

# Lab 1: Using out-of-the-box skills and creating a skill flow

## Use Case

In this tutorial we import a skill to generate a welcome message for new hires using the watsonx.ai generate content skill. We then use another skill (Outlook) to send the previously generated message by email. Finally, we combine the two skills into a **Skill Flow**, to accomplish a more complex multi-step task. The high-level steps to accomplish this are as follows:

1. Connect to watsonx.ai application and add the generate content skill to AI chat
2. Test the skill by generating a welcome email to a new hire
3. Connect to Outlook application and add the skill to send an email to AI chat
4. Test the skill by sending email to yourself
5. Create a skill flow by combining the two skills you just added
6. Test the skill by generating a new hire welcome email and sending it to yourself

## Assumptions

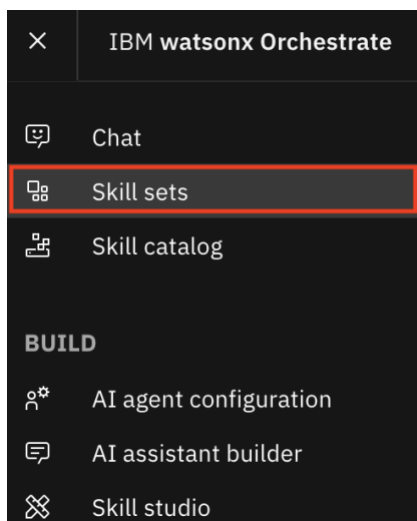
See lab **README** file for details

To complete this lab you need:

1. Access to an IBM watsonx Orchestrate tenant (on AWS or on IBM Cloud)
2. As of now (2/16/25) you will need admin rights to connect skills to the AI chat.  
In the future admin rights may not be required.
3. Outlook email ID and credentials (see lab **README** file)

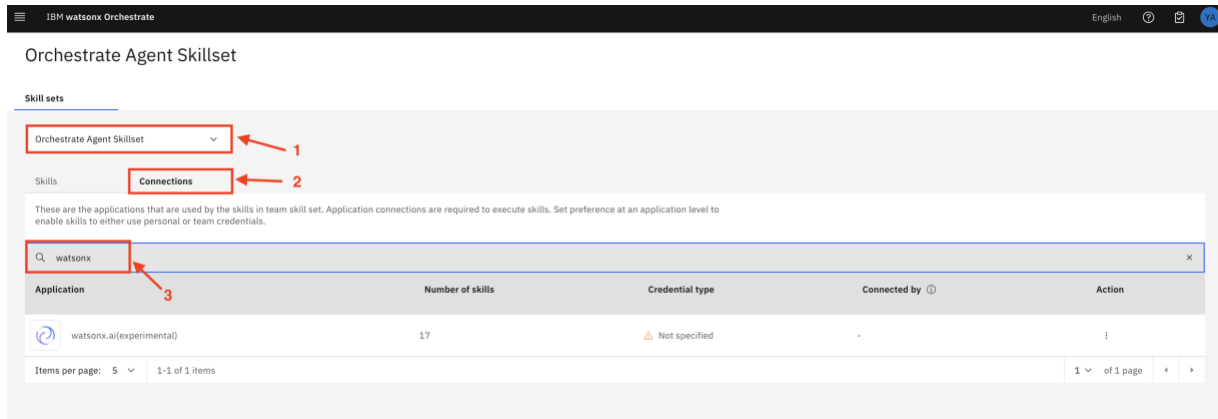
## Step 1: Connect to watsonx.ai application and add the generate content for an email skill to AI chat

1. Log into watsonx Orchestrate with your IBM ID
2. Navigate to **Skill sets** in the hamburger menu:

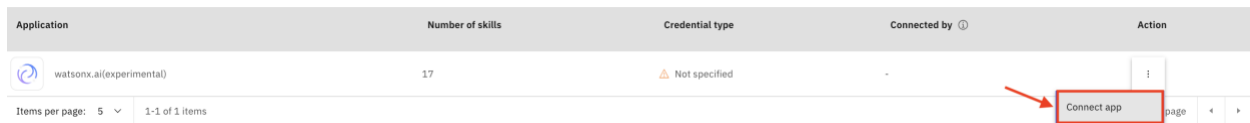


**Note:** if you are using watsonx Orchestrate on AWS, you would need to go into **Manage Team -> Skill sets**

3. Search for an application with skills you want to use in AI chat, i.e. watsonx.ai in this case
  1. Select **Orchestrate Agent Skillset**
  2. Select **Connections** panel
  3. Search for application name (**watsonx.ai**)



4. Click on ... to the right of the application name and then click on **Connect app**:



5. Select **Team credentials** and then click on **Connect app**:

Connect to watsonx.ai(experimental) ×

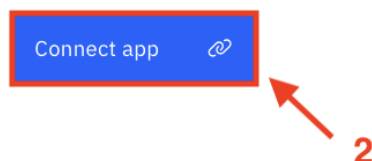
☐ Member credentials

Each team member uses their own credentials to connect to this app and use its skills.

☒ **Team credentials**

The admin sets the credentials each team member uses to connect to this app and use its skills.

You selected **Team credentials** for the credential type. Click **Connect app** to provide the credentials your team will use and to connect to the app.



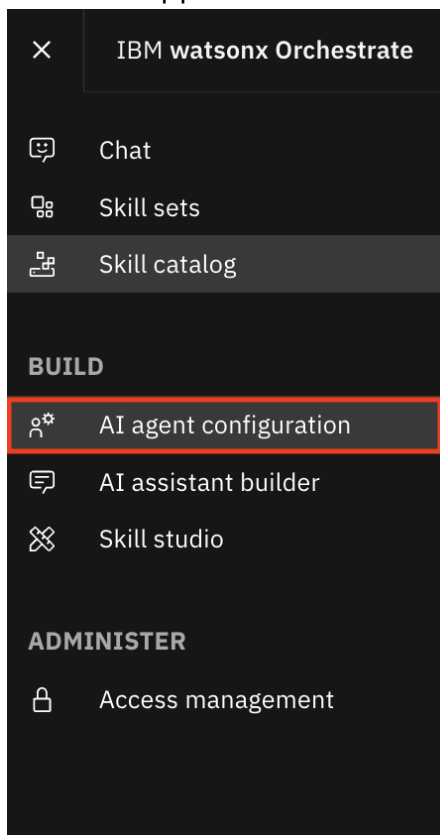
6. Enter bearer token (in this case no credentials are needed, you can just enter 6+ random characters) and click on **Connect app**:

Bearer Token

If the service uses Bearer Authentication please enter the token

Cancel Connect app

7. Once the application has been connected, go into the **AI Agent configuration**:



## 8. Under Apps and skills select the application you just connected (watsonx.ai):

IBM watsonx Orchestrate

### AI agent configuration

Agent configuration allows users to customize their chat experience according to their preferences.

- Model settings
- System prompt
- Starter prompts
- Assistants
- Apps and skills**
- Embed chat

#### Apps and skills let your team connect to data and complete tasks in other applications

[Why add apps and skills?](#)

#### Apps

Skills are grouped by their associated application. Select an app to see all the skills in them.

Search

Sort by: Alphabetically A-Z

IBM Document Processing	Microsoft Outlook	Visible	Skill flows	YA_Lending_Services	<b>watsonx.ai(experimental)</b> Visible
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## 9. Add skill to chat:

IBM watsonx Orchestrate

### AI agent configuration

Agent configuration allows users to customize their chat experience according to their preferences.

- Model settings
- System prompt
- Starter prompts
- Assistants
- Apps and skills**
- Embed chat

#### Apps and skills let your team connect to data and complete tasks in other applications

[Why add apps and skills?](#)

[Back to all apps](#)

watsonx.ai(experimental) @watsonx.ai(experimental)


Visible

Search

Sort by: Alphabetically A-Z

<b>Freshservice ticket sentiment</b> From watsonx.ai(experimental)	<b>Freshservice ticket summarization</b> From watsonx.ai(experimental)	<b>Generate a summary</b> From watsonx.ai(experimental)	<b>Generate an email</b> From watsonx.ai(experimental)	<b>Get a microsoft teams meeting tra...</b> From watsonx.ai(experimental)
Add to chat +	Add to chat +	Added ✓	<b>Add to chat +</b>	Add to chat +
<b>Github issue sentiment</b> From watsonx.ai(experimental)	<b>Github issue summarization</b> From watsonx.ai(experimental)	<b>Outlook email summary</b> From watsonx.ai(experimental)	<b>Salesforce case sentiment analyze</b> From watsonx.ai(experimental)	<b>Salesforce case summarization</b> From watsonx.ai(experimental)
Add to chat +	Add to chat +	Add to chat +	Add to chat +	Add to chat +
<b>Salesloft email summary</b> From watsonx.ai(experimental)	<b>Sharepoint document summary</b> From watsonx.ai(experimental)	<b>Summarize a Salesforce opportun...</b> From watsonx.ai(experimental)	<b>Summarize a Servicenow incident</b> From watsonx.ai(experimental)	<b>Summarize a Zendesk ticket</b> From watsonx.ai(experimental)
Add to chat +	Add to chat +	Add to chat +	Add to chat +	Add to chat +
<b>Summarize the Box content</b> From watsonx.ai(experimental)	<b>Summarize the Webex meeting tr...</b> From watsonx.ai(experimental)			
Add to chat +	Add to chat +			

## 10. Provide a description about what the skill does, to help the supervisory agent route requests, and click on **Add skill**:



Generate an email

from watsonx.ai(experimental)

×

An accurate description of the purpose and capabilities of the skill is required for the AI model to successfully activate this skill in the chat.

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Routing description

Description of skill capabilities29/500

Generate content for an email

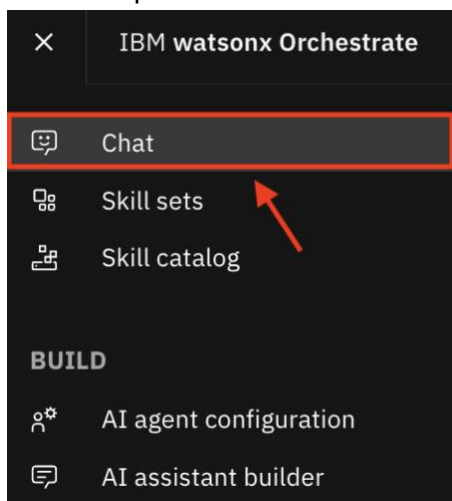
Tip: [What makes a good description?](#)

Cancel

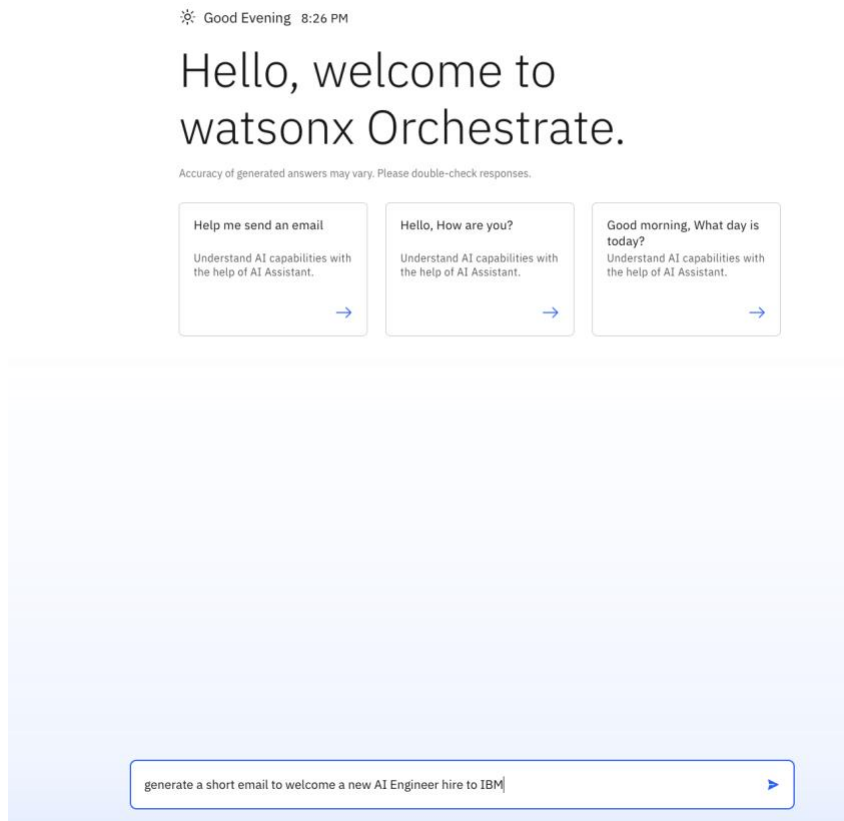
Add skill

## Step 2: Test the skill by generating a welcome email to a new hire

1. Open AI chat to test:



2. Type your request in the chat to test the added skill:



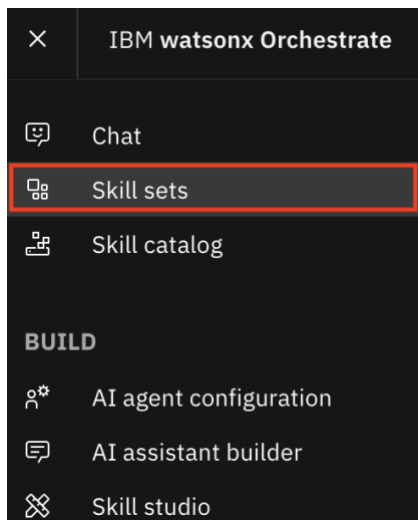
As you can see, the query was routed to the right skill.

**Note:** a screenshot will be added here asap - as soon as the product issue related to connecting to watsonx.ai has been resolved

## Step 3: Connect to Outlook application and add the send email skill to AI chat

We will follow similar steps to connect to Outlook application and add the send email skill to AI chat. Note: you will need to use credentials provided to you to connect to Outlook (instead of using your own email account).

1. Navigate to **Skill sets** in the hamburger menu:

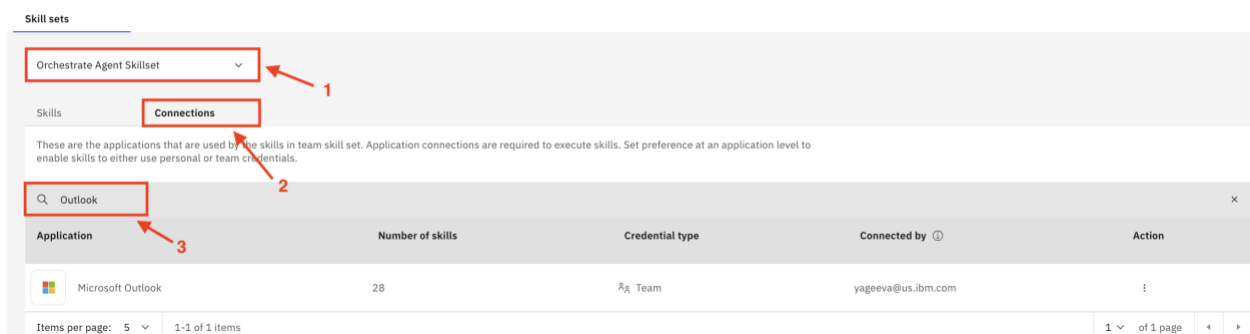


**Note:** if you are using watsonx Orchestrate on AWS, you would need to go into **Manage Team -> Skill sets**

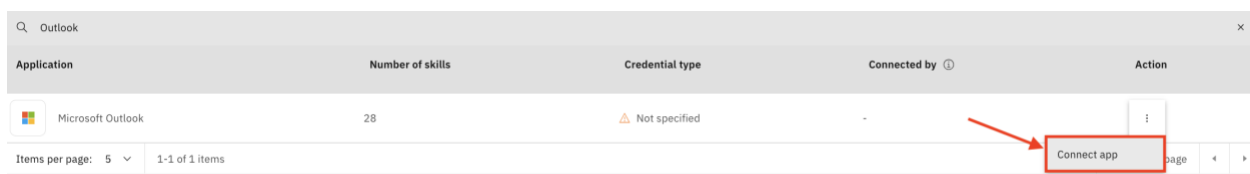
2. Search for an application with skills you want to use in AI chat, i.e. Outlook in this case

1. Select **Orchestrate Agent Skillset**
2. Select **Connections** panel
3. Search for application name (**Outlook**)

Orchestrate Agent Skillset



3. Click on ... to the right of the application name and then click on **Connect app**:





4. Select **Team credentials** and then click on **Connect app**:

Connect to Microsoft Outlook

Member credentials

Each team member uses their own credentials to connect to this app and use its skills.

Team credentials

The admin sets the credentials each team member uses to connect to this app and use its skills.

You selected **Team credentials** for the credential type. Click **Connect app** to provide the credentials your team will use and to connect to the app.

Connect app

5. Select **Non-admin user** and then click on **Connect app**:

Connect to Microsoft Outlook

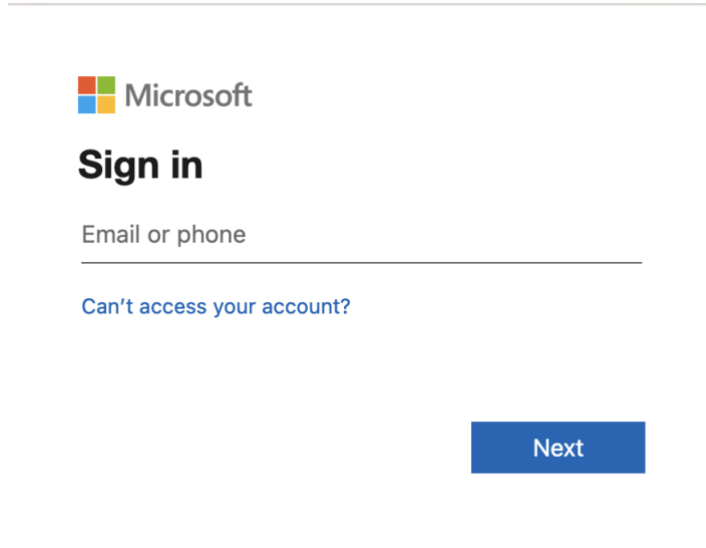
Type

Non-admin user

Cancel

Connect app

6. Use the credentials provided to you to log into Outlook (**do not** use your own Outlook email account):

A screenshot of the Microsoft sign-in page. At the top left is the Microsoft logo. Below it, the text "Sign in" is displayed in a large, bold font. Underneath "Sign in" is a text input field labeled "Email or phone". Below the input field is a link that says "Can't access your account?". At the bottom right of the sign-in area is a blue button labeled "Next".

Microsoft

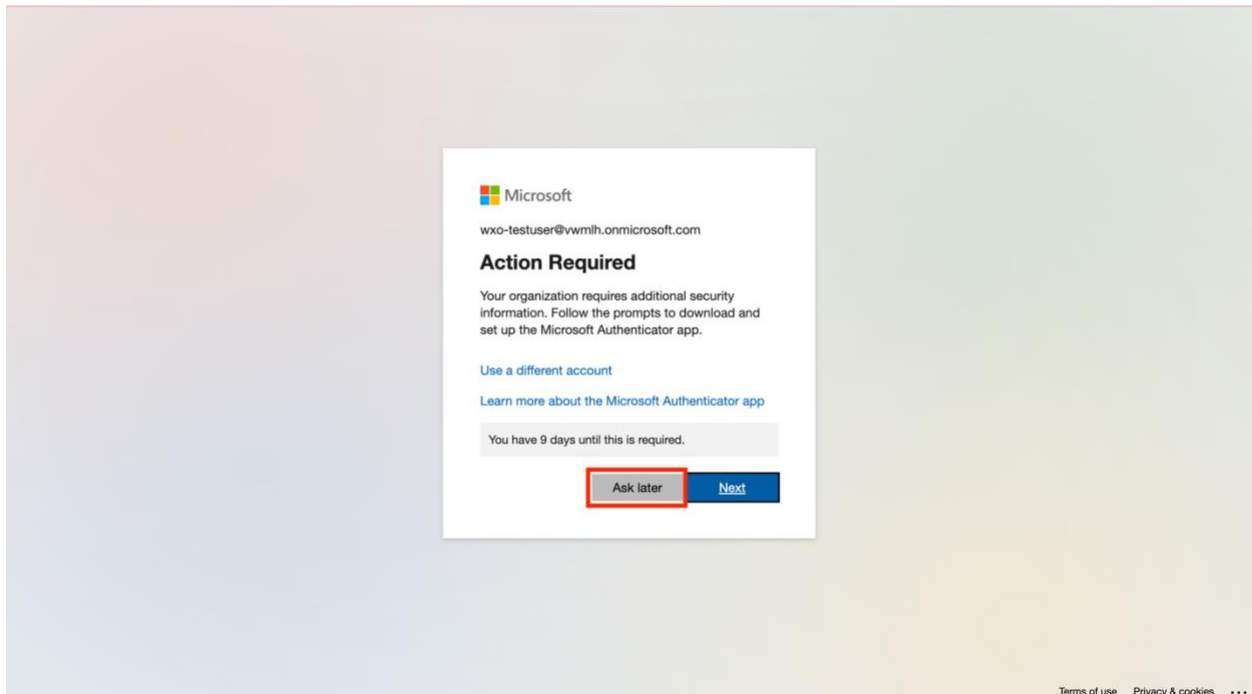
## Sign in

Email or phone

[Can't access your account?](#)

Next

7. Select **Ask Later** if prompted for additional security information

A screenshot of a Microsoft "Action Required" dialog box. The dialog box is white with a light gray border and is centered on a blurred background. At the top left is the Microsoft logo. Below it is the email address "wxo-testuser@vwmih.onmicrosoft.com". The heading "Action Required" is in bold. Below the heading, the text reads: "Your organization requires additional security information. Follow the prompts to download and set up the Microsoft Authenticator app." There are two links: "Use a different account" and "Learn more about the Microsoft Authenticator app". Below these links is a gray box containing the text "You have 9 days until this is required." At the bottom of the dialog box are two buttons: "Ask later" (highlighted with a red rectangle) and "Next".

Microsoft

wxo-testuser@vwmih.onmicrosoft.com

### Action Required

Your organization requires additional security information. Follow the prompts to download and set up the Microsoft Authenticator app.

[Use a different account](#)

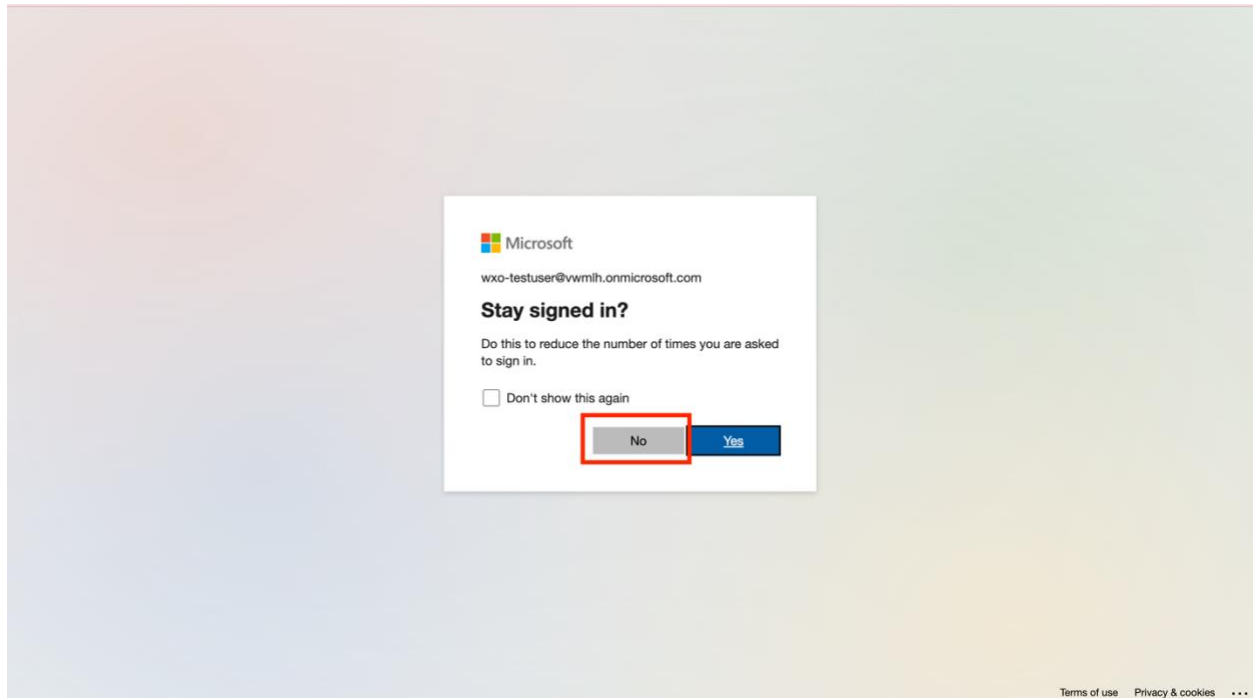
[Learn more about the Microsoft Authenticator app](#)

You have 9 days until this is required.

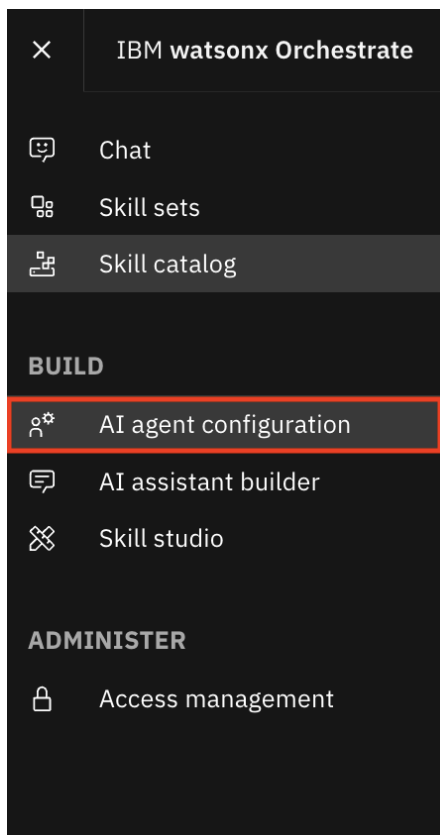
Ask later Next

Terms of use Privacy & cookies ...

8. Select **No** when asked to "Stay signed in?"



9. Once you are connected to the application, go back into the **AI agent configuration**:



## 10. Under Apps and skills select the application you just connected (watsonx.ai):

### AI agent configuration

Agent configuration allows users to customize their chat experience according to their preferences.

The screenshot shows the 'Apps and skills' configuration page. On the left, a sidebar contains navigation links: 'Model settings', 'System prompt', 'Starter prompts', 'Assistants', 'Apps and skills' (highlighted with a red box), and 'Embed chat'. The main content area has a header 'Apps and skills let your team connect to data and complete tasks in other applications' with a link 'Why add apps and skills?'. Below this, a section titled 'Apps' states 'Skills are grouped by their associated application. Select an app to see all the skills in them.' A search bar and a 'Sort by: Alphabetically A-Z' dropdown are present. A table lists applications: 'IBM Document Processing', 'Microsoft Outlook' (highlighted with a red box and marked 'Visible'), 'Skill flows', 'YA\_Lending\_Services', and 'watsonx.ai(experimental)'. Each application has a small icon below its name.

## 11. Add skill to chat:

The screenshot shows the 'Microsoft Outlook' skill configuration page. The header includes 'Microsoft Outlook' and '@microsoftoutlook'. Below the header, there's a 'Hidden' toggle, a search bar, and a 'Sort by: Alphabetically A-Z' dropdown. The main area displays a grid of skills from Microsoft Outlook, each with a percentage icon and an 'Add to chat +' button. The skills are: 'Get all organizations', 'Reply to an email', 'Send an email' (highlighted with a red box and an arrow pointing to its 'Add to chat +' button), 'Update a calendar event', 'Update a contact', 'Update a contact folder', 'Update a group', and 'Update a mail folder'. At the bottom, there's a pagination bar showing 'Items per page: 20', '21-28 of 28 items', and '2 of 2 pages'.

## 12. Provide a description about what the skill does, to help the supervisory agent route requests, and click on **Add skill:**



## Send an email

from Microsoft Outlook



An accurate description of the purpose and capabilities of the skill is required for the AI model to successfully activate this skill in the chat.

### Routing description

Description of skill capabilities

27/500

Send an email using Outlook

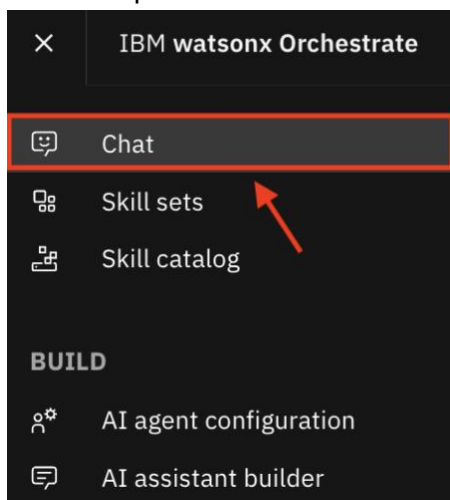
Tip: [What makes a good description?](#)

Cancel

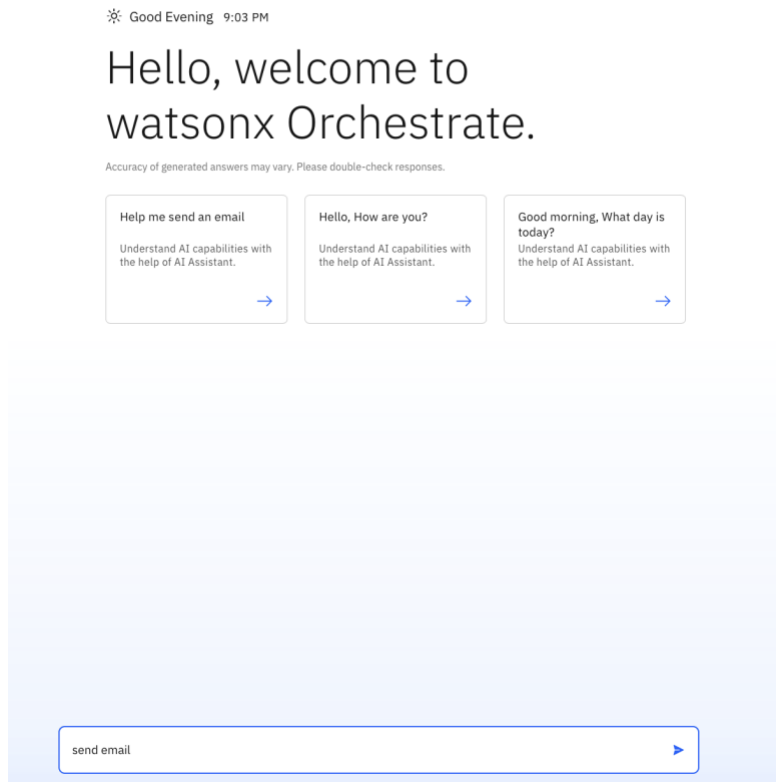
Add skill

## Step 4: Test the skill by sending a test email

1. Open AI chat to test:



2. Type your request in the chat to test the added skill:




As you can see, the query was routed to the right skill. Fill in the details, click on **Apply:**

You 9:04 PM

send email

 watsonx 9:04 PM

 Send an email

To

yageeva@us.ibm.com

A semi-colon (;) separated list of the recipients.

Cc

A semi-colon (;) separated list of the Cc recipients.

Bcc

A semi-colon (;) separated list of the Bcc recipients.

Subject

Test Outlook send email skill

The subject of the email.

Content

Test

The content of the email.

Content type

Text

The content type of the message body. Possible values include: Text or HTML.

[Show all fields](#)

Cancel

Apply

Verify that you received the test email:



watsonx 9:06 PM

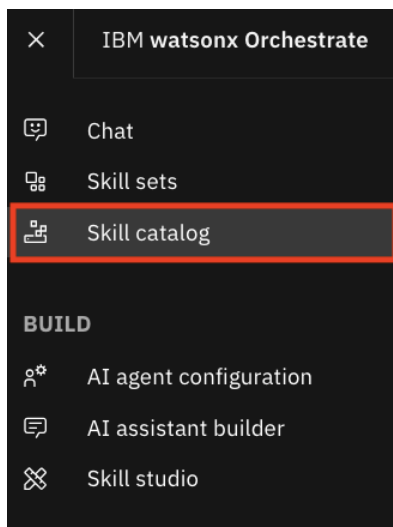
The email was sent.

## Step 5: Create a skill flow by combining the two skills you just added

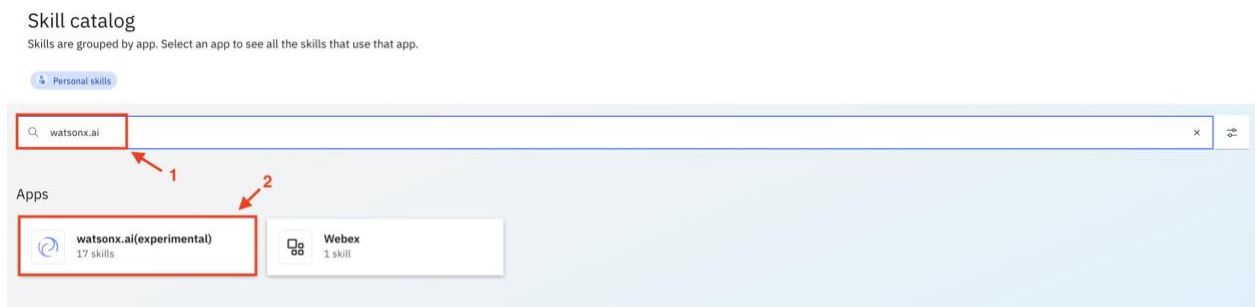
So far you have added the individual skills and tested them. You can combine two or more skills to create a skill flow. Steps to create a skill flow:

1. First, before creating the skill flow, we need to add the skills to our Personal Skills from the catalog:

Go into Skill catalog:

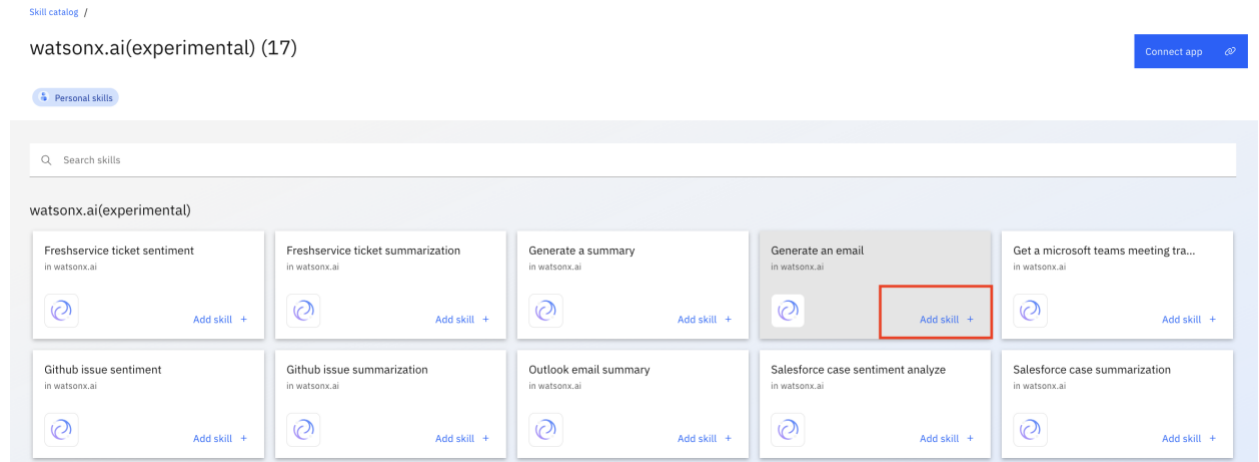


Search for watsonx.ai application in the **Skill catalog** and click on the **watsonx.ai** tile:

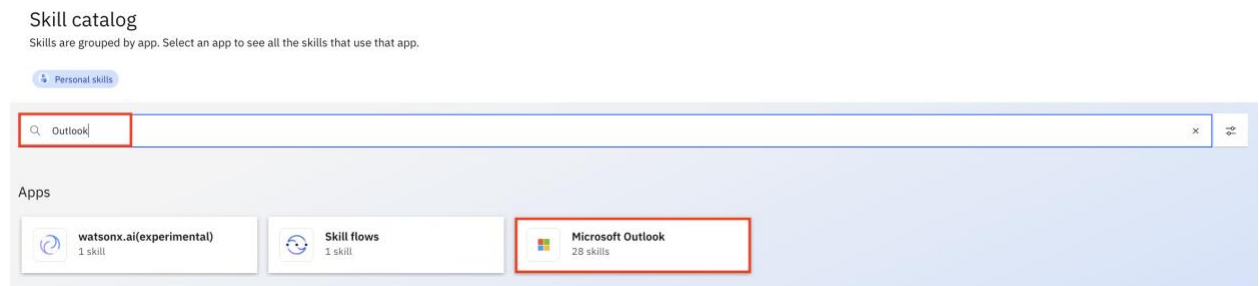




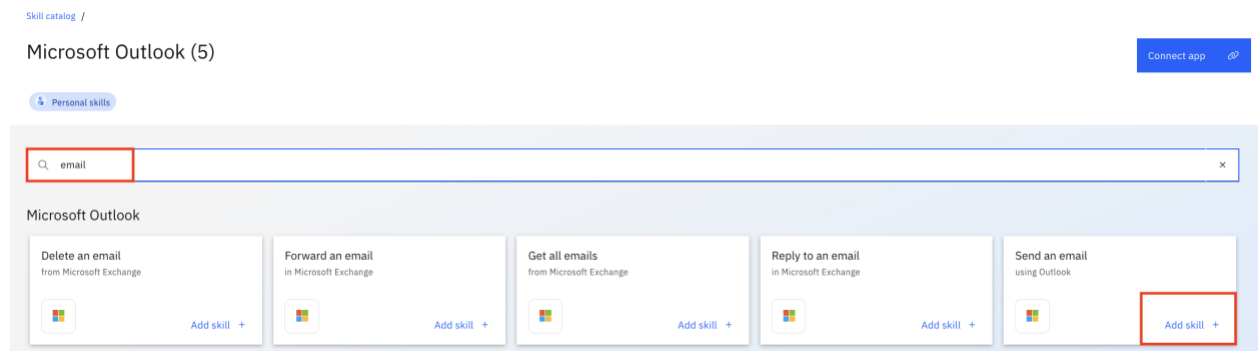
## Add the **Generate an email** skill:



Go back into the **Skill catalog**, search for **Microsoft Outlook** app, and click on the tile:



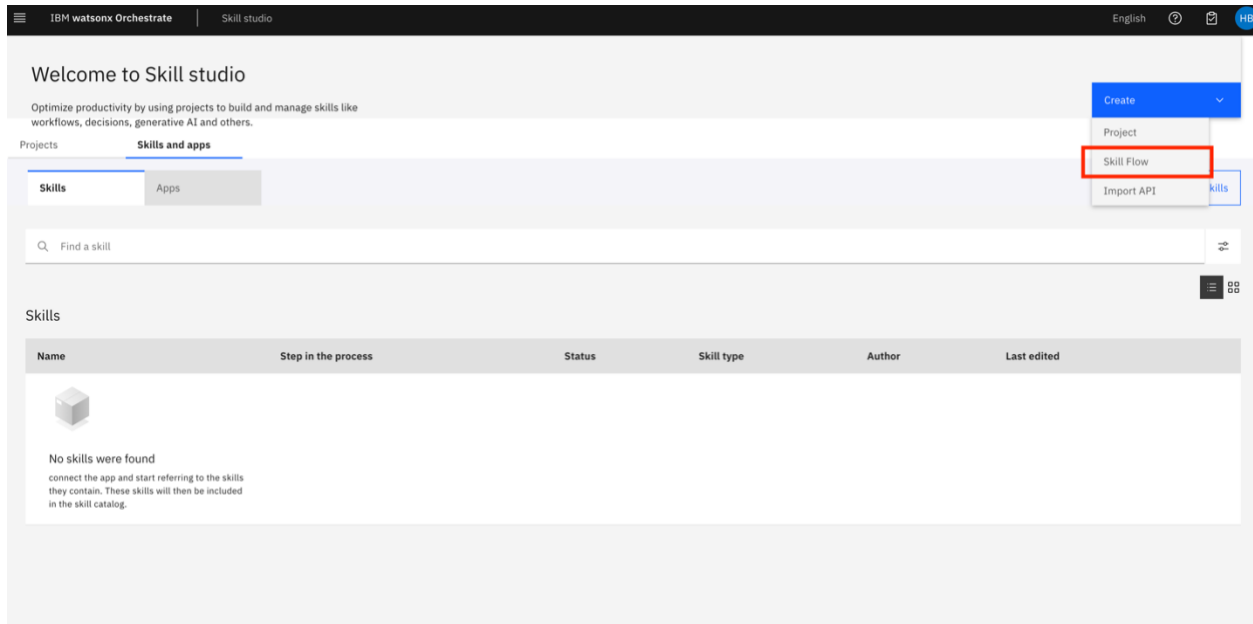
## Search for the **Send an email** skill and **Add skill**:



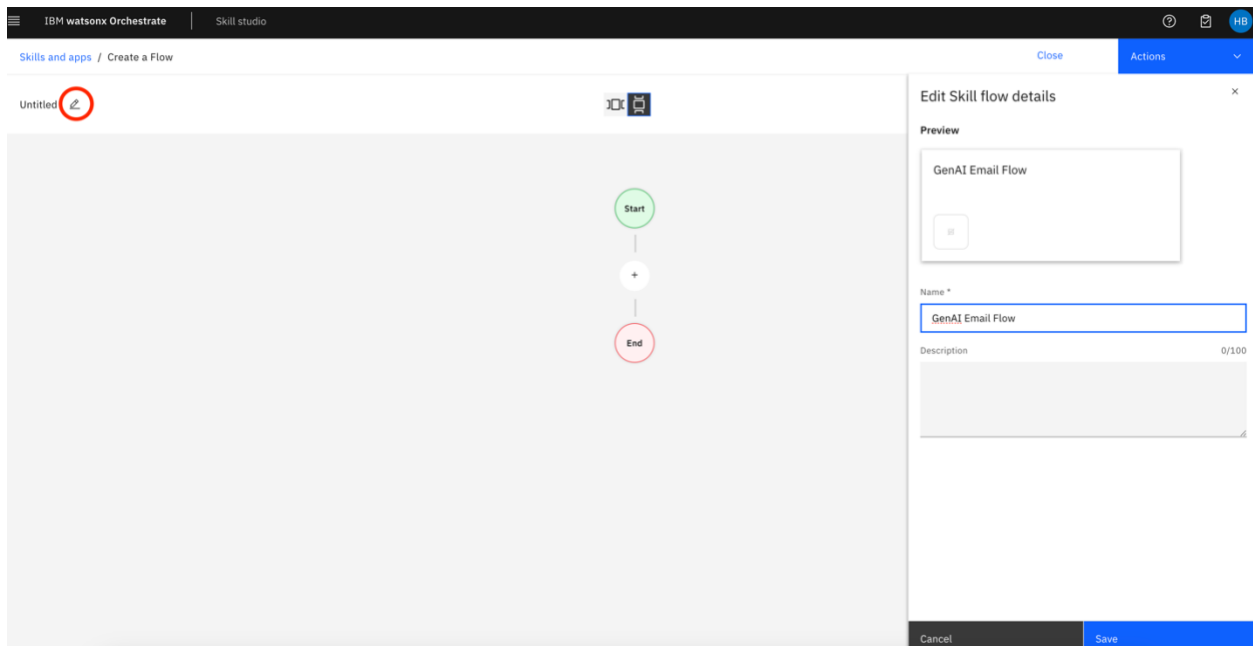
Now that the skills have been added to the Personal Skills in the catalog, we are ready to create the skill flow!

2. Navigate to **Skill studio** by clicking the hamburger menu in the upper left corner and selecting **Skill studio** in the BUILD section

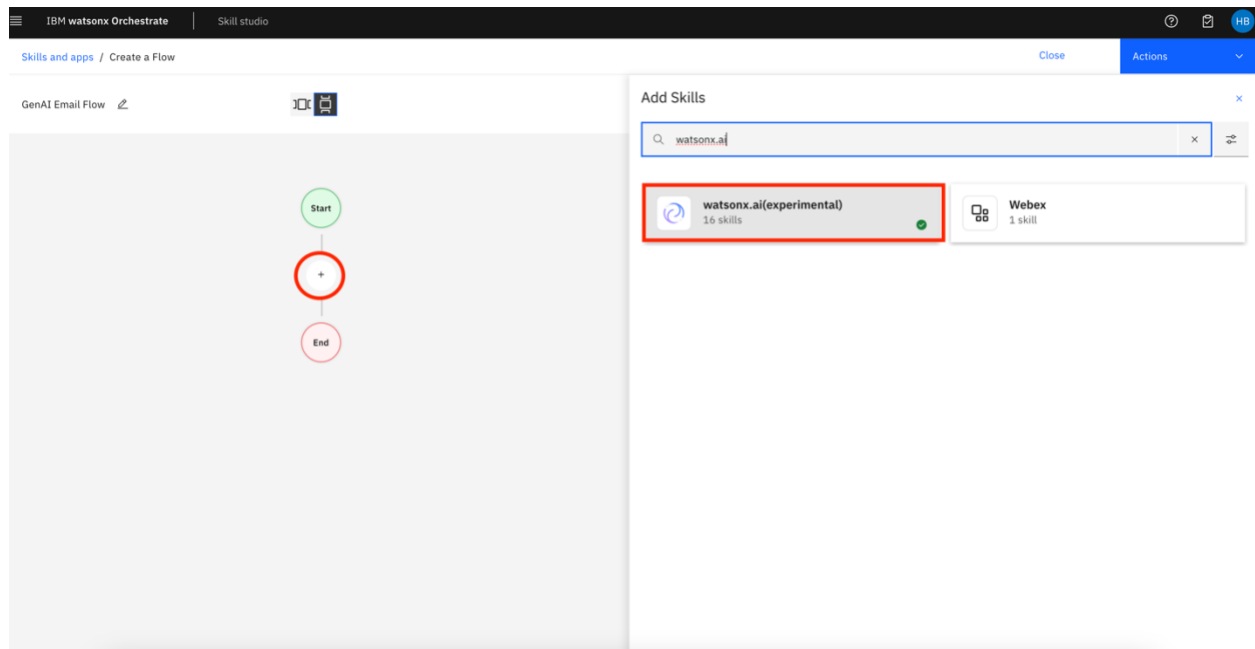
### 3. Create a new Skill Flow by clicking the dropdown on **Create**, then selecting **Skill Flow**



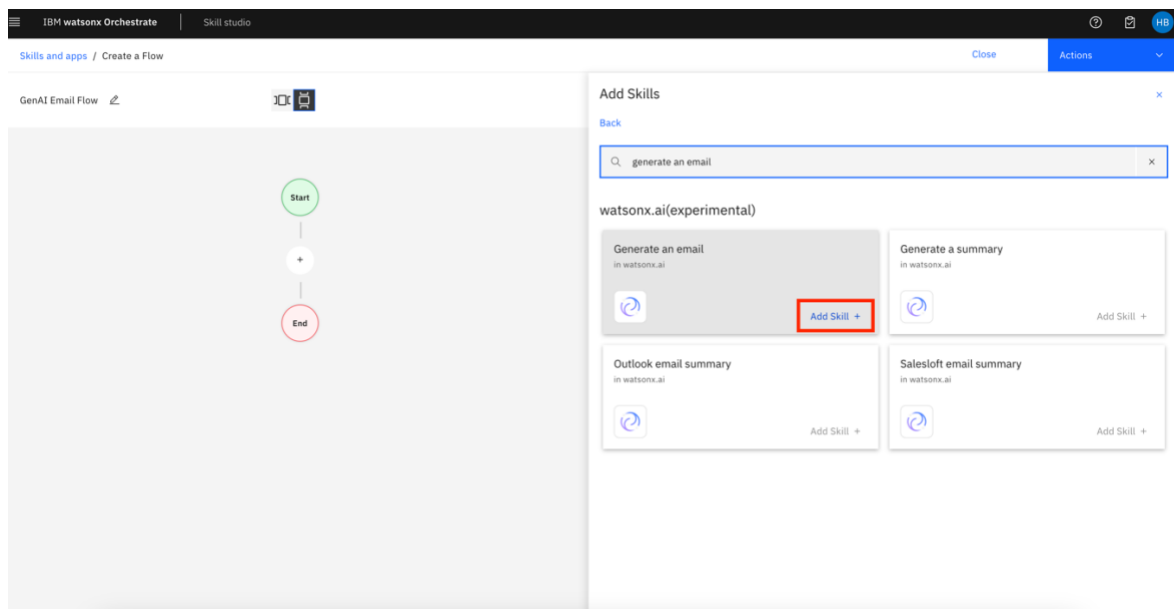
### 4. Click on the pen icon to edit the name of the skill and change it to **{Your\_Initials} GenAI Email Flow** then select **Save**



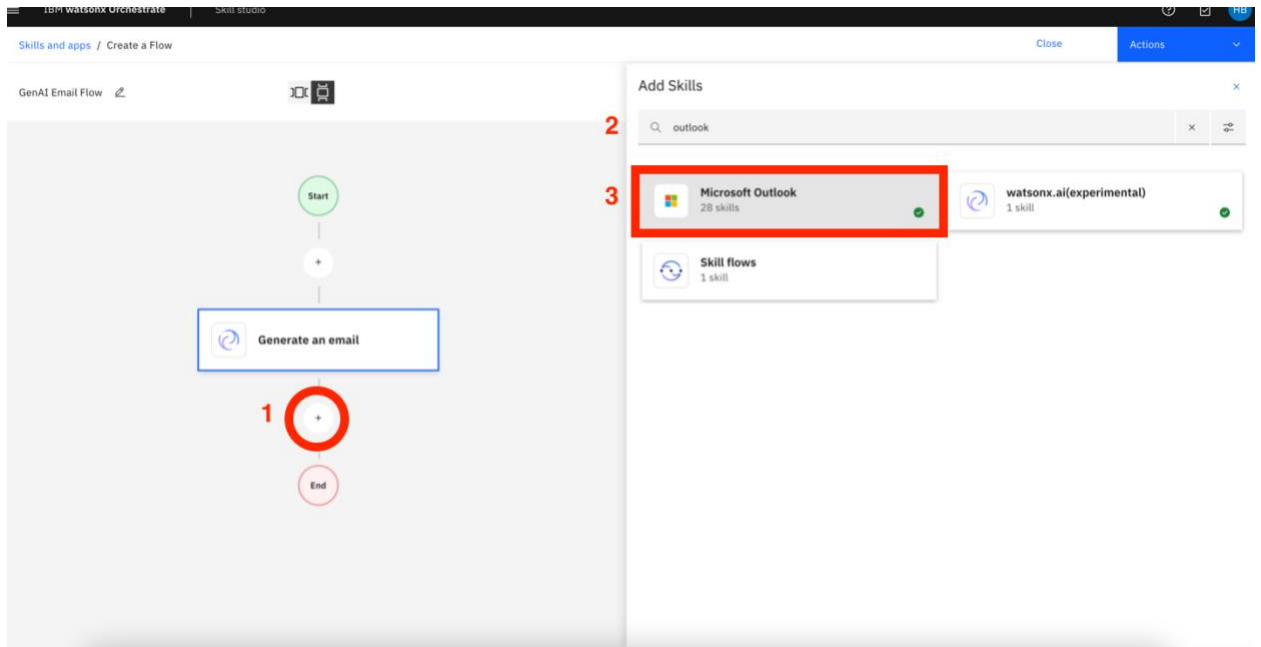
### 5. Click on the **plus sign** between the Start and End flow, then search for *watsonx.ai* skills and select



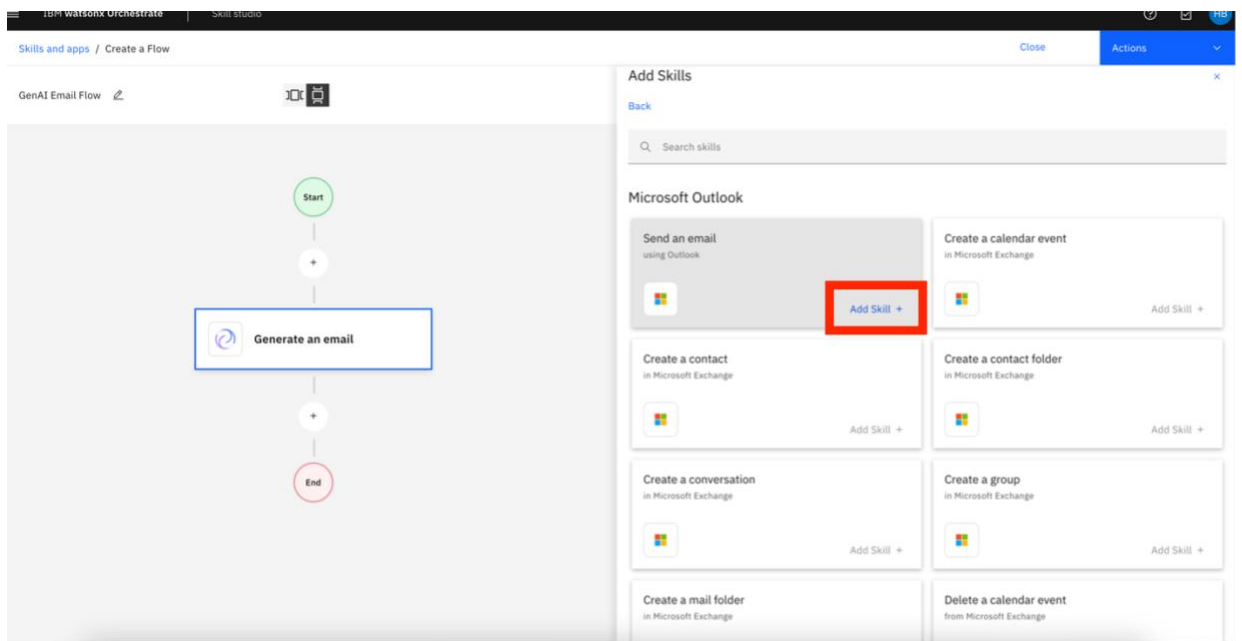
6. Search for **Generate an email** and select **Add Skill +**



7. Next click the **+** button below the **Generate an email** skill to add a new skill. Search for **outlook** and select the **Microsoft Outlook** skill group.



8. Select **Add Skill +** for the **Send an email** skill



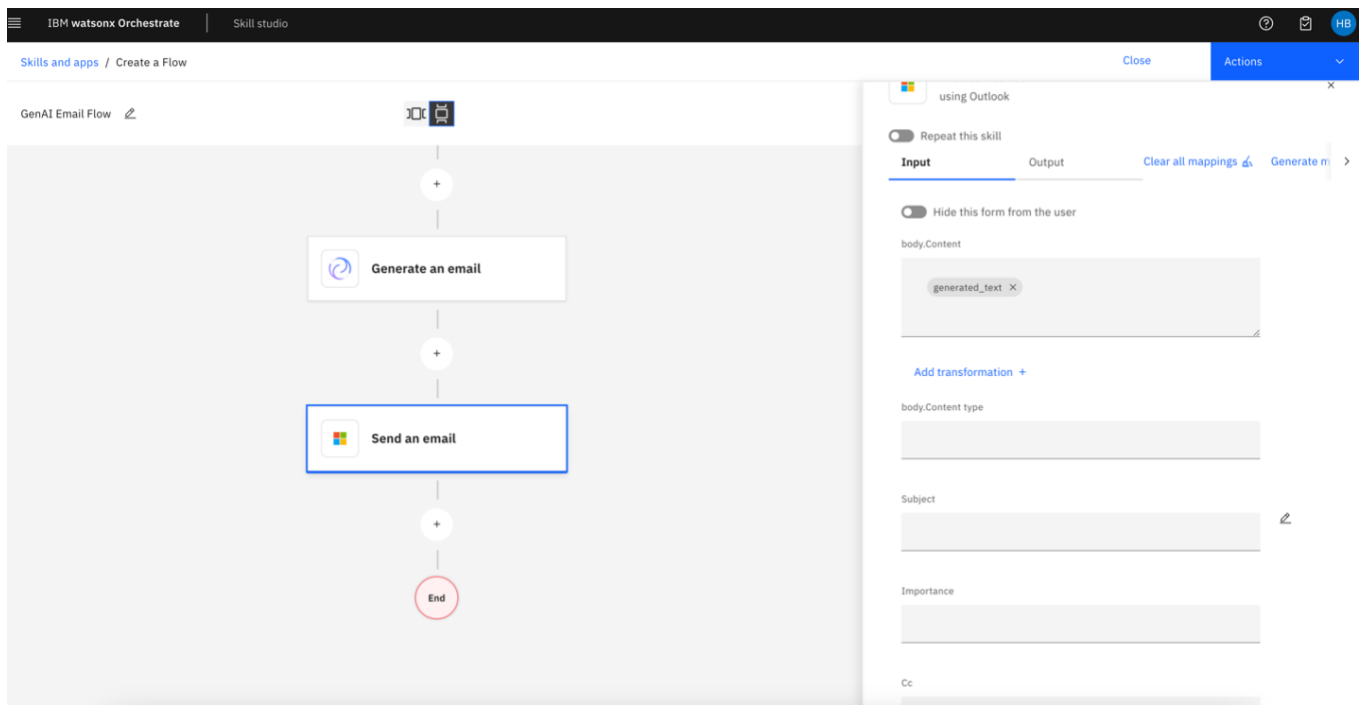
9. Click on **Send an email** skill and in the **Input** tab click the **body.Content**, select **Generate an email** → **generated\_text**

The image displays two screenshots of the IBM watsonx Orchestrate Skill Studio interface, showing the configuration of a 'Send an email' skill within a 'GenAI Email Flow'.

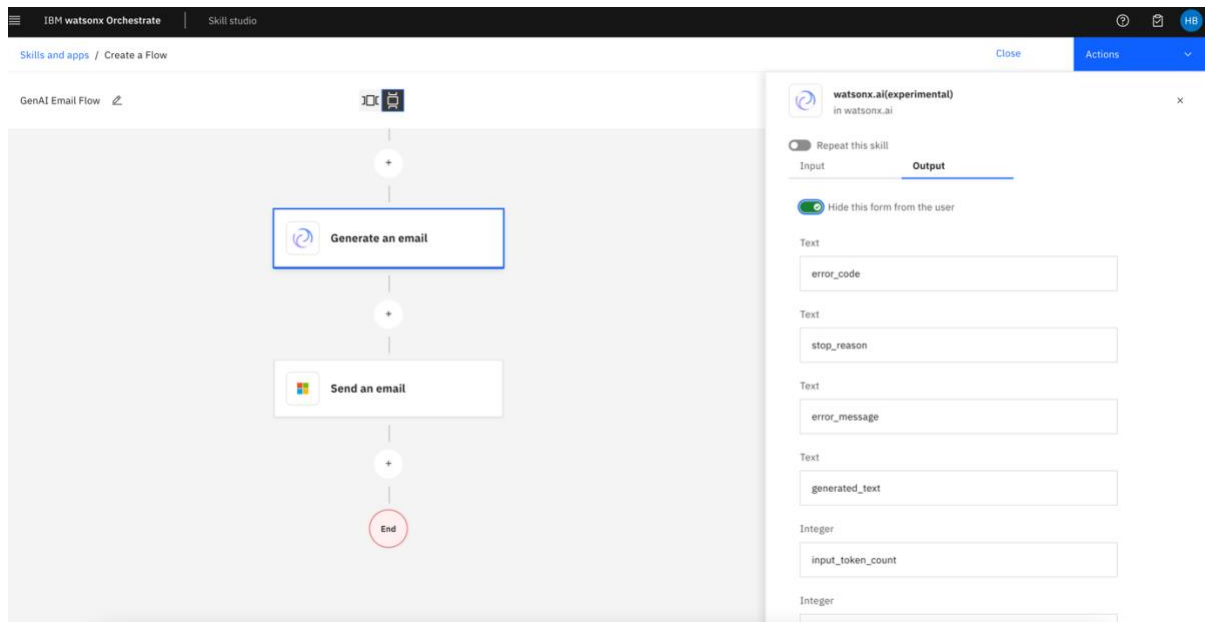
**Top Screenshot:** The 'Send an email' skill is selected in the flow. The right-hand pane shows the 'Input' tab for the skill. The 'body.Content' field is highlighted, and the 'Mapping data for "body.properties.content"' dialog is open. The dialog shows the skill 'Generate an email' selected from the 'Skills/' list.

**Bottom Screenshot:** The 'Send an email' skill is selected in the flow. The right-hand pane shows the 'Input' tab for the skill. The 'body.Content' field is highlighted, and the 'Mapping data for "body.properties.content"' dialog is open. The dialog shows the skill 'Skills/watsonx.ai(experimental)-Generate an email' selected from the 'Skills/' list. The 'Skill Output' section shows the following output fields:

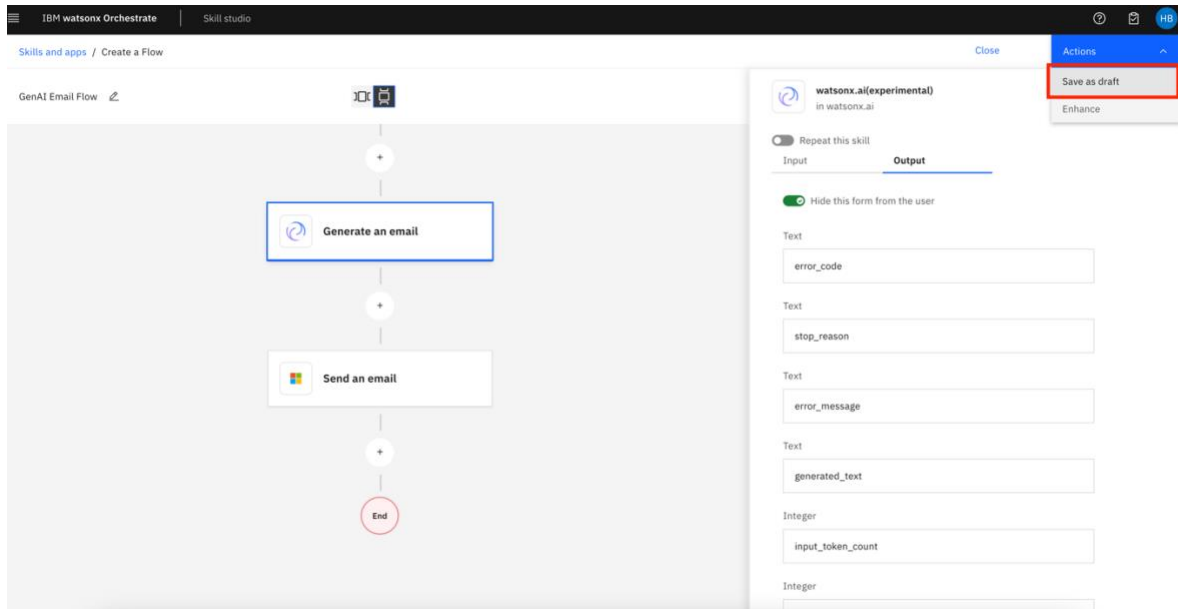
Skill Output	{#}
error_code	abc
stop_reason	abc
error_message	abc
generated_text	abc



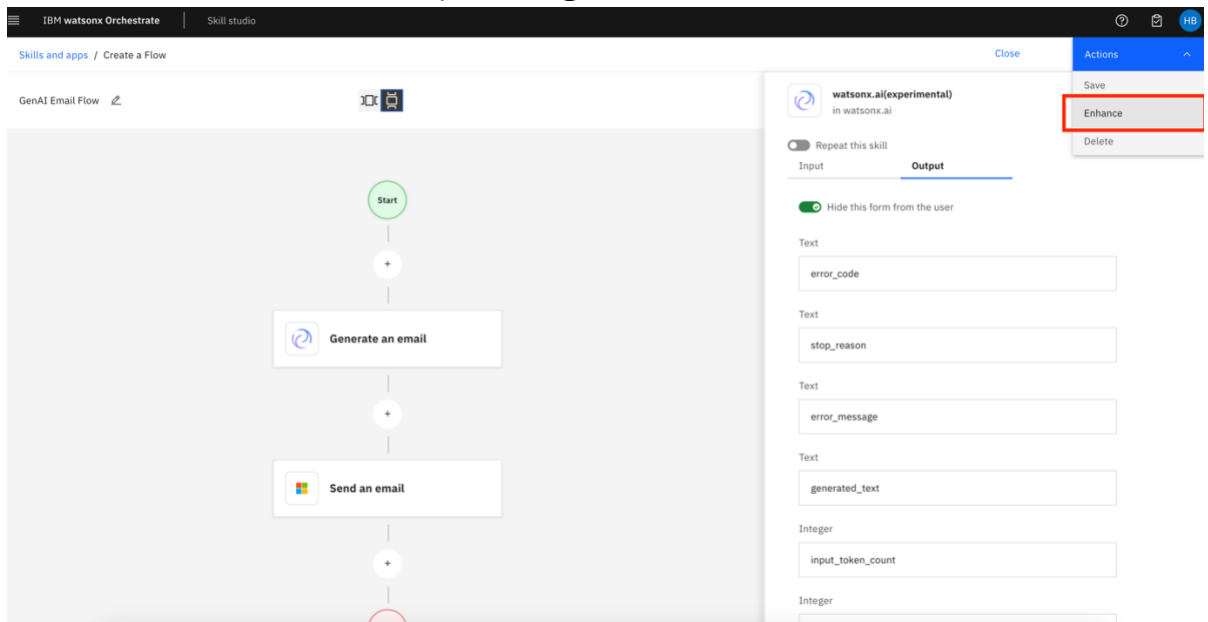
10. Now select **Generate an email skill**, in the **Output** tab turn on the toggle **Hide this form from the user**



11. Now save your skill flow as a draft by clicking the **Actions** drop down and selecting **Save as Draft**



12. Next, click on the **Actions** dropdown again and select **Enhance**



13. To publish your skill, select the **Publish** button

IBM watsonx Orchestrate | Skill studio

Skills and apps / Enhance this skill

### Enhance the “GenAI Email Flow” skill

Add details that will make people want to use this skill.

Name	Phrases	Next best skills
Name and describe this skill in a way that tells users how it's used and why they would want to use it.		
Name*	GenAI Email Flow	
Description	0/100 Enter the description	
API version*	1.0.0	
Categories	Add categories	
App	Skill flows	

**Preview**

The skill will look like this in the catalog.

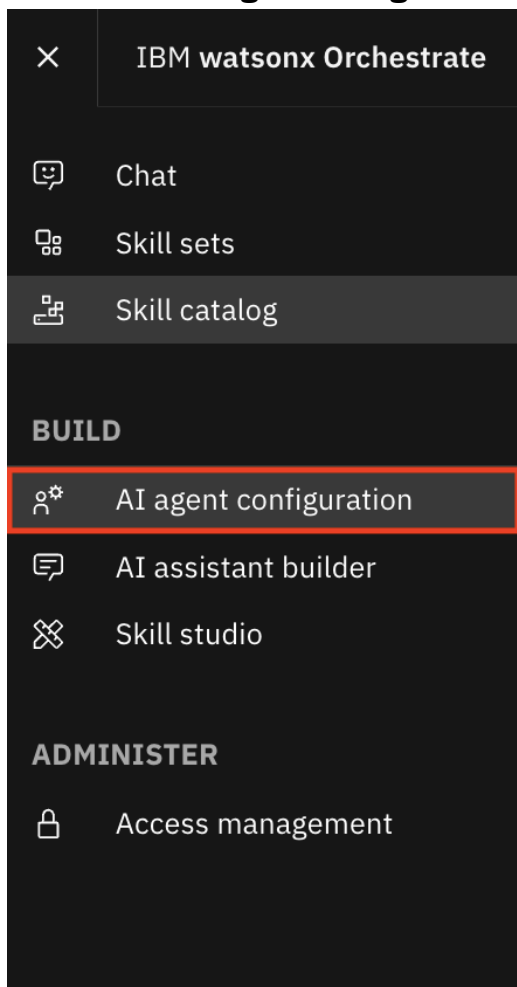
GenAI Email Flow

The skill will look like this in the skill set.

GenAI Email Flow

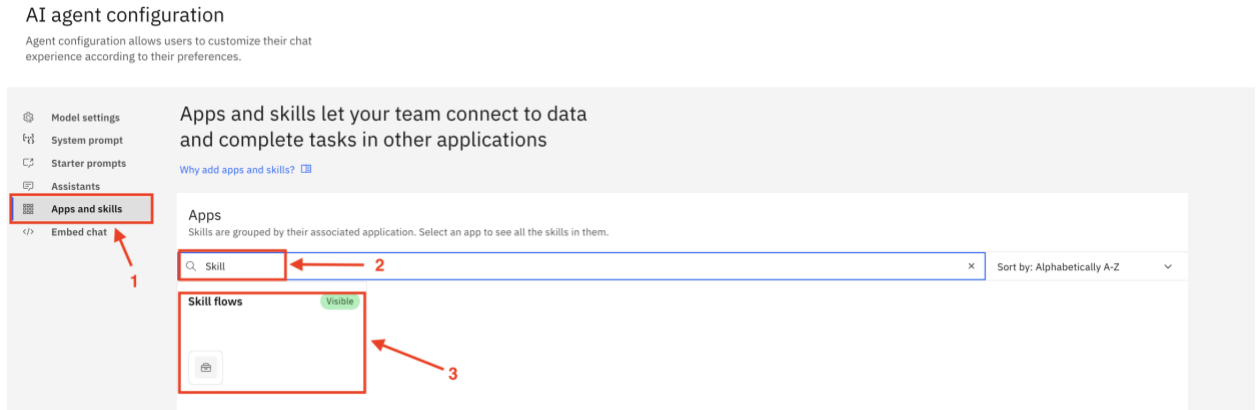
Cancel Publish Save as draft

14. Go into the **AI agent configuration**:

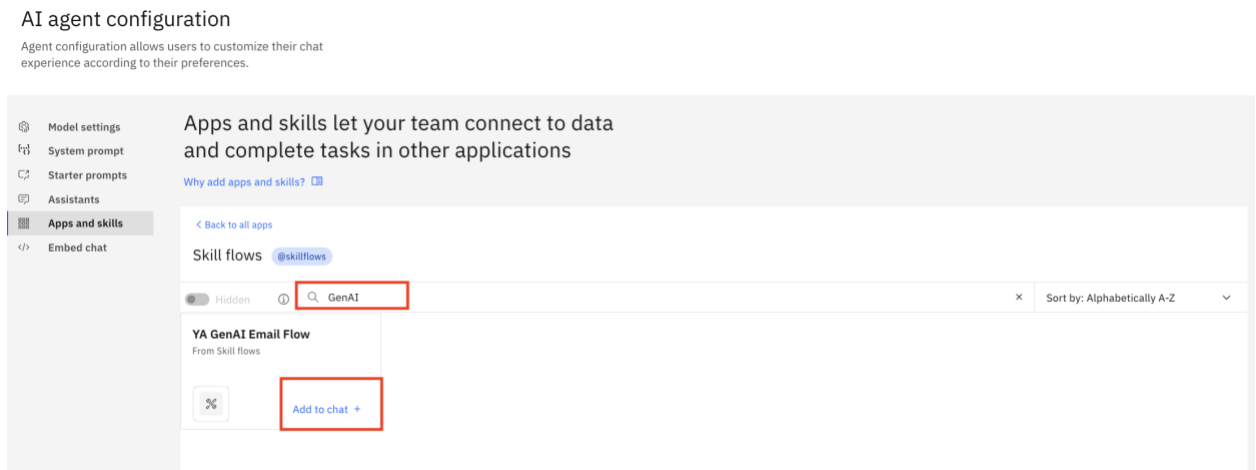




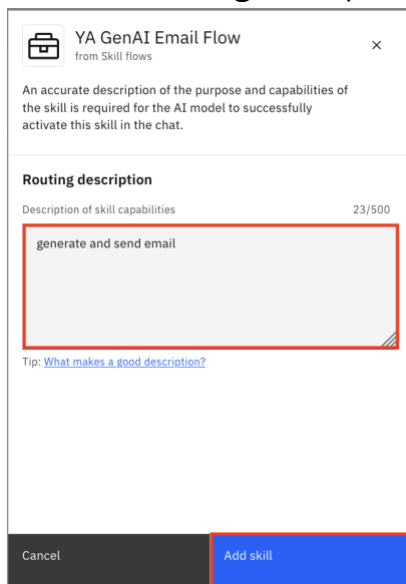
15. Under **Apps and skills** search for skill flows and click on the **Skill flows** tile:



16. Search for your skill flow by name and click on **Add to chat** to add the skill flow to the AI chat:

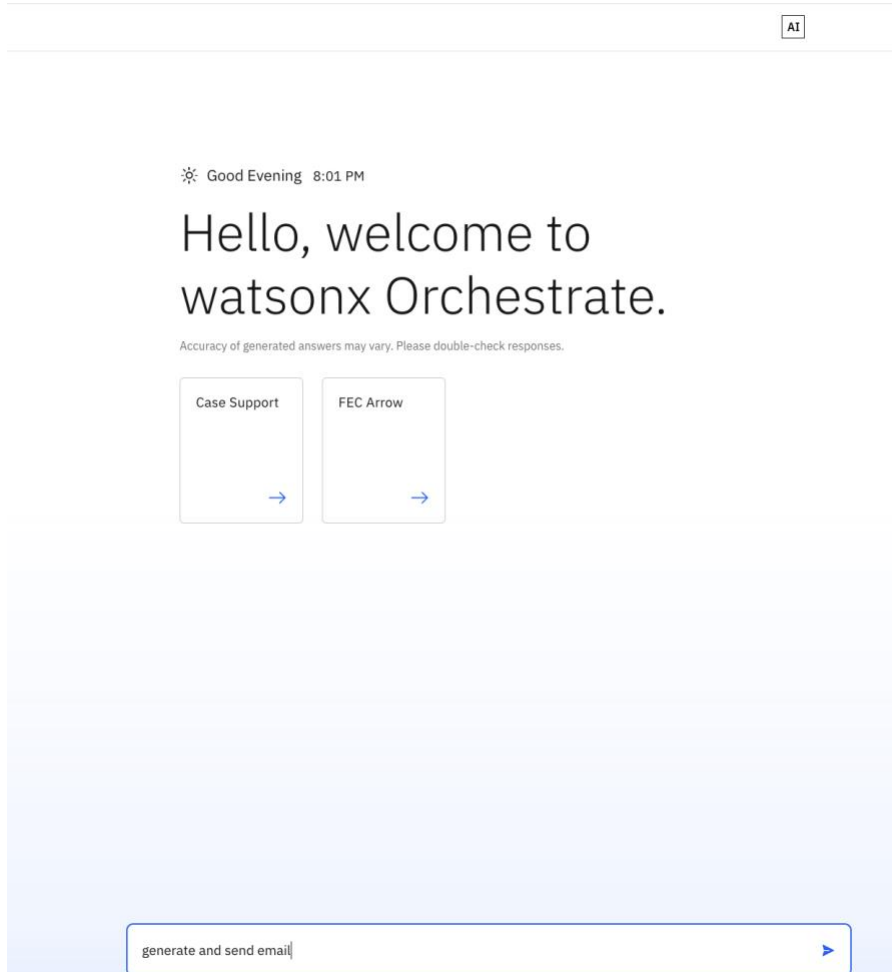


17. Provide a routing description and click on **Add skill**:



## Step 6: Test the skill flow

Finally, you can test the skill flow that you have configured by entering your query in the AI chat:



Note: screenshot of output will be added soon.

**This final step concludes the lab. In this lab, you connected watsonx.ai and Microsoft Outlook send email applications and added the generate email and send email skills to the AI chat. Finally you combined those two skills into a skill flow and added the skill flow to the AI chat.**