

Technical white paper

Creating a custom Microsoft Copilot using Copilot Studio to work with Nasuni data



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Value overview of Microsoft Copilot Studio

- Copilot Studio is a Microsoft web application that enables users to create custom copilots tailored to your specific needs
 - Extends the capabilities of Microsoft Copilot, allowing personalized Al companions to be built for use with Nasuni data
- Unlocks tailored AI solutions that deliver enhanced productivity, insights, and decision-making capabilities while ensuring data privacy and compliance
- Copilot Studio leverages Microsoft's machine learning and natural language understanding to provide context-aware assistance of the Nasuni stored documents that are provided

Component overview of Microsoft Copilot Studio

- **Topic definition:** in Copilot Studio, topics are defined for the custom copilot to handle. These topics represent the areas where the copilot assists users
- Content integration: existing Nasuni content can be added to enhance the copilot's knowledge base
- Language customization: Copilot Studio allows for the selection of the language the copilot speaks, ensuring alignment with the audience
- Testing environment: the copilot's responses can be tested in real-time within the studio
- **Performance metrics:** the performance of the copilot in handling user queries can be monitored, and its behavior can be adjusted as needed

Use cases of Microsoft Copilot Studio

Copilots created using Copilot Studio work particularly well for static data sets that change infrequently. Typical use cases include:

- **Domain-specific assistance:** create copilots specialized in specific domains (e.g., healthcare, legal, finance) to provide accurate and relevant information
- **Custom FAQs:** build copilots that answer frequently asked questions, reducing the load on human support teams
- **Content recommendations:** develop copilots that recommend relevant articles, products, or services based on user queries
- Process automation: Copilot Studio can guide users through complex processes or workflows
- **Personalized conversations:** customize copilots to engage in natural conversations with users, enhancing user experience

Getting started

Here's a step-by-step guide to creating a custom copilot with Nasuni data using Microsoft Copilot Studio:

Step 1 - Sign up and access Copilot Studio

- 1. Navigate to the Microsoft Copilot Studio introduction website: https://copilotstudio.microsoft.com/
- 2. Click on "Try free" and sign in with a work email address
- 3. After signing up, a default Power Apps environment will automatically be created

Recent					See mo
Name		Туре	Last modified	Last published	Owner
0	Copilot for Microsoft 365	Microsoft		Never	
Start w Templates ar	ith a template re currently a preview feature. See <u>supplemental terms</u>				See m
42	Safe Travels Provides answers to common travel questions and related health and safety guidelines		Store Operations Improve the efficiency of retail frontline workers by enabling easy access to store procedures and policies	Ø	Sustainability Insights Enables users to easily get insights and data about a company's sustainability goals and progress
<u>ن</u> ن	Team Navigator Assists employees in finding colleagues and their hierarchy within the organization using Microsoft Teams	Č	Weather Your go-to assistant for getting weather forecast	2	Website Q&A Instantly answer user questions using the content of your web site or other knowledge

Step 2 - Copilot creation

Create a copilot	
Set up the copilot Start fresh with a new copilot, and start making it yours.	Copilot name * ① Copilot 1 What language do you want your copilot to speak? * ① English (United States) (en-US)
	 Give your copilot some knowledge by setting up your Generative Al ① Add knowledge to your copilot by pointing it to an external website so your copilot can instantly answer questions over your data. Learn more Enter your website Al-generated content can have mistakes, so don't forget to make sure it's accurate and appropriate. Review the supplemental terms to learn more.
	Edit advanced options > Create Cancel

- After signing up, the Copilot Studio homepage will be displayed
- Templates for creating copilots will be available and a menu bar with various options, including access to existing copilots, can be found on the right-hand side
- To create a new copilot, click the '+' button labeled "Create a copilot", followed by the "new copilot" option on the next page



- A wizard will not initiate assistance with the creation of a copilot
 - The initial screen will attempt to provide assistance based on natural language, serving as a copilot for the copilot. Clicking the "skip to configure" button at the top right of the screen is recommended.

Copilot	Skip to configure Create ····
	Copilot The primary language is set to English (en-US). Edit language
Hi, I'm here to help you build a custom copilot. In a few sentences, how will your copilot assist your users?	
Hi, I'm here to help you build a custom copilot. In a few sentences, how will your copilot assist your users? 2 minutes ago What should I say?	

Used to represent the copilot. Icon sho	uld be in PNG format and less than 30 KB in size.	Copilot
Description Use your own words to describe what your copilot	should help with, including your audience and end goal.	O The primary language is set to English (e Edit language)
Instructions Direct the behavior of the copilot, including its task	ks and how it completes them.	
Knowledge	+ Add knowledge	

- Copilot language is set to English by default. This setting can be left as is or changed to a preferred language.
- If there is a company logo or icon for the copilot, it can be uploaded here.
- Next, enter the description of the copilot for the intended audience.
- The instructions serve as prompt augmentation for the copilot. Instructions are provided directly to the copilot regarding its intended functions. For example: "you are a friendly support assistant that will use the provided knowledge to answer support questions about <product or company name>." These instructions should be as detailed and explicit as possible, as they have a direct effect on the copilot's performance.
 - At this point, clicking on 'add knowledge' will not allow the addition of Nasuni files because the copilot has not yet been created. Therefore, clicking 'Create' in the top right corner of the screen is the necessary first step.
 - Once the copilot is created, the user will be taken to the newly created copilot. Here, there
 will be an opportunity to 'add knowledge' for indexing, such as Nasuni stored files.



- Copilot Studio has been upgraded to accept individual file sizes of up to 512MB per file (it was previously limited to 3MB per file during the preview).
- When a user asks a question and the copilot doesn't have a defined topic to use, it generates the best answer from the Nasuni documents uploaded in a natural language, conversational style.
- Documents that are made available to Copilot Studio are accessible to Microsoft Dataverse, in which some elements of the document are represented in a structured way to aid searching and filtering, and other parts of the documents are vectorized to aid better interactions with Azure AI services. This is all transparent to the end user creating the chatbot.
- Scroll down to the "upload a document" section and browse out to the Nasuni network share to locate the documents you wish to interact with and select those documents. Note that you can select multiple documents at one time. The documents will be uploaded and made accessible to the Dataverse environment as described above.

- Document types supported by Copilot Studio:
 - Word (doc, docx)
 - Excel spreadsheets (xls, xlsx)
 - PowerPoint (ppt, pptx)
 - PDF (pdf)
 - Text (txt, md, log)
 - HTML files (html, htm)
 - CSV files (csv)
 - XML files (xml)
 - OpenDocument files (odt, ods, odp)
 - EPUB (epub)
 - Rich Text Format (rtf)
 - Apple iWork (pages, key, numbers)
 - JSON files (json)
 - YAML files (yml, yaml)
 - LaTeX files (tex)
- After the documents are uploaded, the system extracts and indexes the content. This process may take some time, depending on the size and amount of content. A notification will indicate that indexing is in progress.
- Microsoft has also now added the ability to utilize the File Share Graph Connector with Copilot Studio (this would need to be deployed and available to be used in this way. The setting up of the graph connector is beyond the scope of this tutorial).

Test copilot 🎲 Overview	Knowledge Top	oics Actions	Analytics
+ Add knowledge	C Last	Search knowled refreshed 30 mi	ge nutes ago
Name	Туре	Last modified	Status
FileConnector1	S Graph con	r Jim Liddle	🕑 Rea

• After the knowledge is added, there is an option to answer questions using only the uploaded knowledge or to supplement responses with the model's general training knowledge. The general knowledge option can be disabled to rely exclusively on the uploaded information.



• Head back to settings and choose 'Generative AI' from the sidebar.

Settings	×
贷 Copilot details	Using generative AI in conversations
♣ Generative AI	How should your copilot interact with people?
🙃 Security	Classic – Use the topics you build to respond to trigger phrases—actions can only be called from inside a topic.
⊞ Authoring Canvas	 Generative (preview) - Use generative AI to respond with the best combination of actions, topics, and knowledge.
<u>ab</u> Entities	How strict should the content moderation be?
🖨 Skills	O Low - More creative O Medium - More balanced O High - More precise

For the "Using generative AI in conversations", leave this set to Classic. Generative (preview) uses generative AI to choose from topics created, and from actions added, to extend the copilot.

Consider the content moderation for the copilot, which governs how creative or strict the copilot is when generating answers. Medium is a balanced and good option to start with, and also allows for testing and adjustments as needed.

Step 3 - Topics and content

Q) Top Add co your cc	bics nversation topics to focus and guide the way opilot answers.	+ Add topic
Q	Goodbye	•••
Q	Greeting	•••
Q	Lesson 1 - A simple topic	•••
See all		

In Copilot Studio, a topic represents some portion of a conversational thread between a user and a copilot. Topics have trigger phases, which can be activated as part of the copilot interaction to lead a user down a particular flow or interaction.

For the purposes of this tutorial, the default phrases will be left as is, although this is something to investigate further depending on the specific use case.

Step 4 – Actions



Actions can be used to extend the capabilities of a copilot by adding one (or more) plugin actions

For this tutorial, no plugin actions will be defined, although this is something to <u>investigate further</u> depending on the use case

Step 5 – Entities

Test co	opilot ×	+ New entity $~~$			
	○ Tracking: off ~) ····	Entities (i)	,₽ Searc	h entities	î
Chat		Name	Description	Method	Errors
		Age	Age of a person, place, or thing, extra	Prebuilt	
		Boolean	Positive or negative responses, extract	Prebuilt	
		City	City names, extracted as a string	Prebuilt	
		Color	Primary colors and hues on the color s	Prebuilt	
		Continent	Continent names, extracted as a string	Prebuilt	
	Unline Verstant conflict a victual assistant lust	Country or region	Country and region names, extracted .	Prebuilt	
(F)	so you are aware, I sometimes use AI to	Date	Dates, days of the week, and months r	Prebuilt	
	website during creation, try asking me about it! Next try giving me some more knowledge	Date and time	Dates, times, days of the week, and $m_{\rm i}$	Prebuilt	
	by setting up generative AI.	Date and time without timezone	Dates, times, days of the week, and $m_{\rm i}$	Prebuilt	
	A minute ago	Duration	Lengths of time, extracted as a string,	Prebuilt	
Type you	ır message	Email	Email addresses, extracted as a string	Prebuilt	

Navigate to the settings on the screen where the copilot was created to access the entities section, typically located in the top right-hand corner. Think of entities as additional details the chatbot may need to assist an end user. While this is not specifically required for this tutorial, consider the following Nasuni customer example:

When contacting support, they may refer to an Edge Appliance in several ways:

- Edge Filer
- Edge
- Appliance
- Filer

Being able to help the chatbot recognize that the user is referring to the same entity when they mention an Edge Appliance is important because it allows the chatbot to provide more accurate and useful responses. By understanding these details, the chatbot can better interpret the context of the information it receives from the user in the prompt.

This step can be skipped for now and revisited once the chatbot is deployed and tuned to align it with specific use cases.

Step 6 – Testing

Test the copilot's responses in real-time to ensure it understands and provides accurate answers. Adjust the copilot's content moderation setting to find the best configuration for the dataset and retest as needed. Recheck and validate the documentation based on the answers provided. The copilot performs better with curated documentation that is neither versioned nor duplicative.



Step 7 – Publish your copilot

Navigate back to the copilot dashboard and select "Publish". This action makes it available for use with Channels.

	Test copilot 🎲 Overview Knowledge Topics Actions Analytics +1	Publish	口 Test	
	Your copilot is ready! Here's what's next:		×	
Publi	 Add actions so your copilot can do things for you Build topics to focus and guide how your copilot answers Sh this copilot 			
Choose to.	Publish to make the content available across all the channels this is connected Publish Cancel	ØE	dit	
	Description A copilot to answer questions about Nasuni NOC and File Manuals.			
	Instructions You are a support copilot that will answer questions about the attached support manuals / documentat	ion.		
		+ Add knowled	lge	

Step 8 - Deploy the copilot

Navigate to Channels to configure the authentication requirements for the copilot. For this deployment, Microsoft Teams will be used, as it automatically sets up Azure Active Directory (AAD) authentication for Teams and Power Apps.



Choose to "Edit details"

Edit the details that should be visible for the custom chatbot.

(It is possible to scroll down to configure other settings, such as the author.)

The channel was added.	×
Edit details	\times
Review and make updates to your copilot before sharing it with others. If the copilot has alread been approved by your admin, you'll need to resubmit it to see any changes you've made. <u>Lear more</u>	y n
Details for Teams	
Name Test copilot	
Icon Image: Change color Image: Change icon Icon should be in PNG format and less than 30 KB in size. Use a white transparent image that has no extra padding. Don't upload confidential icon in your copilot icon Learn more	
Short description *	
Up to 80 characters	
Long description * Help employees stay informed, productive, and connected. Create copilots and add important topics for your organization using an intuitive, graphical interface. No code required. Create	:
your own at https://aka.ms/microsoftcopilotstudio.	

After choosing "Save", choose "Availability options" to see the distribution options for Teams.

 Microsoft Teams 	\times	
Make your bot available to users in Microsoft Teams so they can find and use it. <u>Learn more</u>		
Share link		
Shared users can open the bot in Microsoft Teams with this link. <u>Manage sharing</u>		
ං Copy link		
Show in Teams app store		
Make your bot appear in the Teams app store.		
Show to my teammates and shared users		
Appear under the Built by your colleagues section.		
Show to everyone in my org		
Submit to your admin for approval to appear under Built by your org section.		
Download as .zip		
You can upload the bot directly as a custom app into Microsoft Teams. Learn more		
\downarrow Download .zip		

The easiest option is to share a link. When logged in, clicking the link will prompt a confirmation to install the copilot.

÷	Test copilot @ Your developer name Add	×
Overview Permissions Built using Microsoft Copilot Studio.		
		your organizatio https://aka.ms/n
App features		
-		
Bots Chat with the ap	op to ask questions and find info	
Bots Chat with the ap Copilot extension Use with Copilot	op to ask questions and find info on Preview : or add to a chat or meeting. Some plugins will be turned on autom	atically.

A custom copilot leveraging Nasuni data has now been successfully deployed. Congratulations!

Let's talk

Want to find out more about how Nasuni can provide your business with a fluid data infrastructure designed for the hybrid cloud world?

Nasuni's hybrid cloud platform unifies file and object data storage to deliver effortless scale and control at the network edge.

Learn more

Nasuni is a scalable data platform for enterprises facing an explosion of unstructured data in an AI world, eliminating the choice between expensive tinkering or an overwhelming transformation of your entire data infrastructure.

The Nasuni File Data Platform delivers effortless scale in hybrid cloud environments, enables control at the network edge, and meets the modern enterprise expectation for protected, insight- and Al-ready data. It simplifies file data management while increasing access and performance.

Consolidate data, cut costs, and empower users – all while transforming your data from obstacle into opportunity.

NASUNI