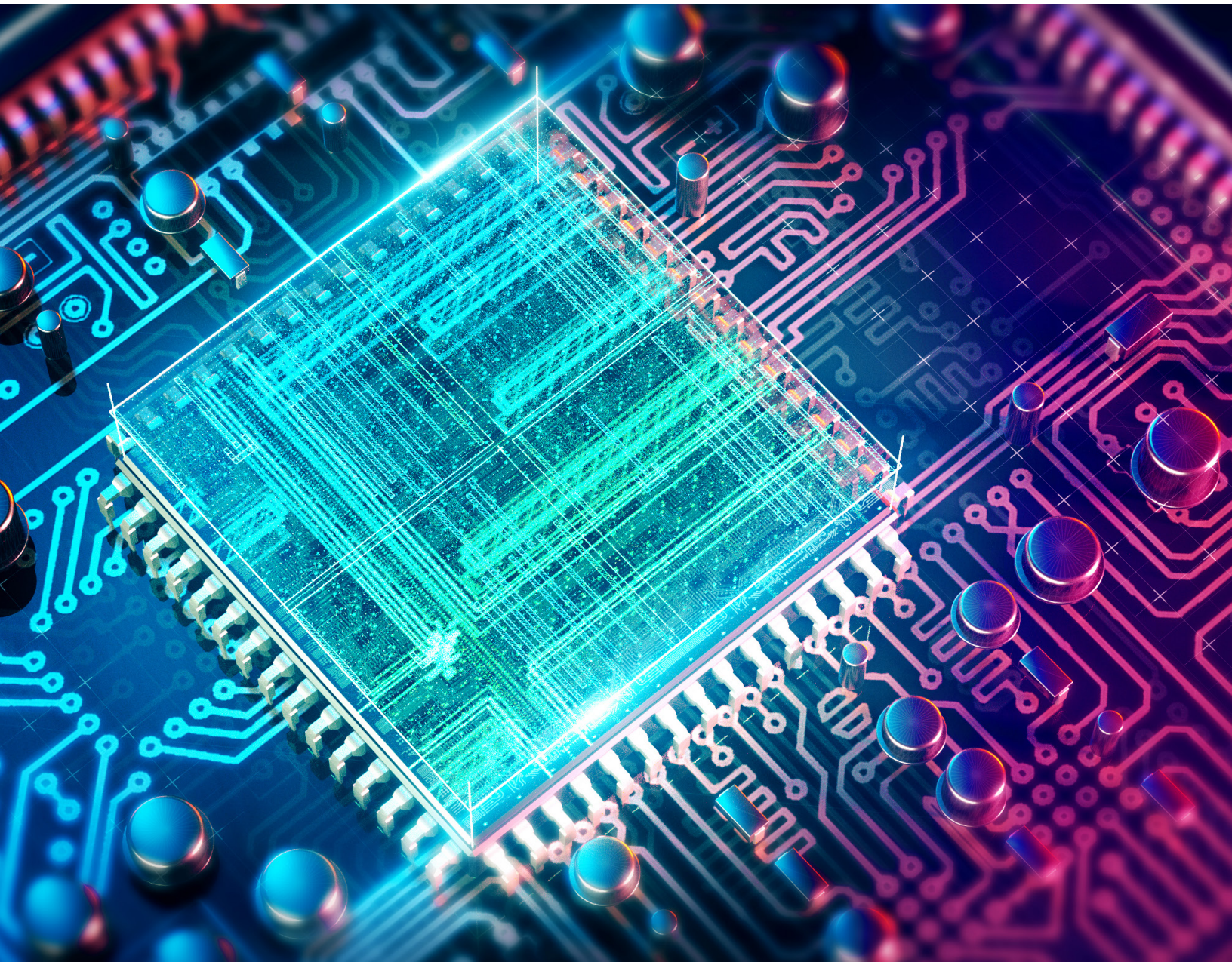
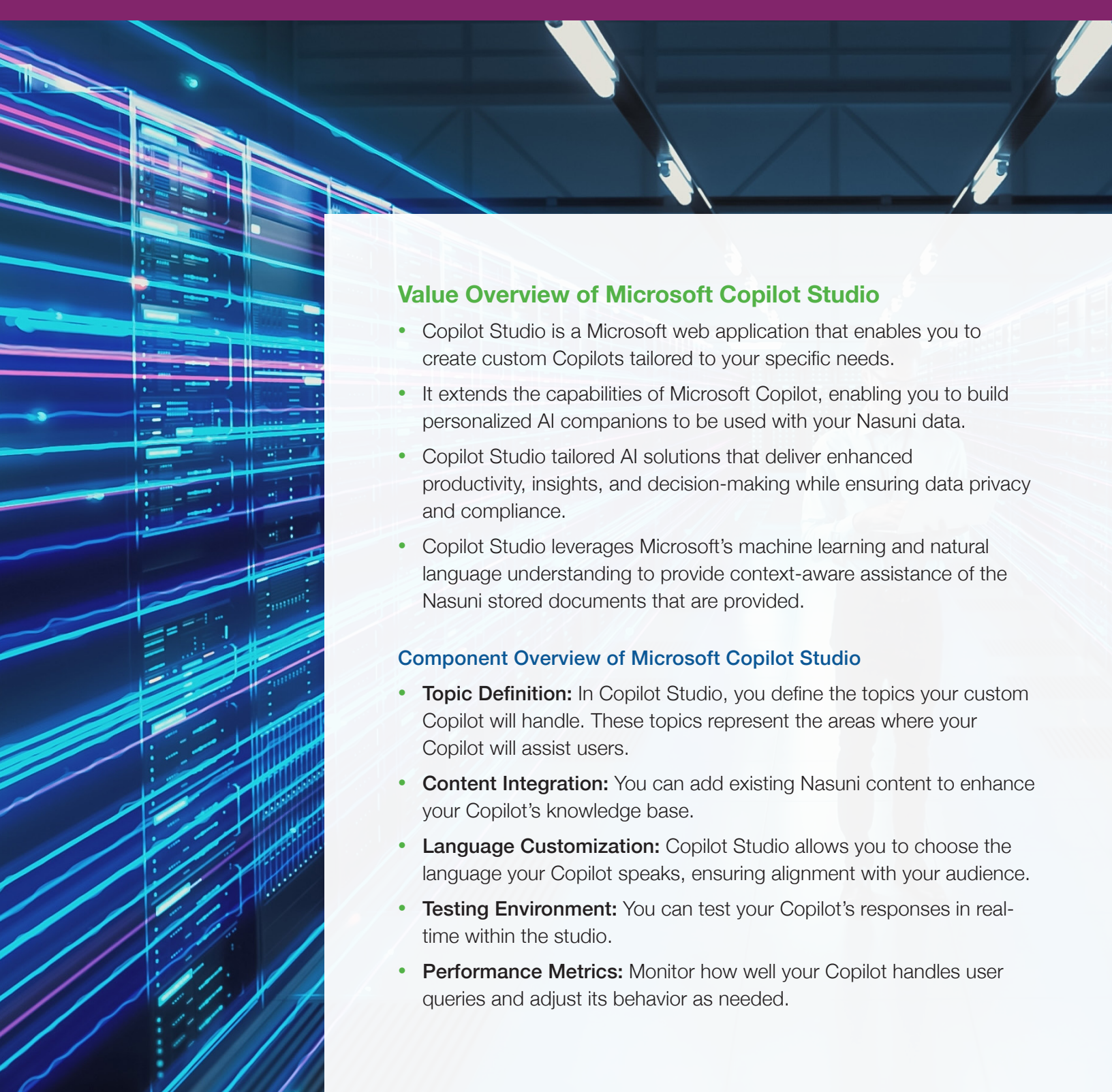


TECHNICAL WHITE PAPER

Creating a Custom Microsoft Copilot Using Copilot Studio to Work With Nasuni Data

2024





Value Overview of Microsoft Copilot Studio

- Copilot Studio is a Microsoft web application that enables you to create custom Copilots tailored to your specific needs.
- It extends the capabilities of Microsoft Copilot, enabling you to build personalized AI companions to be used with your Nasuni data.
- Copilot Studio tailored AI solutions that deliver enhanced productivity, insights, and decision-making 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, you define the topics your custom Copilot will handle. These topics represent the areas where your Copilot will assist users.
- **Content Integration:** You can add existing Nasuni content to enhance your Copilot's knowledge base.
- **Language Customization:** Copilot Studio allows you to choose the language your Copilot speaks, ensuring alignment with your audience.
- **Testing Environment:** You can test your Copilot's responses in real-time within the studio.
- **Performance Metrics:** Monitor how well your Copilot handles user queries and adjust its behavior as needed.

STEP 01

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

Let's walk through the steps to create a custom Copilot for your Nasuni data using Microsoft Copilot Studio.

Sign Up and Access Copilot Studio

- Go to the Microsoft Copilot Studio introduction website: <https://aka.ms/CopilotStudio>
- Click on "Try free" and sign in using your work email address.
- After signing up, a default Power Apps environment will be created for you.

STEP 02

Home Page and Copilot Creation

- Once signed up, you'll land on the Home page within Copilot Studio.
- Here, you'll find a list of all your Copilots.
- To create a new Copilot, click on "Create a Copilot."
- A wizard will guide you through the process:
 - Choose the Copilot language.
 - In the wizard, select the language you want your Copilot to speak.
 - This step determines the language model your Copilot will use.
 - Choose whether to add a website to be included as part of the Copilot knowledge for answering questions.
 - » This is not a required step for interacting with Nasuni stored documents.

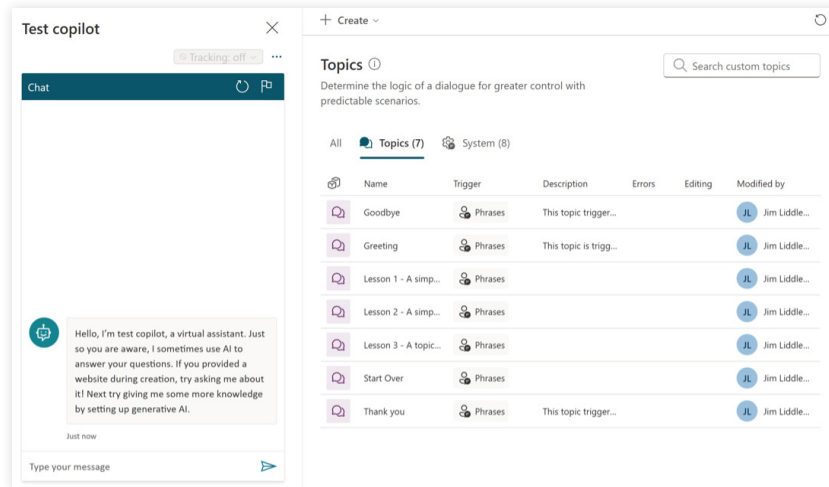
The screenshot shows the 'Create a copilot' wizard interface. On the left, under 'Set up the copilot', it says 'Start fresh with a new copilot, and start making it yours.' On the right, there are three main sections: 1. 'Copilot name' with a text input field containing 'Copilot 1'. 2. 'What language do you want your copilot to speak?' with a dropdown menu set to 'English (United States) (en-US)'. 3. 'Give your copilot some knowledge by setting up your Generative AI' with a sub-header 'Add knowledge to your copilot by pointing it to an external website so your copilot can instantly answer questions over your data. [Learn more](#)'. Below this is a text input field for 'Enter your website'. At the bottom right, there are three buttons: 'Edit advanced options >', 'Create', and 'Cancel'.

STEP 03

Topics and Content

In Copilot Studio, a topic represents some portion of a conversational thread between a user and a Copilot. Topics have trigger phrases 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, we will leave the default phrases and move on, although this is something you may wish to [investigate further](#) depending on your use case.

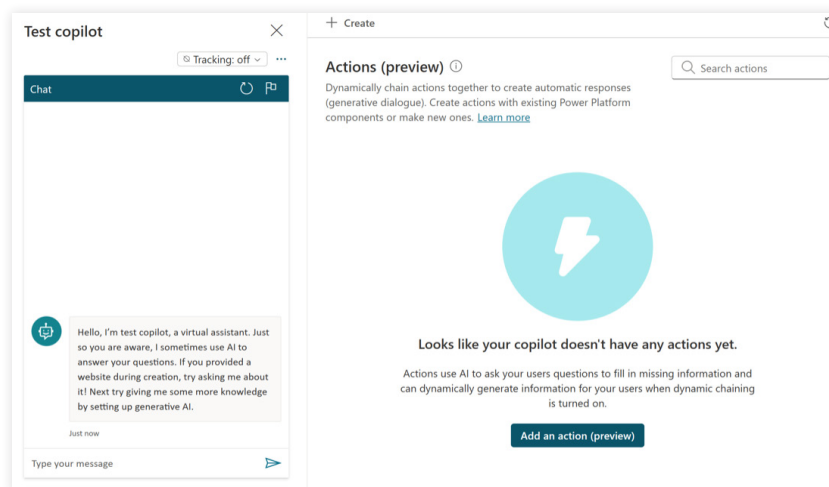


STEP 04

Actions

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

For this tutorial, we will not be defining any plugin actions, although this is something you may wish to [investigate further](#) depending on your use case.



STEP 05

Entities

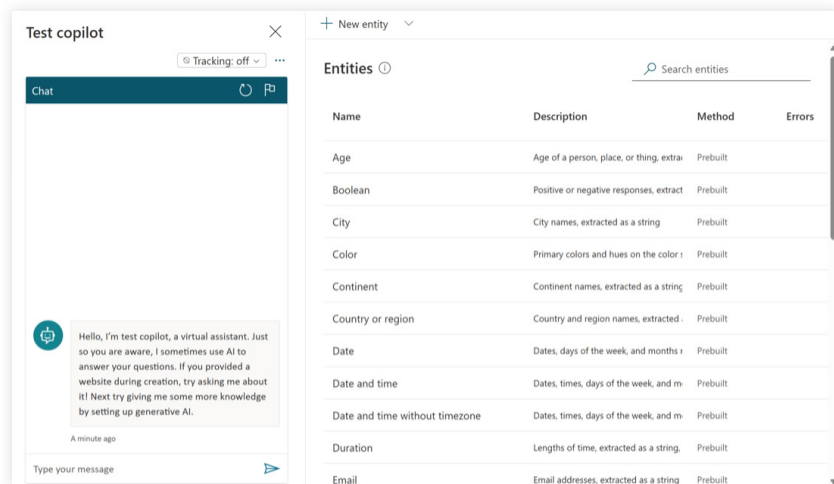
Think of [entities](#) as additional details the chatbot may need to help an end user. Although not specifically required for this tutorial, let's take an example:

Imagine a support chatbot for a tech company. Here are a few types of entities it may need:

- **Product Name:** This helps the chatbot know if the problem is with the “Widget 3000” or the “Red Widget 100”.
- **Issue Type:** Whether the person has a “broken screen” or a “software glitch” will change how the bot helps.
- **Customer Name:** Lets the chatbot address the user personally.

This matters because the chatbot may provide more useful answers if it knows these details. Entities help it.

For this tutorial, you can skip this step for now and go back to it once your chatbot is deployed and you seek to tune the chatbot to your use case.



STEP 06

Navigate to 'Generative AI' or Settings >Generative AI

This is where Nasuni documents can be made available to the Copilot to generate answers with generative AI. 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.

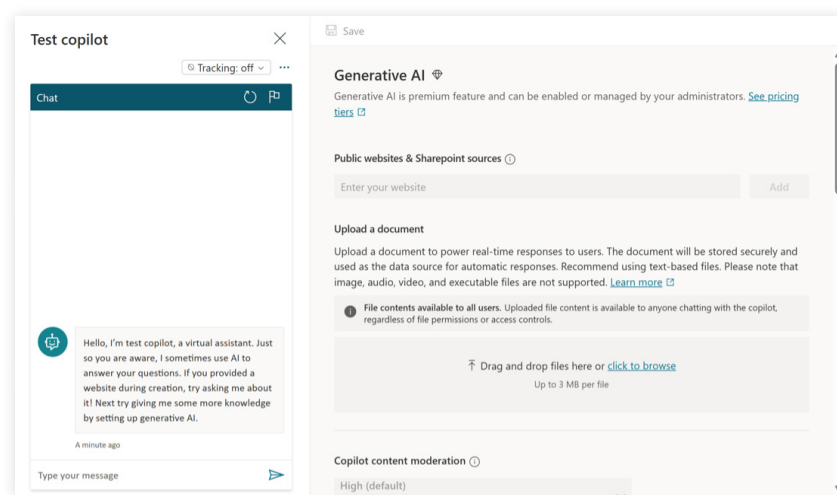
Documents that are made available to Copilot Studio are accessible to Microsoft Dataverse, in which some elements of the document are represented in a structured way to aid searching and filtering, and other

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 the 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.

The types of documents that Copilot Studio supports are:

- Word documents (doc, docx)
- Excel spreadsheets (xls,xlsx)
- PowerPoint documents (ppt, pptx)
- PDF documents (pdf)
- Text documents (txt, md, log)
- HTML files (html, htm)
- CSV files (csv)
- XML files (xml)
- OpenDocument files (odt, ods, odp)
- EPUB documents (epub)
- Rich Text Format documents (rtf)
- Apple iWork documents (pages, key, numbers)
- JSON files (json)
- YAML files (yml, yaml)
- LaTeX files (tex)





Note that currently, documents have a 3MB limit. If you have documents over this size, we recommend you copy the content into a text file, which will substantially reduce the size, and upload it.



Once the documents have been uploaded, the content extraction and indexing occurs. This can take some time depending on the size and amount of the content. You will be informed that the indexing is in progress.

Upload a document

Upload a document to power real-time responses to users. The document will be stored securely and used as the data source for automatic responses. Recommend using text-based files. Please note that image, audio, video, and executable files are not supported. [Learn more](#)

i File contents available to all users. Uploaded file content is available to anyone chatting with the copilot, regardless of file permissions or access controls.


↑ Drag and drop files here or [click to browse](#)
Up to 3 MB per file

Name	Size	Status
 Moby Dick - Herman Melville.pdf	2.28 MB	 Indexing in progress

After completion, you need to ensure that you turn on the switch to ‘Boost conversational coverage with generative answers’ located at the bottom of the page.


Use AI features in your copilot

Generating responses using AI doesn't guarantee accuracy or relevance.




Dynamic chaining with generative actions (preview)

Create conversations by letting AI find and connect the appropriate plugins in real time.



Intelligent authoring with Copilot

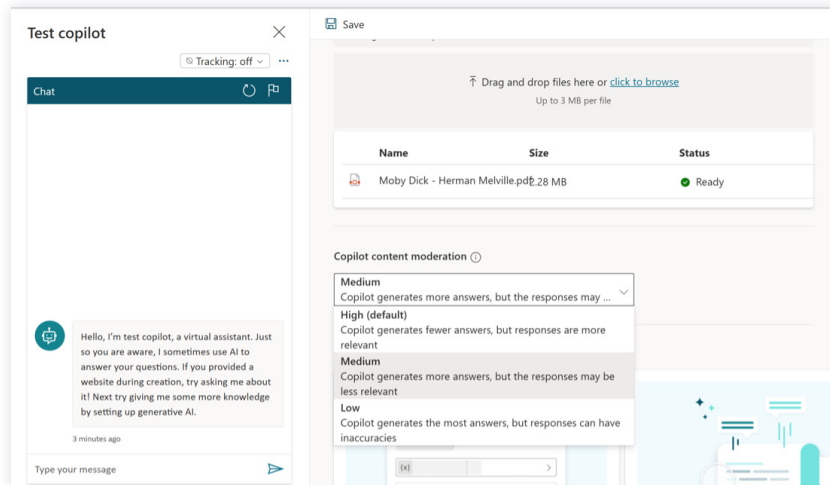
Describe copilot topics you need, and Copilot will develop it. Access this intelligent authoring tool in user settings, unavailable in classic copilots. [Go to user settings](#)



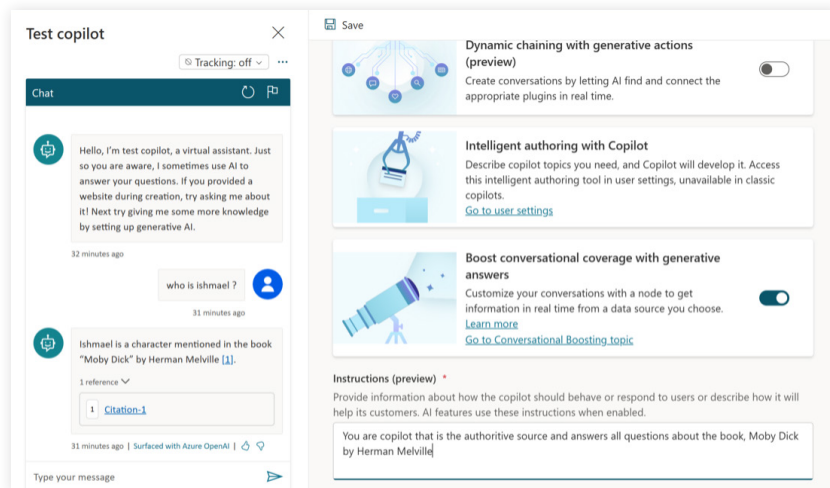
Boost conversational coverage with generative answers

Customize your conversations with a node to get information in real time from a data source you choose. [Learn more](#)

Once you have done this, navigate to the Copilot content moderation and move it from 'High' to 'Medium'. This tends to give the greatest breadth of answers when interacting with generative answers from documents, but after testing your Copilot you can change this to 'high' or 'low' as required and validate which works better for your dataset.



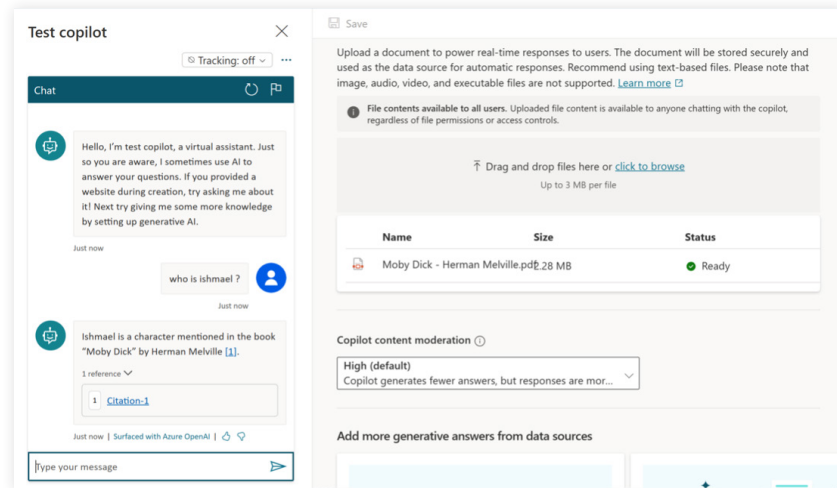
In the Generative AI section, we are going to provide some instructions for our Copilot. This enables you to provide the Copilot with context, instructions, or other information relevant to your use case.



STEP 07

Testing

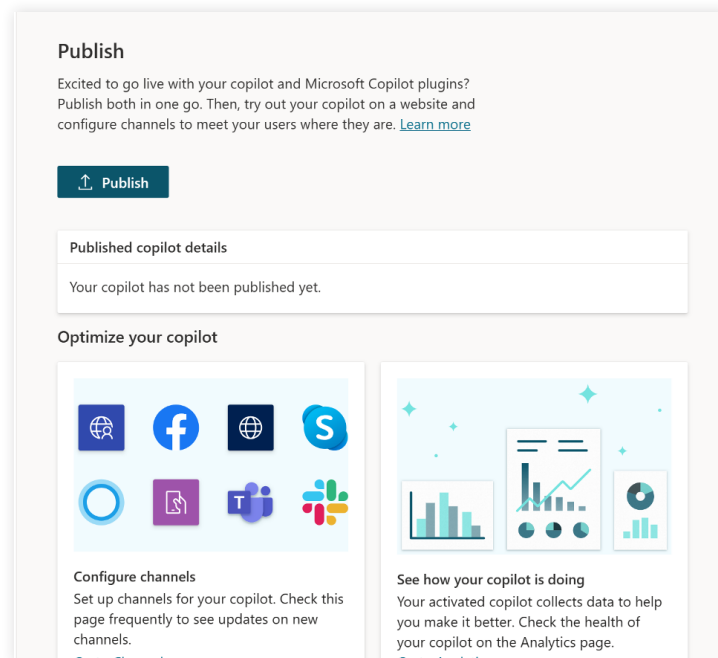
Test the Copilot's responses in real-time. Ensure that it understands and provides accurate answers. Remember to alter the Copilot content moderation setting to validate which works best for your dataset and retest as required.



STEP 08

Publish your Copilot

Navigate to 'Publish' and choose to publish your Copilot. This makes it available available for use with Channels.



STEP 09

Deploy the Copilot

You should navigate to Settings > Security > Authentication to configure the authentication requirements for your Copilot.

Authentication

Verify a user's identity during a conversation. The copilot receives secure access to the user's data and is able to take actions on their behalf, resulting in a more personalized experience. [Learn more](#)

Choose an option

No authentication
Basic copilot setup with no authentication action or authentication variables.

Only for Teams and Power Apps
User ID and User Display Name authentication variables available. Automatically sets up Azure Active Directory (AAD) authentication for Teams and Power Apps. All other channels will be disabled. [Learn more](#)

Manual (for custom website)
Support AAD or any OAuth2 identity provider. Authentication variables are available including authentication token.

Enter the information provided by your Identity Provider (IdP), and then test the connection. For single sign-on with AAD include the token exchange URL. [Learn more](#)

Require users to sign in











Save Close

Navigate to 'Channels' and choose 'Microsoft Teams'.

ⓘ Because you chose Teams Authentication, only Teams channel is available. To use other channels, change your authentication settings. [Go to authentication settings.](#)

Channels

Configure your copilot channels to meet your customers where they are. [Learn more about channels](#)

 Microsoft Copilot (preview) Publish plugins to a Microsoft Copilot for a unified experience.	 Microsoft Teams Chat with your copilot through a Teams app.
 <input checked="" type="checkbox"/> Demo website Try out your copilot and invite team members to do the same.	 <input checked="" type="checkbox"/> Custom website Activate your copilot on your own website.
 <input checked="" type="checkbox"/> Mobile app Add your copilot to a native or web-based mobile app.	 <input checked="" type="checkbox"/> Facebook Connect with your customers on Messenger.
 <input checked="" type="checkbox"/> Skype Expand your copilot's reach to customers on Skype.	 <input checked="" type="checkbox"/> Slack Expand your copilot's reach to customers on Slack.
 <input checked="" type="checkbox"/> Telegram	 <input checked="" type="checkbox"/> Twilio



Choose to turn on Teams.

Microsoft Teams

Nothing can stop a team, and now your copilot can help you achieve more together. To open the lines of communication, select **Turn on Teams**. After a quick installation, your users and copilot can start chatting. [Learn more](#)

Note that certain copilot content may not appear the same on Microsoft Teams as it was authored in Microsoft Copilot Studio. For details, refer to our article on [supported channel content](#).

Turn on Teams Cancel

Choose to 'Edit Details'.


✓ The channel was added.

Microsoft Teams

ⓘ You need to publish your bot before you can make it available to others. [Go to publish](#)

Excited to make your bot available for others to use in Microsoft Teams? Review how your bot will appear. Select **Edit details** to modify. Once you are ready, select **Availability options** to continue. [Learn more](#)

Bot preview

 **test copilot**
Built using Microsoft Copilot Studio.

[Edit details](#) [Open bot](#) [Settings \(coming soon\)](#)

[Disconnect from Teams](#)

Edit the details you want people to see for your custom chatbot. (Note that you can scroll down to configure other settings such as the author)



← Edit details

Review and make updates to your bot before sharing it with others. If the bot has already been approved by your admin, you'll need to resubmit it to see any changes you've made. [Learn more](#)

Details for Teams

Name
test copilot

Icon

 [Change color](#)
 [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 bot icon [Learn more](#)

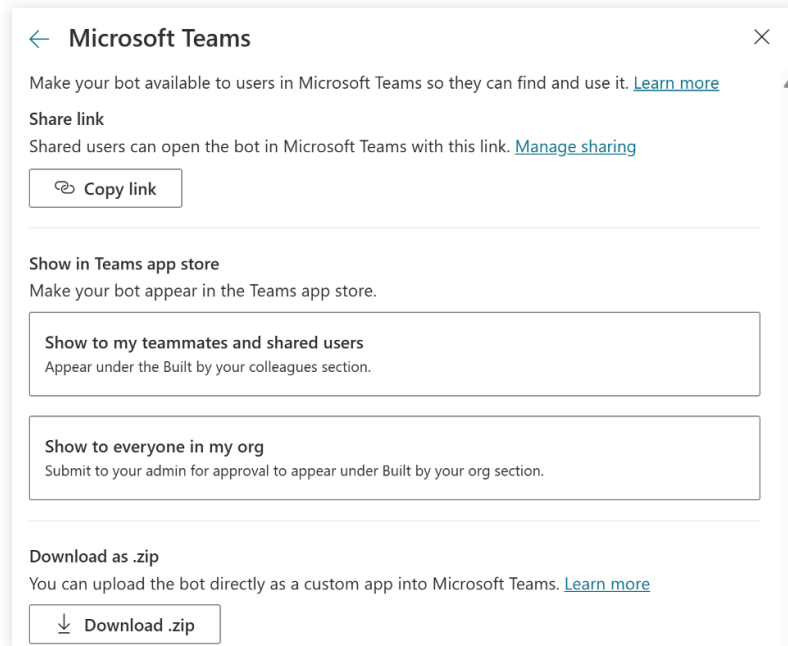
Short description *

Up to 80 characters

Long description *

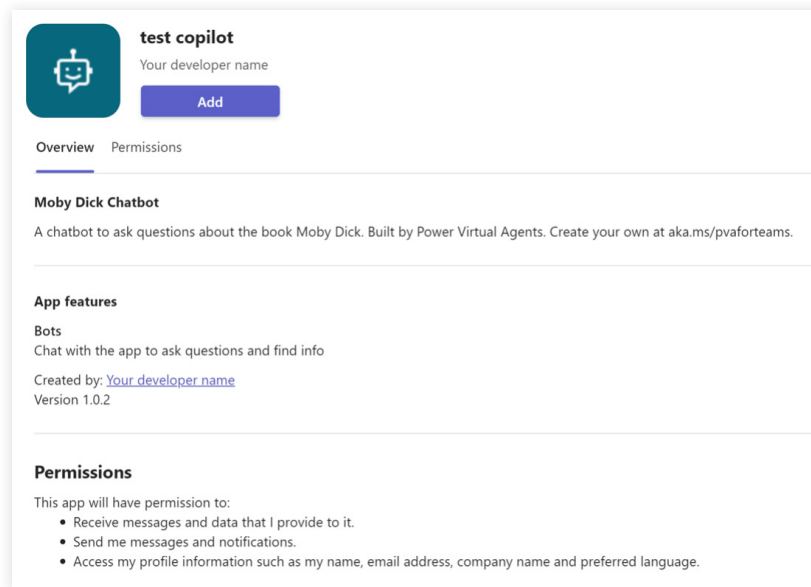
Save Cancel

After choosing 'save' choose 'Availability options' to see the distribution options for Teams.

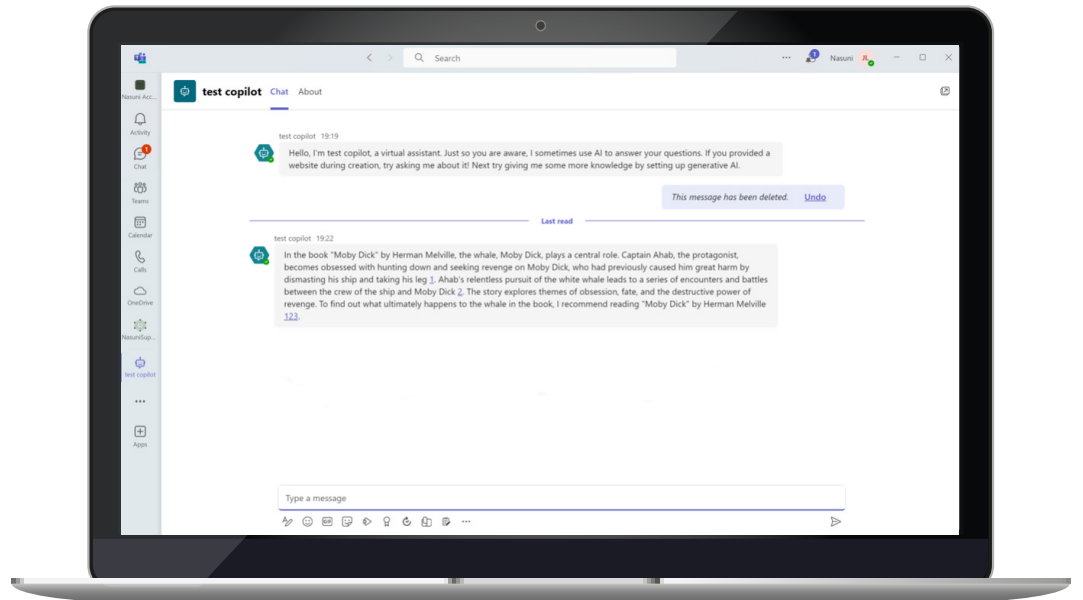


The screenshot shows a dialog box titled "Microsoft Teams" with a back arrow and a close button. The main text says "Make your bot available to users in Microsoft Teams so they can find and use it. [Learn more](#)". Below this is a "Share link" section with the text "Shared users can open the bot in Microsoft Teams with this link. [Manage sharing](#)" and a "Copy link" button. The next section is "Show in Teams app store" with the text "Make your bot appear in the Teams app store." It contains two options: "Show to my teammates and shared users" (with subtext "Appear under the Built by your colleagues section.") and "Show to everyone in my org" (with subtext "Submit to your admin for approval to appear under Built by your org section."). The final section is "Download as .zip" with the text "You can upload the bot directly as a custom app into Microsoft Teams. [Learn more](#)" and a "Download .zip" button.

The easiest option is to share a link. When logged in users click the link, they will be asked whether they wish to install the Copilot.



The screenshot shows the Microsoft Teams app page for "test copilot". At the top, there is a profile picture of a robot head, the name "test copilot", and "Your developer name" with an "Add" button. Below this are tabs for "Overview" (selected) and "Permissions". The "Overview" section is titled "Moby Dick Chatbot" and contains the text "A chatbot to ask questions about the book Moby Dick. Built by Power Virtual Agents. Create your own at aka.ms/pvaforteams." The "App features" section is titled "Bots" and contains the text "Chat with the app to ask questions and find info". It also lists "Created by: [Your developer name](#)" and "Version 1.0.2". The "Permissions" section is titled "Permissions" and contains the text "This app will have permission to:" followed by a bulleted list: "Receive messages and data that I provide to it.", "Send me messages and notifications.", and "Access my profile information such as my name, email address, company name and preferred language."



You have now deployed a custom Copilot that leverages Nasuni data, congratulations!



ABOUT NASUNI CORPORATION

Nasuni is the leading hybrid cloud storage solution that powers business growth with effortless scalability, built-in security, and fast edge performance using a unique cloud-native architecture. The Nasuni File Data Platform delivers operational excellence by consolidating NAS and backup, eliminating data silos, and making management easy and flexible without changes to apps or workflows. Its built-in security offers proactive defense and rapid recovery, lowering organization's risk from the detrimental effects of ransomware attacks and other disasters. Synchronized access to file data everywhere ensures user productivity by supporting remote and hybrid work. For more information, visit www.nasuni.com.