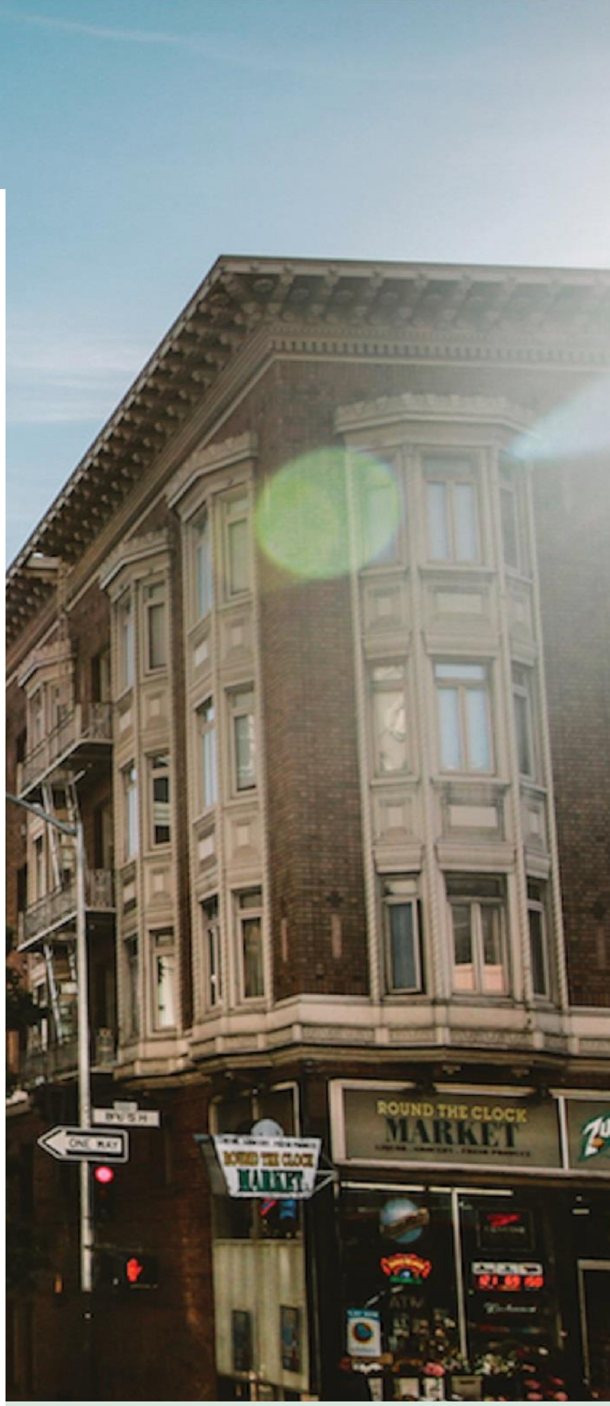
Purchase Order Approval Process

WORKFLOW DEMO APPLICATION



AUGUST 14

IBM

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Gaurav Modgil

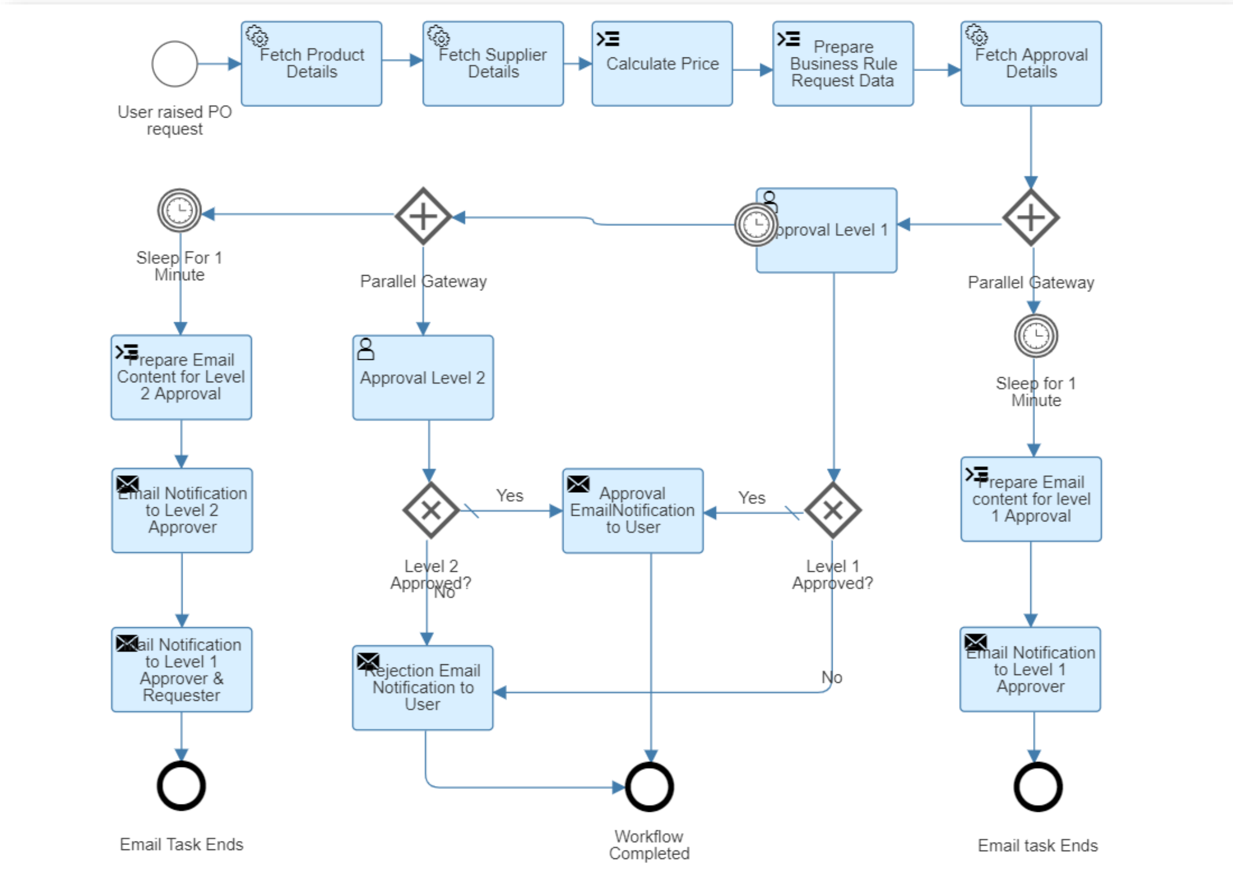
Contents

[A] Use Case: Scenario

1. User fill the product request form using 'Request Product' application providing Product ID, Quantity and Comments. Workflow is instantiated once user Submits the Request.
2. Once Workflow is started, Northwind Database is Queried for the Product and Price, Supplier details are fetched.
3. The level 1 and level 2 approver details are fetched form Business Rules [via REST call].
4. Level 1 manager is sent a mail notification about the User request with the Total Purchase Order Cost.
5. Request Awaits approval in the First Level Managers Inbox until:
   - Manager Approves/Rejects the Request
   - After a Specific Wait Period, The Task is re-routed to the second level Manager.

5. If Either of the managers Rejects the Request, Mail is sent to the Requestor notifying that the request has been rejected.
6. Approval mail is sent to the user with Approval Details as well as Details of the Supplier Like Address/Contact Details etc.

[B] Workflow Diagram



[C] Prerequisites

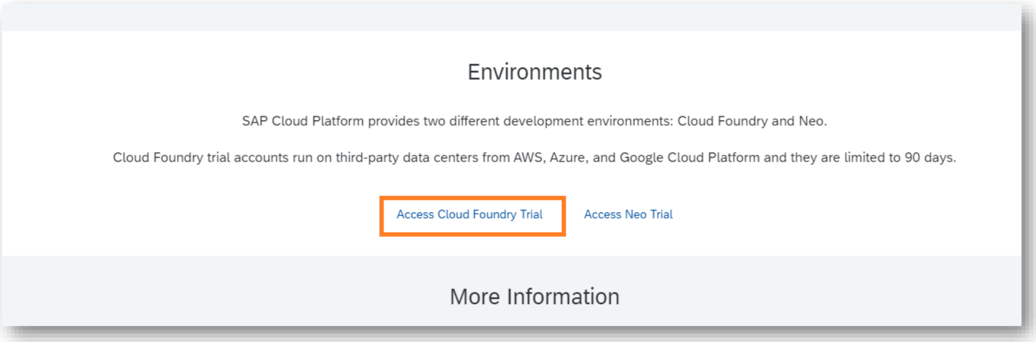
Get a Free Trial Account on SAP Cloud Platform. You can create your account by visiting https://cloudplatform.sap.com/try.html.

https://developers.sap.com/tutorials/hcp-create-trial-account.html

[D] Prepare to Create Workflows in SAP Cloud Platform (Cloud Foundry)

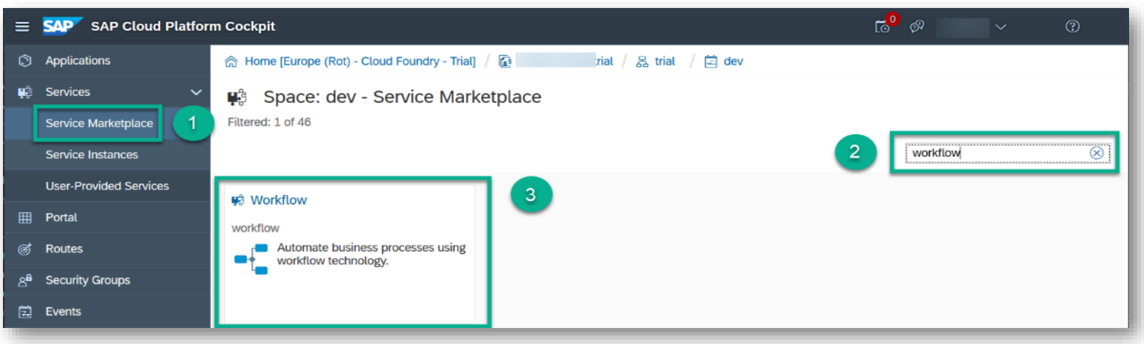
Step 1: Open the SAP Cloud Platform cockpit

1. In your Web browser, open the SAP Cloud Platform cockpit. If you do not have a trial account, see Prerequisites.
2. Scroll down to **Environments** and choose **Access Cloud Foundry Trial**.

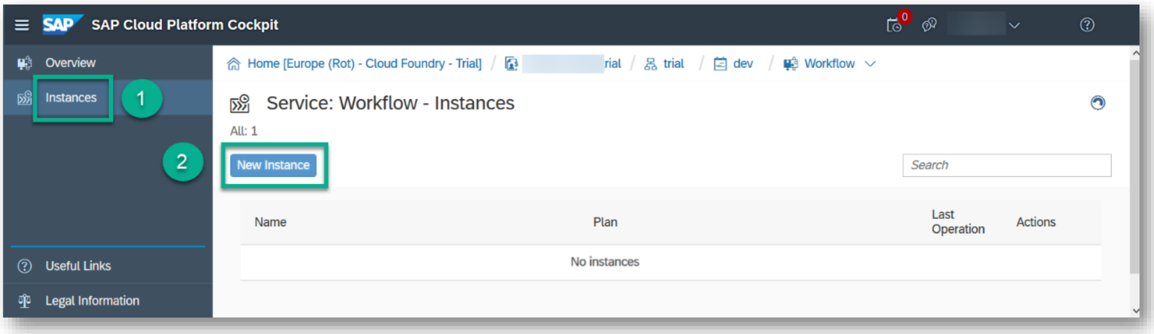


Step 2: Add a workflow instance

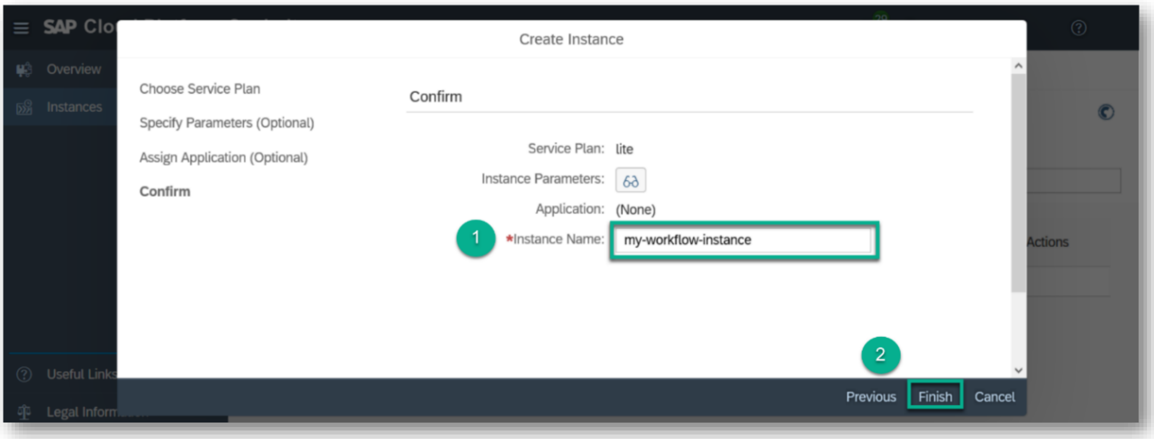
1. Go to your trial subaccount. If you have just created your trial account, choose trial from the breadcrumbs.
2. Choose **Spaces** from the left-hand navigation, and then choose **dev**.
3. Choose **Services** | **Service Marketplace** from the left-hand navigation, and search for **workflow**
4. Choose the workflow service



5. Choose **Instances** from the left-hand navigation, then choose **New Instance**.

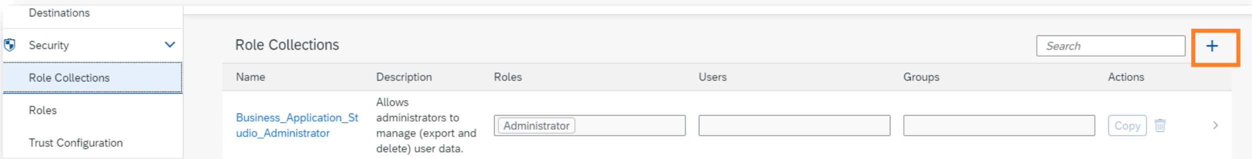


6. In the wizard that comes up, leave the data as is and proceed by choosing **Next**. On the last page, enter `my-workflow-instance` as the instance name and choose **Finish.**



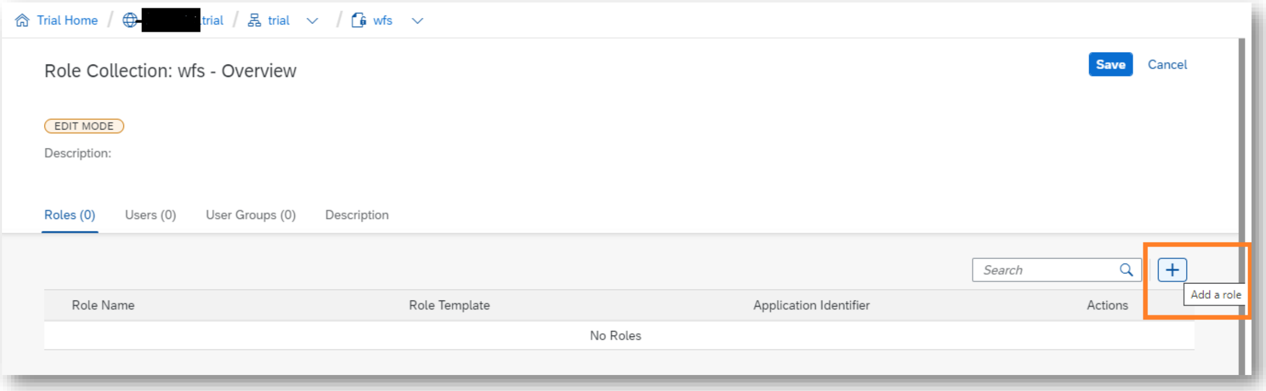
Step 3: Create role collection

1. Go back to your trial subaccount by choosing **trial** from the breadcrumbs.
2. From the left-hand navigation, choose **Security** | **Role Collections**, then choose **to click on plus (+) icon**.

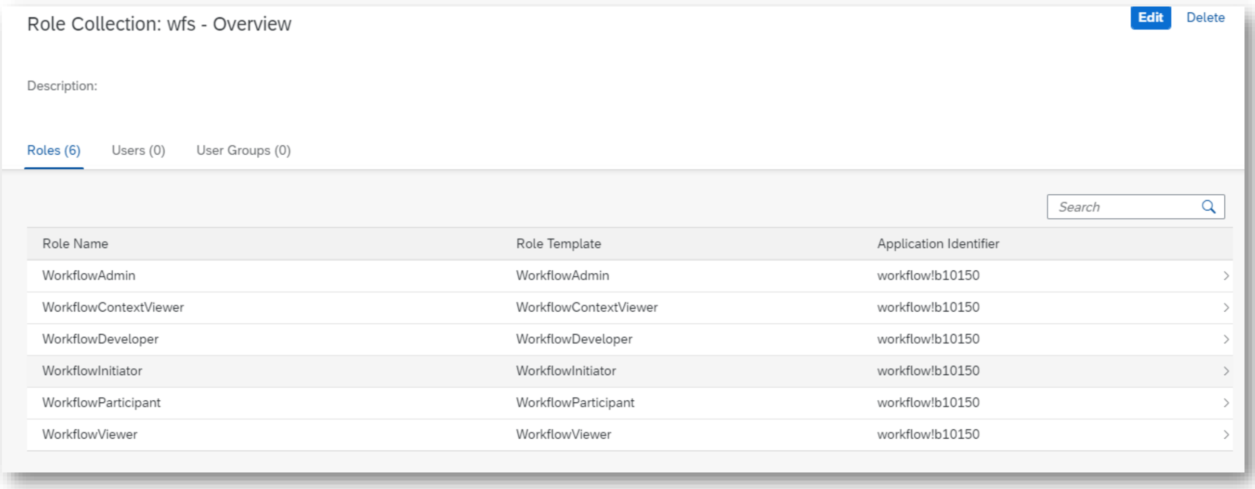


3. Enter the name for your role collection (e.g. **wfs**), then choose **Create**.

4. After the role collection is created, click its name, and choose **Edit** to **Add Role**.



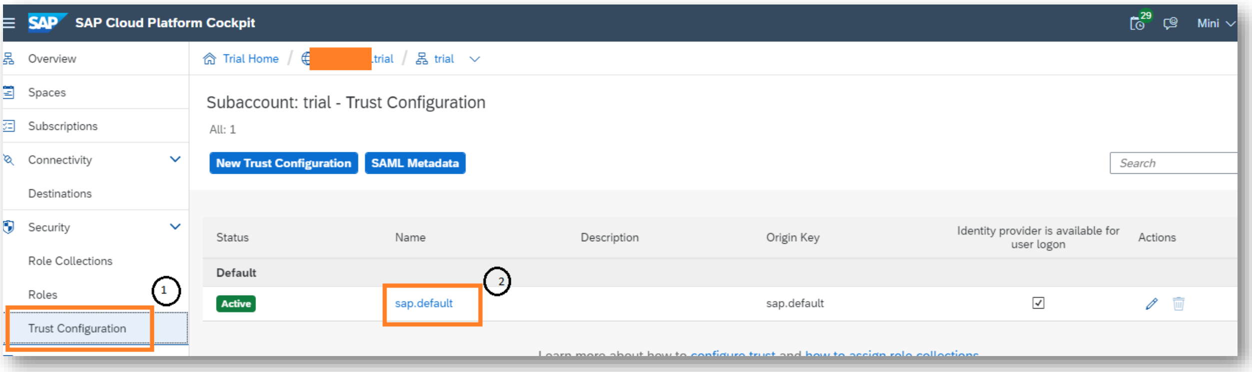
5. In the wizard that comes up, select following roles one by one.
   - WorkflowAdmin
   - WorkflowDeveloper
   - WorkflowInitiator
   - WorkflowParticipant
   - WorkflowViewer
   - WorkflowContextViewer



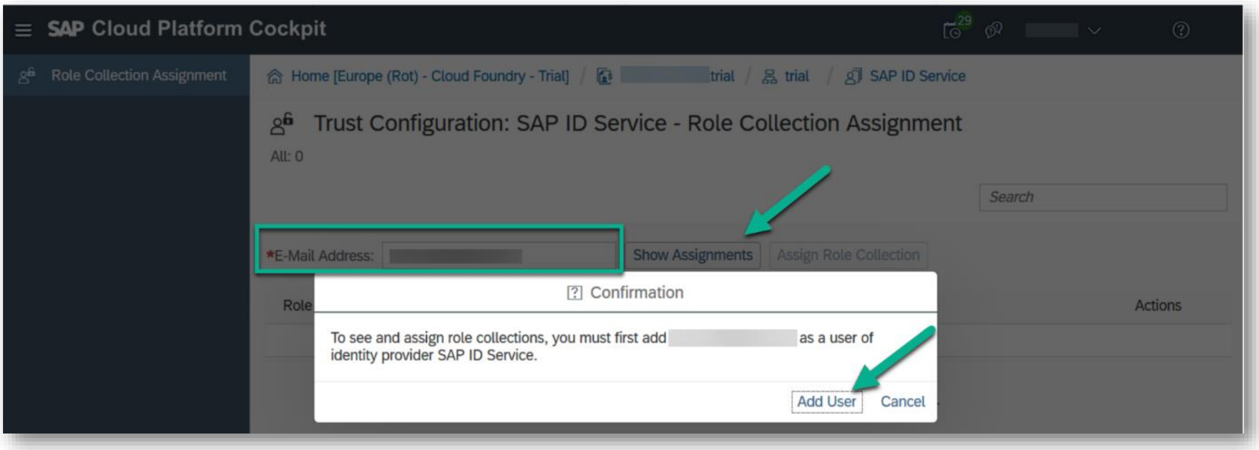
Before adding a new role, you need to save the unsaved changes and again click on Edit button.

Step 4: Assign role collection

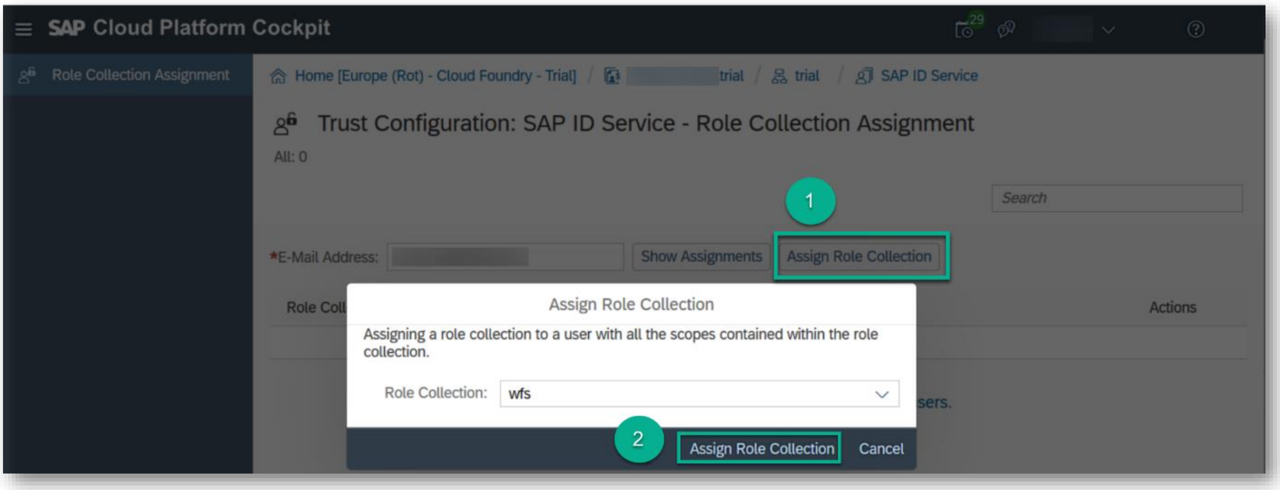
1. Go back to your trial subaccount by choosing the **trial** from the breadcrumbs.
2. From the left-hand navigation, choose **Security** | **Trust Configuration**, then click **sap.default**



3. Enter your email address, then choose **Show Assignments**.

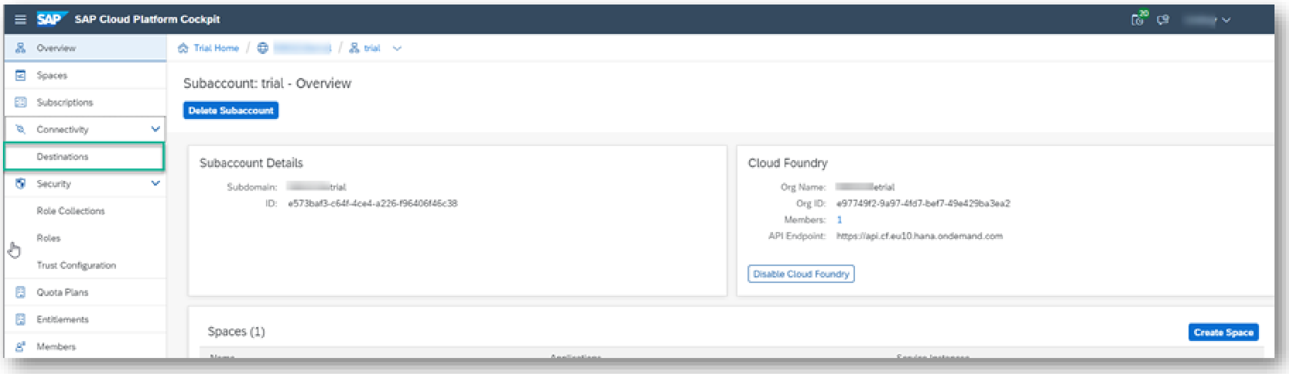


4. Choose **Add User**.
5. Choose **Assign Role Collection** and select the **wfs** collection that you created before. Then choose **Assign Role Collection** again.



Step 5: Connect SAP Cloud Platform to Northwind OData Service

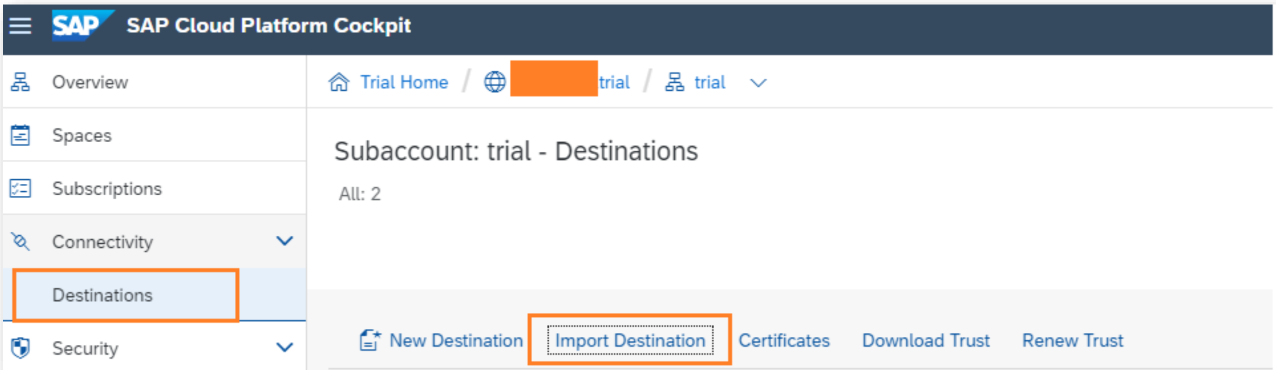
1. Go back to your trial subaccount by choosing the **trial** from the breadcrumbs.
2. In the left navigation panel, click **Destinations** under **Connectivity**.



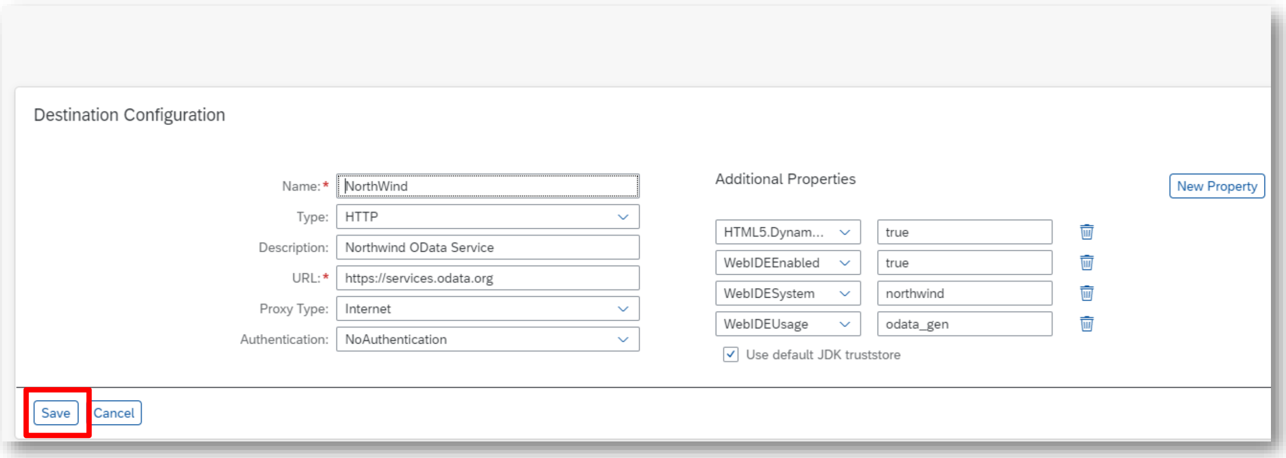
3. Download the file in your local machine from following link:

   https://ibm.box.com/s/1hucncv0a9i99xqyk9w9y111y7md7kc1

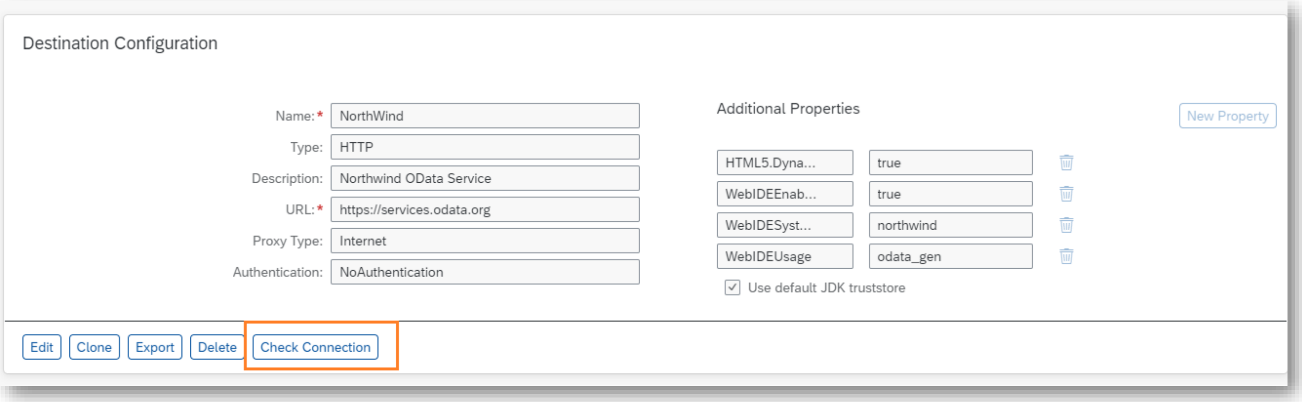
4. Click **Import Destination**.



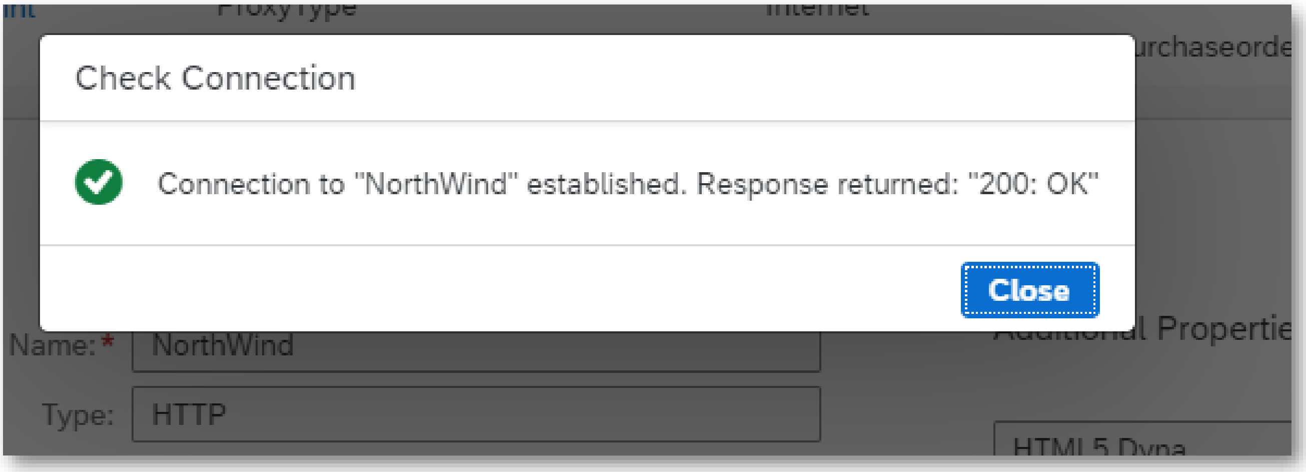
5. Upload the file which you downloaded in step 3.
6. A Destination with name **Northwind** should be created. Click **Save**.



7. Click **Check Connection** to make sure that everything is working.

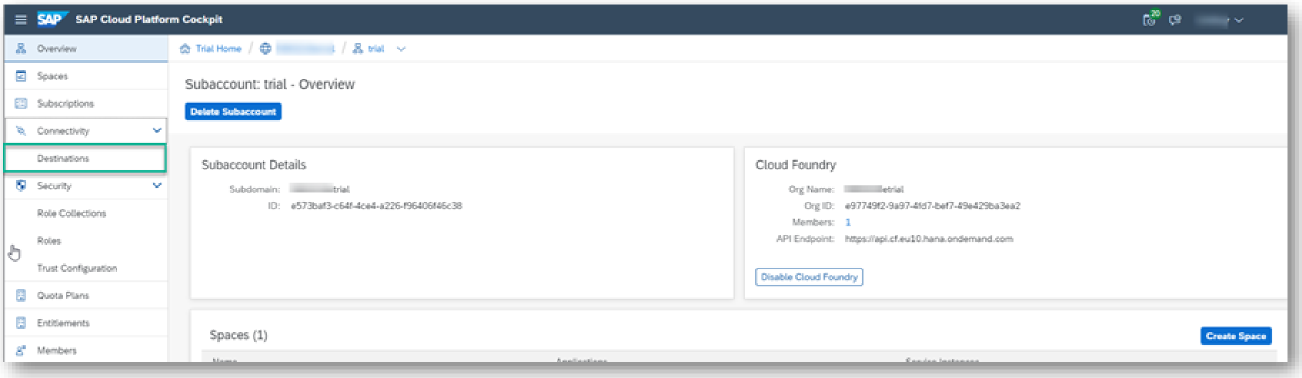


8. You will get confirmation that the connection is established.



Step 6: Set Up Email SMTP configuration to send emails during workflow runtime execution

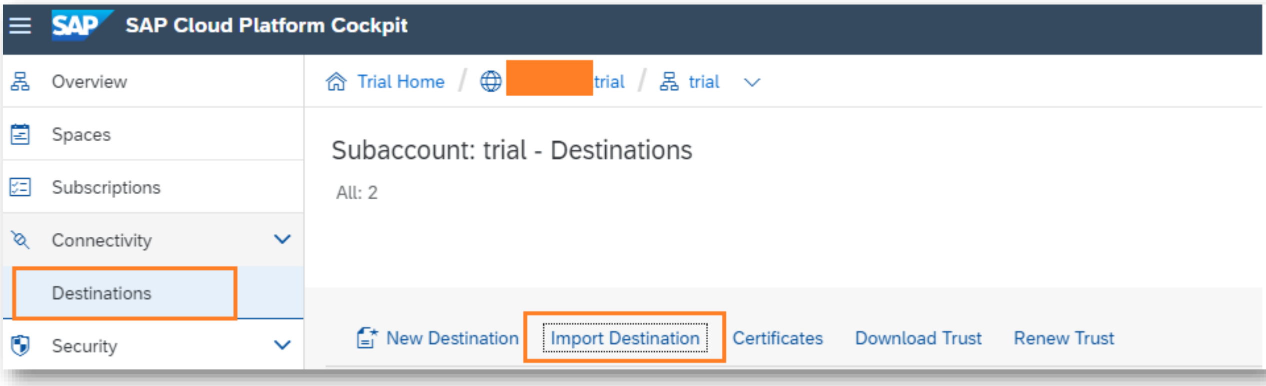
1. Go back to your trial subaccount by choosing the **trial** from the breadcrumbs.
2. In the left navigation panel, click **Destinations** under **Connectivity**.



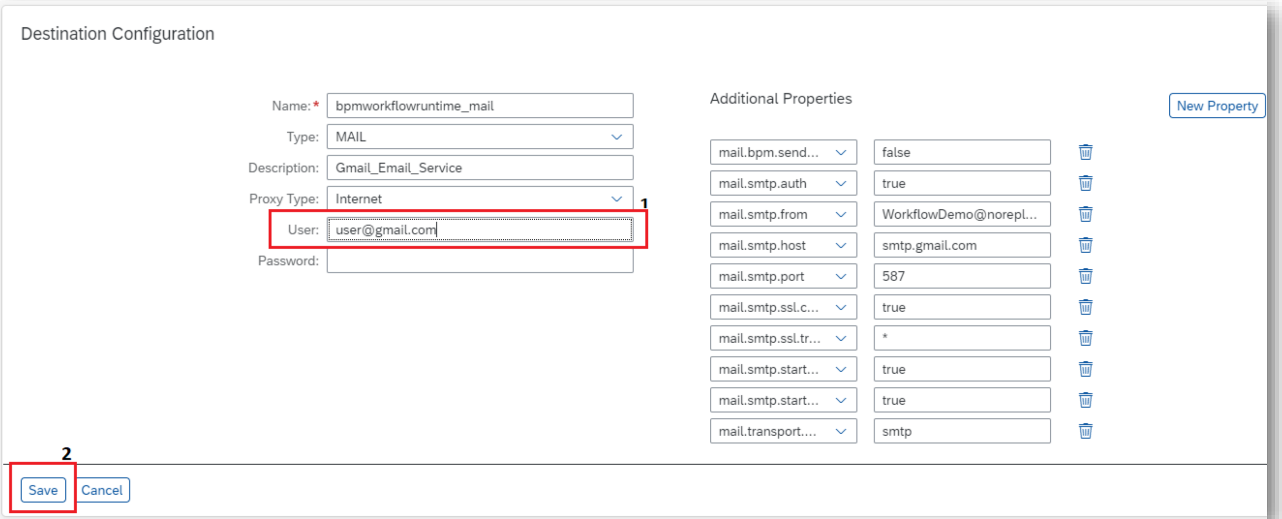
3. Download the file in your local machine from following link.

   https://ibm.box.com/s/irdfq7amaa6r7jjfd7fw881uqxms5kyz

4. Click **Import Destination**.

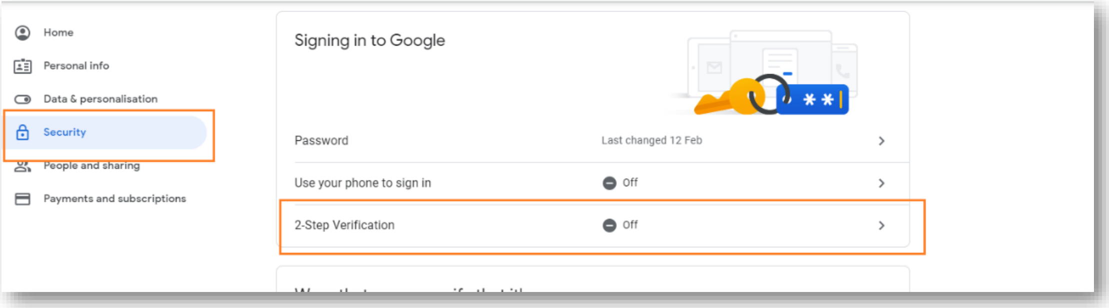


5. Upload the file, you downloaded in step 3.
6. A Destination with name **bpmworkflowruntime_mail** should be created.
7. Change the value of User field to your email address [For the sake of demo we have used Google mail account]
8. Click **Save**.

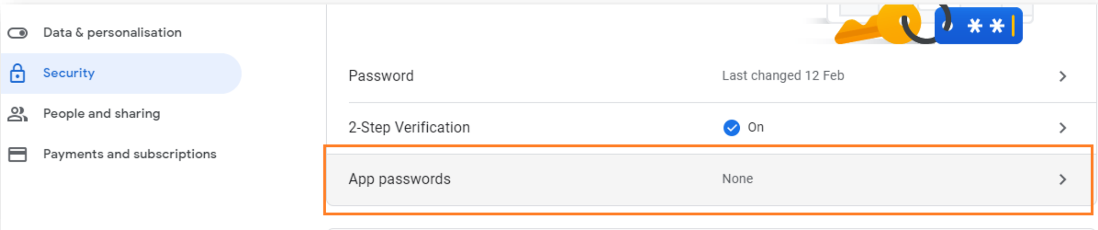


9. You need to generate a password for this application from your Gmail account.
10. Open your Gmail account.
11. Click on Manage Your Google Account

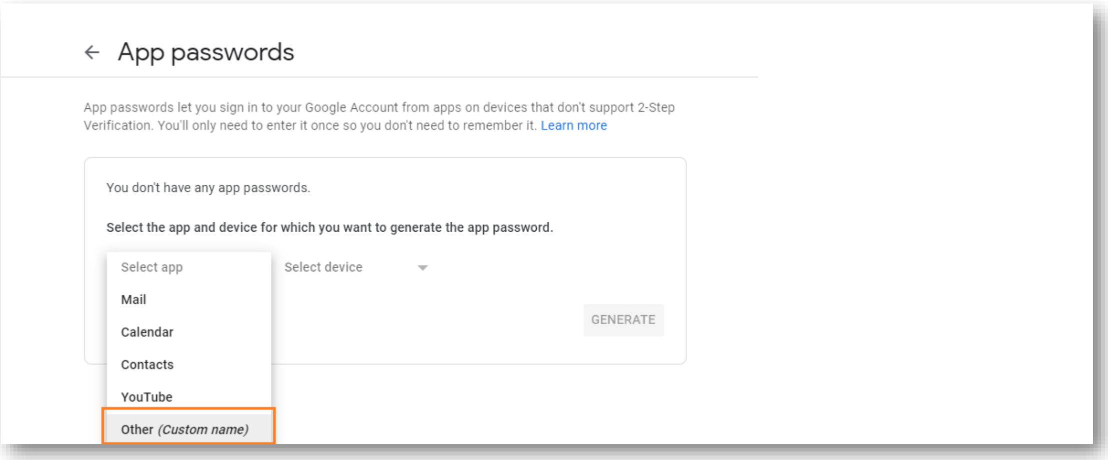
12. From left panel select security and enable **2-Step Verification**.



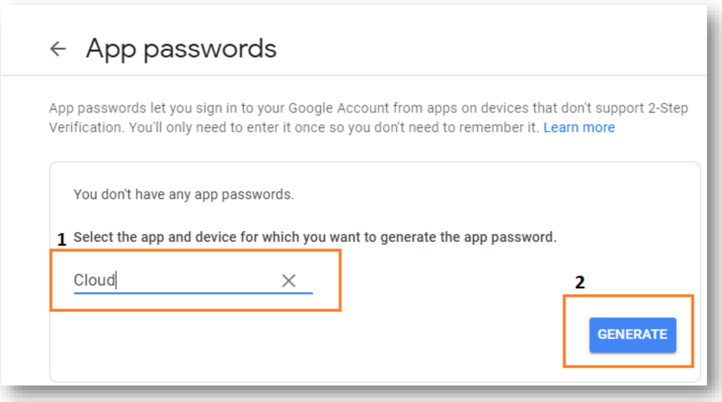
13. Once the 2-Step Verification is enabled. Select App Passwords



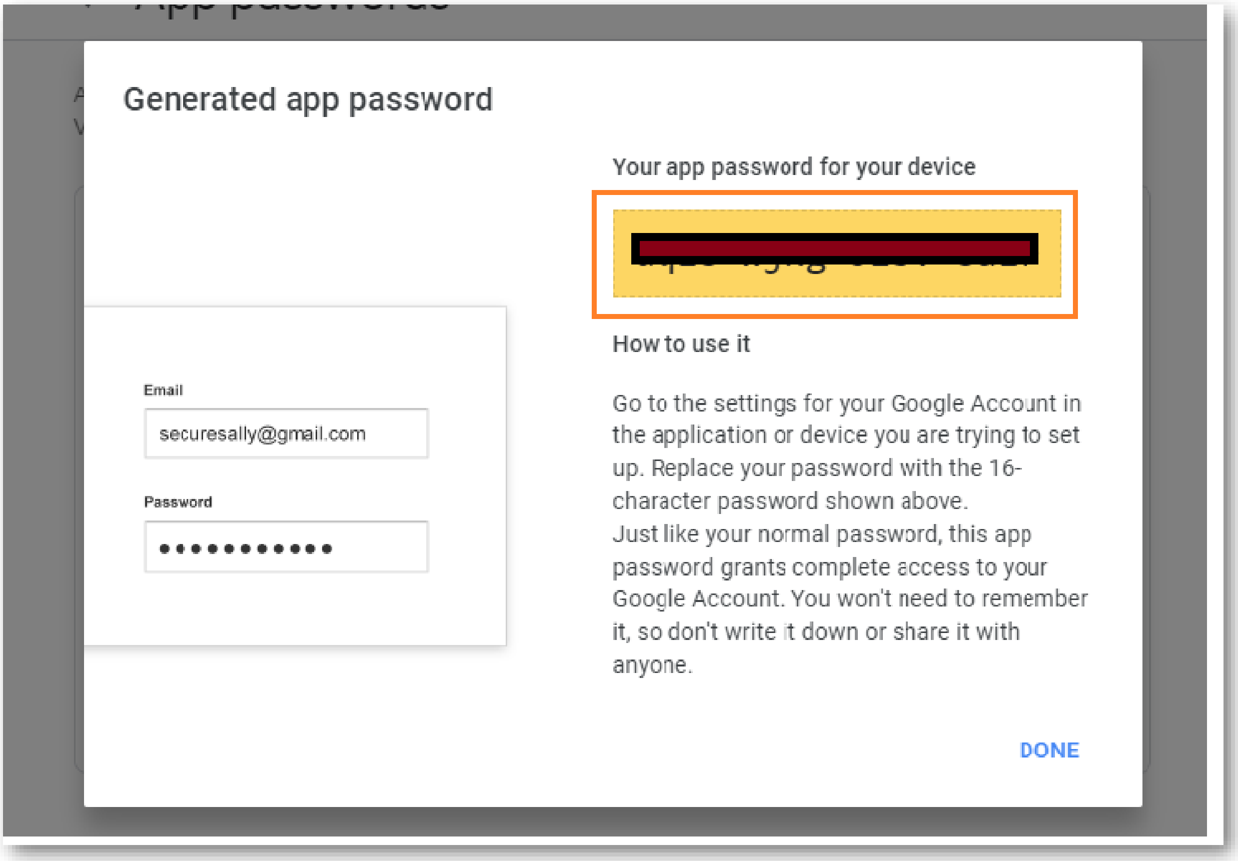
14. New window will be opened, and it will ask you to enter your Gmail account password.
15. Select **Other** from **Select app** dropdown



16. Give any Name to the app, for example **Cloud** and click on **GENERATE**.

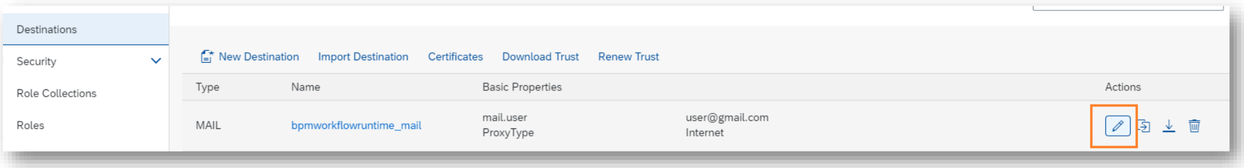


17. Copy the Generated app Password.

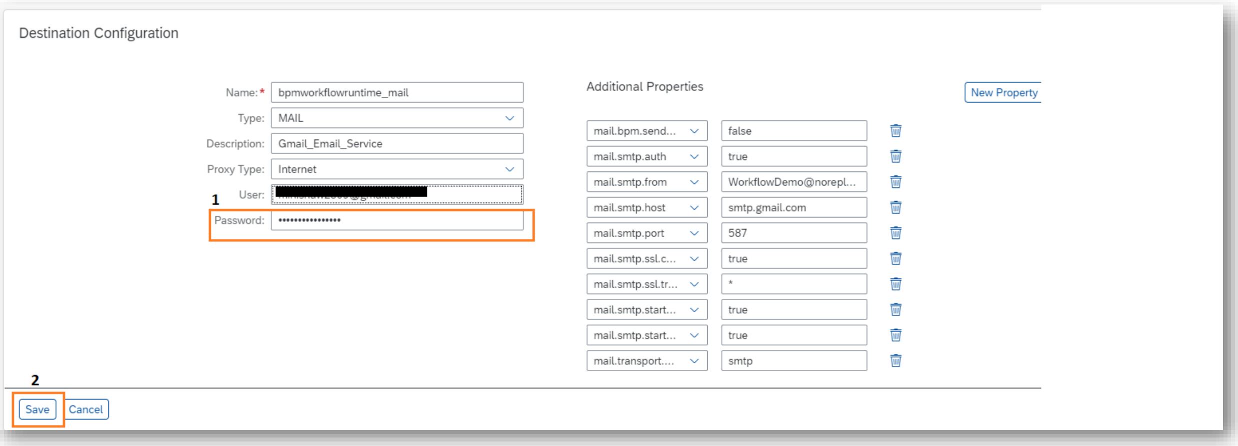


18. Open the destination we created in step 6

19. Click on **Edit** Button



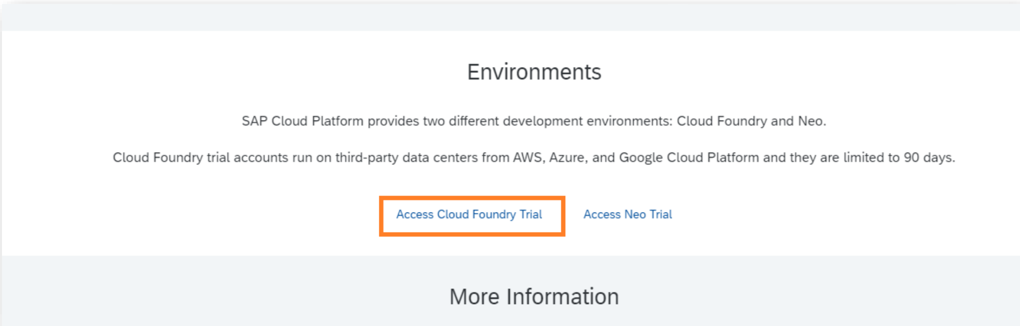
20. Paste the password copied in step 16 in the field Password. Click **Save**



[E] Prepare to Create Business Rules in SAP Cloud Platform (Cloud Foundry)

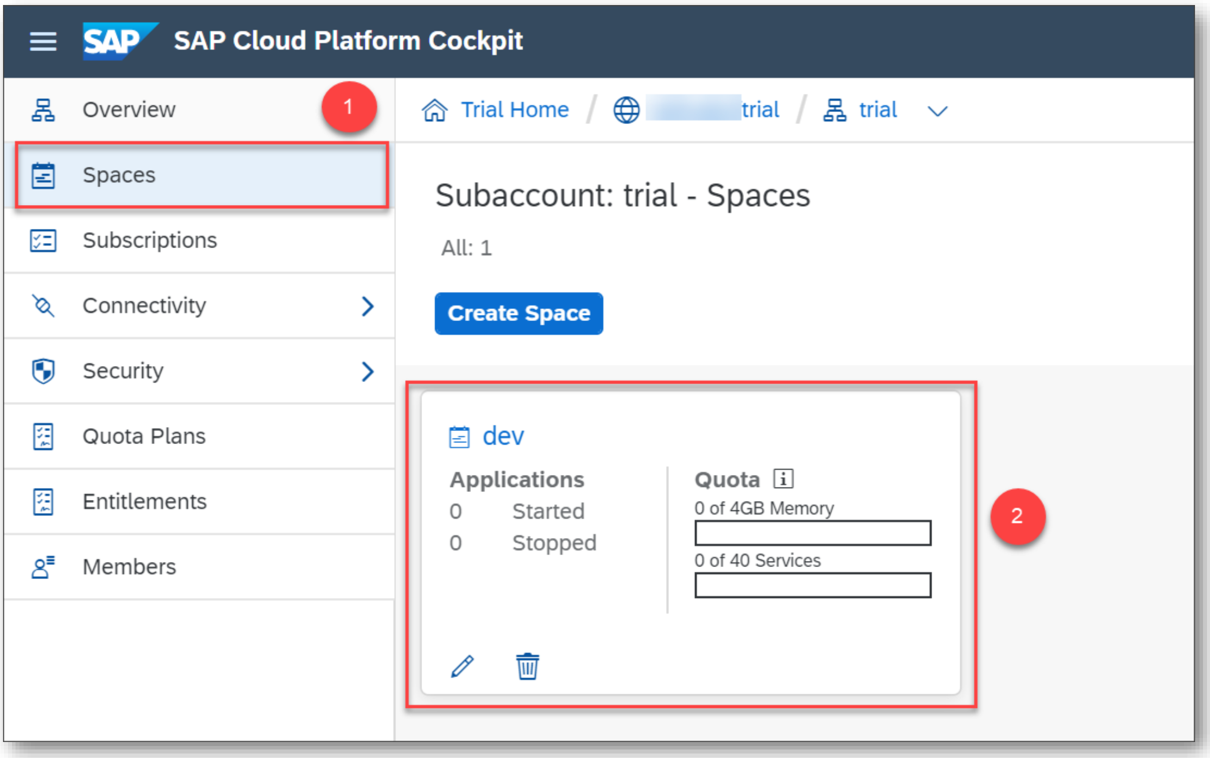
Step 1: Open the SAP Cloud Platform cockpit

1. In your Web browser, open the SAP Cloud Platform cockpit. If you do not have a trial account, see Prerequisites.
3. Scroll down to Environments and choose Access Cloud Foundry Trial.

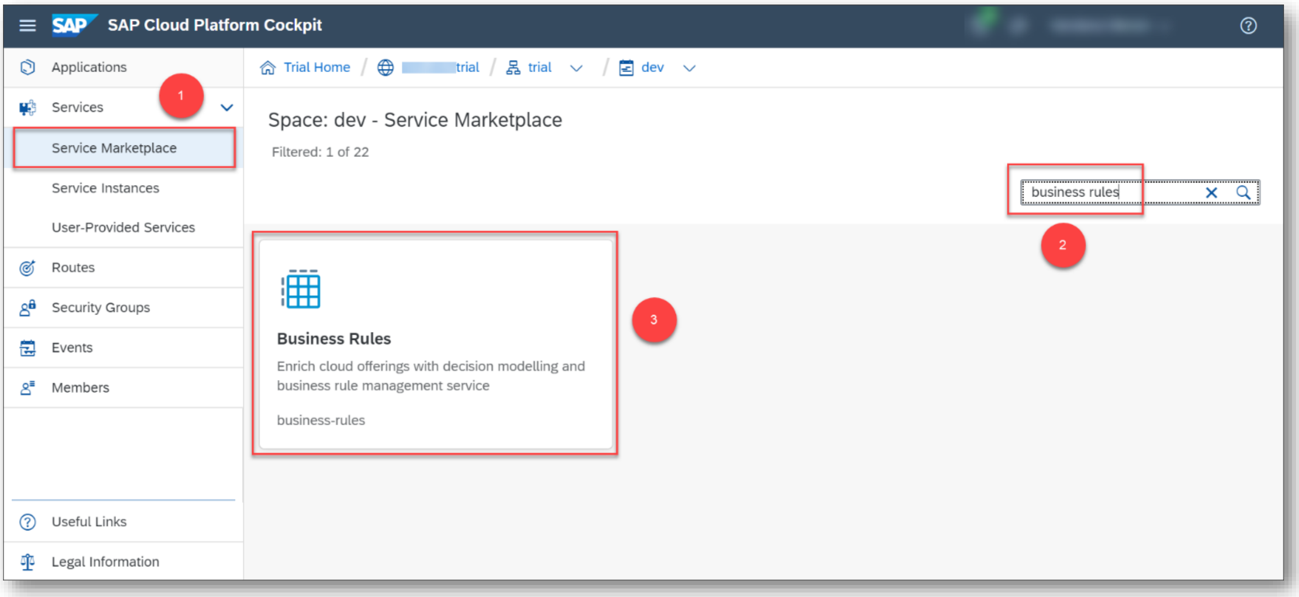


Step 2: Add a Business Rule instance and Create service key for it

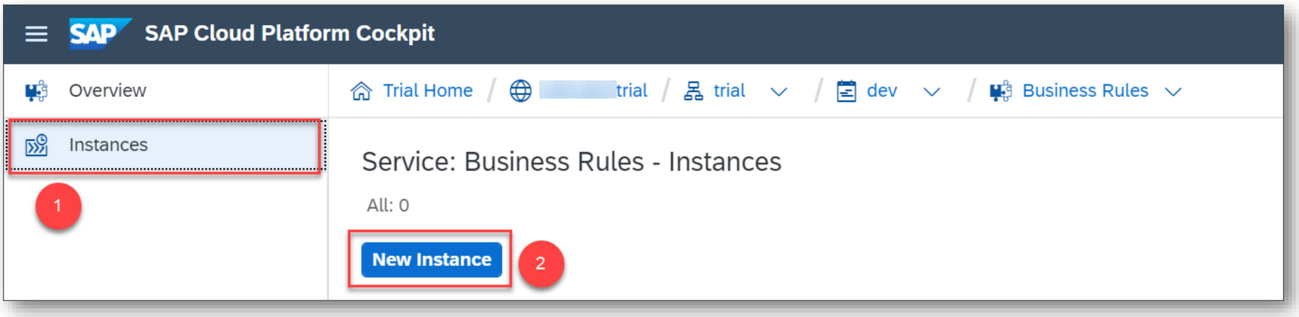
1. Go to your trial subaccount. If you have just created your trial account, choose trial from the breadcrumbs.
2. Choose Spaces from the left-hand navigation, and then choose **dev**.



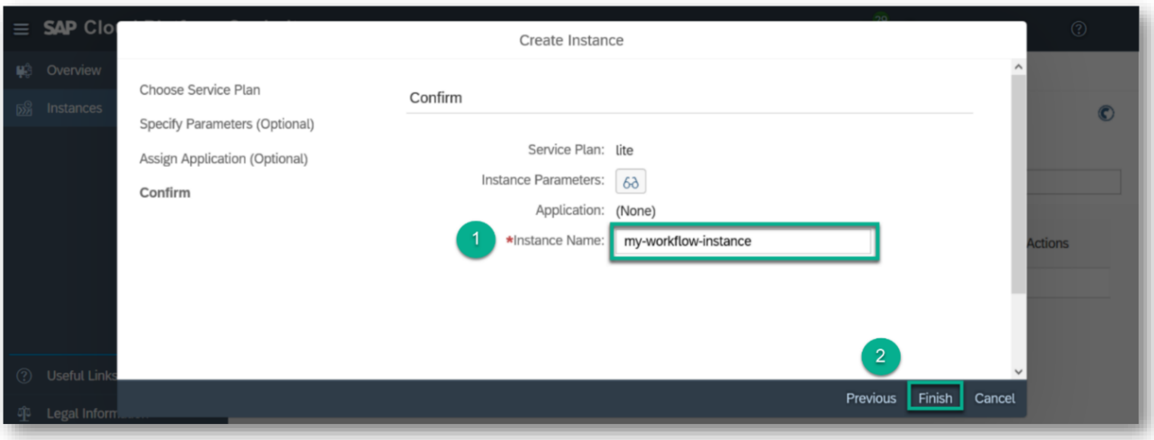
3. Choose **Services | Service Marketplace** from the left-hand navigation, and search for Business rules.
4. Choose **Business Rules** service.



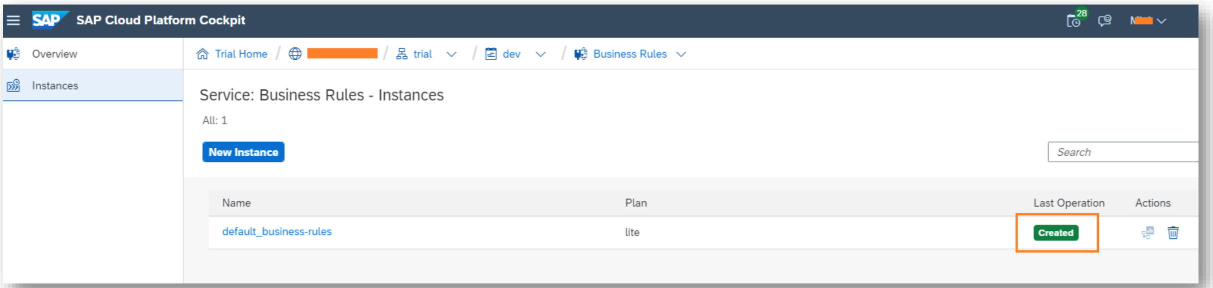
5. Choose **Instances** from the left-hand navigation, then choose **New Instance**.



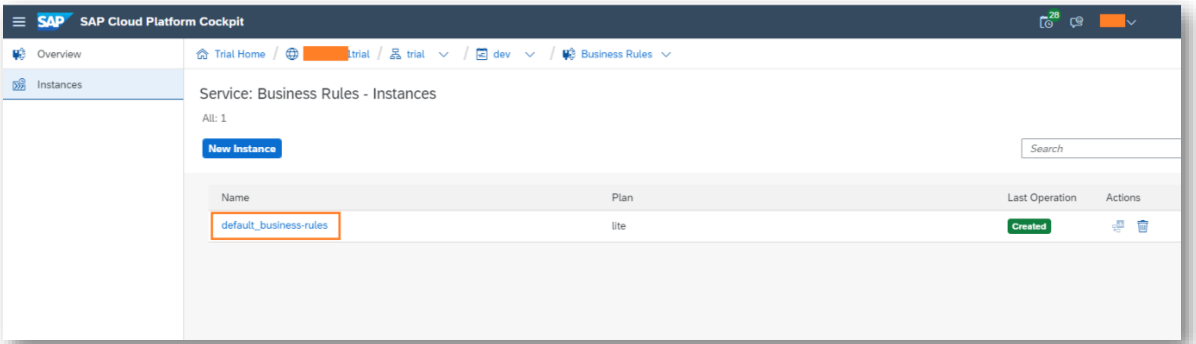
6. In the wizard that comes up, leave the data as is and proceed by choosing **Next**. On the last page, enter default_business-rules as the instance name and choose **Finish.**



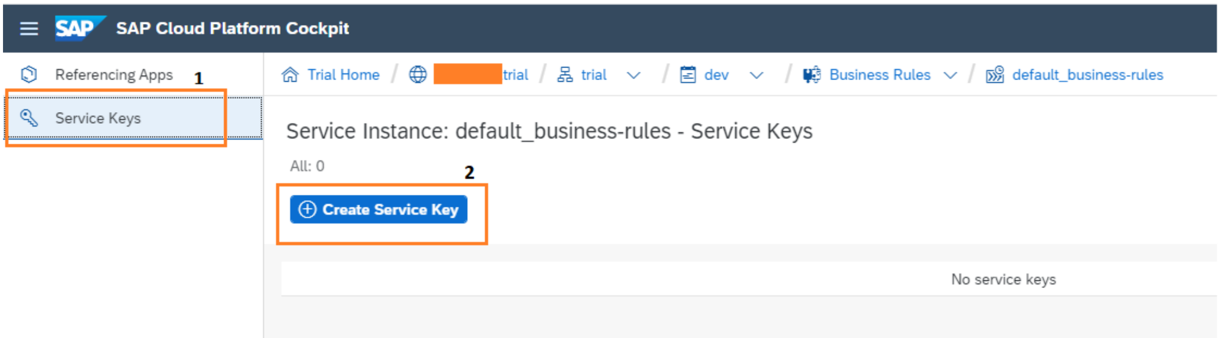
7. The new instance is displayed in the list and the status present under the **Last Operation** changes to Created.



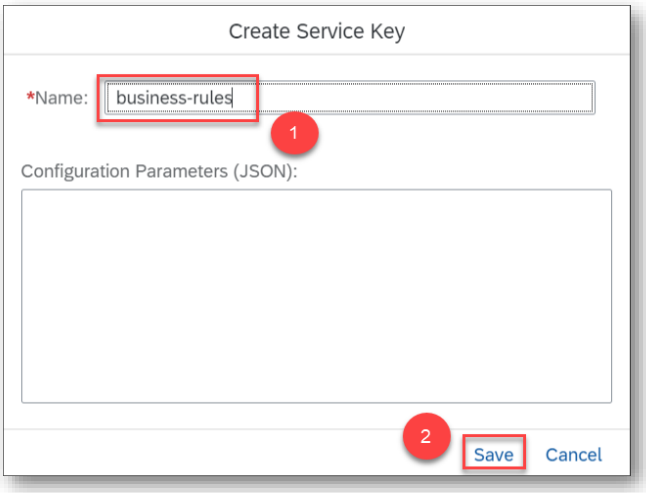
8. Choose the business rules service instance that you created.



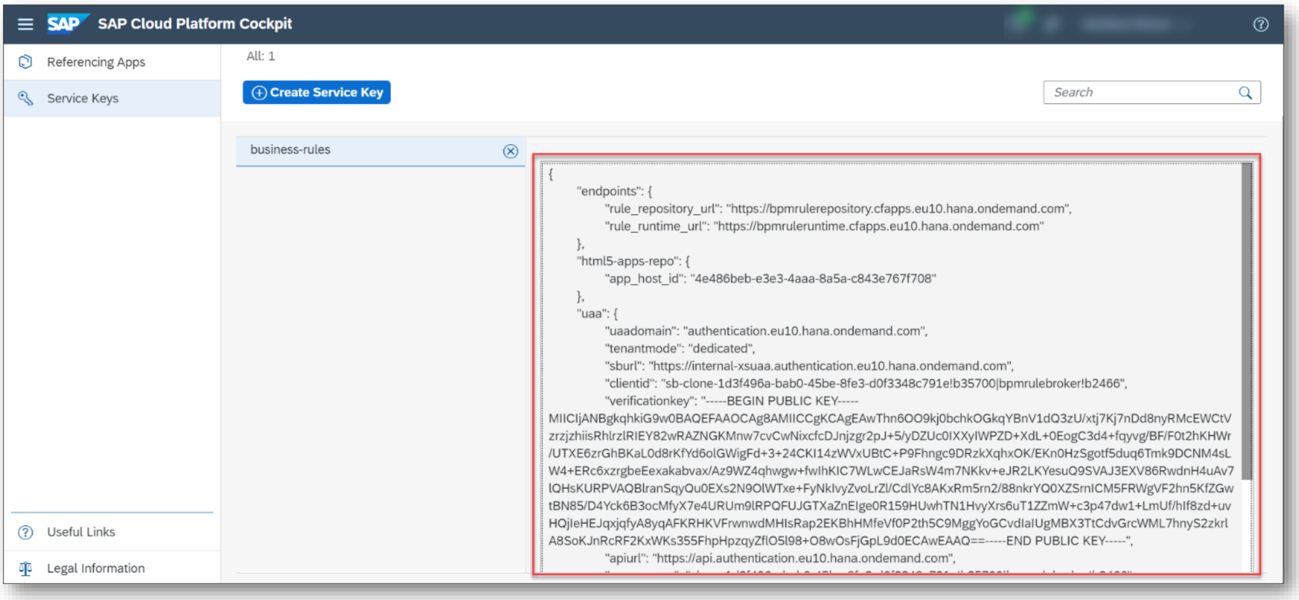
9. In the navigation area, choose **Service Keys** and then choose **Create Service Key**.



10. Provide **Name** ‘business-rules’ and then choose **Save**.



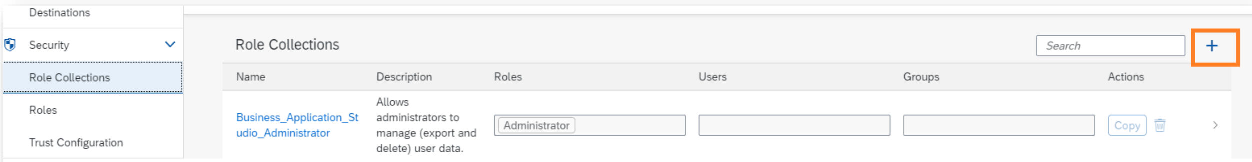
11. The service key is generated as shown



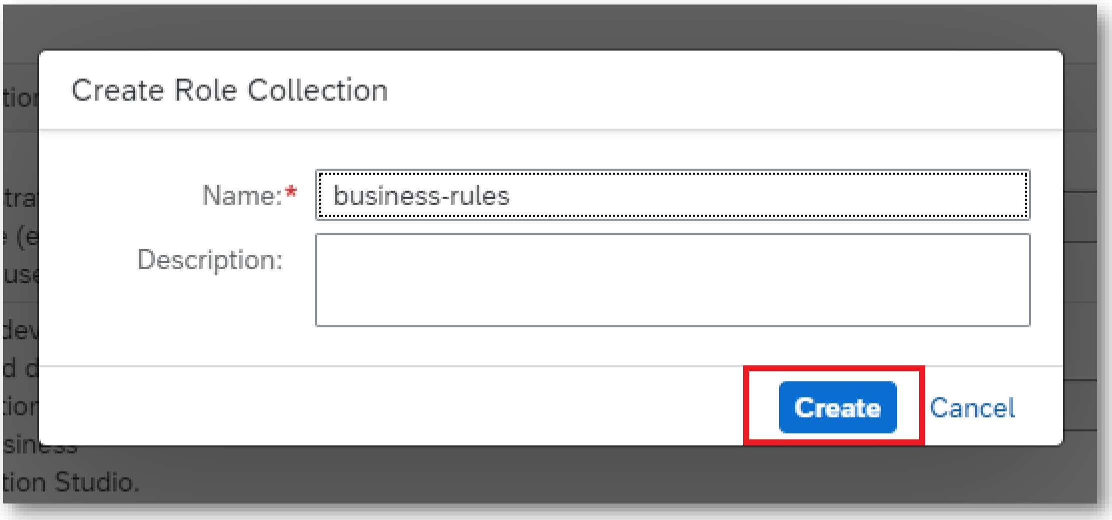
We need service key to consume the business rule as API from any REST Clients

Step 3: Create role collection

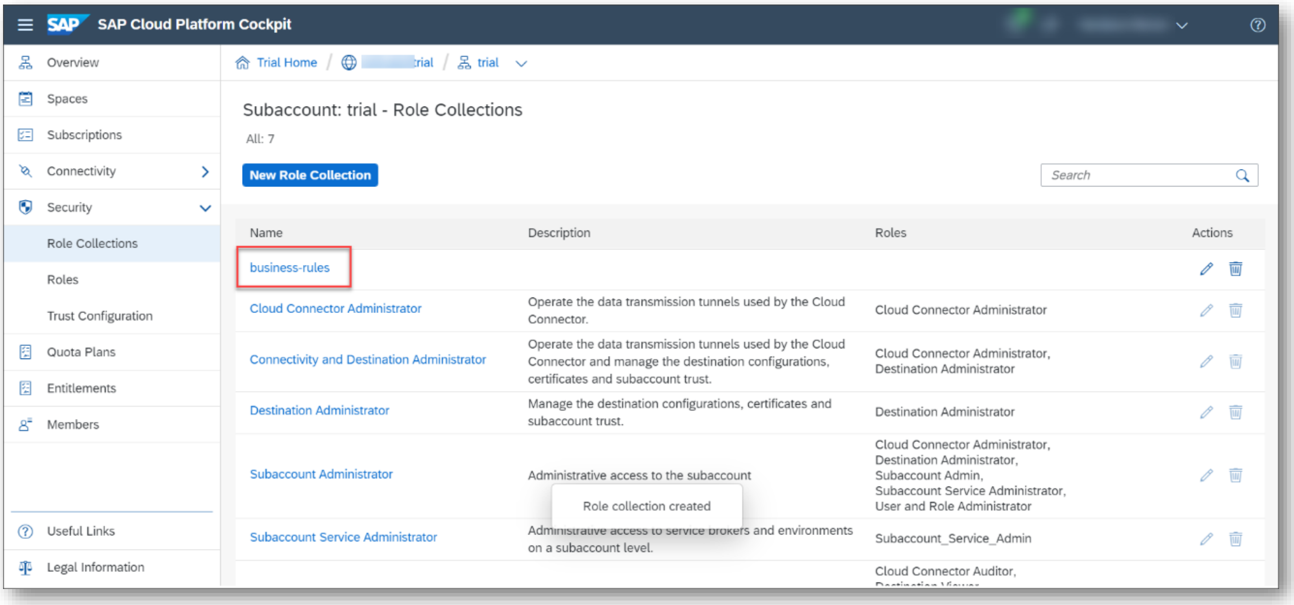
1. Go back to your trial subaccount by choosing **trial** from the breadcrumbs.
2. From the left-hand navigation, choose **Security** | **Role Collections**, then choose **to click on + icon [Create New Role Collection**.]



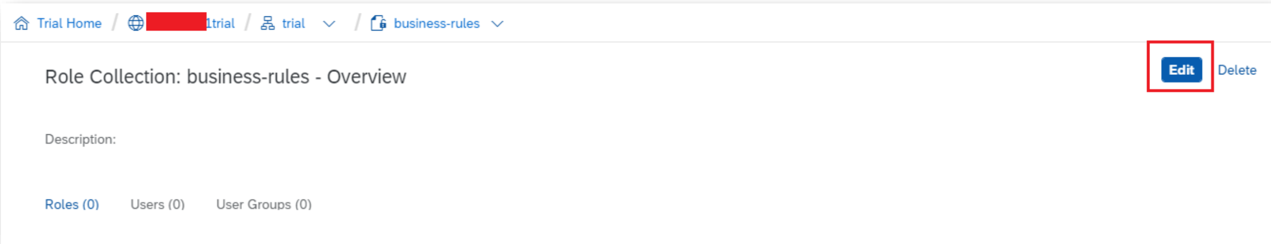
3. Enter business-rules as the name for your role collection, then choose **Create**.



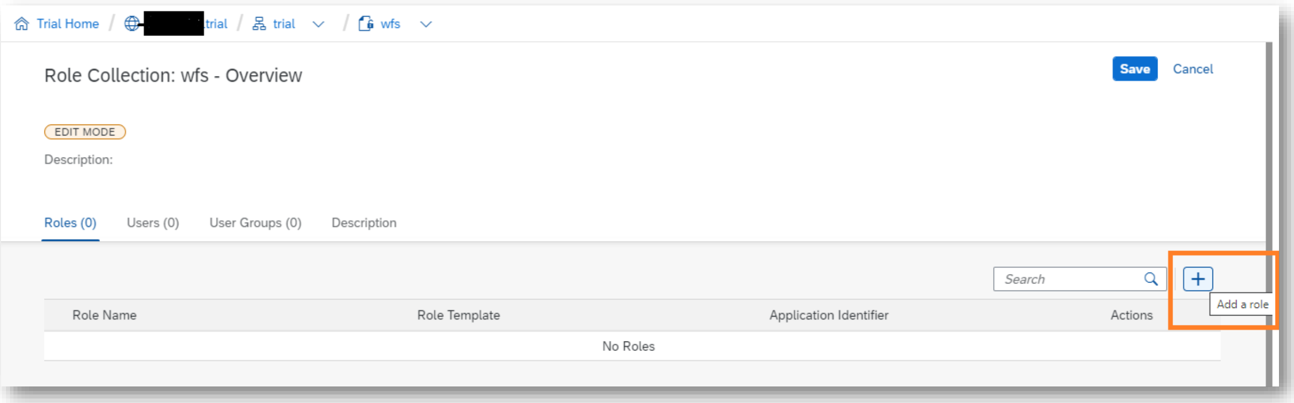
4. Choose **business-rules** role collection.



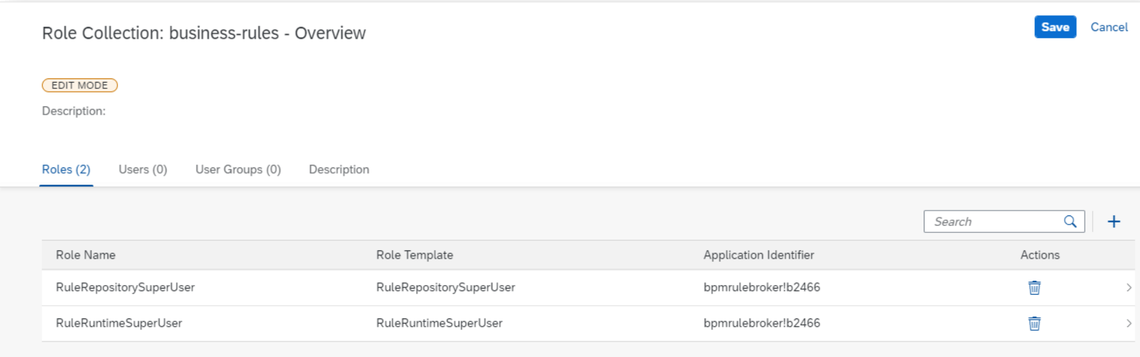
5. Choose Edit



6. Click on **Add Role**.



7. In the wizard that comes up, select following role one by one and choose **Save**
   - RuleRepositorySuperUser
   - RuleRuntimeSuperUser

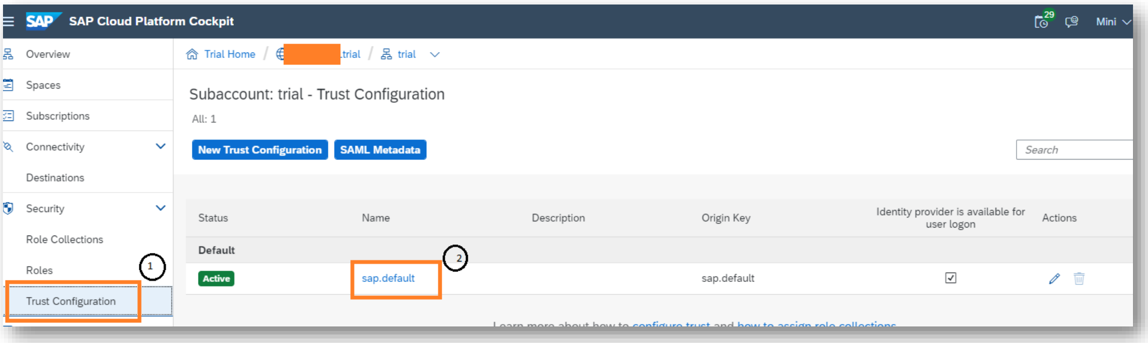


Before adding a new role, you need to save the unsaved changes and again click on Edit button.

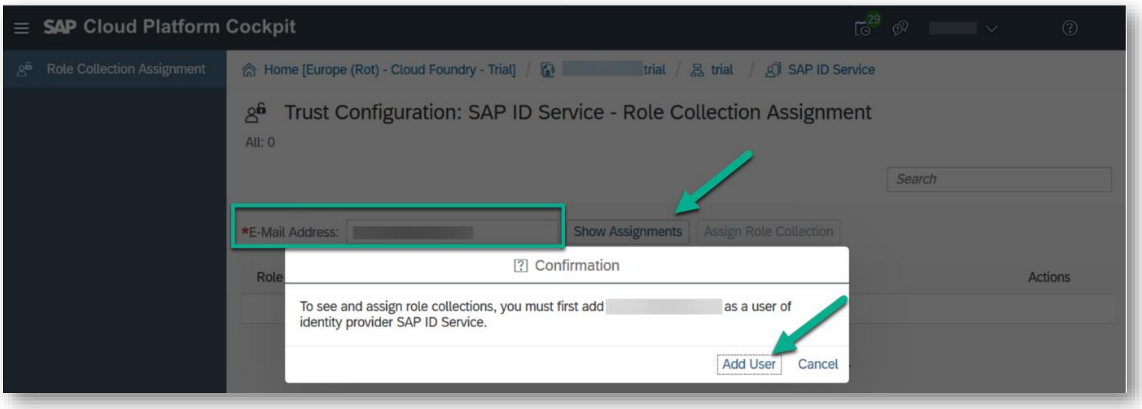
*These roles are required to access the **Manage Rules Project** application to author and execute Business Rules.*

Step 4: Assign role collection

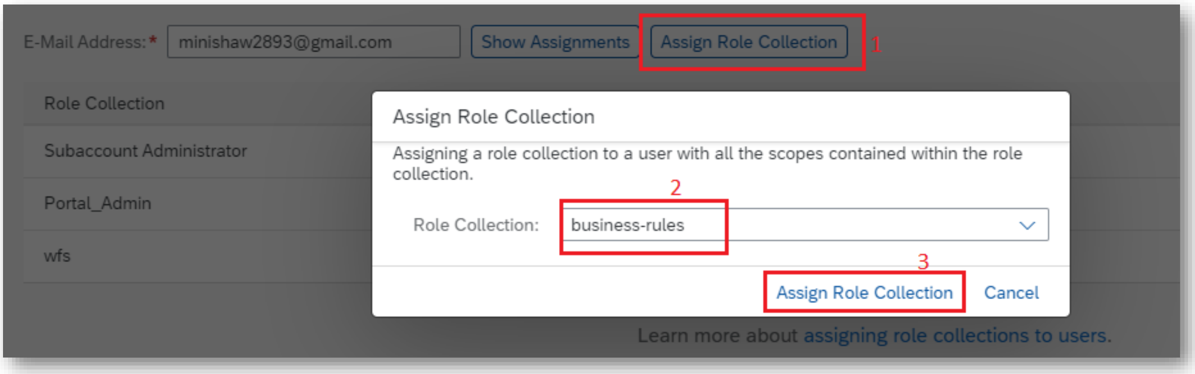
1. Go back to your trial subaccount by choosing the **trial** from the breadcrumbs.
2. From the left-hand navigation, choose **Security** | **Trust Configuration**, then click **sap.default**



3. Enter your email address, then choose **Show Assignments**.



4. Choose **Add User**.
5. Choose **Assign Role Collection** and select the **business-rules** from drop-down that you have created before. Then choose **Assign Role Collection** again.

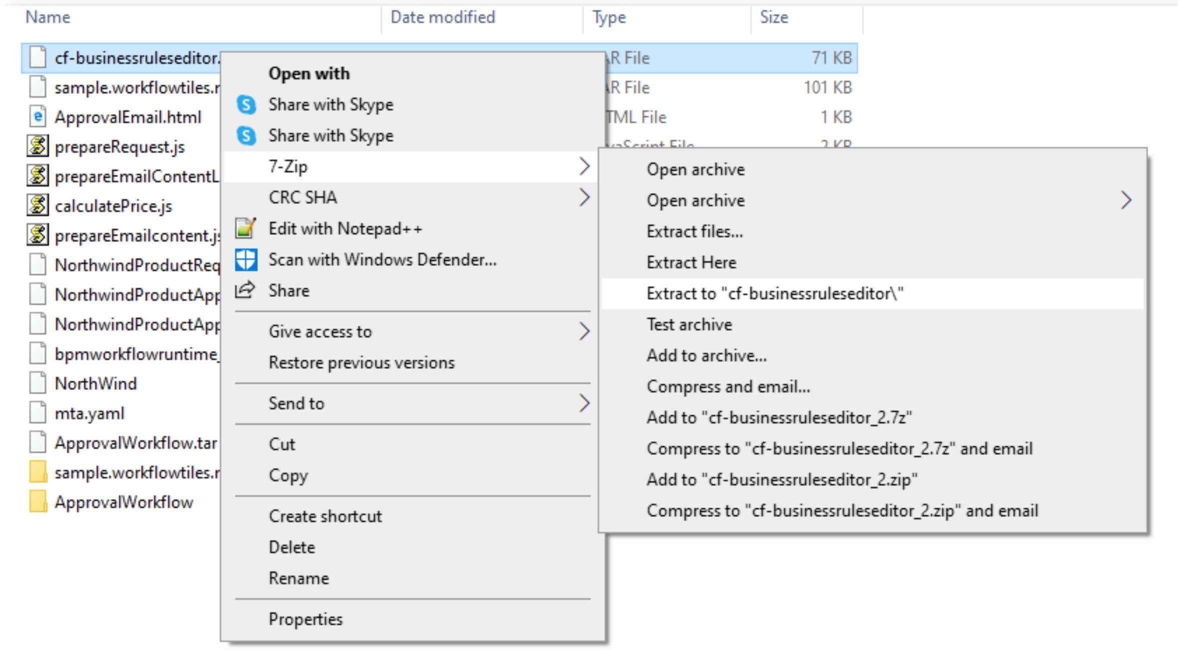


[F] Create Build and Deploy Manage Rules Project Application

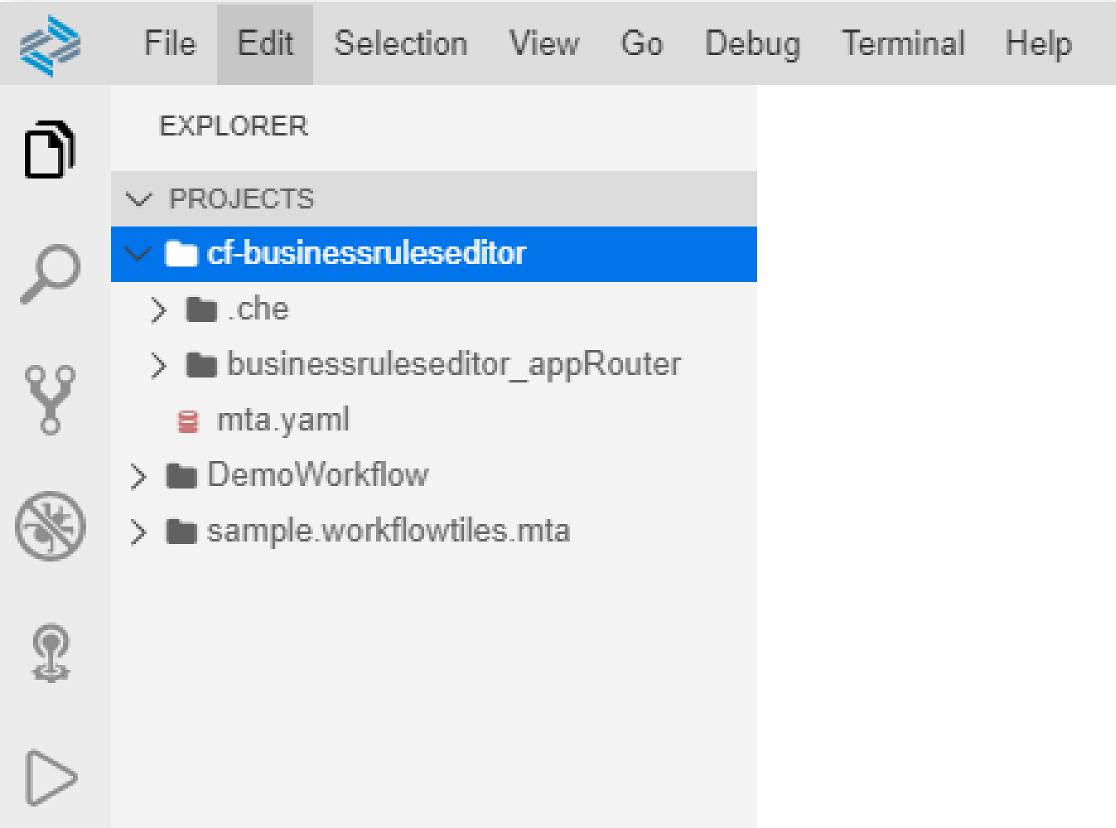
Step 1: Import Project

1. Download the file in your local machine from below link and Extract it using 7-Zip or any relevant software.

   https://ibm.box.com/s/d3zd23t2916kyjyhnbyhqe40ms1uiacl



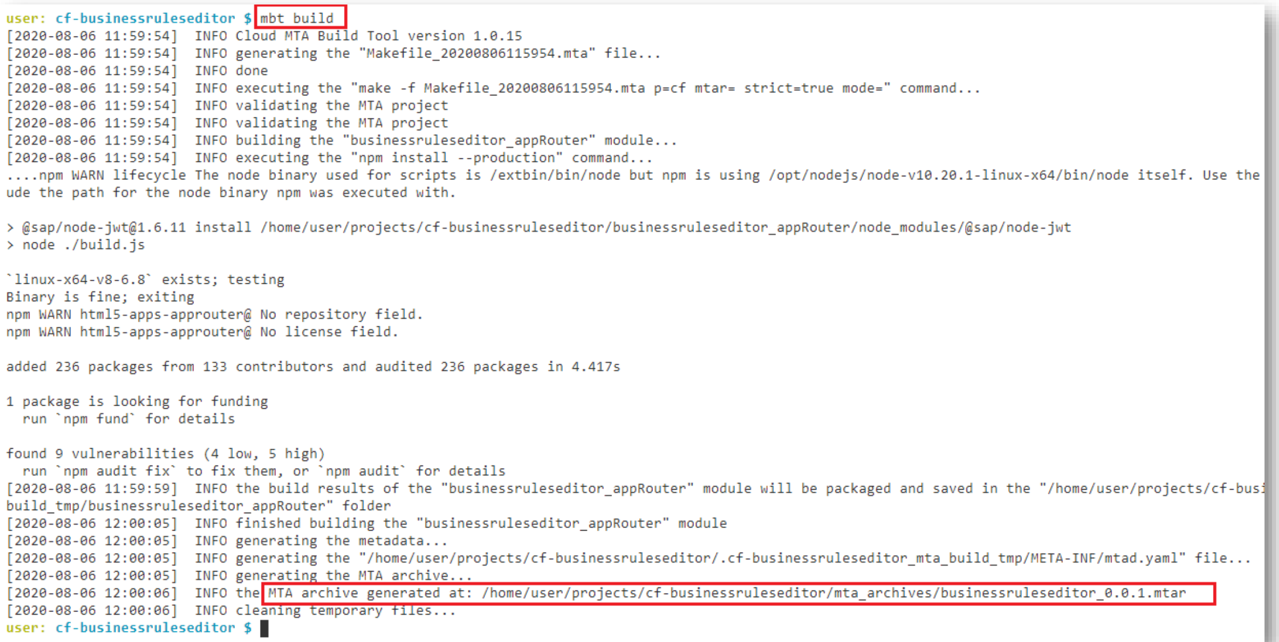
2. Drag and Drop the extracted folder into workspace.



Step 2: Build Project

1. Right click on folder cf-businessruleseditor → select **Open in Terminal**
2. In Terminal, Enter Command: **`$ mbt build`**
3. The MTA archive gets generated at

   /home/user/projects/cf-businessruleseditor/mta_archives/businessruleseditor_0.0.1.mtar

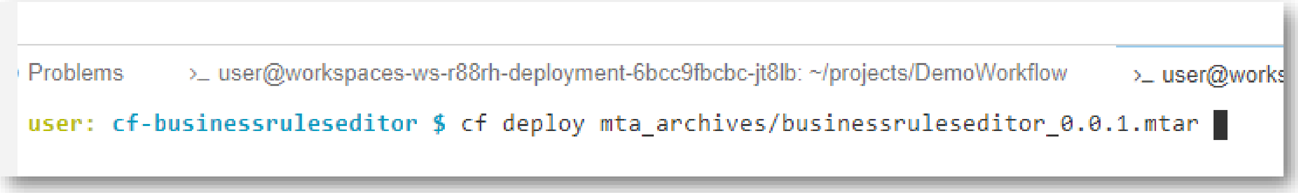


```
user: cf-businessruleseditor $ mbt build
[2020-08-06 11:59:54]  INFO Cloud MTA Build Tool version 1.0.15
[2020-08-06 11:59:54]  INFO generating the "Makefile_20200806115954.mta" file...
[2020-08-06 11:59:54]  INFO done
[2020-08-06 11:59:54]  INFO executing the "make -f Makefile_20200806115954.mta p=cf mtar= strict=true mode=" command...
[2020-08-06 11:59:54]  INFO validating the MTA project
[2020-08-06 11:59:54]  INFO validating the MTA project
[2020-08-06 11:59:54]  INFO building the "businessruleseditor_appRouter" module...
[2020-08-06 11:59:54]  INFO executing the "npm install --production" command...
....npm WARN lifecycle The node binary used for scripts is /extbin/bin/node but npm is using /opt/nodejs/node-v10.20.1-linux-x64/bin/node itself. Use the
ude the path for the node binary npm was executed with.

> @sap/node-jwt@1.6.11 install /home/user/projects/cf-businessruleseditor/businessruleseditor_appRouter/node_modules/@sap/node-jwt
> node ./build.js

`linux-x64-v8-6.8` exists; testing
Binary is fine; exiting
npm WARN html5-apps-approuter@ No repository field.
npm WARN html5-apps-approuter@ No license field.

added 236 packages from 133 contributors and audited 236 packages in 4.417s

1 package is looking for funding
  run `npm fund` for details

found 9 vulnerabilities (4 low, 5 high)
  run `npm audit fix` to fix them, or `npm audit` for details
[2020-08-06 11:59:59]  INFO the build results of the "businessruleseditor_appRouter" module will be packaged and saved in the "/home/user/projects/cf-busi
build_tmp/businessruleseditor_appRouter" folder
[2020-08-06 12:00:05]  INFO finished building the "businessruleseditor_appRouter" module
[2020-08-06 12:00:05]  INFO generating the metadata...
[2020-08-06 12:00:05]  INFO generating the "/home/user/projects/cf-businessruleseditor/.cf-businessruleseditor_mta_build_tmp/META-INF/mtad.yaml" file...
[2020-08-06 12:00:05]  INFO generating the MTA archive...
[2020-08-06 12:00:06]  INFO the MTA archive generated at: /home/user/projects/cf-businessruleseditor/mta_archives/businessruleseditor_0.0.1.mtar
[2020-08-06 12:00:06]  INFO cleaning temporary files...
user: cf-businessruleseditor $
```

Step 3: Deploy project

1. In Terminal, enter Command:

$ cf deploy mta_archives/businessruleseditor_0.0.1.mtar

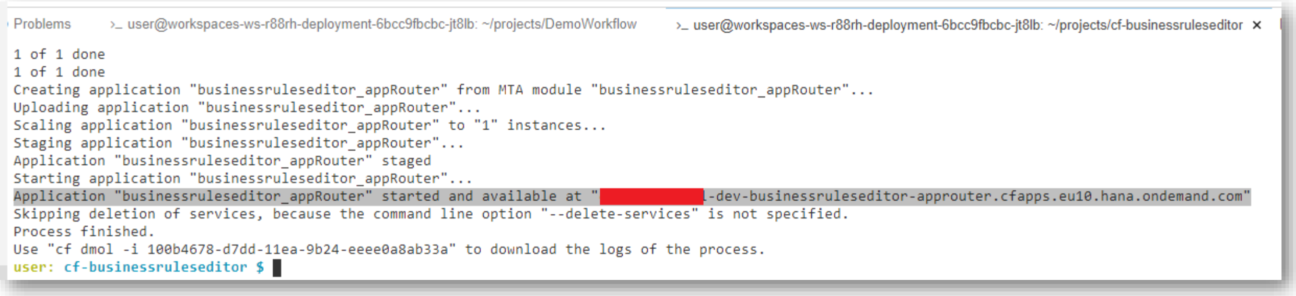


Your application will be deployed to your Cloud Foundry platform.

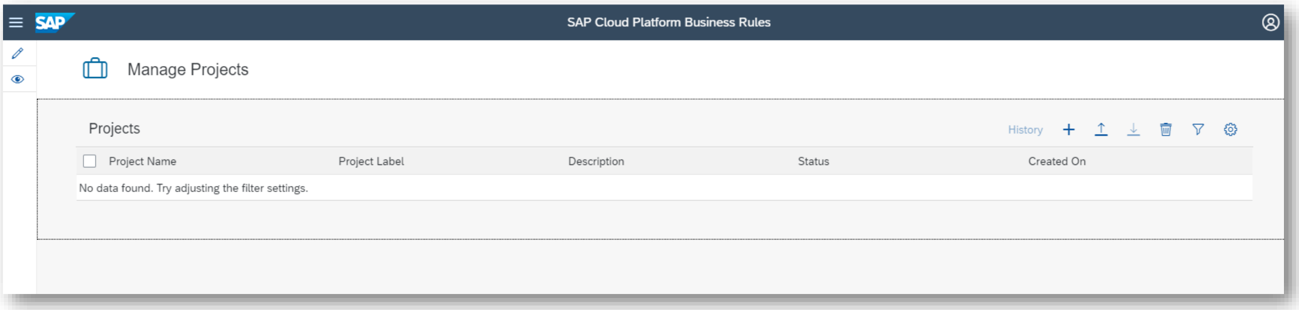
Step 4: Access your Manage Rule Project application

1. Open the job console at the end of the deployment process, and search for the application URL. It should appear in the console as follows:

https://<dev space name>-trial-dev-businessruleseditor-approuter.<your endoint>.hana.ondemand.com



2. Use this URL to access the **Manage Rules Project** application.

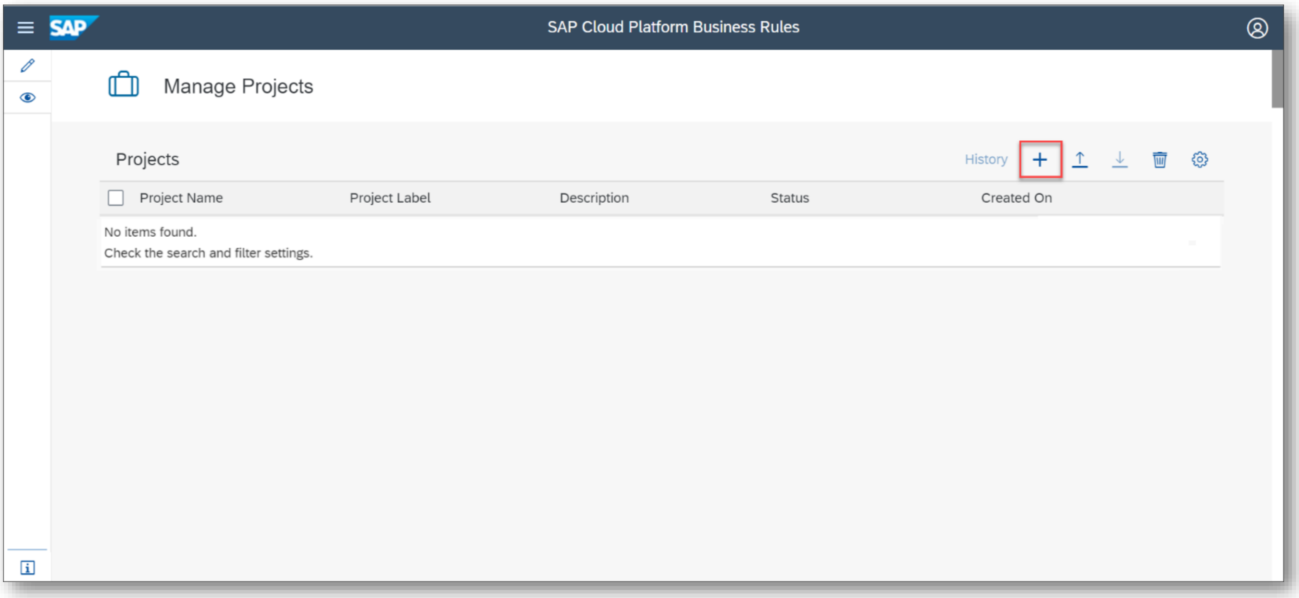


[G] Author and Execute Business Rules using Manage Rule Project

We are using Business Rules to fetch the approvers details based on total cost of PO

Step 1: Create a Project to Author Rules

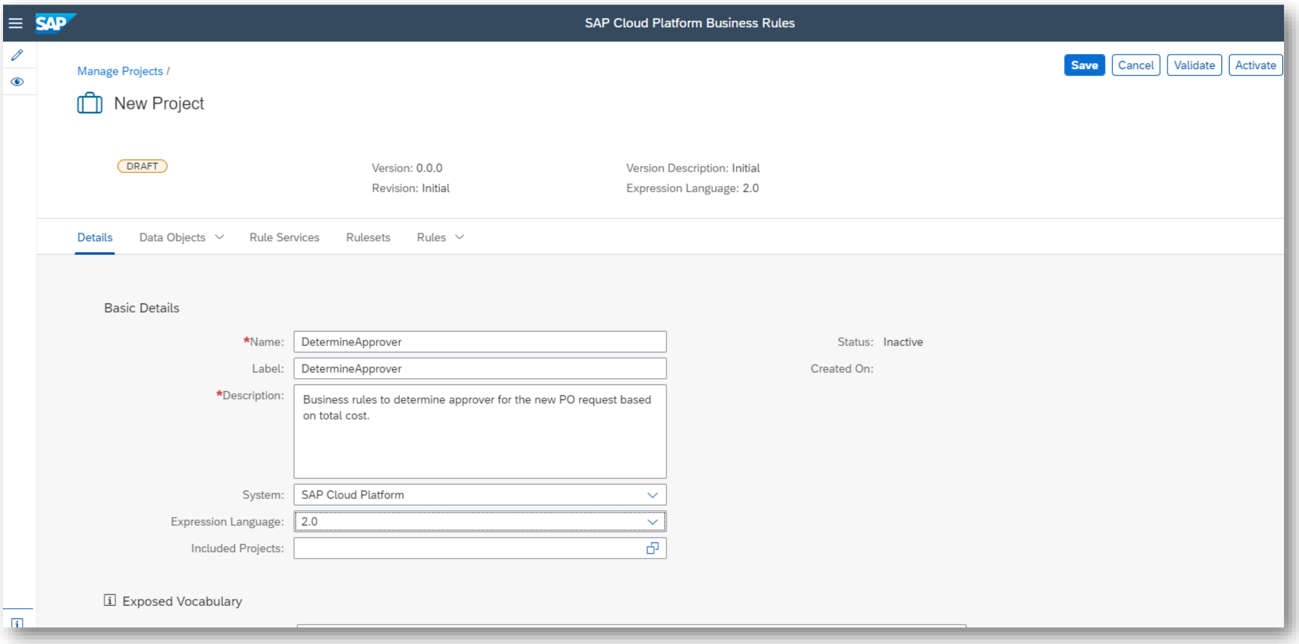
1. Open the **Manage Rules Project** application. In the **Manage Rules Project** screen, choose +.



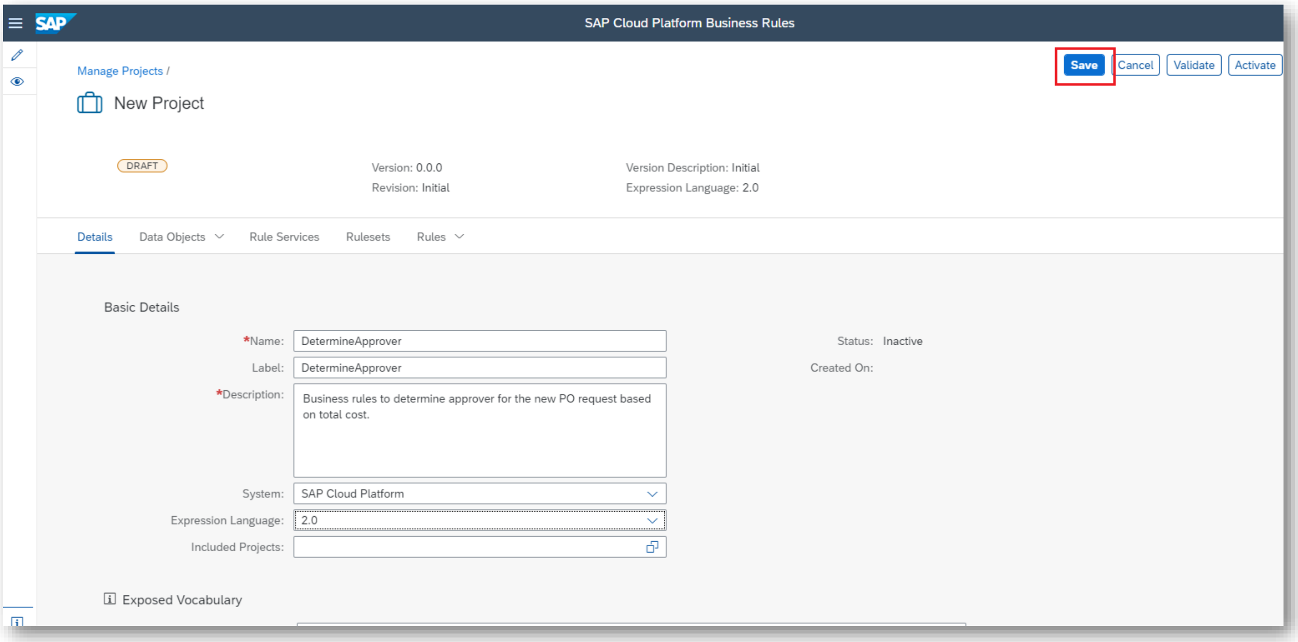
2. Enter the following details of the project:

Field Name	Value
Name	DetermineApprover
Label	DetermineApprover
Description	Business rules to determine approver for the new PO request based on total cost.
System	SAP Cloud Platform
Expression Language	2.0

Label and **Description** are a mandatory field. Description field does not support special characters.



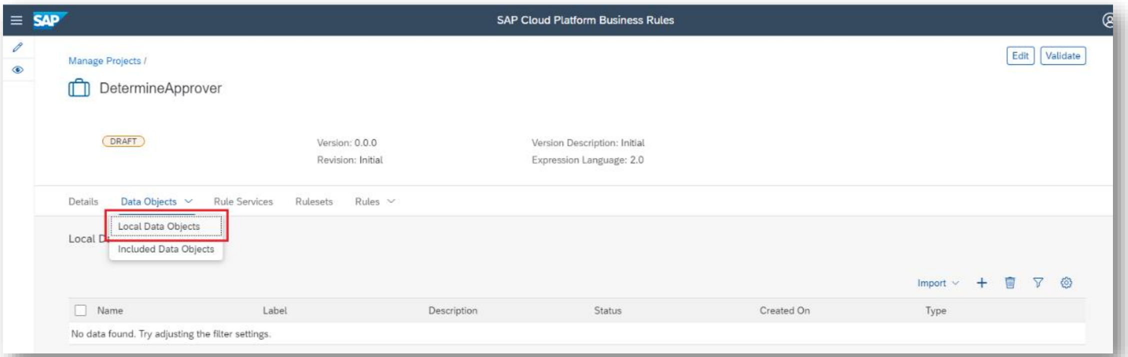
3. Save your project. Choose Save.



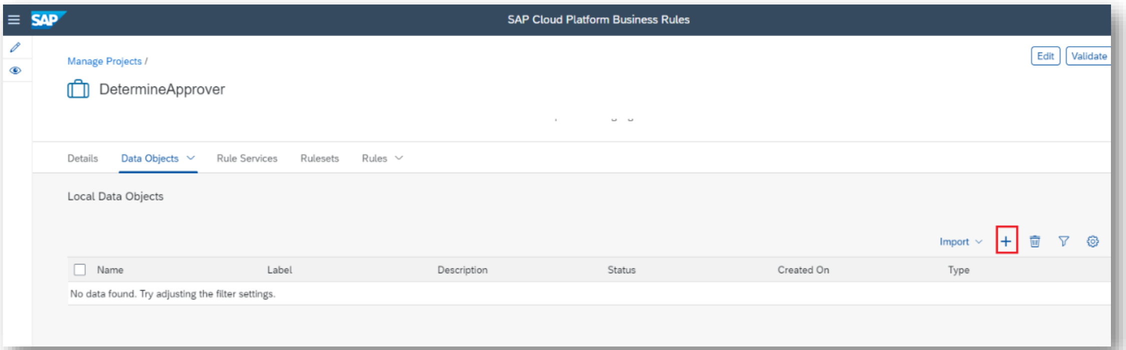
Step 2: Create Data Objects and Configure Value Help for Scenario

For this demo keep the data object and its attribute name same as shown.

1. Choose Data Objects > Local Data Objects.

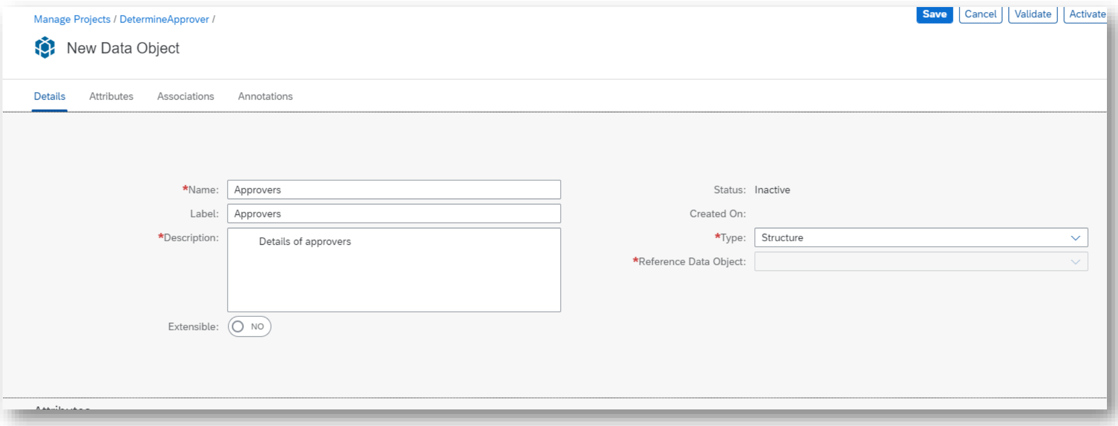


2. In the **Local Data Objects** section, choose +.

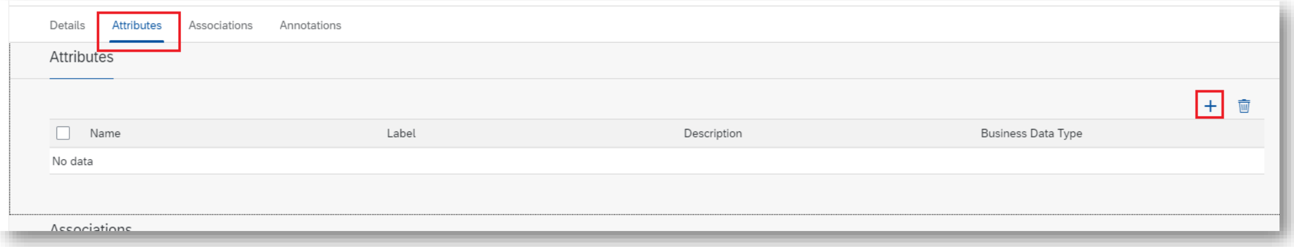


3. In the **New Data Object** screen, provide the following details for the output data object as shown:

Field Name	Value
Name	Approvers
Label	Approvers
Description	Details of approvers
Type	Structure



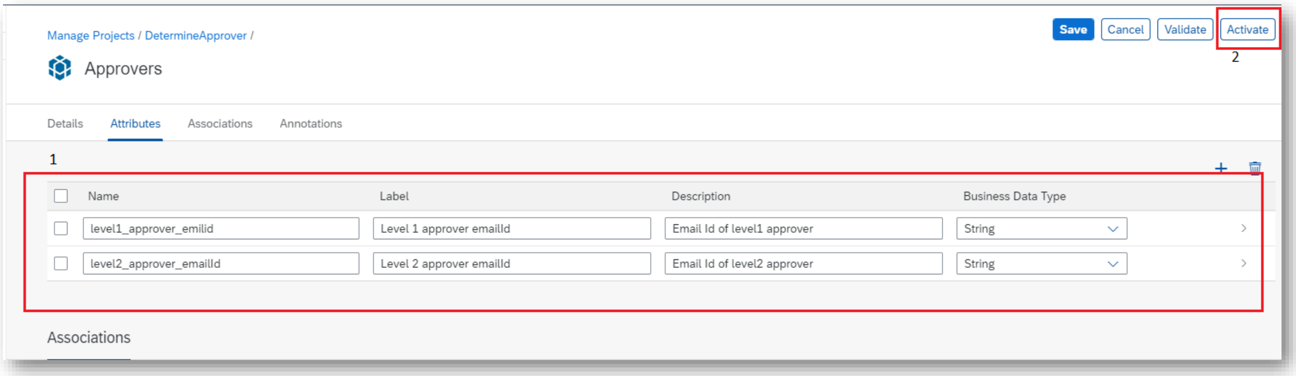
4. Choose **Attributes** tab, then choose **+** to create a new attribute for the data object **Approvers**.



5. Similarly, create 2 new attributes with the following values:

Name	Label	Description	Business Data Type
level1_approver_email_id	Level 1 approver emailId	Email Id of level1 approver	String
level2_approver_email_id	Level 2 approver emailId	Email Id of level2 approver	String

6. Choose **Activate**



7. Similarly, create and activate **PurchaseOrder** data object and its attribute with the following values:

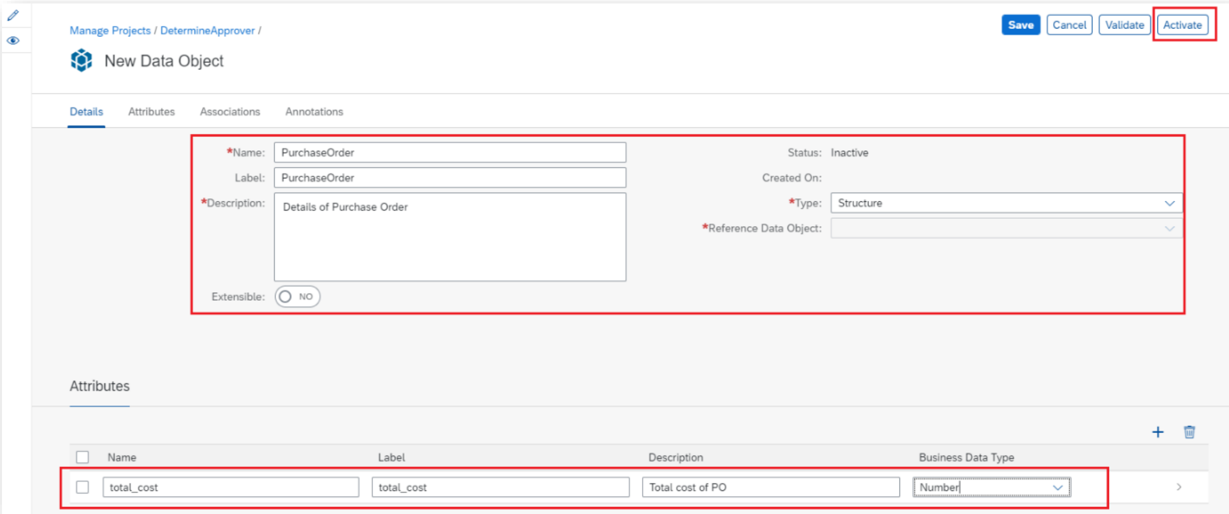
Table 1: Data Object

Field Name	Value
Name	PurchaseOrder
Label	PurchaseOrder
Description	Details of Purchase Order
Type	Structure

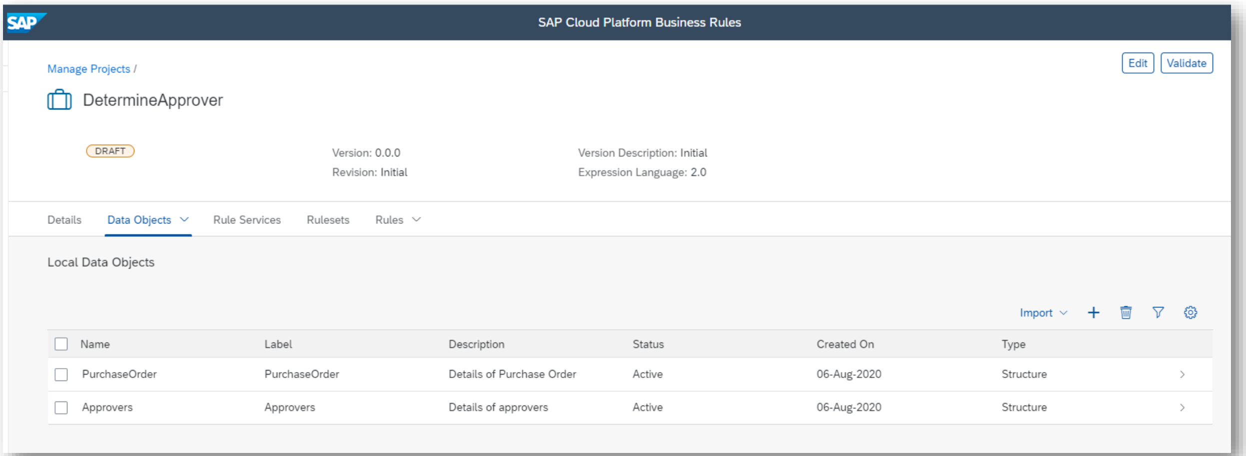
Table 2: Attribute

Field Name	Value
Name	total_cost
Label	total_cost
Description	Total cost of PO
Business Data Type	Number

8. Then, choose **Activate**



9. Navigate to the **Local Data Objects** tab to view the list of data objects.

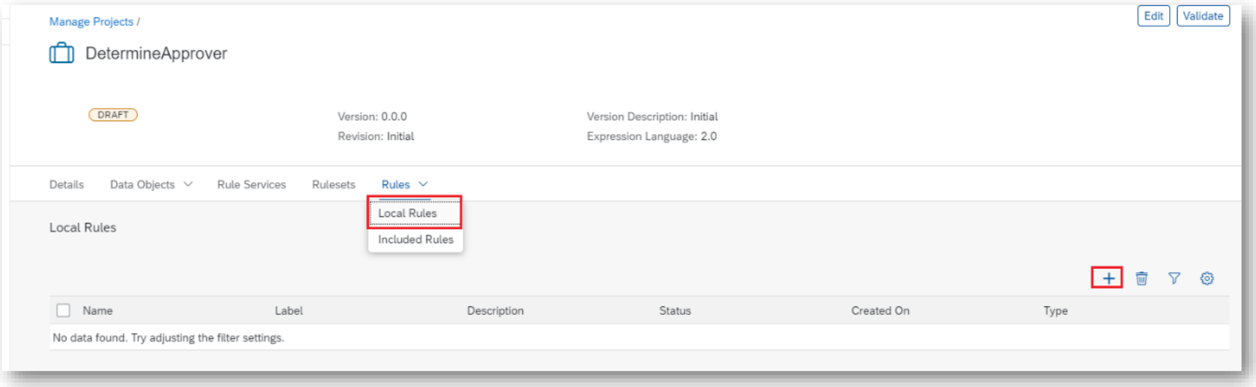


For this demo keep the data object and its attribute name same as shown.

Make sure both Data Objects are in Active State. In case any data object is inactive. Go to that data object. Choose Edit and then choose Activate option.

Step 3: Create Decision table rules

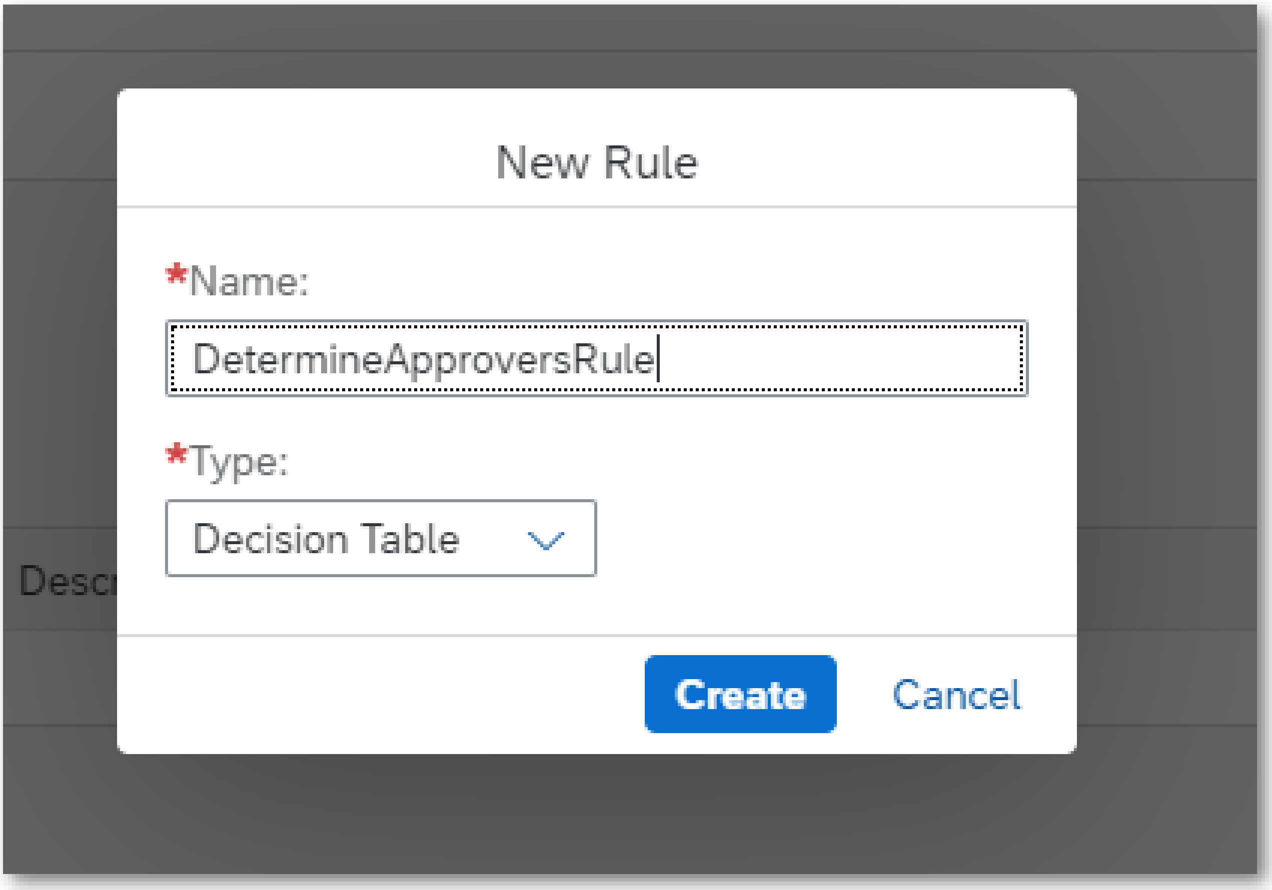
1. Navigate to the **Rules** > **Local Rules** tab, then choose +.



2. In the New Rule prompt, provide the following details:

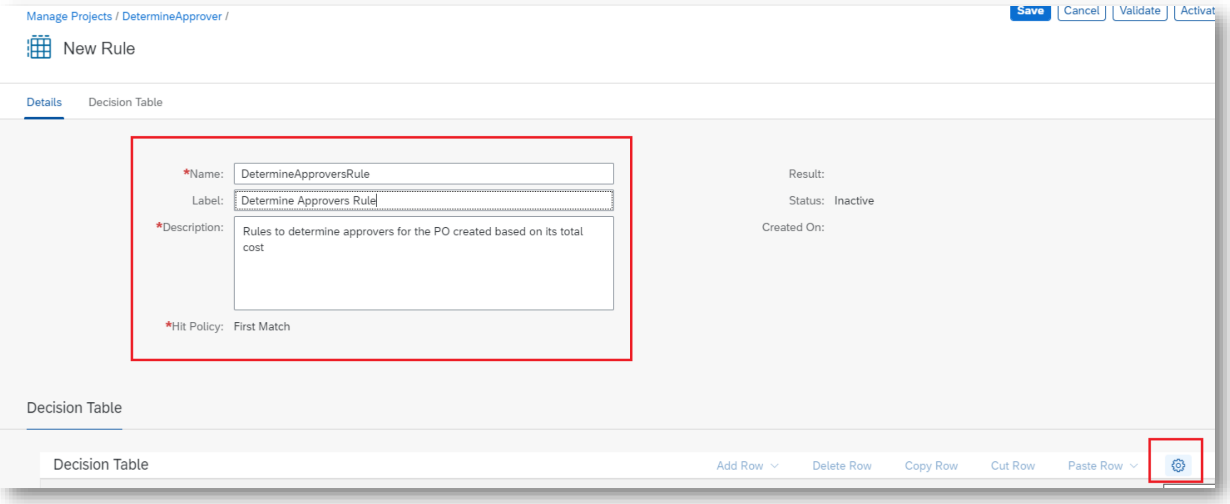
Field Name	Value
Name	DetermineEquipmentRules
Type	Decision Table

3. Choose **Create**



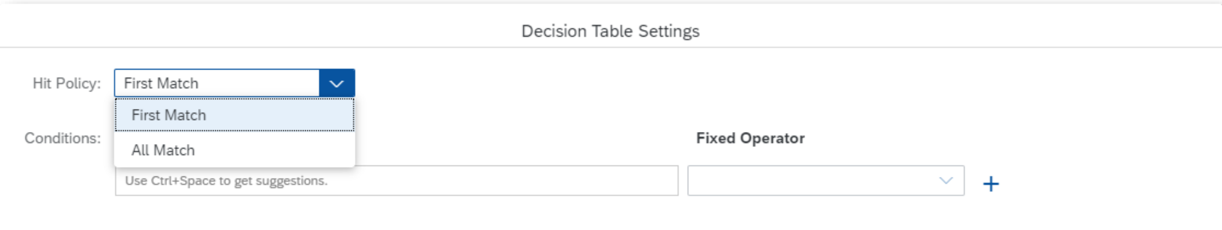
4. In the **New Rule** page, provide the following details and then choose **Settings** icon.

Field Name	Value
Label	Determine Approvers Rule
Description	Rules to determine approvers for the PO created based on its total cost

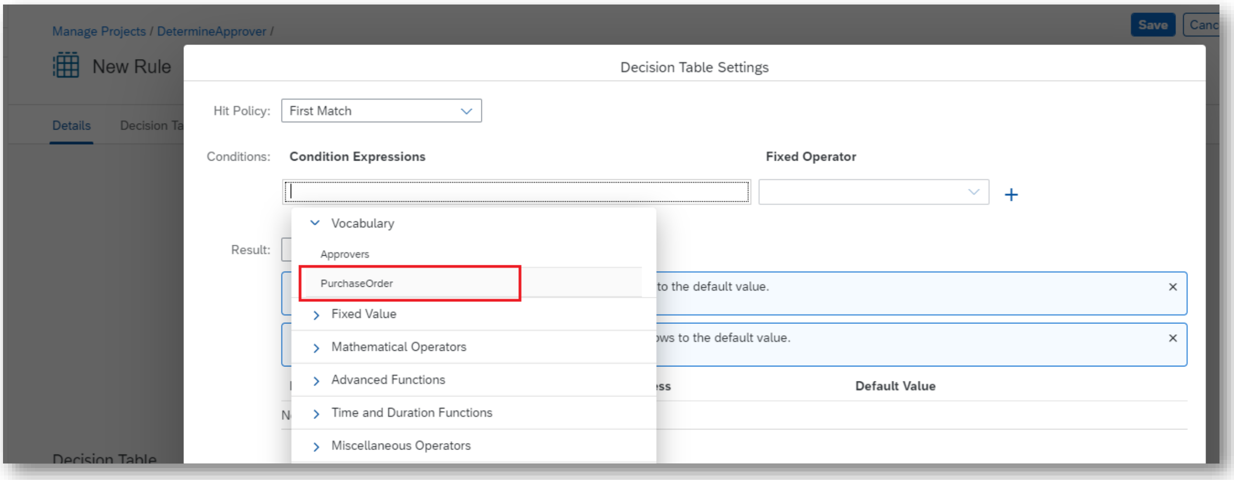


The decision table settings window opens.

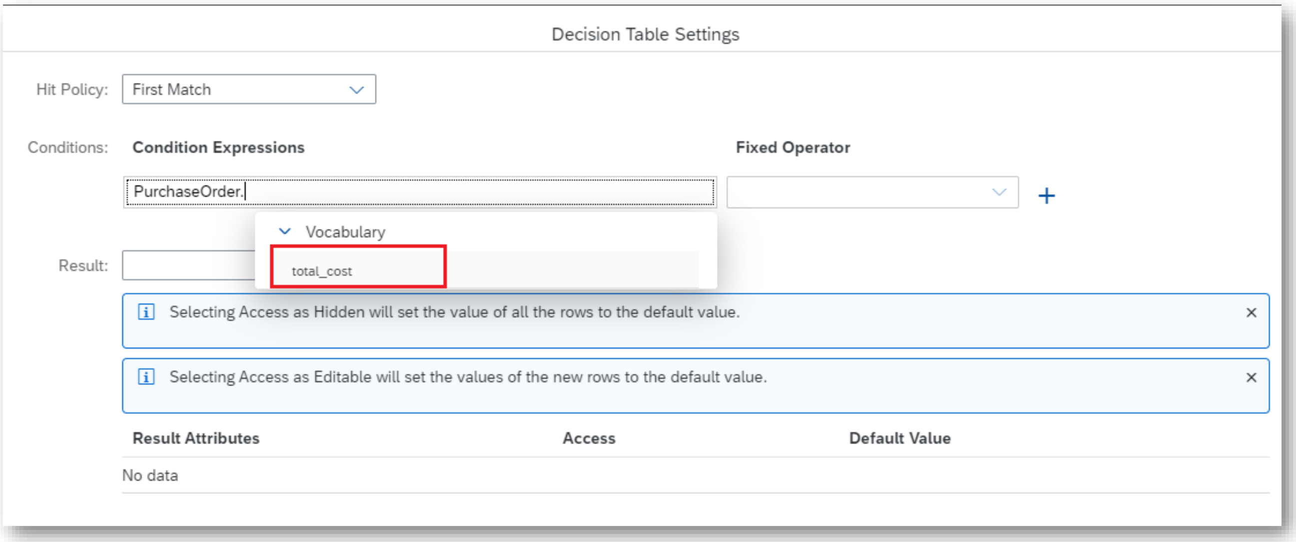
5. In the decision table settings window, select the **Hit Policy** as **First Match**. With **Hit Policy** as **First Match**, the decision table returns the first row that matches the condition.



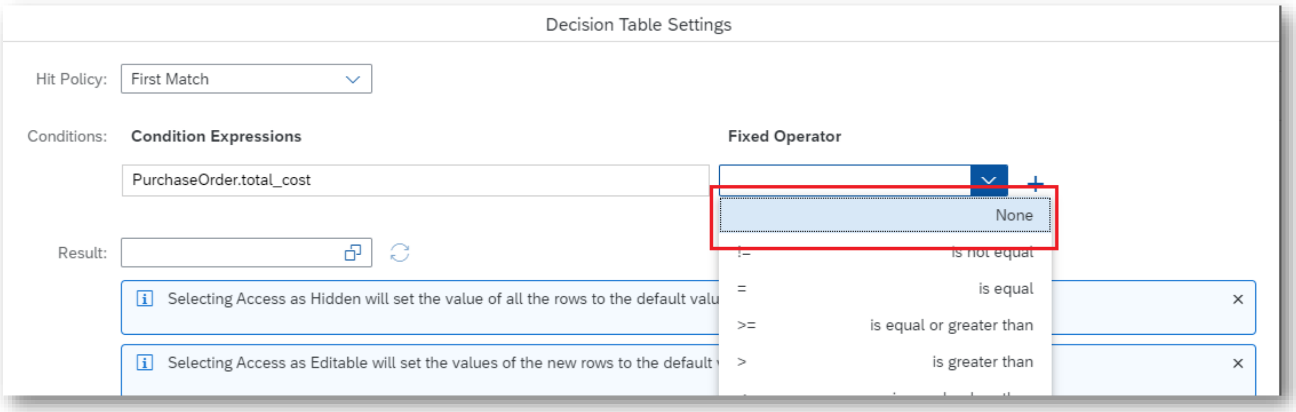
6. Press **CTRL** + **SPACE** to load the autosuggestion list. Then choose **PurchaseOrder** under **Vocabulary** section.



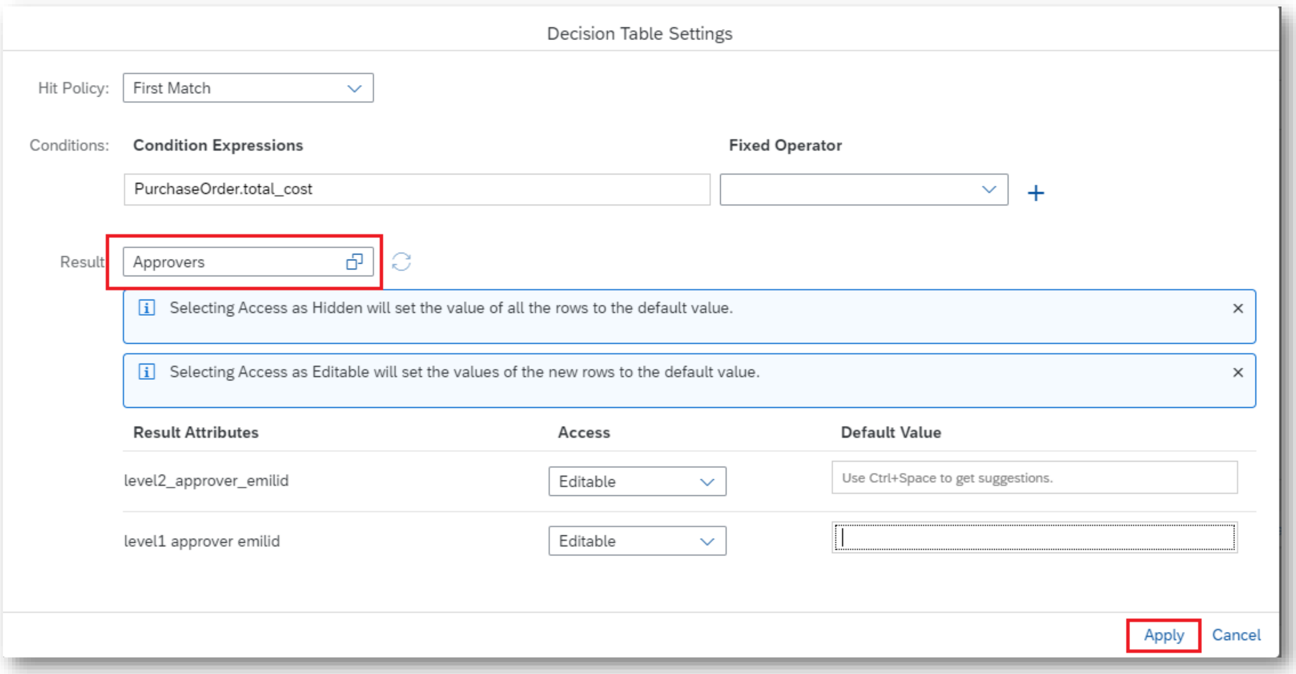
7. Choose the attribute **total_cost** from the **Vocabulary** section.



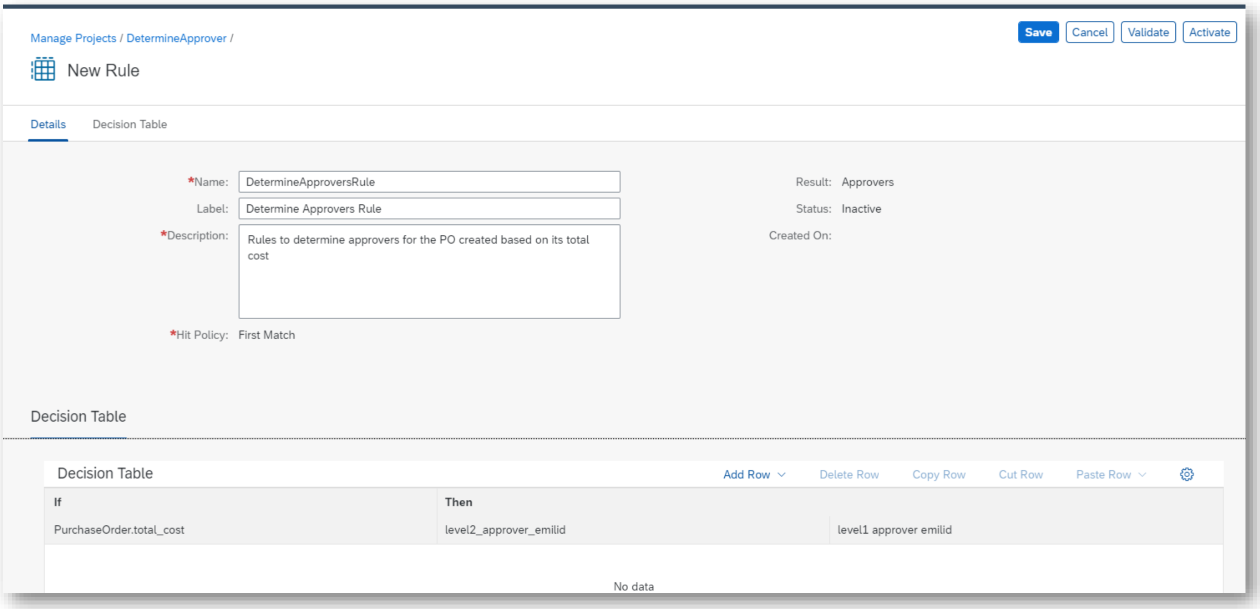
8. From the **Fixed Operator** dropdown list, select **None**.



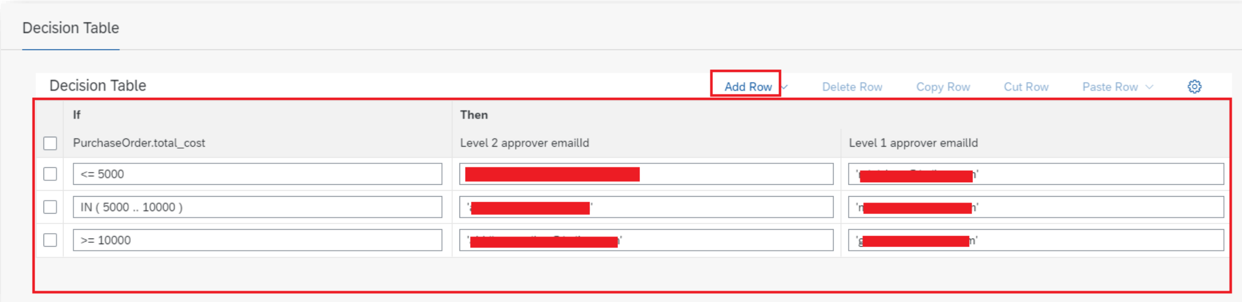
10. Choose Approvers as the **Result** data object from the dropdown list and then choose **Apply**.



A decision table gets created with the condition columns and result columns as shown:



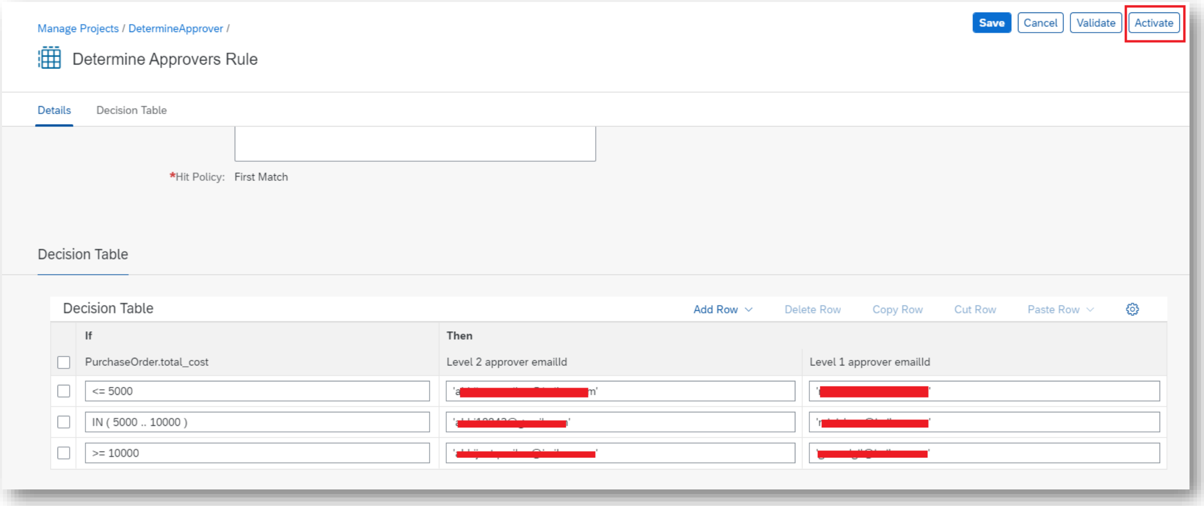
11. You can add any condition and result values in decision table depending upon your requirement. For Demo Following condition are entered.



String must be enclosed within single inverted commas. e.g. ‘user@example.com’.

Provide Fiori launchpad access to all the approvers so that they can access ‘My Inbox’ application. Reference: Step 4: Assign role collection

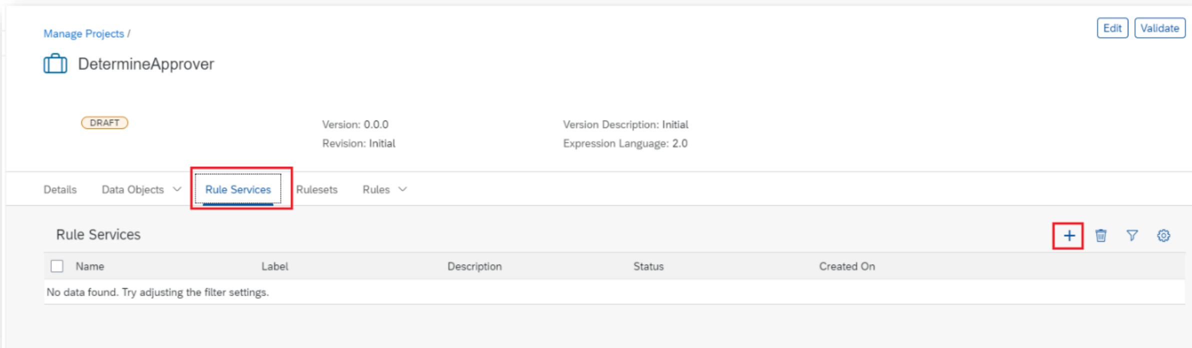
12. Choose **Activate**



Step 4: Create Rule Services

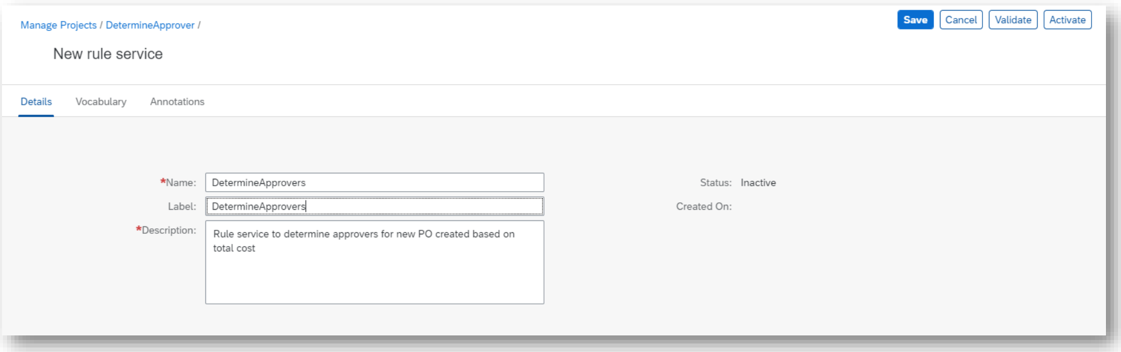
1. Navigate to the project using breadcrumbs

2. Navigate to the **Rule Service** tab, then choose + to create a new rule service.



3. In the New Rule Service page, enter the following details:

Field Name	Value
Name	DetermineApprovers
Label	DetermineApprovers
Description	Rule service to determine approvers for new PO created based on total cost



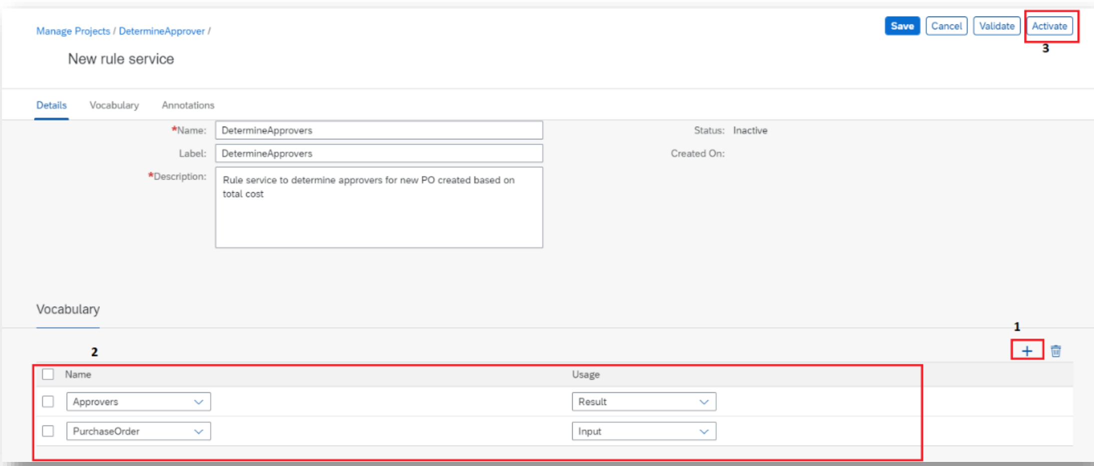
4. In the Vocabulary tab, choose + and select the following options:

Field Name	Value
Name	PurchaseOrder
Usage	Input

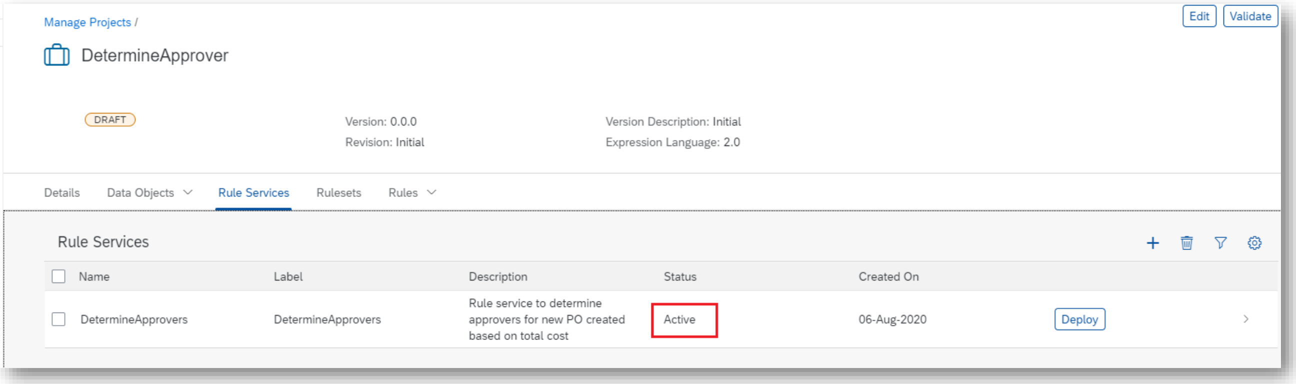
5. Similarly, choose + to add a new row and select the following options:

Field Name	Value
Name	Approvers
Usage	Result

6. Then, choose Activate.



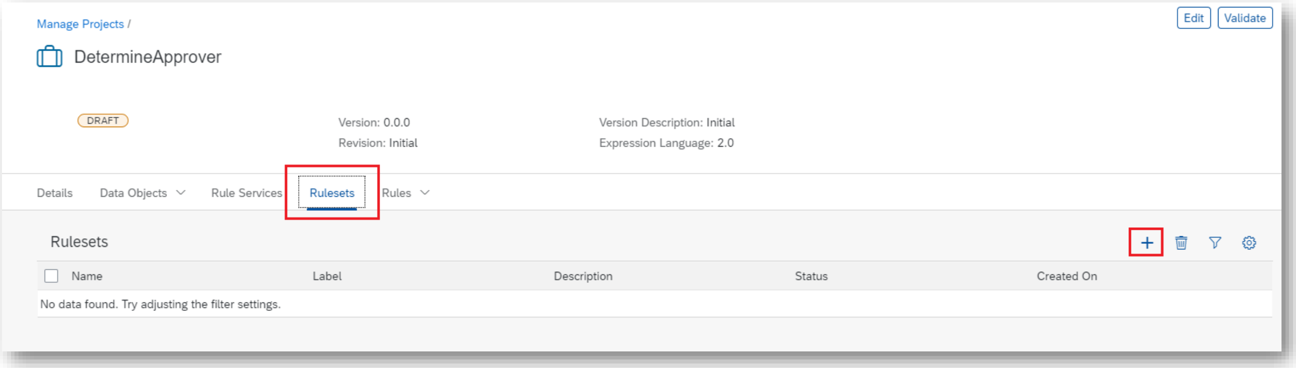
7. Navigate to the **Rule Service** tab to view the list of rule services.



Make sure all the rule services are in **Active** status.

Step 5: Create Rulesets

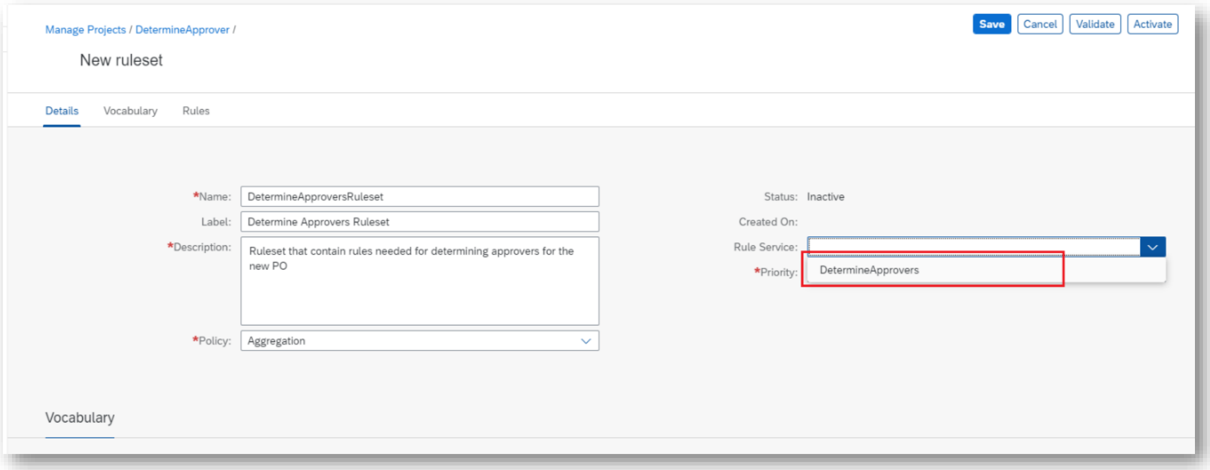
1. Navigate to the Ruleset tab, then choose +.



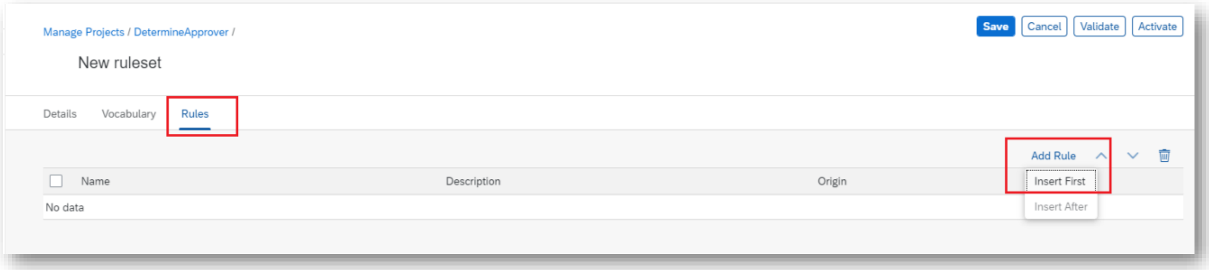
2. In the New Ruleset page, enter the following details:

Field Name	**Value**
Name	DetermineApproversRuleset
Label	Determine Approvers Ruleset
Description	Ruleset that contain rules needed for determining approvers for the new PO
Rule Service	DetermineApprovers

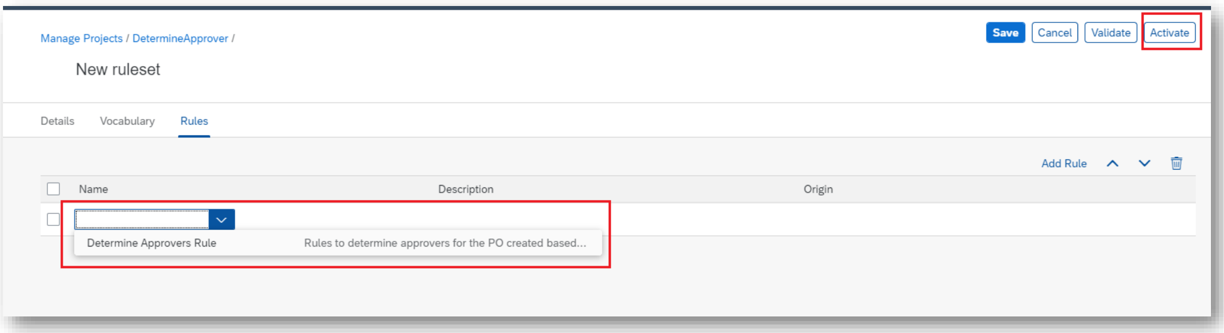
You can leave the **Priority** and **Policy** fields and **Vocabulary** section as it is.



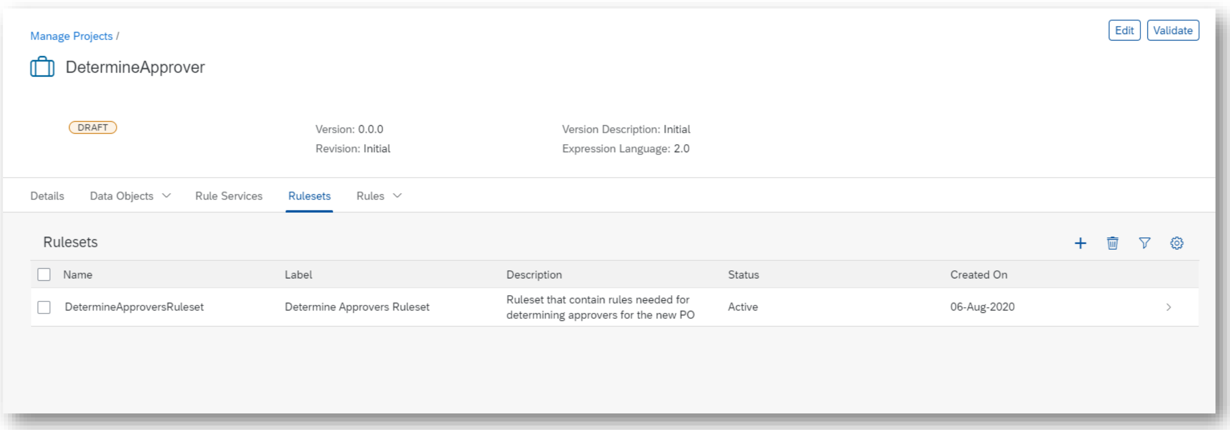
3. Choose the **Rules** tab, choose **Add Rule** > **Insert First**.



4. Select **Determine Approval Rule** from the dropdown list. Then, choose **Activate** to activate the rule set.



5. Navigate to the **Ruleset** tab to view the list of rule sets as shown:

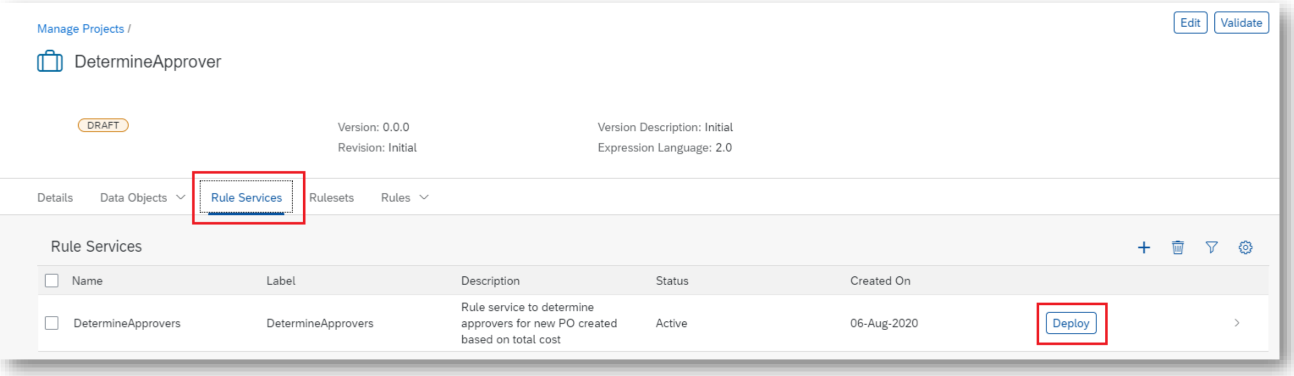


Make sure all the rulesets are in **Active** status.

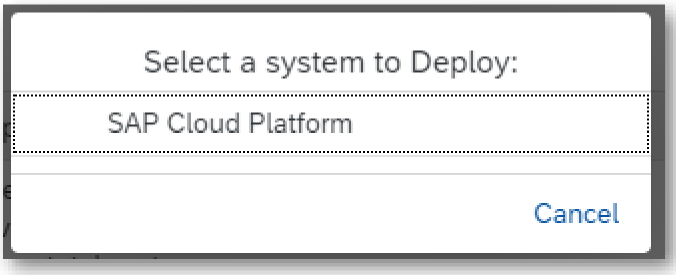
Step 6: Deploy Rule Service to SAP Cloud Platform

1. Before deployment Ensure that each entity of the project is active.

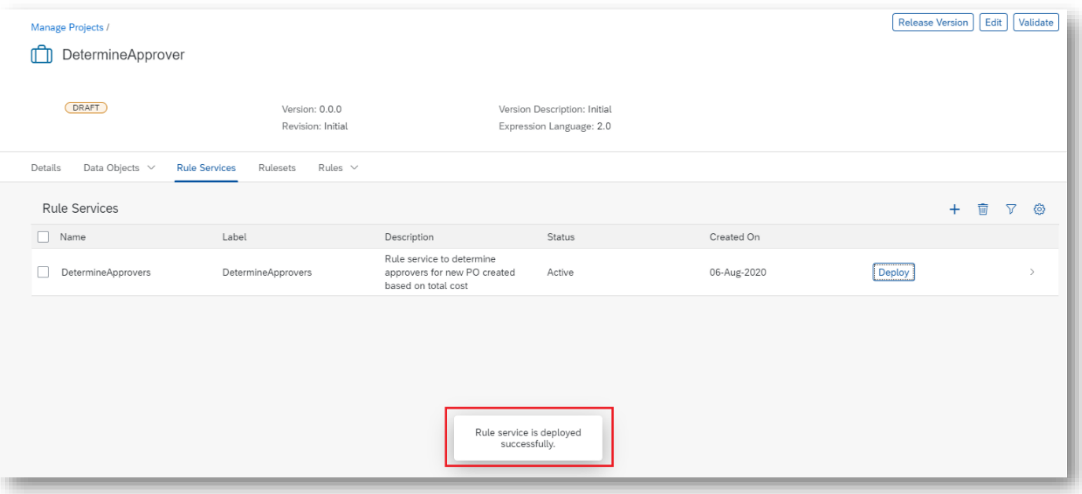
2. Navigate to the **Rule Service** tab and then choose **Deploy** button of `DetermineApprovers` to deploy the rule service.



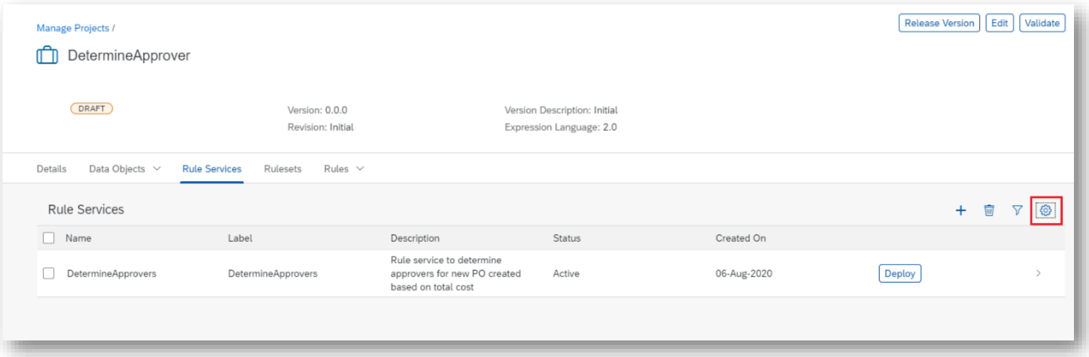
3. Choose **SAP Cloud Platform** for deploying the rule service.



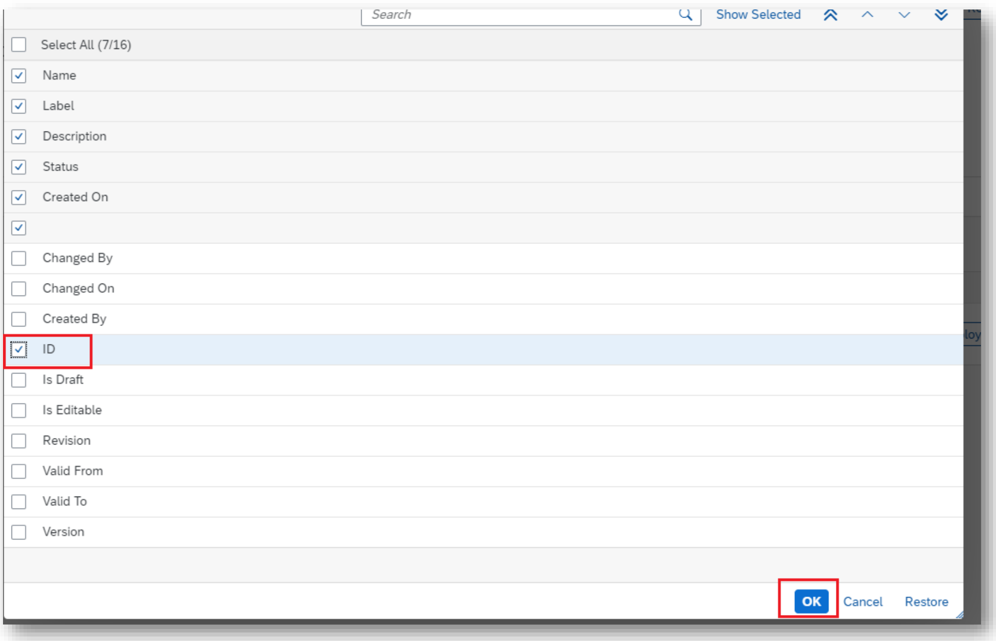
4. You will see the following message on successful activation of the rule service:



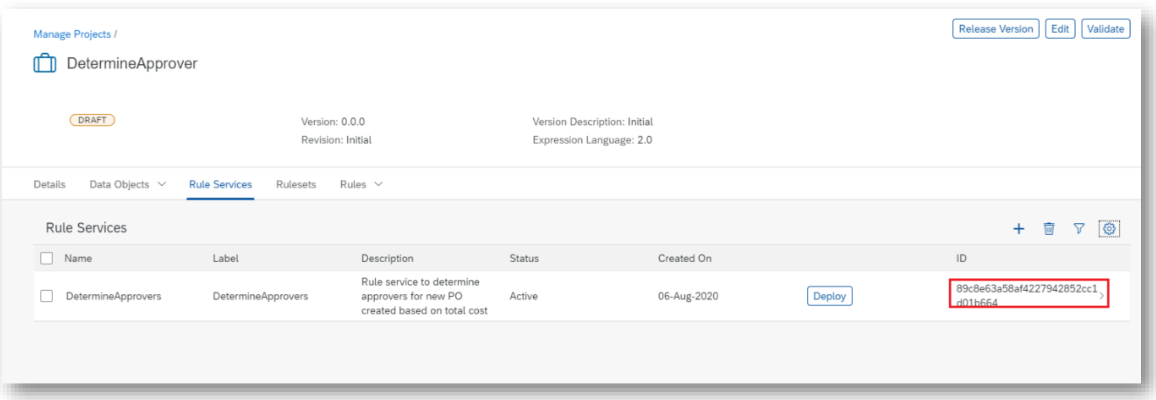
5. Choose **settings** button



6. Select **ID** and choose **OK**



7. Please save the Rule Service ID. It will be required while developing workflow to call this rule service.



Step 7: Test the Business Rules from SAP API Business Hub.

Use following Ref link to test the Business Rules created in step 6.

https://developers.sap.com/tutorials/cp-cf-businessrules09-test-apis.html

[H] Prepare to use Business Rule in Workflow

Step 1: Get Parameters of Business Rule Instance

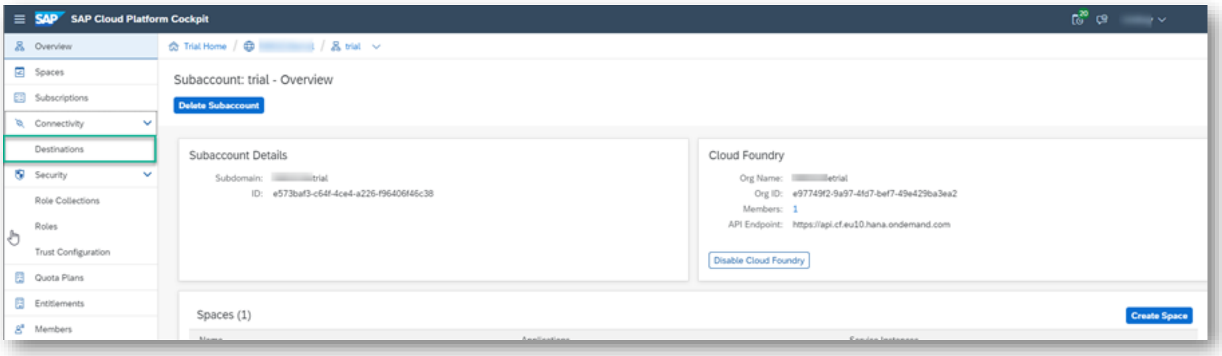
Get the following parameters values from the service keys of your business rules instance:

- clientid
- clientsecret
- url

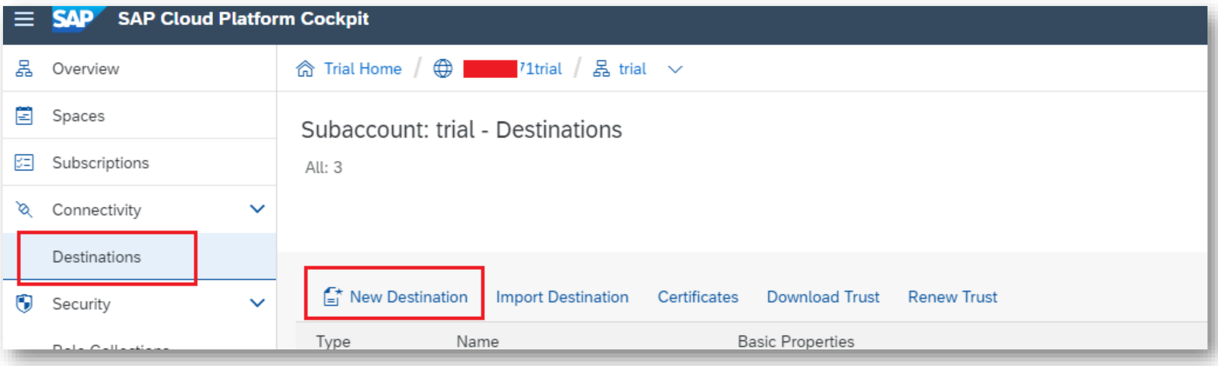
Reference: 17The service key is generated as shown

Step 2: Create Destination

1. Go back to your trial subaccount by choosing the **trial** from the breadcrumbs.
2. In the left navigation panel, click **Destinations** under **Connectivity**.



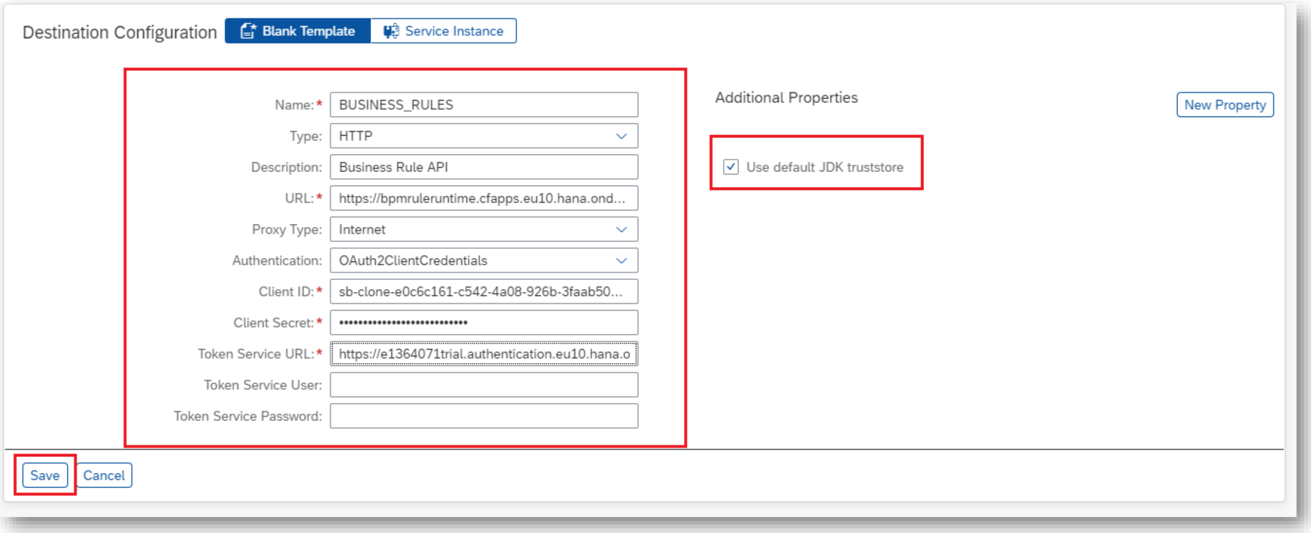
3. Click **New Destination**.



4. Give the following details:

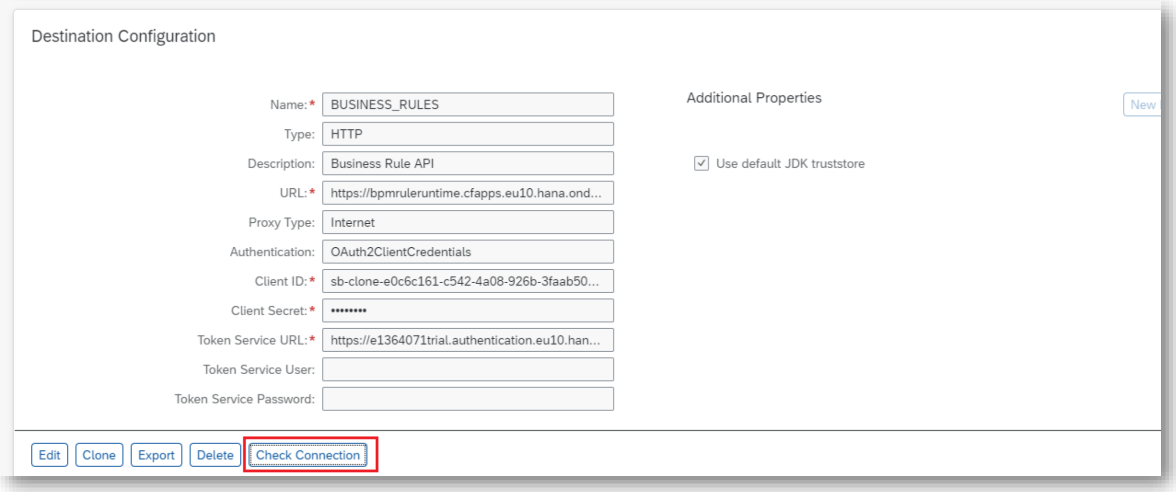
Field Name	Value
Name	BUSINESS_RULES
Type	HTTP
Description	Business Rule API
URL	https://bpmruleruntime.cfapps.eu10.hana.ondemand.com/rules-service
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
Client ID	`Client Id` from the service keys of your business rules instance. Reference: Step 1: Get Parameters of Business Rule Instance
Client Secret	`Client Secret` from the service keys of your business rules instance. Reference: Step 1: Get Parameters of Business Rule Instance
Token Service URL	`{URL}/oauth/token` URL taken from the service keys of your business rules instance. Reference: Step 1: Get Parameters of Business Rule Instance

5. Choose **Save**

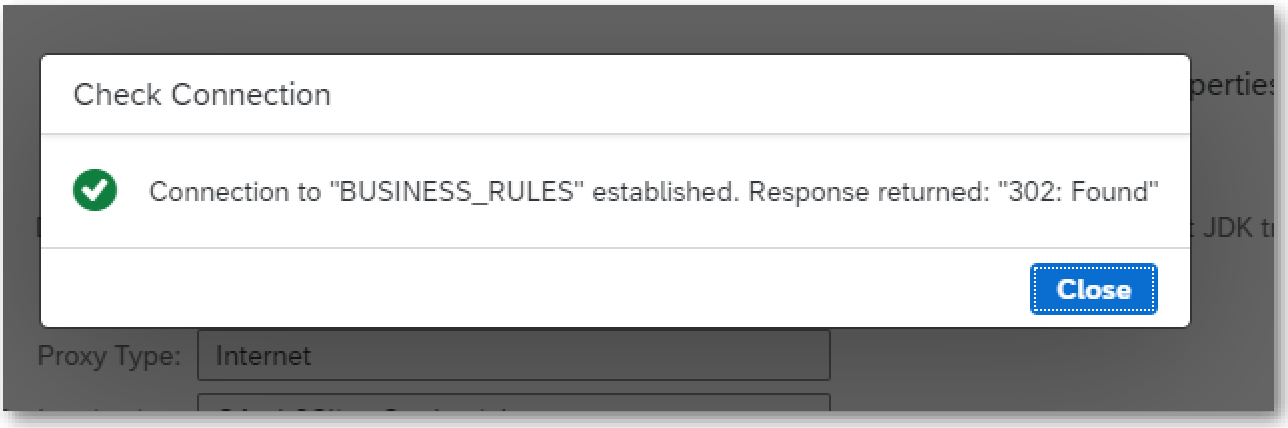


6. A Destination with name **BUSINESS_RULES** should be created.

7. Click **Check Connection** to make sure that everything is working.



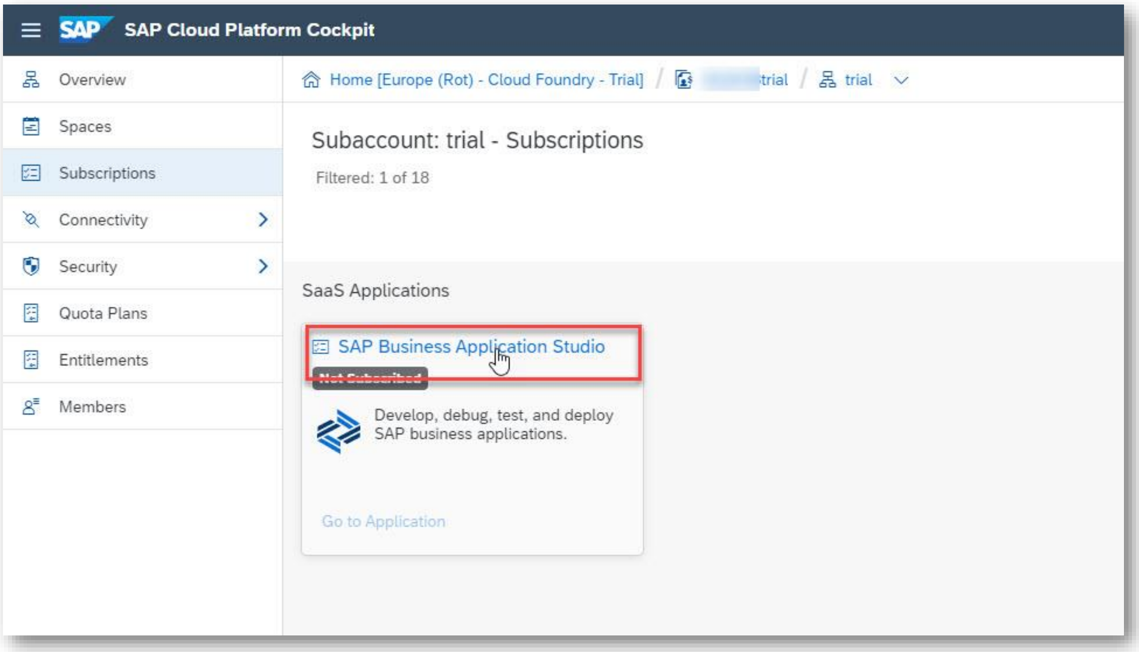
8. You will get confirmation that the connection is established.



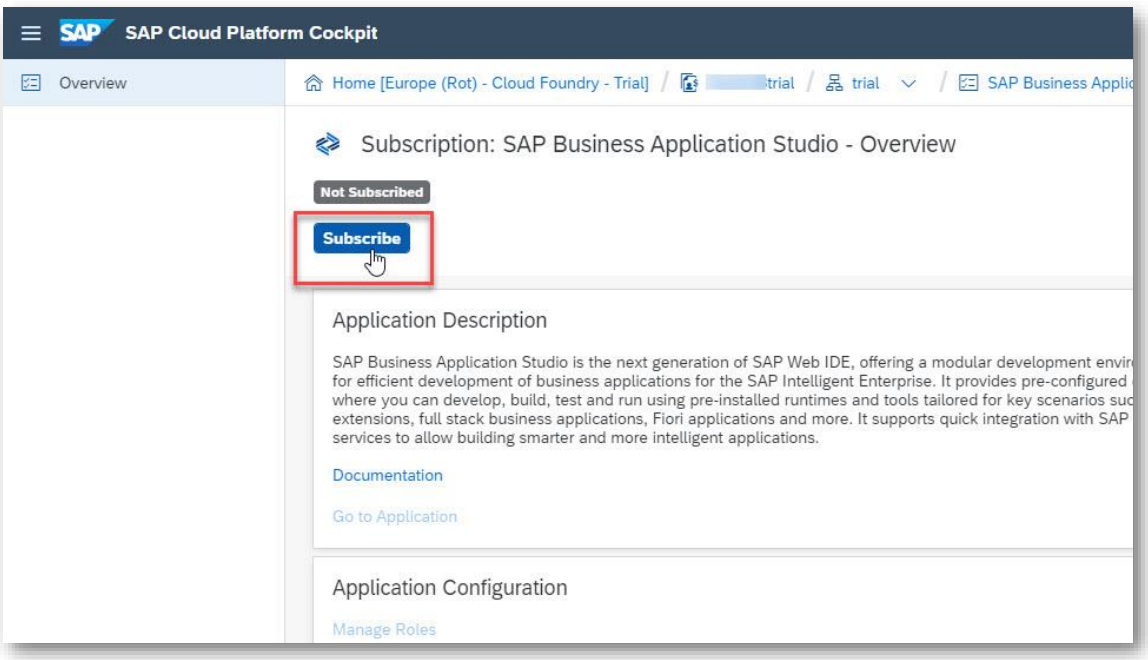
[I] Set Up SAP Business Application Studio for Development

Step 1: Subscribe SAP Business Application Studio

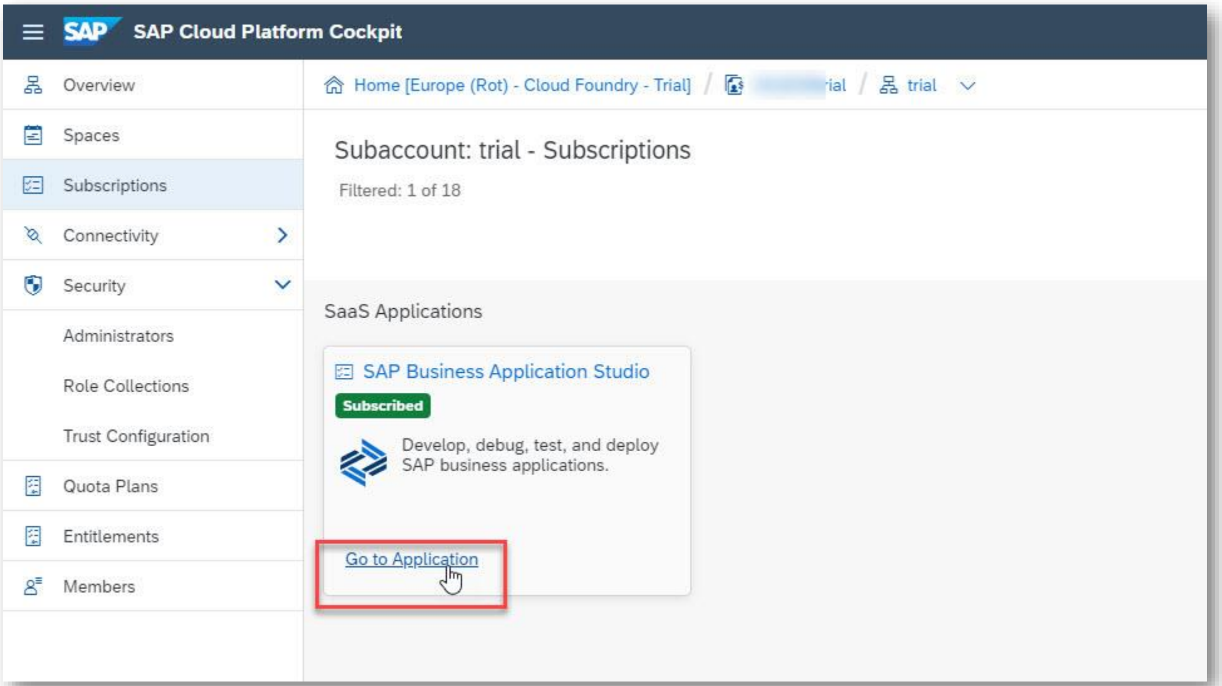
1. Go back to your trial subaccount by choosing the **trial** from the breadcrumbs.
2. In the **Subscriptions** page, search for **studio.**
3. Click the **SAP Business Application Studio** tile.



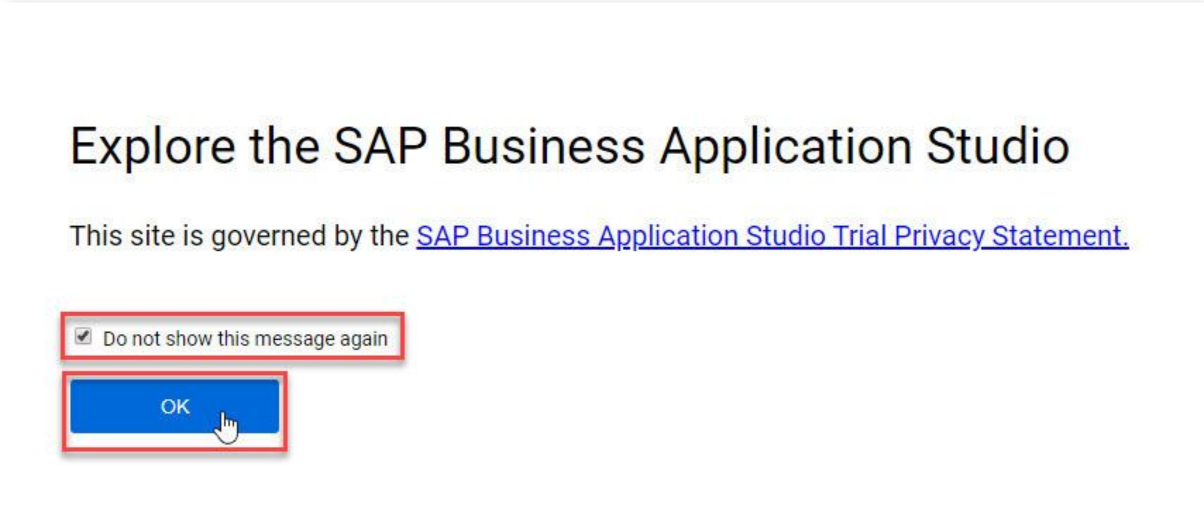
4. Click **Subscribe** to add the subscription to the subaccount.



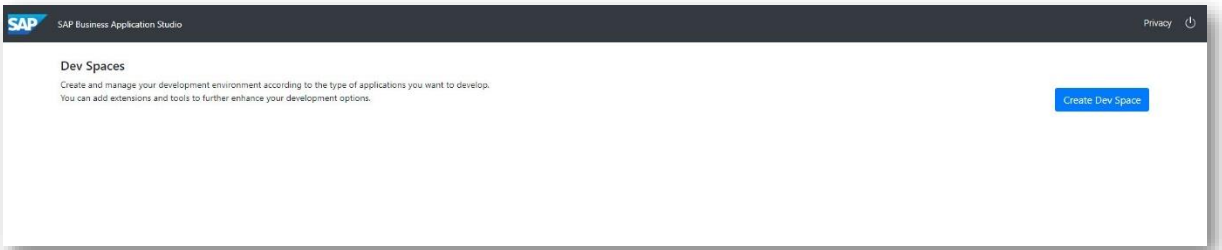
5. Once subscribed, Click **Go to Application.**



6. You might be asked to accept the legal terms. Check the box and click **OK**.

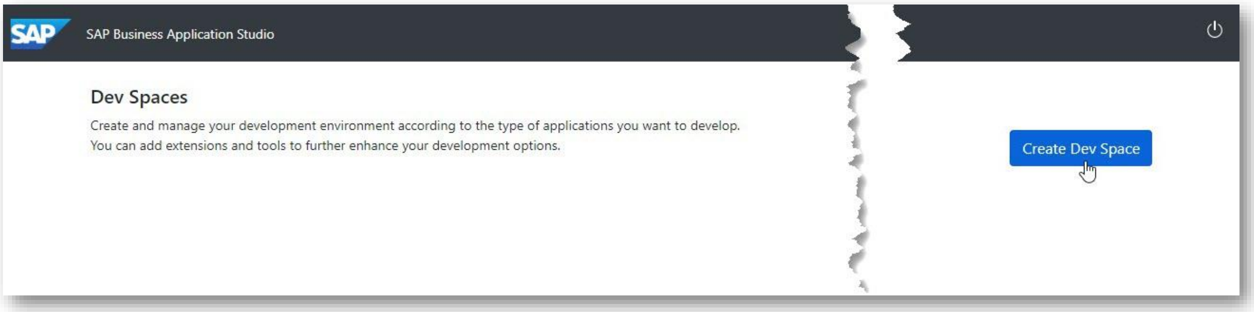


7. SAP Business Application Studio loads.

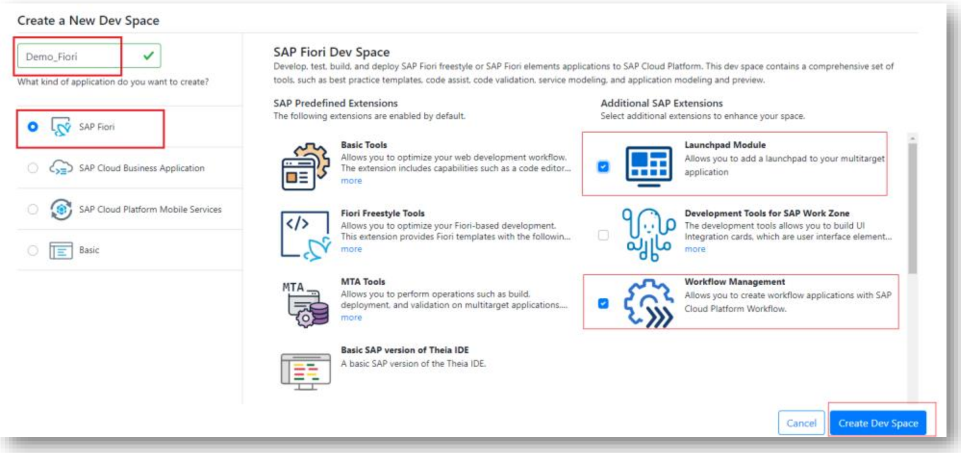


Step 2: Create a Dev Space for SAP Fiori Apps

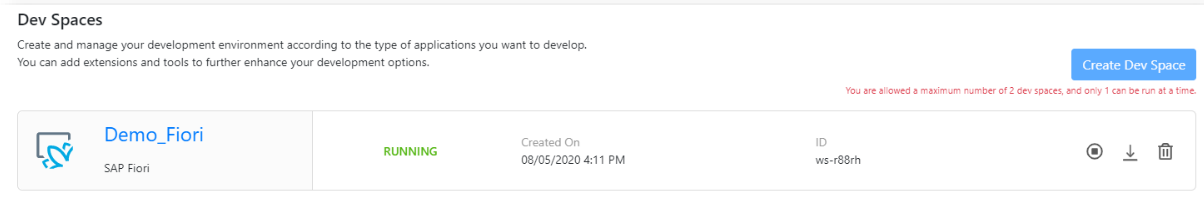
1. Choose **Create Dev Space**.



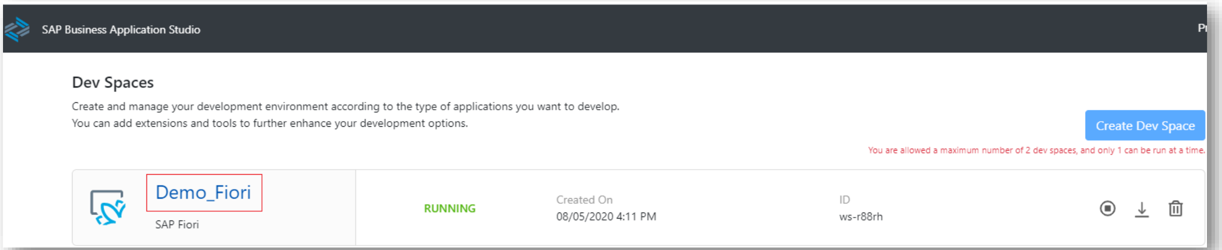
2. Enter **Demo_Fiori** for your dev space **name**.
3. Choose **SAP Fiori** as the application type.
4. From Additional SAP Extension select **Launchpad Module** and **Workflow management**
5. Click **Create Dev Space**



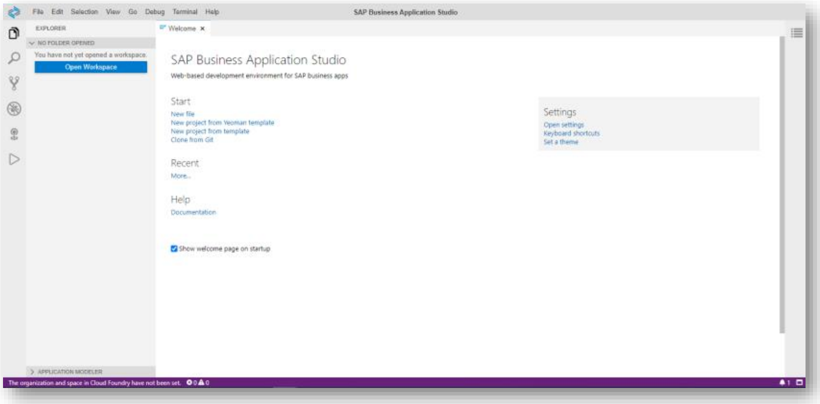
6. The dev space is in status **STARTING**. Wait until it is in status **RUNNING**



7. **Click** the name of the dev space you created



8. The SAP Fiori dev space opens, and the **Welcome** tab appears.

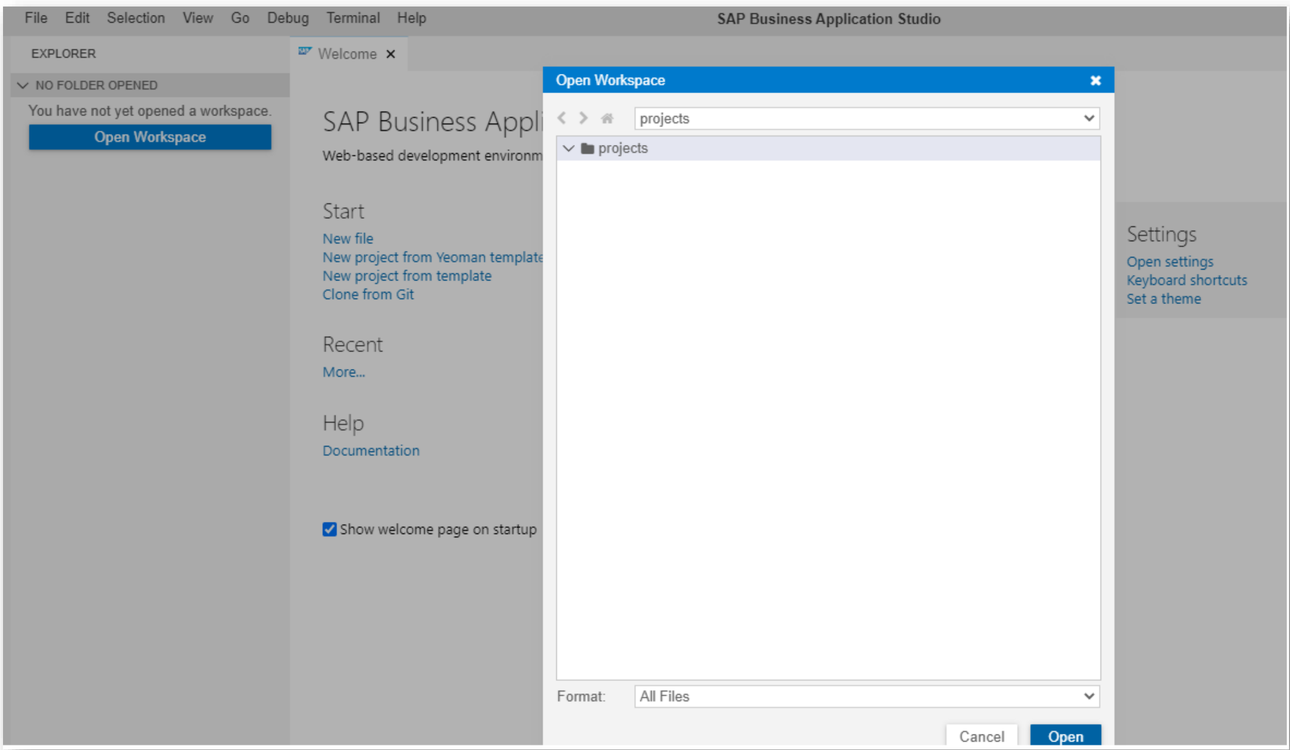


The purple color of the status bar indicates that there is no open workspace.

[J] Create, Build and Deploy Workflow Project

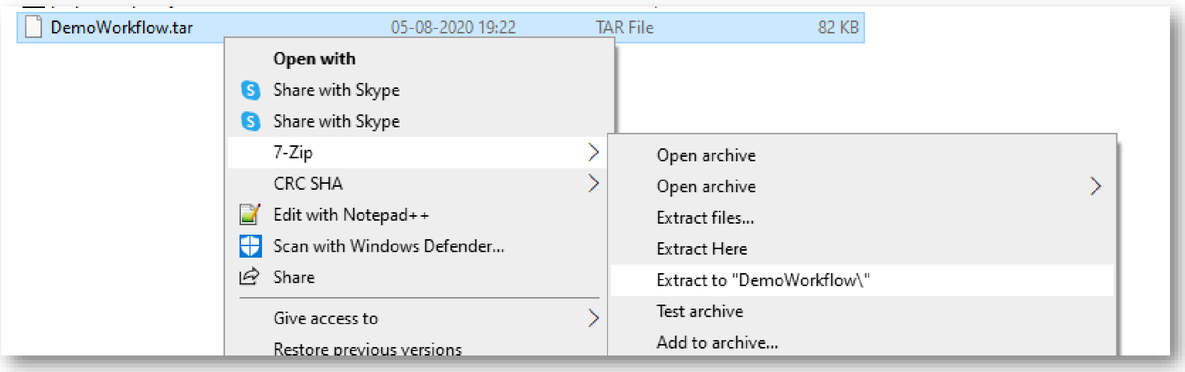
Step 1: Open a workspace in SAP Business Application Studio and Import Project

1. Click on File → Open Workspace → select Projects → Click on **Open**

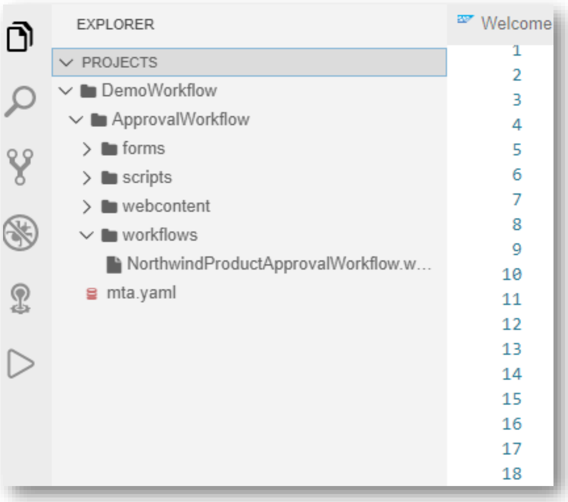


2. Download the file in your local machine from below link and Extract it using 7-Zip or any relevant software.

https://ibm.box.com/s/fzlxctfbto28ivs9k7f2wfn5xr4ta745

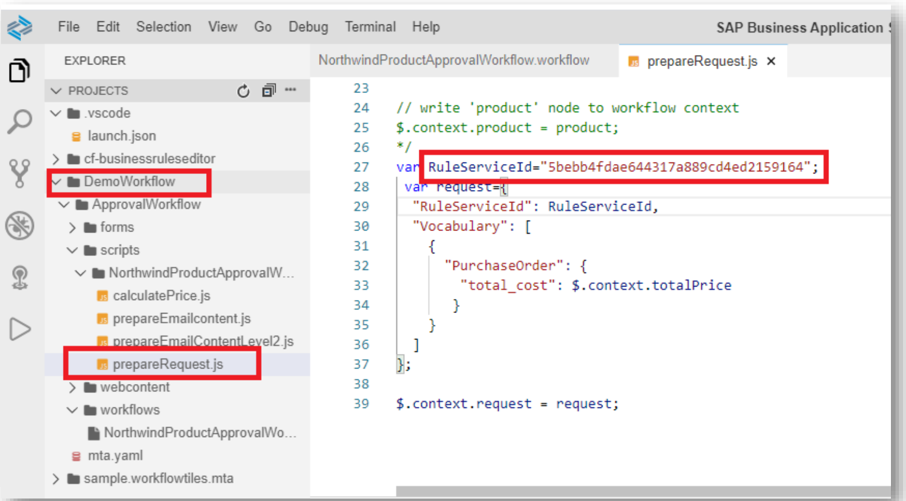


3. Drag and Drop the extracted folder into just created workspace.

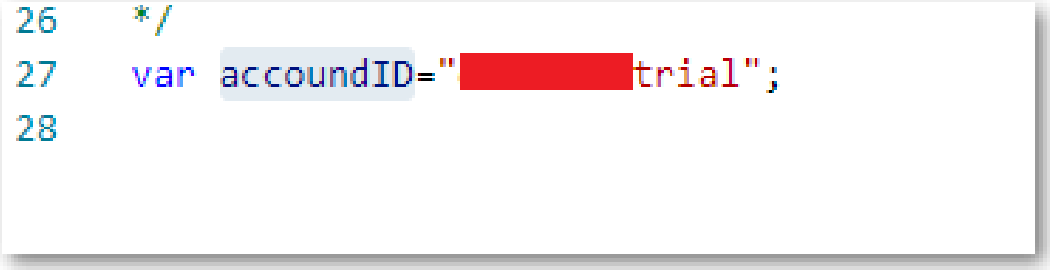


4. Open script file **prepareRequest.js**
5. Change the value of variable RuleServiceId to the ID of your Business Rule Service.

   Reference: Please save the Rule Service ID. It will be required while developing workflow to call this rule service.



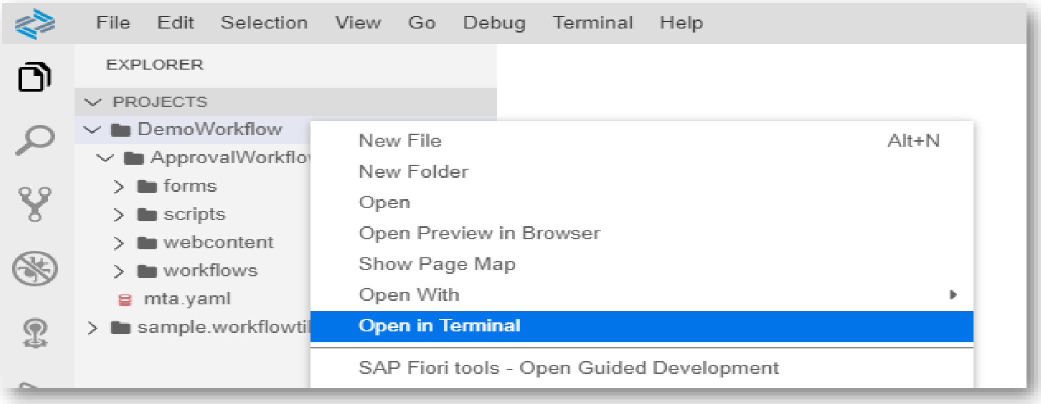
6. Save the changes. Ctrl+S
7. Open both the files **prepareEmailcontent.js** and **prepareEmailContentLevel2.js**
8. Change the value of variable **accoundID** to the ID of your trail account in both files.



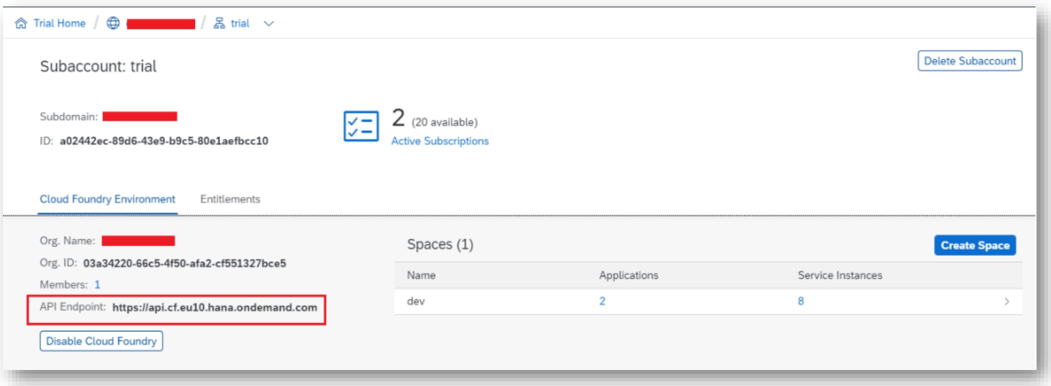
9. Save the changes.

Step 2: Build your workflow project

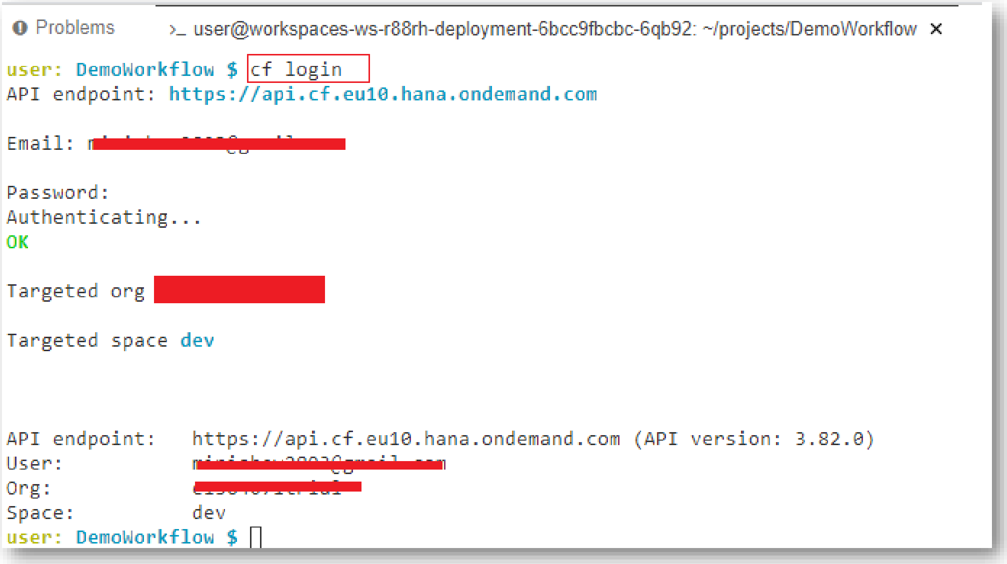
7. Right click on folder DemoWorkflow → select **Open in Terminal**



8. In Terminal, enter following command to login to your CF account: **$ cf login**
9. Enter API endpoint. You can get API endpoint details from your SAP cloud account.



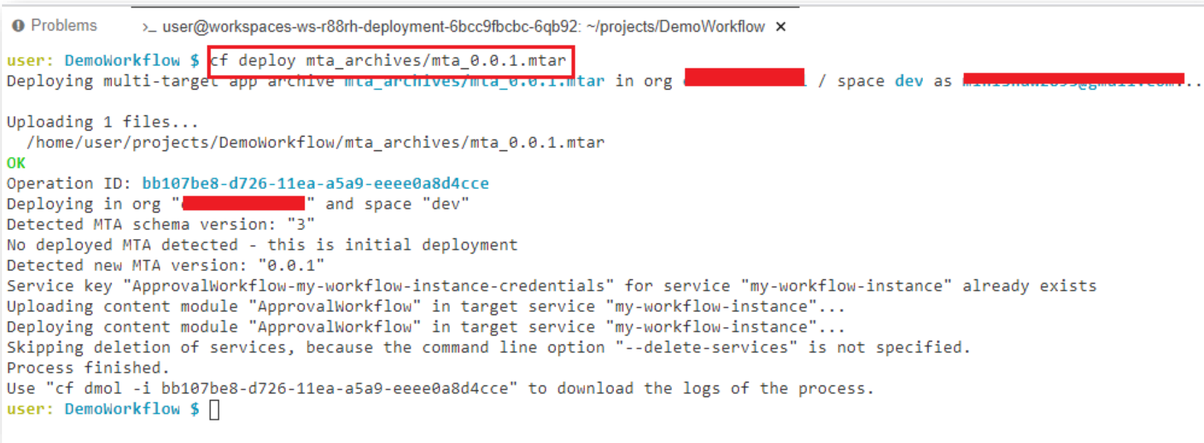
10. Enter your registered username
11. Enter Password



12. In Terminal, Enter Command: **$ mbt build**
13. The MTA archive gets generated at
    /home/user/projects/DemoWorkflow/mta_archives/mta_0.0.1.mtar

Step 3: Deploy your workflow project

1. In Terminal, enter Command: **$ `cf deploy mta_archives/mta_0.0.1.mtar`**
2. Your application will be deployed to your Cloud Foundry platform.

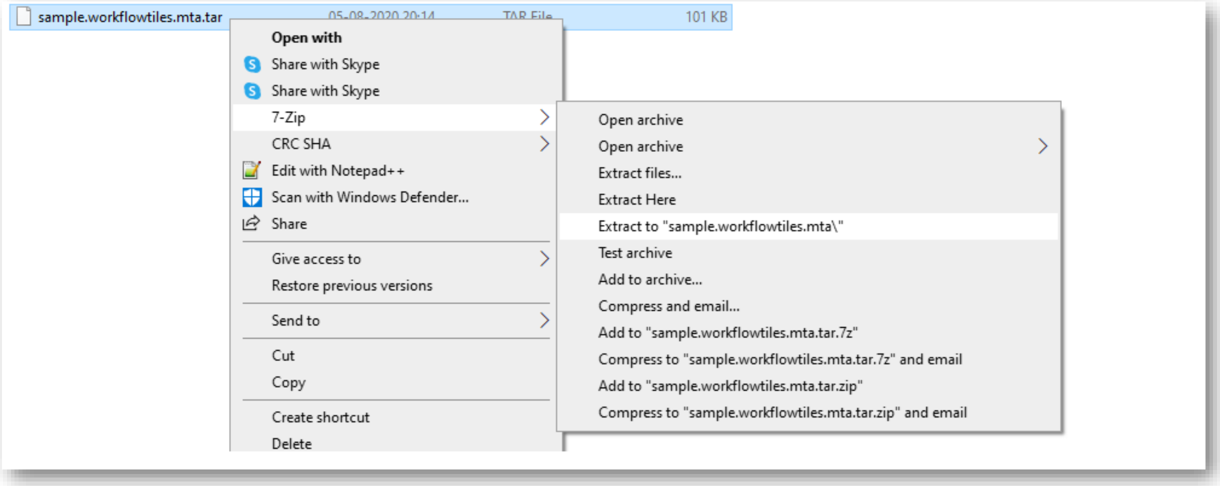


[K] Create Build and Deploy SAP Fiori Launchpad Project and its Module

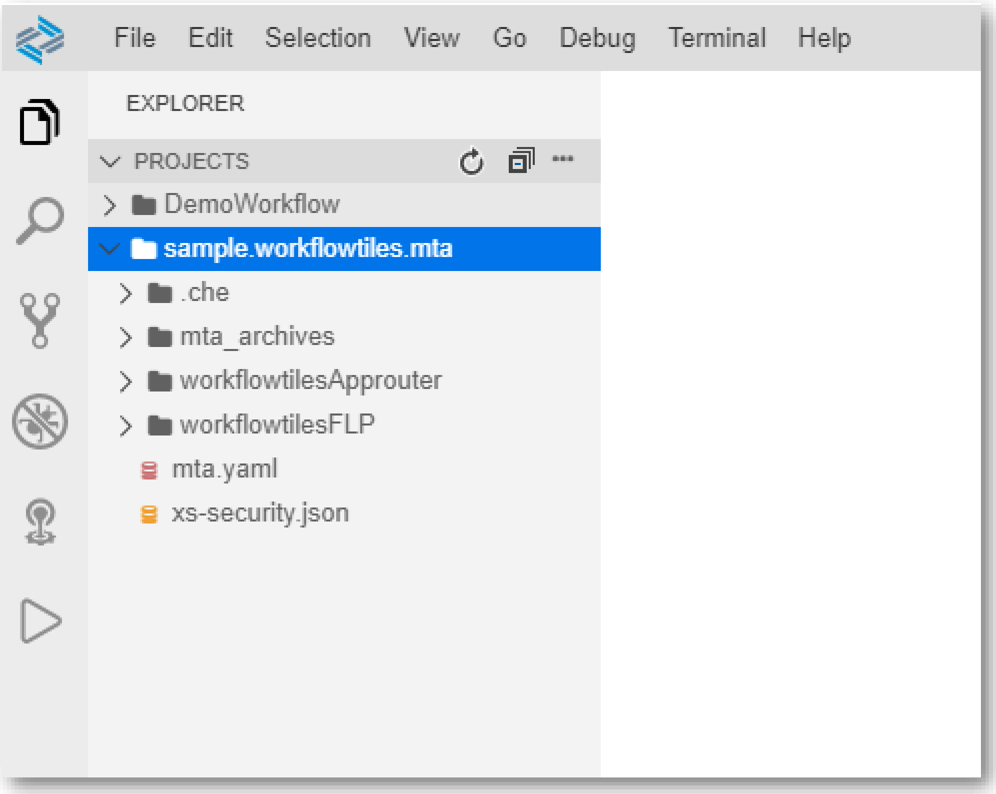
Step 1: Import Project

1. Download the file in your local machine from below link and Extract it using 7-Zip or any relevant software.

   https://ibm.box.com/s/junl25pal98vz6m6mbpx82on0ppo2so7



2. Drag and Drop the extracted folder into workspace.

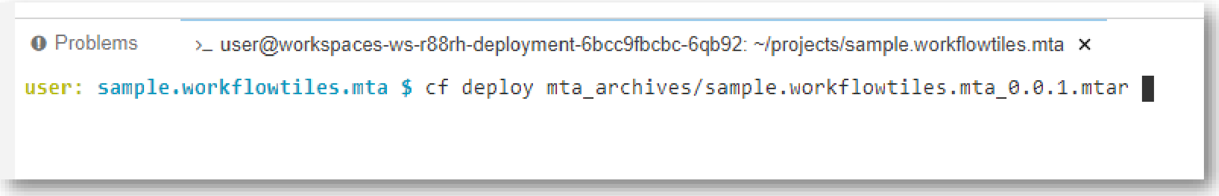


Step 2: Build Project

1. Right click on folder sample.workflowtiles.mta → select **Open in Terminal**
2. In Terminal, Enter Command: **$ mbt build**
3. The MTA archive gets generated at /home/user/projects/sample.workflowtiles.mta/mta_archives/sample.workflowtiles.mta_0.0.1.mtar

Step 3: Deploy project

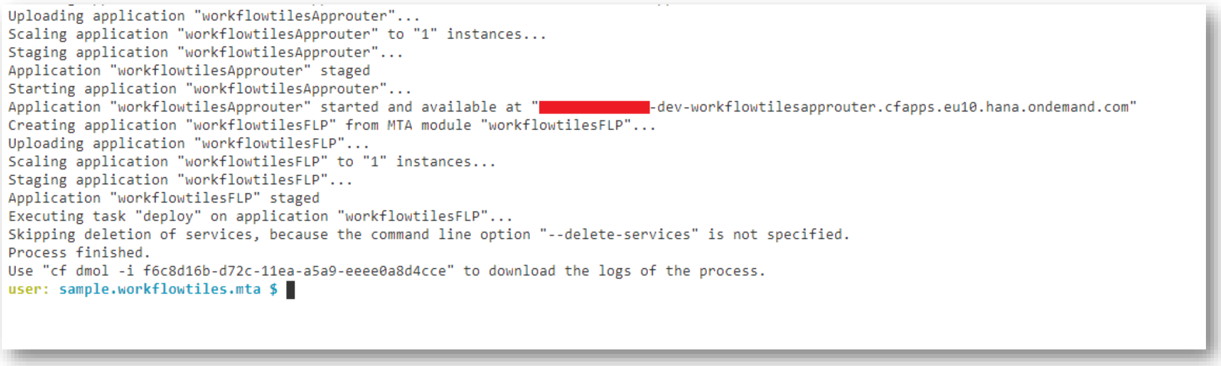
1. In Terminal, enter Command: **$ cf deploy mta_archives/sample.workflowtiles.mta_0.0.1.mtar**



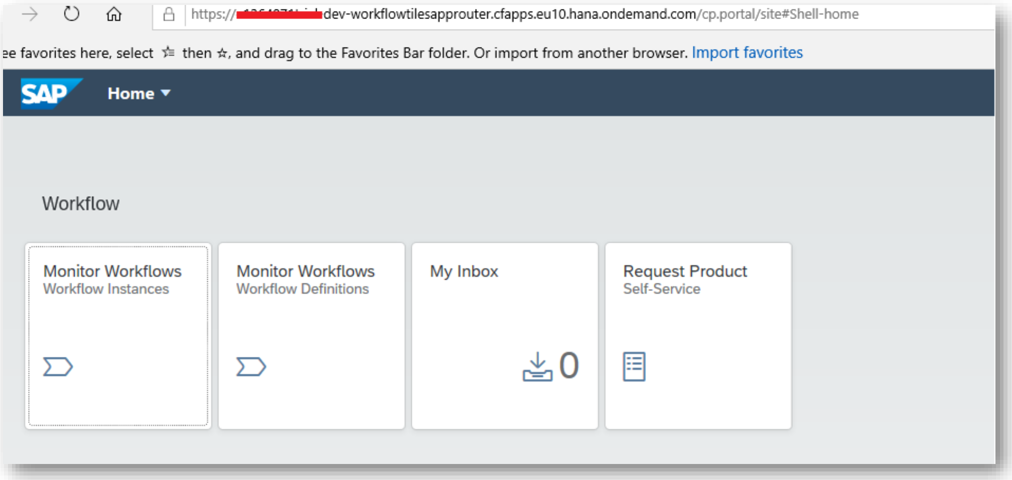
2. Your application will be deployed to your Cloud Foundry platform.

Step 4: Access your SAP Fiori launchpad apps

3. Open the console, and search for the launchpad URL `https://<dev space name>-trial-dev-workflowtilesapprouter.cfapps.<your endoint>.hana.ondemand.com`



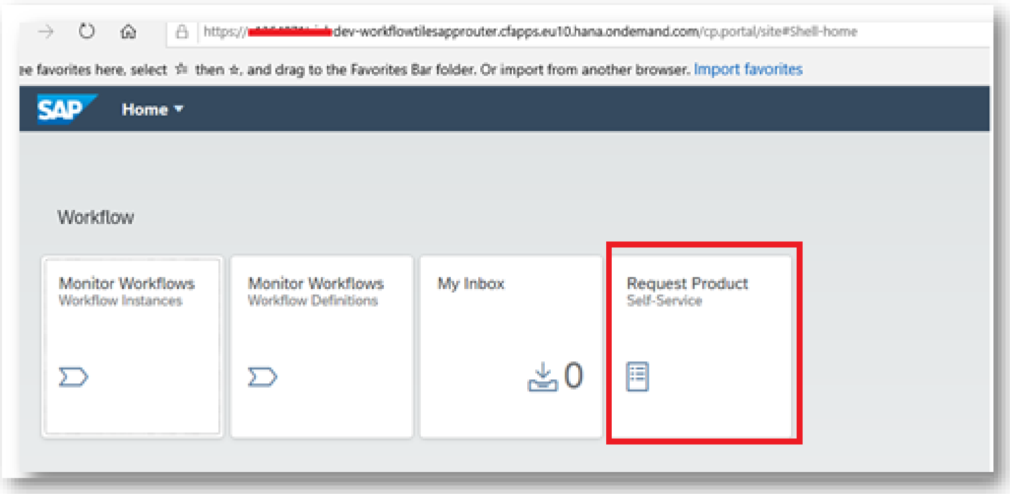
4. Copy the URL to your browser.
5. Log on to your trial account by entering your email address and password. Your home page of SAP Fiori launchpad is displayed.



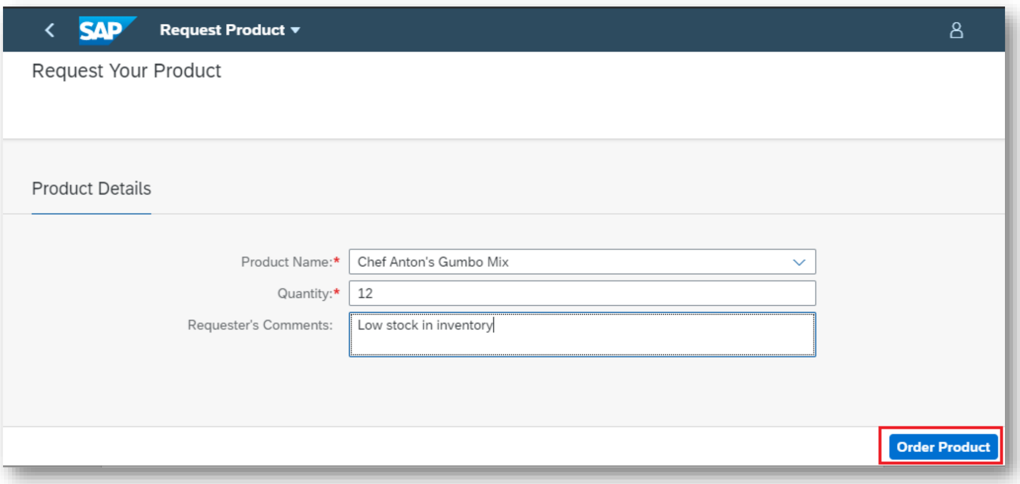
[L] Testing Workflow Scenario

Submit request for Purchase Order

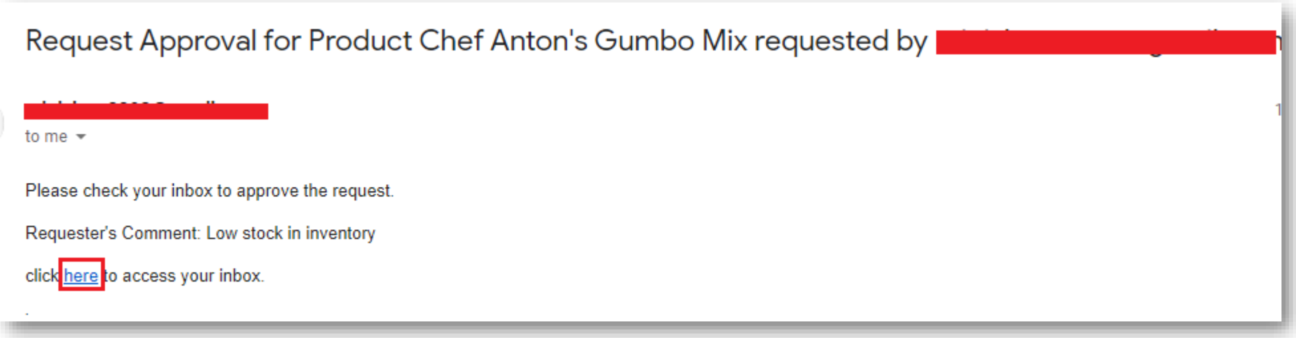
1. Open your SAP Fiori launchpad in browser and click application ‘**Request Product**’



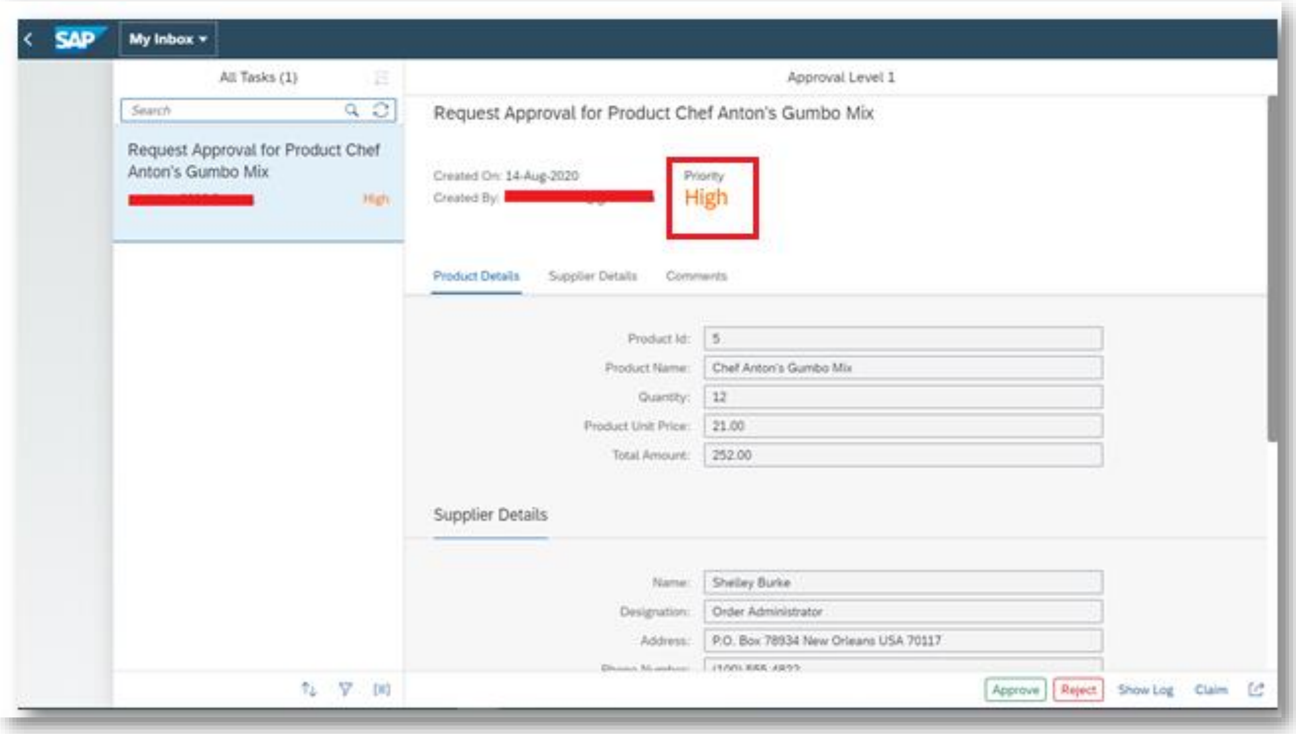
2. Fill the form and submit it by clicking on ‘**Order Product**’. As soon as the form is submitted, workflow will be triggered.



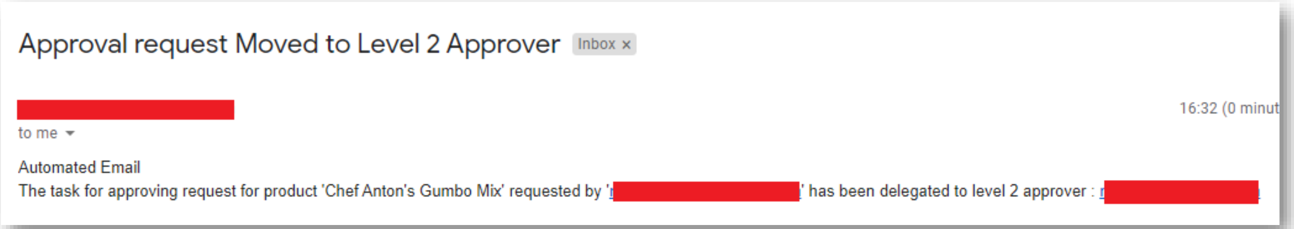
3. Depending upon your business rule, level 1 approver will get the approval request email with a link to his inbox to make his decision within assigned time window. [for demo, we have kept the waiting time to 4 minutes]

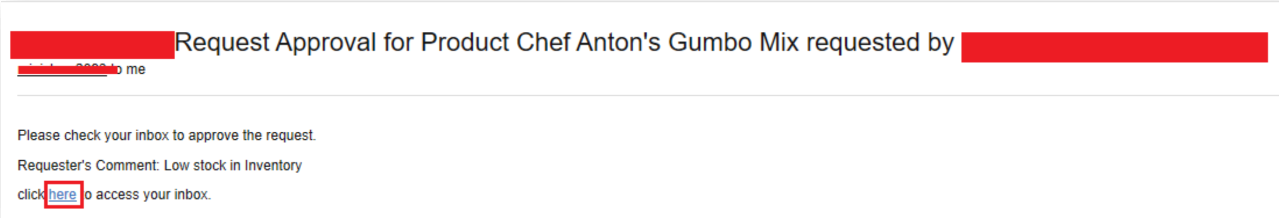


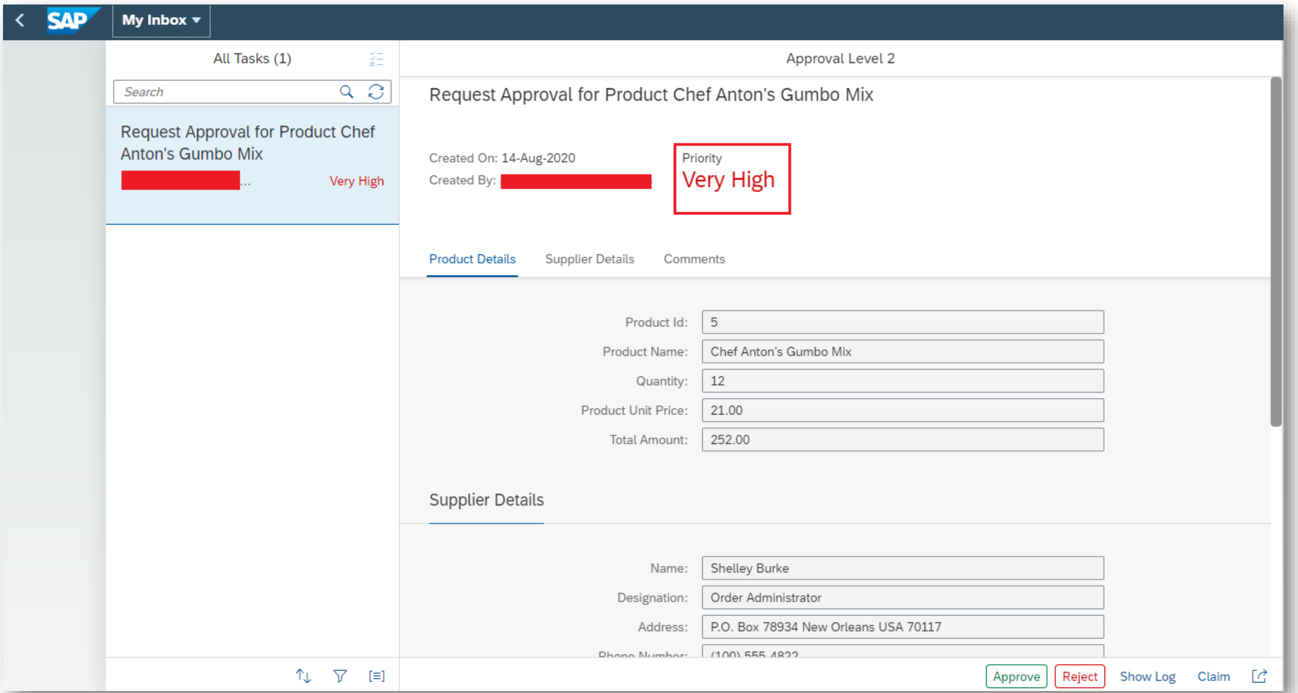
4. When the link shown in email is clicked, it takes the approver to the task in his inbox. The approval form shows extra details about the product such as calculated total cost, its supplier details.



5. If level 1 approver does not make any decision within allocated time window,
   a. The approval task for the Purchase order is delegated to level 2 approver with higher priority.
   b. A notification email is sent to both Level 1 approver and requester about the same.
   c. Parallelly Level2 approver also gets the email notification about the request with a link to his inbox.


Approval request Moved to Level 2 Approver
Inbox ×
[redacted]
16:32 (0 minut
to me
Automated Email
The task for approving request for product 'Chef Anton's Gumbo Mix' requested by '[redacted]' has been delegated to level 2 approver : [redacted]


[redacted] Request Approval for Product Chef Anton's Gumbo Mix requested by [redacted]
[redacted] to me
Please check your inbox to approve the request.
Requester's Comment: Low stock in Inventory
click here to access your inbox.


SAP
My Inbox
All Tasks (1)
Search
Request Approval for Product Chef Anton's Gumbo Mix
[redacted]...
Very High
Approval Level 2
Request Approval for Product Chef Anton's Gumbo Mix
Created On: 14-Aug-2020
Created By: [redacted]
Priority
Very High
Product Details
Supplier Details
Comments
Product Id: 5
Product Name: Chef Anton's Gumbo Mix
Quantity: 12
Product Unit Price: 21.00
Total Amount: 252.00
Supplier Details
Name: Shelley Burke
Designation: Order Administrator
Address: P.O. Box 78934 New Orleans USA 70117
Approve
Reject
Show Log
Claim