Copilot Studio and Azure AI Workshop

Lab 1: Create an agent and add knowledge sources

Hands-on Lab Step-by-Step Guide

April 2025

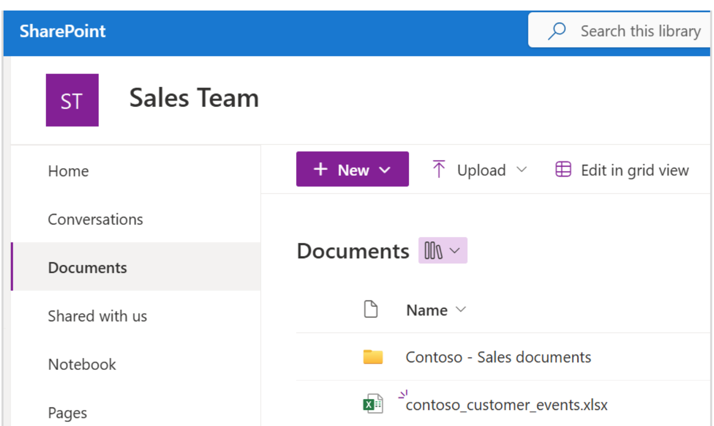
Lab Overview and Pre-requisites

Learning Objectives

This lab is designed to help both pro-code and Low-code developers to create a copilot in Copilot Studio called Sales Buddy and add Knowledge Sources to the agent to allow users to ask questions about the data.

Pre-requisites

- You will need credentials for a demo tenant that has Dataverse/Dynamics 365 Sales and AI Builder trial enabled.
- Create a public SharePoint site in the demo tenant named **Sales Team**. Once created, upload the **Lab 1 Assets** to the **Documents** library of this new site. Ensure that the uploaded content contains:
  - The folder titled **Contoso – Sales documents** contains **two Word documents**.
  - An Excel file named **contoso_customer_events.xlsx** is also present and accessible.

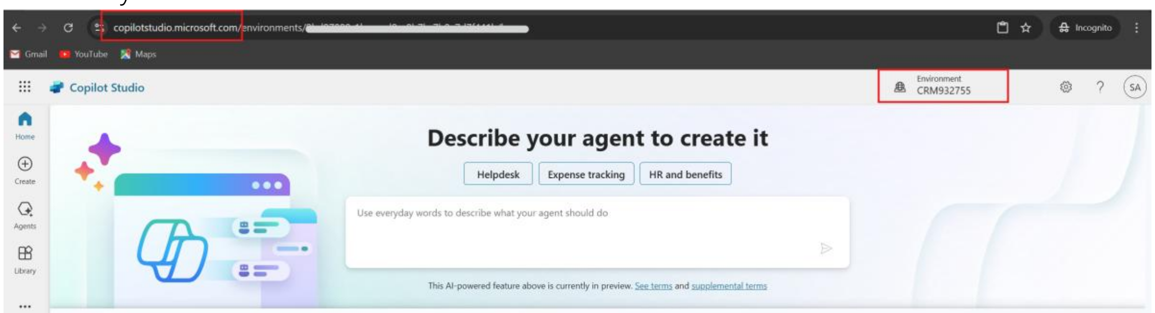


- Verify that you have sample data in your tenant: Browse to https://make.powerapps.com in your demo tenant and ensure you are in the **correct environment**. Click on **Tables** and then **Account** to confirm you have data in your account table.

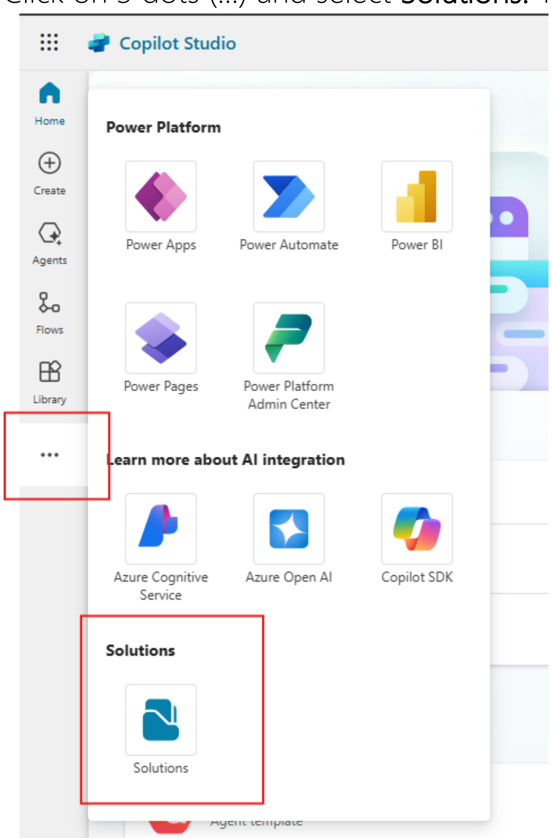
Lab 1: Create an agent and add Knowledge sources

1. Browse to copilotstudio.microsoft.com to open Copilot Studio using the credentials of your demo tenant. You may need to use an In Private or Incognito browser to access your demo tenant.

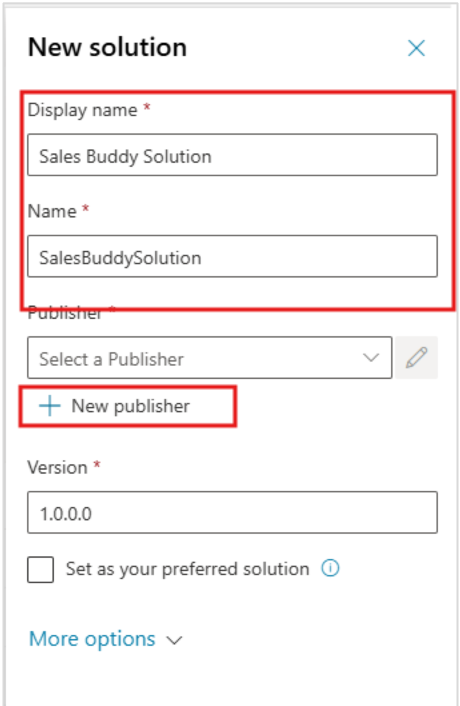
   Confirm you are in the correct environment.



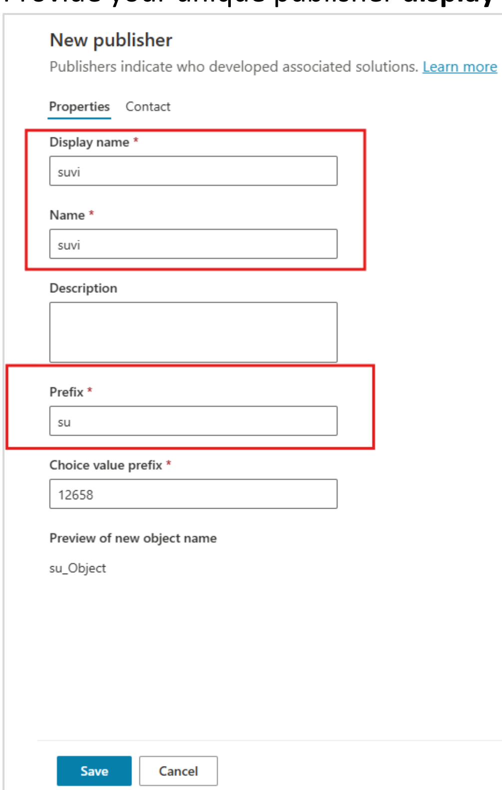
2. Click on 3 dots (...) and select **Solutions.** This opens the solutions window.



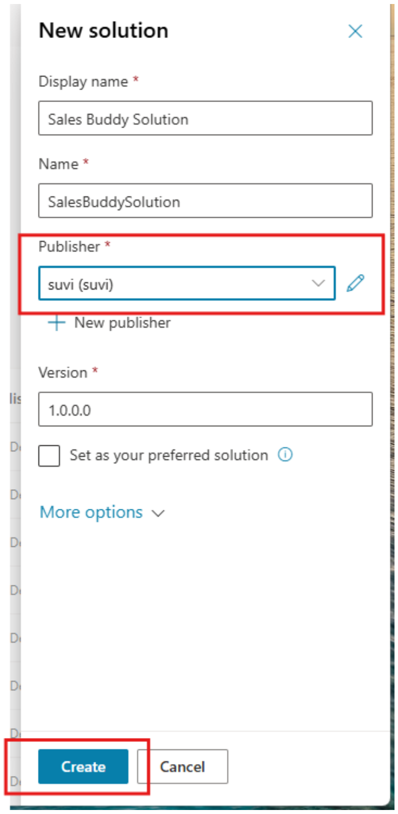
3. In the solutions window, Select **New solution** and fill-in the details and select **New Publisher**



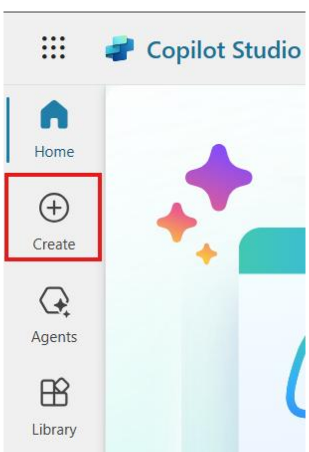
4. Provide your unique publisher **display name, name and prefix**



5. Back in the new solution window, select the newly created publisher and click on **Create**

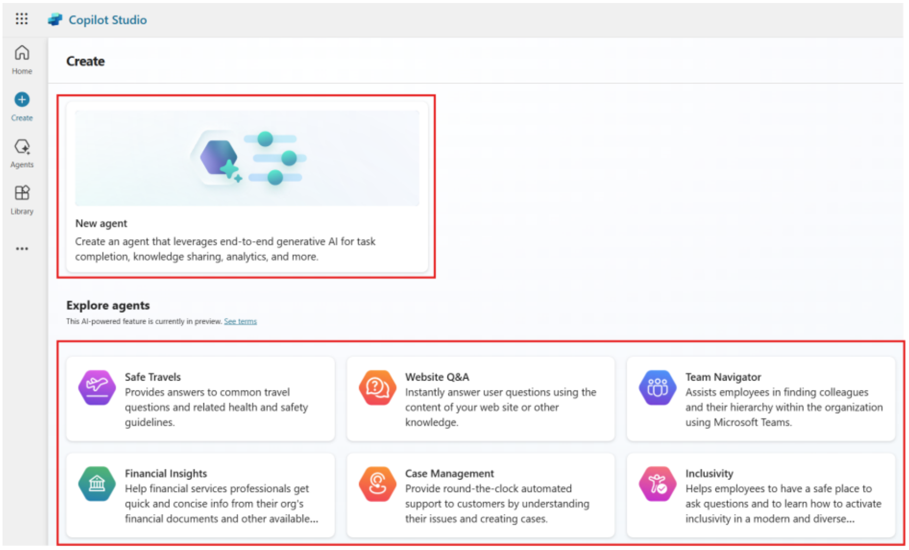


6. Navigate back to Copilot Studio window, ensure you're inside the right environment. Click on + Create on the left-hand side to start creating a new Agent.

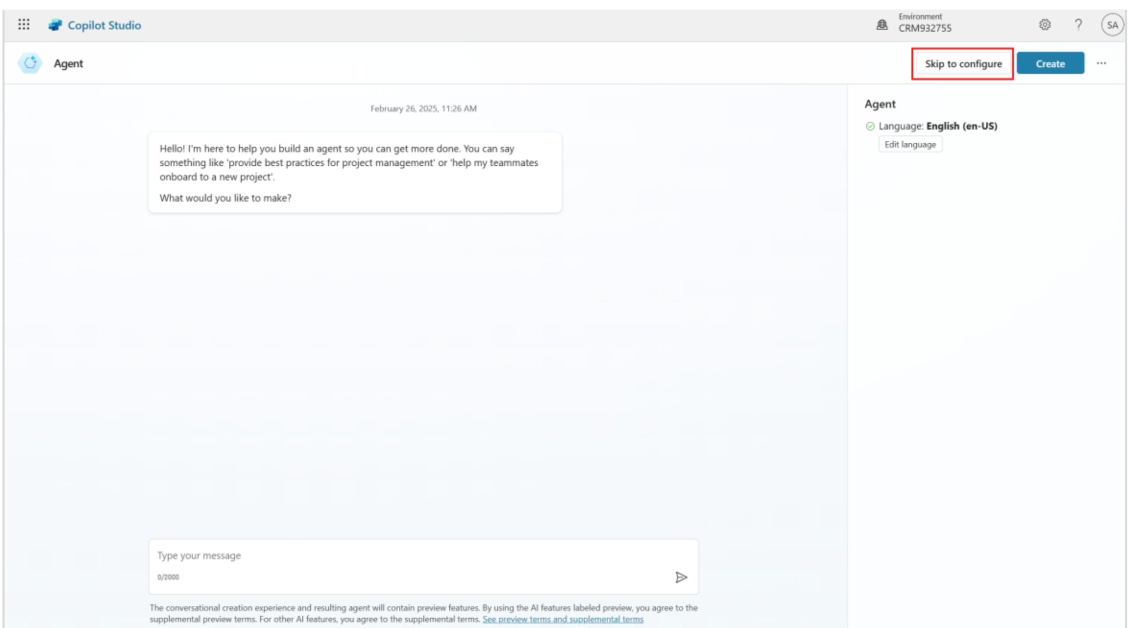


7. There are many Agent Templates currently available for you to start with a template. We will be creating our own custom agent, so click on + New Agent to start the configuration process.

[MS Learn - Quickstart: Create and deploy an agent](#)



8. On this screen you can have a conversation with that agent builder to build out your agent or you can click on Skip to Configure to start the configuration process. For our lab, we are going to Skip to Configure. You can explore creating an agent using the chat on your own time.

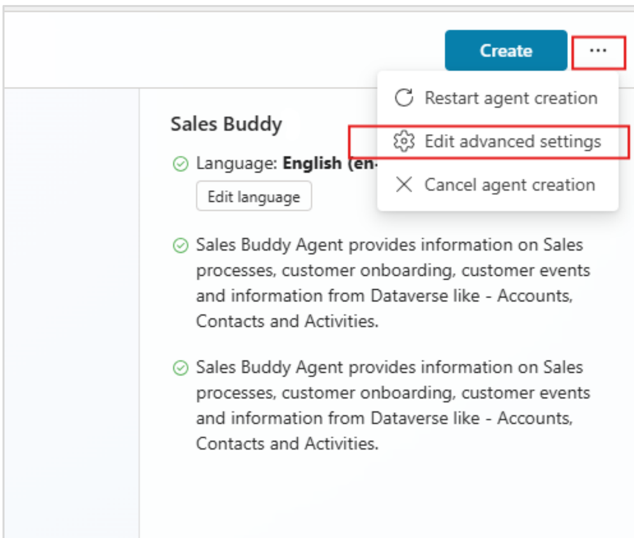


9. Configure the agent using the following information:

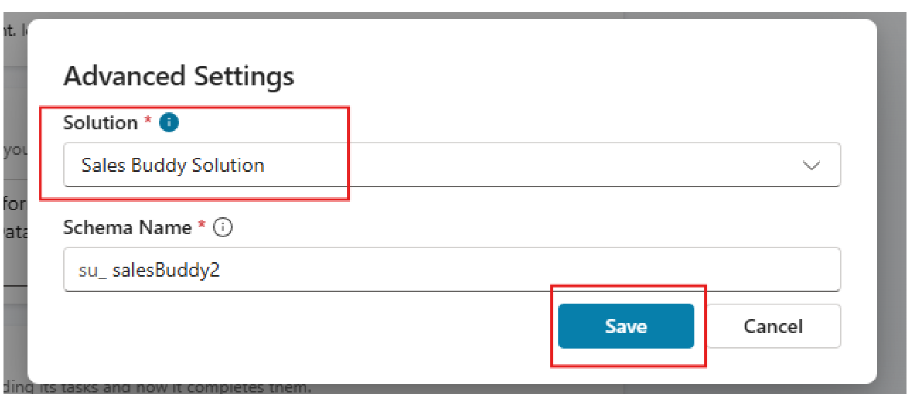
Name: Sales Buddy

Description: Sales Buddy Agent provides information on Sales processes, customer onboarding, customer events and information from Dataverse like - Accounts, Contacts and Activities.
Instructions: Sales Buddy Agent provides information on Sales processes, customer onboarding, customer events and information from Dataverse like - Accounts, Contacts and Activities.

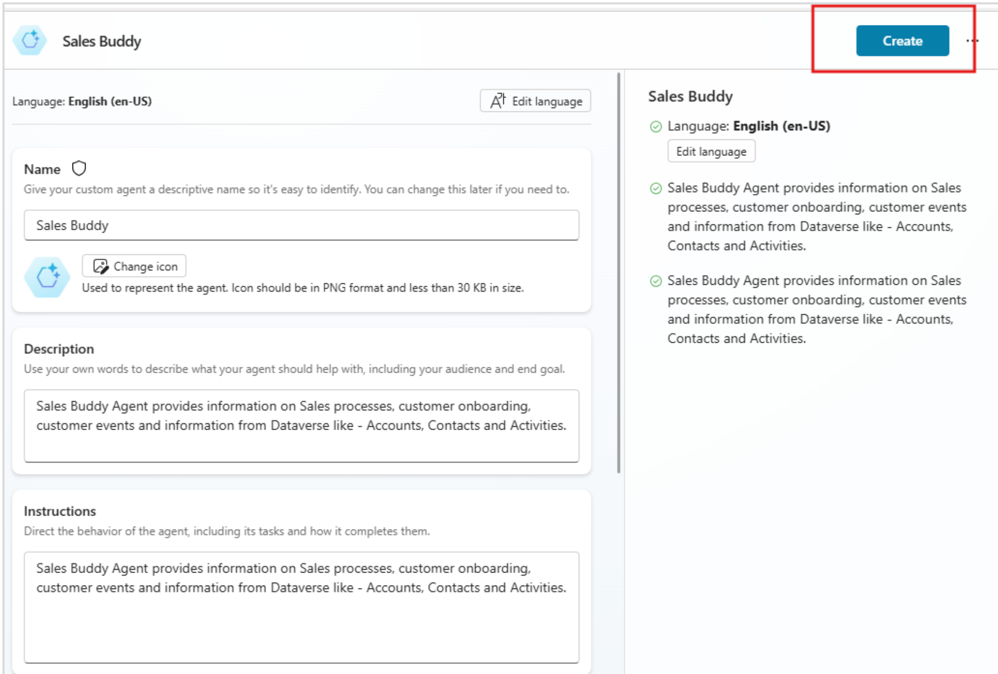
10. Click on 3 dots (…) on right-top, next to **Create** button and select **Edit advanced settings**



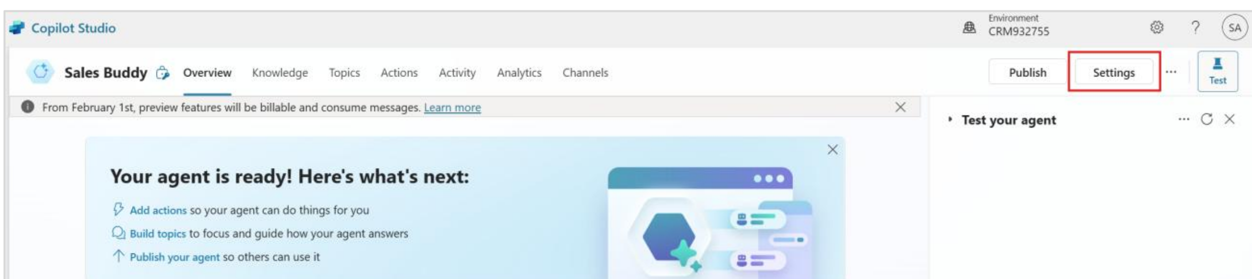
11. In the advanced settings window, select the **Sales buddy Solution** that we previously created and select **Save**



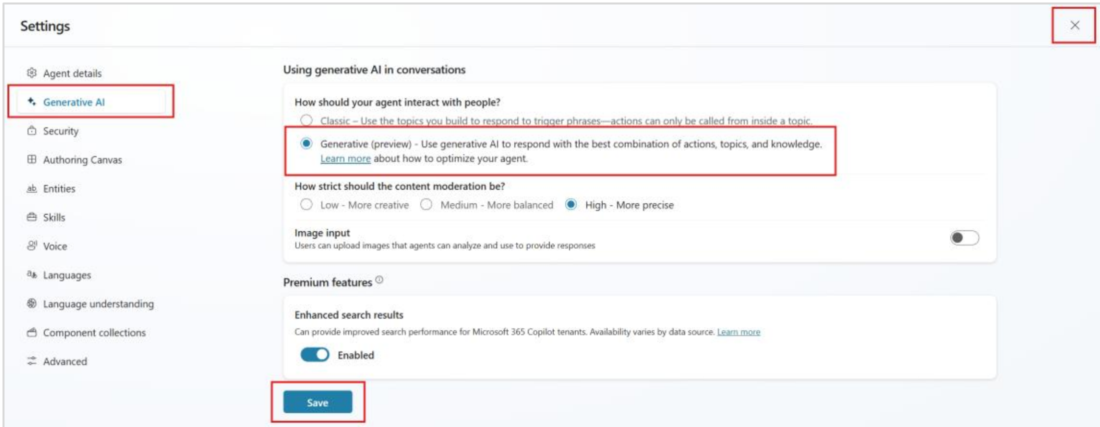
12. Back in the new agent window, click on **Create** in the upper right corner to start creating the agent within the new solution



13. Once your agent is created, we will confirm that the Generative AI Settings are enabled. Click on **Settings** in the upper right corner.

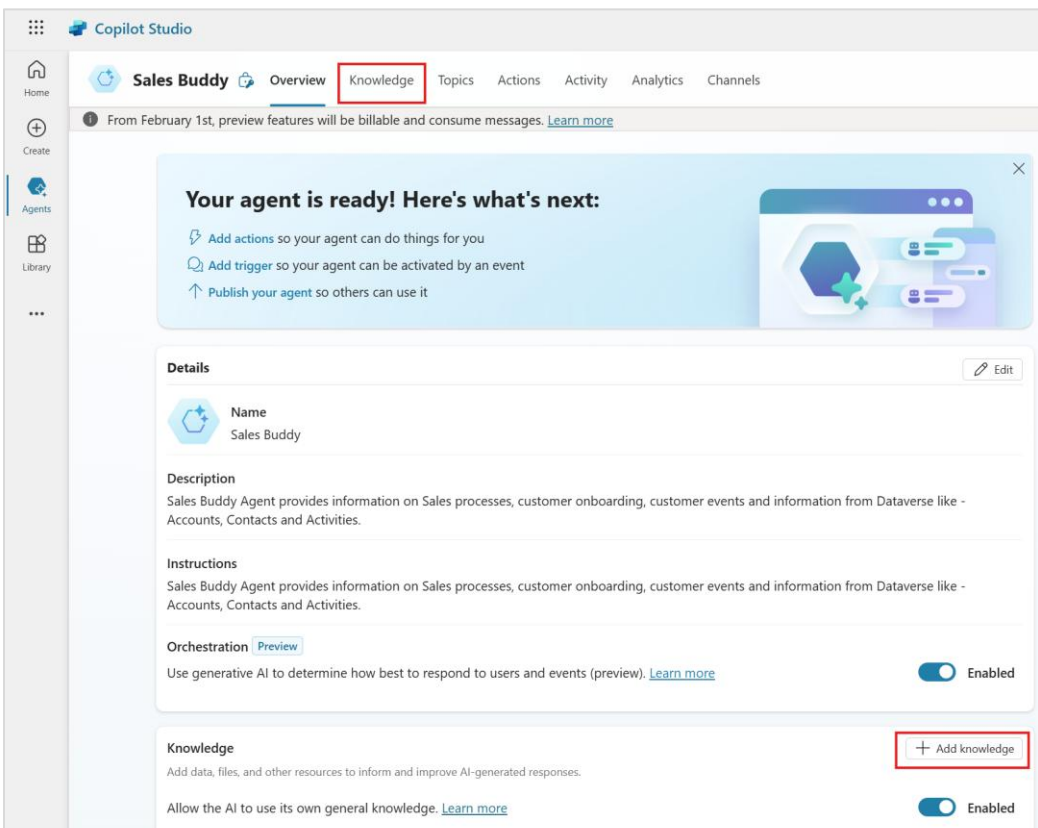


14. Once in Settings, click on **Generative AI** in the left-hand menu and select **Generative (preview).** You can keep the rest of the settings the same. Click on **Save** and then close the Settings menu by clicking on the **X** in the right-hand corner.

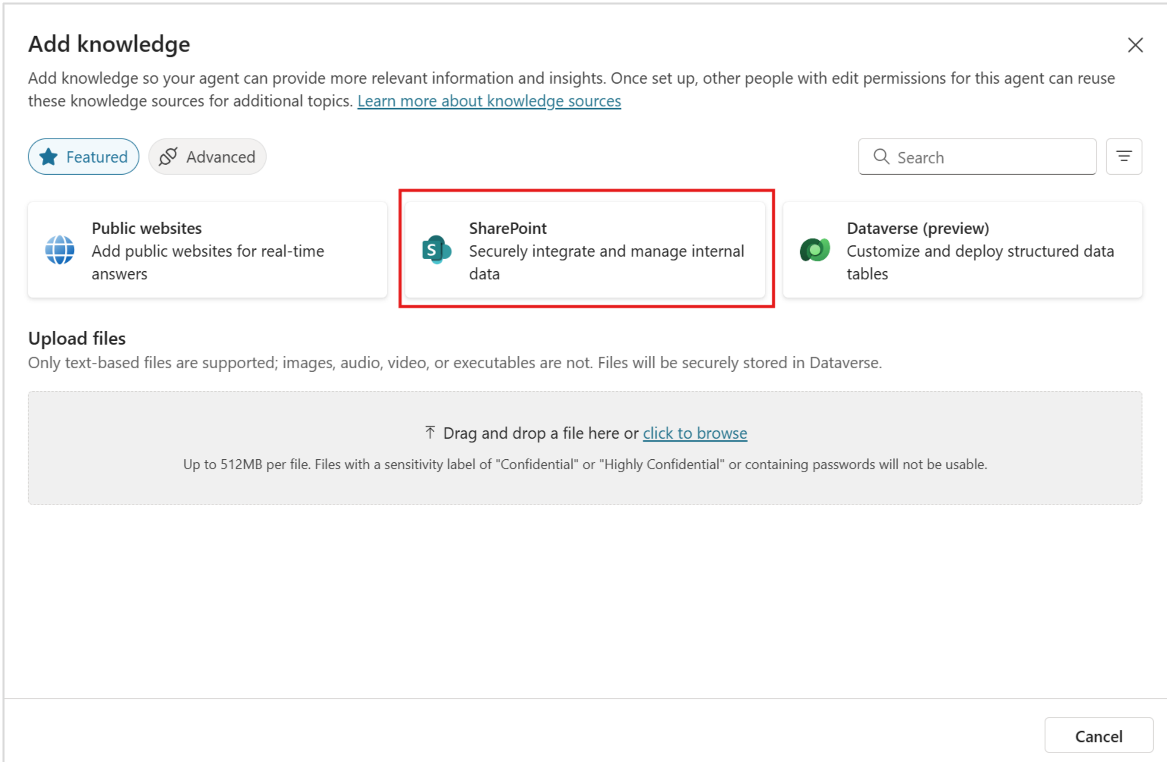


15. We are now ready to add some Knowledge sources. You can either click on **Knowledge** in the top menu or click on the **+ Add Knowledge** button in the Knowledge area.

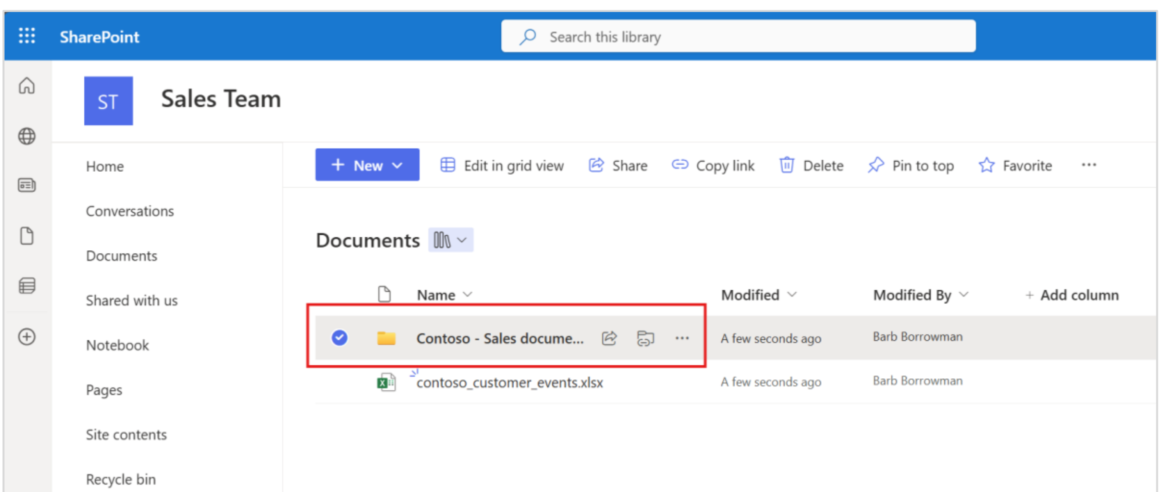
    [MS Learn - Knowledge Sources Overview]()



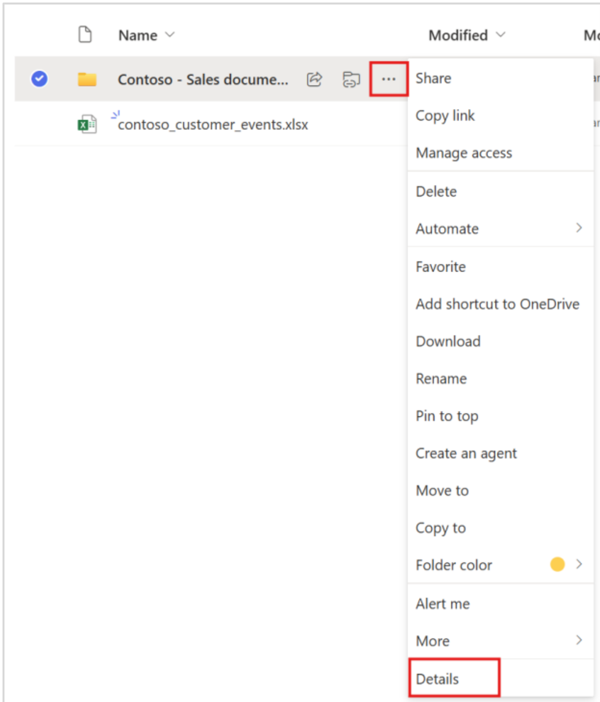
16. We will be adding documents from a SharePoint site that you should have downloaded as a pre-requisite. Click on **SharePoint.**



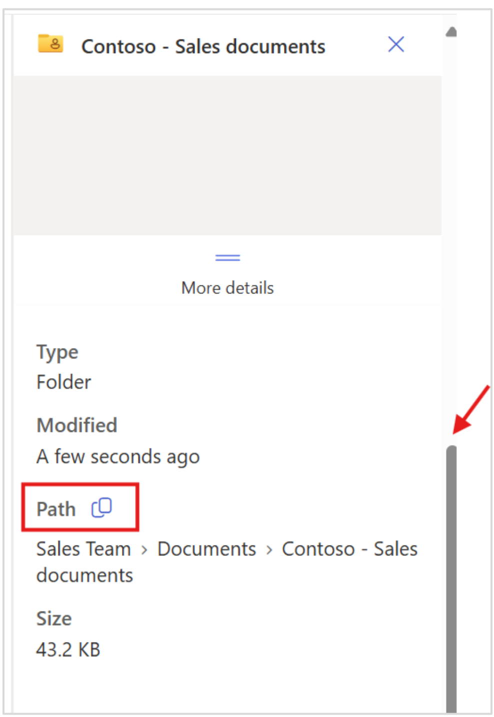
17. We will get the URL of the SharePoint site where you have downloaded the lab assets. Browse to your SharePoint site where you downloaded the lab assets. Select the **Contoso – Sales documents folder.**



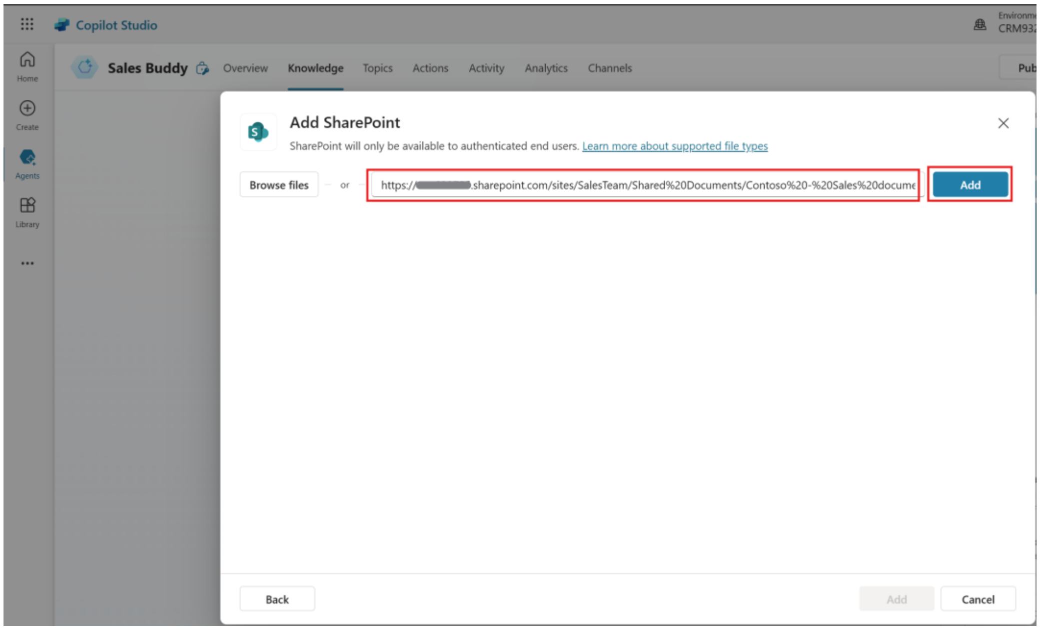
Click on the **ellipse (…)** and then **Details**.



Scroll down in the detail window and then **copy** the path.



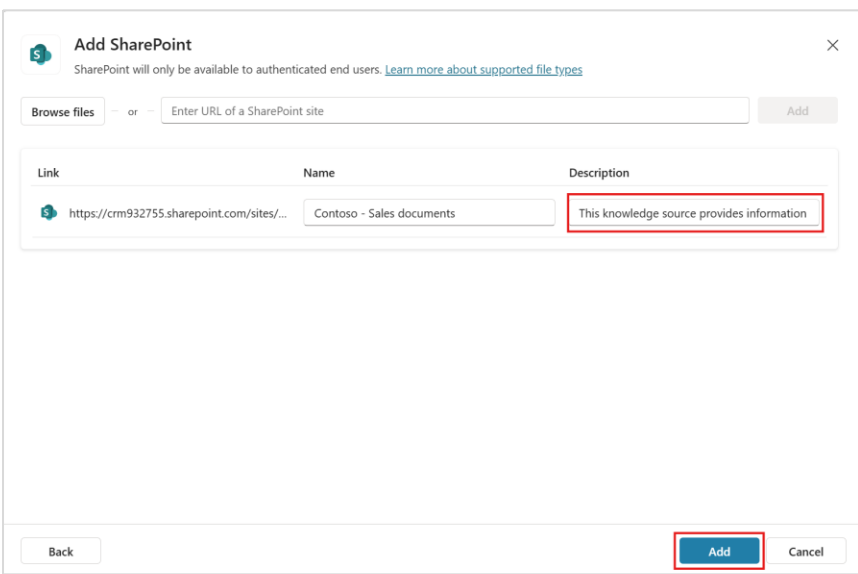
18. Click back over to the **Copilot Studio tab** that has the add Knowledge Source step open and **paste the URL** we just copied. Click on **Add**.



19. The next step is very important. We need to add a description of the knowledge source so that the agent knows when to use it. Copy and paste the following in the Description for the knowledge source:

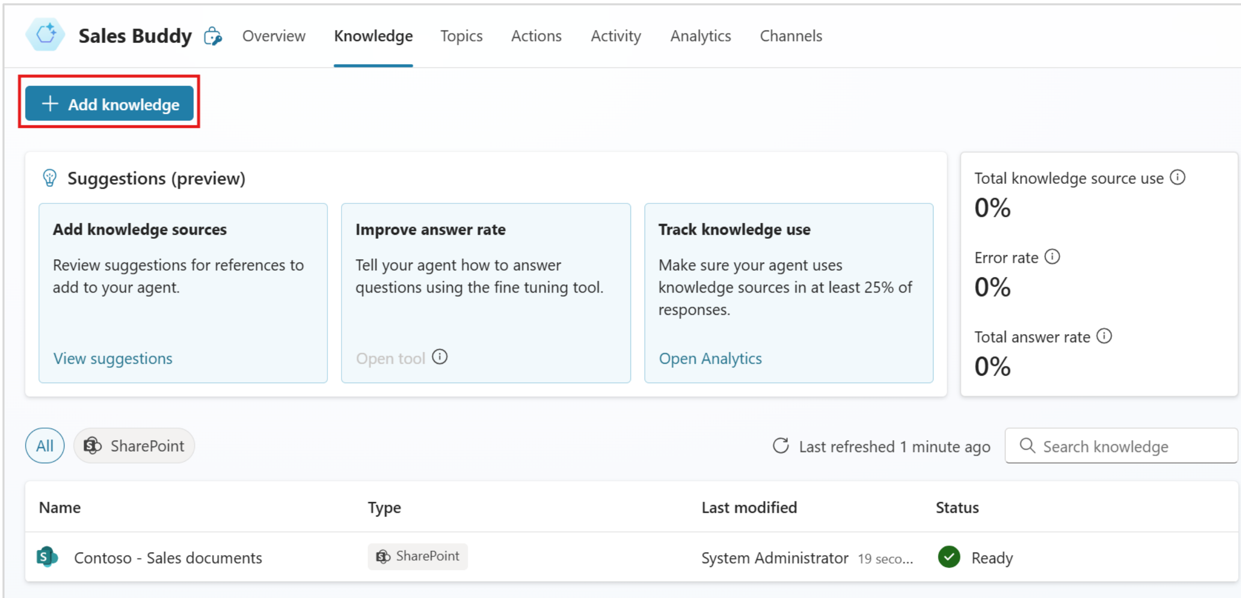
    This knowledge source provides information on sales processes and customer onboarding. These are the files available in that folder.

    Then click on Add.

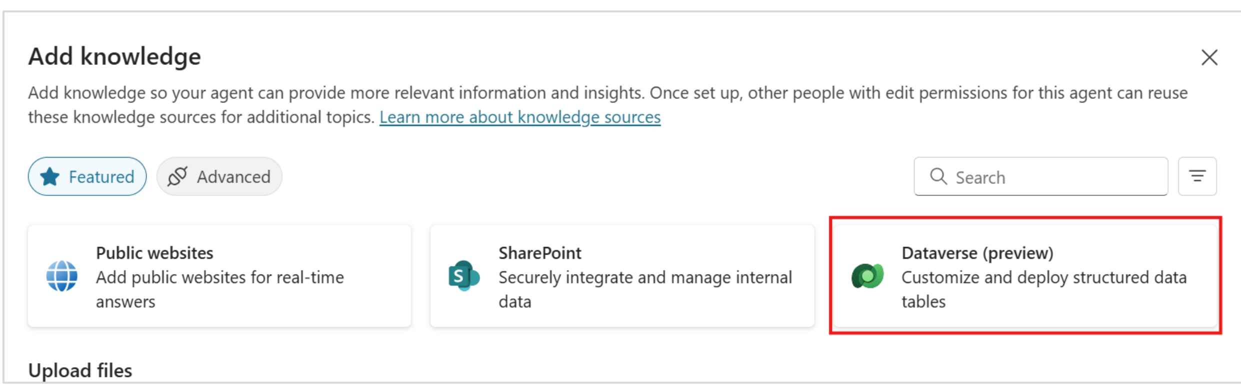


20. It may take a few minutes to add the knowledge source, but we will see a green check mark under status when our document is ready to be used by the agent. We are

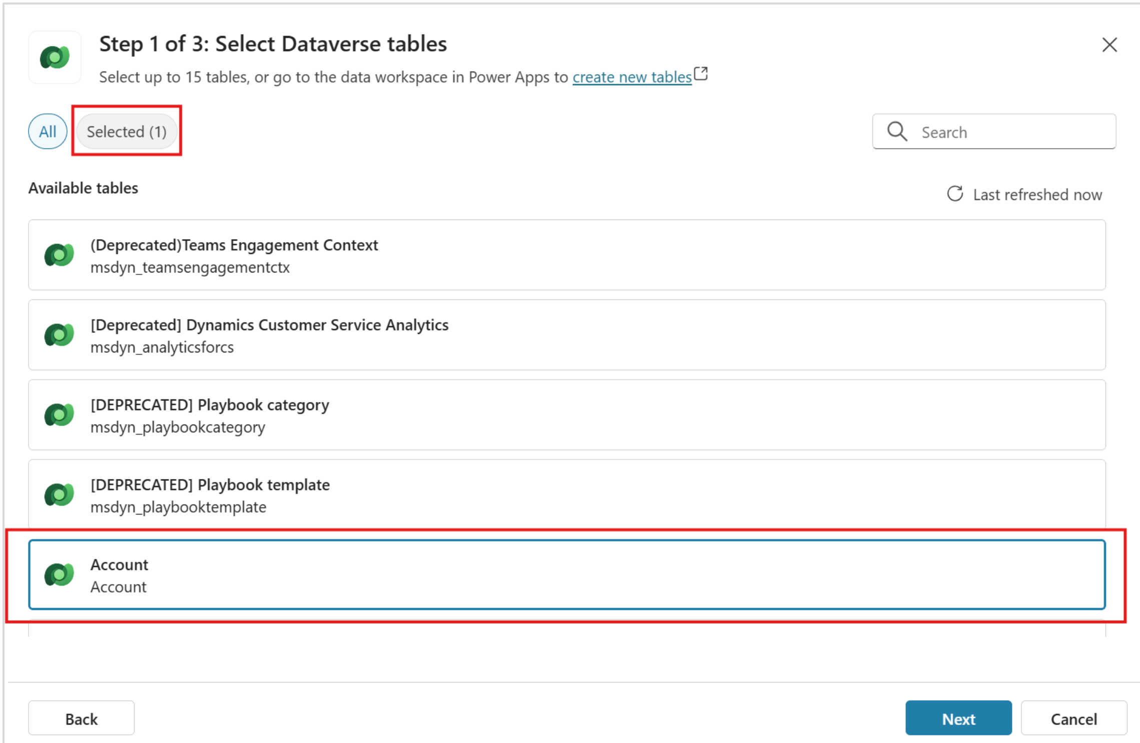
going to add a 2nd knowledge source to get access to our accounts and contacts. Click on + Add knowledge.



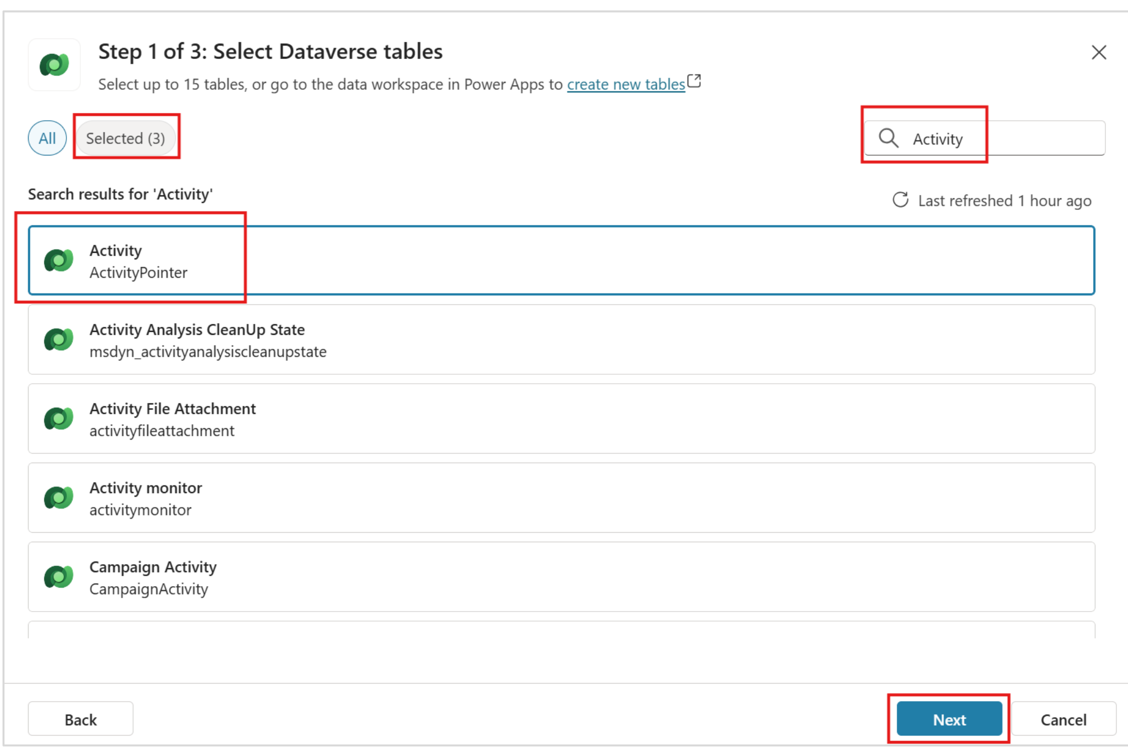
21. Since our accounts and contacts reside in Dataverse, click on **Dataverse (preview)** for the knowledge source.



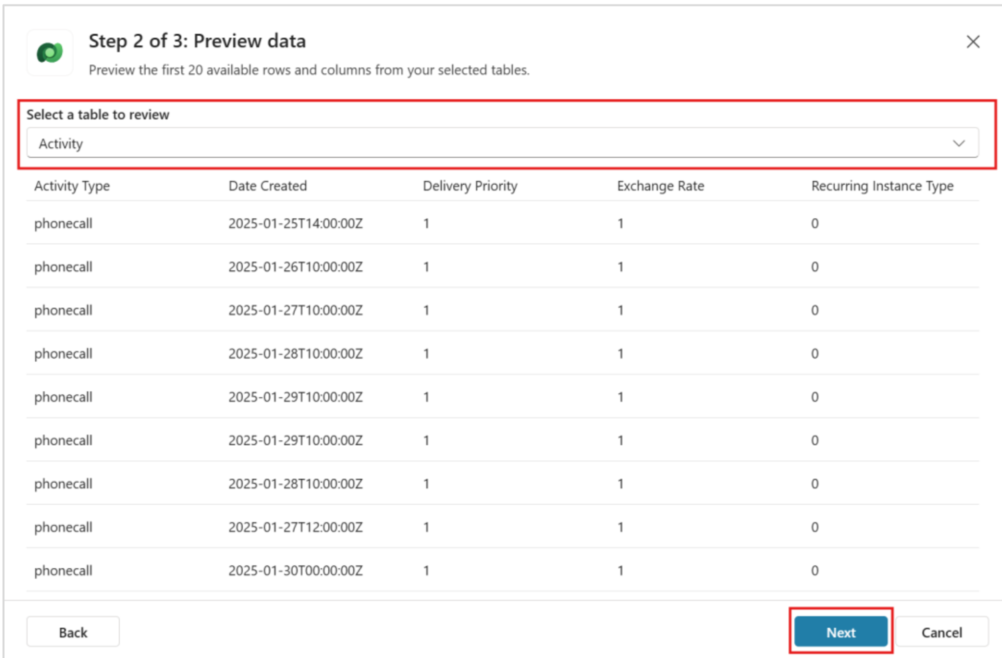
22. We will select 3 tables for our agent: **Account, Contacts and Activity**. Click on **Account** to select that table. *You will also see at the top that (1) table is selected.*



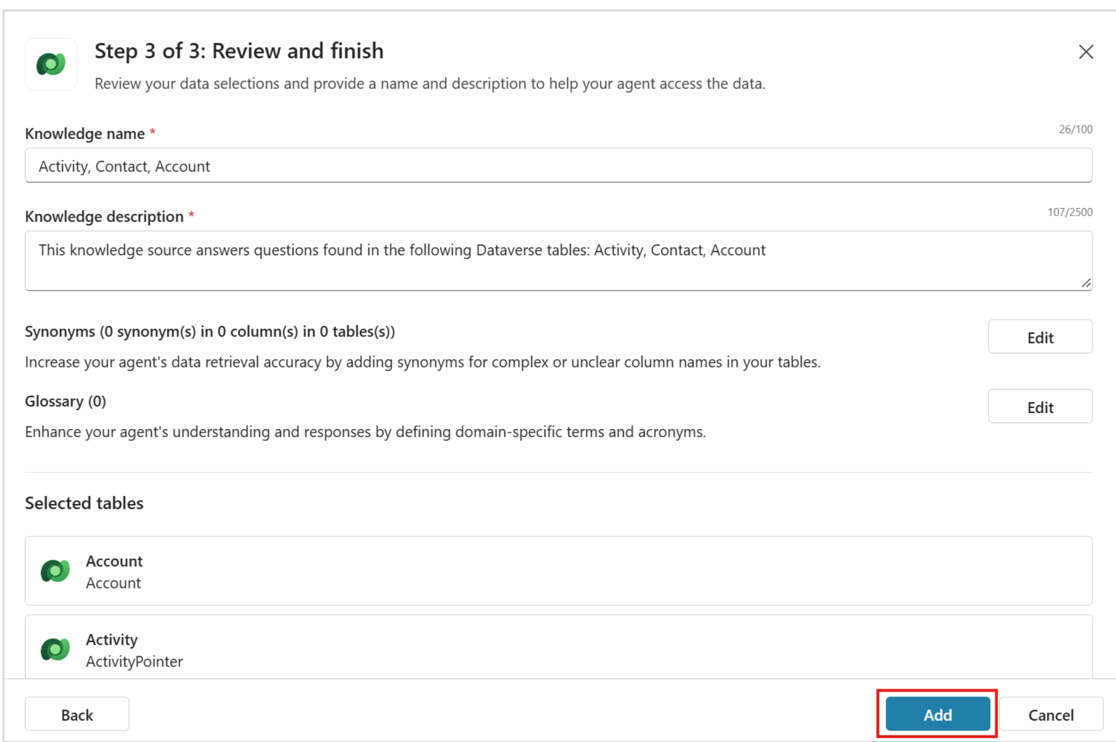
Search for Contact to find that table and select that table. Search for Activity and select that table. You should now have (3) tables selected. Click on Next.



23. The next step is to preview the data in the tables and confirm that it is the data you were expecting. You can select each table using the drop-down menu. When you have previewed the data, you can click on **Next**.

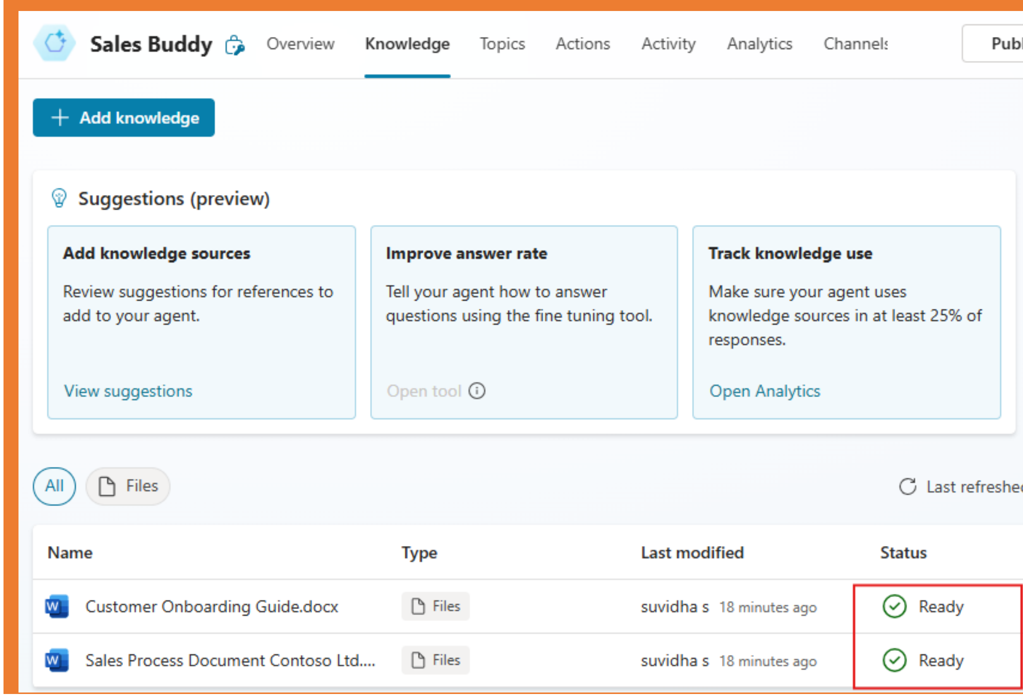


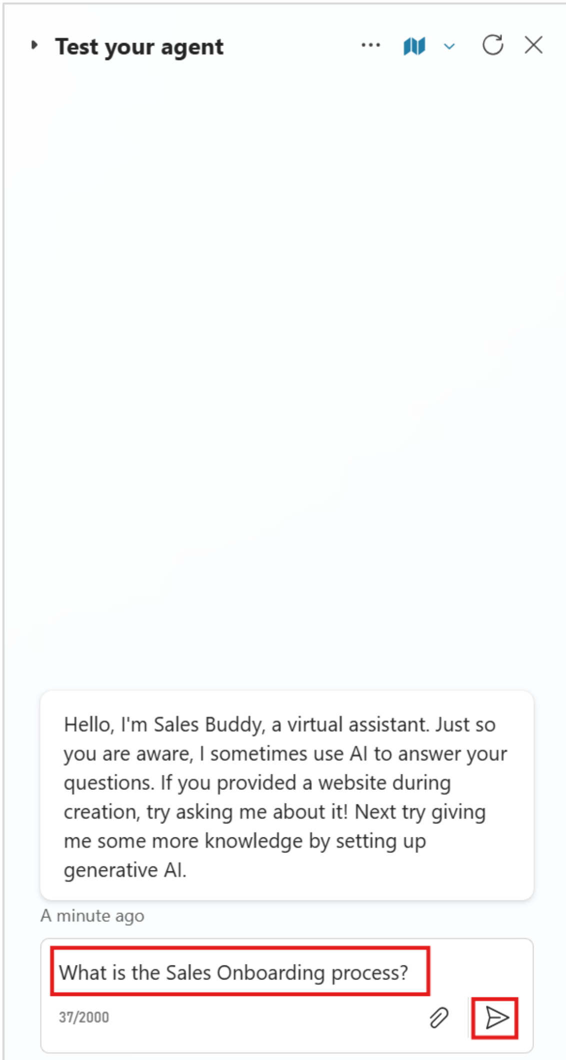
24. The last step is to review and finish. You can review the knowledge name, description and the tables. Click on **Add.**



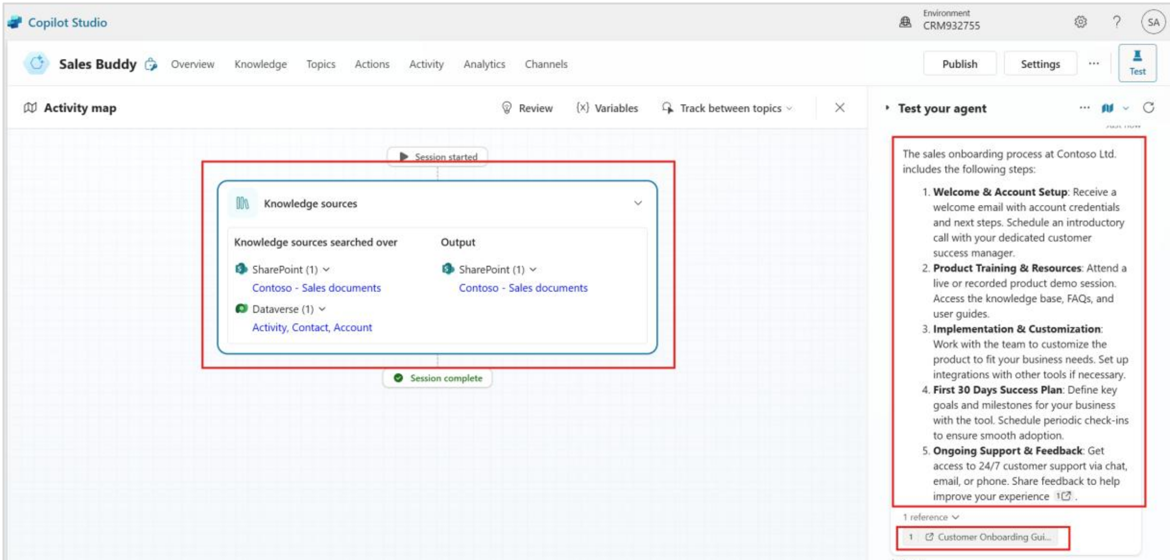
25. It may take a few minutes for the Knowledge sources to be indexed, but we can start testing with some questions from our sales documents on the SharePoint site. In the testing pane, type the question **"What is the Sales onboarding process?"** and click on the send button to ask your question.

Note: sometimes it takes a while to index the SharePoint site or document folder, and you may not see the expected results immediately. If the agent doesn't return the results from SharePoint, for now, please upload the two **word** documents as knowledge source directly instead of pointing to SharePoint. (It might take around 10 minutes to index these documents, check for status under Knowledge tab before testing)

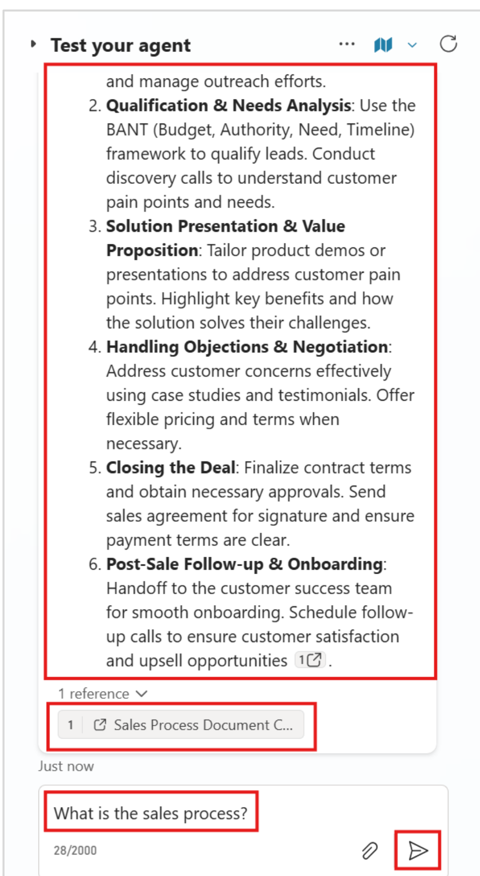




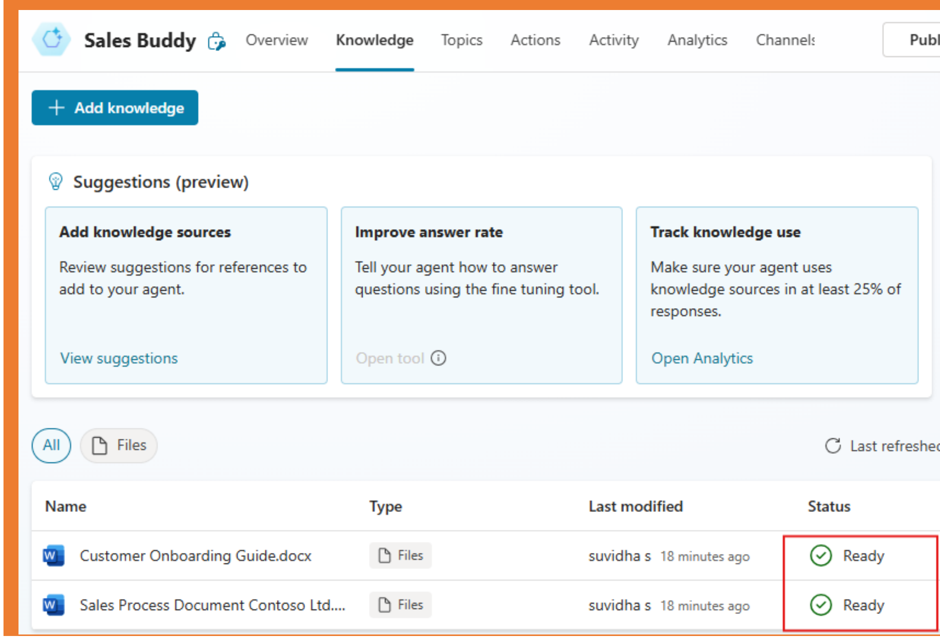
26. You can see on the canvas that the agent is looking at the knowledge sources that we have given it to answer questions. You can then see that the agent gives us the steps for on boarding a new customer at Contoso and that the data was generated from our Customer Onboarding Guide.



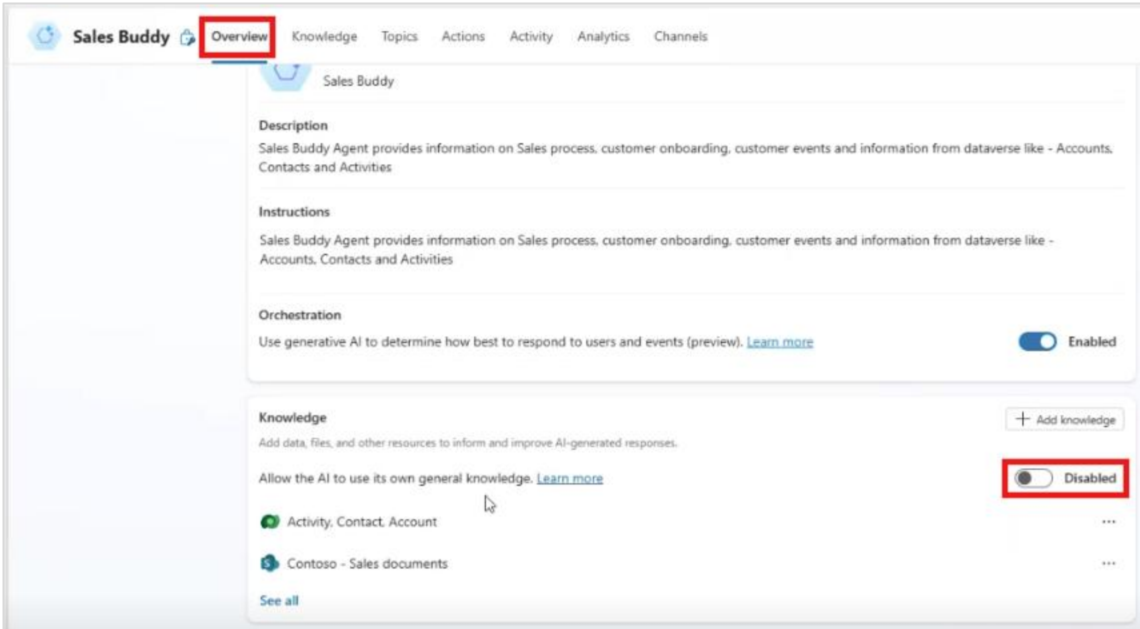
27. We can try another question. Type **"What is the sales process?"** and click on the **Send** button. We can see once again that it is using the knowledge sources and gives us the answer from our Sales Process Document.



Note: sometimes it takes a while to index the SharePoint site or document folder, and you may not see the expected results immediately. If the agent doesn't return the results from SharePoint, for now, please upload the two **word** documents as knowledge source directly instead of pointing to SharePoint. (It might take around 10 minutes to index these documents, check for status under Knowledge tab before testing)



28. We can limit the agent to only use knowledge sources we have added and not any knowledge from the web. In the **Overview** section, scroll down to **Knowledge** and **Disable Allow the AI to use its own general knowledge**.

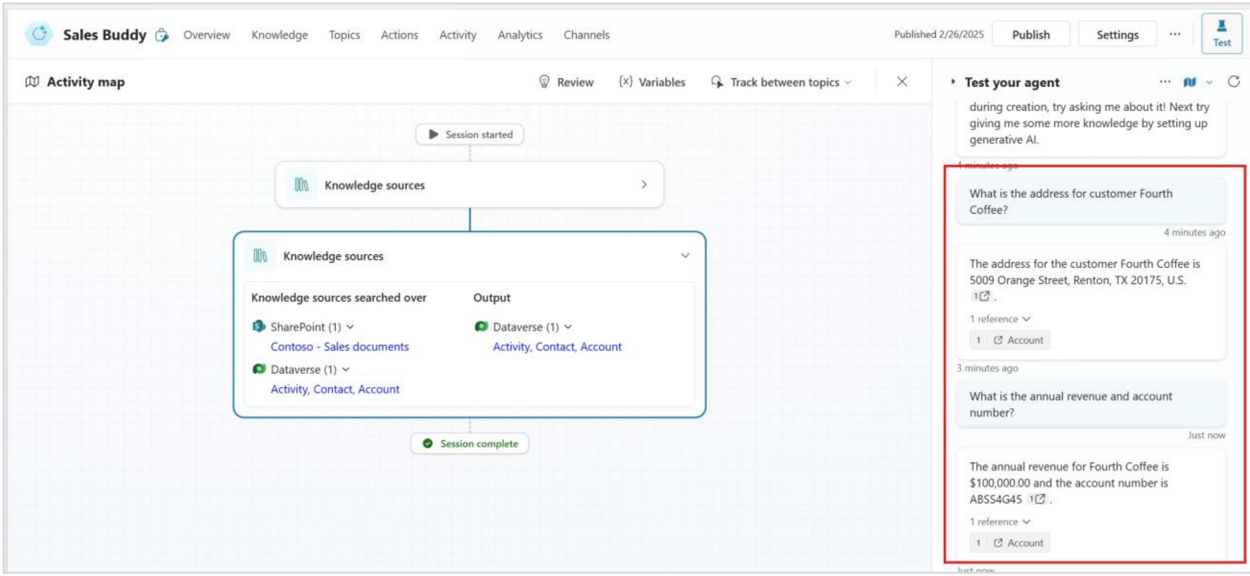


29. Our second knowledge source should be ready for testing, so let's ask some questions about the Accounts and Contacts we added. In the Test your Agent pane, ask the following questions:

    What is the address for customer Northwind Traders?
    What is the annual revenue and account number?

    You will see we get the information back from our Account table and the agent will remember that we are asking about Northwind Traders with our second question.

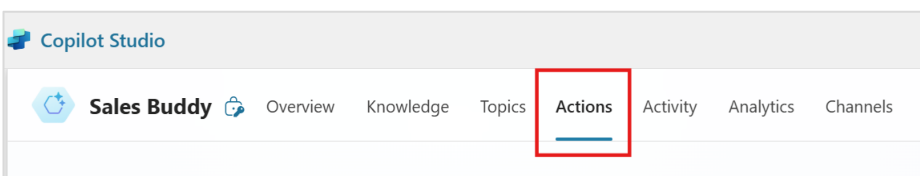
    Note: The screenshot below shows the address, revenue, and account number for Fourth Coffee. This customer is not in the lab materials, but the result will be similar (with different numbers) for Northwind Traders (or any of the customers in your Contacts).



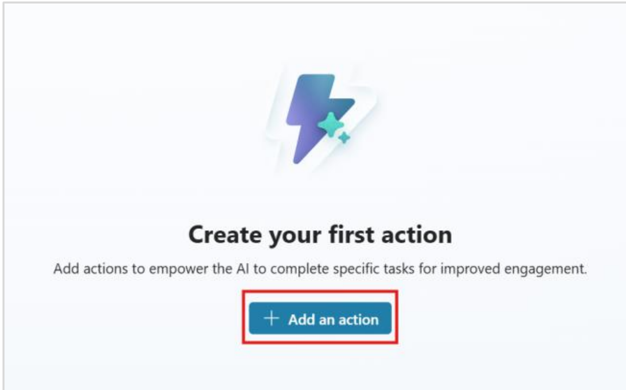
30. We're adding another source—a list of upcoming customer events stored as a table in Excel. If we upload the Excel file directly as a Knowledge source, it will remain a static list, requiring manual updates/uploads whenever new events are added. Since hosting the file on a SharePoint site won't work for direct retrieval either (as Excel files aren't supported for this purpose), we'll take a different approach. We'll create an Action for our Agent that dynamically queries the Excel table stored on SharePoint whenever someone asks about customer events..

[Use actions with custom agents (preview) - Microsoft Copilot Studio | Microsoft Learn]()

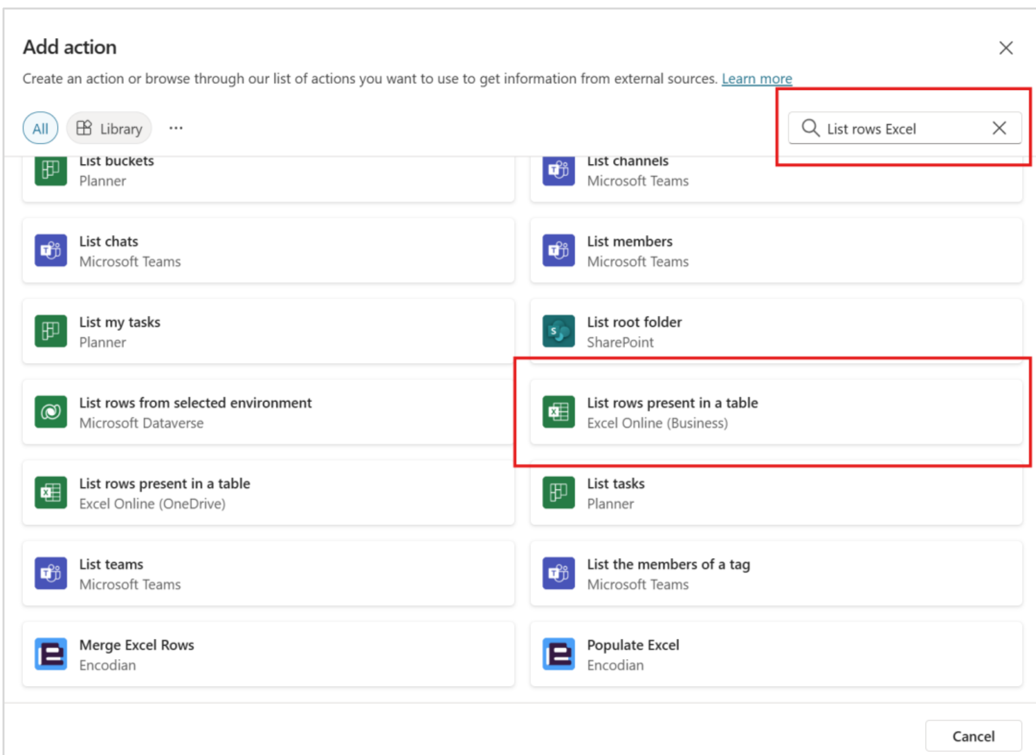
To add an Action, click on the **Action tab** in the top menu for Sales Buddy.



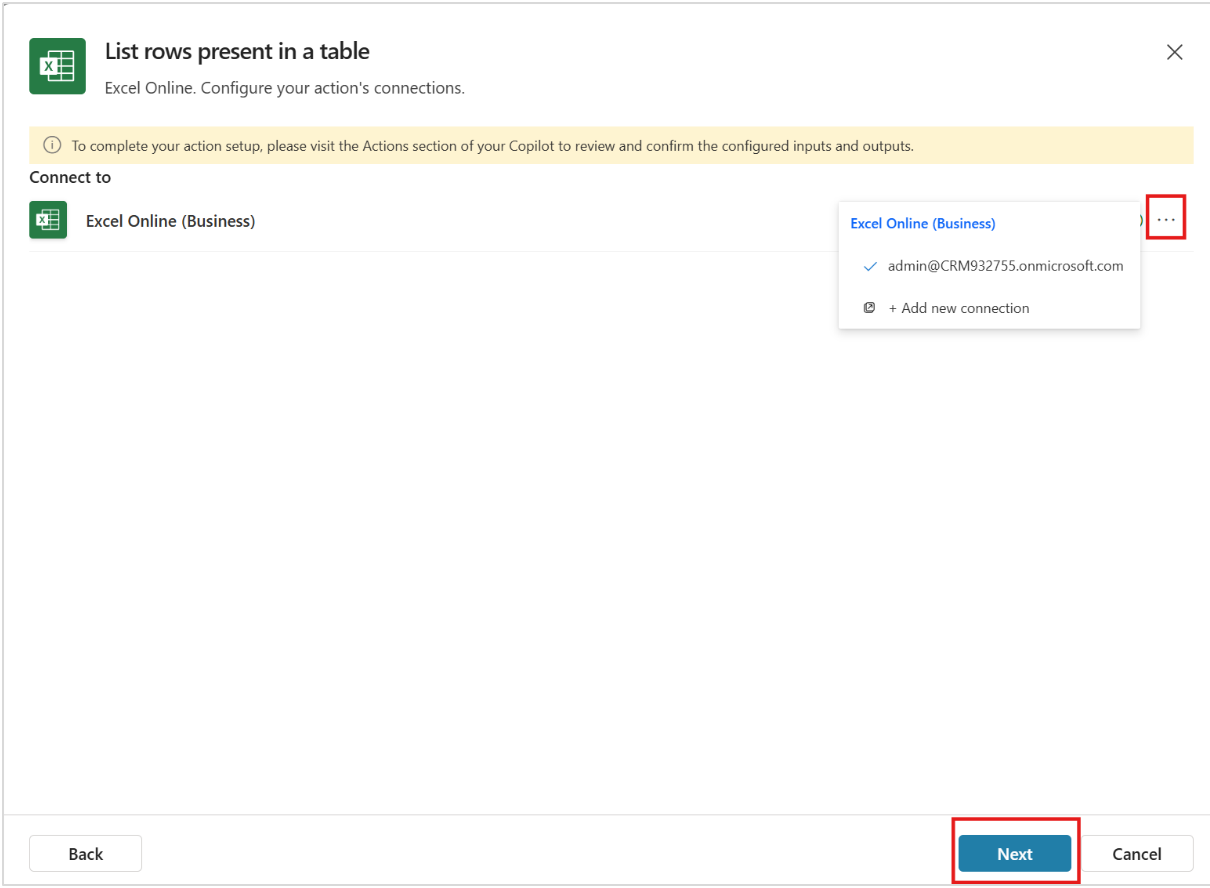
31. Click on **+ Add an Action**.



32. Search for List rows Excel in the actions. You will probably need to scroll down to find and then select List rows present in a table for Excel Online (Business).
Note: To use this action, the Excel data has to be in a table.



33. You can confirm you have a valid connection when you see the green checkmark, or this is where you could change connections or verify which connection is being used. Then click Next.

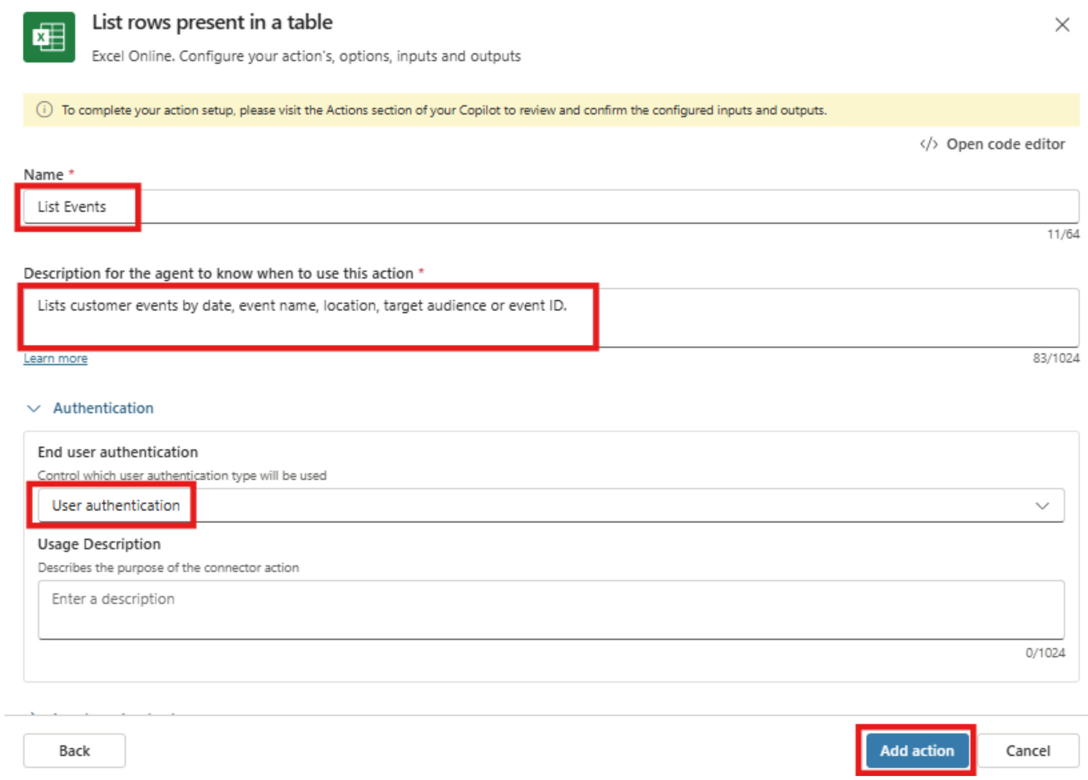


34. Configure the action with the following and then click **Add action**.

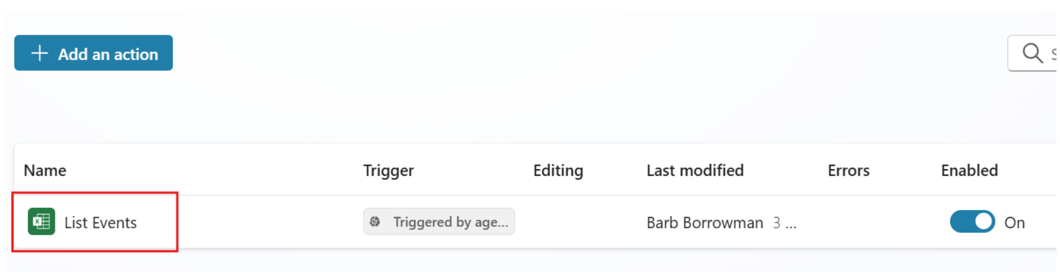
    Display Name: **List Events**
    Description: **Lists customer events by date, event name, location, target audience or event ID.**
    End user Authentication: **User Authentication**

    By selecting User Authentication, the end user will be required to create a connection the first time they are using the action in the agent.

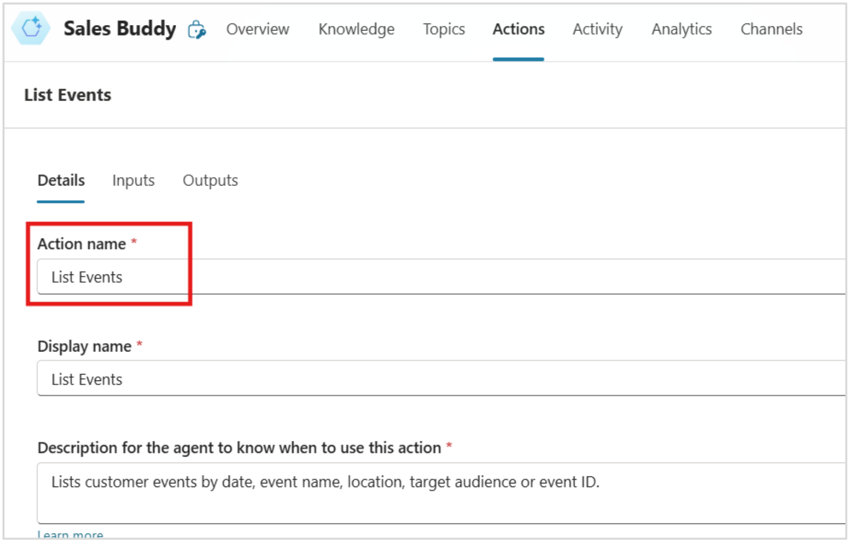
    Remainder of the configuration is default



35. Now we can configure the action name inputs for the action and the action inputs. Click on the **List Events** action to edit.



36. Rename the **Action Name** to **List Events**.

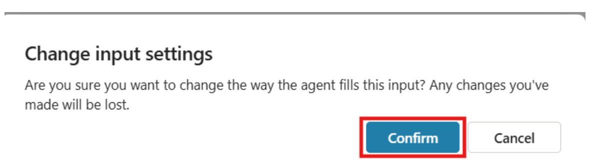


37. Click on the **Inputs** tab and configure as follows:

Location:

How will the agent fill this input?: Use drop down to select **Set as a value**

Click on Confirm whenever the Change input setting pop-up is shown.

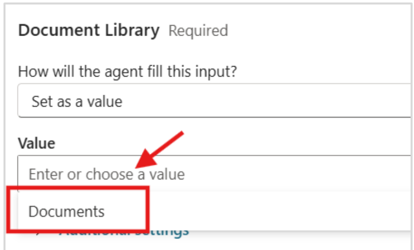


Value for Location: **SharePoint site URL where the lab assets are stored (ex: https://crmXXXX.sharepoint/sites/SalesTeam)**

Document Library:

How will the agent fill this input?: Use drop-down to select **Set as a value**

Value for Document Library: **If you click in the area for the value, it should populate with the document library choices in your SharePoint site. If not, get the name from the SharePoint site.**



File:

How will the agent fill this input?: Use the drop-down to select **Set as a value**

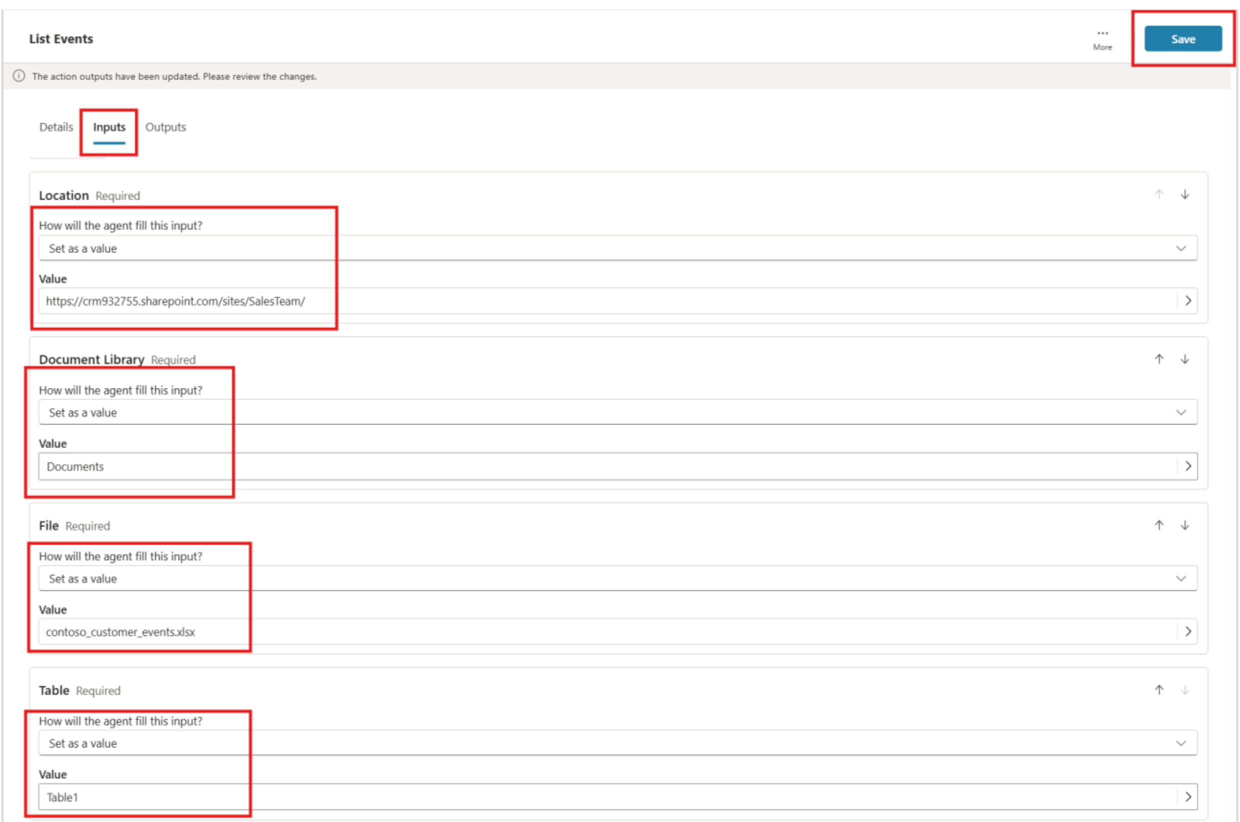
Value: Name of the Excel document - **contoso_customer_events.xlsx**

Table:

How will the agent fill this input?: Use the drop-down to select **Set as a value**

Value: Click in the area for the value and select **Table1**

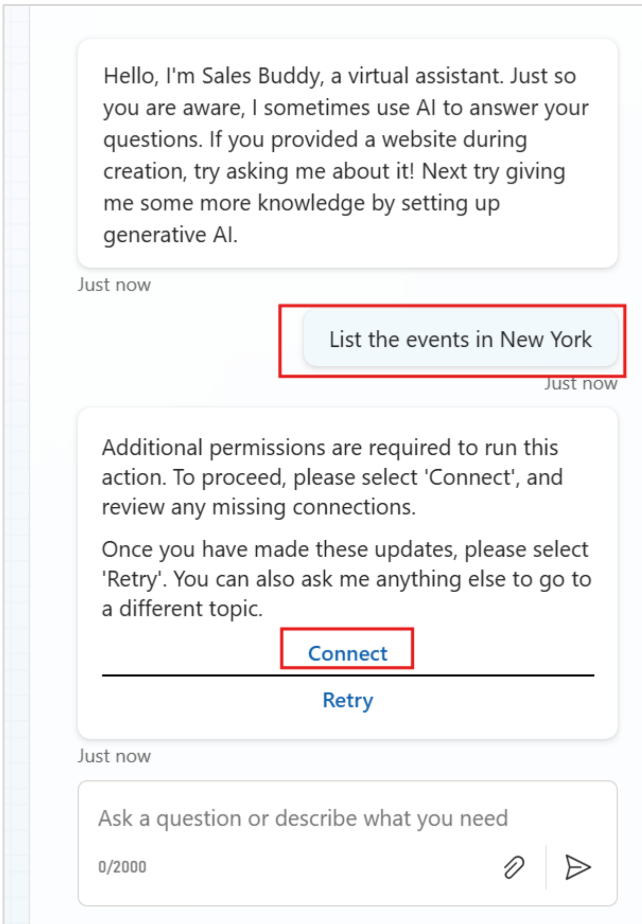
Click **Save.**



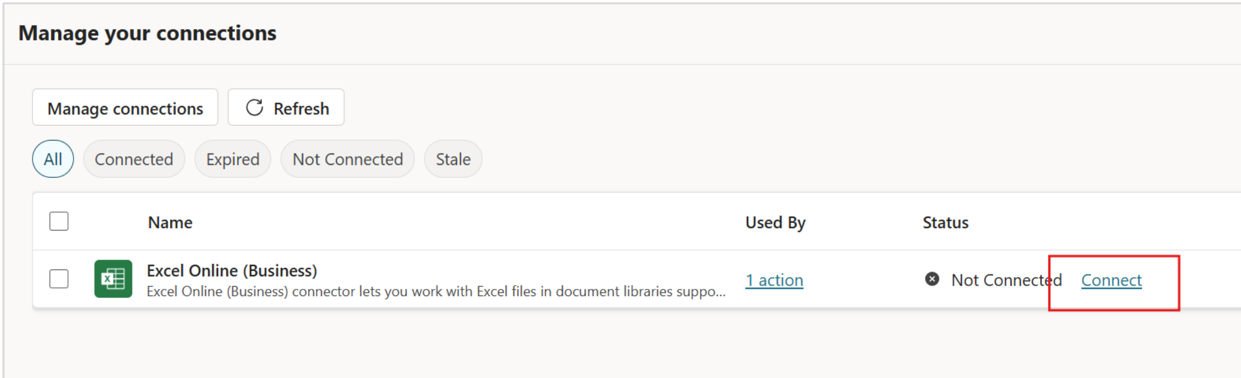
38. We are now ready to test our agent with the new knowledge source. In the test panel, ask the following question and Send:

    List the events in New York

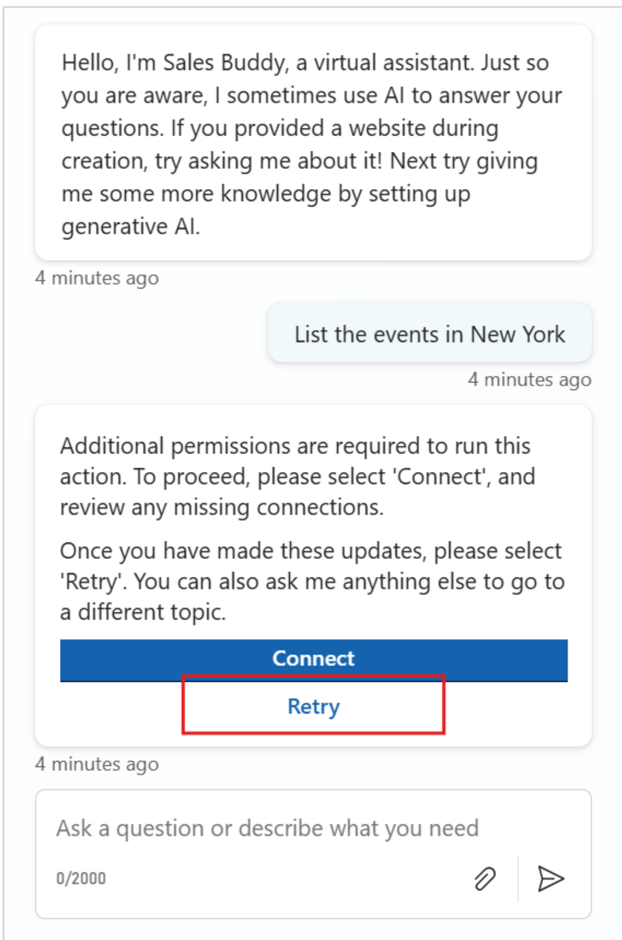
39. You might be prompted to create a connection. This is a first-time experience. Click on Connect



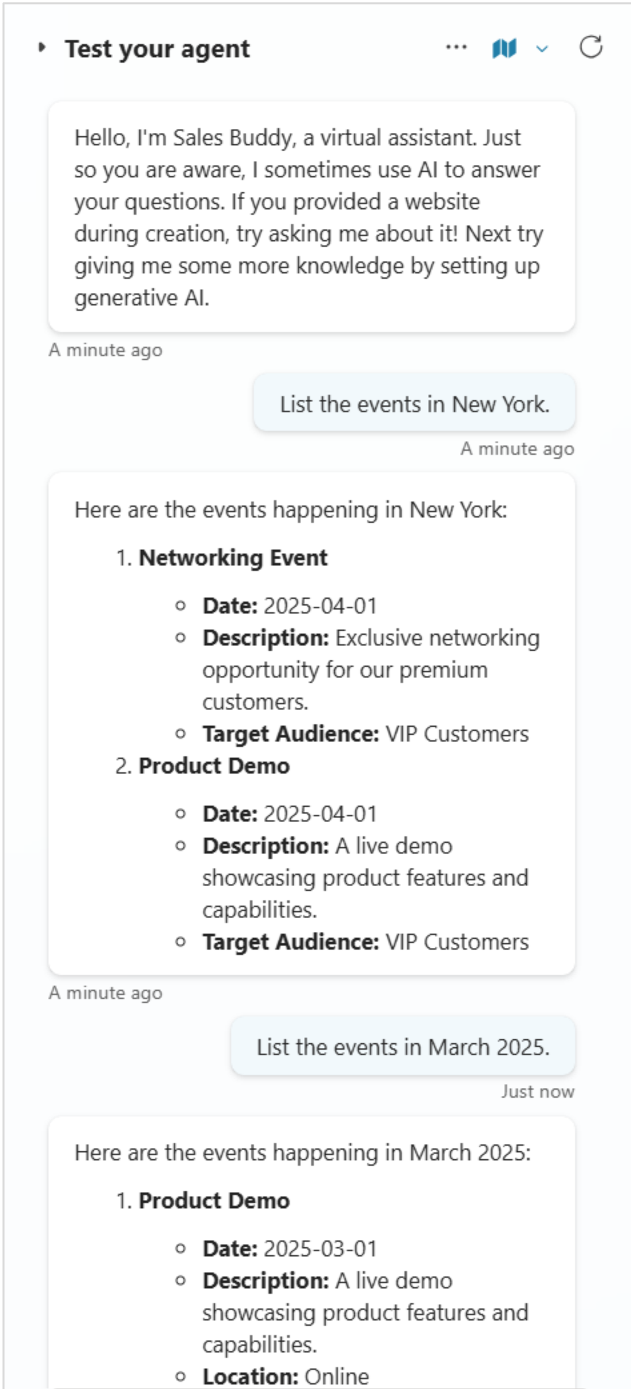
40. In the new window, click on **Connect** next to the excel connector and **Submit**.



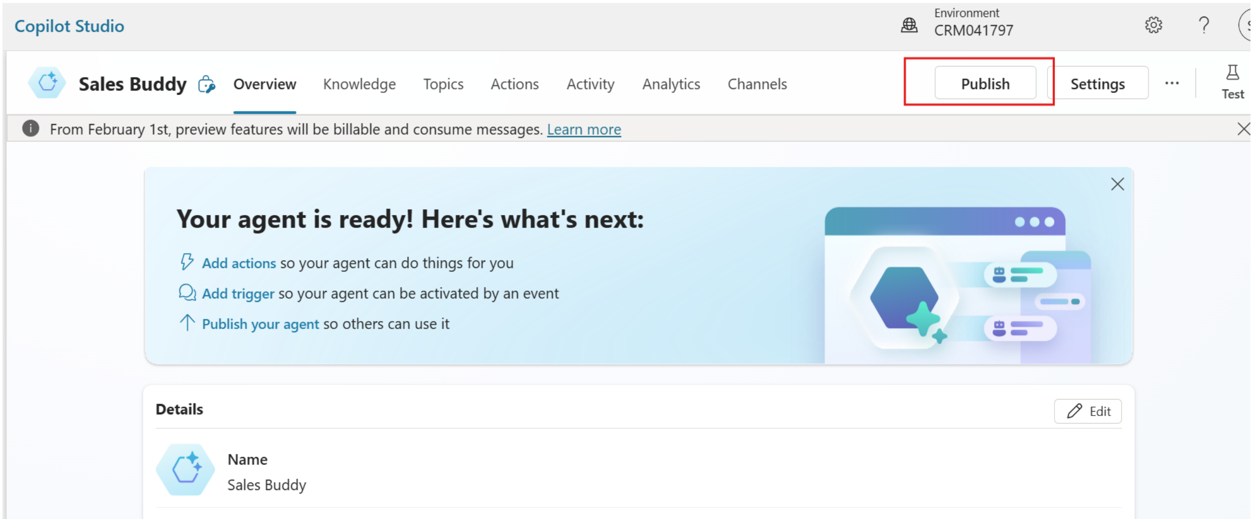
Go back to your test window and click on **Retry**



41. You should see the response from the agent as shown below. You can ask another question - List the event in March 2025



42. Click on **Publish** on top and in the pop-up window, click on **Publish** again.



Congratulations! You have completed Lab 1.

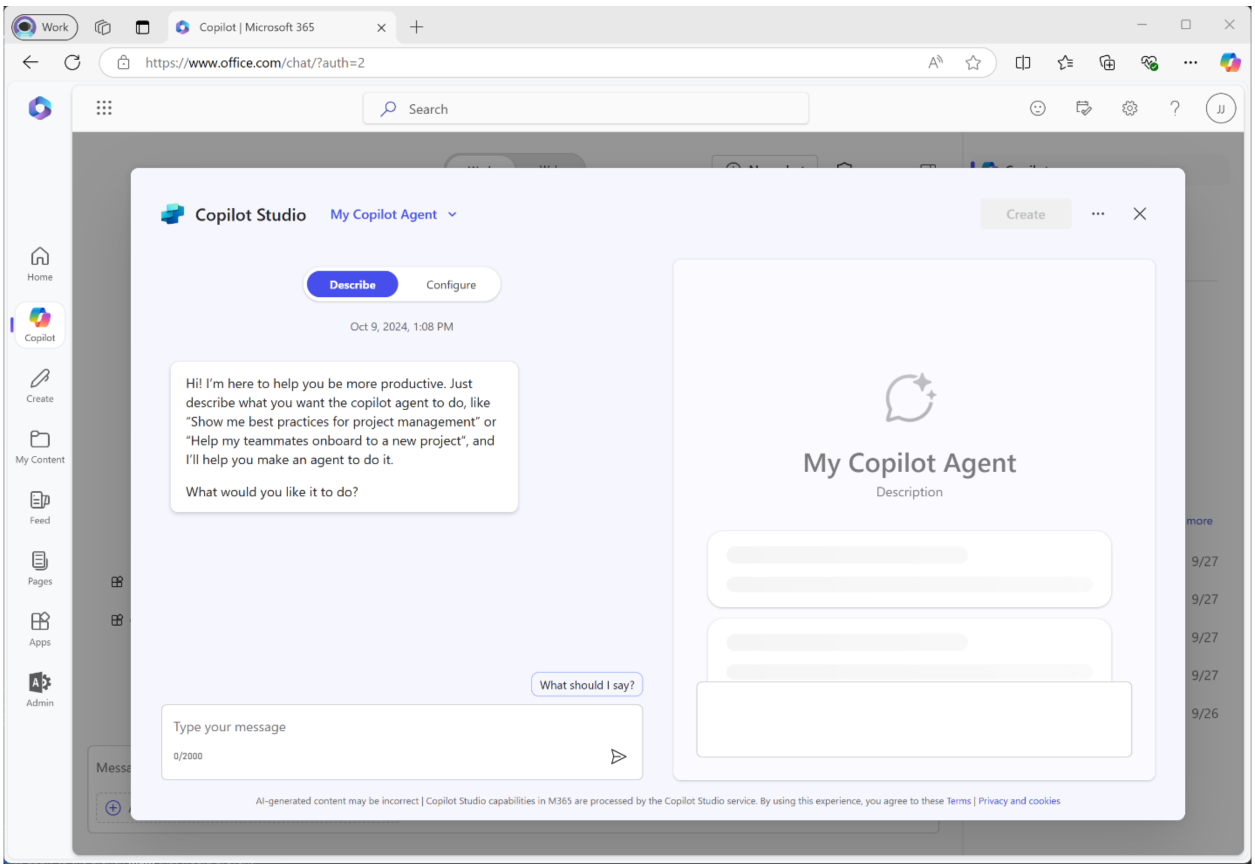
Appendix:

Microsoft 365 Copilot Chat – Copilot Studio Agent Builder

The Copilot Studio Agent Builder in Microsoft 365 Copilot Chat enables citizen developers to build agents for Microsoft 365 Copilot easily and quickly.

This additional guide demonstrates how to create an agent and add knowledge sources in Microsoft 365 Copilot Chat using the Copilot Studio Agent Builder.

If you need more advanced capabilities like Actions to integrate external services, we recommend that you use the full Microsoft Copilot Studio, which provides a comprehensive set of tools and features for more complex requirements.



Current Limitations

- Only web browsing, Microsoft Graph connectors, SharePoint sites, folders, and files can be specified as knowledge sources. You can upload your local folders and files into SharePoint.
    - In other words, Dataverse cannot be used as a knowledge source in Agent Builder.
- Actions in Agent Builder are not yet available.
- Agents created via Copilot Studio agent builder can't be used in Teams Chat.

Pre-requisites

- User account must be licensed for Microsoft 365.

- ❗ **IMPORTANT:** Must meet one of the following criteria:
    - User account is licensed for Microsoft 365 Copilot.
    - If user account is not licensed for Microsoft 365 Copilot, Pay-As-You-Go (PAYG) billing is set up for Microsoft 365 Copilot Chat.
        - Click here for information on setting up PAYG for Copilot Chat.
- Copilot extensibility must be enabled for the user account to use the Copilot Studio Agent Builder in Microsoft 365 Copilot Chat.
    - Click here for information on enabling Copilot extensibility in the Microsoft 365 Admin Center.

Instructions

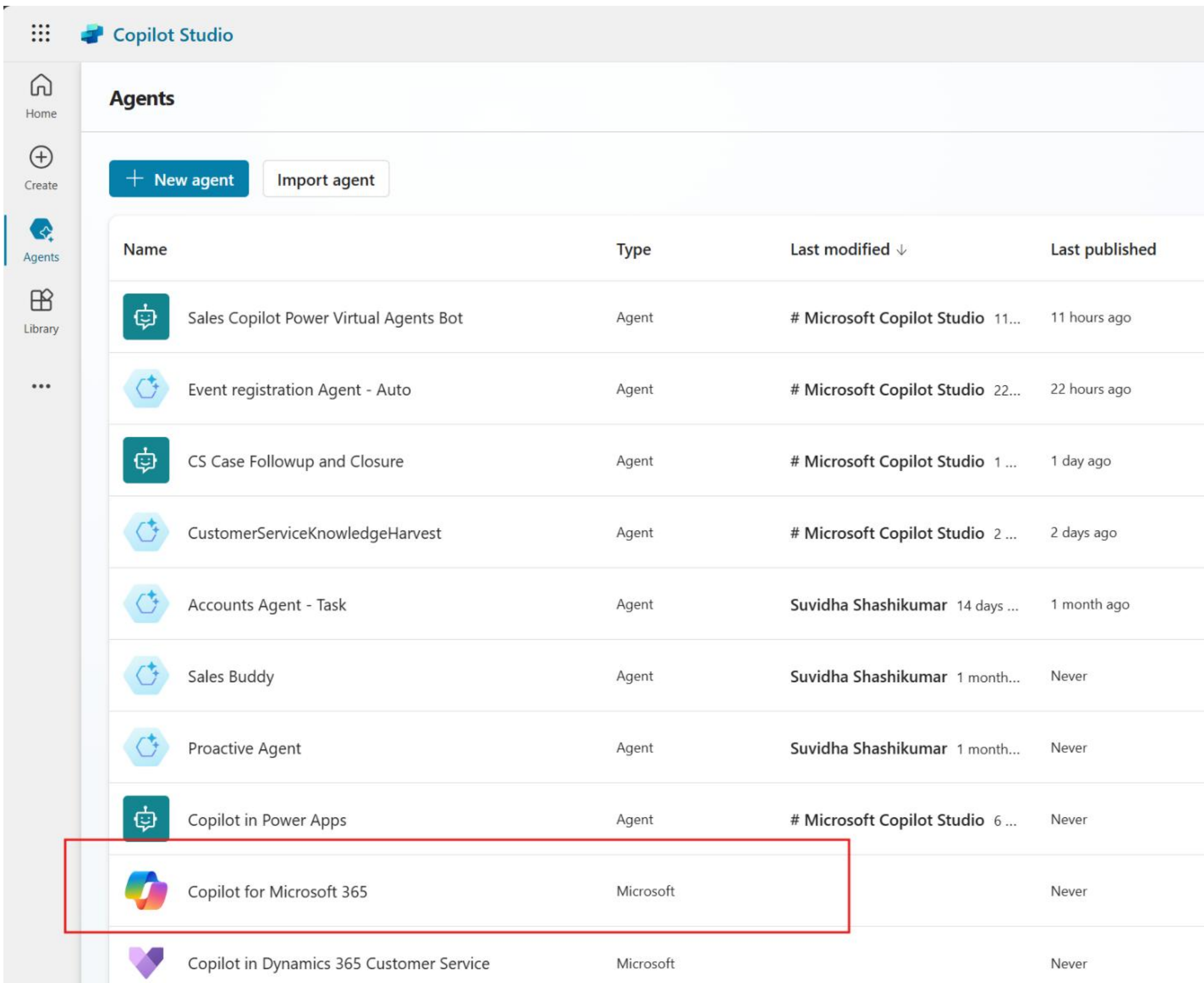
1. Navigate to Microsoft 365 Copilot Chat via microsoft365.com/chat, office.com/chat, or the Microsoft Teams desktop and web client.
    - Note: if you are licensed for Microsoft 365 Copilot, you can access Agent Builder via both the Work and Web options.
2. In the right rail, choose **Create an agent**.
3. Click on the **Configure** tab.
    - The Describe tab allows you to create an agent using plan language in a conversational interface. For this lab, we are going to skip to the Configure tab. Note that both tabs are in sync.
4. Configure the agent using the following information:
    - Name: Sales Buddy Lite
    - Description: The Sales Buddy Lite Agent provides information on sales processes, customer onboarding, and customer events.
    - Instructions: You provide information on sales processes, customer onboarding, and customer events.
5. Under **Knowledge**, click the **Browse** button to open the **Pick items** window.
6. Under **Quick Access** on the left, look for the SharePoint site where you uploaded the lab documents.
    - If your SharePoint site is not in the list, click More places. You should now see Shared libraries. If your lab site is still not visible, type its name into the search box in the top right of the Pick items window.
7. Select the "Contoso – Sales Documents" folder and the "contoso_customer_events.xlsx" Excel file, then click the **Select** button at the bottom right of the window to confirm.
8. Test the Sales Buddy Lite agent in the chat window on the right. If desired, make additional adjustments in **Configure**. Once you're done configuring and testing your agent, click the purple **Create** button at the top right of the window to create it.
9. Select **Go to agent** to open a new chat with the agent in Microsoft 365 Copilot. You can easily return to chats with your agents from the right rail of Microsoft 365 Copilot.
10. To edit or share the Sales Buddy Lite agent:
    1. Navigate to Microsoft 365 Copilot chat.
    2. Click **Create an agent** in the right rail.
    3. In the top left of the Agent Builder window, click on the link in the **My Agents** breadcrumb menu with a downward facing caret (˅) beside it. Choose Sales Buddy Lite.

4. From here, you can update and/or share the agent.
    - Note: When you share an agent, the people you share the agent with can use it, but they can't edit it. You can change the sharing option at any time by choosing the Share button at the top right corner.

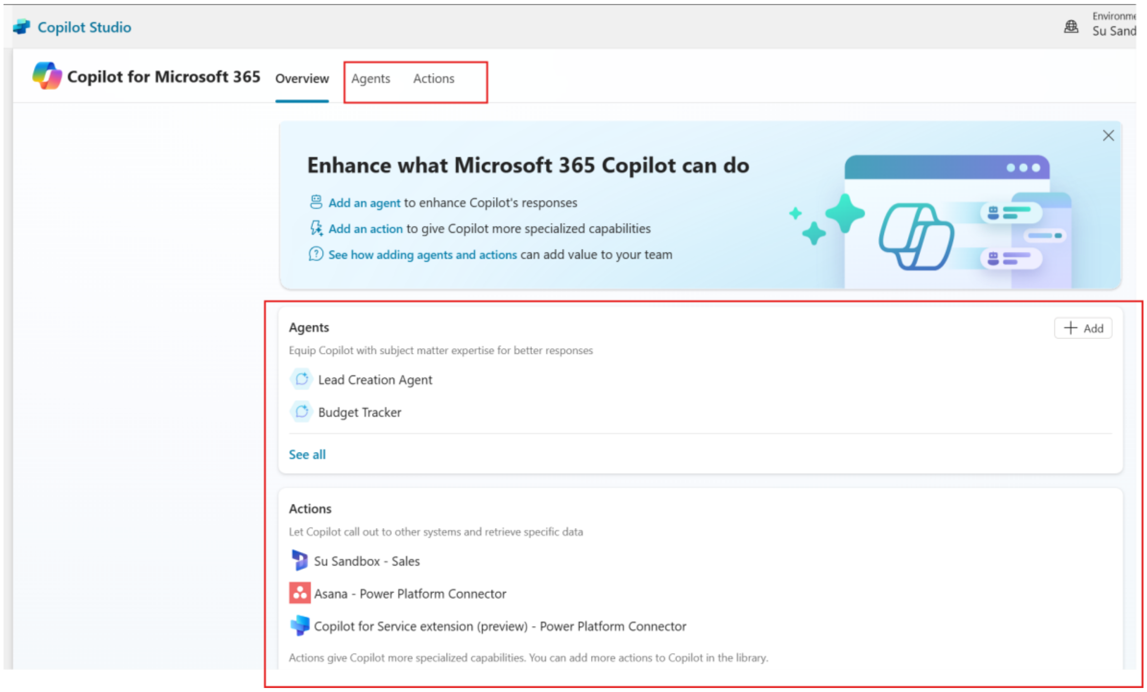
Extend Microsoft 365 Copilot with Copilot Agents and Copilot Studio Actions

In Copilot Studio, click Agents. You will find first-party agents, like Microsoft 365 Copilot, listed in Copilot Studio by default. Yes, Microsoft 365 Copilot is an agent too! Click on **Copilot for Microsoft 365**.

(Note: “Microsoft 365 Copilot” was formerly called “Copilot for Microsoft 365” and it has not yet been updated in Copilot Studio > Agents.)



From here, you can create **Copilot agents** and configure **Actions** for Microsoft 365 Copilot.



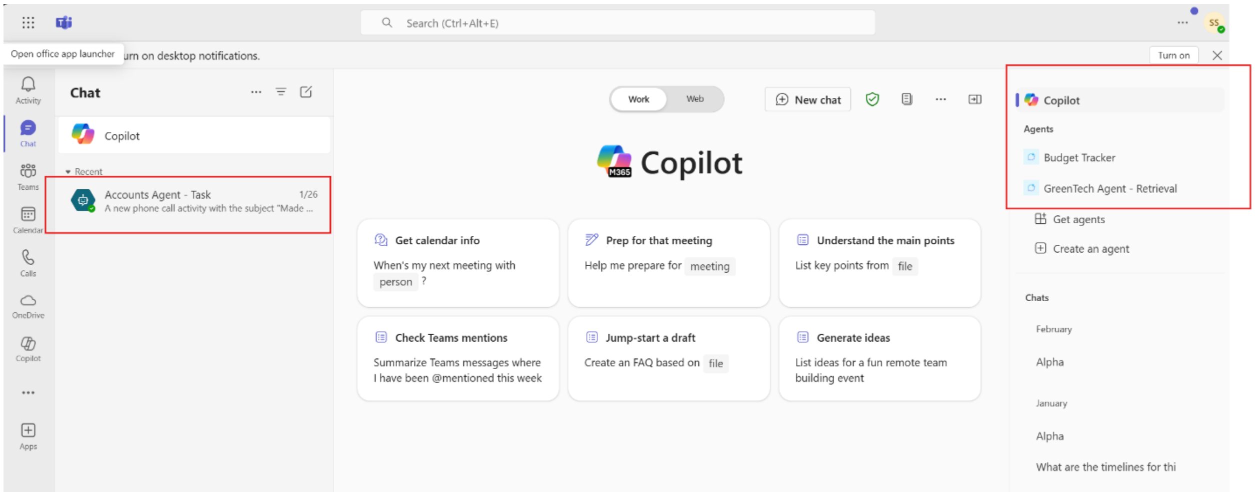
Copilot agents (formerly called "Extensions" – some documentation may still refer to Copilot agents as Extensions) are declarative agents that extend the functionality of Microsoft 365 Copilot. When you create a Copilot agent, integration with Microsoft 365 Copilot is already taken care of. However, they are less customizable than custom agents. Some key limitations include:

- Copilot agents cannot be published to any channels outside of Teams + Microsoft 365 Copilot.
- Topics cannot be configured directly in a Copilot agent (they must be configured through Conversational Actions).
- Some connections (e.g. Dataverse) cannot be connected directly to a Copilot agent (they must be configured through Connector Actions).
- Copilot agents do not appear in the Copilot Studio Agents list.

For more information on Copilot agents, click here.

Note: Copilot agents are not the only type of agent that can be accessed from Microsoft 365 Copilot! Custom agents, built in Copilot Studio, can also be used in Microsoft 365 Copilot.

Some configuration is required for a custom agent to appear not only under Chats (as highlighted below, on the left) but also in the Agents menu on the right of Microsoft 365 Copilot (also highlighted below). For detailed instructions, see the **Lab 4 Guide** titled "Publish the Sales Buddy Agent to Microsoft 365 Copilot Chat".)



You can further extend Microsoft 365 Copilot with Copilot Studio actions (formerly called “Plugins” – some documentation may still refer to actions as “Plugins”).

(Note: Copilot Studio actions are a *completely* different, separate solution from the similarly-named [Microsoft 365 Copilot Actions](), which are currently in limited private preview.)

The following action types are available:

Action Type	Description
[Conversational]()	A conversational action built in Microsoft Copilot Studio enables you to extend your agent's behavior. You can create new abilities that aren't natively in Microsoft 365 Copilot, like calling a specific API, applying sophisticated business logic, or accessing data sources that require configuration outside of Microsoft 365 Copilot's access. These abilities are configured similarly to a standard topic in Copilot Studio.
[Connectors]()	Connector actions are used within Microsoft Dataverse to connect to other data sources. When created, the connector includes specific component actions that can be used with the connector. It's possible to use Microsoft-certified connectors or custom connectors created within an organization or tenant. Custom connectors let your action retrieve and update data from external sources accessed through APIs. Connectors make it possible to access data from popular enterprise systems such as Salesforce, Zendesk, MailChimp, and GitHub. Connectors are routinely used by makers in their Power Apps and flows.
[Flows]()	Microsoft Power Automate cloud flows can be called from an agent to perform actions, retrieve information, and automate processes across other apps and data sources using connectors. Flows can be called from within a Microsoft 365 Copilot chat to perform actions or retrieve information across the user's environment.
[Prompts]()	Prompts are AI prompt templates created to customize the generation of text content in relation to user input. These templates can be used for various scenarios like summarization, action items, sentiment or entity extraction, translating text and much more. In addition, you can add your own Dataverse data to augment knowledge sources and get business specific answers. Prompts

	enable your users to use natural, plain language to get answers and perform actions with Microsoft Copilot. They use natural language understanding (NLU) to understand a user's intent and map it to an associated piece of information, data, or activity.

Click here for more information on Copilot Studio actions, and here for Copilot Studio actions architecture.