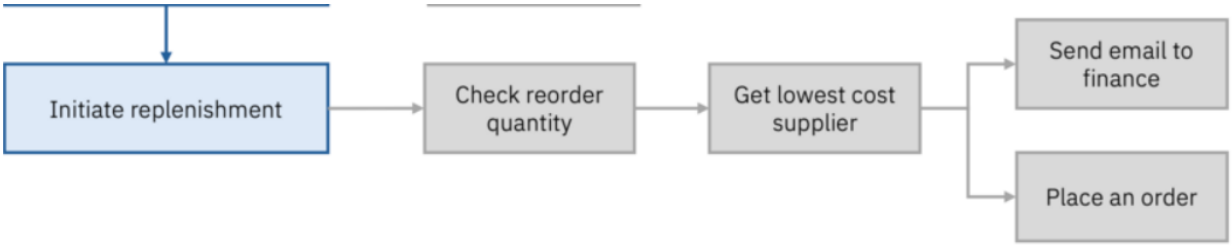
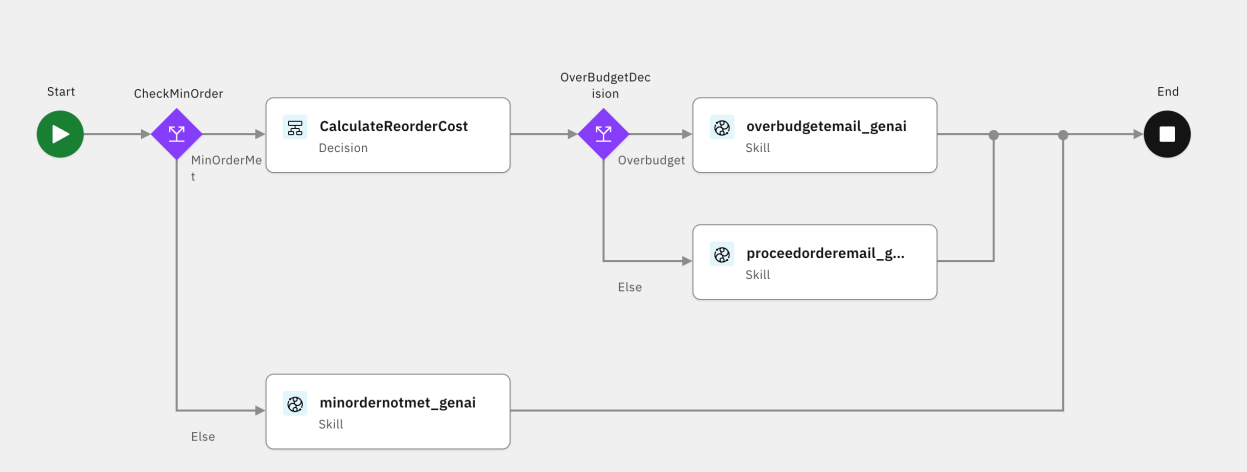
Lab 5: Automation Builder

In this lab, we will be building an automation workflow which can help us to determine the steps to take once we have all our reorder information available. In this automation, we will be branching out to different actions based on the following criteria:

- If the order quantity meets minimum order (assuming set by supplier)
- If the order is above a certain budget and requires approval from the procurement head



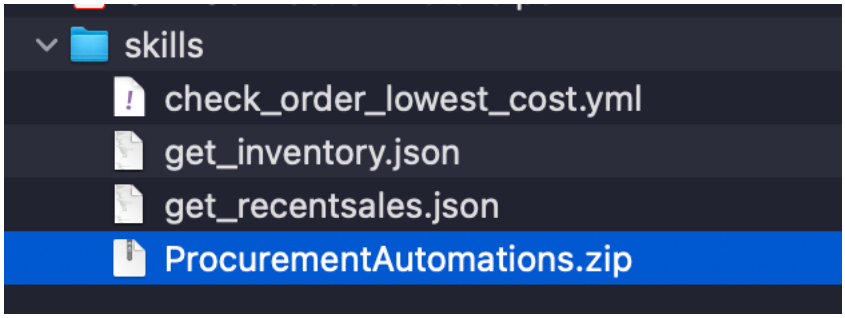
This automation is achievable by a workflow within the automations. The workflow has already been prebuilt for you but feel free to click on each component to understand more.



Automation Builder

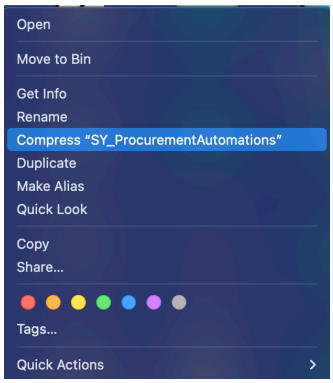
1. **Prepare zip file**

1.1 In your downloaded folder, locate the ProcurementAutomations.zip in the “skills” folder. Automations are prebuilt in this skill folder for you.



1.2 Unzip the file and rename the file to “[YourName]_ProcurementAutomations”.

1.3 Rezip the folder.



*** **If you are using a Macbook, the current built in archiver utility is not compatible. To rezip your folder please follow the following steps or please ask a facilitator to assist you.**

a. **Launch terminal**

b. **Paste in this code and press return:**

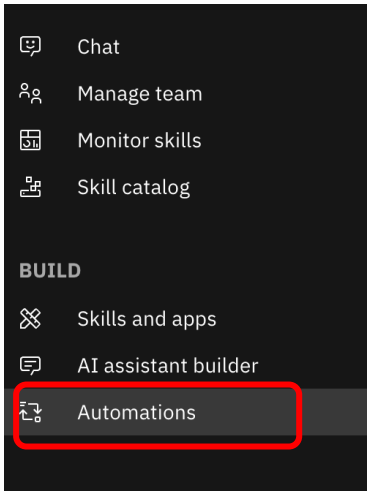
cd desktop/digital-labour-workshop/workshop content/skills

c. **Paste in this code and press return:**

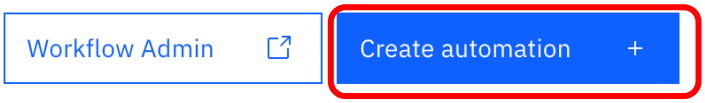
zip -r [YourName]_ProcurementAutomations.zip [YourName]_ProcurementAutomations

2. Uploading automations into Watsonx Orchestrate

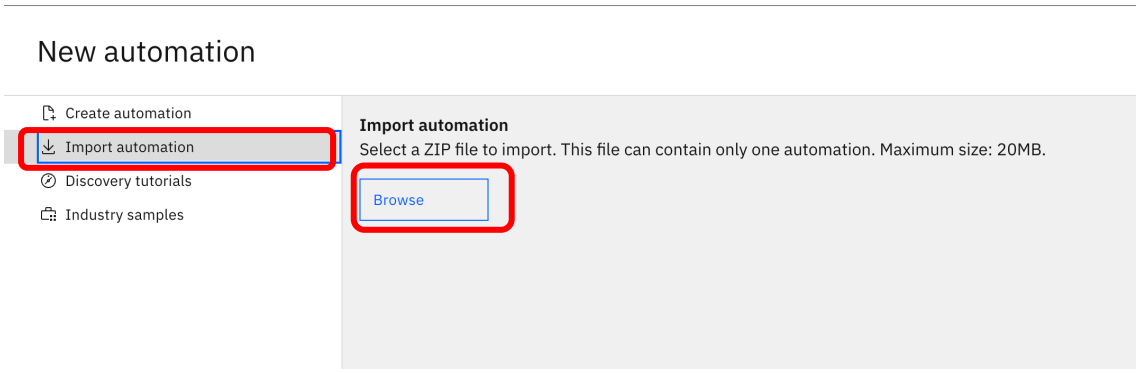
2.1 Access the automation builder through the menu pane on the left.

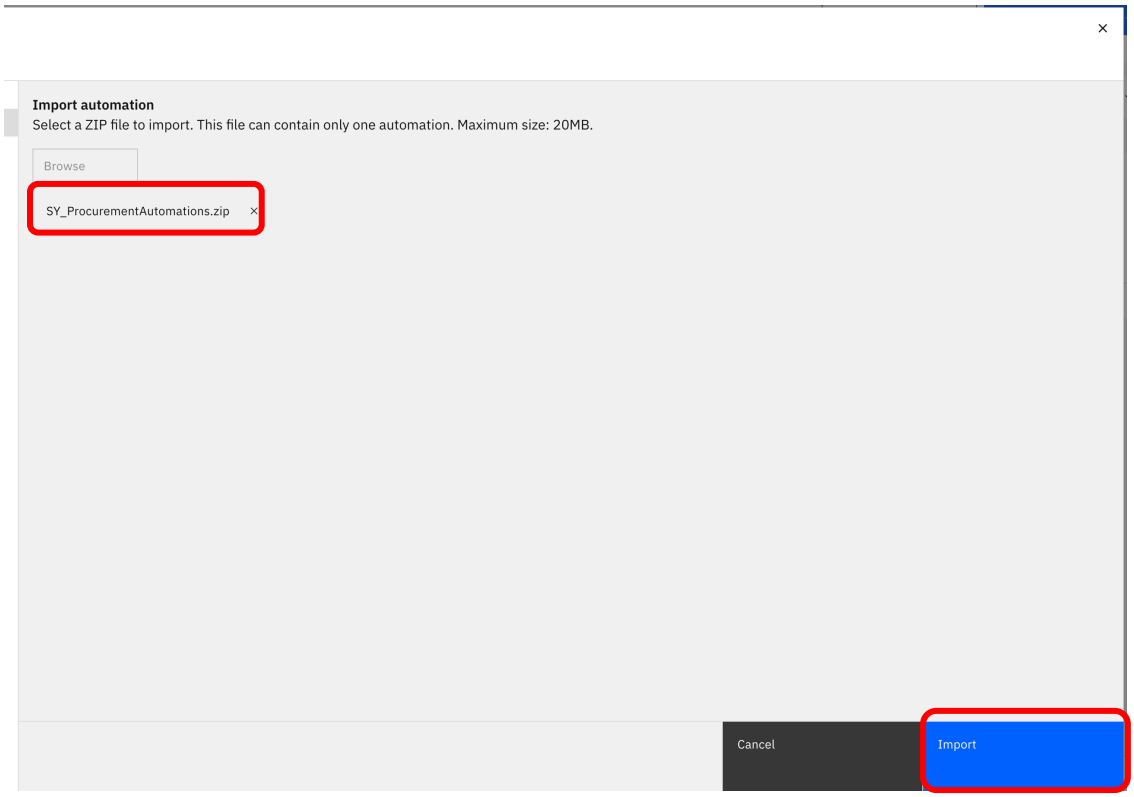


2.2 In the Automations page, click on Create automation.

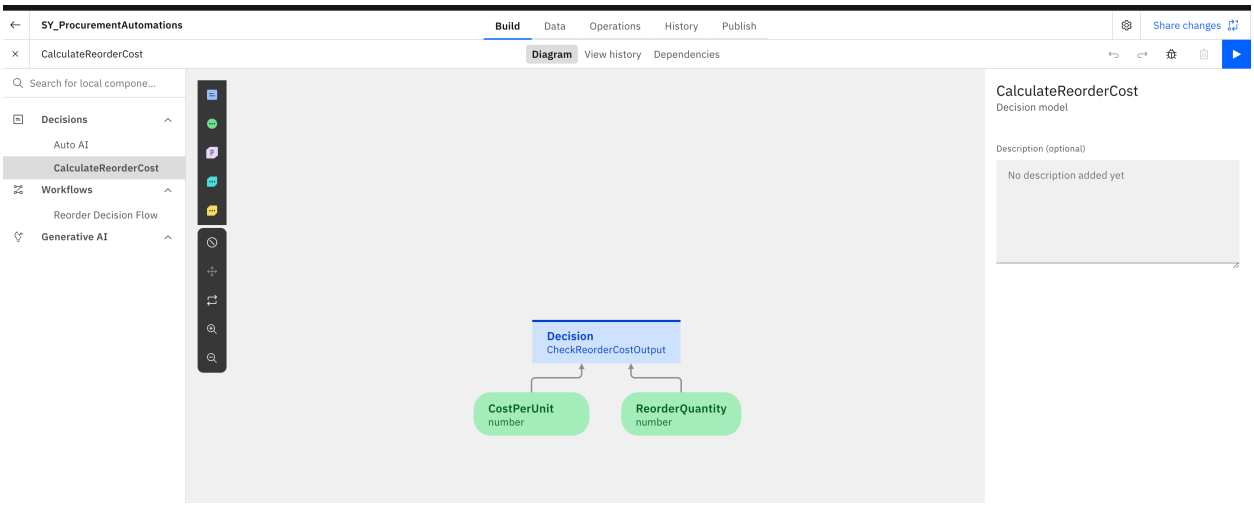


2.3 Select Import automation and select the zip file titled "[YourName]_ProcurementAutomations" and click the "Import" button





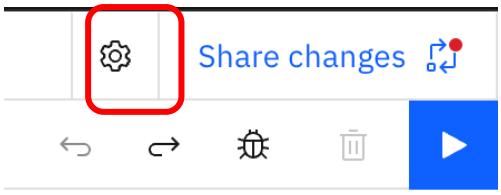
2.4 You will see your interface like this.



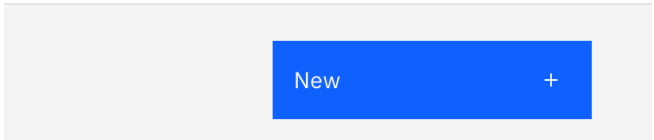
- The Decisions tab allows organization to determine business rules, calculations, business mappings, decisions based on certain conditions.
- Workflows tab allows for automated workflows to be designed. Workflows can also include decisions and skills from our skills catalogue
- Generative AI tab allows automation creation using Large Language Models. These can be published as skills and included into the workflows.

3 Update Prediction Model Details

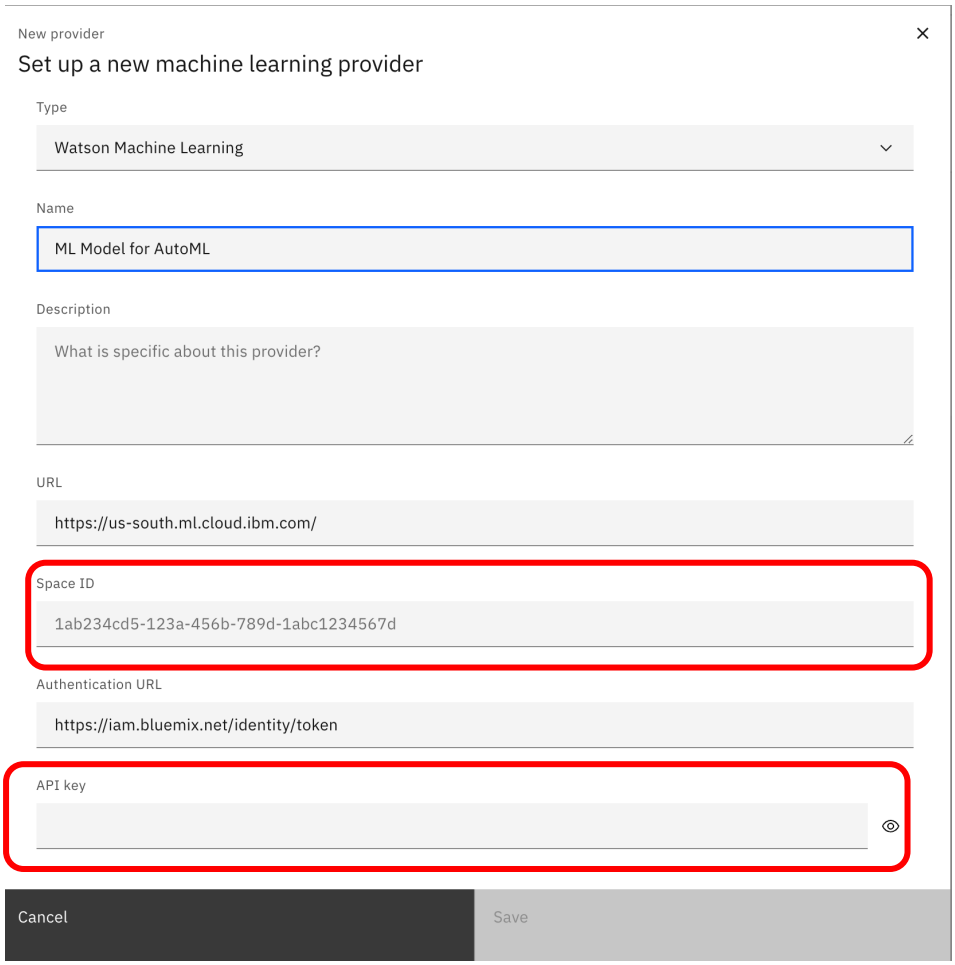
3.1 Click on the settings on the top right corner.



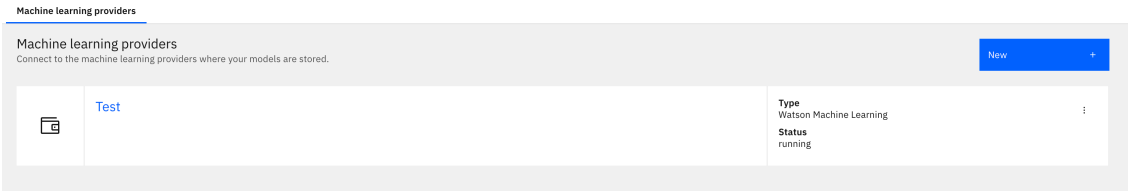
3.2 Click on “New” on the top right corner.



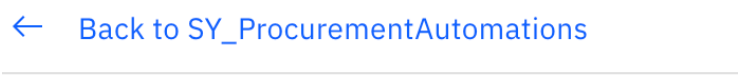
3.3 Ensure that the details are as below. You will need to fill in the Space ID and API Key as provided in the connection details document. Click Save after all details have been entered.

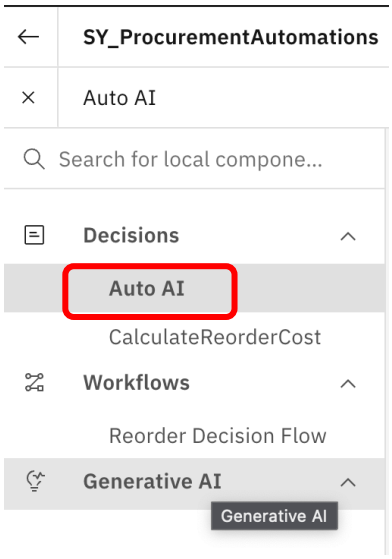


3.4 After you've clicked save, your page should show something similar.

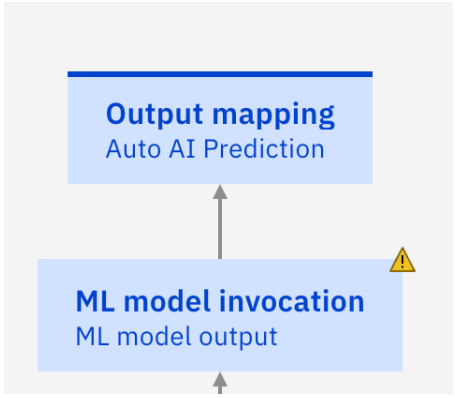


3.5 Click on Back and Click on AutoAI from the left panel.

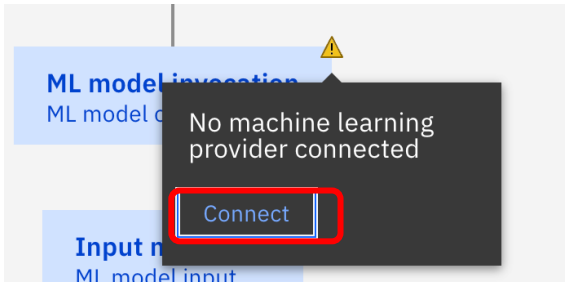




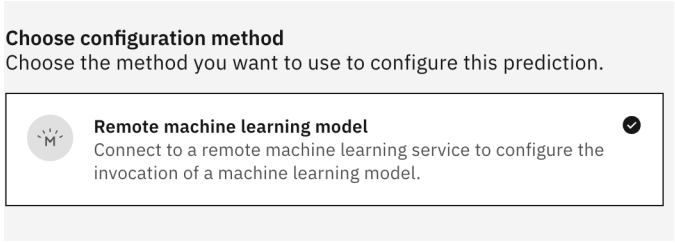
3.6 You will see a warning sign on one of your tiles in the decision flow.



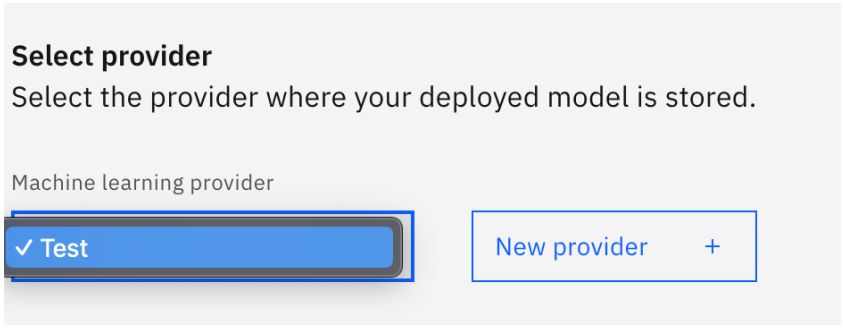
3.7 Click on the warning sign and click “Connect”.



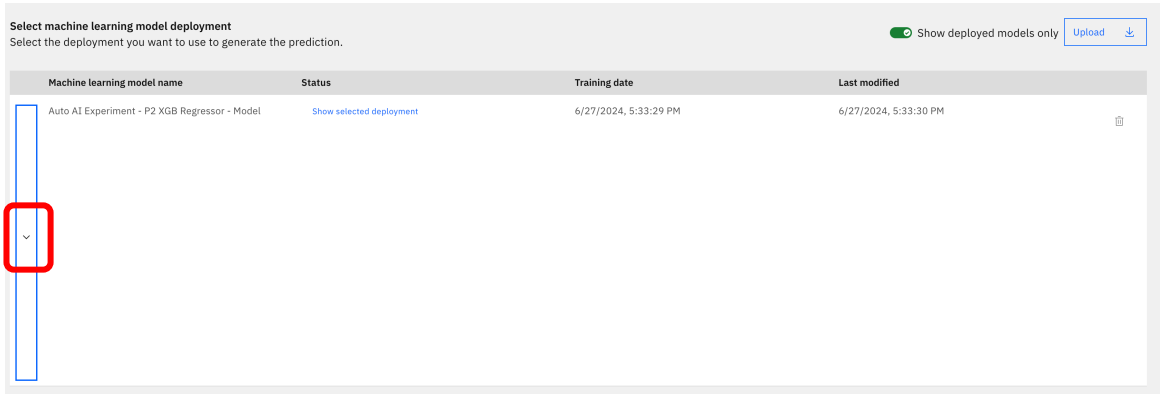
3.8 Choose “Remote machine learning model” and click “Next”.



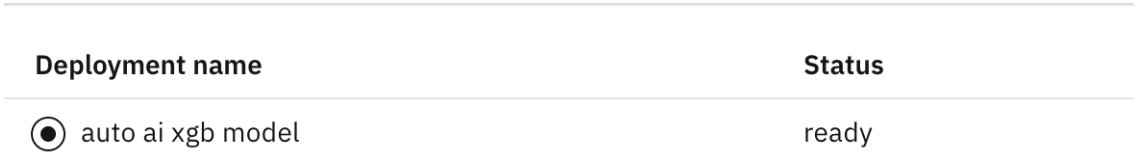
3.9 Select the provider. The provider's name will depend on the name you've input in step 3.3.



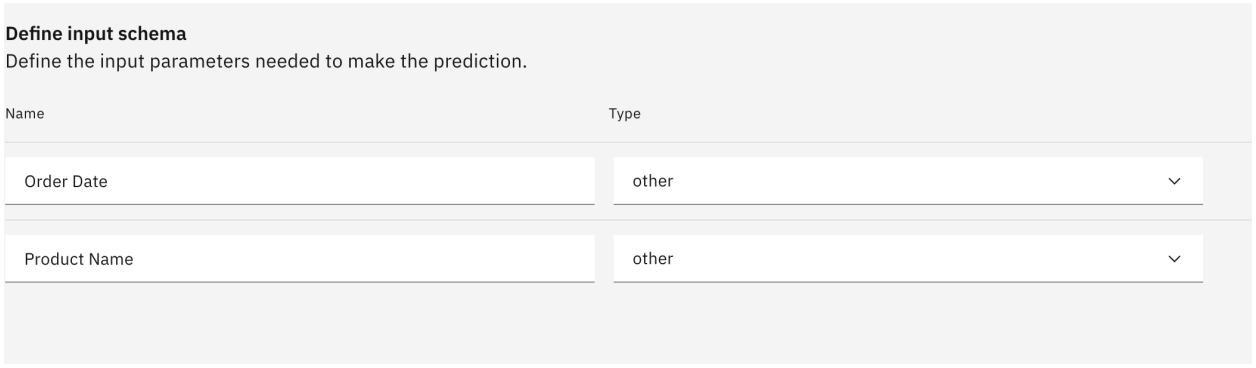
3.10 You will see the layout change to something similar as below. Click on the small arrow



3.11 Select the model and click "Next"

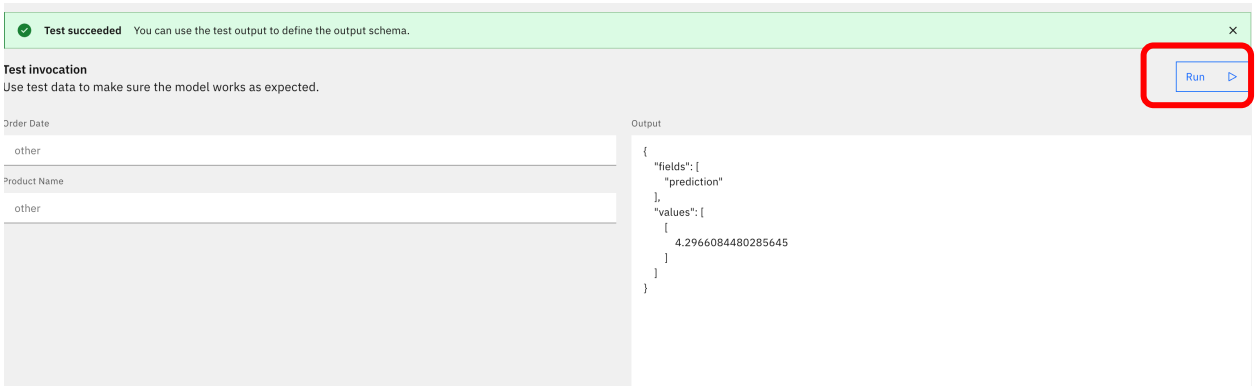


3.12 Leave the options as it is and click "Next".

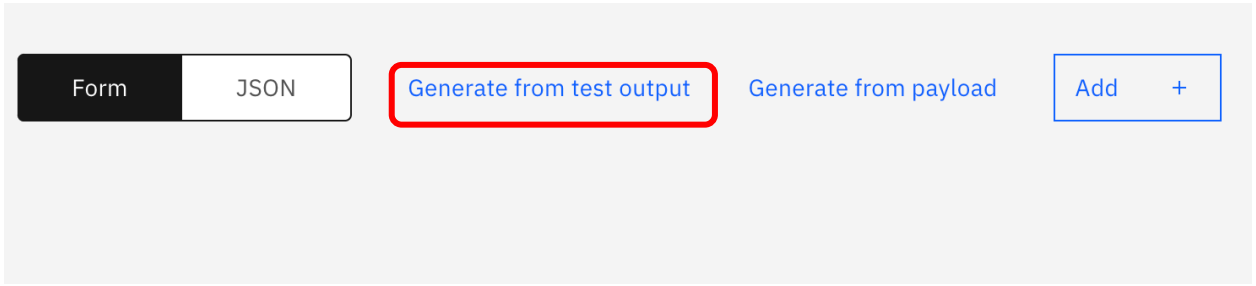


3.13 Click on the Run button to test the model.

Click “Next” when the output has the result shown below.

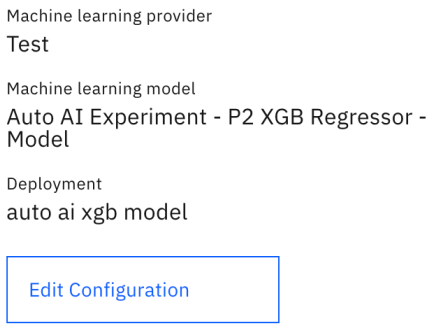


3.14 Click on “Generate from test output” and click “Ok” on the pop up.



3.15 Once you get the Prediction field, click “Apply” on the top right.

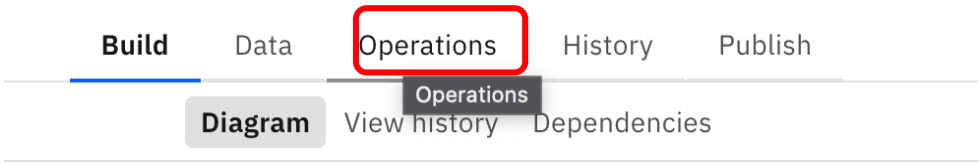
3.16 Click back to AutoAI and you will see the below configuration in your right side panel.



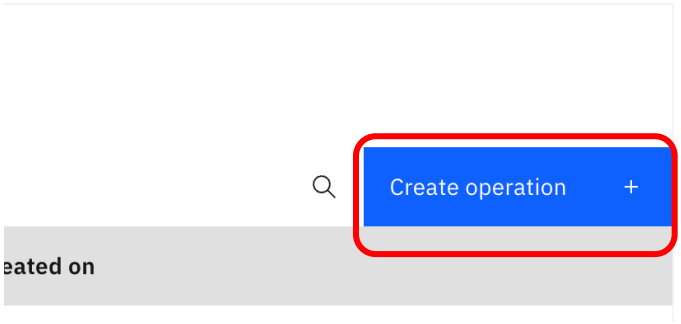
4 Create Operations

To use the automations within Watsonx Orchestrate, we will need to publish the automations in the form of an operation. We will create an operation now.

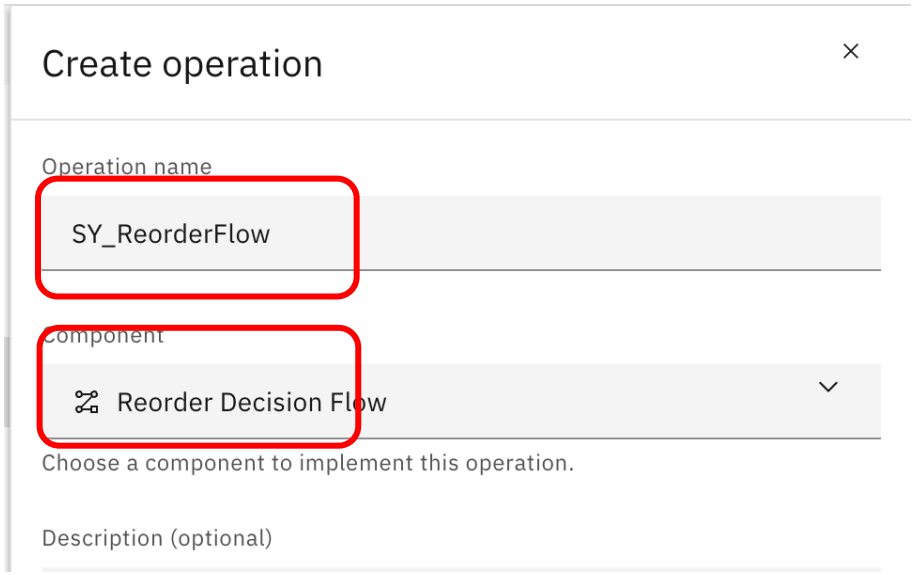
4.1 Select the “Operations” tab.



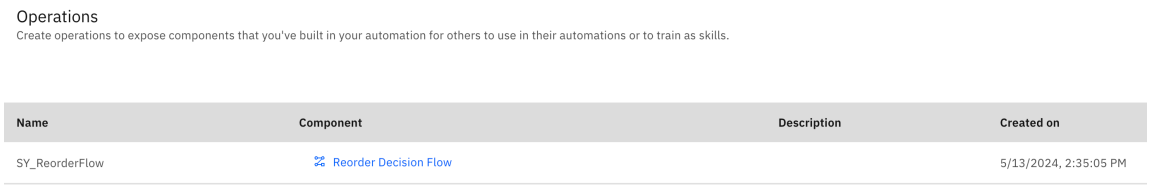
4.2 Select “Creation operation”.



4.3 Change the Operation name to “[YourName]_ReorderFlow” and Select “Reorder Decision Flow” in the Component Section

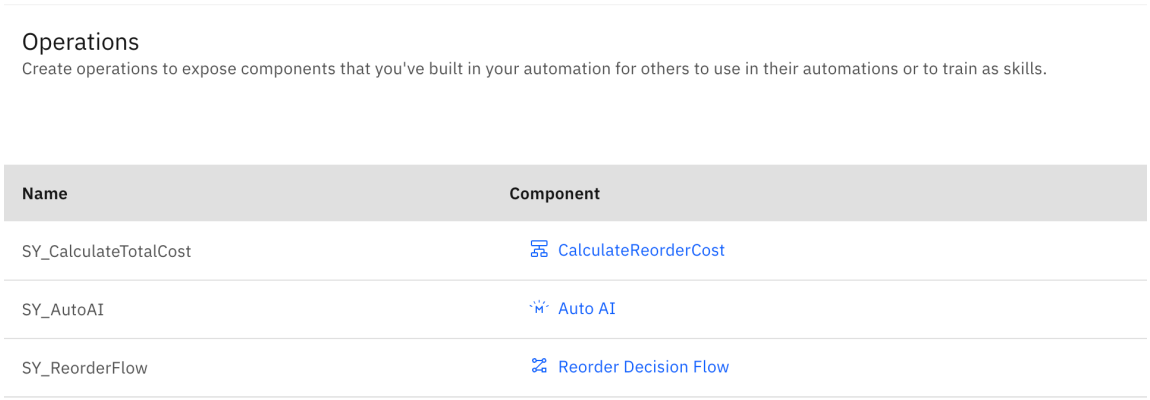


4.4 Click Save and you will see an operation has been created for you.

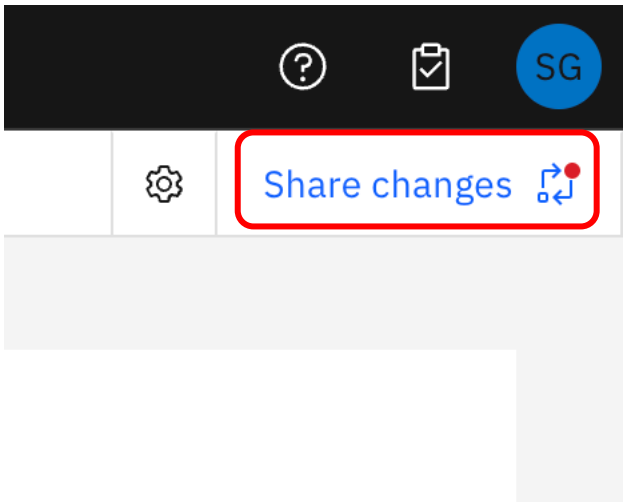


4.5 Repeat steps 3.2 to 3.4 for the AutoAI and CalculateReorderCost decisions.

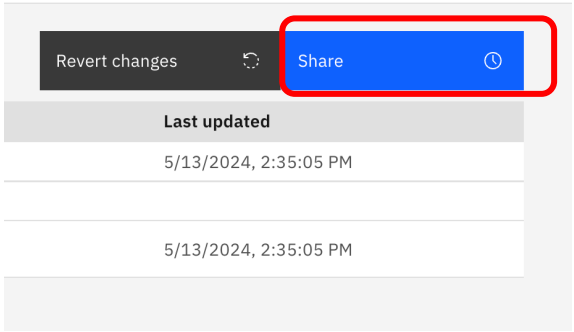
****Important to name your operations starting with your name.**



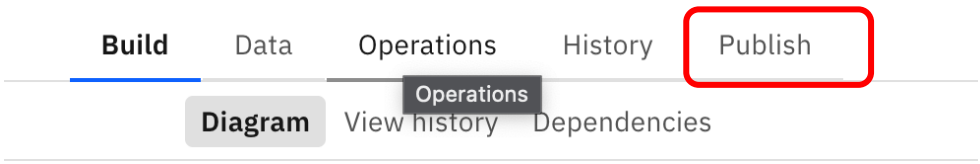
4.6 Select the “Share changes” tab.



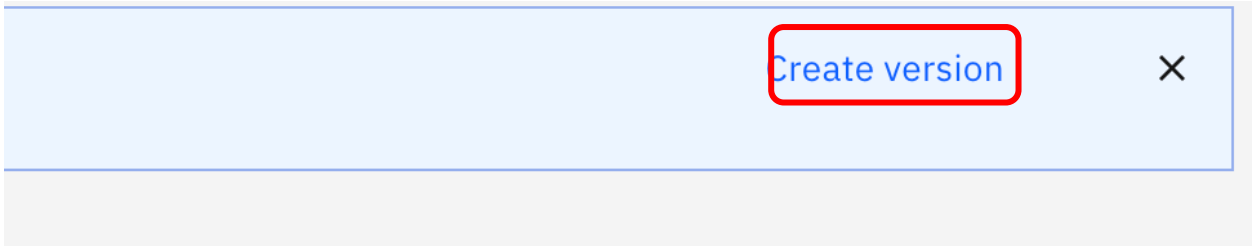
4.7 Click on “Share”, follow the instructions on screen and click “Share” once again.



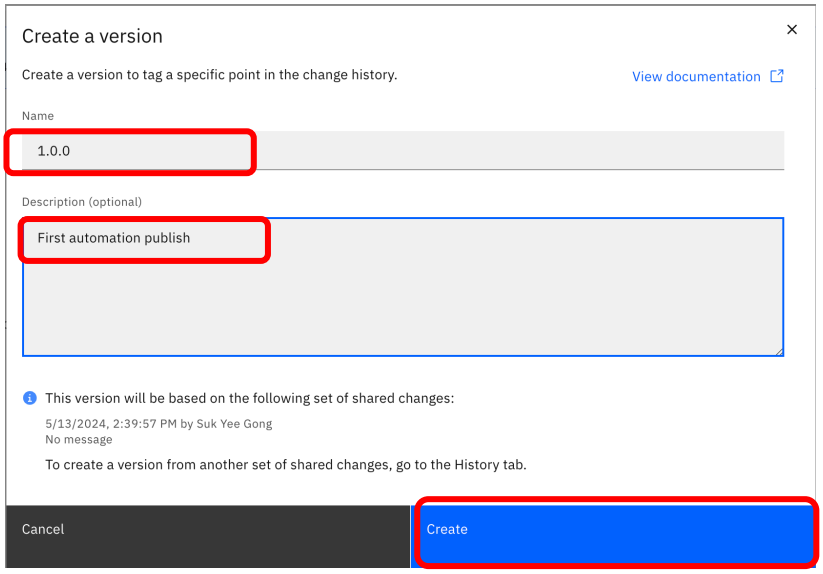
4.8 Select the “Publish” tab



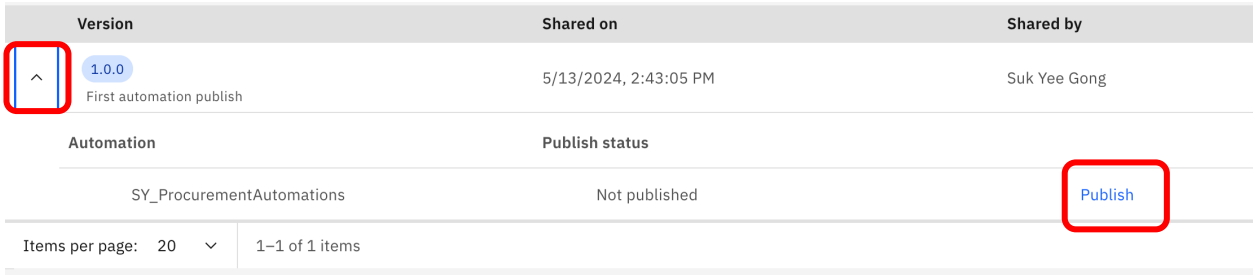
4.9 You will see a blue box on screen. Look for the “Create version” link and click.



4.10 Type in the Name (usually version number), Description and click Create



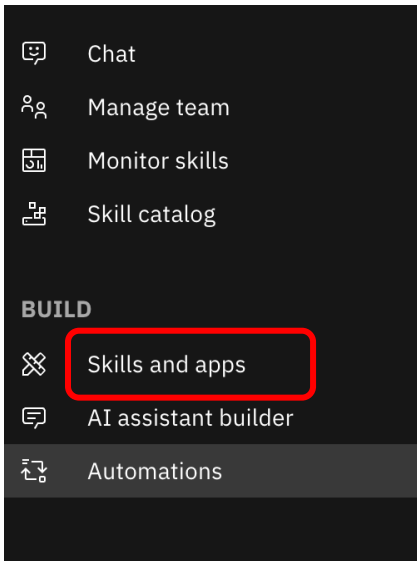
4.11 Expand '∨' against the version and click on 'publish' link. Confirm any confirmation dialog. If the publishing fails, wait for about 10 - 20 seconds and re-try until you have successfully published.



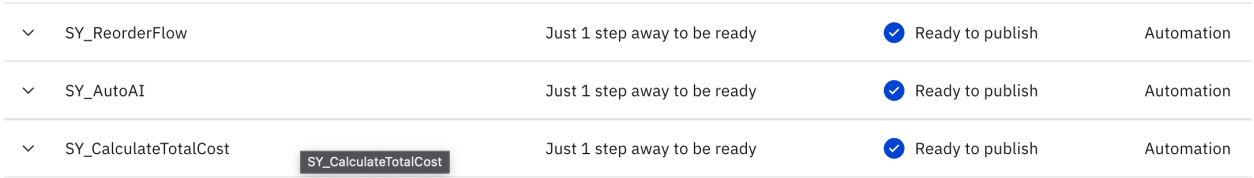
5 Using the Automation as a Skill

Now the automations will be a part of the skills which you can use within Watsonx Orchestrate. Just like previous self-built skills, we will need to publish the skill and add it into our personal skills to use it.

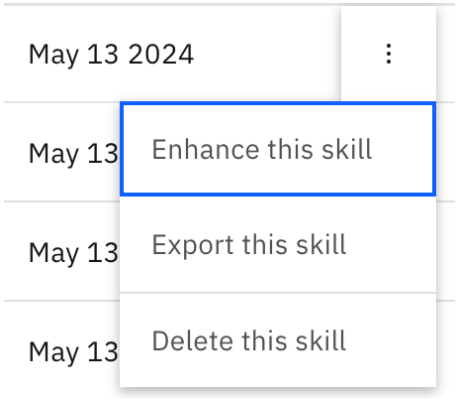
5.1 Access the skills and apps tab.



5.2 From the Skills tab, you will see the unpublished automations listed as skills.



5.3 Publish each skill by clicking on the 3 dots, “Enhance this skill” and click Publish.

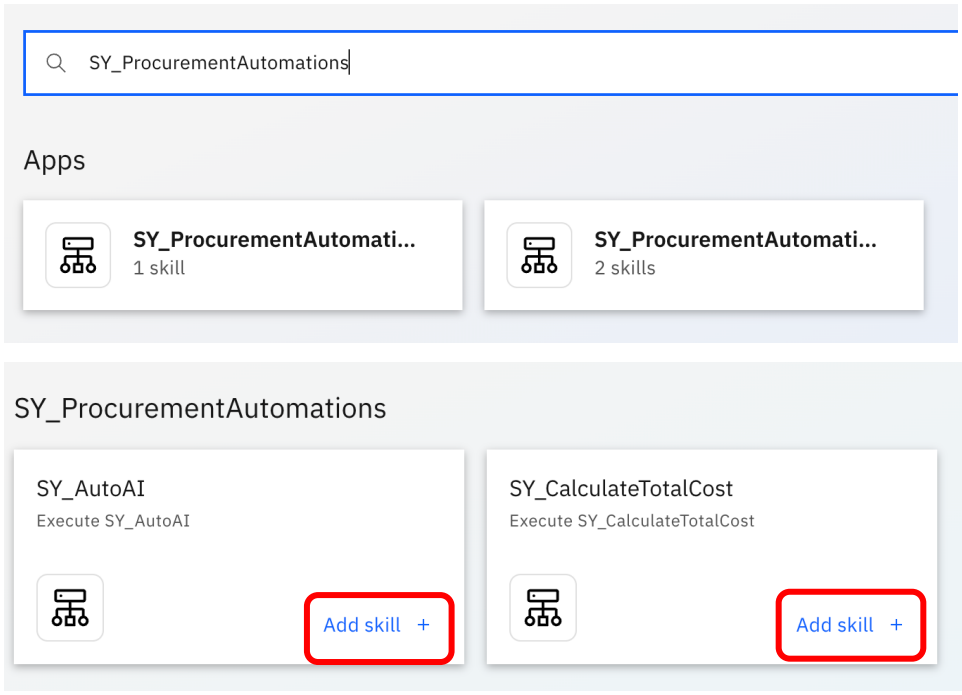


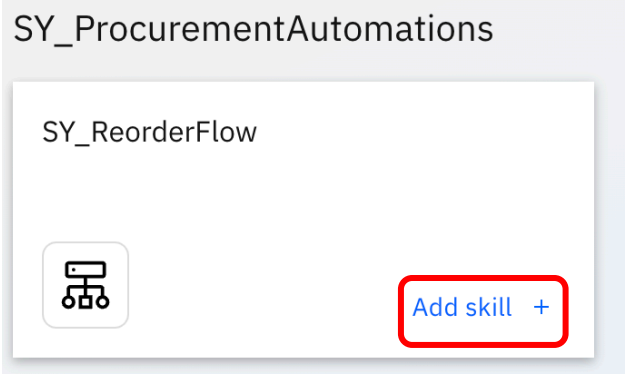
5.4 Repeat this step for all 3 automations.

Name	Step in the process	Status	Skill type
SY_CalculateTotalCost	Ready to use	Published	Automation
SY_AutoAI	Ready to use	Published	Automation
SY_ReorderFlow	Ready to use	Published	Automation

5.5 Click on chat and add the 3 skills into your personal skills.

5.6 Search for “[YourName]_ProcurementAutomations and add all the skills within this app.





5.7 You can test out the skills within the chat.

5.8 We will be incorporating the ReorderFlow in a skills flow in the following lab