

# Build your custom Copilot for Microsoft 365



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#### Elevating Knowledge Management with OpenAI Language Models

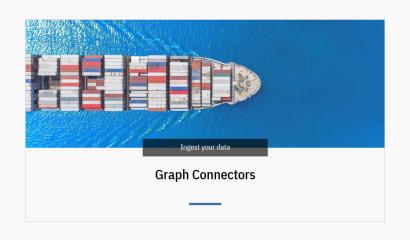
"Unlocking New Possibilities for Streamlined Information Access and Collaboration."

"Apply generative AI to a variety of use cases."

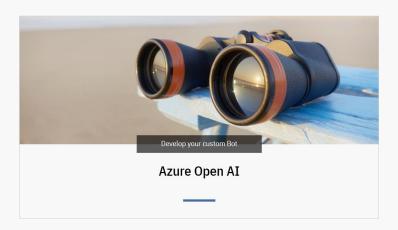




#### Agenda







### **Azure Al**

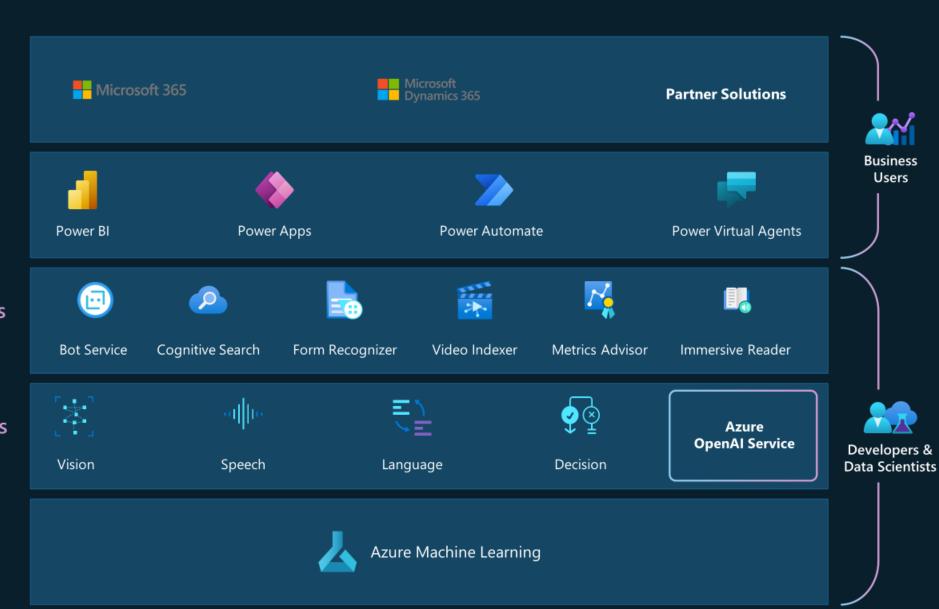
**Applications** 

**Application Platform** Al Builder

**Scenario-Based Services Applied AI Services** 

**Customizable AI Models Cognitive Services** 

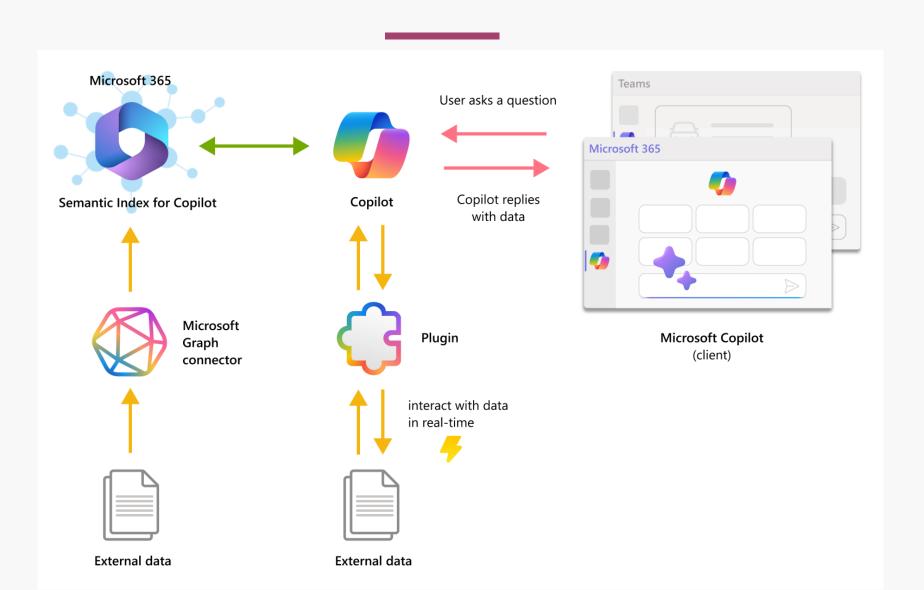
**ML Platform** 

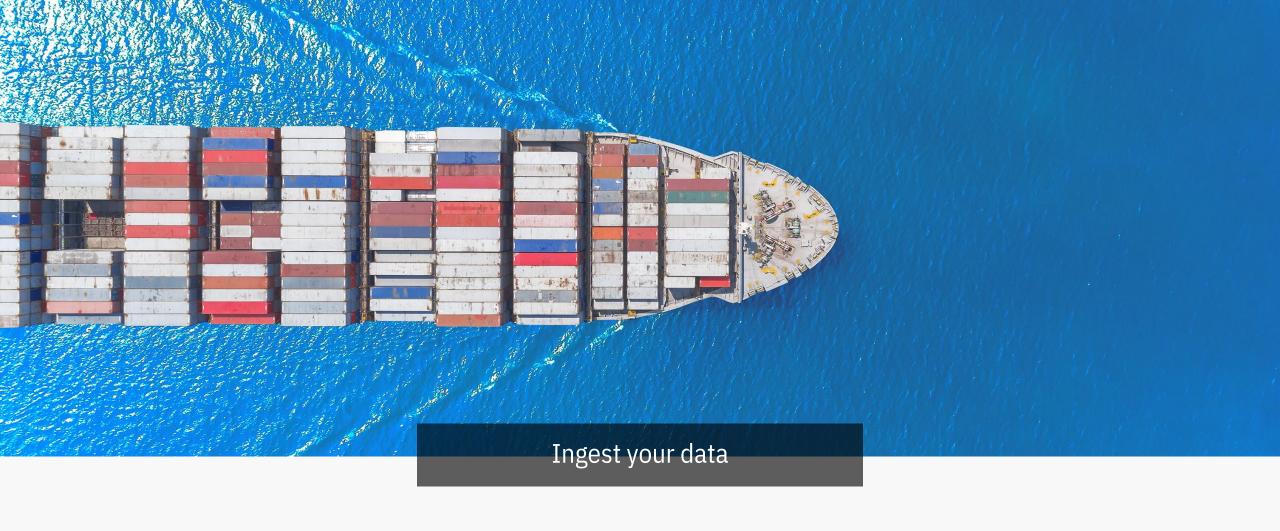


Users



#### aka.ms/ExtendCopilotM365





# **Graph Connectors**

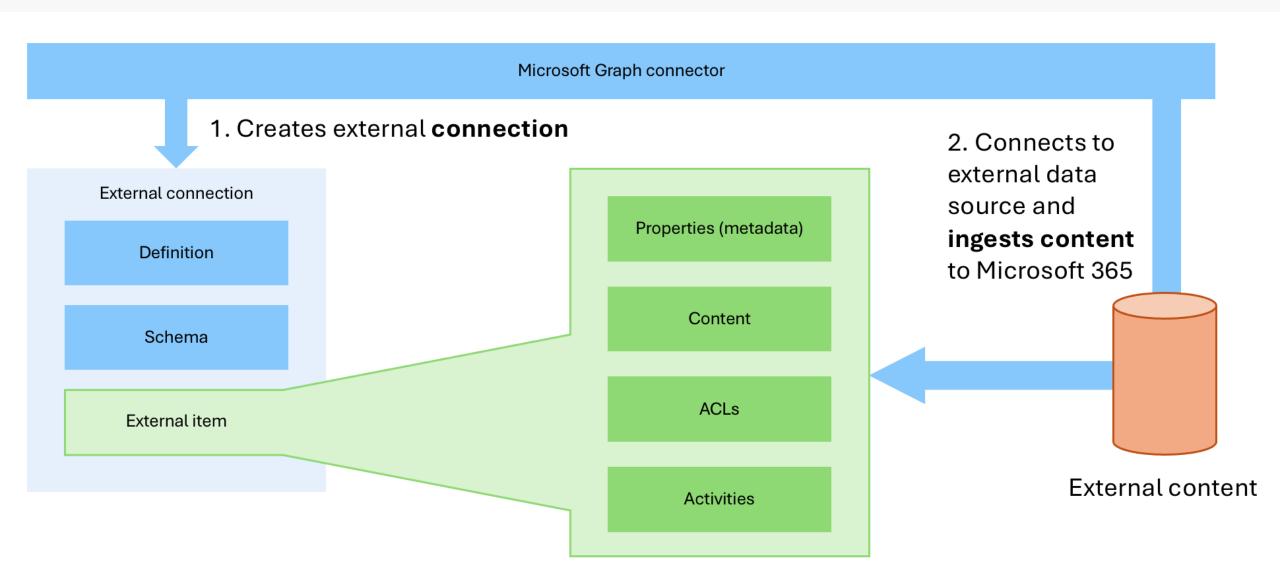


#### Your data (from a database or other data sources)

id; title; date; speaker; room; audience; type; url; format; level; products; description 555625;AI & Copilot: Preparing, Piloting, Paths To Success/Scale, & Plugins;28 Apr 2024 09:00 AM;Richard Harbridg 568159; Beginner SharePoint Framework (SPFx) Bootcamp; 28 Apr 2024 09:00 AM; Chris Kent, Hugo Bernier, David Warner 554804; Guard and Protect: Microsoft 365 Security Unleashed; 28 Apr 2024 09:00 AM; Liam Cleary; D: SH II; IT Professio 568028; Power Apps Fundamentals: Extending SharePoint into Low-Code Apps and Forms (2024 edition); 28 Apr 2024 09:0 568065; Best Practices for Intranet Information Architecture: the key to unlocking AI's full potential; 29 Apr 2024 568048; Collaboration 201: Enhance Teams and SharePoint with Power Apps and Power Automate; 29 Apr 2024 09:00 AM; Ma 582937; From Low Code to Pro Code: A Power Class on Building Solutions for Microsoft 365 with PnP; 29 Apr 2024 09:0 568082; Governance for Microsoft 365, the Power Platform and Your Copilots; 29 Apr 2024 09:00 AM; Martina Grom, Toni 10 573018; Grounding AI using SharePoint content; 29 Apr 2024 09:00 AM; Microsoft 365 Team Place Holder; MS 1; Microsoft 573011; Leveraging AI to power your organization's productivity; 29 Apr 2024 09:00 AM; Microsoft 365 Team Place Hold 559448; Power Automate Cloud Flows Hands-on Workshop for Microsoft 365 Power Users; 29 Apr 2024 09:00 AM; Vlad Catri 12 649574; The Age of Copilots; 30 Apr 2024 08:00 AM; Jeff Teper; D: Pacific Hall; Business/End Users, Developers, IT Pro 13 650136; General Session: Reshaping productivity with Copilot for Microsoft 365; 30 Apr 2024 09:30 AM; Bobby Kishore, 14 639513; Cultivating Trust and Leadership Excellence: Strategies for Respect and Empathy in the Workplace; 30 Apr 20 579245; Boosting Employee Development with Viva Goals and Copilot; 30 Apr 2024 11:30 AM; Tiffany Songvilay; D: SH III 562107; Building Engaging Employee Experiences for Viva Connections using SPFx; 30 Apr 2024 11:30 AM; Derek Cash-Pet



#### Ingesting data with the Graph Connector



#### Access control list

Item Id ACL Properties Content

```
"@odata.type": "microsoft.graph.externalItem",
"acl": [{
    "type": "User",
    "value": "c3a8d94d-f807-4785-b1c0-f0f4dbc9f54"
    "accessType": "deny",
    "identitySource": "azureActiveDirectory"
    "type": "Group",
    "value": "contosoEscalations"
    "accessType": "grant",
    "identitySource": "External"
}, {
    "type": "Everyone",
    "value": "07ea6043-dab2-4448-9d7f-70dba909a9c"
    "accessType": "grant",
    "identitySource": "azureActiveDirectory"
}],
```

#### **Properties**

Item Id

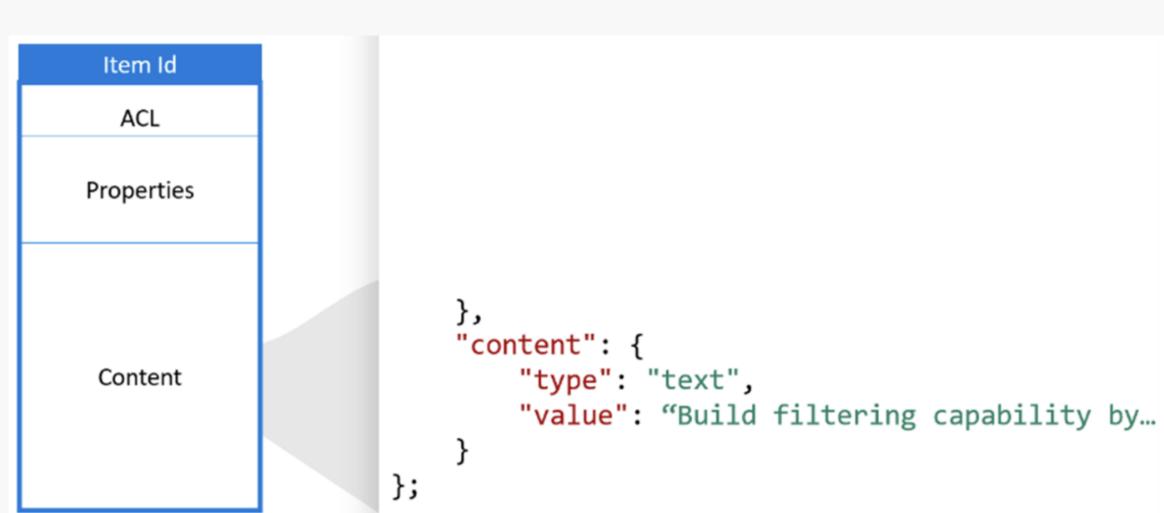
ACL

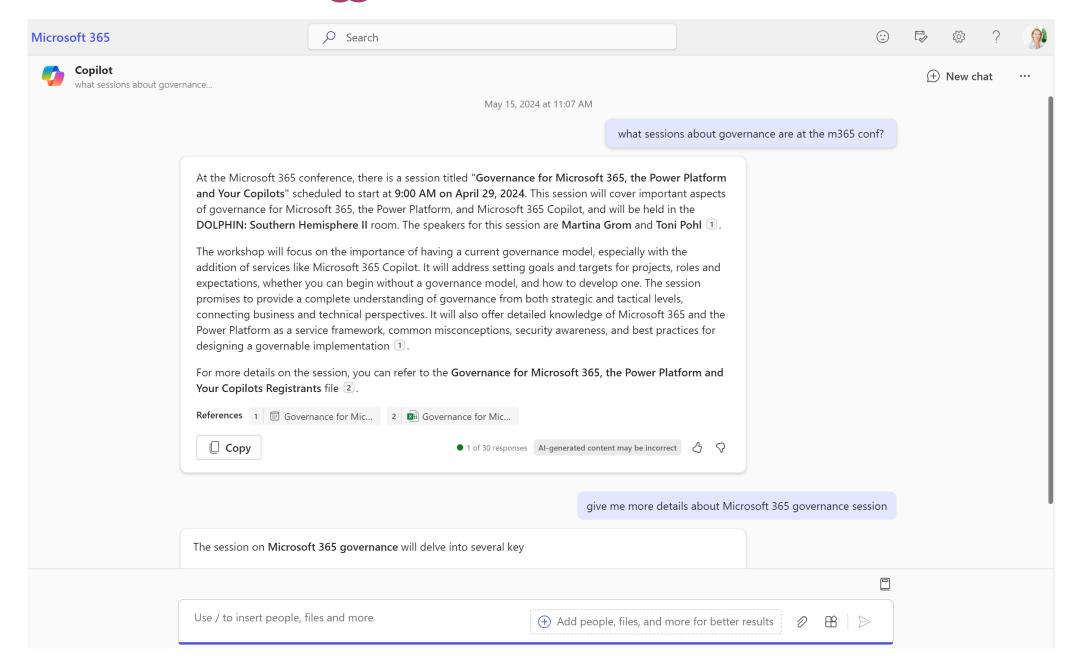
**Properties** 

Content

```
"properties": {
    "ticketID": "1158",
    "title": "Filter design",
    "createdBy": "Carole Poland",
    "assignedTo": "Aaron Bjork",
    "lastEditedDate": "2020-08-25T03:32:08.42641",
    "lastEditedBy": "Aaron Bjork",
    "workItemType": "Feature",
    "priority": "1",
    "resolved": "false",
    "tags@odata.type": "Collection(String)",
    "tags": ["eng", "design"],
    "status": "Todo",
    "url": "https://ticketstracker.com/apps/flightbooker"
},
```

#### **Content (Relevance, Text and HTML)**







## **Message Extensions**



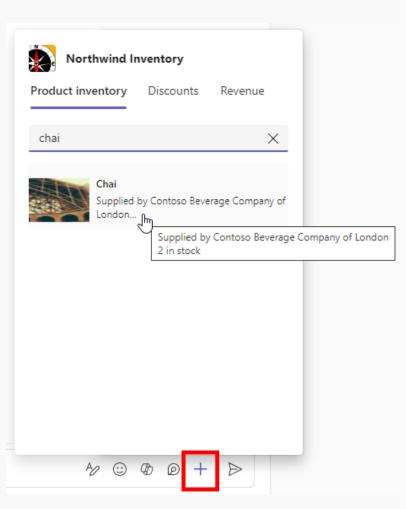
#### Message Extensions demo

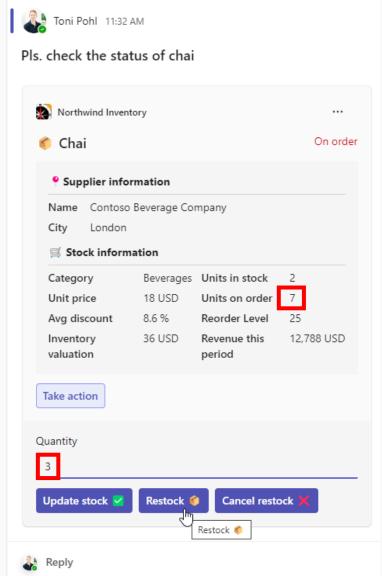
- Search products and interact with the user to order or restock products
- https://github.com/OfficeDev/Copilot-for-M365-Plugins-Samples/tree/main/samples/msgextnorthwind-inventory-ts

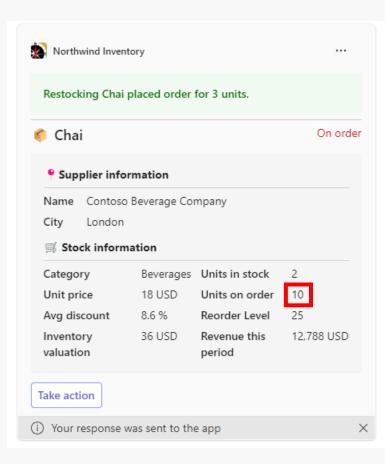
lmageUrl	InventoryStatus	InventoryValue	ProductID	ProductName	QuantityPerUnit	ReorderLevel
https://picsum.photos/seed/1/20	In stock	6300	1	Chai	10 boxes x 20 bags	25
https://picsum.photos/seed/10/2	null	null	10	Ikura	12 - 200 ml jars	20
https://picsum.photos/seed/11/2	null	null	11	Queso Cabrales	1 kg pkg.	30
https://picsum.photos/seed/12/2	null	null	12	Queso Manchego La Pastora	10 - 500 g pkgs.	20
https://picsum.photos/seed/13/2	null	null	13	Konbu	2 kg box	5
https://picsum.photos/seed/14/2	null	null	14	Tofu	40 - 100 g pkgs.	20
https://picsum.photos/seed/15/2	null	null	15	Genen Shouyu	24 - 250 ml bottles	5
https://picsum.photos/seed/16/2	null	null	16	Pavlova	32 - 500 g boxes	10
https://picsum.photos/seed/17/2	null	null	17	Alice Mutton	20 - 1 kg tins	20
https://picsum.photos/seed/18/2	null	null	18	Carnarvon Tigers	16 kg pkg.	20



#### Message Extensions – Demo Plugins interactivity









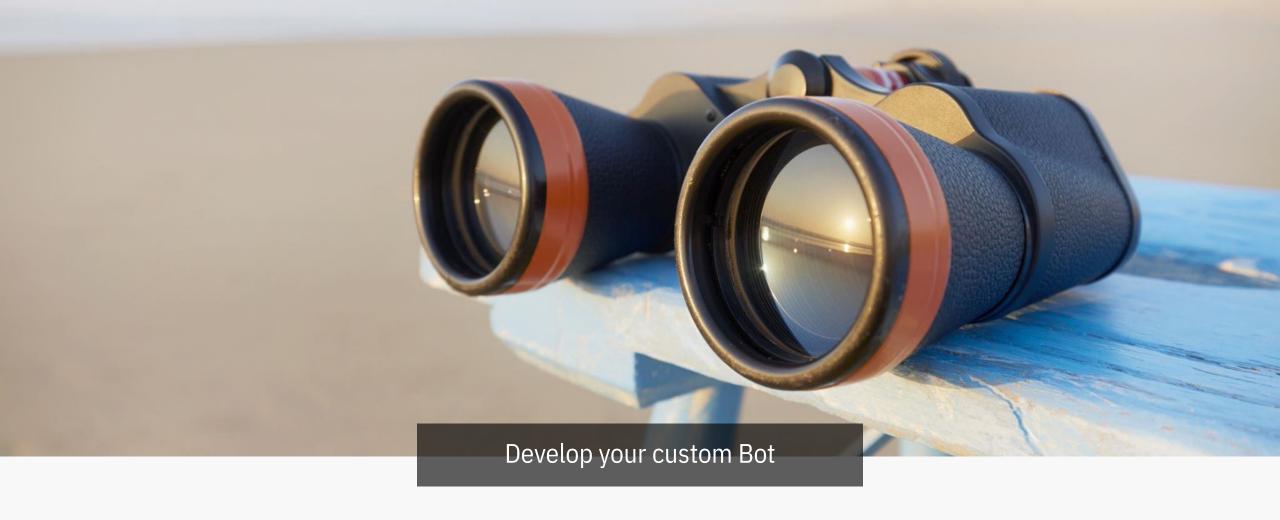
#### What to use when

#### **Graph Connectors**

- Ingest data into Microsoft Graph
- Unstructured / flattened data
- Up to 5M items per connection
- Up to 20 requests per second
- Read-only
- Data inside M365
- SharePoint, Bing work, etc.

#### Plugin

- Bot development
- Real-time data access
- Structured data
- Suitable for high volume data (over 5M)
- Suitable for high activity (over 20 req./sec.)
- Read and write
- Teams and Outlook



# Azure Open AI



#### When to use a custom Open AI solution?











Custom Copilot
e.g., when many users
need to access specific
company data.

Data grounding
Run Azure OpenAI
Service on your data to
gain insights and create
chat experiences for
users.
Use Skills to process
data automatically.

Trust and transparency
Provide protection from
undesirable inputs and
outputs.

Data, privacy and security
Extend on your terms.

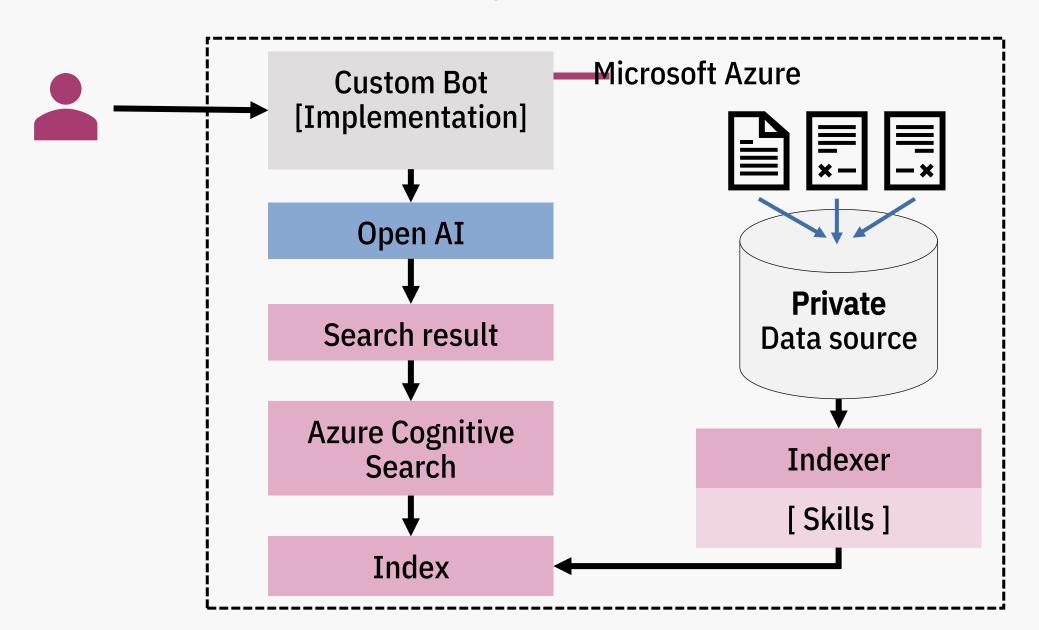
# Steps to create your custom Copilot with your data

- Data source: Documents (PDF, Office, Web, etc.)
- Azure AI Document Intelligence API Get the content, crack documents
- Azure AI Search API Build Index & search
- Open AI API refine the search result
- Bot API (Teams) chat



#### **EUROPEAN COLLABORATION SUMMIT**

#### **Custom Copilot with Azure AI Search**





#### https://github.com/Microsoft/BotBuilder-Samples/blob/main/README.md#getting-the-samples

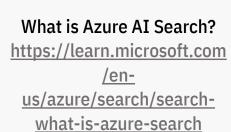
	Sample Name	Description	.NET	JavaScript	Python	Java
2	Echo bot	Demonstrates how to receive and send messages.	.NET Core	JavaScript, TypeScript	<u>Python</u>	<u>Java</u>
3	Welcome user	Introduces activity types and provides a welcome message on conversation update activity.	.NET Core	JavaScript, TypeScript	<u>Python</u>	<u>Java</u>
5	Multi turn prompts	Demonstrates how to use waterfall dialog, prompts, and component dialog to create a simple interaction that asks the user for name, age, and prints back that information.	.NET Core	JavaScript, TypeScript	<u>Python</u>	<u>Java</u>
6	Using cards	Introduces all card types including thumbnail, audio, media etc. Builds on Welcoming user + multi-prompt bot by presenting a card with buttons in welcome message that route to appropriate dialog.	.NET Core	JavaScript, TypeScript	<u>Python</u>	<u>Java</u>
7	Adaptive cards	Demonstrates how the multi-turn dialog can use a card to get user input for name and age.	.NET Core	<u>JavaScript</u>	<u>Python</u>	<u>Java</u>
8	Suggested actions	Demonstrates how to enable your bot to present buttons that the user can tap to provide input.	.NET Core	<u>JavaScript</u>	<u>Python</u>	<u>Java</u>
13	Core bot	Core bot shows how to use cards, dialog, and Language Understanding (LUIS).	.NET Core,	<u>JavaScript</u> , <u>TypeScript</u>	<u>Python</u>	<u>Java</u>
15	Handling attachments	Demonstrates how to listen for/handle user provided attachments.	.NET Core	<u>JavaScript</u>	<u>Python</u>	<u>Java</u>
40	TIMEX resolution	Demonstrates various ways to parse and manipulate the TIMEX expressions you get from LUIS and the <a href="DateTimeRecognizer">DateTimeRecognizer</a> used by the DateTimePrompt.	.NET Core	<u>JavaScript</u>	<u>Python</u>	<u>Java</u>
43	Complex dialogs	Demonstrates different ways for composing dialogs.	.NET Core	<u>JavaScript</u>	<u>Python</u>	<u>Java</u>
45	State management	Demonstrates how to use state management and storage objects to manage and persist state.	.NET Core	<u>JavaScript</u>	<u>Python</u>	Java

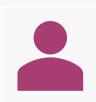


#### **Azure AI Search**









within Azure AI Language
https://learn.microsoft.com
/en-us/azure/botservice/bot-builderconcept-luis?view=azurebot-service-4.0#azurecognitive-search

**Configure Azure AI Search** 



**Configure custom question** 

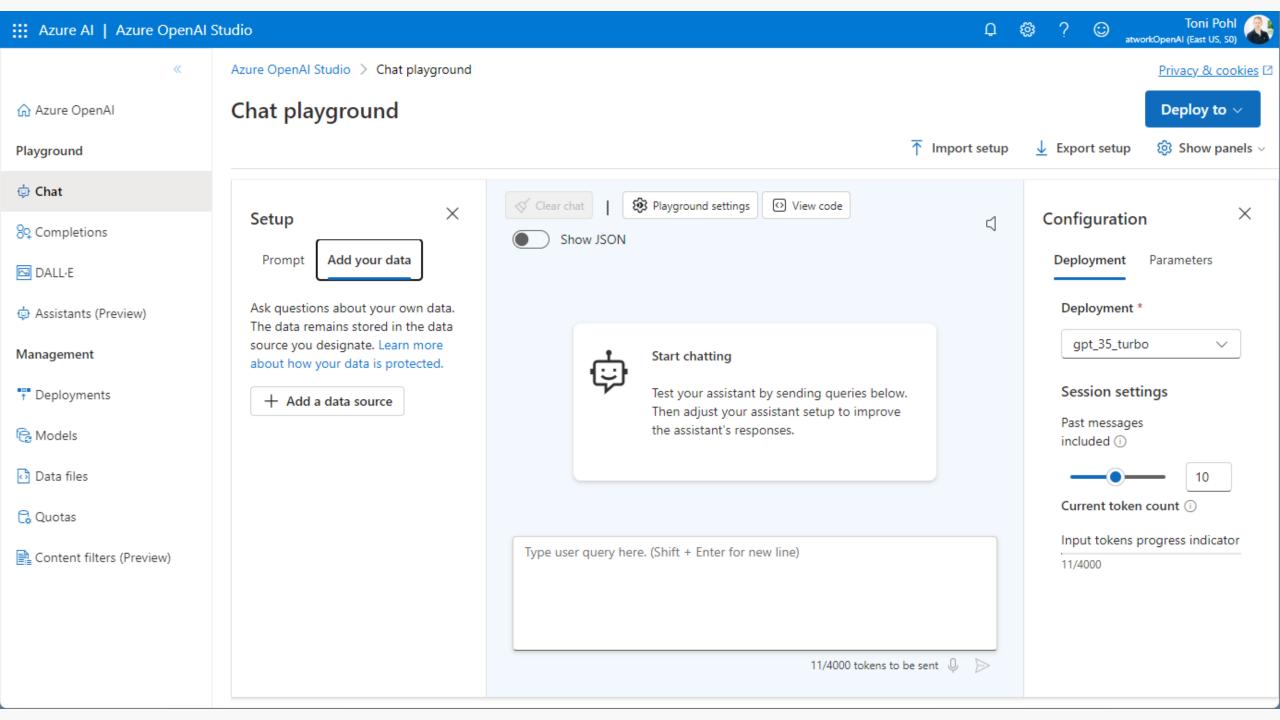
answering enabled

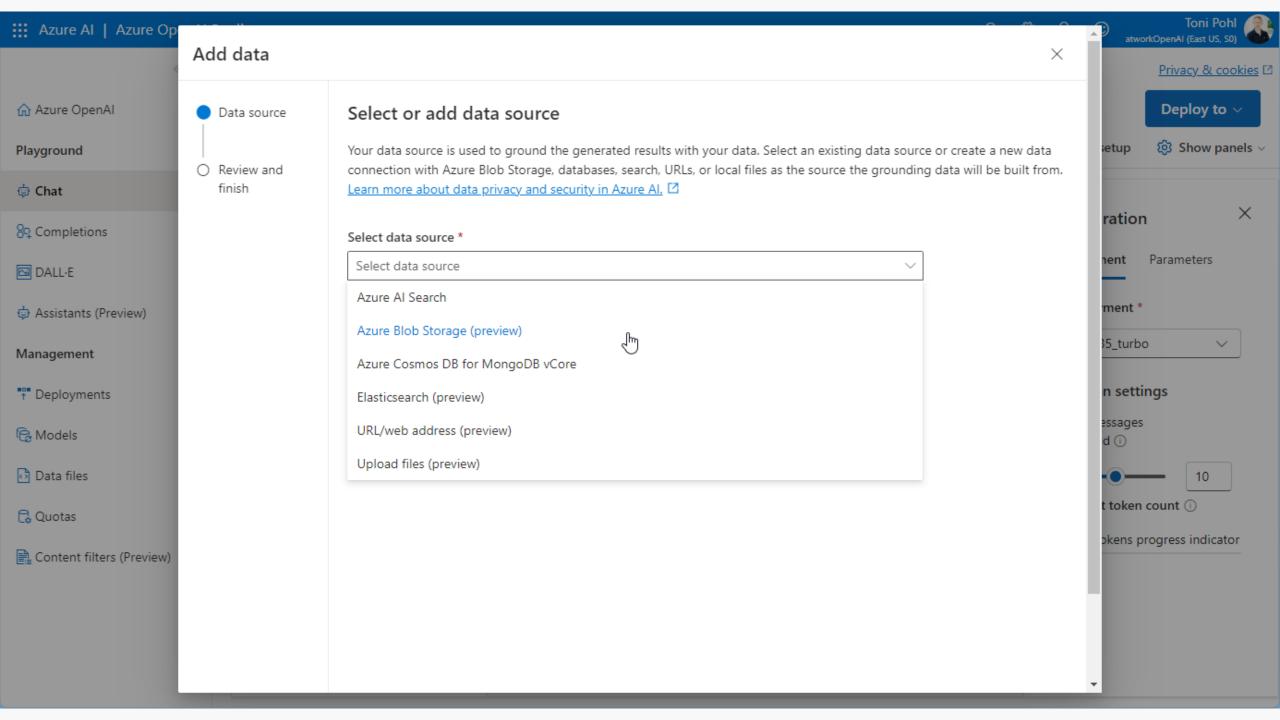
resources

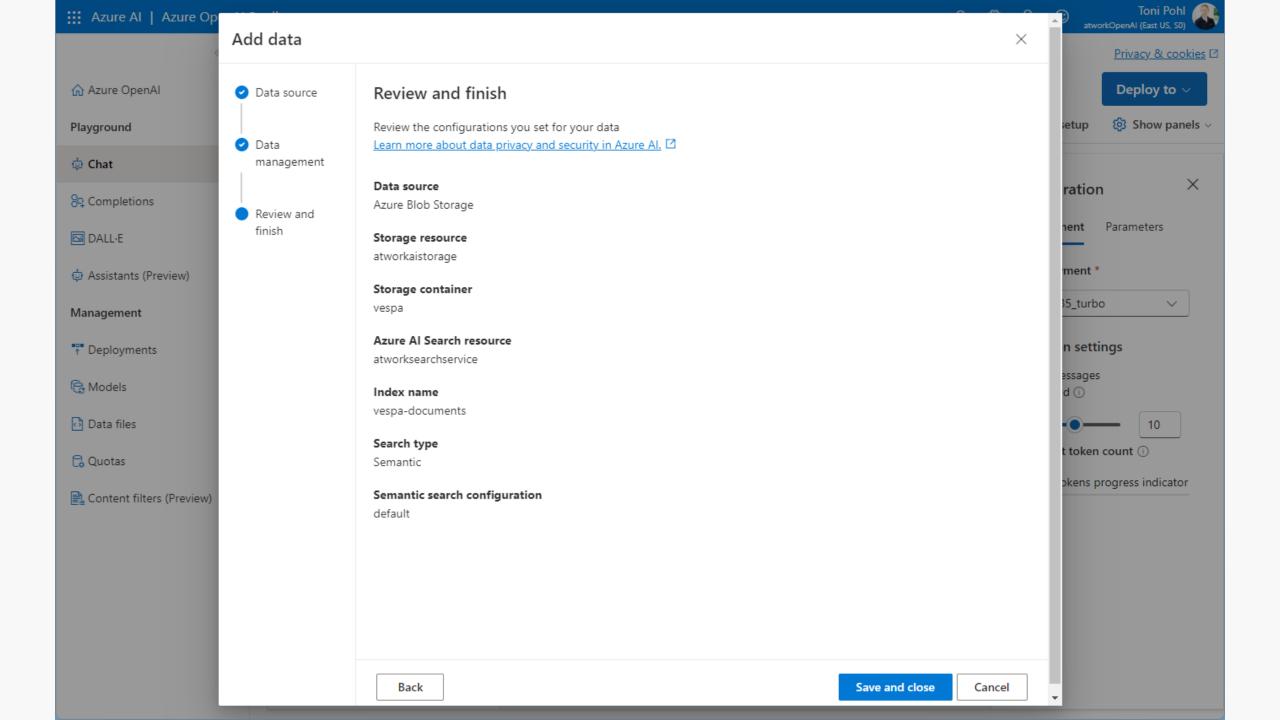
https://learn.microsoft.com
/en-us/azure/aiservices/languageservice/questionanswering/howto/configure-resources

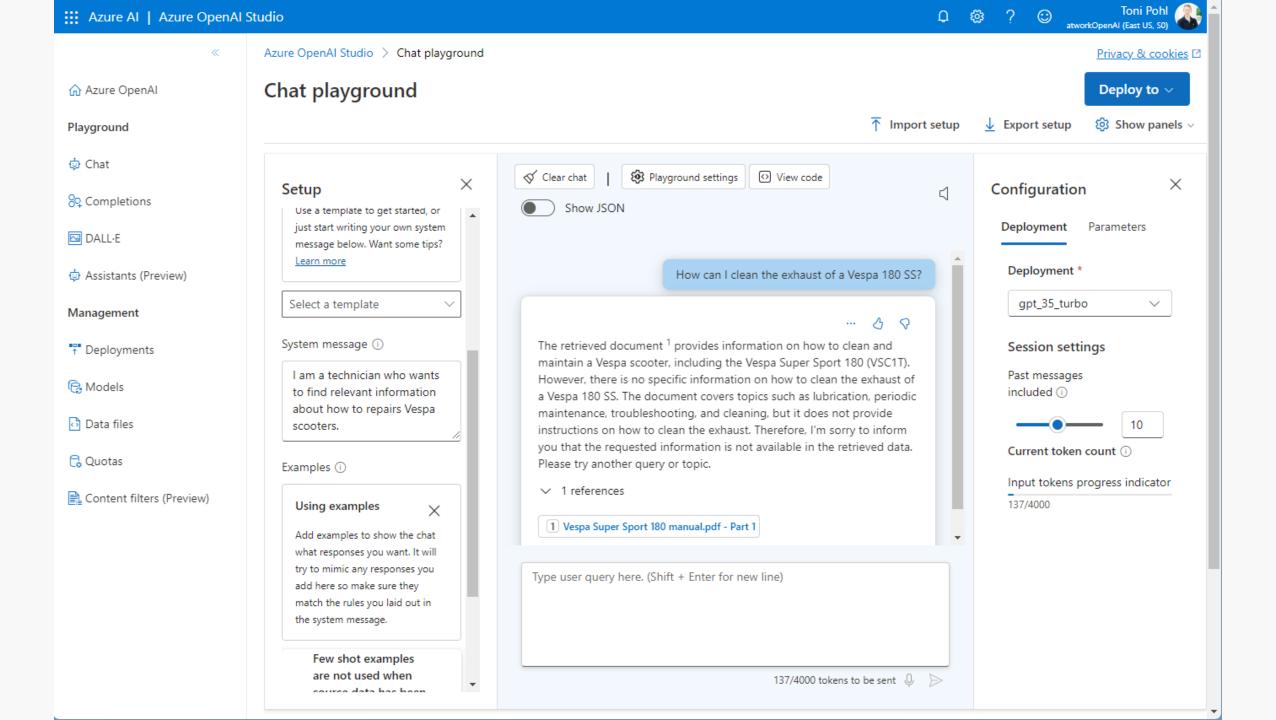


Try it out <a href="https://oai.azure.com/">https://oai.azure.com/</a>
<a href="portal/">portal/</a>





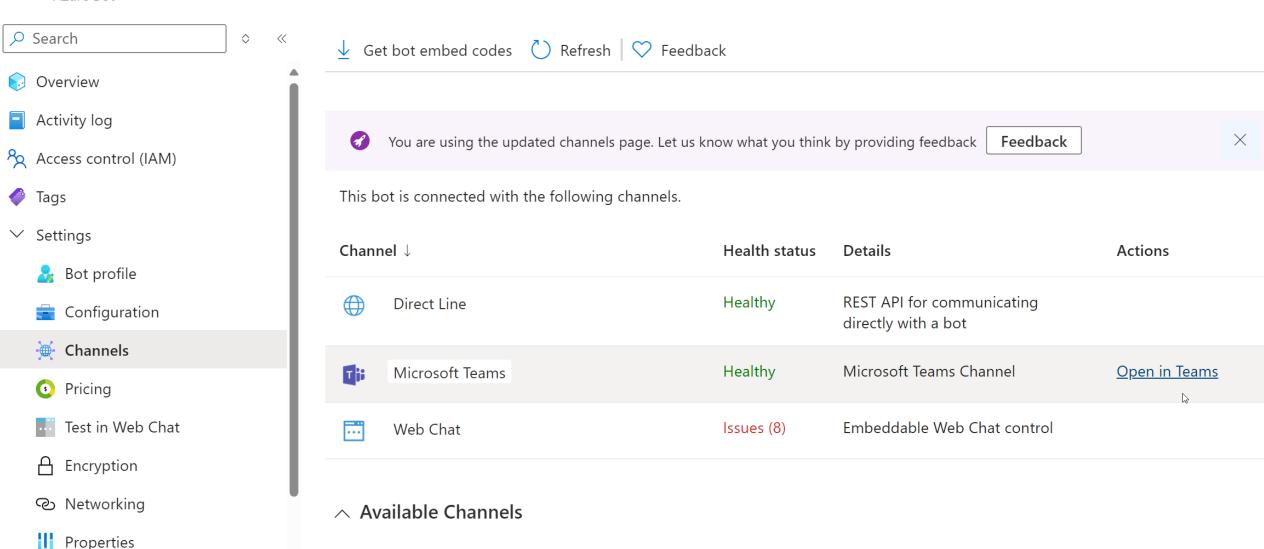




#### Home > Azure Al services | Bot services > atworkAlBot

# atworkAlBot | Channels ☆ … Azure Bot

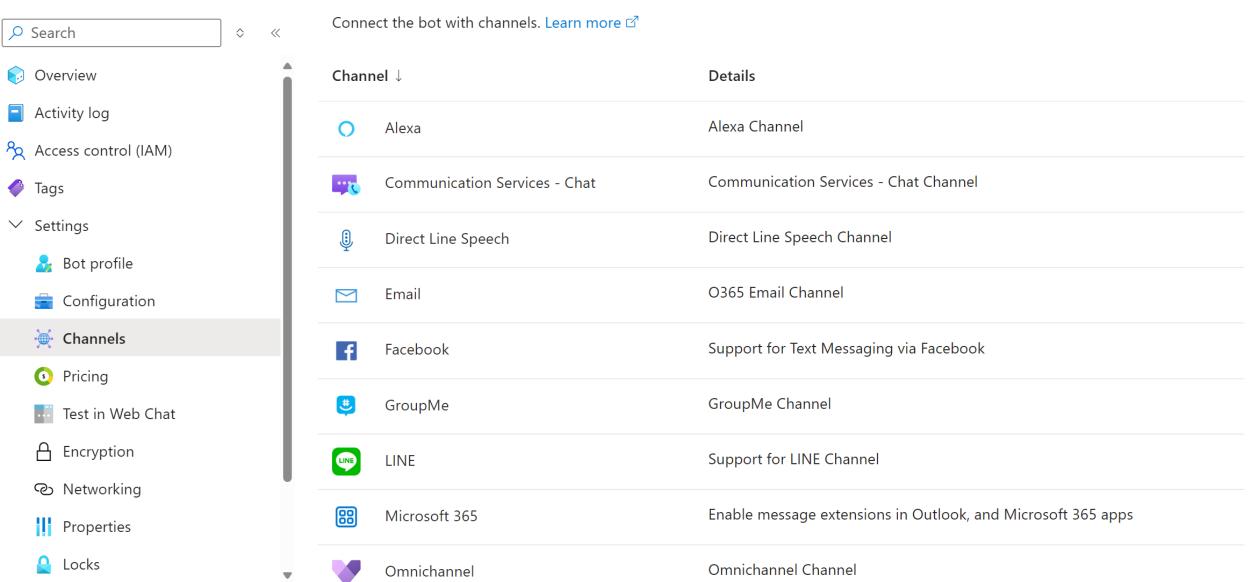
ا مماده



Connect the bot with channels. Learn more

#### Home > Azure Al services | Bot services > atworkAlBot





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## Methods to integrate your data



#### Summary









**Graph Connectors**Ingest data

Message
Extensions
(PlugIns)
Develop an
interactive Bot

Azure Open AI Bot Develop your own data integration and Bot Copilot Studio low code, simple, will grow...



#### **Copilot and Search Options...**

	Graph Connectors	Message Extensions	<b>Copilot Studio</b>	Azure OpenAI
Type	Integrates in graph and add vertical in Search	Interactivity, adaptive cards	Simple to use, fast solution	Integration on your terms
Development	N	Y	Low code	Y
Data Location	Graph	Data storage	Data storage	Data storage
Solution complexity	*	**	*	***



#### **M365 Copilot resources**

- https://aka.ms/Copilot-Plugins
- https://aka.ms/Message-Extensions
- https://aka.ms/GraphConnectors
- https://aka.ms/ExtendCopilotM365
- https://aka.ms/community/samples



#### **Azure Open AI resources**

- Azure OpenAI Service https://azure.microsoft.com/en-us/products/ai-services/openai-service
- Azure AI Document Intelligence https://azure.microsoft.com/en-ca/products/form-recognizer
- Azure AI | Document Intelligence Studio https://documentintelligence.ai.azure.com/studio/read
- Basics of the Microsoft Bot Framework https://learn.microsoft.com/en-us/azure/bot-service/bot-builder-basics?view=azure-bot-service-4.0
- Create a bot with the Bot Framework SDK https://learn.microsoft.com/en-us/azure/bot-service/bot-service-quickstart-create-bot?view=azure-bot-service-4.0&tabs=csharp%2Cvs
- Bot Development Requirements
   https://learn.microsoft.com/en-us/azure/bot-service/bot-service-quickstart-create-bot?view=azure-bot-service-4.0&tabs=csharp%2Cvs#prerequisites
- Bot Framework Samples https://github.com/Microsoft/BotBuilder-Samples/blob/main/README.md#getting-the-samples
- What is Azure AI Search? https://learn.microsoft.com/en-us/azure/search/search-what-is-azure-search
- Configure Azure AI Search within Azure AI Language <u>https://learn.microsoft.com/en-us/azure/bot-service/bot-builder-concept-luis?view=azure-bot-service-4.0#azure-cognitive-search</u>
- Configure custom question answering enabled resources https://learn.microsoft.com/en-us/azure/ai-services/language-service/question-answering/how-to/configure-resources

# THANK YOU, YOU ARE AWESOME

# PLEASE RATE THIS SESSION IN THE MOBILE APP.



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