

# Enhance Microsoft Copilot and Microsoft Graph with Your Own Data



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## The official event app for the M365 Community Conference



#### Join the event app to access:

- Event announcements
- Personalized agenda, session details
- Speaker & attendee profiles
- Networking, meet-ups, messages
- Event documents

**Event Invitation Code:** M365Con2024



#### Co-Pilot?



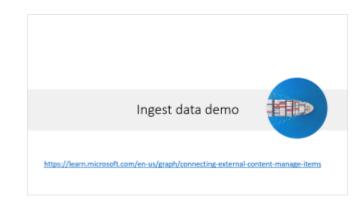
## Jarvis is my co-pilot

It 's Copilot!

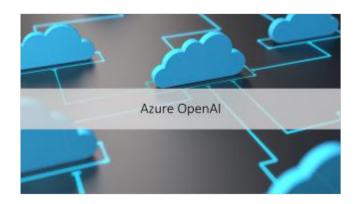
## Agenda

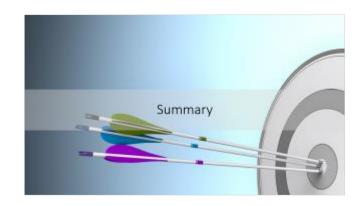












#### **Azure Al**

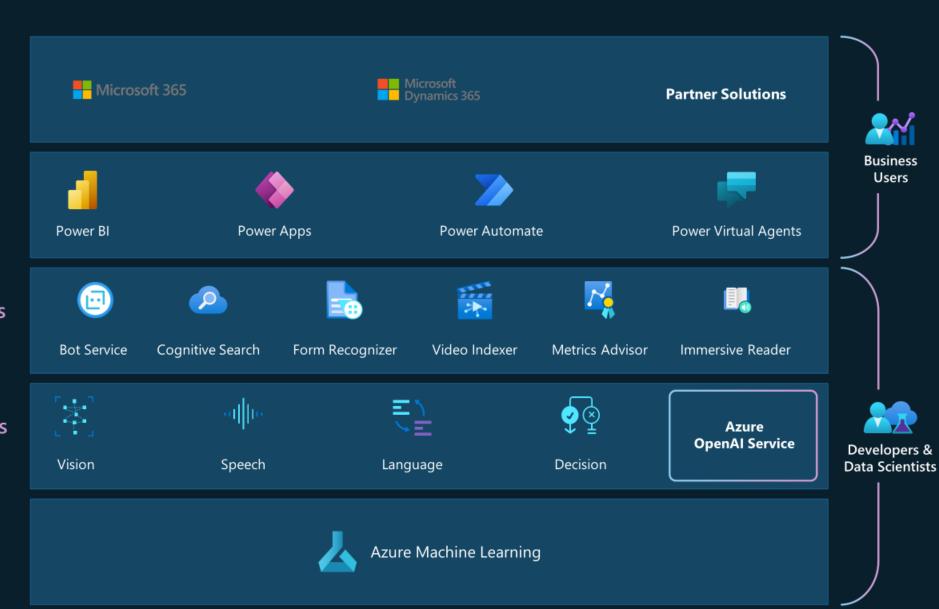
**Applications** 

**Application Platform** Al Builder

**Scenario-Based Services Applied AI Services** 

**Customizable AI Models Cognitive Services** 

**ML Platform** 

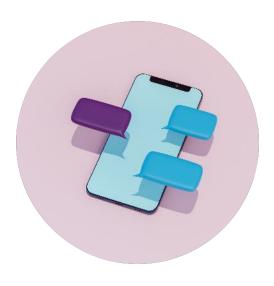


Users

#### Integrate your custom data



**Graph Connectors** 



Message Extensions

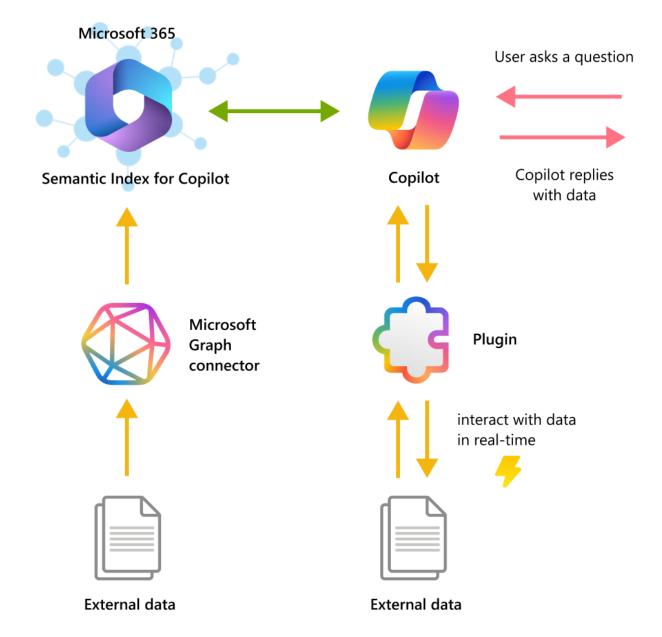


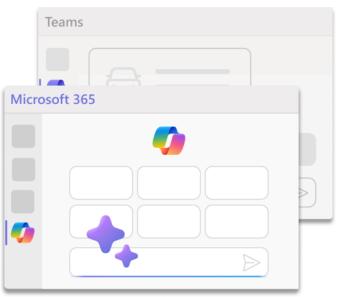
Bot + Azure Cognitive Search

## Methods



#### aka.ms/ExtendCopilotM365





Microsoft Copilot (client)

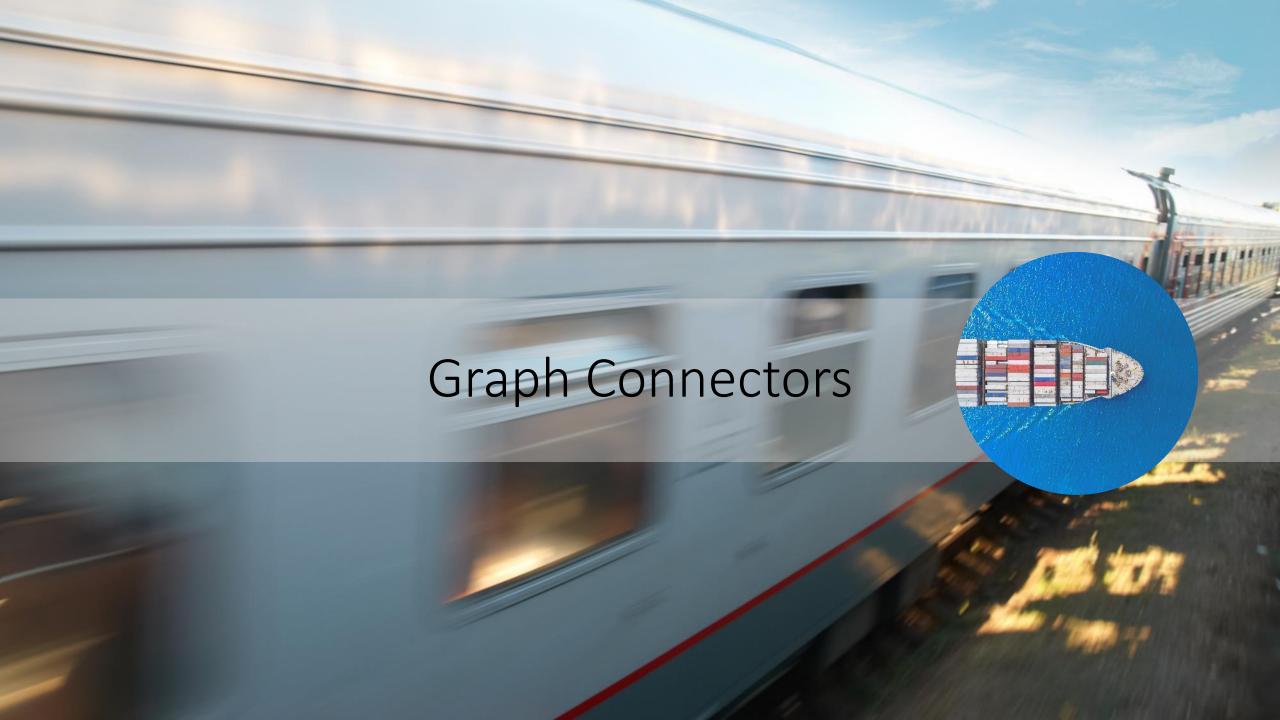
#### What to use when

#### **Graph Connector**

- 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, Viva Topics, 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



#### Developing a custom Graph connector

- Do you want to ingest content once or continuously?
- Will you run the connector manually, or will it run continuously in the cloud?
- How much content do you need to ingest?
   What's the necessary infrastructure to support it?
- Do you need to handle content updates and deletions automatically?

#### Steps for using Graph Connectors

Use the Microsoft Graph connectors REST API or SDK.

As Admin, open Microsoft 365 admin center / Settings / Search & intelligence.

Register your schema, applying semantic labels, and property attributes.

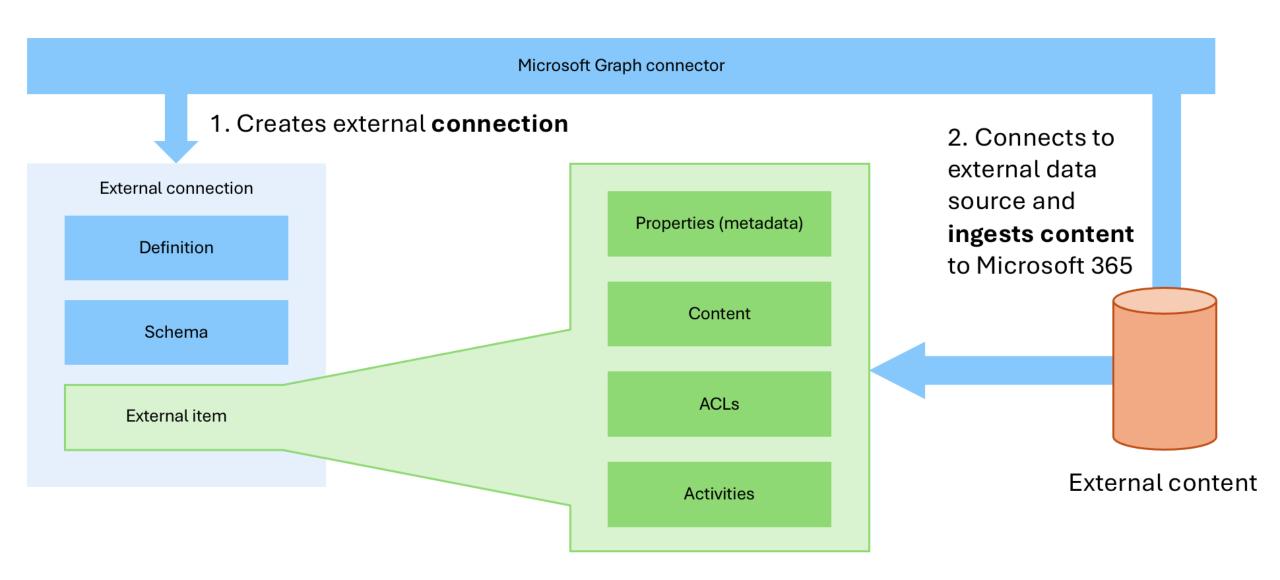
Ingest and manage external items.

## Ingest data demo



https://learn.microsoft.com/en-us/graph/connecting-external-content-manage-items

## Ingesting data with the Graph Connector



#### Add an external item to Graph



```
PUT /external/connections/contosohelpdesk/items/SR00145
Content-Type: application/json

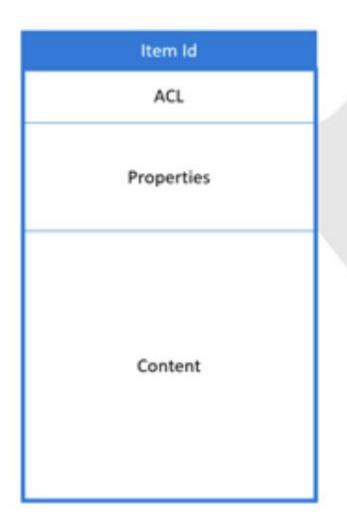
"properties": {
    "title": "WiFi outage in Conference Room A",
    "priority": 1,
    "assignee": "meganb@contoso.com"
}
```

#### 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

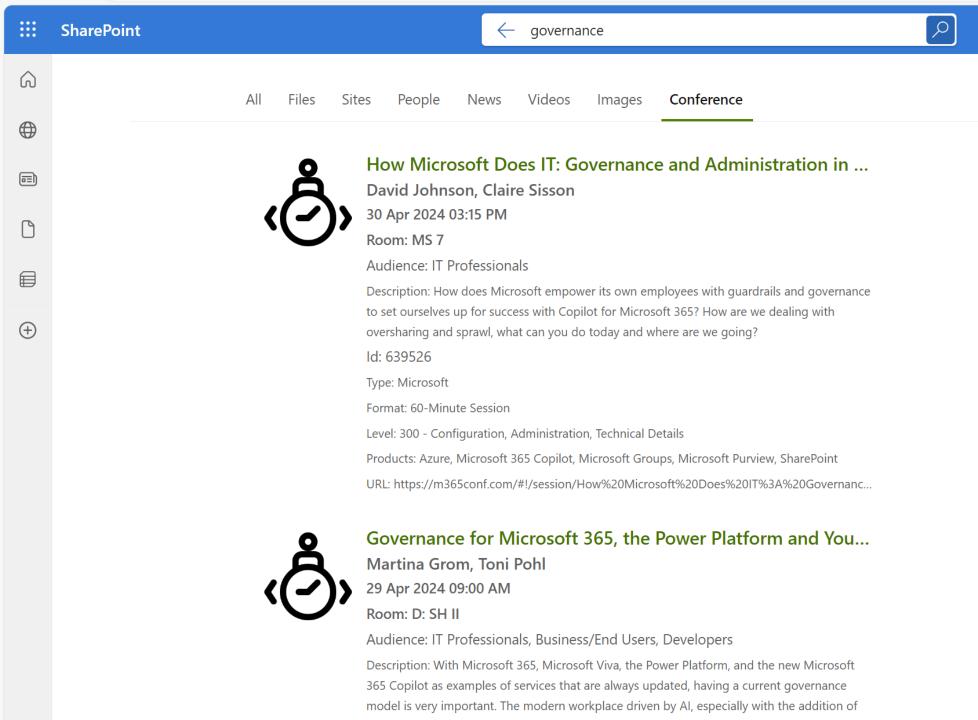


```
"properties": {
    "ticketID": "1158",
    "title": "Filter design",
    "createdBy": "Carole Poland",
    "assignedTo": "Aaron Bjork",
    "lastEditedDate": "2020-08-25T03:32:08.42641",
    "lastEditedBy": "Aaron Bjork",
    "workItemType": "Feature",
    "priority": "1",
    "resolved": "false",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

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

Item Id ACL **Properties** Content

```
},
  "content": {
      "type": "text",
      "value": "Build filtering capability by...
}
```



⇔ Feedback



What sessions does Martina Grom have at M365 conference 2024?

Martina Grom is scheduled to present the following sessions at the M365 conference 2024:

- "Enhance Microsoft Copilot and Microsoft Graph with your own data" on 2 May 2024 at 09:15 AM in room D: SH I. This is a 60-minute session aimed at IT Professionals and Developers, focusing on Azure, Azure Functions, Microsoft 365 Copilot, Microsoft Entra, Microsoft Graph, and PVA/Copilot Studio. 1
- "Governance for Microsoft 365, the Power Platform and Your Copilots" on 29 Apr 2024 at 09:00 AM in room D: SH II. This full-day workshop is designed for IT Professionals, Business/End Users, and Developers, covering governance models for Microsoft 365, Microsoft Viva, the Power Platform, and Microsoft 365 Copilot. (2)

These sessions are part of the Microsoft 365 Community Conference that takes place in Orlando, USA, from April 28th to May 3rd, 2024. For more details, you can refer to the M365 conference website.

References

Copy



● 1 of 30 responses Al-generated content may be incorrect





#### Graph Connectors

- All of the connectors by Microsoft are free.
- Have sufficient index quota.
- Any valid Microsoft 365 Copilot, Microsoft 365 or Office 365 license allows you to view data from connectors in your search results.
- For each licensed user, you get entitlement for 500 items of index quota.
- By default, Microsoft Graph connectors support up to 50 million items of total index quota.
- The per connection item limit is 5 million items by default. (Open support case for more), and 30 connectors per tenant.
- Pricing: 0-100K objects extracted Free
   100K+ objects extracted \$0.75 per 1K objects extracted
   <a href="https://learn.microsoft.com/en-us/microsoftsearch/licensing">https://learn.microsoft.com/en-us/microsoftsearch/licensing</a>



#### Use cases

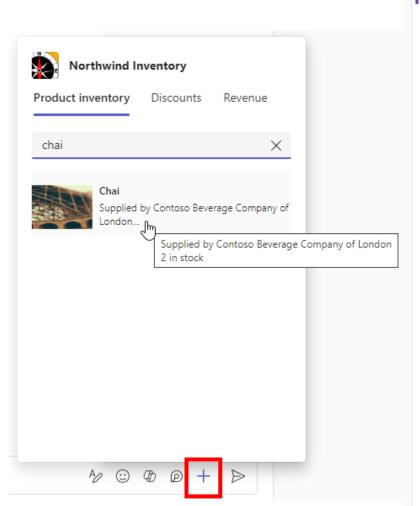
- Direct interaction with data
- Extended functionality
- Not "only" search
- Read and write
- Ad-hoc data
- No import
- (Developer required)

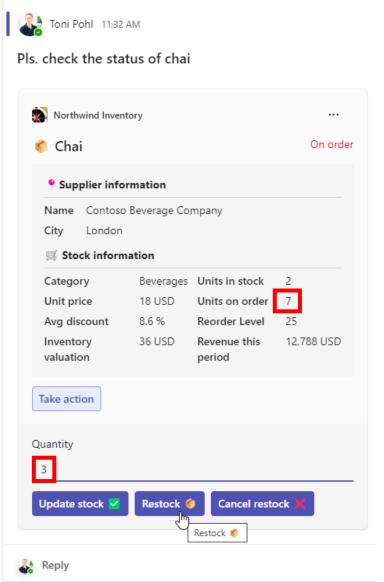
#### Message Extensions demo

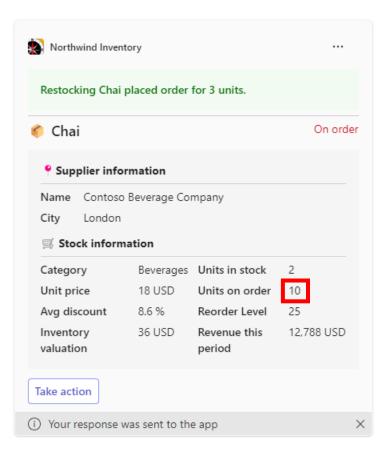


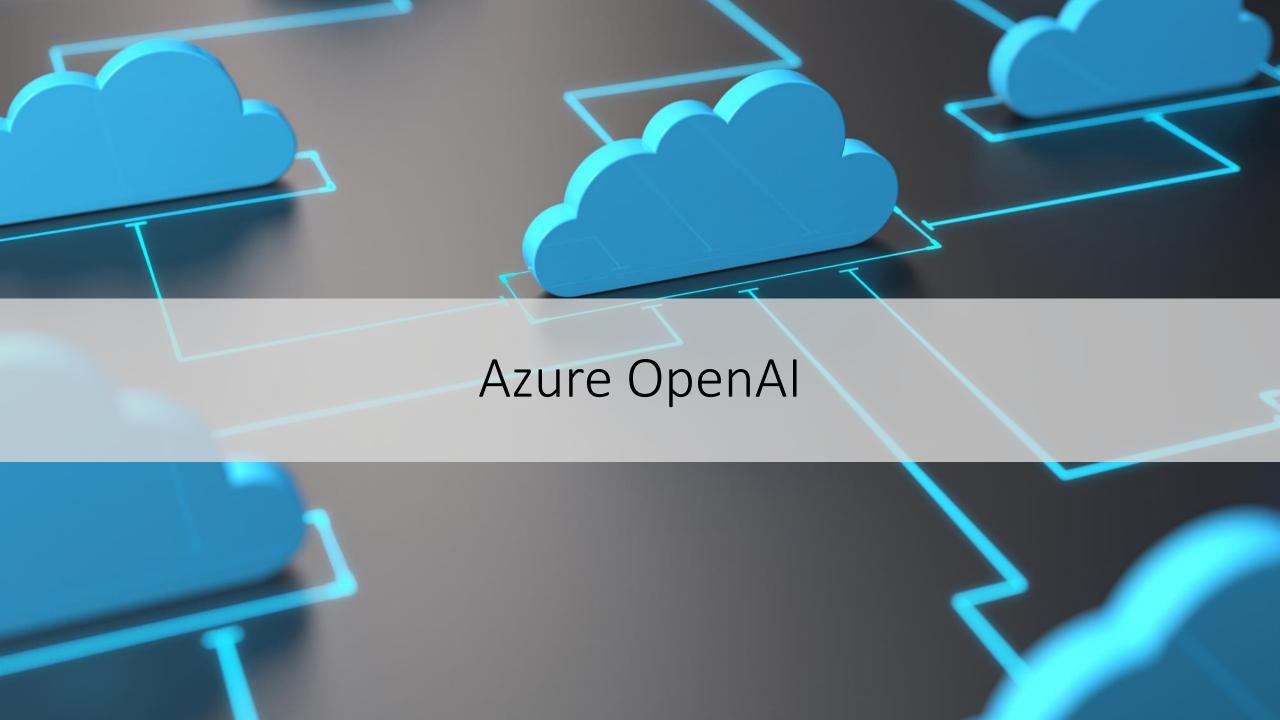
https://github.com/OfficeDev/Copilot-for-M365-Plugins-Samples/tree/main/samples/msgext-northwind-inventory-ts

## Message Extensions – Demo Plugins interactivity









# Create your custom Copilot with your data

- 1. Data source documents (PDF, Office, Web, etc.)
- 2. Azure AI Document Intelligence API – Get the content
- 3. Azure Cognitive Search API– Build Index & search
- 4. Open AI API refine the search result
- 5. Bot API chat with the user (in Teams, etc.)

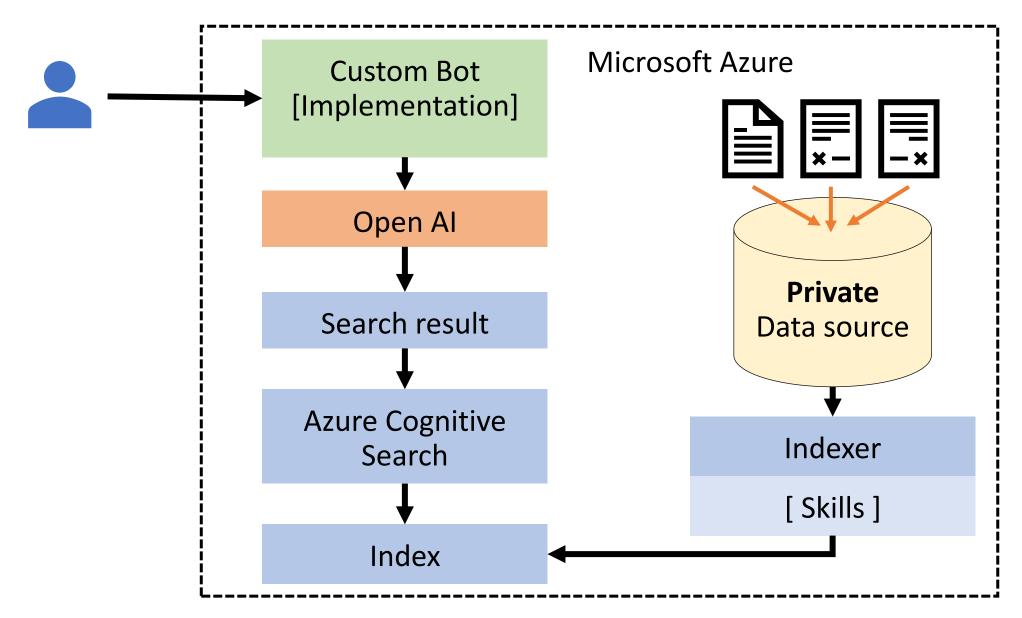


#### Sample data source for the index



☐ Name	Size	Date modified	Туре	
✓ Yesterday				
azure-governance-policy.pdf	230.946 KB	22.09.2023 12:35	Adobe Acrobat Docu	
Microsoft Azure Active Directory M365 Minimum Viable SCB Draft v0.1.pdf	725 KB	22.09.2023 12:30	Adobe Acrobat Docu	
Microsoft 365 Defender M365 Minimum Viable SCB Draft v0.1.pdf	602 KB	22.09.2023 12:28	Adobe Acrobat Docu	
Microsoft Power BI M365 Minimum Viable SCB v0.1.pdf	559 KB	22.09.2023 12:30	Adobe Acrobat Docu	
Microsoft Teams M365 Minimum Viable SCB Draft v0.1.pdf	547 KB	22.09.2023 12:30	Adobe Acrobat Docu	
Microsoft Exchange Online M365 Minimum Viable SCB Draft v0.1.pdf	530 KB	22.09.2023 12:28	Adobe Acrobat Docu	
Microsoft Power Platform M365 Minimum Viable SCB Draft v0.1.pdf	478 KB	22.09.2023 12:30	Adobe Acrobat Docu	
Microsoft OneDrive for Business M365 Minimum Viable SCB Draft v0.1.pdf	472 KB	22.09.2023 12:30	Adobe Acrobat Docu	
Microsoft SharePoint Online M365 Minimum Viable SCB Draft v0.1.pdf	459 KB	22.09.2023 12:30	Adobe Acrobat Docu	

#### Custom Copilot with Azure Cognitive Search



## Azure Open Al Demo



#### Integrated OpenAl Bot into Teams chat

2/14 7:19 AM

where can i see threats

atworkAlBot 2/14 7:19 AM



To view threats, you can use the Explorer feature in Microsoft 365 Defender [doc4]. Additionally, you can configure audit logging to view data in threat protection reports and email security reports [doc4].

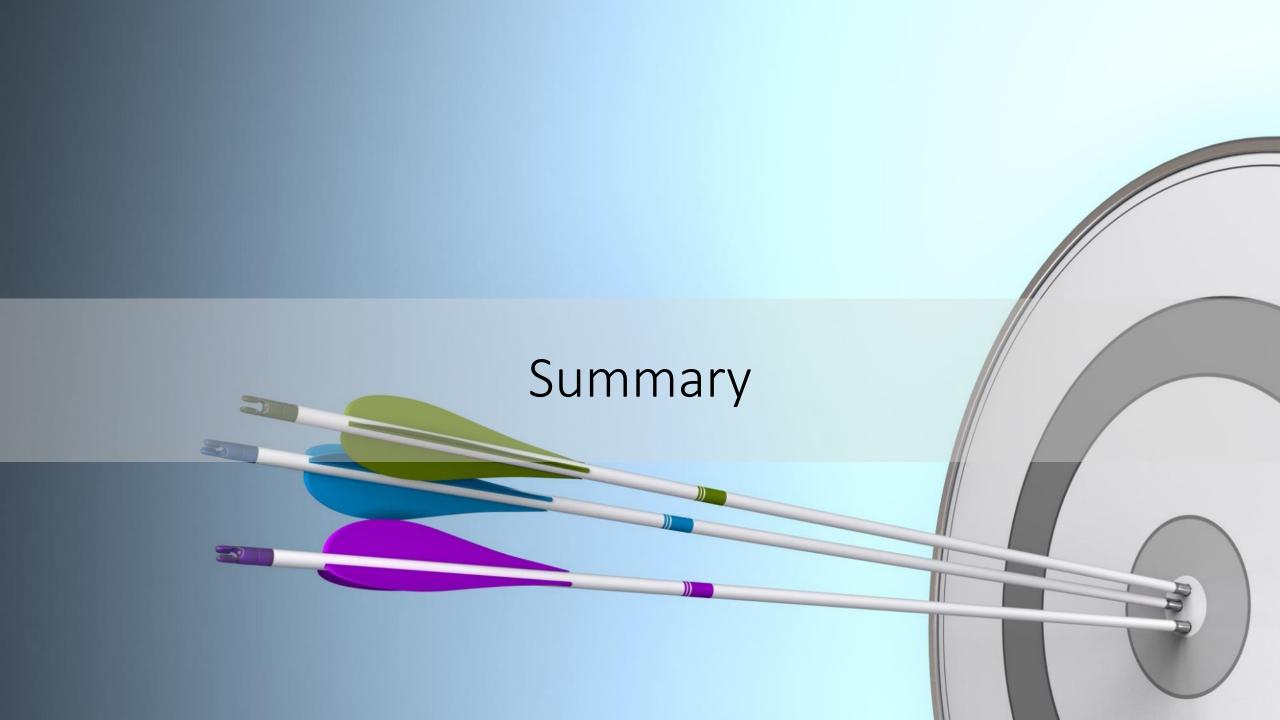
Microsoft Azure Active Directory M365 Minimum Viable SCB...

Microsoft 365 Defender M365 Minimum Viable SCB Draft v0...

Microsoft 365 Defender M365 Minimum Viable SCB Draft v0...

Microsoft 365 Defender M365 Minimum Viable SCB Draft v0...

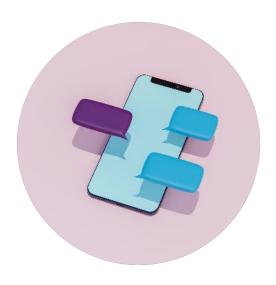
Microsoft 365 Defender M365 Minimum Viable SCB Draft v0...



#### Take aways to integrate your data into Copilot



**Graph Connectors** 

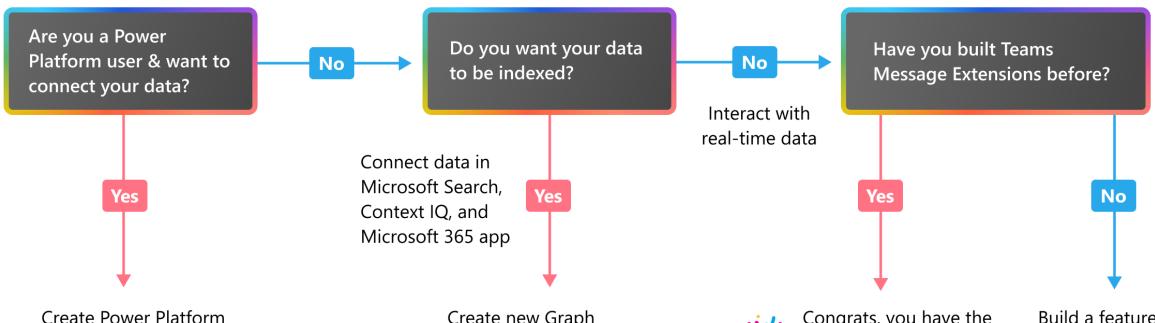


Message Extensions



Bot + Azure Cognitive Search





Create Power Platform connector to connect external data!

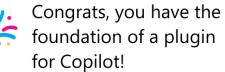


Power Platform connectors

Create new Graph connectors using the API or SDK!



Microsoft Graph connectors



Build a feature-rich solution using Bot Framework!



**Message Extension** 

## Copilot and Search Options...

	Graph Connectors	Message Extensions	Copilot Studio	Azure OpenAl
Type	Integrates in Graph and add a Vertical in Search	Interactivity, adaptive cards	Simple to use, fast solution	Integration on your terms
Development	N	Y	N	Y
Data Location	Graph	Data storage	Data storage	Data storage
Solution complexity	*	**	*	***

#### Do

- Learn, Learn, Learn
- Define your use cases
- Validate your use cases against available solutions
- Integrate Open AI into your solutions as helper, not as a decision maker
- Validate security and compliance

#### Don't

- Reinvent the wheel again
- Think twice if you really need a custom model
- Copilot is not a replacement for a human
- GPT model is not a search engine



#### Start here!

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

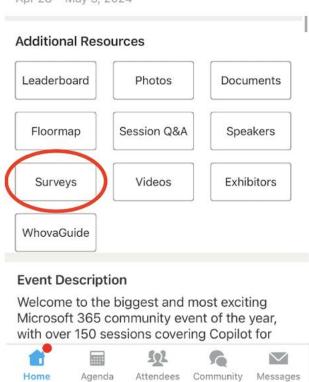
#### Q&A

In case of questions, please contact us. We are happy to engage in further conversations.



#### M365 Community Conference

Lake Buena Vista, FL Apr 28 – May 3, 2024



#### **Session Feedback Surveys**

We really want to hear from YOU!

In the pursuit of making next year's Microsoft 365 Community Conference even better, we want to hear your feedback about this session.

#### Here's How -

- Simply go to the Whova App on your smartphone
- Scroll down on the M365 Community Conference Homepage to 'Additional Resources' to click "Surveys'.
- Click Session Feedback.
- Scroll down to find this session title.
- Complete the session feedback survey.
- Finally, click 'Submit'

It's just that easy!

#### Thank You!



Find the presentation and demos at <a href="https://github.com/tonipohl/CustomCopilots">https://github.com/tonipohl/CustomCopilots</a>

#### Let's Connect



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## Power Platform COMMUNITY CONFERENCE

COPILOT STUDIO POWER PAGES



Workshops Sept 16, 17 & 21

PowerPlatformConf.com X PowerPlatConf



