Receiving response for STP submission

Perform the following steps to configure the *Receiving response for STP submission* iFlow:

1. In your SAP INTEGRATION SUITE tenant, from the menu in the upper left corner, choose *Design*.
2. Click the package *Single Touch Payroll (STP) reporting – Australia*.
3. For the iFlow that you want to change, choose *Actions* -> *Configure*.



4. Change the relevant parameters in the *Sender* tab.

Configure "Receiving Response for STP Submission"

Sender Receiver More

Connection

Sender: Sender

Adapter Type: SOAP

Address: /sap/ato/stp/pull

Authorization: User Role

User Role: ESBMessaging send

Conditions

Body Size (in MB): 80

Attachments Size (in MB): 50

<i>Connection</i>	<i>Address</i>	The connection <i>Address</i> must be configured to generate the SOAP Endpoint URL. This must be unique for each iFlow across all packages in a CPI tenant
	<i>Authorization</i>	Select appropriate option either "User Role" or "Client Certificate" as per your setup and provide the related fields data
<i>Conditions</i>	<i>Body Size (in MB)</i>	Provide the suitable size in MB for message body
	<i>Attachment Size (in MB)</i>	Provide the suitable size in MB for message attachment

5. Change the relevant parameters in the *Receiver* tab as follows:

Sender **Receiver** More

Receiver: Receiver

Adapter Type: AS4

Connection

Agreement: http://sbr.gov.au/agreement/Gateway/1.0/Pull/PKI

Address: [Redacted]

SAML Endpoint URL: https://softwareauthorisations.evte.ato.gov.au/R3.0/S007v1.2/service.svc

Private Key Alias: [Redacted]

Timeout (in sec): 300

Security

Private Key Alias: [Redacted]

Save Deploy Close

<i>Connection</i>	<i>Agreement</i>	http://sbr.gov.au/agreement/Gateway/1.0/Pull/PKI
	<i>Address</i>	EVTE: https://test2.ato.sbr.gov.au/services/BulkBatch-async-pull PROD: https://prod2.ato.sbr.gov.au/services/BulkBatch-async-pull
	<i>SAML Endpoint URL</i>	EVTE: https://softwareauthorisations.evte.ato.gov.au/R3.0/S007v1.2/service.svc PROD: https://softwareauthorisations.ato.gov.au/R3.0/S007v1.2/service.svc
	<i>Private Key Alias</i>	Alias name of M2M
	<i>Timeout (in sec)</i>	300
<i>Security</i>	<i>Private Key Alias</i>	Alias name of M2M

6. Change the relevant parameters in the *More* tab as follows:

Sender Receiver **More**

Type: All Parameters

AppliesTo: https://test.sbr.gov.au/services

ExpirationPeriod: 30

ResponseDatastore: ATO-Responses

TechnicalReceiptDatastore: ATO-TechnicalReceipts

ThresholdAlert: 2

Type	All Parameters
ExpirationPeriod	30
RetentionPeriod	2
TechnicalReceiptDatastore	ATO-TechnicalReceipts
ResponseDatastore	ATO-Responses
AppliesTo	<p>EVTE: ATO environment: ebMS3 EVTE3 AppliesTo value: https://test.sbr.gov.au/services</p> <p>ATO environment: Core Services EVTE AppliesTo value: https://test.sbr.gov.au/services</p>
	<p>PROD: ATO environment: ebMS3 PROD1, PROD2 AppliesTo value: https://sbr.gov.au/services</p> <p>ATO environment: Core Services PROD AppliesTo value: https://sbr.gov.au/services</p>

Note:

- The *TechnicalReceiptDatastore* name must be unique across packages in a CPI tenant. The same name that was used in the *Data submission for STP reporting* iFlow must be used here.
- The *ResponseDatastore* name must be unique across packages in a CPI tenant.

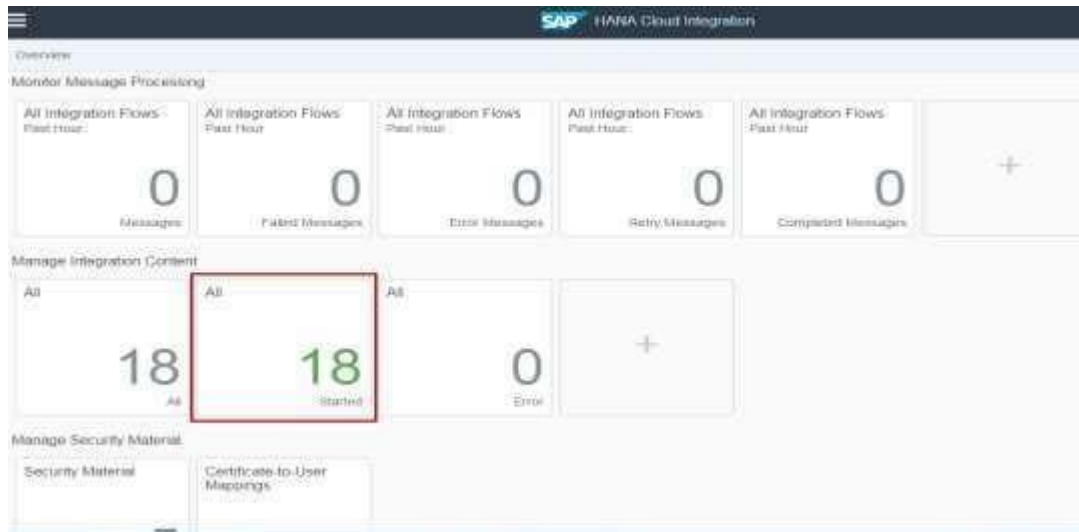
5.1.4 Deploy iFlows on test and productive tenants

Perform the following steps to deploy the iFlows on test and productive tenants:

1. In your SAP INTEGRATION SUITE tenant, from the menu in the upper left corner, choose *Design*.
2. Click the package name.
3. For the iFlow that you want to deploy, choose *Actions -> Deploy*.



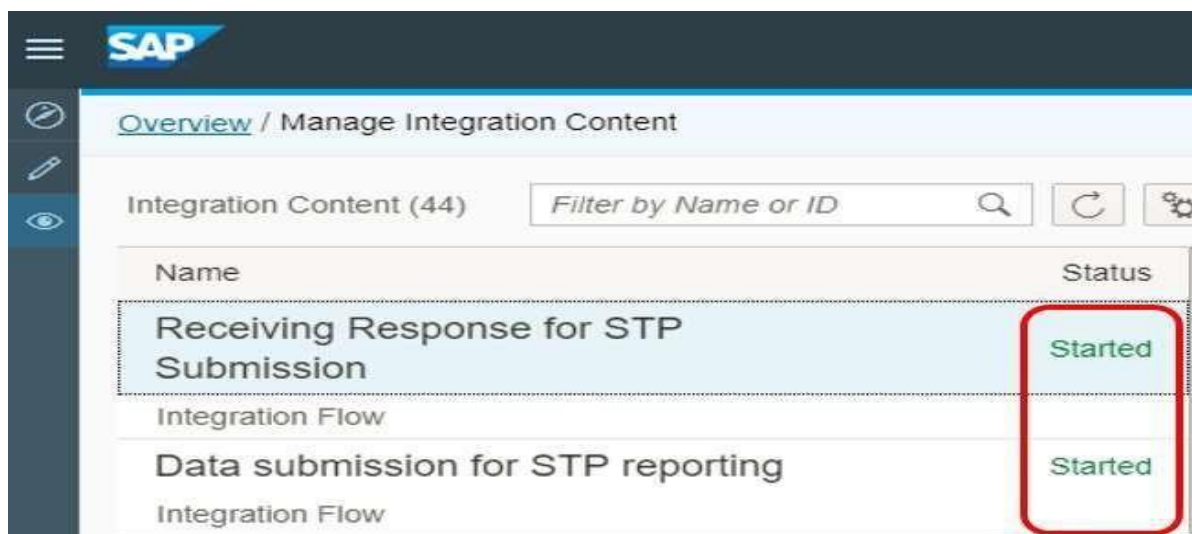
4. Repeat steps 1-3 for each of the iFlows in the package.
5. Check and make sure all iFlows have been deployed successfully by doing the following:
 - a. In your SAP INTEGRATION SUITE tenant, choose *Monitor* from the menu in the upper left corner.
 - b. Under *Integration Content Monitor*, choose the *Started* tile.



- c. Check the deployment status of each iFlow.

If the *Status* is *Started*, it means the iFlow has been deployed successfully.

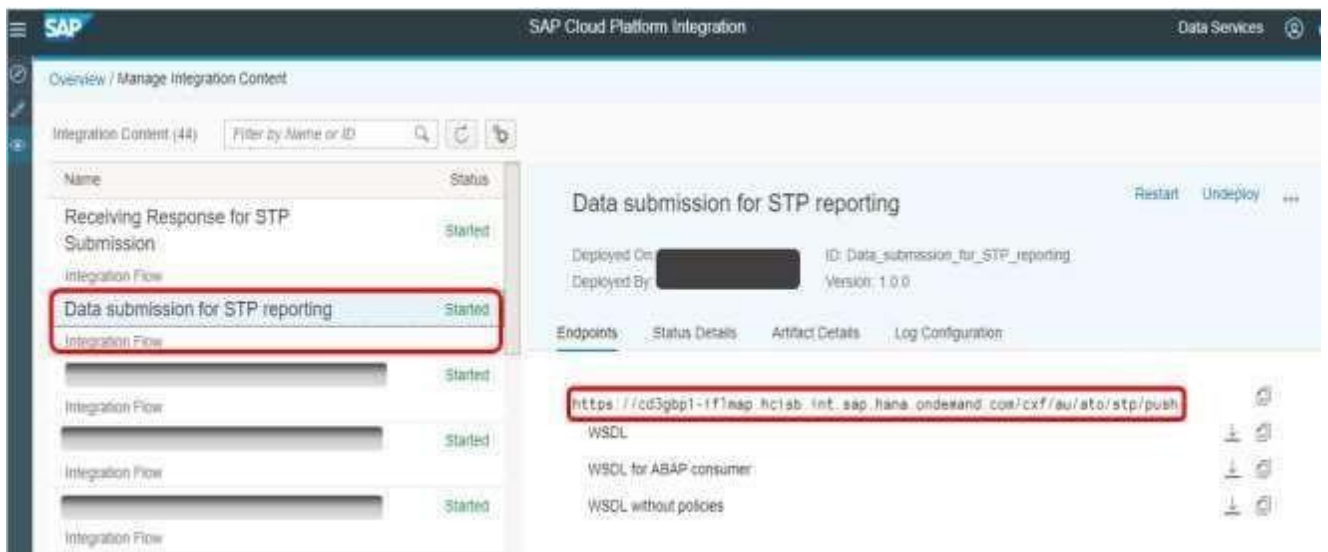
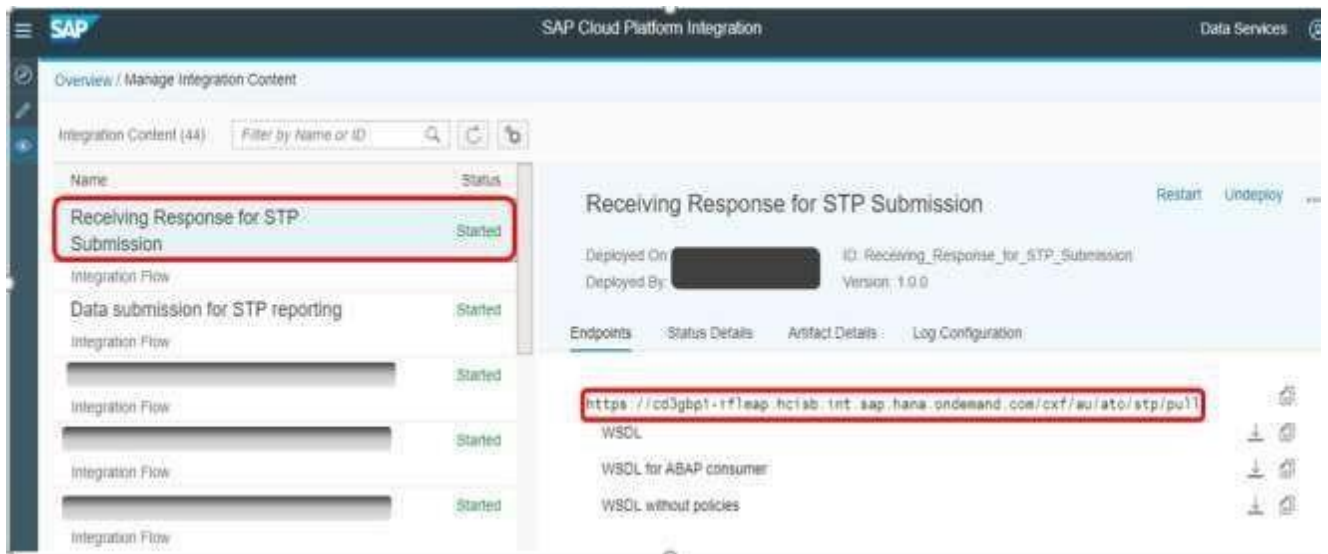
Note: The deployment can take up to 30 minutes if this is the first iFlow that has been deployed to the SAP INTEGRATION SUITE tenant.



6. Note the URL of the endpoint of each service as follows:

Note: This URL will be used later for setup of the SAP ERP system.

- a. Select the iFlow corresponding to the service.
- b. Note the endpoint URL displayed in the top right corner.



- You can monitor messages in SAP INTEGRATION SUITE.
To understand the details of message monitoring and error handling, refer to this link:

<https://help.sap.com/viewer/368c481cd6954bdfa5d0435479fd4eaf/Cloud/en-US/314df3f8f4334dd8829c62e865cc6d02.htm>

- You can also monitor messages in the ABAP Web Service.
For more details, refer to this link:

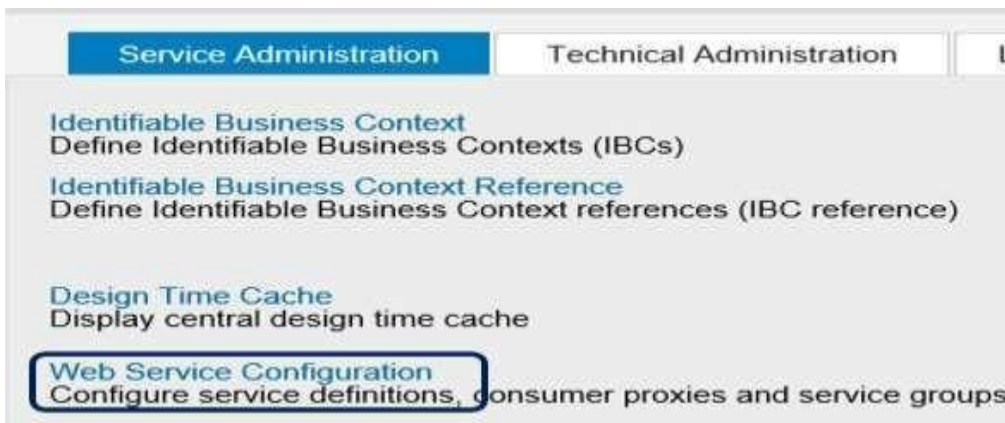
<https://wiki.scn.sap.com/wiki/display/ABAPConn/ABAP+Web+Service+Monitors>

In the Employee Central payroll system, you need to configure the Web Services in the SOA Manager through which communication between the Employee Central payroll system and the government gateway via SAP INTEGRATION SUITE can be established.

In the following steps, the *Employer Alignment Submission (EAS) Report (RPCEASG0)* is used as an example:

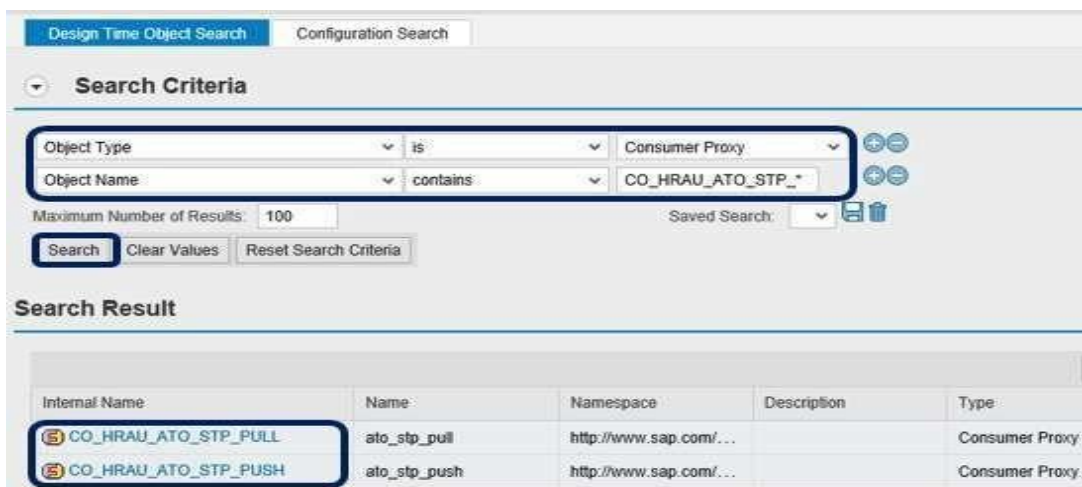
Note: You must configure the proxy for each report. For some reports you need to configure the proxy only once, while for the other reports you must reconfigure the proxy once every year due to object names and port names changed as per government requirements. For more information, see the table of object names and port names at the end of this section.

1. Open the SOA Manager using transaction SOAMANAGER.
2. Click *Web service configuration*.



3. Enter the object name CO_HRAU_ATO_STP_* and click *Search*.

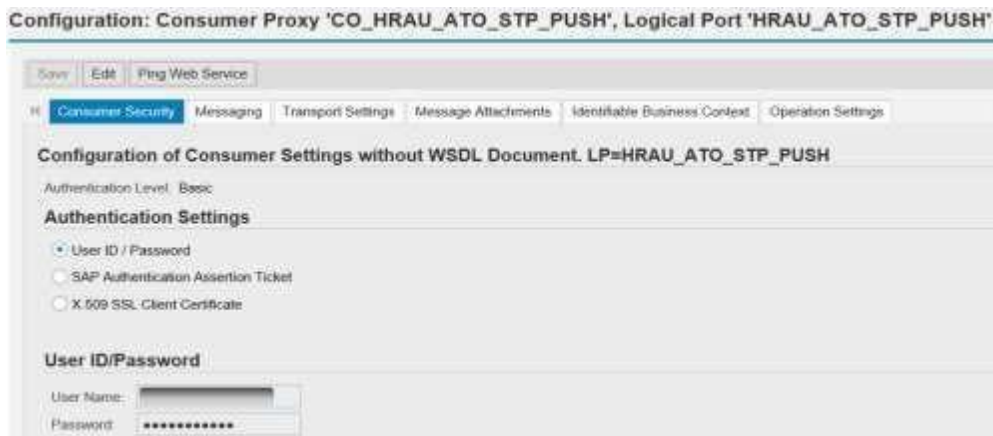
Object Type	is	Consumer Proxy
Object Name	contains	CO_HRAU_ATO_STP_*



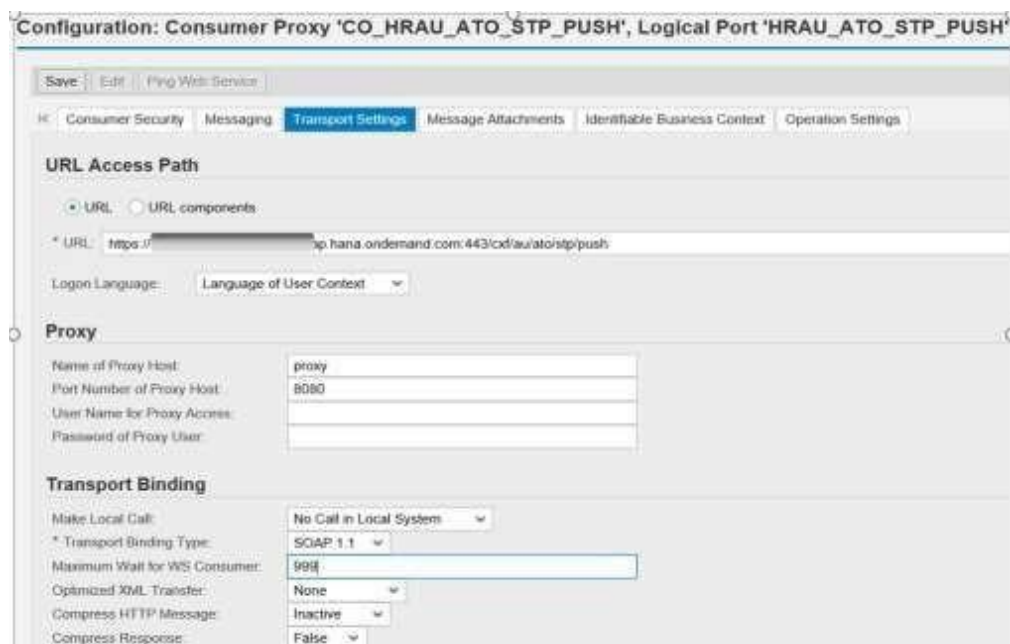
4. For both objects found in the search, follow the steps below:
 - a. Click the internal name link and then select *Create > Manual Configuration*.



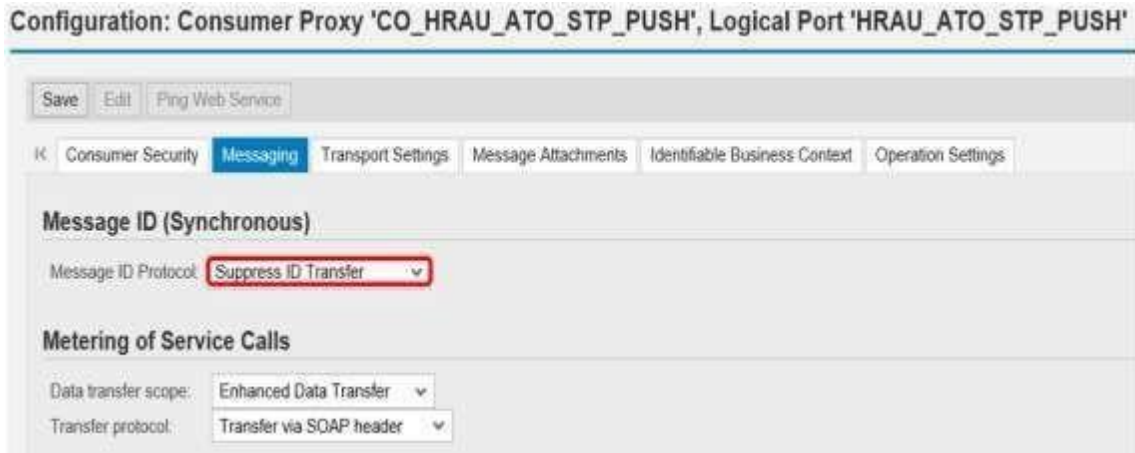
- b. Enter a logical port name (for example, HRAU_ATO_STP_PUSH), select *Logical Port is Default*, and then click *Next*.
 - c. In the *Consumer Security* tab, select *User ID / Password*, enter the username and password of the SAP INTEGRATION SUITE communications user, and then click *Next*.



- d. In the *Transport Settings* tab, enter the relevant information as follows and then click *Next*.



- In the *Messaging* tab, select 'Suppress ID Transfer' for *Message ID Protocol* and then click *Next*.



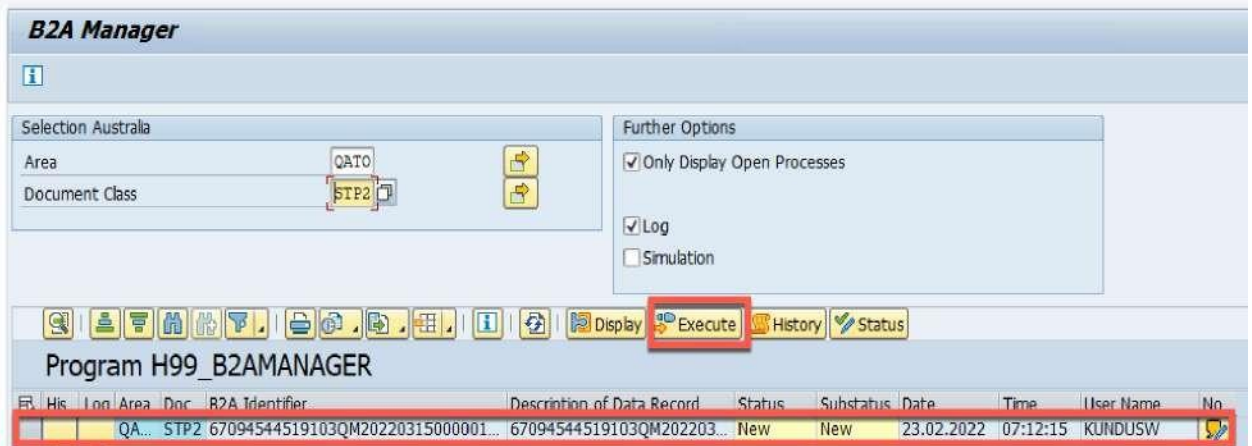
- Proceed with the remaining default settings and click *Finish*.
- On the *Define Logical Ports* page, select the entry and click *Activate*.
- Perform a PING test in SOAManager.

iFlow	Object Name	Port Name to be configured	URL access path
Data Submission for STP Reporting	CO_HRAU_ATO_STP_PUSH	HRAU_ATO_STP_PUSH	https://xxxxxxxxxxx.sap.hana.ondemand.com/cxf/au/ato/stp/push
Receiving response for STP submission	CO_HRAU_ATO_STP_PULL	HRAU_ATO_STP_PULL	https://xxxxxxxxxxx.sap.hana.ondemand.com/cxf/au/ato/stp/pull

6 TESTING

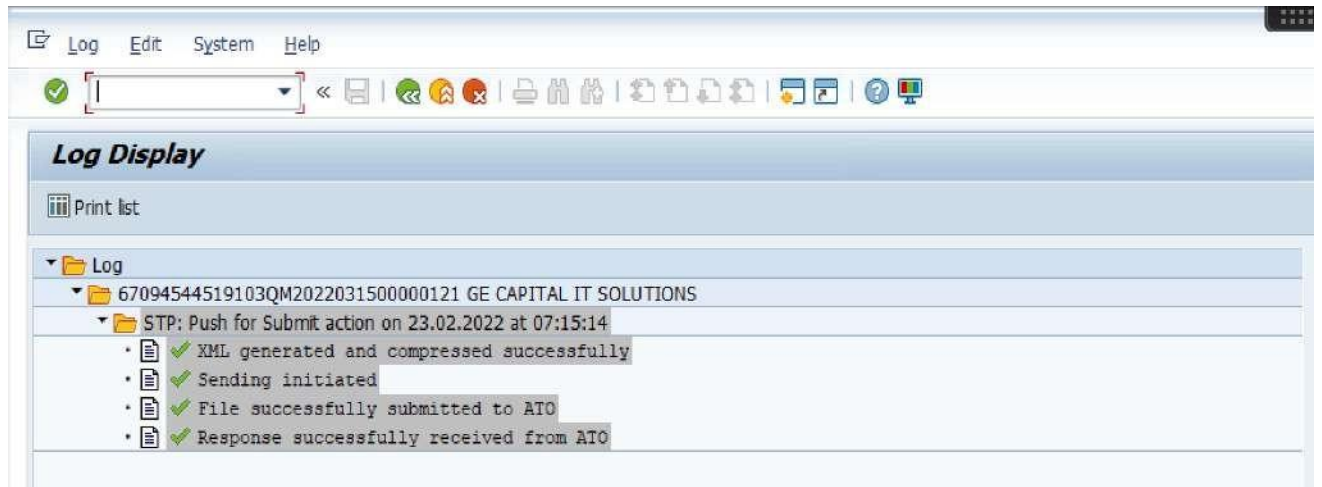
Perform the following steps to test data transmission between the SAP ERP and ATO servers:

1. In the SAP ERP system, go to transaction PB2A for country grouping '13'.
2. Specify the *Document Area* as 'QATO' and the *Document Class* as 'STP2', and then press *Enter*.
3. Select the line item for a submission file and then click *Execute*.

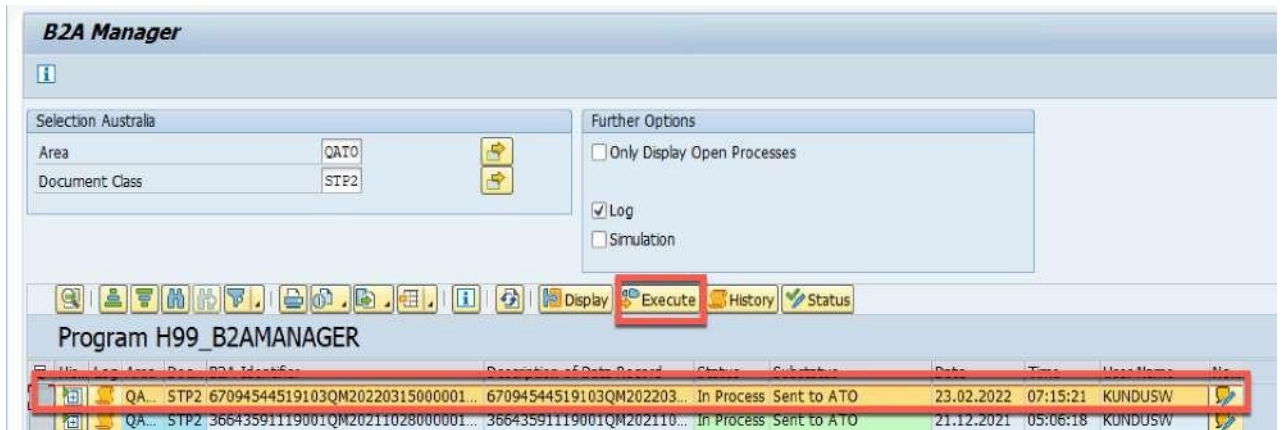


4.

Result: The file is submitted to the government gateway successfully.



5. Repeat step 3 for the same line item.



Result: The business validation response is received from the government gateway successfully.

