Using Multi-Agent in Copilot Studio

Help makers understand how to leverage multi-agent configurations including child and connected agents.

🧭 Lab Details

Level	Persona	Duration	Purpose
300	Maker	30 minutes	After completing this lab, participants will be able to leverage multi-agent configurations with Copilot Studio. This lab teaches the concepts of multi-agent and shows the difference of connected and child agent configurations.

📚 Table of Contents

🤔 Why This Matters

Makers and Architects - Want to know how to appropriately leverage multi-agent configurations and when to use connected vs child agents to optimize how your agent orchestrates and is built for scale?

Think of a complex agent that might have many tools and knowledge sets that should only be used when appropriate: - **Without Multi-Agent**: Makers are heavily limited in the number of orchestratable topics and tools they have at their disposal. - **With Multi-Agent**: Makers are able to logically group their tools, topics, and knowledge into contextualized agents that allow for additional instructions and descriptions to be used to guide their orchestration on the best way to find the data it is looking to provide to the user.

Common challenges solved by this lab: - "Abusing connected agents" - "Not knowing if something should be a connected agent or child agent" - "Don't understand the capabilities and rationale of child agents" - "Not classifying their agents' capabilities and putting excessive instructions in the Overview instructions to compensate"

Become a multi-agent master - no need to continue to wonder about how to work around limitations of tools and topics that can be orchestrated or have the wrong tool being called at the wrong time.

🌐 Introduction

Welcome to the Copilot Studio Multi-Agent Lab. In this hands-on session, you'll learn how to design, orchestrate, and extend intelligent copilots using multi-agent patterns, including child agents, connected agents, and coordinated task delegation. This lab is designed to help you understand how complex workflows can be broken into smaller, specialized agents that collaborate to solve problems—mirroring modern enterprise AI architectures. You'll build and configure agents, define how they communicate, and connect them to real data and actions. By the end, you'll have a working multi-agent copilot capable of distributing tasks, retrieving information from external systems, and chaining logic across multiple agent types.

What You Will Learn - How multi-agent patterns work in Copilot Studio - Creating and configuring child agents to handle specialized tasks - Chaining logic so a parent agent delegates tasks to child agents - Building connected agents that access data sources and external systems - Designing agent-to-agent communication flows - Using dynamic chaining to route user intent to the right agent - Implementing branching logic for conditional task routing - Best practices for agent design, naming, and responsibility boundaries - Testing multi-agent scenarios end to end in Copilot Studio - Troubleshooting common multi-agent issues

🎓 Core Concepts Overview

Concept	Why it matters
Child Agents	Allows a maker to group a common set of tools and knowledge including instructions into a logical group
Connected Agents	Allows a maker to connect an external agent to another agent in Copilot Studio
Orchestration	Allows a maker to let the agent decide what tools and agents are best to solve the user's request

📄 Documentation and Additional Training Links

- Generative Orchestration (https://learn.microsoft.com/en-us/microsoft-copilot-studio/faqs-generative-orchestration)
- Multi-Agent (https://learn.microsoft.com/en-us/microsoft-copilot-studio/authoring-add-other-agents)

✅ Prerequisites

- Access to Microsoft Copilot Studio
- Dataverse Search enabled in environment
- Access to Dataverse unbound action connector
- Sample Data loaded into Dataverse Tables

- Access to Account / Contact table in environment

- Access to modify views and create search indexes on Account / Contact table

---

🎯 Summary of Targets

In this lab, you'll build a parent agent that will leverage both connected agents and child agents. By the end of the lab, you will:

- Create a parent agent for a Sales Associate

- Configure a child agent that gets information about products

- Connect to a connected agent that gets information about Accounts and Contacts

- Use generative orchestration to select the correct agent and tools to execute the request

🧩 Use Cases Covered

Step	Use Case	Value added	Effort
1	Create Sales Assistant Agent	Creates parent agent to help sales associate find information they need	[X min]
2	Create Product Information Child Agents	Creates child agent to provide product information	[X min]
3	Connect to Account and Contact Information Agent	Connect existing Copilot Studio agent that provides account and contact information	[X min]

🛠️ Instructions by Use Case

🧱 Use Case #1: Create Sales Assistant Agent

Creates parent agent to help sales associate find information they need

Use case	Value added	Estimated effort
Create Sales Assistant Agent	Creates parent agent to help sales associate find information they need	[X minutes]

Summary of tasks

In this section, you'll learn how to create a parent agent to use as the base agent for a Sales Associate Assistant.

Scenario: Your Sales Team needs to quickly answer questions and help customers with information on your products and with finding account and contact information.

Objective

Create the parent agent base that will be needed to host all your tools, agents, and knowledge for sales associates.

Step-by-step instructions

Create Sales Associate Assistant

1. Navigate to the Copilot Studio home page at https://copilotstudio.microsoft.com.

2. On the Home page in the description of the agent you want to build, enter:
   ```
   Agent that assists sales associates with getting product information and lookup
   account and contact information in the sales system.
   ```

> ⚠️
>
> **IMPORTANT:** Do not click Enter or submit this text yet as we need to do the agent settings before we do that.
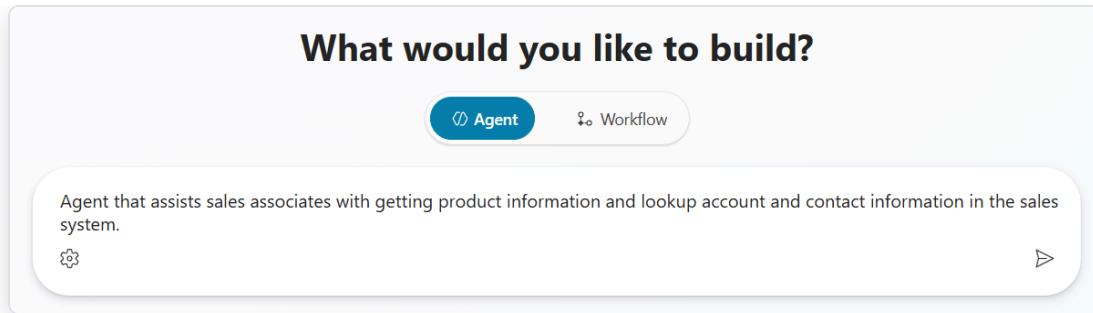
Home Creation Text

3. Click the **Gear** on the description input area and edit the schema name to include `salesassistant` and then click **Update**
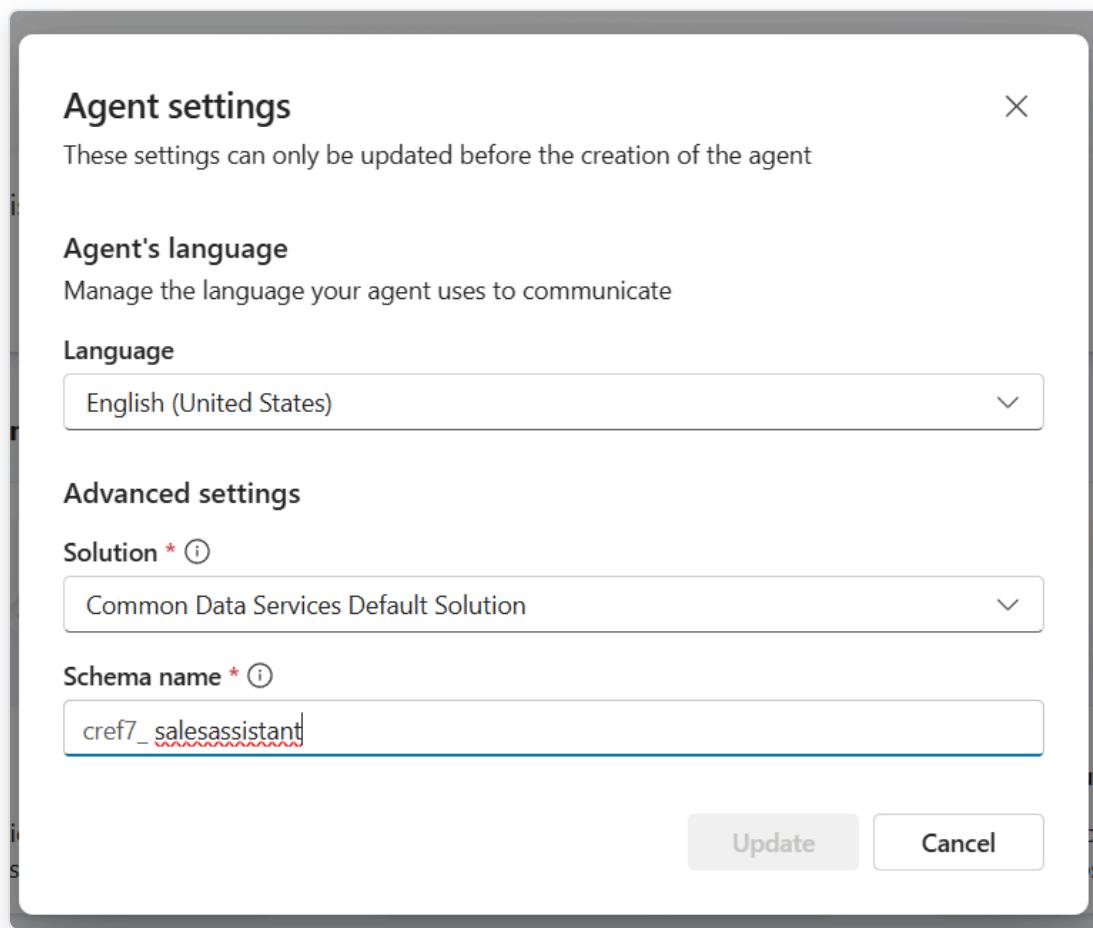
Agent Settings

> 💡
> **Tip:** Putting an agent into a dedicated solution and changing the schema name is always helpful for application lifecycle management in the future.

4. Click **Enter** or the **Arrow** button on the description field

5. Once your agent is fully provisioned, review the instructions and tool or knowledge recommendations provided by the Copilot Studio provisioning process.

Prevent Hallucinations

6. To ensure that our agent doesn't use model knowledge, we want to turn off some features. Select **Settings** (in the upper right-hand corner)

7. Scroll to the bottom of the list of settings on the **Generative AI** settings screen and turn **Off** both **Use general knowledge** and **Use information from the Web**

Turn off Model and Web Knowledge

8. Click **Save** and then **Close** the settings page

> 💡
>
> **Tip:** Turning off model and web knowledge helps to keep your agent from hallucinating information that the model might know about our product catalog or other items that might confuse it. This is best practice if you want it to keep to just the content you provide.

Collect Sales Associate's Market

9. Click **Topics** in the top navigation menu

10. Click **Add a Topic** and select **From blank**
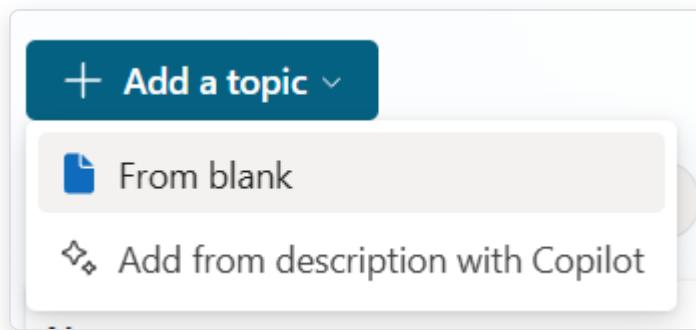
Create blank topic

11. Hover your mouse over the box that says **The agent chooses** and click the **Double Arrows** to show the Change Trigger menu, then select **It's redirected to**
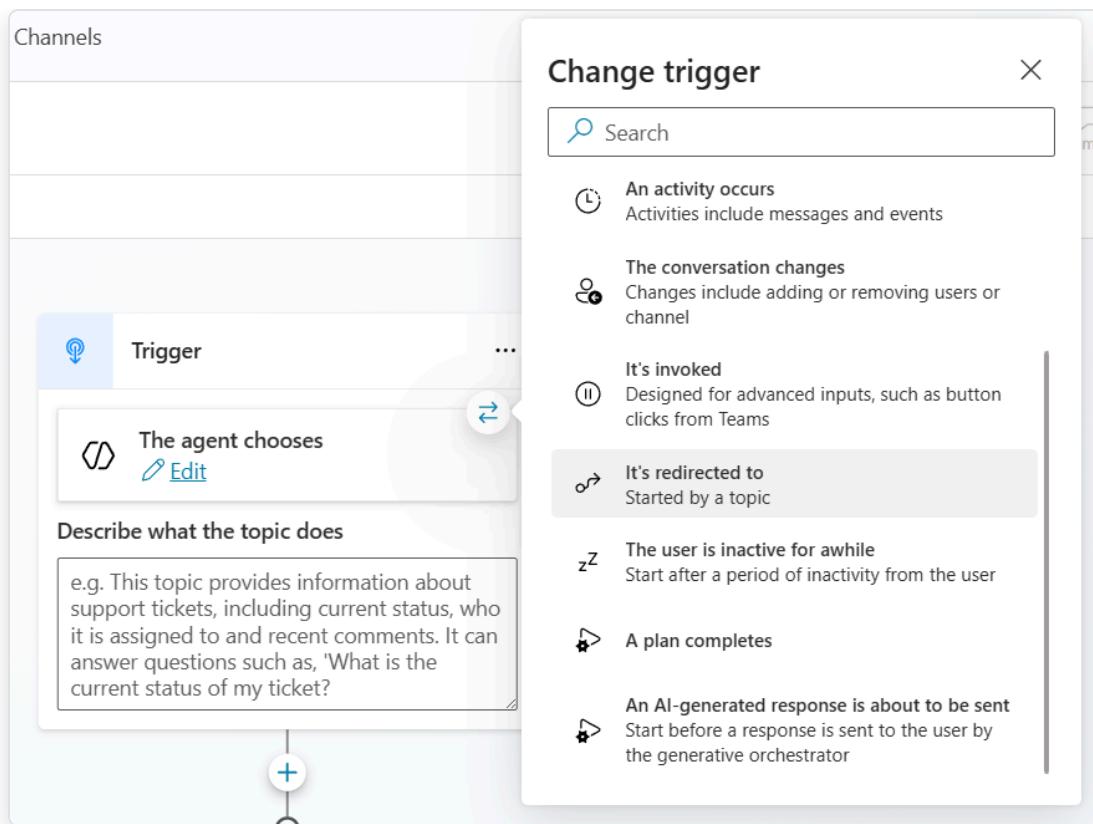
Set Trigger on Topic

12. Change the name of the Topic to `Select Market` by clicking on the name in the upper left-hand navigation
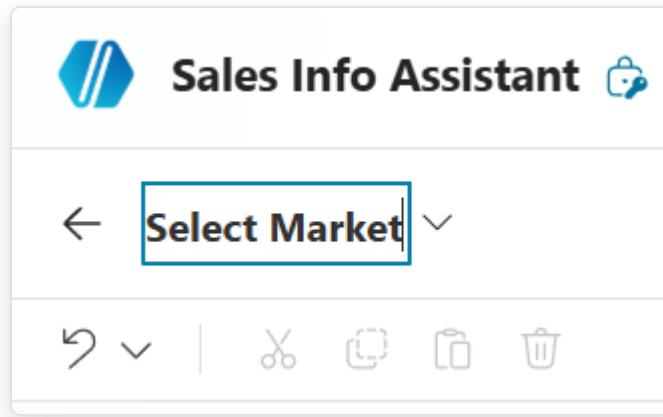
Set Topic Name

13. Add a node after the Trigger by clicking the **+** and select **Ask a question**
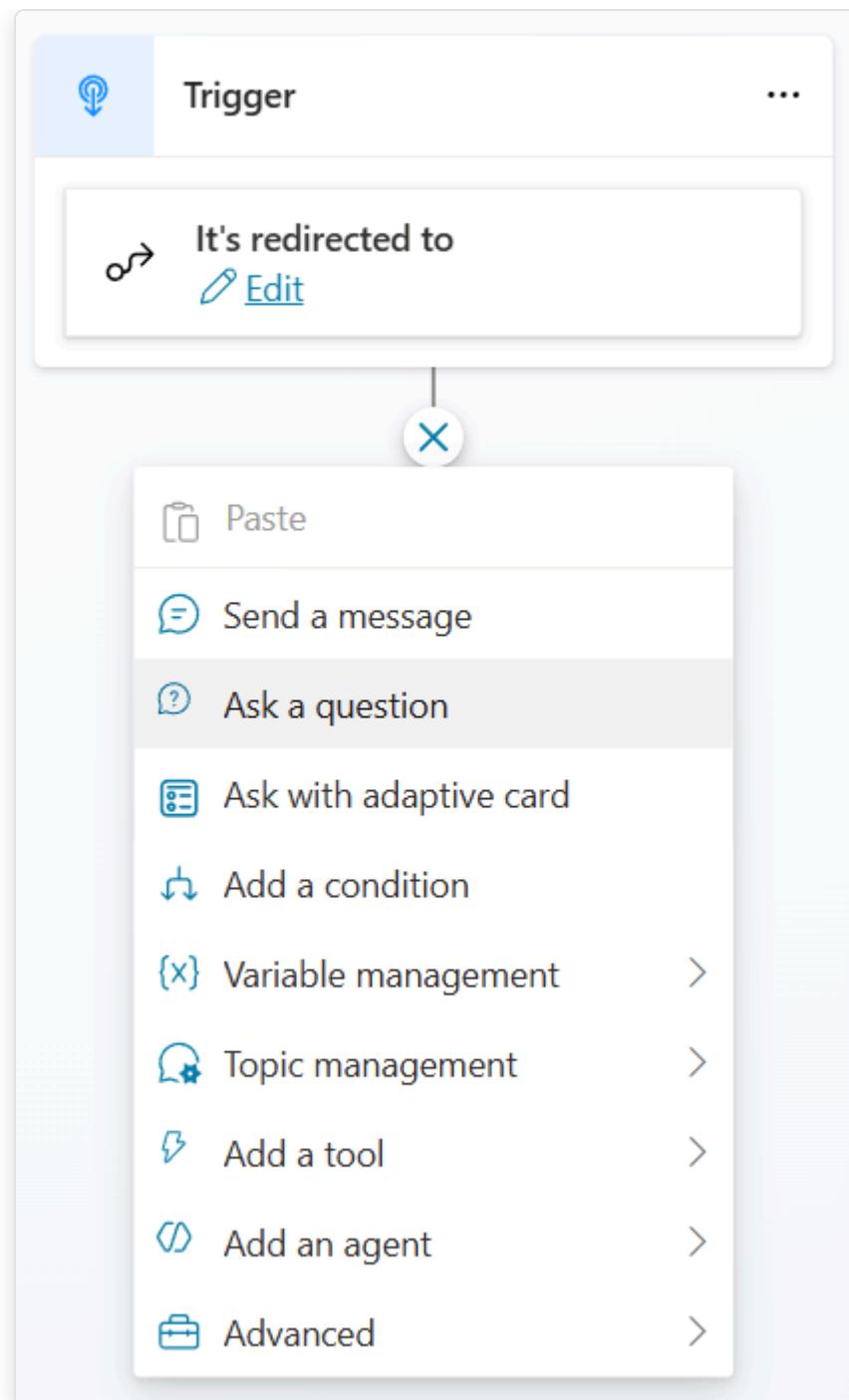
Add Question

14. Enter `What market are you wanting information in?` and add to Options for user both `US` and `UK` by selecting **New option**
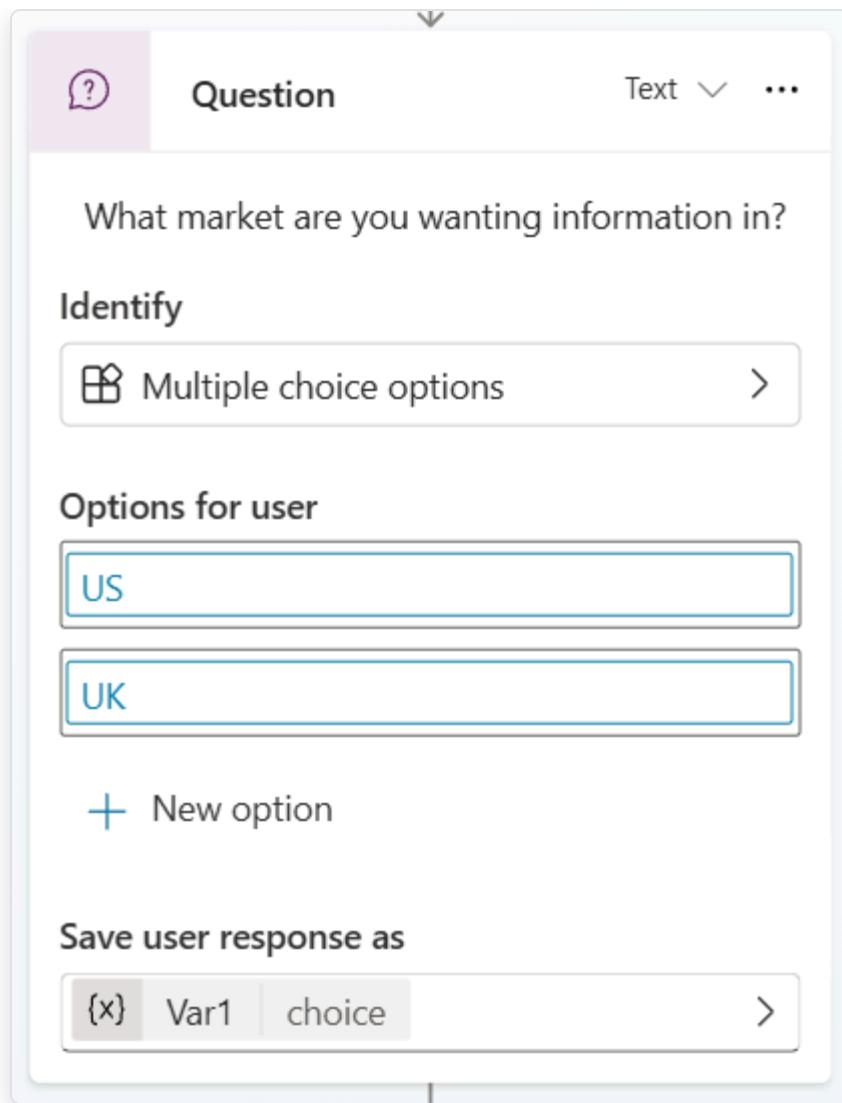
Create Question and Options

15. Under **Save user response as** click on **Var1** and set the Variable name to `Market`

16. Select **Global** as the Usage of the Variable and select **External sources can receive value**

17. Enter `The market that the sales associate is requesting information about.` in the Variable description

Variable properties   ✕

Variable name

| Global. | Market |

Type

choice

Reference

> ⑦ **Question**
> What market are you wanting inform...   ⋮
>
> Type (choice) derived from here
> Variable gets value from this node if empty

View all references

Usage

◯ Topic (limited scope)

⦿ Global (any topic can access)

   ☐ Allow to carry between sessions

   ☐ External sources can set value

   ☑ External sources can receive value

Variable description ⓘ

The market that the sales associate is re

Sensitive data ⓘ

◯ Off

Variable Settings

18. Delete all the **Condition** nodes by selecting **...** and then selecting **Delete** on each
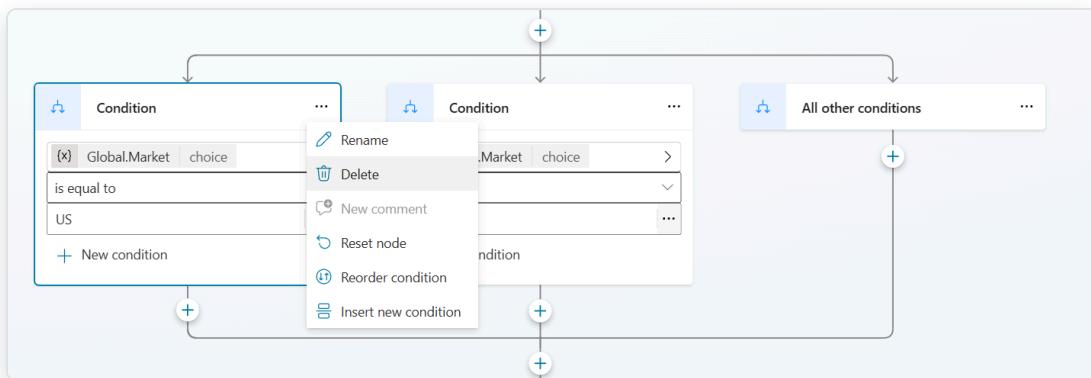
Delete Conditions

19. Click **Save** to save the topic

20. Click the **V** next to the name of the topic "Select Market" and select **Conversation Start** to go to the Conversation Start Topic
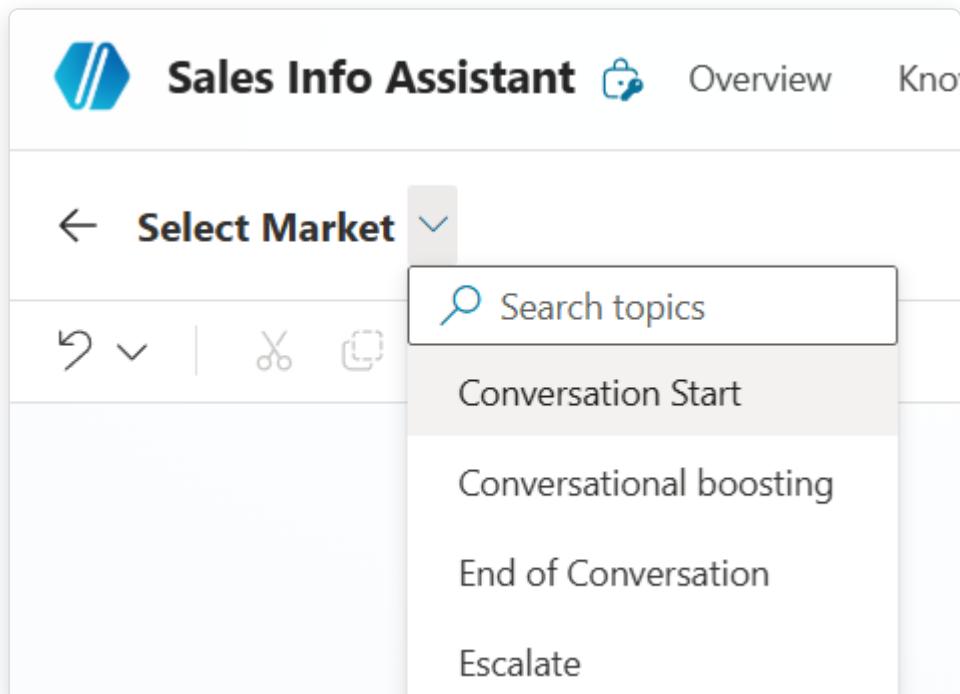
Go To Conversation Start

21. Add a new node at the end of the topic by selecting the **+** and then selecting
Topic Management > Go to another topic > Select Market
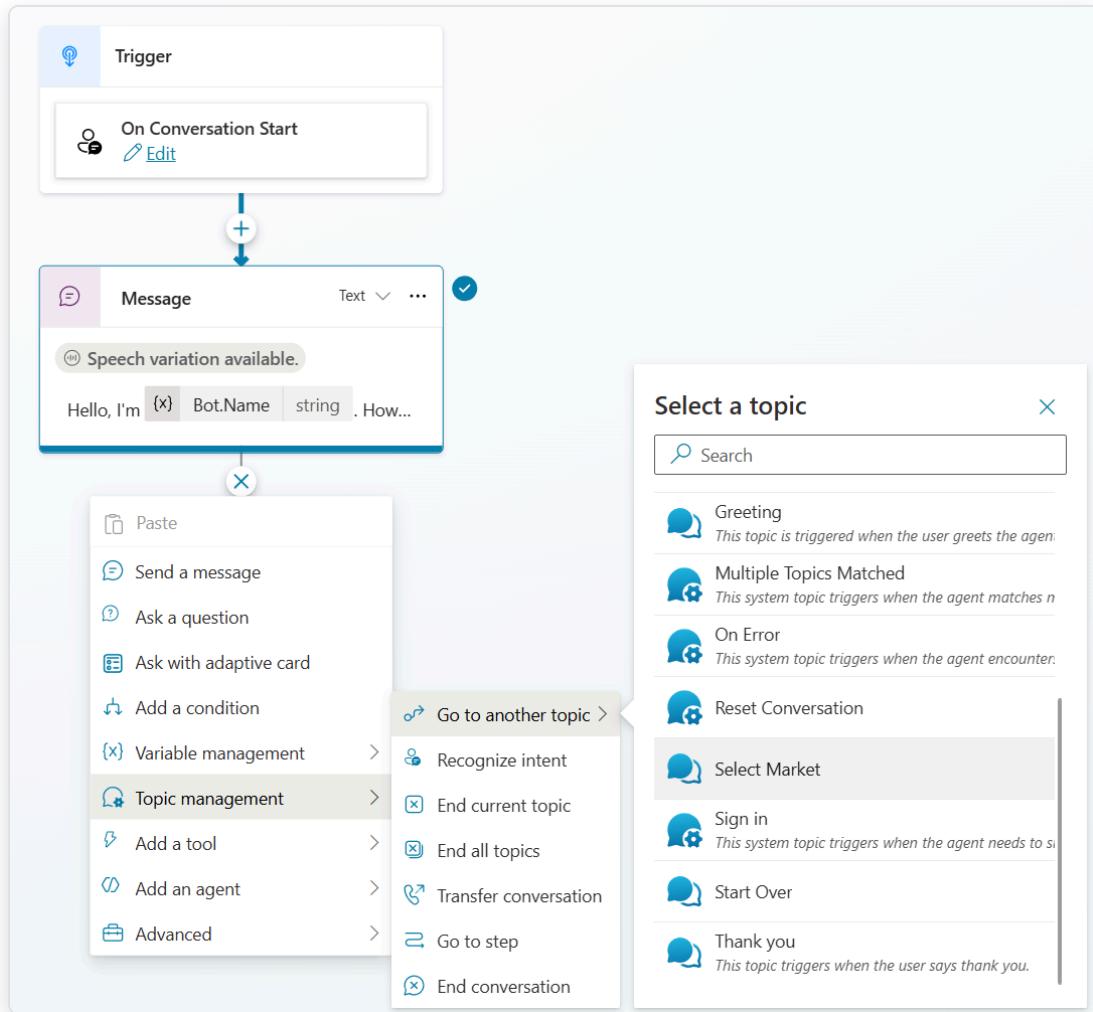
Add Node to Conversation Start

22. Click **Save**

23. Open the Test chat by clicking **Test** in the upper right-hand corner

24. Click the **+** in the Test chat to start a new test session and verify that you now
are asked which market at the beginning of each new chat.

Test Chat Market Selection

🏅 Congratulations! You've completed Use Case #1!

🔄 Use Case #2: Create Product Information Child Agents

Create child agents that allow the user, based on their market, to get the right product information.

Use case	Value added	Estimated effort
Create Product Information Child Agents	Group common tools and knowledge into logical groups for orchestration optimization	[X minutes]

Summary of tasks

In this section, you'll learn how to create child agents to logically group knowledge and tools allowing them to be orchestrated based on a condition.

Scenario: You want to orchestrate to knowledge about your products based upon the market that the user selects.

Create Child Agent for US product information

1. In the Sales Associate Assistant, select **Agents** on the top navigation menu

2. Click **Add** on the Agents page

3. Select **New child agent**

Create a child agent

New child agent
A lightweight agent within your existing agent. Learn more

Select Child Agent

4. Set Agent Name to `US Product Information Agent`

5. Set the Description to `This agent provides details about the Surface products offered in the United States`

6. Expand **Advanced** and set the Condition to the **Global.Market** variable **is equal to** `US`

ⓘ Details
What it is, how it operates, and how the orchestrator identifies it. Learn more

Name

US Product Information Agent

When will this be used?

The agent chooses - Based on description

Description * ⓘ

This agent provides details about the Surface products offered in the United States.

⌄ Advanced

Condition ⓘ   Builder ⌄

{x} Global.Market choice   >

is equal to   ⌄

US   ...

+ New condition

Priority ⓘ

Enter number

Set Child Agent Details

> 💡
> **Tip:** You can use a formula or variables to make conditions for when this agent should be available.

7. In Instructions add `This agent should only answer questions about Microsoft Surface products in regards to the US-based products. It should never provide details or stats on any products not offered or details about models offered outside of the United States. You should only talk about Microsoft Surface products and not discuss any products that are not Microsoft Surface products even if they are made by Microsoft.`

Add instructions

8. Add Knowledge to the Child Agent by clicking **Add** in the Knowledge section of the Child Agent configuration

9. Select **Public Websites**

10. Enter `microsoft.com` in Public website link and click **Add**

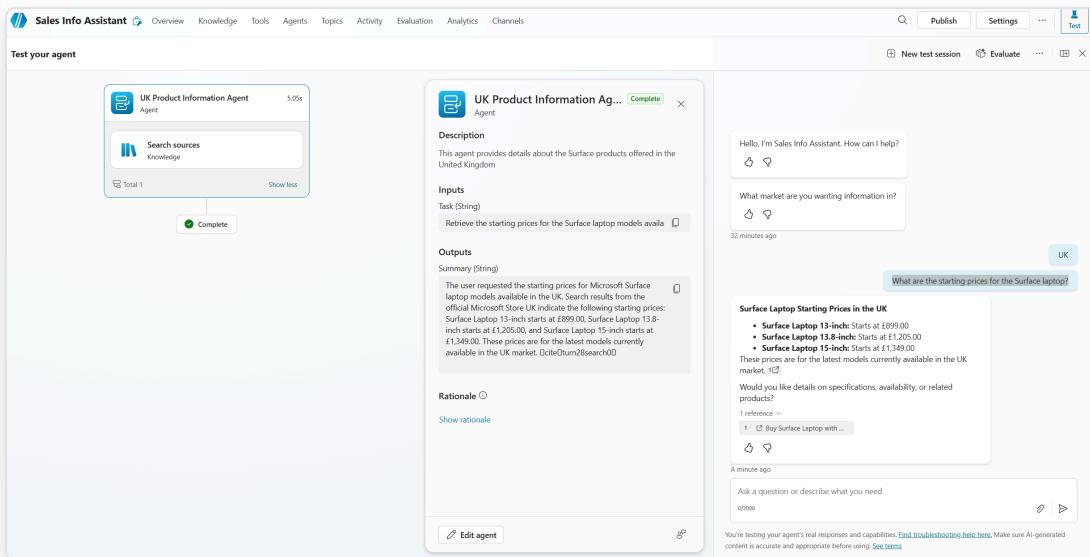11. Click **Add to agent**

12. Click **Save** to save your child agent

Create Child Agent for UK product information

1. In the Sales Associate Assistant, select **Agents** on the top navigation menu

2. Click **Add** on the Agents page

3. Select **New child agent**

Select Child Agent

4. Set Agent Name to `UK Product Information Agent`

5. Set the Description to `This agent provides details about the Surface products offered in the United Kingdom`

6. Expand **Advanced** and set the Condition to the **Global.Market** variable **is equal to** `UK`

Set Child Agent Details UK

> 💡
> **Tip:** You can use a formula or variables to make conditions for when this agent should be available.

7. In Instructions add `This agent should only answer questions about Microsoft Surface products in regards to the UK-based products. It should never provide details or stats on any products not offered or details about models offered outside of the United Kingdom. You should only talk about Microsoft Surface products and not discuss any products that are not Microsoft Surface products even if they are made by Microsoft.`

📄 Instructions

↶ ↷

This agent should only answer questions about Microsoft Surface products in regards to the UK-based products. It should never provide details or stats on any products not offered or details about models offered outside of the United Kingdom.

You should only talk about Microsoft Surface products and not discuss any products that are not Microsoft Surface products even if they are made by Microsoft.

Add Child Agent Instructions UK

8. Add Knowledge to the Child Agent by clicking **Add** in the Knowledge section of the Child Agent configuration

9. Select **Public Websites**

10. Enter `microsoft.com/en-gb` in Public website link and click **Add**

11. Click **Add to agent**

12. Click **Save** to save your child agent

13. Open the Test chat by clicking **Test** in the upper right-hand corner

14. Click the **+** in the Test chat to start a new test session

15. Select **UK**

16. Enter `What are the starting prices for the Surface laptop?`

17. Verify that the correct child agent was triggered and that your answer is appropriate for the UK market

Example Response UK question

18. Reset the conversation and do again for US market

🥇 Congratulations! You've completed Use Case #2!

🧱 Use Case #3: Connect to Account and Contact Information Agent

Connect the Account and Contact Information agent to our parent Sales Associate Agent. Will need to ensure indexing is working in the environment ahead of testing.

Use case	Value added	Estimated effort
Connect to Account and Contact Information Agent	Connect to an Account and Contact Information agent	[X minutes]

Summary of tasks

In this section, you'll learn how to connect an existing Copilot Studio agent to your parent agent using the connected agents feature.

Scenario: Your Sales Team needs to quickly answer questions and help customers with information on your products and with finding account and contact information.

Objective

Connect existing agent to our Sales Associate Assistant agent to add ability to find account and contact information from the sales system.

Step-by-step instructions

Make sure that Dataverse Search is set to on

1. In the upper right-hand corner of Copilot Studio, click the **Gear** icon

2. Select **Go to Power Platform admin center**

3. In the left navigation, select **Environments**

4. Select your environment from the list

5. Select **Settings** in the top menu

6. Expand **Product** and select **Features**

7. In the Search section, ensure **Dataverse search** is turned **On**

8. Click **Save** if you made any changes

Ensure that indexes are in place for our connected agent

> ⚠️
>
> **IMPORTANT:** This is not required for a connected agent to work, but to make sure that the one we have pre-loaded for you will return results we must index a few tables in your environment.

9. In the top left, click the menu button with 9 dots in the shape of a box and select **Power Apps**
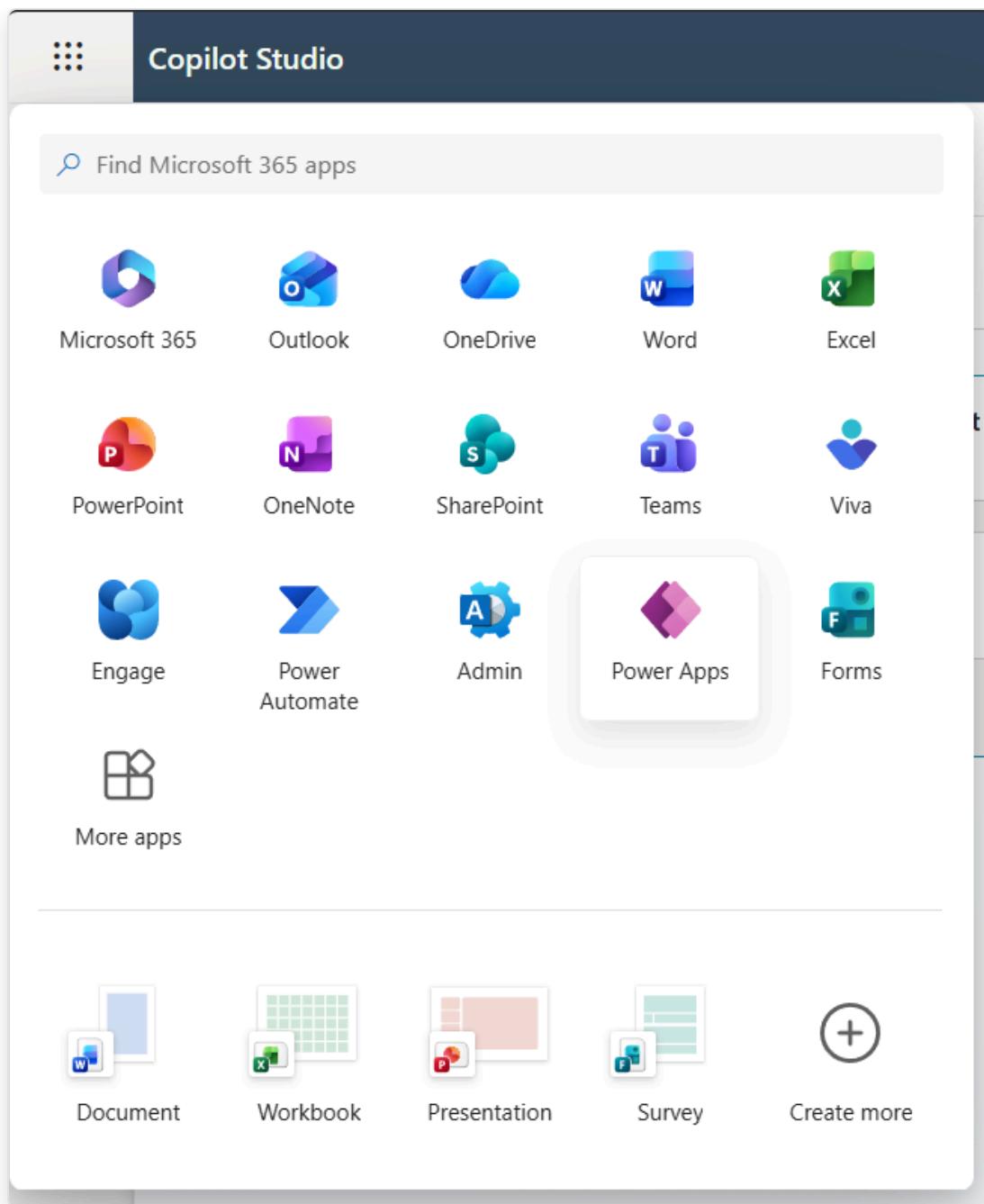
Open Power Apps

10. In the left-hand menu select **Tables**

11. Select the **Account** table from the list

12. Select **Views** from the Data experiences section

13. Select **Quick Find Active Accounts** option from the list of Views

14. Select **View Column** to verify the following list of columns are in the view:

- Address1: State or Providence

- Address1: Postal Code

- Address1

- Annual Revenue

- Currency

Account View

15. Add the ability to search on certain fields by verifying that the following items are in the **Find by** on the bottom right. Click the **Edit find table columns** option to check:

- Address1: State or Providence

- Address1: Postal Code

- Address1: City
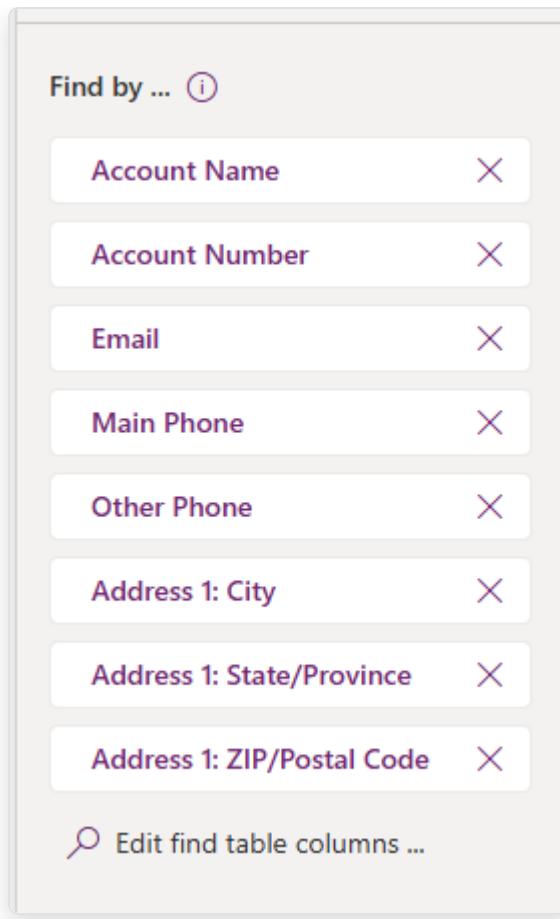
Add Account Searchable Columns

16. Click **Save and publish** to update the index

> ⚠️
>
> **IMPORTANT:** DO NOT navigate away until the save and publish is completed!

17. Click **Back** in the upper left corner to go back to the Views list

18. Click on **Tables** in the Views screen to go back to the list of Tables
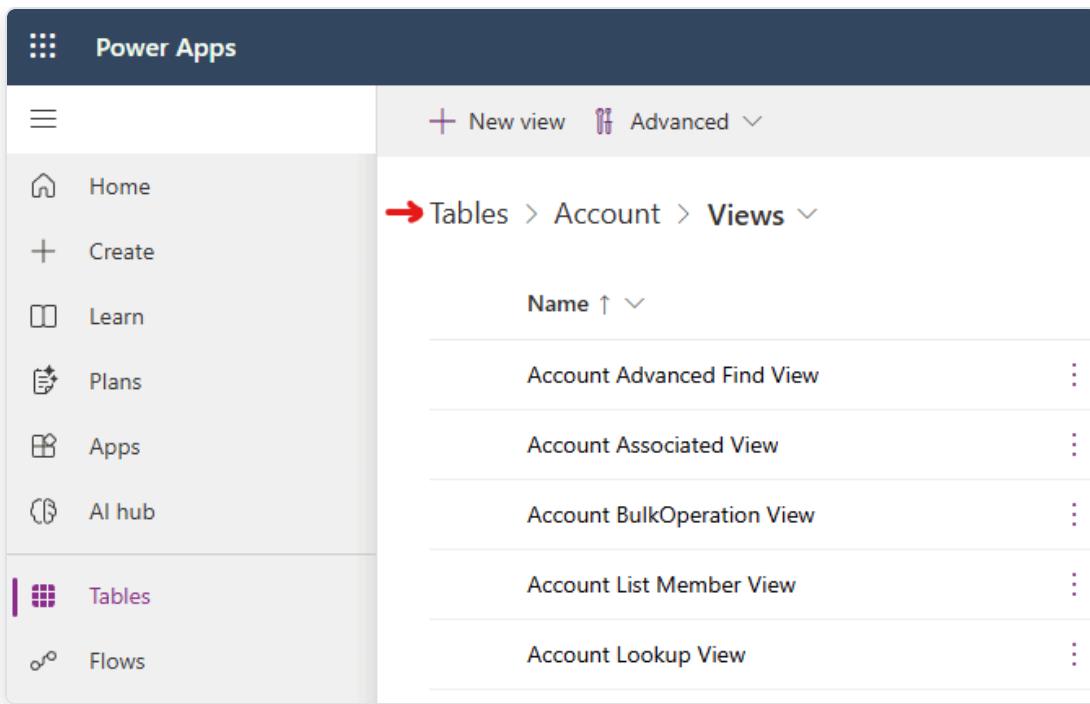
Navigate to Tables

19. Select **Contact** table from the list

20. Select **Views** from the Data experiences section

21. Select **Quick Find Active Contacts** option from the list of Views

22. Select **View Column** to verify the following columns are in the view:

- Anniversary
- Birthday
- Job Title
- Marital Status

Column Add Contact

23. Click **Save and publish** to update the index

> ⚠️
>
> **IMPORTANT:** DO NOT navigate away until the save and publish is completed!

Test and Publish the Account and Contact Information Agent

24. In the Copilot Studio tab in your browser, open the **Account Data Lookup Agent**

25. Open the Test chat by clicking **Test** in the upper right-hand corner

26. Enter `What are the accounts in Texas?`

27. Verify that you get a response showing that the agent is working and the data is indexed

   Test Account Lookup

28. Click **Settings** in the upper right-hand menu

29. Make sure that the setting in the Generative AI menu in the Connected Agents section for **Let other agents connect to and use this one** is set to **On**

30. Close the Settings menu by clicking the **X** in the upper right-hand corner

31. Click **Publish** and make sure that your agent publishes

> ⚠️
>
> **IMPORTANT:** You can't connect to an agent unless it is published
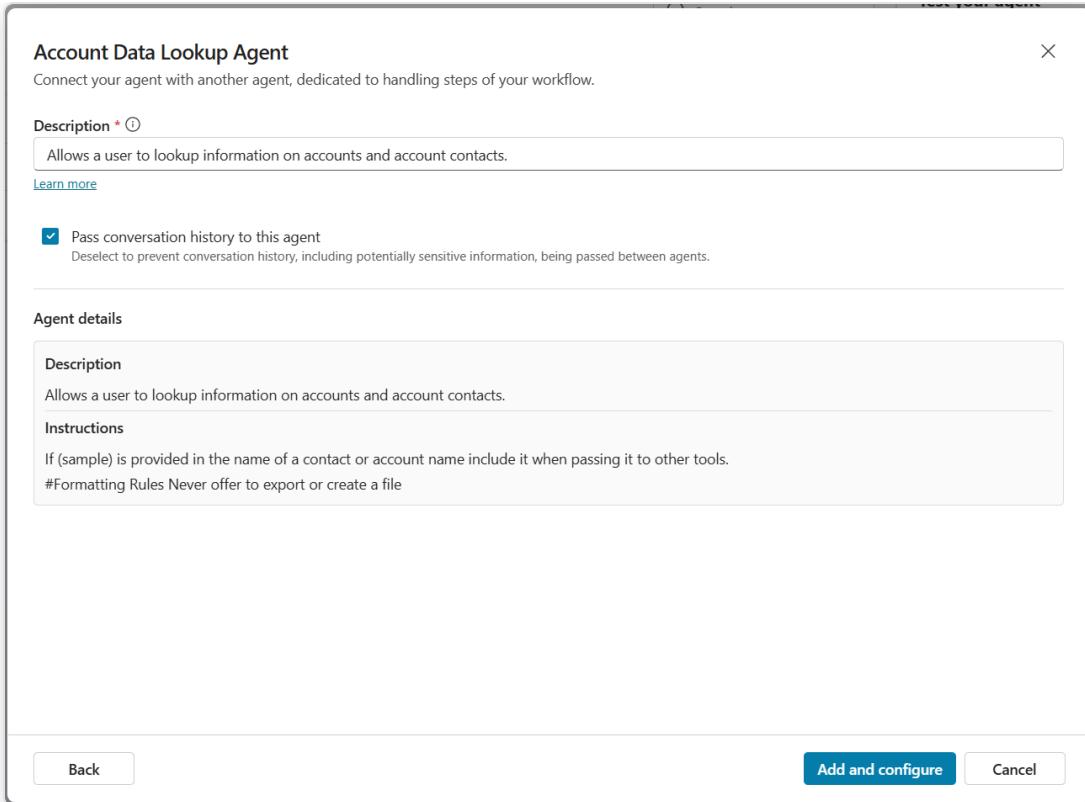
Connect the Account and Contact Information Agent

32. In the Copilot Studio tab in your browser, open your parent agent (Sales Associate Assistant)

33. Navigate to the **Agents** menu on the top navigation bar

34. Click **Add an agent**

35. Select **Account Data Lookup Agent** from the menu
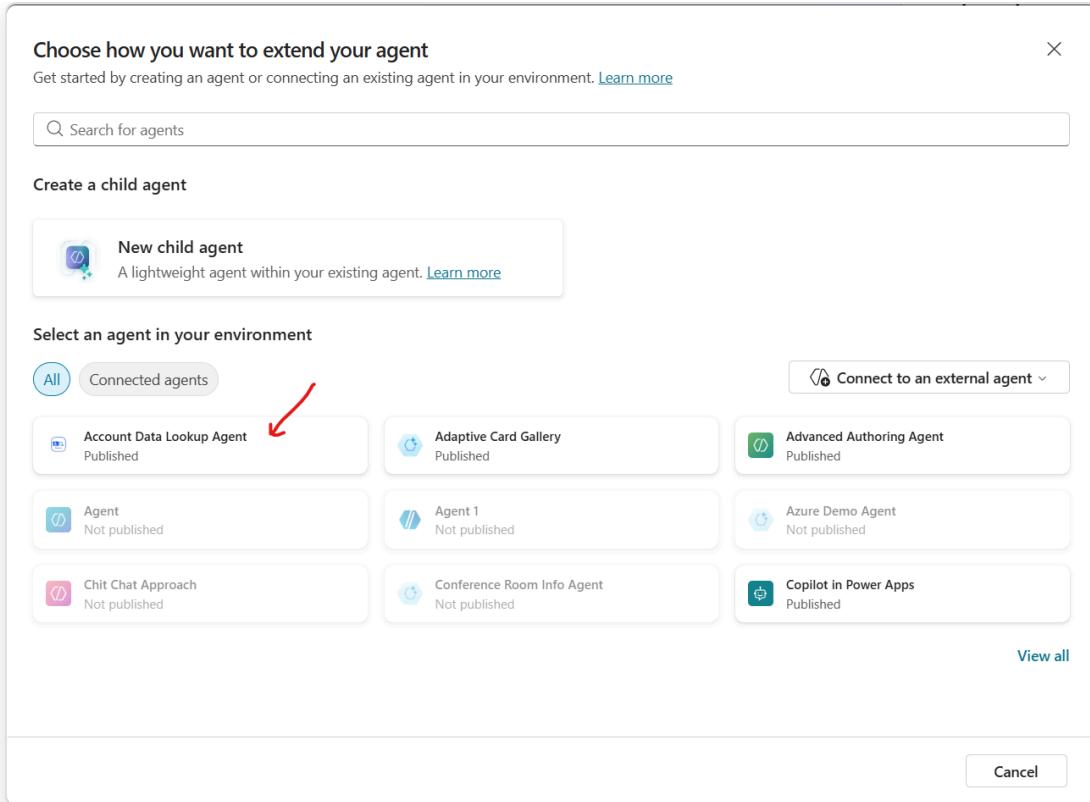
Select Connected Agent

36. Notice that the Description provides details on when to use this agent

37. Make sure that the **Pass conversation history to this agent** is **Checked**

Account Data Lookup Agent

Connect your agent with another agent, dedicated to handling steps of your workflow.

Description *

Allows a user to lookup information on accounts and account contacts.

Learn more

☑ Pass conversation history to this agent
Deselect to prevent conversation history, including potentially sensitive information, being passed between agents.

Agent details

Description
Allows a user to lookup information on accounts and account contacts.

Instructions
If (sample) is provided in the name of a contact or account name include it when passing it to other tools.
#Formatting Rules Never offer to export or create a file

Back   Add and configure   Cancel

Validate Setting Connected Agent

38. Click **Add and configure**

39. Open the Test chat by clicking **Test** in the upper right-hand corner

40. Select **US** in the test canvas to select that geography

41. Enter `What are all of the details of accounts in Texas?` and send to agent

42. Notice that the agent orchestrated to the connected agent which then called its child agent that then called numerous tools to answer the question.

Account Info Results

🥇 Congratulations! You've completed Use Case #3!