



# Copilot Studio and Azure AI Workshop

## Lab 3: Copilot Studio – Exploring Agent Setup and Analytics

Hands-on Lab Step-by-Step Guide

April 2025

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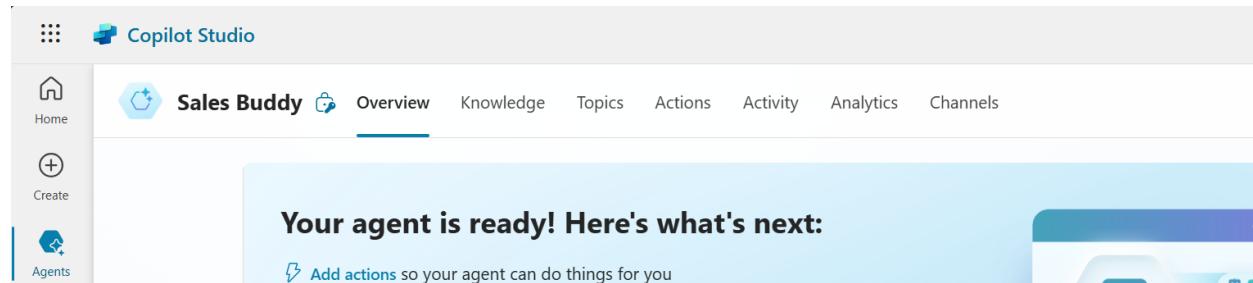
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Copilot Studio provides a comprehensive platform for setting up and analyzing agents to enhance their effectiveness. This guide will take you through the process of agent setup and delve into the analytics that can improve agent performance.

## 1. Exploring Your Agent

Setting up your agent is the foundational step in utilizing Copilot Studio. You'll learn how to configure the basic parameters, assign tasks, and integrate your agent into various environments.

Review the menu options of your Agent.



1. **Overview** – this tab is the home page of your agent providing description and quick links to many of the capabilities and features of your agent

The screenshot shows the 'Overview' tab selected in the top navigation bar of the Copilot Studio interface. The main content area displays a message: 'Your agent is ready! Here's what's next:' followed by three calls-to-action: 'Add actions so your agent can do things for you', 'Add trigger so your agent can be activated by an event', and 'Publish your agent so others can use it'. To the right of this message is a small preview window showing a user interface with various icons and components. Below this section is a 'Details' card containing 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.
- General instructions:** Sales Buddy Agent provides information on Sales processes, customer onboarding, customer events and information from Dataverse like - Accounts, Contacts, and Activities.
- Orchestration:** Use generative AI to determine how best to respond to users and events. [Learn more](#)  Enabled
- Knowledge:** Add data, files, and other resources to inform and improve AI-generated responses. [Learn more](#)  Disabled

2. **Knowledge** – on this tab, you can add knowledge sources for your agent, review the existing resources, add new, and analyze usage.

Click to + add knowledge

The screenshot shows the Copilot Studio interface for an agent named "Sales Buddy". The "Knowledge" tab is highlighted with a red box. Below it, a blue button labeled "+ Add knowledge" has a red arrow pointing to it. To the right, there are three cards: "Suggestions (preview)", "Improve answer rate", and "Track knowledge use". On the far right, there are three performance metrics: "Total knowledge source use 0%", "Error rate 0%", and "Total answer rate 0%". Below these are filters for "All", "Dataverse", and "SharePoint", and a search bar.

Name	Type	Last modified	Status
Shared Documents	SharePoint	System Administrator 6 days ago	<span>Ready</span>
Activity, Contact, Account	Dataverse	System Administrator 6 days ago	<span>Ready</span>

3. There are several options knowledge sources. Click on Public Websites

The screenshot shows the "Add knowledge" dialog. It includes a description of what adding knowledge does, a search bar, and three categories: "Featured" (selected), "Advanced", and "Public websites". The "Public websites" category is highlighted with a red box. Below it, there's a file upload section and a note about file types.

4. Enter a website such as your corporate site and click Add

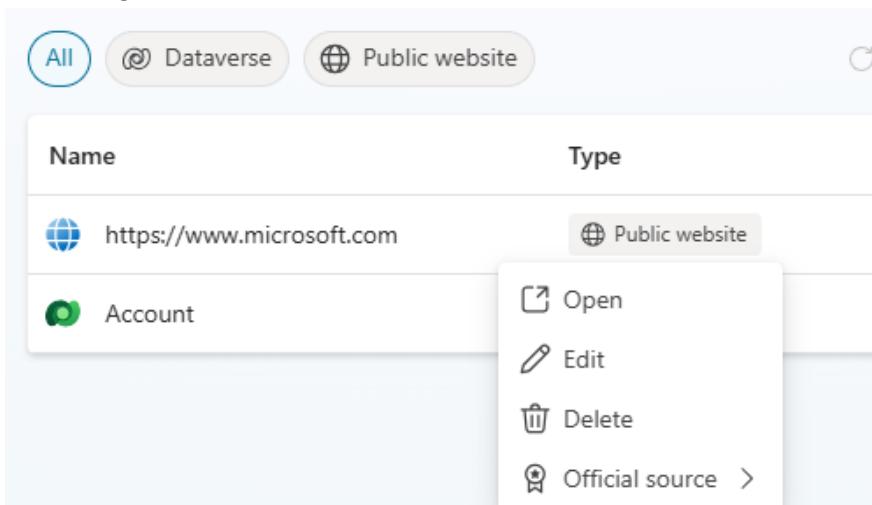
The screenshot shows the "Add public websites" dialog. It has a "Public website link" input field containing "https://www.microsoft.com" and a blue "Add" button.

5. Your Agent will process and should show a green ready

A screenshot of the Copilot Studio interface. At the top, there are three filter buttons: 'All' (selected), '@ Dataverse', and 'Public website'. To the right is a status indicator 'Last refreshed 23 minutes ago' and a search bar 'Search knowledge'. Below the filters is a table with four columns: 'Name', 'Type', 'Last modified', and 'Status'. There are two rows of data:

Name	Type	Last modified	Status
🌐 https://www.microsoft.com	Public website	System Ad...	Ready
👤 Account	@ Dataverse	System Ad...	Ready

6. Click the ellipsis by your new source and there are options such as editing and indicating Official Source status



7. **Topics** – this tab lists all your current topics. Many are generated automatically providing typical topic requirements.

Notice filters to **Custom** and **System** views

Name	Trigger	Last modified	Enabled
Conversation Start	On Conversation...	System Administrator...	<input checked="" type="checkbox"/> On
Conversational boosting	Unknown topic	System Administrator...	<input checked="" type="checkbox"/> On
End of Conversation	On redirect	System Administrator...	<input checked="" type="checkbox"/> On
Escalate	On Talk to Repre...	System Administrator...	<input checked="" type="checkbox"/> On
Fallback	Unknown topic	System Administrator...	<input checked="" type="checkbox"/> On
Goodbye	Phrases	System Administrator...	<input checked="" type="checkbox"/> On
Greeting	Phrases	System Administrator...	<input checked="" type="checkbox"/> On
Multiple Topics Matched	On select	System Administrator...	<input checked="" type="checkbox"/> On
On Error	On error	System Administrator...	<input checked="" type="checkbox"/> On

- Topics may also be disabled if no longer required or redundant

Name	Trigger	Description	Editing	Last modified	Errors	Enabled
Conversation Start	On Conversation...	This system...		System Administrator...		<input checked="" type="checkbox"/> On
Conversational boosting	Unknown topic	Create gen...		System Administrator...		<input checked="" type="checkbox"/> On
End of Conversation	On redirect	This system...		System Administrator...		<input checked="" type="checkbox"/> On
Escalate	On Talk to Repre...	This system...		System Administrator...		<input checked="" type="checkbox"/> On
Fallback	Unknown topic	This system...		System Administrator...		<input checked="" type="checkbox"/> On
Goodbye	Phrases			System Administrator...		<input checked="" type="checkbox"/> On
Greeting	Phrases			System Administrator...		<input checked="" type="checkbox"/> On
Multiple Topics Matched	On select	This system...		System Administrator...		<input checked="" type="checkbox"/> On
On Error	On error	This system...		System Administrator...		<input type="checkbox"/> Off

9. Click the Conversation Start topic

The screenshot shows a list of topics in Copilot Studio. At the top, there is a button labeled '+ Add a topic'. Below it, there are three filter buttons: 'All' (highlighted with a blue border), 'Custom (4)', and 'System (9)'. The main table has columns: 'Name', 'Trigger', 'Last modified', and 'Enabled'. There are two rows visible:

Name	Trigger	Last modified	Enabled
Conversation Start	On Conversation...	System Administrator...	<input checked="" type="checkbox"/> On
Conversational greeting	On Conversation...	System Administrator...	<input checked="" type="checkbox"/> On

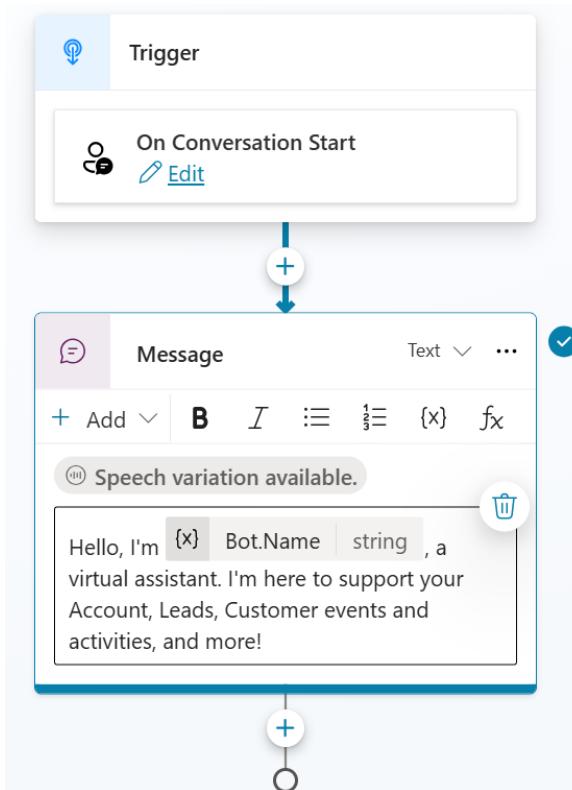
10. Click in the message box which will make it expand

The screenshot shows the 'Conversation Start' topic expanded. At the top, there is a dropdown menu labeled 'Conversation Start'. To the right, there are buttons for 'Copilot', 'Comments', 'Variables', and 'Tr'. Below the dropdown, there are icons for back, forward, search, and delete. The expanded view shows a 'Trigger' section with 'On Conversation Start' and an 'Edit' link, and a 'Message' section with a rich text editor. The message text is:

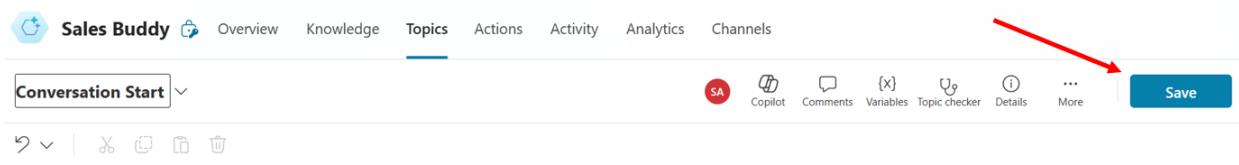
Hello, I'm {x} Bot.Name | string , a virtual assistant. Just so you are aware, I sometimes use AI to answer your questions. If you provided a website during creation, try asking me about it! Next try giving me some more knowledge by setting up generative AI.

11. Update the message to better fit its purpose (leave the Bot name variable as is). Such as:

Hello, I'm [Bot.Name variable] a virtual assistant. I'm here to support your Account, Leads, Customer events and activities, and more!



12. Click Save



13. **Actions** - this tab will display any existing actions and allow to create new



14. Click the **+Add an action** button

Some sample actions will display.

#### Add action

Create an action or browse through our list of actions you want to use to get information from external sources. [Learn more](#)

The screenshot shows a search interface with filters for "Featured" (selected), "Library", and a dropdown menu. A search bar contains the placeholder "Search". Below this, a button labeled "+ New action" is visible. The main area displays a list of "8 actions" in cards:

- Customer Service (preview) Library**  
Ask questions about summary for a case. For example you can ask...
- Delete a row**  
Excel Online (Business)
- Get forecast for today**  
MSN Weather
- List rows present in a table**  
Excel Online (Business)
- Case create assist (Coming soon) Library**  
Coming soon
- Get a row**  
Excel Online (Business)
- Get worksheets**  
Excel Online (Business)
- Customer Service (preview) Library**  
Purpose: This tool retrieves specific information and details from

15. In the previous labs we created a couple actions, but let's explore further.

Click in the Search and type: SAP

Many available actions will be available.

Try other searches for data you may be familiar with.

Further information regarding adding enterprise knowledge may be found here:

[Add enterprise data as a knowledge source - Microsoft Copilot Studio | Microsoft Learn](#)

Click cancel for now

#### Add action

Create an action or browse through our list of actions you want to use to get information from external sources. [Learn more](#)

All Library ...

+ New action

252 actions

Call SAP function (V3) SAP ERP	Call SAP function (V2) SAP ERP
Read SAP table with parsing SAP ERP	Get SAP element at screen coordinate IA-Connect SAP GUI
Spellcheck Sapling.ai (Independent Publisher)	Set SAP grid view first visible column IA-Connect SAP GUI
Set SAP grid view first visible row index IA-Connect SAP GUI	Medical spellcheck Sapling.ai (Independent Publisher)
Get SAP parent element Id IA-Connect SAP GUI	Open SAP connection IA-Connect SAP GUI
...	...

16. **Activity** – this tab will display the history of your agent runs and items your agents may be working on.

Most likely yours has only a few entries, if any

Name	Summary	Date ↓	Completed steps	Last step	Status
System Administrator	The customer wants to know the annual...	04/03/2025, 10:43:26	3	P:UniversalSearchTool	Cor

## Copilot Studio and Azure AI Foundry Workshop

As you build out your agents, here is an example of what you may subsequently see:

The screenshot shows the Copilot Studio interface for the 'Engagement Management Agent'. The top navigation bar includes 'Copilot Studio', 'Environment Development', 'Publish', 'Settings', 'Test', and 'Open Analytics'. The main header says 'Engagement Management Agent' with a gear icon. Below it, there are tabs for 'Overview', 'Knowledge', 'Topics', 'Actions', 'Activity' (which is underlined), 'Analytics', and 'Channels'. A large 'Analytics' section displays metrics: Total sessions (1,364, up 5%), Sessions completed (1,292, up 4%), Sessions in progress (33, down 1%), Sessions incomplete (39, down 8%), and Satisfaction score (4.7/5.0, up 2%). A note indicates the data was last refreshed 1 minute ago. Below this is a table listing sessions with columns for Name, Date, Summary, Status, and Channels. The sessions listed are all automated, with various completion statuses and channels.

17. **Analytics** – we will explore this tab in detail in a latter section of this lab.

The screenshot shows the Customer Service interface. The top navigation bar includes a logo, 'Customer Service', and tabs for 'Overview', 'Knowledge', 'Topics', 'Actions', 'Activity' (underlined), 'Analytics' (highlighted with a red box), and 'Channels'. The 'Analytics' tab is currently active.

18. **Channels** – this tab allows you to publish your Agent for your users or customers. Many are typical collaboration channels such as Teams, Apps, and Portals. You may also publish to Dynamics 365 Customer Service or 3<sup>rd</sup> party applications.

## Copilot Studio and Azure AI Foundry Workshop

In Lab 4, we will be publishing the Sales buddy agent to Teams and Demo site with authentication.

The screenshot shows the Copilot Studio interface for the 'Sales Buddy' agent. The top navigation bar includes tabs for Overview, Knowledge, Topics, Actions, Activity, Analytics, and Channels, with 'Channels' highlighted by a red box. A message at the top states: 'Because you chose Microsoft authentication, only the Teams + Microsoft 365 channel is available. To use other channels, [change your authentication settings](#)'. Below this, the 'Published agent status' section shows 'Not published'. The 'Channels' section contains a grid of icons for various communication platforms: Telephony, Teams + Microsoft 365 (highlighted with a red box), Demo website, Custom website, Mobile app, Facebook, Skype, Slack, Telegram, Twilio, Line, GroupMe, Direct Line Speech, and Email. The 'Customer engagement hub' section lists Dynamics 365 Customer Service, Genesys, LivePerson, Salesforce, and ServiceNow.

19. We've reviewed all the tabs but the **Settings** area is important to explore

The screenshot shows the 'Settings' page for the 'Sales Buddy' agent. The top navigation bar includes tabs for Overview, Knowledge, Topics, Actions, Activity, Analytics, Channels, Publish, Settings (highlighted with a red box), and Test. The main content area displays the 'Published agent status' as 'Not published'. On the right side, there are buttons for 'Test your agent' and other configuration options. A red arrow points from the text in step 19 to the 'Settings' tab in the navigation bar.

20. The settings details contains many additional configurations you will likely perform for further enhancement of your agent. Many of these you will modify throughout the labs.

The screenshot shows the 'Copilot Studio' interface with the 'Settings' tab selected. On the left, a sidebar lists various options like Home, Create, Agents, Library, and more. The main area is titled 'Agent details' and contains fields for 'My agent's name' (set to 'Customer Service'), 'Icon' (a blue hexagonal icon with a white symbol), and a 'Change icon' button. A note says the icon appears on chat controls across all channels. Below these are sections for 'Generative AI', 'Security', 'Authoring Canvas', 'Entities', 'Skills', 'Voice', 'Languages', 'Language understanding', 'Component collections', and 'Advanced'.

## 2. Knowledge Tuning

Adding knowledge sources enables you to provide business specific data which augments the responses of your agents. A key to improving agent responses is understanding how and when knowledge sources were used. Additionally, providing context or scoping to the knowledge sources can enhance the reliability of answers provided by your agent.

### 1. Click on Knowledge

In the Suggestions section, click on **View suggestions**

The screenshot shows the 'Sales Buddy' interface with the 'Knowledge' tab selected. At the top, there are tabs for Overview, Knowledge (highlighted with a red box), Topics, Actions, Activity, Analytics, and Channels. Below the tabs, there's a 'Suggestions (preview)' section with three cards: 'Add knowledge sources' (with a red arrow pointing to the 'View suggestions' link), 'Improve answer rate' (with a 'Open tool' button), and 'Track knowledge use' (with a 'Open Analytics' button). To the right, there are statistics: 'Total knowledge source use 0%', 'Error rate 0%', and 'Total answer rate 0%'. At the bottom, there's a table of knowledge sources with columns for Name, Type, Last modified, and Status. The table shows three entries: 'https://www.microsoft.com' (Public website, 1 hour ago, Ready), 'Shared Documents' (SharePoint, 6 days ago, Ready), and 'Activity, Contact, Account' (Dataverse, 6 days ago, Ready).

2. Click on SalesSpecificQnA and click + Add

Suggested knowledge (preview)

Below is the list of the suggested knowledge sources. [Learn more](#)

Name	Type	Action
Customer Service Structured Search	@ Dataverse	+ Add
SalesSpecificQnA	@ Dataverse	+ Add

3. After a moment it will change to Added

SalesSpecificQnA	@ Dataverse	Added
------------------	-------------	-------

With this feature, you can discover, search, and add sources:

- Used in one of your previous agents
- Used in agents shared with you
- Used previously while working with Office products

The list contains the 100 most recently used knowledge sources.

4. Click the X in the upper-right corner to return to your list

Suggested knowledge (preview)

Below is the list of the suggested knowledge sources. [Learn more](#)

5. Click your new knowledge source

The screenshot shows a list of knowledge sources. At the top, there are four filter buttons: 'All' (selected), '@ Dataverse', 'Public website', and 'Share'. Below this is a table with two columns: 'Name' and 'Type'. The 'Name' column lists 'https://www.microsoft.com', 'Shared Documents', 'SalesSpecificQnA', and 'Activity, Contact, Account'. The 'Type' column shows icons for 'Public website', 'Share', 'Data', and 'Data'. The row for 'SalesSpecificQnA' is highlighted with a red box.

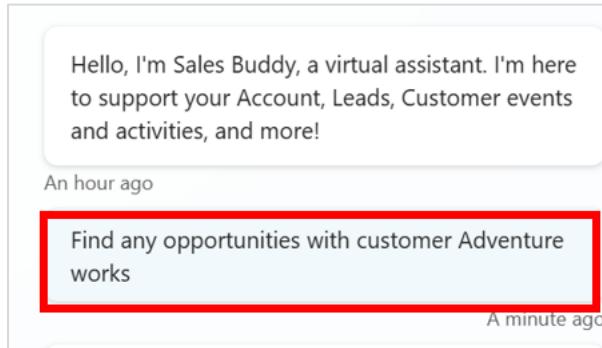
Name	Type
https://www.microsoft.com	Public website
Shared Documents	Share
SalesSpecificQnA	Data
Activity, Contact, Account	Data

6. Review the new tables added related to Sales

The screenshot shows the 'SalesSpecificQnA' knowledge source details page. It includes sections for 'Knowledge details' (Knowledge name: SalesSpecificQnA, Knowledge description: This knowledge source answers questions found in the following Dataverse tables: Contact, Account), 'Type' (Dataverse), 'Modified by' (System Administrator 19 minutes ago), 'Status' (Ready), and 'Official source' (disabled). Below these are sections for 'Selected tables' and 'Edit tables', each listing six tables: Account, ActivityPointer, Goal, Invoice, Lead, and Opportunity.

Selected tables	Edit tables
Account	ActivityPointer
Goal	Invoice
Lead	Opportunity

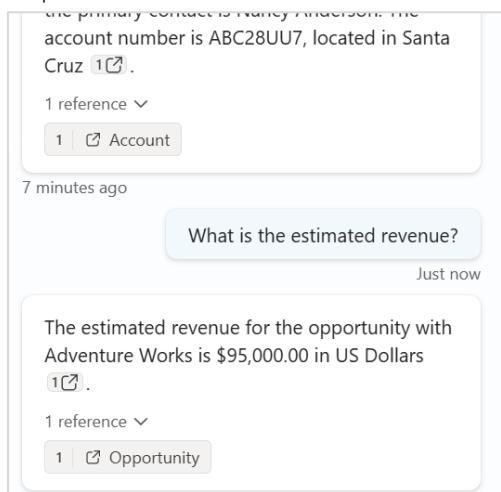
7. Ask your agent information from one of the new tables:  
Find any opportunities with customer Adventure works



8. Sales Buddy will search and return results:

The screenshot shows the Sales Buddy interface with a search results window. The search query was "Find any opportunities with customer Adventure works". The results show that one opportunity was found in the Dataverse, specifically for the account "Adventure Works". The summary message from Sales Buddy at the bottom says: "You have one opportunity with the customer Adventure Works. The record shows that it was created on March 19, 2025, at 8:14 PM UTC, and the primary contact is Nancy Anderson. The account number is ABC28UU7, located in Santa Cruz." This summary message is also highlighted with a red rectangle.

9. Inquire more information about the Opportunity



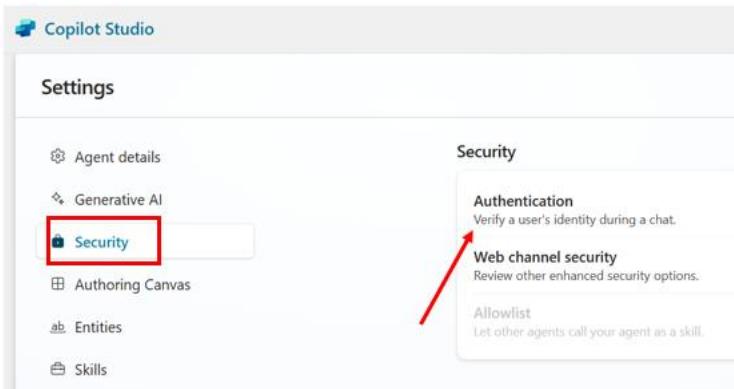
Pretty cool!

### 3. Security & Authentication

1. Click on Agent Settings



2. Click Security. Click on that option and click Authentication



3. Typically, we will select Authenticate with Microsoft

This is used for our deployments to Microsoft Teams and other Microsoft apps

## 4. Language Capability

Multilingual agents are agents that can communicate with customers in different languages while keeping all the content in a single agent. In many cases, they can automatically detect the desired language based on the agent user's web browser setting and respond in the same language, providing a more personalized and engaging experience for customers.

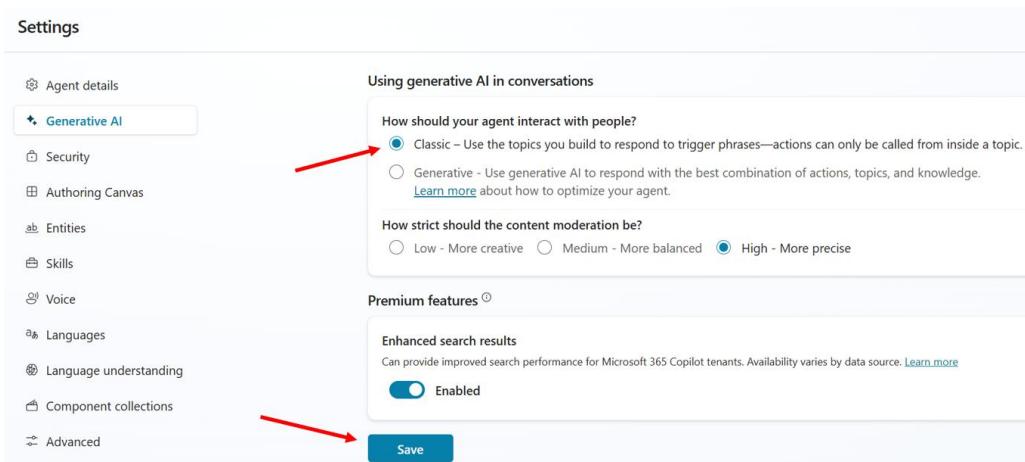
For the list of supported languages, see [Language support](#).

1. Select **Settings** in your agent

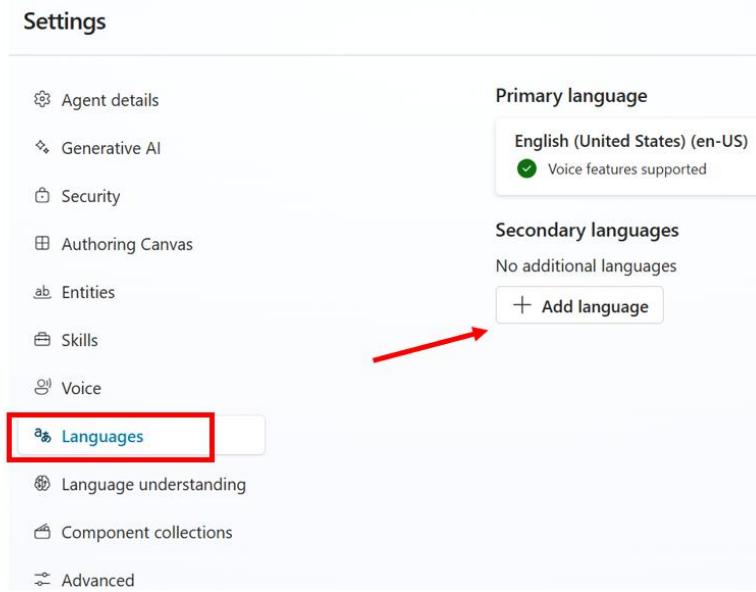


2. In order to use multiple languages, we need to turn off Generative AI, which is only supported in copilots using English. To add support for another language, we need to switch to **classic mode**.

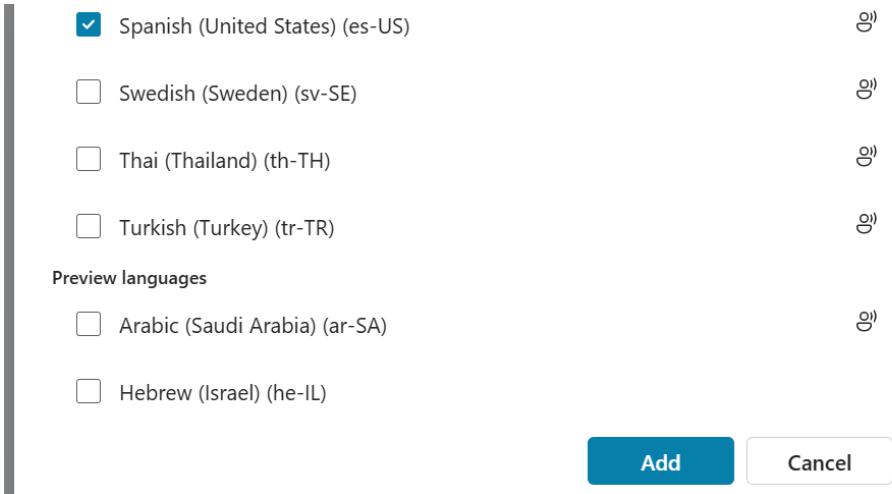
3. Select **Classic** and click **Save**



4. Click on Languages and click + Add language



5. Choose language(s) to add and click Add



6. A success message is displayed, and the selected language(s) is listed as Secondary language in the Languages page.

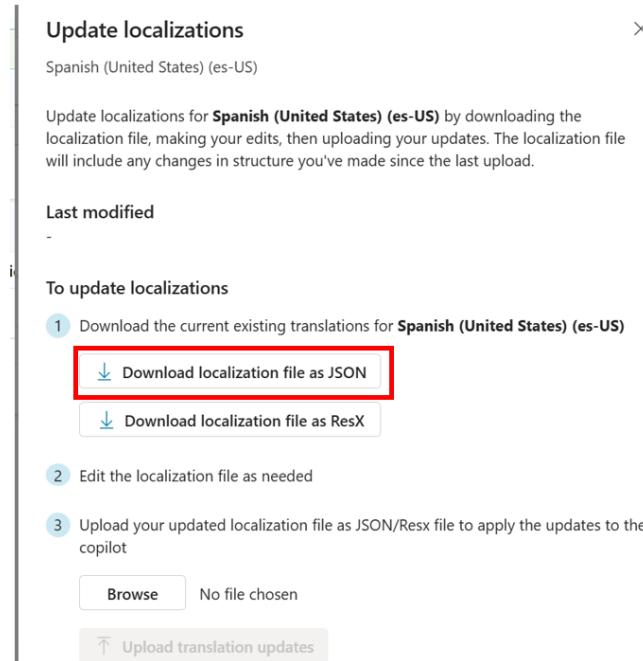
The screenshot shows the 'Languages' page. At the top, a green success message box says 'Language was added successfully.' Below it, the 'Primary language' section shows 'English (United States) (en-US)' with a checkmark indicating 'Voice features supported'. In the 'Secondary languages' section, there is a table with columns 'Secondary language ↑', 'Localization', and 'Last modified'. A single row is visible for 'Spanish (United States) (es-US)', which includes an 'Upload' button next to its localization status. At the bottom of the table is a '+ Add language' button.

**Note:** All copilot topic and content editing must be done in the copilot's primary language. To edit the copilot's secondary language to localize the strings, you must use the steps in this section. Once the copilot strings are localized and uploaded to the copilot as described here, you can see the localized content in the authoring canvas by switching the language in the Test copilot window. We will walk you through the steps but have a file for you to use during the labs so you don't have to translate the text during the lab.

7. With the copilot **Sales Buddy** agent open, expand Languages from the left navigation pane, and select **Upload** button next to Spanish language.

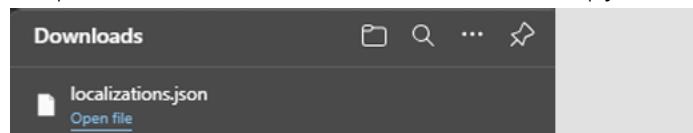
The screenshot shows the 'Languages' page again. A green success message box at the top says 'Language was added successfully.' Below, the 'Primary language' section shows 'English (United States) (en-US)' with a checkmark for 'Voice features supported'. In the 'Secondary languages' section, there is a table with columns 'Secondary language ↑', 'Localization', and 'Last modified'. A single row is visible for 'Spanish (United States) (es-US)', which includes an 'Upload' button next to its localization status. The 'Upload' button for the Spanish row is highlighted with a red box.

8. On the Update localizations flyout, select Download localization file as JSON to download the current localization file for that language.



9. The following steps are for your information only as we have already created a file with the translation for you to utilize in the labs.

- Open the downloaded file and make a copy of it.



- Rename the copied version of the file as localizations.json(Replace the language with the language you are using. It is Spanish in this case) .
- Open the file and replace the primary language strings with the appropriate translated text similar to the snippet below and save the file.
- Make sure all the copilot's messages that are in English are updated with the secondary language selected.

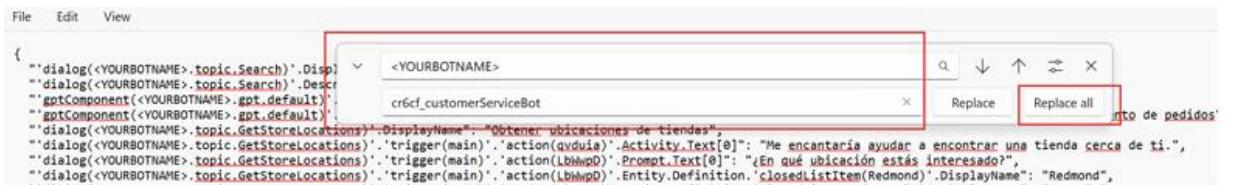
```

    "dialog(crlSe_copilot1_XlWuW.topic.Search)".DisplayName: "Iniciar conversación",
    "dialog(crlSe_copilot1_XlWuW.topic.Search)".Description: "Crear conversaciones generativas a partir de fuentes de conocimiento.",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".DisplayName: "Obtener ubicaciones de tiendas",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Description: "Búsqueda de servicios al cliente que apunta a las ubicaciones finales con los detalles y el procesamiento de pedidos",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".O.DisplayName: "Obtener ubicaciones de tiendas",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Trigger: "trigger(main)".Action: "QueryUI".Activity.Text[0]: "Me encantaría ayudar a encontrar una tienda cerca de ti.",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Trigger: "trigger(main)".Action: "LWuW0".Prompt.Text[0]: "Tú qué ubicación está interesado",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Trigger: "trigger(main)".Action: "LWuW0".Entity.Definition: "closedListItem(Redmond)".DisplayName: "Redmond",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Trigger: "trigger(main)".Action: "LWuW0".Entity.Definition: "closedListItem(Seattle)".DisplayName: "Seattle",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Trigger: "trigger(main)".Action: "LWuW0".Entity.Definition: "closedListItem(Bellevue)".DisplayName: "Bellevue",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Trigger: "trigger(main)".Action: "LWuW0".Activity.Text[0]: "Muestra la tienda de la empresa en nuestro Centro de Visitantes. La dirección es: 4567 Main St., Redmond, 26232",
    "dialog(crlSe_copilot1_XlWuW.topic.GetStoreLocations)".Trigger: "trigger(main)".Action: "X7ewip".Activity.Text[0]: "Nuestra tienda (Topic.StoreLocation) está ubicada en el distrito U en University Village. La dirección es: 1234 E."
  
```

10. For the purpose of this lab, Open the downloaded JSON file in Notepad and copy your bot name from line 1 (first word within () before .topic.Search), as shown below. We will use this to update the Language\_Spanish.txt file next.

```
{
  "dialog(cr6cf_customerServiceBot.topic.Search)".DisplayName": "Conversational boosting",
  "dialog(cr6cf_customerServiceBot.topic.Search)".Description": "Create generative answers from knowledge sources."
  "dialog(cr6cf_customerServiceBot.topic.Purchaseoutdoorstuff)".DisplayName": "Purchase outdoor stuff",
  "dialog(cr6cf_customerServiceBot.topic.Purchaseoutdoorstuff)".trigger(main).action(Question_3YIwBa).Prompt.Text": "¿Qué tipo de actividad te gustaría hacer al aire libre?",
  "dialog(cr6cf_customerServiceBot.topic.Purchaseoutdoorstuff)".trigger(main).action(sendActivity_2WfaVO).Activity.Definition": "closedListEntity(Redmond).Localization": "Redmond",
  "dialog(cr6cf_customerServiceBot.topic.Purchaseoutdoorstuff)".trigger(main).action(sendActivity_ewDCGc).Activity.Definition": "closedListEntity(Seattle).Localization": "Seattle",
  "dialog(cr6cf_customerServiceBot.topic.Purchaseoutdoorstuff)".trigger(main).action(sendActivity_rnCJnk).Activity.Definition": "closedListEntity(Chicago).Localization": "Chicago",
  "dialog(cr6cf_customerServiceBot.topic.Purchaseoutdoorstuff)".trigger(main).Intent.TriggerQueries[0]": "purchaseoutdoorstuff"
}
```

11. Open Lab 3 Assets folder and open Language\_Spanish.txt file. Carefully replace all instances of <YOURBOTNAME> with the bot name you copied in last step - cr6cf\_customerServiceBot. (In Notepad, click Edit > Replace option to replace all at once)



12. Click File > Save to save the file as Language\_Spanish.JSON (Add .JSON at the end in file name to ensure this file is saved as JSON file on your computer)  
 13. Return to the Languages page, select Upload for the Spanish secondary language.

Language was added successfully.

#### Primary language

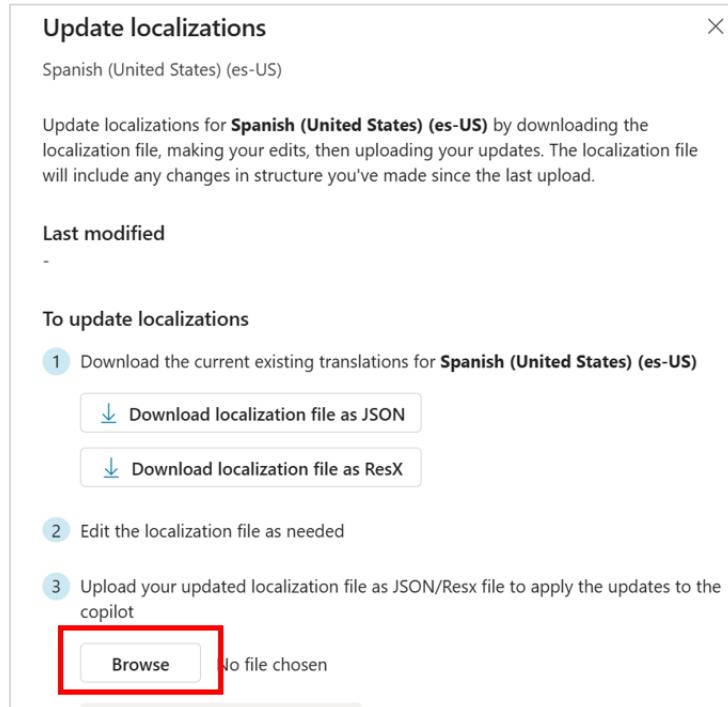
English (United States) (en-US)

Voice features supported

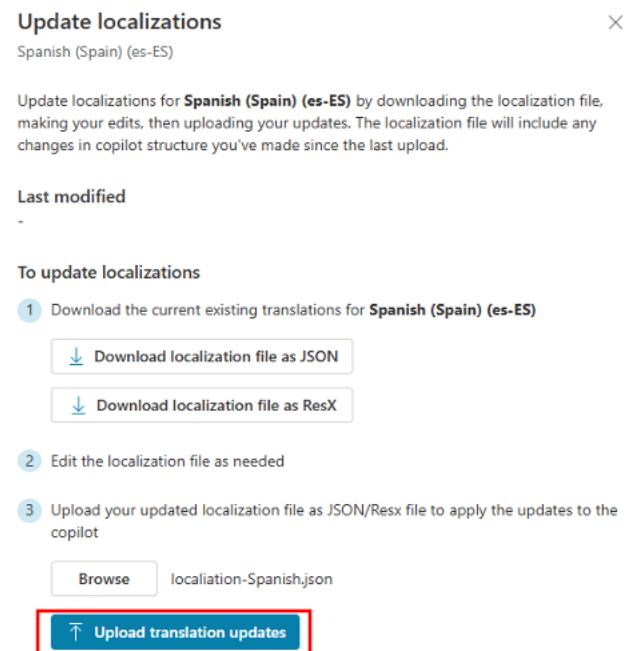
#### Secondary languages

Secondary language ↑	Localization	Last modified
Spanish (United States) (es-US)	...	-

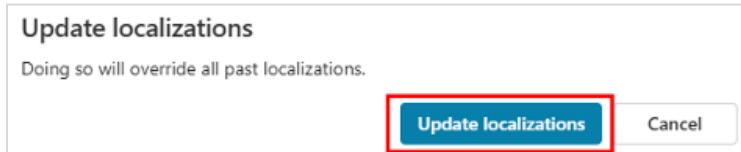
14. Click on Browse and upload the localization-Spanish.json file that you just updated.



15. Click on Upload translation updates



16. Confirm you want to override all past localizations by clicking on **Update localizations**.



17. A **Localizations updated Successfully** message appears. Click on **Close** to close the Update localizations page.

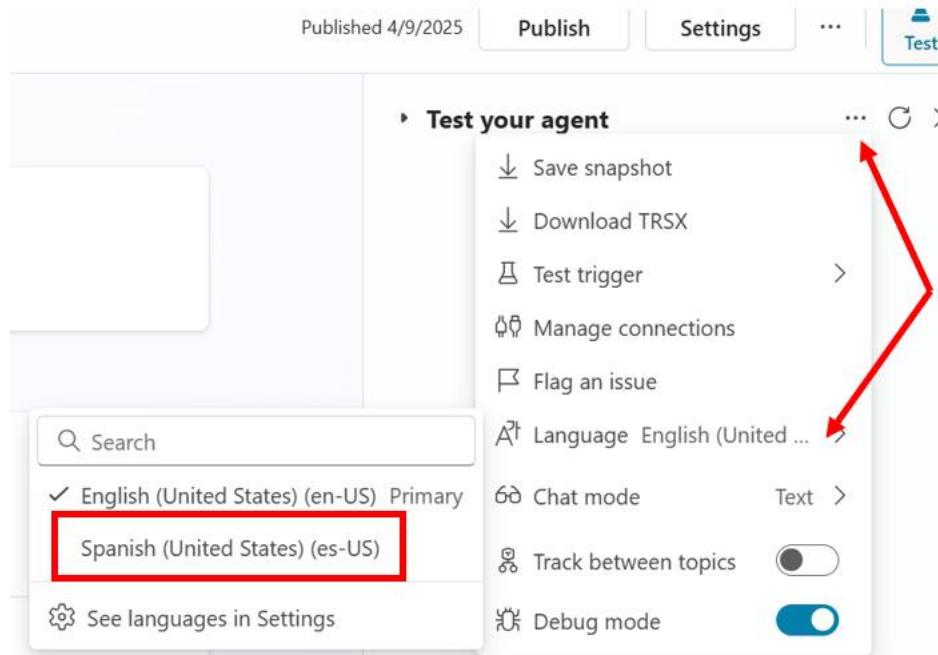


18. Close the Settings window
19. Click on Test in the upper right

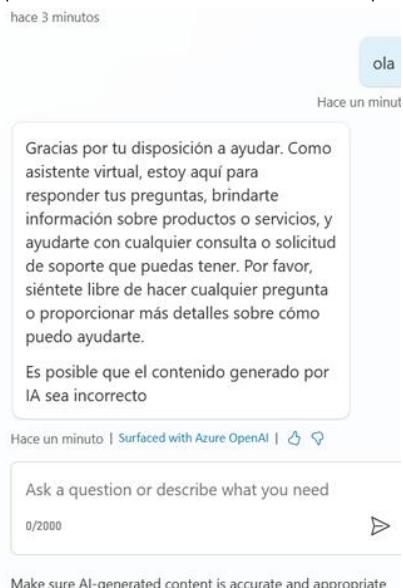


20. Click on the more (...), then Language and select secondary language - Spanish.

21. The test copilot will reload itself, this time using the selected secondary language.  
The authoring canvas shows the secondary language.



22. Type and send **Ola** (Hello in Spanish) to see the bot respond in Spanish.



23. Let's switch back to English as Generative AI is only supported in English language.  
 Go to **Languages** page and **remove** the Spanish language.

The screenshot shows the 'Languages' settings page. At the top, under 'Primary language', 'English (United States) (en-US)' is listed with a green checkmark indicating 'Voice features supported'. Below this, under 'Secondary languages', 'Spanish (United States) (es-US)' is listed. To the right of this entry is an 'Upload' button and a red box highlights the 'Remove' button, which has a trash can icon and the word 'Remove' next to it. A '+ Add language' button is also visible.

24. In the same settings window, click on Generative AI tab, Select **Generative** option and **Save**.

The screenshot shows the 'Settings' page. On the left, there is a sidebar with the following options: Agent details (selected), Generative AI (highlighted with a red box), Security, Authoring Canvas, Entities, Skills, Voice, Languages, Language understanding, Component collections, and Advanced. On the right, under 'Using generative AI in conversations', there is a section titled 'How should your agent interact with people?' with two radio button options: 'Classic – Use the topics you build to respond' and 'Generative – Use generative AI to respond' (which is selected and highlighted with a red box). Below this is a section titled 'How strict should the content moderation be?' with two radio button options: 'Low - More creative' and 'Medium - More strict'. Under 'Premium features', there are sections for 'Enhanced search results' (disabled) and 'Use deep reasoning models (Preview)'. At the bottom right is a large red box highlighting the 'Save' button.

25. Test your Copilot to ensure the welcome message is in English.

## 5. Entities

In this section, we will learn to use prebuilt entities and to create and use the custom entities.

**Note:** Make sure your language is set to Primary language. Otherwise, you may encounter errors.

Microsoft Copilot Studio comes with a set of prebuilt entities, which represent the most commonly used stereotype information in real-world dialogs, such as age, colors, numbers, and names. With the knowledge granted by entities, a bot can smartly recognize the relevant information from a user input and save it for later use.

1. Select **Settings** in your agent



2. Select **Entities** On the right pane, a list of entities is displayed. These are the **prebuilt entities**.

Settings					
		+ Add an entity			
		Name	Description	Method	Errors
Agent details		Age	Age of a person, place, or thing, extracted as a number	Prebuilt	
Generative AI		Boolean	Positive or negative responses, extracted as a Boolean	Prebuilt	
Security		City	City names, extracted as a string	Prebuilt	
Authoring Canvas		Color	Primary colors and hues on the color spectrum, extracted as a string	Prebuilt	
<b>Entities</b>		Continent	Continent names, extracted as a string	Prebuilt	
Skills		Country or region	Country and region names, extracted as a string	Prebuilt	
Voice		Date	Dates, days of the week, and months relative to a point in time, extracted as a string	Prebuilt	
Languages		Date and time	Dates, times, days of the week, and months relative to a point in time, extracted as a string	Prebuilt	
Language understanding		Date and time without timezone	Dates, times, days of the week, and months relative to a point in time, extracted as a string without the timez...	Prebuilt	
Component collections					
Advanced					

- Click on the **Money** entity. It opens the details of the entity, showing the description and the values saved for the same.

The screenshot shows the Copilot Studio Entities window. On the left, there is a list of entities with their descriptions. On the right, there are sections for Description, Method, Usage, User input, Entity, and Saved value. The 'Money' entity is highlighted with a red box.

Money			
<b>Description</b> Monetary amounts, extracted as a number			
<b>Method</b> Prebuilt			
<b>Usage</b>			
<b>User input</b>	<b>Entity</b>	<b>Saved value</b>	
It costs 1000 Euros	1000 Euros	1000.00	
3 items for \$1K	\$1K	1000.00	
It costs a thousand five hundred	A thousand five hundred	1500.00	

**Entities List:**

- Color
- Continent
- Country or region
- Date
- Date and time
- Date and time without timezone
- Duration
- Email
- Event
- File
- Language
- Money**

- Close the window

Next we will create and use a custom entity

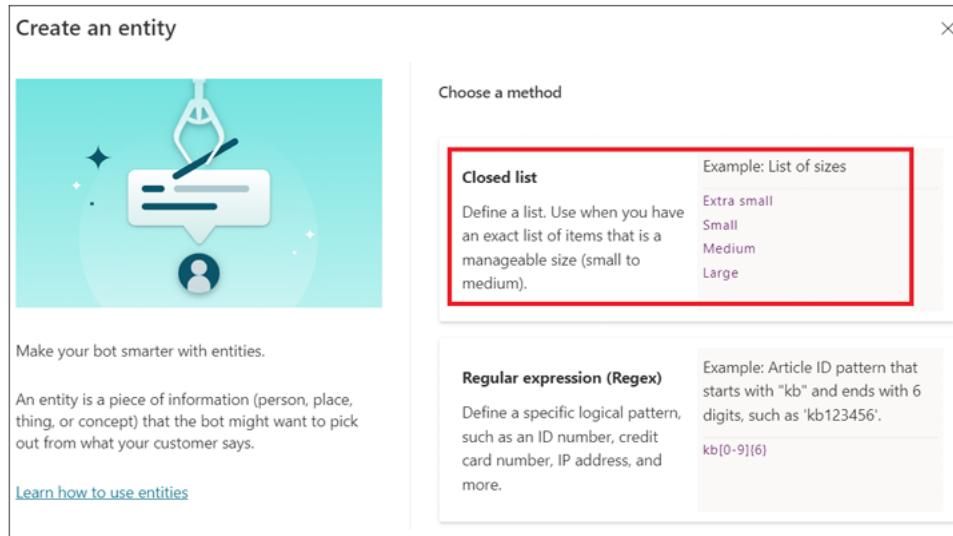
- In the Entities window, click on **+ Add an entity** and select **+ New Entity**

### Settings

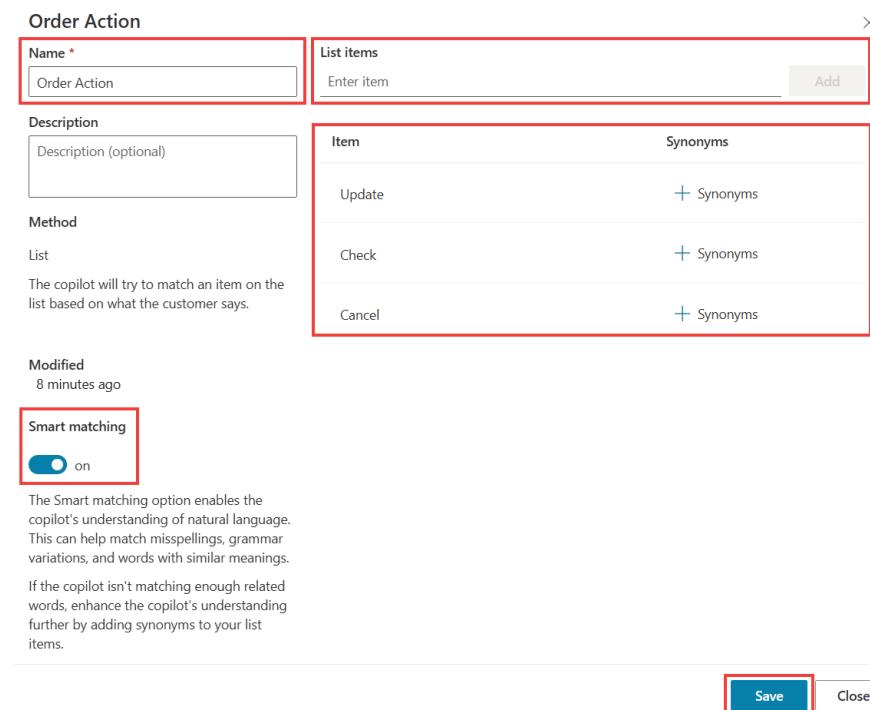
The screenshot shows the Entities window with the 'Entities' tab selected. A dropdown menu is open at the top right, showing options: '+ Add an entity' (with '+ New entity' highlighted with a red box), '+ Register an external entity', and 'Description'. Below the menu, there are three entity definitions: Age, Boolean, and City.

Description	
Age	Age of a person, place, or thing
Boolean	Positive or negative response
City	City names, extracted as a string

- Select **Closed List**



8. Within the **Create an entity** dialog, select **Closed List**.
9. Within the **Name** field of the new entity pane, enter the name **Order Action**.
10. Add three options within the **List items** called **Update**, **Check**, and **Cancel**. You can also choose to add synonyms by selecting synonyms for each option (*optional for this task*).
11. Make sure **Smart matching** is toggled on, and then select **Save**.



This action creates a new entity called **Order Action** that you can use with the **Question** node in your topic to place **User's entire response** with **Order Action**.

12. Return to the Sales Buddy, create a new topic from scratch

The screenshot shows the 'Sales Buddy' interface with the 'Topics' tab selected. A red box highlights the 'Add a topic' button, which has a dropdown menu open with options: 'From blank', 'Create from description with Copilot', and 'From template'. Below the button, there is a table with columns for 'Name', 'Trigger', and 'Description'. One row is visible with the name 'Goodbye', trigger 'Phrases', and description 'This topic tr'.

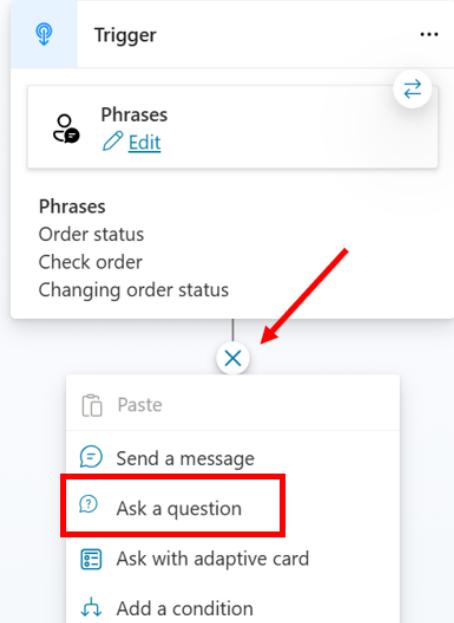
13. Name it: **Check Order Status**

The screenshot shows the 'Sales Buddy' interface with the 'Topics' tab selected. A red box highlights the newly created topic 'Check Order Status'. Below the topic name, there are several icons for managing the topic.

14. Enter several appropriate phrases

The screenshot shows the 'Sales Buddy' interface with the 'Phrases' section of a topic card. A red box highlights the list of phrases: 'Order status', 'Check order', and 'Changing order status'. To the right, a detailed view of the 'Phrases' section is shown with a red box highlighting the list: 'Order status', 'Check order', and 'Changing order status'. The detailed view includes sections for 'Phrases', 'Show writing tips', 'Add phrases', and a text input field with instructions for adding items in bulk.

15. Click to add a node and choose Ask a question



16. Enter Can I help you with the status of an order? Select Identify, and a slide-out menu will display on the right, where you can select an entity from the list.

Search for and select the custom entity that you created in the previous step called Order Action.

Changing order status

Question

Text

Can I help you with the status of an...

Identify

Multiple choice options

Options for user

New option

Missing multiple choice options

Choose information to identify

To help the agent pick out specific information from your user's response, choose an option or entity.

Search

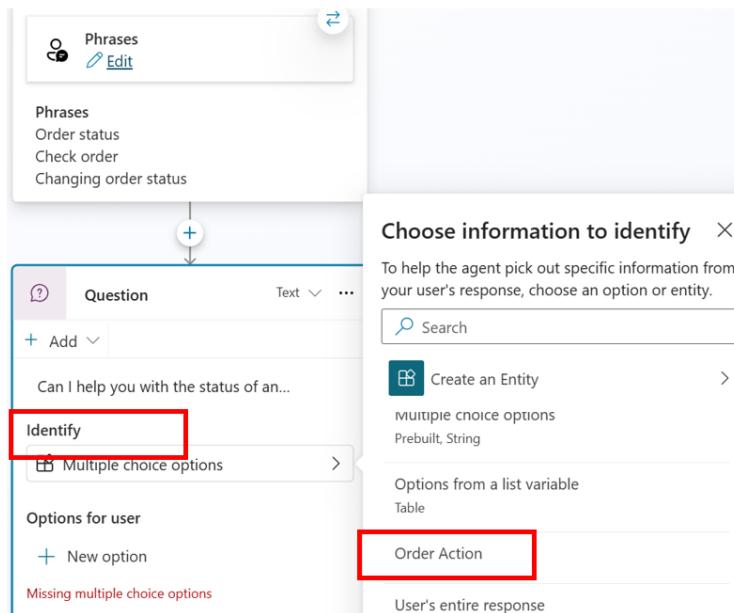
Create an Entity

multiple choice options  
Prebuilt, String

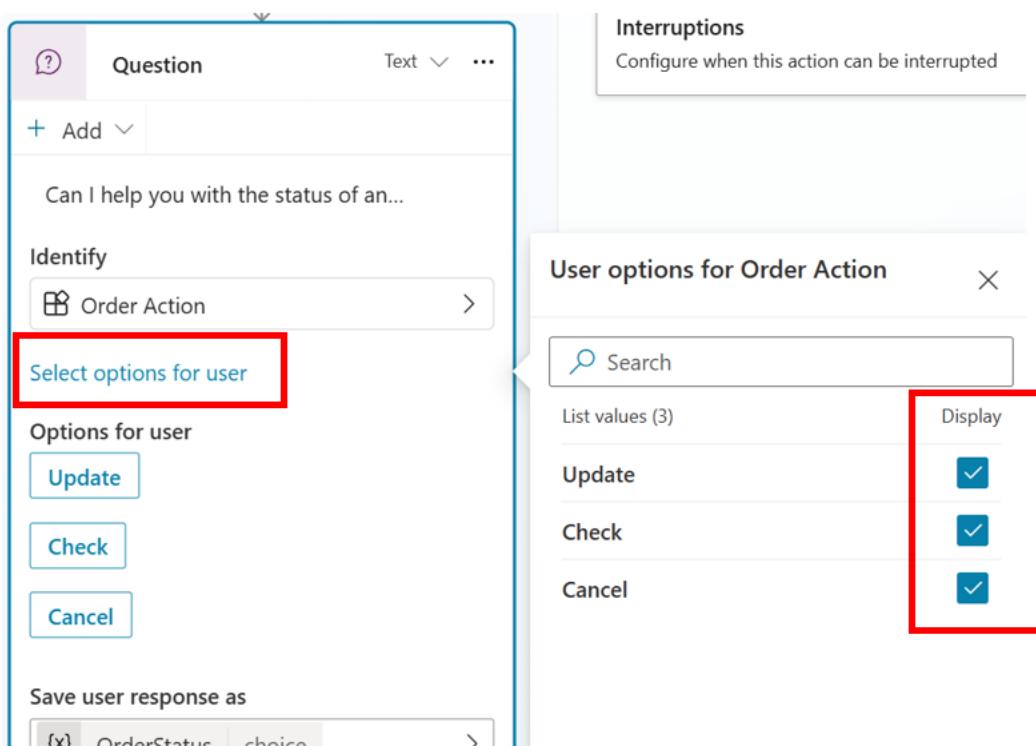
Options from a list variable  
Table

Order Action

17. In the **Save user response as** box, click to rename the variable to **OrderStatus**



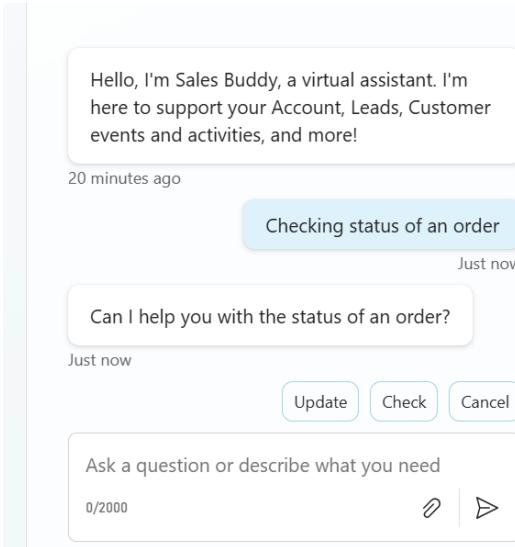
18. Select options for user and then select all the options to display to the user.



19. Save your topic

You have successfully set up a custom entity for your **Question** node. The default behavior for question nodes is, if the variable that the question response is stored in has a value already, then the question is skipped and not asked.

20. Test by asking about an order



Obviously, we would build out the process to a greater degree such as identifying the customer, locating orders, including conditions for the entity selection, etc.

A more comprehensive example could be found here:

[Use entities and slot filling in agents - Microsoft Copilot Studio | Microsoft Learn](#)

## 5. Image & Voice Capability

Copilot Studio supports interactive voice response (IVR) capabilities, including speech and dual-tone multi-frequency (DTMF) input, context variables, call transfer, and speech and DTMF customization.

Before you can create or edit agents for voice scenarios, you need a phone number to use. With [Azure Communication Services](#), you can get a new phone number or use an existing phone number. For more information, see [Integrate a voice-enabled agent with Dynamics 365 Customer Service](#).

Key concepts for voice authoring

With the growing trend toward self-service applications, voice-enabled agents are making a huge difference for businesses. Voice-enabled agents are used in various applications, such as call centers, mobile apps, and messaging platforms.

Voice-enabled agents can collect user input through speech and Dual-Tone Multi-Frequency (DTMF).

### Supported voice features

After your agent is ready for voice services, you can configure features for your scenario.

Expand table

Feature	Description
<a href="#">Barge-in</a>	Allows users to interrupt the system at any time during the conversation.
<a href="#">Dual-tone multi-frequency (DTMF)</a>	Allows users to enter data by pressing keys on their phone keypad. DTMF can accept single key menu navigation and collect business information with multi-digits.
<a href="#">Latency message</a>	Send messages or audio to inform users that the system is still processing their request in long-running operations.
<a href="#">Silence detection and timeouts</a>	Detects when the user stops speaking, allowing the system to respond appropriately.
<a href="#">Speech recognition improvement</a>	Speak naturally, without a script-a user's spoken command or question is translated for the voice-enabled agent to process.
<a href="#">Speech Synthesis Markup Language (SSML)</a>	Control how your agent's voice sounds and behaves with users. You can control the tone, pitch, and speed of the voice that interacts with the user.

### How to configure voice features

The following articles show you how to enable features, for a given scenario, step by step.

- Collect user input via speech and DTMF
  - [Dual-tone multi-frequency \(DTMF\) support](#)

- [Silence detection and timeouts](#)
- [Speech recognition improvement](#)
- Control how your agent's voice sounds and behaves with users
  - [Barge-in](#)
  - [Latency message](#)
  - [Speech synthesis markup language \(SSML\)](#)
- Control the call flow by transferring calls or hanging up
  - [Transfer a call to a representative or external phone number](#)
  - [Hang up call at the end of a conversation](#)
- Authoring capabilities when building a voice-enabled agent
  - [Build a voice-enabled agent from a template](#)
  - [Speech & DTMF modality](#)
  - [Use voice variables](#)
  - [Test your voice-enabled agent in chat](#)

### Known limitations

These tips and limitations help you successfully integrate voice into your agent.

Expand table

Feature	Tip or limitation
Channel order	Enable the Telephony channel first and then connect with Dynamics 365. The sequence is for channel reconnection.
Language/Locale	For a full list of supported languages and locales, see <a href="#">Language support</a> . If you have a customized locale request, contact the Copilot Studio team.

Feature	Tip or limitation
DTMF	The question node supports copilot single-digit DTMF (global command) and multi-digit DTMF, with conflict handling for the DTMF key at the same time.
DTMF only	When DTMF only for voice is enabled, some timers might not be effective, such as interdigit timeout for DTMF or silence detection timeout.
Latency message on Action node	<ul style="list-style-type: none"> <li>- If you don't enable latency message or the message is empty, all messages before the action node are blocked and sent after the action completes.</li> <li>- If you use multiple consecutive action nodes for one topic and hit any unexpected results, add a message node between the consecutive action nodes.</li> </ul>
Test chat dial pad	Pressing a key on the dial pad in the Test chat returns "/DTMF#", which isn't supported, and isn't a valid input. Instead, the command "/DTMFkey#" should be typed into the chat.
Multilingual voice-enabled agents	If you incorporate a multilingual voice-enabled agent, you must set <a href="#">authentication</a> to <i>No authentication</i> to be able to publish on the Dynamics 365 Customer Service channel.
Customer engagement hub	<p>Apart from Dynamics 365, all the other customer engagement channels only work with chat-based agents. The following aren't supported for voice-enabled agents:</p> <ul style="list-style-type: none"> <li>- Genesys</li> <li>- Live person</li> <li>- Salesforce</li> <li>- ServiceNow</li> </ul>
Generative AI for voice-enabled agents	<a href="#">Creating and editing topics with Copilot</a> isn't supported for voice-enabled agents. Copilot doesn't create messages for Speech & DTMF, and doesn't configure DTMF mappings.

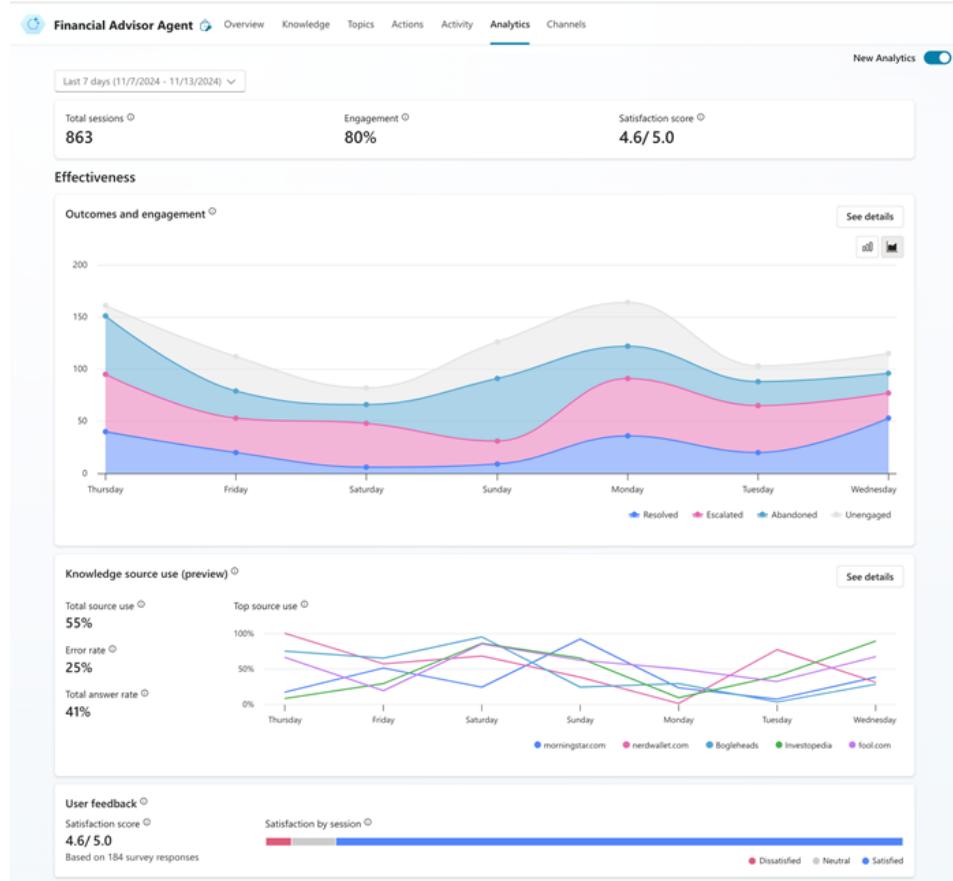
Feature	Tip or limitation
Environment release cycle	Currently, voice-enabled agents are only available in <b>Standard</b> environments. For more information, see <a href="#">Unable to turn on Optimize for voice</a> .

## 7. Configuring Agent Analytics

Analytics are crucial for understanding how your agent operates and pinpointing areas for improvement. In this section, you'll explore the different analytics tools available within Copilot Studio and how to leverage them for optimal performance.

The **Analytics** page in Copilot Studio provides an aggregated insight into the overall effectiveness of your agent across [analytics sessions](#).

Most likely your agent will not have produced enough activity yet to preview good insights, but we will tour the options available with example data.



There are three core areas to focus on when reviewing and improving agent effectiveness:

- **Outcomes and engagement:** Knowing the end result of a conversation helps you begin to identify where your agent is succeeding and where it needs improvement.
- **Knowledge source use:** Seeing how often your knowledge sources are used helps you understand how well your agent is able to provide answers to user questions.
- **Action use:** Learning how often actions are used and how often they succeed can help you understand if those actions are useful and successful for users.
- **User feedback:** Reviewing user feedback helps you identify new user scenarios and issues and make improvements based directly on what your users are asking for.

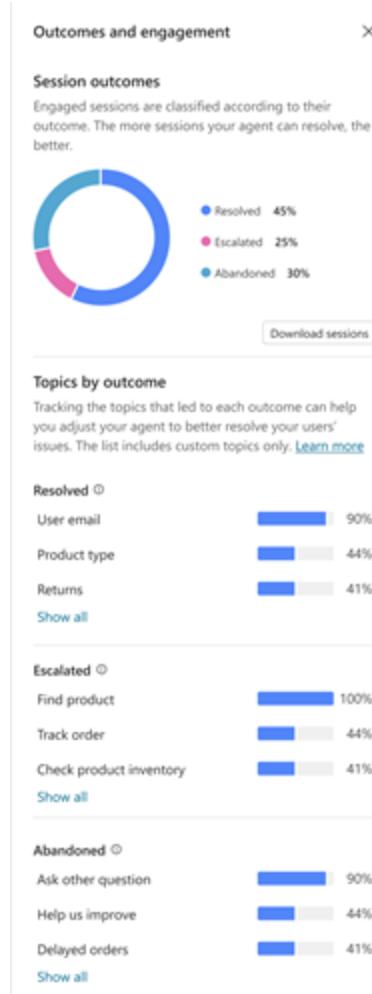
You can view analytics for events that occurred in the last 360 days.

#### Note

On February 20, 2025, the data retention for analytics changed from 90 days to 360 days, so you can only view analytics from events that occurred after November 22, 2024, even if they happened within the last 360 days.

#### Outcomes and engagement

The **Outcomes and engagement** section shows a chart that tracks the type of outcome for each session between your agent and users.



To open a side panel with a pie chart breakdown of [session](#) outcomes, along with the top topics that led to each outcome, select **See details** on the chart.

A [session](#) falls into one of the following two states:

- **Unengaged:** A session starts when a user interacts with your agent or the agent sends a proactive message to the user. The session begins in an *unengaged* state.
- **Engaged:** A session becomes *engaged* when one of the following occurs:
  - a non-system topic is triggered
  - the session is escalated
  - the fallback topic is triggered
  - the conversational boosting topic is triggered

Once the [session](#) becomes engaged, it remains engaged. An engaged session has one of the following outcomes:

- **Escalated:** A session ends and is considered *escalated* when the **Escalate** topic is triggered or a **Transfer to agent** node is run (the current analytics session ends, whether the conversation transfers to a live agent or not).
- **Resolved:** A session ends and is considered *resolved* when the **End of Conversation** topic is triggered and the user confirms that the interaction was a success or lets the session time out.
- **Abandoned:** A session ends and is considered *abandoned* when an engaged session times out after 36 minutes and didn't reach a resolved or escalated state.

You can also set the outcome for actions with the `conversationOutcome` parameter using the action code editor. For example, `conversationOutcome: ResolvedConfirmed` for confirmed success or `conversationOutcome: ResolvedImplied` for implied success.

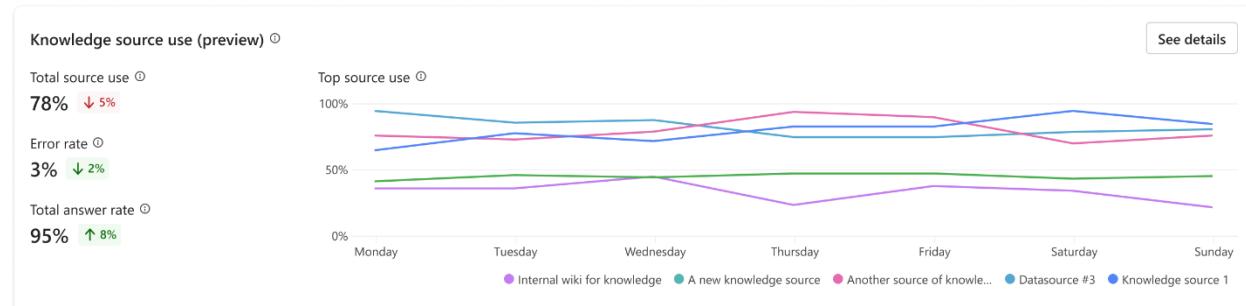
See the guidance documentation [Measuring copilot engagement](#) for suggestions and best practices on how to measure and improve engagement.

### Knowledge source use

The **Knowledge source use** section shows a chart and metrics that track how often your knowledge sources are used in conversations between your agent and users.

It also shows trend indicators for how often your sources are being used, how many errors are being generated, and how many times the source is being used to provide answers to user questions.

The chart displays the top five knowledge sources used over the date range defined at the top of the **Analytics** page.



Select **See details** to open a side panel with knowledge source usage and error rates over your selected time period. You can use these charts to identify which knowledge sources work well to help users, and which to target for improvements.

- **Knowledge source use** shows the percentage of sessions that used each knowledge source the agent has access to.
- **Errors** shows the percentage of sessions that used each knowledge source type (for example, SharePoint) that resulted in an error.

## Action usage

The **Action use** section shows a chart and metrics that track how often your actions are started over time, and how often those actions complete successfully.

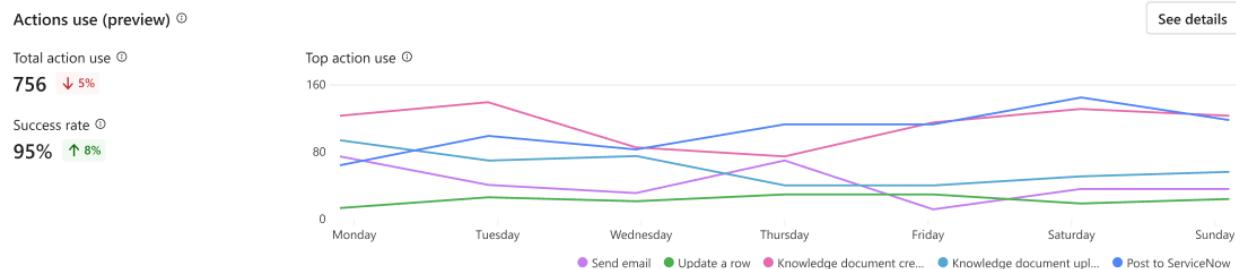
It also shows trend indicators for how often your actions are being used and the percentage of called actions that completed successfully.

### Note:

Actions analytics are available for agents with generative mode turned on.

The chart displays the top five actions used over the date period defined at the top of the **Analytics** page.

To open a side panel with a list of all actions used in the specified time period, along with trend indicators, select **See details** on the chart.



## User feedback

The **User feedback** section shows a chart and metrics that track the average customer satisfaction (CSAT) scores for sessions in which customers respond to an end-of-session request to take the survey.

## 8. Improving Agent Effectiveness

Once your agent is set up and analytics are configured, the next step is to utilize these insights to enhance agent effectiveness. This involves iterative testing, performance tuning, and adapting strategies based on analytical feedback.