

Microsoft Copilot Studio documentation

Discover how to build AI-driven copilots easily with Microsoft Copilot Studio with online training courses, docs, and videos. Learn how to quickly and simply integrate chat into your web site.



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Administer and extend

Administer Microsoft Copilot Studio

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One-stop learning resource for Power Platform applications and features including admin, developer, and guidance...

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Power BI

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Design, host, and administer secure, modern, and low-code business websites.

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[Microsoft Azure](#)

The next generation of CRM
and ERP applications

Ever-expanding set of cloud
computing services to help
your organization meet its
business challenges

Microsoft Copilot Studio overview

Article • 12/09/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

Microsoft Copilot Studio lets you create powerful AI-powered copilots for a range of requests—from providing simple answers to common questions to resolving issues requiring complex conversations. Engage with customers and employees in multiple languages across websites, mobile apps, Facebook, Microsoft Teams, or any channel supported by the Azure Bot Framework.

These copilots can be created easily without the need for data scientists or developers. Some of the ways that Copilot Studio copilots are used include:

- COVID-19 infection rate and tracking information.
- Sales help and support issues.
- Opening hours and store information.
- Employee health and vacation benefits.
- Common employee questions for businesses.

Copilot Studio is available as both a standalone web app, and as a discrete app within Teams. Most of the functionality between the two is the same. However, there might be different reasons to choose one version or the other based on the ways you want to use Copilot Studio.

[+] Expand table

Copilot Studio version	Use cases	More information
Web app at https://web.powerva.microsoft.com	<ul style="list-style-type: none">- An IT admin who wants to create copilots for customers.- Familiar with chatbot services, you want to trial or test Copilot Studio.- A copilot user who wants to	Explore the Copilot Studio demo

Copilot Studio version	Use cases	More information
	explore advanced copilot concepts, such as entities and variables, and create complex copilots.	
Teams app	<p>An employee or member of an organization who wants to use copilots to answer common employee questions.</p> <ul style="list-style-type: none"> - You want to use advanced concepts, such as entities and variables, and have an internally-available copilot in Teams. - You want to create and distribute a copilot in the shortest time possible. 	Open or add the Microsoft Copilot Studio app in Teams

Important information

Important

Microsoft Copilot Studio (1) is not intended or made available as a medical device for the diagnosis of disease or other conditions, or in the cure, mitigation, treatment or prevention of disease, or otherwise to be used as a component of any clinical offering or product, and no license or right is granted to use Microsoft Copilot Studio for such purposes, (2) is not designed or intended to be a substitute for professional medical advice, diagnosis, treatment, or judgment and should not be used as a substitute for, or to replace, professional medical advice, diagnosis, treatment, or judgment, and (3) should not be used for emergencies and does not support emergency calls. Any chatbot you create using Microsoft Copilot Studio is your own product or service, separate and apart from Microsoft Copilot Studio. You are solely responsible for the design, development, and implementation of your chatbot (including incorporation of it into any product or service intended for medical or clinical use) and for explicitly providing end users with appropriate warnings and disclaimers pertaining to use of your chatbot. You are solely responsible for any personal injury or death that may occur as a result of your chatbot or your use of Microsoft Copilot Studio in connection with your chatbot, including (without limitation) any such injuries to end users.

Related topics

- Use GPT-based capabilities to expand your copilot's reach.
- Create your first copilot.
- Create and edit topics.
- Enhance your copilot.
- Publish your copilot.
- Using analytics to improve your copilot.

Microsoft Copilot Studio compliance offerings

Article • 11/15/2023

ⓘ Important

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Microsoft Copilot Studio is a Core Online Service, as defined in the [Online Services Terms \(OST\)](#), and is compliant with or covered by:

- Health Insurance Portability and Accountability Act (HIPAA) coverage
- Health Information Trust Alliance (HITRUST) Common Security Framework (CSF)
- Federal Risk and Authorization Management Program (FedRAMP)
- System and Organization Controls (SOC)
- Various International Organization for Standardization (ISO) certifications
- Payment Card Industry (PCI) Data Security Standard (DSS)
- The Cloud Security Alliance (CSA) Security Trust Assurance and Risk (STAR)
- United Kingdom Government Cloud (G-Cloud)
- Outsourced Service Provider's Audit Report (OSPAR)
- Korea-Information Security Management System (K-ISMS)
- Singapore Multi-Tier Cloud Security (MTCS) Level 3
- Spain Esquema Nacional de Seguridad (ENS) High-Level Security Measures

Health Insurance Portability and Accountability Act (HIPAA) coverage

[HIPAA](#) is a United States healthcare law that establishes requirements for the use, disclosure, and safeguarding of individually identifiable health information. It applies to covered entities—doctors' offices, hospitals, health insurers, and other healthcare companies—that have access to patients' protected health information (PHI), in addition to business associates—such as cloud service and IT providers—that process PHI on their behalf.

Microsoft Copilot Studio is covered under the Health Insurance Portability and Accountability Act (HIPAA) Business Associate Agreement (BAA).

You can create chatbots that handle protected health information when your organization is bound by HIPAA, as in the following scenarios where the chatbot can:

- Ask individuals to provide their health information (blood pressure, weight, and so on).
- Capture health information and personally identifying information, such as the customer's IP address or email address.

 **Note**

Although Microsoft Copilot Studio is covered under HIPAA, it still isn't intended for use as a medical device. See the disclaimer on [the intended use of Microsoft Copilot Studio and medical devices](#).

[Learn more about HIPAA](#).

Health Information Trust Alliance (HITRUST)

HITRUST is an organization governed by representatives from the healthcare industry.

HITRUST created and maintains the Common Security Framework (CSF), a certifiable framework to help healthcare organizations and their providers demonstrate their security and compliance consistently.

The CSF builds on HIPAA and the HITECH Act, which are US healthcare laws that have established requirements for the use, disclosure, and safeguarding of individually identifiable health information and enforce non-compliance.

HITRUST provides a benchmark—a standardized compliance framework, assessment, and certification process—against which cloud service providers and covered health entities can measure compliance.

[Learn more about HITRUST](#).

Federal Risk and Authorization Management Program (FedRAMP)

FedRAMP was established to provide a standardized approach for assessing, monitoring, and authorizing cloud computing products and services under the Federal Information Security Management Act (FISMA) and to accelerate the adoption of secure cloud solutions by federal agencies.

Microsoft's government cloud services meet the requirements of FedRAMP.

By deploying protected services including Azure Government, Office 365 US Government, and Dynamics 365 Government, federal and defense agencies can use a rich array of compliant services.

[Learn more about FedRAMP.](#)

SOC compliance

SOC is a method for assuring control regulation within a service. Microsoft Copilot Studio has been audited to be compliant with SOC.

SOC audit reports are available from the [Microsoft Service Trust Portal](#).

[Learn more about SOC.](#)

ISO compliance

Microsoft Copilot Studio is compliant with the ISO standards listed in the following table. Audit reports for each are available from the [Microsoft Service Trust Portal](#).

Standard	Name of report and certificate	Link to standard (www.iso.org)
ISO 9001:2015	Microsoft Azure, Dynamics 365, and Other Online Service - ISO9001 Certificate and Assessment Report	ISO 9001:2015
ISO 20000-1:2011	Microsoft Azure, Dynamics 365, and Other Online Service - ISO20000-1 Certificate and Assessment Report	ISO/IEC 20000-1:2011
ISO 22301:2012	Microsoft Azure, Dynamics 365, and Other Online Service - ISO20000-1 Certificatie and Assessment Report	ISO/IEC 22301:2012
ISO 27001:2013	Microsoft Azure, Dynamics 365, and Other Online Service - ISO27001 and 27701 Certificate and Microsoft Azure, Dynamics 365, and Other Online Service - ISO27001, 27018, 27017, 27701 Assessment Report	ISO/IEC 27001:2013
ISO 27017:2015	Microsoft Azure, Dynamics 365, and Other Online Service - ISO27017 Certificate and Microsoft Azure, Dynamics	ISO/IEC 27017:2015

Standard	Name of report and certificate	Link to standard (www.iso.org)
	365, and Other Online Service - ISO27001, 27018, 27017, 27701 Assessment Report ↗	
ISO 27018:2019	Microsoft Azure, Dynamics 365, and Other Online Service - ISO27018 Certificate ↗ and Microsoft Azure, Dynamics 365, and Other Online Service - ISO27001, 27018, 27017, 27701 Assessment Report ↗	ISO/IEC 27018:2019 ↗
ISO 27701:2019	Microsoft Azure, Dynamics 365, and Other Online Service - ISO27701 Certificate ↗ and Microsoft Azure, Dynamics 365, and Other Online Service - ISO27001, 27018, 27017, 27701 Assessment Report ↗	ISO/IEC 27701:2019 ↗

Payment Card Industry (PCI) Data Security Standard (DSS)

The Payment Card Industry (PCI) Data Security Standards (DSS) form a global information security standard designed to prevent fraud through increased control of credit card data.

Organizations of all sizes must follow PCI DSS standards if they accept payment cards from the five major credit card brands:

- Visa
- MasterCard
- American Express
- Discover
- Japan Credit Bureau (JCB).

Compliance with PCI DSS is required for any organization that stores, processes, or transmits payment and card-holder data.

[Learn more about PCI DSS.](#)

The Cloud Security Alliance (CSA) Security Trust Assurance and Risk (STAR)

From the [CSA STAR website](#) ↗ :

- The Security Trust Assurance and Risk (STAR) Program encompasses key principles of transparency, rigorous auditing, and harmonization of standards. Companies

who use STAR indicate best practices and validate the security posture of their cloud offerings.

The STAR registry documents the security and privacy controls provided by popular cloud computing offerings. This publicly accessible registry allows cloud customers to assess their security providers in order to make the best procurement decisions.

Microsoft Copilot Studio has been audited to be compliant with CSA STAR.

[Learn more about CSA STAR.](#)

United Kingdom Government Cloud (G-Cloud)

Government Cloud (G-Cloud) is a UK government initiative to ease procurement of cloud services by government departments and promote government-wide adoption of cloud computing.

G-Cloud comprises a series of framework agreements with cloud services suppliers (such as Microsoft), and a listing of their services in an online store, the Digital Marketplace. These enable public-sector organizations to compare and procure those services without having to do their own full review process.

Inclusion in the Digital Marketplace requires a self-attestation of compliance, followed by a verification performed by the Government Digital Service (GDS) branch at its discretion.

[Learn more about G-Cloud.](#)

Outsourced Service Provider's Audit Report (OSPAR)

The OSPAR framework was established by the Association of Banks in Singapore (ABS), which formulated IT security guidelines for outsourced service providers (OSPs) that seek to provide services to Singapore's financial institutions. The ABS Guidelines are intended to assist financial institutions in understanding approaches to due diligence, vendor management, and key technical and organizational controls that should be implemented in cloud outsourcing arrangements, particularly for material workloads.

Microsoft Copilot Studio has OSPAR attestation.

[Learn more about the ABS OSPR.](#)

Korea-Information Security Management System (K-ISMS)

K-ISMS  is a country/region-specific ISMS framework that defines a stringent set of control requirements designed to help ensure that organizations in Korea consistently and securely protect their information assets.

[Learn more about ISMS \(Korea\).](#)

Singapore Multi-Tier Cloud Security (MTCS) Level 3

The MTCS Standard for Singapore was prepared under the direction of the Information Technology Standards Committee (ITSC) of the Infocomm Development Authority of Singapore (IDA).

The ITSC promotes and facilitates national programs to standardize IT and communications, and Singapore's participation in international standardization activities.

[Learn more about MTCS.](#)

Spain Esquema Nacional de Seguridad (ENS) High-Level Security Measures

In 2007, the Spanish government enacted Law 11/2007, which established a legal framework to give citizens electronic access to government and public services. This law is the basis for Esquema Nacional de Seguridad (National Security Framework), which is governed by Royal Decree (RD) 3/2010.

The goal of the framework is to build trust in the provision of electronic services, and ensure the access, integrity, availability, authenticity, confidentiality, traceability, and preservation of data, information, and services.

[Learn more about ENS.](#)

Copilot Studio security and governance

Article • 11/15/2023

Important

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Microsoft Copilot Studio follows the Security Development Lifecycle (SDL). The SDL is a set of strict practices that support security assurance and compliance requirements.

Learn more at [Microsoft Security Development Lifecycle Practices](#).

The Copilot Studio service is governed by your commercial license agreements, including the [Microsoft Product Terms](#) and the [Data Protection Addendum](#). For the location of data processing, refer to the [geographical availability documentation](#).

The [Microsoft Trust Center](#) is the primary resource for Power Platform compliance information. Learn more at [Copilot Studio Compliance Offerings](#).

Furthermore, Power Platform has an extensive set of [Data Loss Prevention features](#) to help you manage the security of your data. Learn how to [Configure Data Loss Prevention policies](#) for bots in your organization.

To further govern and secure Copilot Studio using generative AI features in your organization, you can do the following,

1. Disable bot publishing:

- Your admin can disable the ability to publish bots with generative answers and actions for your tenant in the [Power Platform admin center](#).

The screenshot shows the Power Platform admin center interface. On the left, there's a navigation sidebar with options like Home, Environments, Analytics, Billing (Preview), Settings, Resources, Help + support, Data integration, Data (preview), Policies, and Admin centers. The main area is titled 'Tenant settings' and contains a table with columns 'Name' and 'Description'. One row in the table is 'Copilot (preview)', which is described as 'Allow canvas editors and admins to get AI-powered answers to how-to questions. Currently in preview.' Another row is 'Environment routing (preview)', described as 'Guide makers to specific environments based on defined rules.' At the bottom of the table, there's a row for 'Publish bots with AI features', which is described as 'Allow Power Virtual Agents to publish bots with AI features enabled.' To the right of this table, there's a panel titled 'Publish bots with AI features' with a sub-section 'Publish bot authors to publish Power Virtual Agents bots when AI features are enabled, like conversational boosting with generative answers.' It includes a note about agreeing to supplemental terms and a toggle switch labeled 'Enabled'.

- Your admin can disable Copilot for your organization by creating a support request.
2. Disable data movement across geographic locations for Copilot Studio generative AI features outside the United States).
3. Enable Copilot Studio conversational plugins.

Finally, Copilot Studio supports [securely accessing customer data using Customer Lockbox](#)

Quotas, limits, app registration, certificates, and configuration values for Microsoft Copilot Studio

Article • 11/15/2023

ⓘ Important

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This topic contains quotas, limits, app registration usage, certificate rotation, and configuration values for Microsoft Copilot Studio.

Quotas

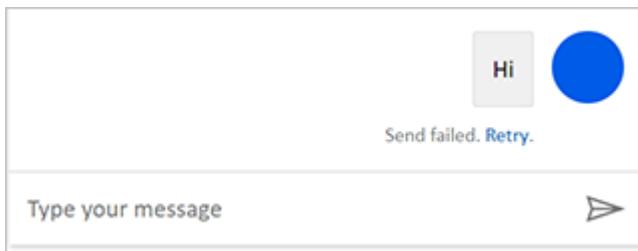
Quotas are default constraints applied to chatbots that limit how often messages can be sent to the chatbot. The purpose of quotas is to throttle the client's service load, which protects a service from being overloaded and the client from unexpected resource usage.

Quotas are applied to your chatbots alongside the capacity constraints you gained by purchasing a [Microsoft Copilot Studio plan](#). Also see [Licensing and capacity considerations](#).

The following quotas, defined as requests per minute (RPM), apply to Microsoft Copilot Studio chatbots' Dataverse environment.

Action	Quota with the paid plan
Messages to a chatbot (Includes any message from a user or integrations, such as Azure Bot Framework skills, to a single chatbot.)	800 RPM per Dataverse environment

If the quota for **messages to a chatbot** is met, the user chatting with the chatbot will see a failure notice when they try to send a message. They'll be prompted to retry.



Limits

These limits apply to the Microsoft Copilot Studio web app and the Microsoft Copilot Studio app in Microsoft Teams.

Maximum channel data message size limits when using Microsoft Copilot Studio in Omnichannel

Microsoft Copilot Studio in Omnichannel uses the ACS channel, and has the same [channel data message size limit of 28kb](#) applies.

This can impact scenarios such as [transferring to Omnichannel](#), where all the variables (both those local to the topic and bot variables available in the conversation) are passed as context to the agent. If the size of all the variables passed exceeds the limit, the ACS channel will fail with error `MessageSizeExceeded`, and the transfer will be completed without the variables being passed. If you encounter scenarios in which the context is not being passed, check for a large number of variables, and clear them before making the transfer to avoid going over the limit.

Microsoft Copilot Studio web and Teams apps limits

Feature	Web app	Teams app
Bots	N/A	50 per team
Topics	1000 per bot in Dataverse environments	250 per bot in Dataverse for Teams environments ¹ 1000 per bot in Dataverse environments (after upgrade)
Trigger phrases	200 per topic	200 per topic
Skills	100 per bot	100 per bot ²

¹ If you're approaching limits in Dataverse for Teams environments, you can [upgrade Dataverse for Teams](#) to continue adding topics.

² You must have a [Microsoft Copilot Studio standalone subscription](#) to use skills in a bot you've created in the Teams app. Skills are not available in the [Teams plan](#).

Microsoft Copilot Studio subscription limits

Feature	Standard subscription	Teams (select Microsoft 365 subscriptions)
Sessions	N/A	Chat sessions are unlimited per tenant every month, but a service limit of 10 sessions per user every 24 hours across all bots in a tenant will be enforced. ¹
Power Platform requests ²	250,000 every 24 hours ³	6,000 every 24 hours

¹ Microsoft Copilot Studio [sessions](#) that are included with [Microsoft 365 subscriptions](#) aren't pooled.

² These requests are consumed by Power Automate flows that are triggering by Microsoft Copilot Studio chatbots. Learn more about [Power Automate limits](#).

³ You can contact your admin to increase the Microsoft Copilot Studio Power Platform requests limits by purchasing the Microsoft Copilot Studio Chat Session add-on. For more information, see the [Microsoft Power Platform Licensing Guide](#).

Required services

The following table lists the services to which Microsoft Copilot Studio connects. Ensure none of these services are blocked on your network.

Configure all [required services for Power Automate](#), in addition to Microsoft Copilot Studio, to use both together.

Domains	Required	Protocols	Uses
*.directline.botframework.com	Yes	HTTPS	Access to Bot Framework Web Chat
*.directline.botframework.com	Yes	WS	Web socket connection to support Chat
pipe.aria.microsoft.com	No	HTTPS	Telemetry data gathered by Microsoft (strongly recommended to ensure Microsoft team can adequately respond to client-side bot editing issues)

Domains	Required	Protocols	Uses
*.powerva.microsoft.com	Yes	HTTPS	Microsoft Copilot Studio authoring experience and APIs
*.analysis.windows.net	Yes	HTTPS	Analytics reports shown in Microsoft Copilot Studio (through Power BI)
bot-framework.azureedge.net	Yes	HTTPS	Bot framework resources
pa-guided.azureedge.net	No	HTTPS	In-product guidance (recommended)
cci-prod-botdesigner.azureedge.net	Yes	HTTPS	Microsoft Copilot Studio authoring experience

How Microsoft Copilot Studio automatically creates app registration

What is app registration?

App registration is a process that assigns a unique identifier and a secret key to a chatbot, allowing it to communicate with different channels and services. App registration is a mandatory component of Microsoft Copilot Studio chatbots, as it enables the bot to identify itself to Omnichannel for Customer Service, in Microsoft Teams, and to authenticate with other channels. App registration also allows the bot to connect with skills.

How does Microsoft Copilot Studio manage app registration?

Microsoft Copilot Studio simplifies the app registration process by automatically creating and managing the app registration for each chatbot. There is no action required from the customer to set up or configure the app registration. Microsoft Copilot Studio handles the app registration behind the scenes, ensuring that the bot has the necessary credentials and permissions to interact with Omnichannel, selected channels, and skills. The customer can focus on designing and publishing the bot, without worrying about the technical details of app registration.

Is app registration secure?

App registration does not pose a security issue to customers or their data. The app registration is only used to identify the bot and to enable secure communication with the channels and skills. The app registration does not grant access to any customer data or resources, nor does it expose any sensitive information about the bot. The app registration is stored and managed by Microsoft Copilot Studio, which follows the highest standards of security and compliance.

How Microsoft Copilot Studio automatically creates and rotates certificates

Overview

To let chatbots communicate with your data sources and services, Microsoft Copilot Studio creates an application in your Azure Active Directory (AAD) tenant, along with an associated service principal. A service principal is an identity that represents an application and allows it to access resources in your tenant. Microsoft Copilot Studio controls the credentials to the service principal, which is an encrypted certificate.

Certificate rotation

For security and compliance reasons, Microsoft Copilot Studio rotates the certificates on a regular cadence. This means that the service principal gets a new certificate and the old one is revoked. This process is automatic and does not require any action from you. Certificate rotation does not affect the functionality of your chatbots or the security of your data. It is a standard practice that ensures that the certificates are always valid and up to date.

Applicability

Certificate rotation applies to both Microsoft Copilot Studio classic and production (unified authoring canvas) versions. Both versions create and rotate certificates in the same manner, and don't require any action from you.

IP addresses

Requests from Microsoft Copilot Studio to Microsoft Bot Framework skills use the following IP addresses in their respective regions. If you are using an Azure service, we recommend you use the **PowerPlatformInfra** and **PowerPlatformPlex** service tags,

which will automatically implement the proper IP addresses. You can also manually enter IP addresses in your traffic configuration rules.

Configure all [connectors for IP addresses](#) for Power Automate in addition to Microsoft Copilot Studio to use both together.

For general information on using service tags, refer to [Virtual network service tags](#).

Region	Outbound IP
United States	52.150.154.48-52.150.154.63, 52.150.154.128-52.150.154.191, 52.250.230.0-52.250.230.31, 52.241.140.217, 52.241.138.151, 52.180.102.55, 20.49.123.192-20.49.123.255, 20.49.123.176-20.49.123.191, 13.87.160.143, 13.86.254.118, 13.83.97.188, 13.83.68.60, 20.49.123.64-20.49.123.127, 20.49.123.160-20.49.123.175, 20.49.123.128-20.49.123.159, 13.87.164.30, 13.87.164.20, 13.87.161.18, 13.86.252.116, 13.83.249.34, 13.83.17.188, 13.83.145.222, 13.64.39.170, 13.64.27.44, 52.234.104.49, 20.49.123.0-20.49.123.63, 20.49.122.224-20.49.122.255, 20.49.122.208-20.49.122.223, 13.86.250.62, 13.86.194.190, 13.86.137.20, 13.83.64.166, 13.83.56.37, 13.64.38.167, 13.64.35.24, 20.49.122.96-20.49.122.127, 20.49.122.192-20.49.122.207, 20.49.122.128-20.49.122.191, 13.91.138.172, 13.87.164.205, 13.87.163.230, 13.87.162.91, 13.87.160.212, 13.86.193.65, 13.86.185.5, 13.86.139.229, 13.86.136.222, 52.250.229.240-52.250.229.255, 20.49.122.64-20.49.122.95, 20.49.122.0-20.49.122.63, 13.88.133.160, 13.88.132.123, 13.88.129.160, 13.87.167.63, 13.87.161.235, 13.87.160.104, 13.86.254.191, 13.83.147.192, 13.83.102.38, 52.250.229.224-52.250.229.239, 52.250.229.192-52.250.229.223, 52.250.229.128-52.250.229.191, 13.88.135.72, 13.88.135.67, 13.88.135.42, 13.87.216.21, 13.87.154.100, 13.86.249.98, 13.86.192.20, 13.86.185.6, 52.250.229.64-52.250.229.127, 52.250.229.32-52.250.229.63, 52.250.229.16-52.250.229.31, 52.180.96.196, 13.88.65.204, 13.88.65.140, 13.87.218.70, 13.87.167.172, 13.87.164.186, 13.86.250.244, 13.86.185.91, 13.86.177.32, 20.49.126.64-20.49.126.127, 20.49.125.184-20.49.125.187, 20.49.125.176-20.49.125.183, 20.189.142.58, 52.250.229.0-52.250.229.15, 52.250.228.192-52.250.228.255, 52.250.228.160-52.250.228.191, 40.65.49.151, 40.65.49.140, 40.65.49.103, 13.87.216.130, 13.87.154.164, 13.87.153.50, 13.86.185.81, 13.83.70.105, 52.250.231.224-52.250.231.255, 20.49.124.64-20.49.124.79, 20.49.124.0-20.49.124.63, 52.250.231.192-52.250.231.223, 52.250.231.128-52.250.231.191, 52.250.231.112-52.250.231.127, 52.250.231.96-52.250.231.111, 52.250.231.64-52.250.231.95, 52.250.231.0-52.250.231.63, 20.49.126.0-20.49.126.63, 20.49.125.136-20.49.125.143, 20.49.125.132-20.49.125.135, 13.87.167.198, 20.49.125.192-20.49.125.255, 20.49.125.160-20.49.125.175, 20.49.125.144-20.49.125.159, 13.91.136.144, 52.250.228.40-52.250.228.47, 20.49.125.64-20.49.125.127, 20.49.125.128-20.49.125.131, 13.83.66.89, 20.49.125.0-20.49.125.63, 20.49.124.96-20.49.124.111, 20.49.124.112-20.49.124.127, 13.83.23.194, 52.250.228.36-52.250.228.39, 20.49.124.80-20.49.124.95, 20.49.124.128-20.49.124.255, 13.87.217.80, 13.86.185.35, 13.83.97.180, 13.83.151.212, 52.250.230.192-52.250.230.255, 52.250.230.160-52.250.230.191, 52.250.230.144-52.250.230.159, 20.49.127.248-20.49.127.255, 13.83.249.58, 13.83.248.248, 52.250.230.64-52.250.230.127, 52.250.230.32-52.250.230.63, 52.250.230.128-52.250.230.143, 52.246.120.190, 13.88.129.116, 13.88.128.218, 13.87.157.188, 52.250.228.48-52.250.228.63, 52.250.228.128-

Region	Outbound IP
	52.250.228.159, 20.49.121.192-20.49.121.255, 20.184.251.143, 13.87.218.169, 13.87.217.75, 13.87.217.11, 13.87.167.46, 13.87.167.174, 13.87.161.241, 13.87.154.24, 13.83.66.124, 40.64.134.192-40.64.134.255, 40.64.134.144-40.64.134.159, 52.226.41.235, 52.226.41.202, 52.226.143.0, 52.188.177.124, 52.149.238.57, 52.146.75.0-52.146.75.31, 52.146.74.192-52.146.74.255, 52.146.74.176-52.146.74.191, 20.185.8.74, 104.45.174.26, 52.224.203.192, 52.224.195.119, 52.191.232.133, 52.188.222.168, 52.146.74.64-52.146.74.127, 52.146.74.160-52.146.74.175, 52.146.74.128-52.146.74.159, 52.146.26.244, 52.146.26.218, 52.146.26.125, 40.88.16.44, 20.185.73.73, 52.255.213.211, 52.224.201.114, 52.224.17.48, 52.191.237.186, 52.190.24.61, 52.188.79.60, 52.188.77.154, 52.150.35.132, 52.146.74.0-52.146.74.63, 52.146.73.224-52.146.73.255, 52.146.73.208-52.146.73.223, 52.249.201.87, 52.224.201.121, 52.191.238.79, 52.191.238.157, 52.188.181.97, 52.151.243.194, 52.151.231.104, 52.147.222.228, 52.146.73.96-52.146.73.127, 52.146.73.192-52.146.73.207, 52.146.73.128-52.146.73.191, 52.146.50.100, 52.226.148.225, 52.224.200.26, 52.224.184.205, 52.224.17.98, 52.191.239.246, 52.191.239.208, 52.146.73.64-52.146.73.95, 52.146.73.0-52.146.73.63, 52.146.72.240-52.146.72.255, 40.71.234.201, 20.185.215.62, 104.45.175.45, 52.255.221.231, 52.190.30.145, 52.190.30.136, 52.190.27.148, 52.146.72.224-52.146.72.239, 52.146.72.192-52.146.72.223, 52.146.72.128-52.146.72.191, 40.88.48.237, 40.88.18.208, 40.71.233.8, 20.185.211.94, 52.226.49.156, 52.226.49.104, 52.191.39.181, 52.188.43.247, 52.188.183.159, 52.151.246.107, 52.146.72.64-52.146.72.127, 52.146.72.32-52.146.72.63, 52.146.72.16-52.146.72.31, 20.42.24.159, 20.185.215.91, 104.45.191.89, 52.224.142.152, 52.146.79.64-52.146.79.127, 52.146.79.128-52.146.79.131, 52.146.77.168-52.146.77.175, 52.224.185.216, 52.224.184.221, 52.188.222.206, 52.188.221.237, 52.146.72.0-52.146.72.15, 52.146.24.114, 52.146.24.106, 52.142.16.162, 40.76.149.246, 20.49.111.192-20.49.111.255, 20.49.111.160-20.49.111.191, 52.146.79.0-52.146.79.63, 52.146.78.224-52.146.78.255, 52.146.78.208-52.146.78.223, 52.146.78.96-52.146.78.127, 52.146.78.192-52.146.78.207, 52.146.78.128-52.146.78.191, 52.146.78.64-52.146.78.95, 52.146.78.0-52.146.78.63, 52.146.77.176-52.146.77.191, 52.150.37.207, 52.146.77.192-52.146.77.255, 52.146.77.160-52.146.77.167, 52.146.76.188-52.146.76.191, 52.191.217.43, 52.146.77.64-52.146.77.127, 52.146.77.144-52.146.77.159, 52.146.77.128-52.146.77.143, 52.226.148.5, 52.146.77.0-52.146.77.63, 52.146.76.184-52.146.76.187, 52.146.76.176-52.146.76.183, 52.255.212.164, 52.151.238.19, 52.146.76.192-52.146.76.255, 52.146.76.160-52.146.76.175, 52.146.76.144-52.146.76.159, 52.224.150.63, 52.224.149.89, 52.224.137.160, 52.146.76.128-52.146.76.143, 52.146.76.0-52.146.76.127, 40.71.236.15, 20.49.110.84-20.49.110.87, 52.146.75.192-52.146.75.255, 52.146.75.160-52.146.75.191, 52.146.75.144-52.146.75.159, 52.152.205.65, 52.152.205.137, 20.62.129.136-20.62.129.143, 52.149.243.177, 52.149.240.75, 52.146.75.64-52.146.75.127, 52.146.75.32-52.146.75.63, 52.146.75.128-52.146.75.143, 20.42.39.188, 20.185.72.53, 52.249.204.114, 52.226.175.58, 52.224.204.110, 52.188.216.65, 52.152.194.10, 40.88.18.248, 40.76.161.168, 40.76.161.165, 40.76.161.144, 20.49.111.64-20.49.111.127, 20.49.111.48-20.49.111.63, 20.49.111.128-20.49.111.159, 13.73.254.176-13.73.254.191, 13.73.254.160-13.73.254.175, 13.73.254.128-13.73.254.159, 52.185.226.247, 40.74.183.121, 40.124.136.75, 40.124.136.2, 40.124.136.138, 40.119.1.22, 20.188.77.155, 13.73.254.96-13.73.254.127, 13.73.254.64-13.73.254.95, 13.73.254.0-13.73.254.63,

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	40.119.42.86, 40.119.42.85, 20.65.130.80-20.65.130.87, 52.249.63.45, 52.249.60.80, 52.249.59.157, 40.74.202.22, 40.74.201.230, 40.74.200.156, 40.74.183.82, 13.73.253.224-13.73.253.255, 13.73.253.192-13.73.253.223, 13.73.253.128-13.73.253.191
South America ¹	191.234.138.96-191.234.138.111, 191.234.138.64-191.234.138.95, 191.234.138.112-191.234.138.127, 191.235.127.181, 191.234.138.32-191.234.138.63, 191.234.138.0-191.234.138.31, 191.234.137.192-191.234.137.255, 191.233.31.224, 191.233.31.0, 191.233.242.180, 191.233.1.175, 191.233.0.254, 191.233.0.149, 191.234.139.176-191.234.139.183, 191.233.20.43, 191.233.18.254, 191.234.137.64-191.234.137.127, 191.234.137.160-191.234.137.191, 191.234.137.128-191.234.137.159, 191.233.31.63, 191.233.30.20, 191.233.29.72, 191.233.28.145, 191.233.27.226, 191.233.25.156, 191.233.242.177
Canada	52.228.87.160-52.228.87.191, 52.228.86.178-52.228.86.179, 20.48.192.16-20.48.192.23, 20.48.192.0-20.48.192.15, 52.228.87.192-52.228.87.255, 52.228.86.184-52.228.86.191, 52.228.86.180-52.228.86.183, 40.82.187.141, 20.39.134.93, 20.39.134.9, 20.39.134.67, 52.228.87.64-52.228.87.127, 52.228.87.48-52.228.87.63, 52.228.87.128-52.228.87.159, 52.156.24.232, 40.82.173.103, 20.48.193.168-20.48.193.175, 52.228.87.32-52.228.87.47, 52.228.87.0-52.228.87.31, 52.228.86.192-52.228.86.255, 52.139.22.227, 52.139.18.243, 52.139.17.252, 52.139.17.108, 20.63.52.175, 20.39.141.50, 20.39.140.23, 20.39.139.245, 20.151.73.141, 40.89.22.96-40.89.22.127, 40.89.22.208-40.89.22.223, 40.89.22.192-40.89.22.207, 40.89.22.80-40.89.22.83, 40.89.22.128-40.89.22.191, 40.89.20.232-40.89.20.239, 40.80.249.52, 40.80.240.214, 40.80.240.191, 40.80.240.185, 40.89.22.64-40.89.22.79, 40.89.22.0-40.89.22.63, 40.89.21.224-40.89.21.255, 40.89.23.240-40.89.23.247, 40.80.241.67, 40.80.241.43, 52.155.25.157, 52.155.25.145, 52.155.25.132, 52.139.86.52, 52.139.83.184, 52.139.80.229, 40.89.21.192-40.89.21.223, 40.89.21.128-40.89.21.191, 40.89.20.240-40.89.20.255, 40.80.249.219, 40.80.249.210, 40.80.248.79
Europe	52.155.95.212, 52.155.232.15, 52.155.176.197, 52.146.128.64-52.146.128.127, 52.146.128.32-52.146.128.63, 52.146.128.16-52.146.128.31, 52.142.112.84, 52.142.112.49, 40.127.145.191, 20.54.66.198, 20.54.66.186, 20.54.66.178, 52.156.194.25, 52.155.94.139, 52.155.91.129, 52.155.222.217, 52.146.128.0-52.146.128.15, 52.142.87.183, 20.54.105.78, 20.54.105.65, 20.54.105.122, 20.50.71.192-20.50.71.255, 20.50.71.160-20.50.71.191, 52.158.24.178, 52.155.88.22, 52.155.180.156, 52.155.178.3, 52.142.121.142, 20.54.106.12, 20.54.105.72, 20.54.105.243, 20.50.71.64-20.50.71.127, 20.50.71.48-20.50.71.63, 20.50.71.128-20.50.71.159, 52.158.27.66, 52.155.236.16, 52.155.181.78, 52.155.172.184, 52.142.127.254, 20.54.4.212, 20.54.3.210, 20.54.3.143, 20.50.71.32-20.50.71.47, 20.50.71.0-20.50.71.31, 20.50.70.192-20.50.70.255, 52.155.236.8, 52.155.234.184, 52.155.173.7, 52.142.80.162, 40.127.241.36, 40.127.150.85, 40.127.148.127, 20.50.70.96-20.50.70.127, 20.50.70.80-20.50.70.95, 20.50.70.128-20.50.70.191, 52.156.204.190, 52.155.91.146, 52.155.235.153, 52.155.234.28, 52.155.234.126, 52.155.234.107, 52.155.233.8, 20.50.70.64-20.50.70.79, 20.50.70.0-20.50.70.63, 20.50.69.224-20.50.69.255, 52.155.94.157, 52.155.233.227, 52.155.232.169, 52.142.82.161, 40.127.235.247, 40.127.235.20, 40.127.234.252, 20.54.106.211, 20.50.69.192-20.50.69.223, 20.50.69.128-20.50.69.191, 20.50.69.112-20.50.69.127,

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	52.155.235.151, 52.155.224.132, 52.155.223.80, 52.142.86.84, 51.104.156.26, 51.104.155.233, 51.104.155.15, 51.104.152.162, 20.50.69.96-20.50.69.111, 20.50.69.64-20.50.69.95, 20.50.69.0-20.50.69.63, 52.146.130.192-52.146.130.255, 52.146.130.176-52.146.130.179, 52.142.81.115, 51.104.178.0, 51.104.177.53, 51.104.176.219, 20.50.68.136-20.50.68.143, 52.146.130.64-52.146.130.127, 52.146.130.160-52.146.130.175, 52.146.130.128-52.146.130.159, 52.146.130.0-52.146.130.63, 52.146.129.224-52.146.129.255, 52.146.129.208-52.146.129.223, 52.146.129.96-52.146.129.127, 52.146.129.192-52.146.129.207, 52.146.129.128-52.146.129.191, 52.146.129.64-52.146.129.95, 52.146.129.0-52.146.129.63, 52.146.128.240-52.146.128.255, 52.146.132.232-52.146.132.239, 51.104.150.153, 51.104.150.127, 52.158.24.140, 52.156.196.221, 52.156.193.146, 52.155.220.20, 52.146.128.224-52.146.128.239, 52.146.128.192-52.146.128.223, 52.146.128.128-52.146.128.191, 52.142.121.155, 40.127.229.37, 40.127.227.23, 40.127.224.152, 52.158.121.190, 52.158.112.171, 52.155.233.110, 52.155.162.137, 51.104.159.8, 51.104.159.21, 51.104.159.10, 20.54.37.75, 20.50.68.192-20.50.68.255, 20.50.68.160-20.50.68.191, 20.50.68.144-20.50.68.159, 51.144.190.147, 51.138.27.6, 51.138.26.201, 51.138.26.161, 51.105.206.64, 51.105.183.7, 40.74.32.24, 40.74.32.17, 40.113.182.96-40.113.182.111, 40.113.182.64-40.113.182.95, 40.113.182.0-40.113.182.63, 104.45.77.57, 52.236.152.88, 52.157.221.163, 52.142.233.149, 51.138.27.148, 51.124.83.127, 51.105.249.94, 40.113.181.192-40.113.181.255, 40.113.181.160-40.113.181.191, 40.113.181.144-40.113.181.159, 20.50.134.59, 104.45.65.67, 52.236.153.149, 52.157.221.75, 52.142.233.146, 40.74.10.193, 40.119.159.78, 40.113.181.64-40.113.181.127, 40.113.181.32-40.113.181.63, 40.113.181.128-40.113.181.143, 20.54.209.240, 20.54.209.238, 20.54.209.236, 52.157.237.175, 52.142.237.97, 52.142.233.161, 51.105.164.54, 40.74.18.24, 40.113.181.0-40.113.181.31, 40.113.180.192-40.113.180.255, 40.113.180.176-40.113.180.191, 20.54.209.175, 20.54.209.167, 20.54.209.120, 52.149.108.155, 51.144.56.64, 51.138.38.197, 51.105.165.235, 51.105.101.1, 40.113.180.64-40.113.180.127, 40.113.180.160-40.113.180.175, 40.113.180.128-40.113.180.159, 20.50.16.253, 20.50.16.235, 51.105.97.152, 51.105.250.196, 51.105.152.95, 51.105.152.8, 51.105.152.238, 40.119.159.181, 40.119.159.126, 40.113.180.0-40.113.180.63, 40.113.179.224-40.113.179.255, 40.113.179.208-40.113.179.223, 51.145.186.156, 51.105.250.200, 51.105.193.78, 40.74.42.86, 40.74.42.84, 40.113.179.96-40.113.179.127, 40.113.179.192-40.113.179.207, 40.113.179.128-40.113.179.191, 20.54.184.154, 20.50.231.176, 20.50.228.248, 51.137.10.173, 51.124.71.26, 51.124.1.108, 51.105.99.79, 51.105.96.44, 51.105.250.62, 51.105.145.107, 40.113.179.64-40.113.179.95, 40.113.179.0-40.113.179.63, 40.113.178.240-40.113.178.255, 20.50.238.87, 51.105.130.21, 40.113.178.56-40.113.178.63, 40.113.178.52-40.113.178.55, 20.61.96.192-20.61.96.255, 104.45.70.91, 104.45.70.154, 104.45.67.10, 20.61.96.64-20.61.96.127, 20.61.96.48-20.61.96.63, 20.61.96.128-20.61.96.159, 40.113.183.192-40.113.183.255, 20.61.96.32-20.61.96.47, 20.61.96.0-20.61.96.31, 40.113.183.96-40.113.183.127, 40.113.183.80-40.113.183.95, 40.113.183.128-40.113.183.191, 40.113.183.64-40.113.183.79, 40.113.183.0-40.113.183.63, 40.113.182.224-40.113.182.255, 20.61.98.152-20.61.98.159, 20.50.25.187, 20.50.24.95, 52.157.222.173, 52.142.234.230, 51.138.31.195, 51.138.30.32, 51.138.28.250, 51.105.160.10, 40.74.33.38, 40.119.159.218, 40.113.182.192-40.113.182.223, 40.113.182.128-40.113.182.191, 40.113.182.112-40.113.182.127, 52.137.24.206, 51.145.189.149, 51.137.13.184, 51.137.12.195,

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	51.137.12.137, 51.105.195.166, 40.74.5.98, 40.113.178.224-40.113.178.239, 40.113.178.192-40.113.178.223, 40.113.178.128-40.113.178.191, 20.71.81.103
United Kingdom	51.104.31.64-51.104.31.127, 51.104.31.48-51.104.31.55, 51.104.30.172-51.104.30.175, 20.49.166.40, 20.49.166.129, 20.49.166.118, 20.49.145.249, 51.143.208.216-51.143.208.223, 51.132.215.182, 51.132.215.162, 51.145.104.29, 51.132.161.225, 51.11.25.68, 51.11.25.172, 51.11.24.198, 51.11.172.56, 51.11.172.30, 51.11.172.160, 51.104.31.32-51.104.31.47, 51.104.31.0-51.104.31.31, 51.104.30.192-51.104.30.255, 51.104.248.11, 51.137.166.64-51.137.166.127, 51.137.166.24-51.137.166.27, 51.137.166.16-51.137.166.23, 51.132.73.95, 51.132.72.50, 51.132.72.181, 51.132.68.126, 51.137.167.176-51.137.167.183, 40.81.117.23, 40.81.113.131, 52.142.168.104, 51.137.166.0-51.137.166.15, 51.137.165.192-51.137.165.255, 51.137.164.224-51.137.164.255, 51.137.137.235, 51.137.137.224, 51.137.137.159, 51.137.137.158, 51.137.136.98, 40.81.116.223, 40.81.116.143, 40.81.116.141
France	51.103.3.240, 51.103.3.127, 20.43.47.80-20.43.47.87, 51.11.235.83, 51.11.233.176, 51.11.233.119, 40.66.62.172, 40.66.61.123, 20.43.45.192-20.43.45.223, 20.43.45.128-20.43.45.191, 20.43.44.240-20.43.44.255, 52.136.184.88-52.136.184.95, 40.82.224.52, 40.82.224.49, 51.105.92.64-51.105.92.127, 51.105.92.160-51.105.92.175, 51.105.92.128-51.105.92.159, 40.82.236.9, 40.82.236.35, 40.82.224.9, 40.82.224.65, 40.82.224.60,
Switzerland	51.107.241.104-51.107.241.111, 51.107.202.69, 51.107.201.45, 51.107.9.82, 51.107.8.238, 51.107.8.159, 51.107.45.66, 51.107.41.120, 51.107.241.192-51.107.241.255, 51.107.241.160-51.107.241.191, 51.107.11.80-51.107.11.83, 51.107.11.68-51.107.11.71, 51.107.96.104, 51.107.249.88-51.107.249.95, 51.107.101.181, 51.107.98.194, 51.107.96.52-51.107.96.55, 51.107.96.48-51.107.96.51, 51.107.96.36, 51.107.96.206, 51.107.249.192-51.107.249.255, 51.107.249.160-51.107.249.191, 51.107.101.56, 51.107.100.218
India	52.140.110.48-52.140.110.63, 52.140.110.32-52.140.110.47, 52.140.110.0-52.140.110.31, 20.193.137.40, 20.193.137.133, 20.192.43.64-20.192.43.71, 52.140.109.128-52.140.109.255, 52.140.108.242-52.140.108.243, 20.193.154.38, 20.193.153.43, 20.193.153.162, 13.71.52.132, 13.71.50.175, 13.71.49.81, 13.71.49.244, 13.71.48.192, 20.41.198.240-20.41.198.255, 20.41.198.224-20.41.198.239, 20.41.198.192-20.41.198.223, 52.172.112.176-52.172.112.183, 20.40.4.3, 20.40.4.24, 20.44.35.138, 20.44.34.50, 20.44.34.154, 20.44.32.68, 20.44.32.253, 20.41.199.0-20.41.199.127, 20.41.197.28-20.41.197.29, 20.40.1.97, 20.40.1.191, 20.40.1.101
Japan	20.43.71.224-20.43.71.255, 20.43.70.240-20.43.70.255, 20.43.70.232-20.43.70.239, 20.43.70.206-20.43.70.207, 20.48.15.227, 20.194.144.9, 20.191.161.200-20.191.161.207, 20.44.167.207, 20.44.131.162, 20.44.130.57, 20.44.130.222, 20.43.71.192-20.43.71.223, 20.43.71.128-20.43.71.191, 20.43.70.208-20.43.70.223, 20.194.144.31, 20.194.144.27, 20.194.144.25, 40.80.63.96-40.80.63.127, 40.80.63.80-40.80.63.95, 40.80.63.128-40.80.63.143, 40.81.182.124, 40.81.182.117, 20.189.225.72-20.189.225.79, 40.81.190.97, 40.81.189.52, 40.81.188.107, 40.81.186.128, 40.81.181.214, 40.81.181.212, 40.81.181.190, 40.80.63.64-40.80.63.79, 40.80.63.0-40.80.63.63, 40.80.62.96-40.80.62.127

Region	Outbound IP
Asia Pacific	20.189.111.28-20.189.111.31, 20.189.111.128-20.189.111.191, 20.187.195.144-20.187.195.151, 52.139.177.8, 52.139.177.14, 52.139.176.216, 40.81.25.37, 20.189.77.126, 20.189.76.100, 20.189.74.80, 20.187.195.192-20.187.195.255, 20.187.195.160-20.187.195.191, 20.187.195.136-20.187.195.143, 52.139.179.116, 20.189.122.41, 20.187.197.24-20.187.197.31, 52.229.225.182, 52.184.84.210, 52.184.80.151, 52.139.170.52, 52.139.170.4, 52.139.156.110, 40.81.25.65, 20.189.112.175, 20.189.111.64-20.189.111.127, 20.189.111.32-20.189.111.63, 20.187.195.128-20.187.195.135, 23.98.107.24-23.98.107.27, 23.98.107.16-23.98.107.23, 23.98.107.128-23.98.107.191, 52.139.235.85, 52.139.234.140, 52.139.233.32, 52.139.232.83, 23.98.107.8-23.98.107.15, 23.98.107.64-23.98.107.127, 23.98.107.32-23.98.107.63, 20.43.161.215, 20.43.161.149, 20.43.161.116, 23.98.109.40-23.98.109.47, 20.44.198.104, 20.44.197.126, 52.148.112.216, 52.139.234.217, 40.90.184.63, 40.119.215.132, 23.98.107.0-23.98.107.7, 23.98.106.192-23.98.106.255, 23.98.106.160-23.98.106.191, 20.44.240.222, 20.43.175.237, 20.43.175.210, 20.43.175.186
Australia	20.53.40.192-20.53.40.255, 20.53.40.112-20.53.40.119, 20.53.40.108-20.53.40.111, 20.53.40.96-20.53.40.103, 20.53.40.128-20.53.40.191, 20.53.40.104-20.53.40.107, 20.53.115.98, 20.53.115.102, 20.53.115.101, 20.40.177.116, 20.53.79.20, 20.53.79.144, 20.53.74.224, 20.53.40.64-20.53.40.95, 20.53.40.0-20.53.40.63, 20.40.188.84, 20.40.187.183, 20.40.182.180, 20.37.199.240-20.37.199.255, 20.188.218.165, 20.53.77.171, 20.53.44.224-20.53.44.231, 20.53.104.132, 20.53.109.144, 20.53.109.107, 20.53.109.106, 20.53.104.7, 20.40.186.118, 20.37.199.224-20.37.199.239, 20.37.199.192-20.37.199.223, 20.37.199.128-20.37.199.191, 20.188.221.55, 20.188.219.150, 20.188.218.111, 104.46.177.0-104.46.177.63, 104.46.176.160-104.46.176.163, 104.46.176.152-104.46.176.159, 52.243.109.5, 52.243.109.4, 52.243.109.126, 40.81.60.206, 20.42.230.236-20.42.230.239, 104.46.176.192-104.46.176.255, 104.46.176.144-104.46.176.151, 52.243.113.89, 52.243.113.88, 52.243.113.102, 40.81.56.190, 20.40.165.7, 20.40.165.31, 20.40.164.215, 104.46.176.64-104.46.176.127, 104.46.176.32-104.46.176.63, 104.46.176.128-104.46.176.143, 52.243.108.25, 52.243.106.93, 104.46.179.32-104.46.179.39, 52.243.110.67, 52.243.110.181, 52.243.110.156, 20.46.108.117, 20.42.231.192-20.42.231.255, 20.42.230.240-20.42.230.255, 20.40.165.67, 20.40.164.49, 20.40.162.57, 20.40.160.0, 104.46.176.0-104.46.176.31

¹ Customer data in South America is replicated in United States for disaster recovery purposes, so requests from Microsoft Copilot Studio to Microsoft Bot Framework skills will be using United States IP addresses.

Considerations for the latest Microsoft Copilot Studio unified authoring release

Article • 11/15/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

The latest Microsoft Copilot Studio release is now here and generally available (GA). This release brings a major update to the Microsoft Copilot Studio product, introducing a significant number of updates and improvements so that organizations can build conversational experiences that are valuable and relevant to their customers and internal users.

As we have released our latest version, this is the time to be considering migrating from your classic experience in Microsoft Copilot Studio to the latest version. At this time we have not released or set any dates when this is recommended to be completed by. This guide aims to help readers understand some of the significant improvements within this release and areas to consider when it comes to your organization migrating your classic Power Virtual Agent experience.

Upgrading to Microsoft Copilot Studio unified authoring

If you already have created one or more bots using Microsoft Copilot Studio you might be wondering what the process is for upgrading to the latest release.

Cloning an existing Microsoft Copilot Studio classic bot

To assist in the upgrade experience, at launch, there is a new clone feature that is now available on bots built using Microsoft Copilot Studio (classic).

New features in Power Virtual Agents

Explore the new features in Power Virtual Agents by converting a copy of this bot. Add images and video in your messages; insert logic using equations, and build quickly with intelligent authoring and answers created with GPT.

Convert this bot Learn more

This feature will clone the selected Microsoft Copilot Studio classic bot and create a new bot that uses the latest unified authoring version. There are some important considerations to be aware of in this cloning process, which are listed below:

- The cloning process will only be available in the same language from source bot in the classic experience to target bot experience.
- The cloning process will only clone topics built using the Microsoft Copilot Studio web canvas (not topics built using Bot Composer).
- The cloning process will clone entities and associated synonyms and custom entities.
- A bot administrator needs to reconfigure authorization, channels and security settings in the cloned unified authoring bot.
- Any Bot Framework Skills from the Microsoft Copilot Studio classic bot would need to be reconnected with the cloned unified authoring bot.
- The connection to Power Automate Flows, built using the Microsoft Copilot Studio web canvas, will be cloned and associated within the topic within the cloned unified authoring topic, however it is strongly recommended that the connections are tested.
- Consideration should be given for any custom canvas and additional custom architecture components you may have connected to your Microsoft Copilot Studio classic bot as they would need to be reconnected or reconfigured to your new cloned unified authoring bot and tested. Wider consideration should be given to your entire architecture and any impact within that architecture that could have been updated since the updating of your bot (and its bot ID).
- Any automated deployment pipelines would need to be updated if utilizing the Microsoft Copilot Studio classic bot ID or any reference to the classic bot.
- Any custom reporting to your new bot deployment should be updated. Examples include if the custom data pipeline solution is being used or alternative reporting solutions.

Important

This may not be an exhaustive list based on your current implementation and architecture. Ensure you complete the required testing for your bot before deploying to production, even if you are using the clone feature to migrate your bot between versions.

Note

In the future there may be additional tools available to assist with migration of bots and we would appreciate your feedback on this topic. [Please submit feature requests ↗](#)

It should not be understated that while today there is a process of a migration, by migrating your bot from Microsoft Copilot Studio classic to unified authoring, companies are then able to leverage all of the latest features within Microsoft Copilot Studio unified authoring. This includes GPT-enabled features, variable management and Power FX, code view, events and so much more. Companies will be able to take this opportunity to add additional value to your bot and, as a result, an improved experience for your customers.

What is new or has been updated in the latest Microsoft Copilot Studio

Below is an overview, and not an exhaustive list, of what has changed in Microsoft Copilot Studio unified authoring. It aims to highlight the significant new capabilities now available within the authoring experience of Microsoft Copilot Studio, or significant changes that should be brought to the attention of readers.

Important

To review more detail about the core capabilities and features of Microsoft Copilot Studio, check out the [Getting Started Guide](#)

Creating a new bot

When creating a brand new by selecting **New chatbot** under the **Chatbots** item in the main navigation, there is a new bot creation process where bot makers can name the bot, specify the bot's language and also get started with boosted conversations (public preview feature)

Additionally you can configure **Advanced Information** including the icon, choose to include (or not include) lesson topics, and also select the default solution and default schema name for new topics. When selecting the schema name, this directly utilizes the prefix from the selected solution.

💡 Tip

For more information on Boosted Conversations, see below and also the feature documentation here.

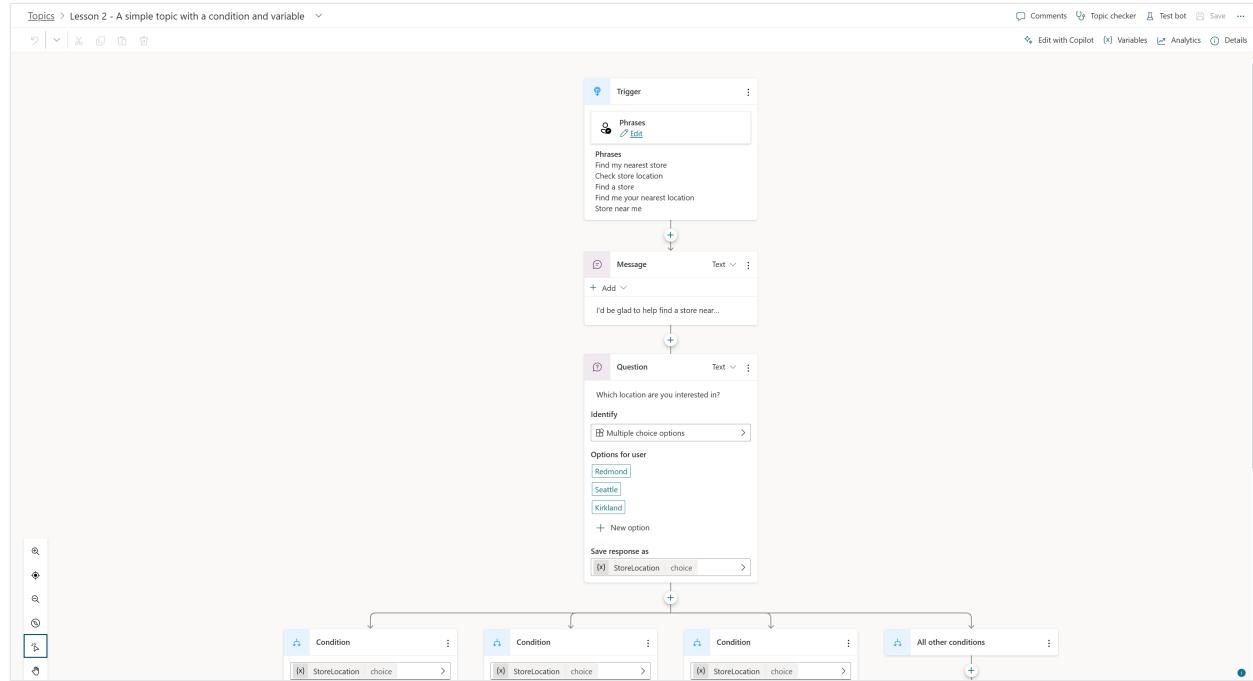
The screenshot shows the 'Create a bot' interface in the Power Virtual Agents portal. It's Step 1 of 2. On the left, there's a sidebar with 'Power Virtual Agents' and a 'Create a bot' button. The main area has a heading 'Configure your bot'. It includes instructions to start fresh with a new bot, convert a classic bot, and enable voice capabilities. A 'Bot name' field is present, along with a dropdown for 'What language do you want your bot to speak?' set to English. There's also a section for 'Boost your conversations with GPT (preview)' which allows users to enter their website URL for AI-generated responses. A note at the bottom states that AI-generated content can have mistakes and should be reviewed.

User Interface Changes

There have been a number of user interface updates with the aim to make the bot maker and administration experience easier and more intuitive. This begins at the bot creation experience, although it doesn't end there. The improvements also include:

- *Creating a New Topic:* Users will no longer be able to create topics using Bot Composer. Bot makers can create a new topic manually or using Copilot.
- *Trigger tags:* You will now see all types of triggers within the topic view, and also these can appear as different triggers due to the events feature, such as *Message Received*.
- *Connectors within a topic:* Previously the connectors between nodes were curved. They are no longer curved.
- *Topic User Interface:* Additional nodes are now available on the creation menu within the authoring canvas, new productivity panel and extended menu to include copilot and variables.

- *Variable Watch Window*: Specific call out where the variable watch window is no longer in the mini map, and instead on the variable panel at the top area of the authoring canvas.
- *Flyout Menus*: Microsoft Copilot Studio now utilizes the full window within the authoring experience and additional properties based on selections within the authoring canvas is traditionally held within a flyout panel on the side of the screen.



System Topics

[System topics](#) are not recommended to changed if you are new and not experienced to bot building in Microsoft Copilot Studio. For those familiar with Microsoft Copilot Studio you may notice that there are additional and updated system topics now available in the latest unified authoring release.

Conversation Start: Previously, Bot makers had to customize the bot with additional code to automatically begin a conversation with Microsoft Copilot Studio. This is no longer required, and the Conversation Start system topic begins the conversation automatically and is turned on by default today. You can see this working for yourself by using the 'Test your bot' panel within Microsoft Copilot Studio and your bot will automatically start using the Conversation Start topic data

Multiple Topics Matched: When building conversational experiences, when a user asks a question, there can be more than one topics matched with high confidence. This causes a disambiguation experience to occur, normally referred to as 'Did You Mean' experiences within Microsoft Copilot Studio. This is where the bot will ask the user, Did You Mean X, or Did you Mean Y? This experience helps to then disambiguate between

two or more high ranking topics that were matched by the user's original question. In the latest Power Virtual Agent release, now you can edit the out of the box disambiguation experience using the 'Multiple Topics Matched' system topic e.g. not displaying specific topics when disambiguation is triggered.

Topics <small>①</small>					
Type	Name ↓	Trigger ↑	Status	Errors	Currently editing
<small>System topics are the core of your bot. Without them, your bot will not function or handle errors properly. You can't delete these topics.</small>					
Conversation Start	On Conversation Start	<input checked="" type="checkbox"/>	On		
End of Conversation	On Redirect	<input checked="" type="checkbox"/>	On		
Escalate	On Talk to Agent	<input checked="" type="checkbox"/>	On		
Fallback	On Unknown Intent	<input checked="" type="checkbox"/>	On		
Multiple Topics Matched	On Select Intent	<input checked="" type="checkbox"/>	On		
On Error	On Error	<input checked="" type="checkbox"/>	On		
Reset Conversation	On Redirect	<input checked="" type="checkbox"/>	On		
Sign in	On Sign In	<input checked="" type="checkbox"/>	On		

Pass entire Objects back to Microsoft Copilot Studio using Power Automate

Microsoft Copilot Studio has been seamlessly integrated with Power Automate to allow bot makers to connect to many different connectors to help retrieve and access data in other systems. In the previous version of Microsoft Copilot Studio, only text, number or boolean (yes/no) type objects could be passed between Power Virtual Agent and Power Automate.

In Microsoft Copilot Studio unified authoring release, you can now send an entire Object, whether that be a Dataverse record or a collection of Dataverse records, to send back using the text output of the Microsoft Copilot Studio return statement.

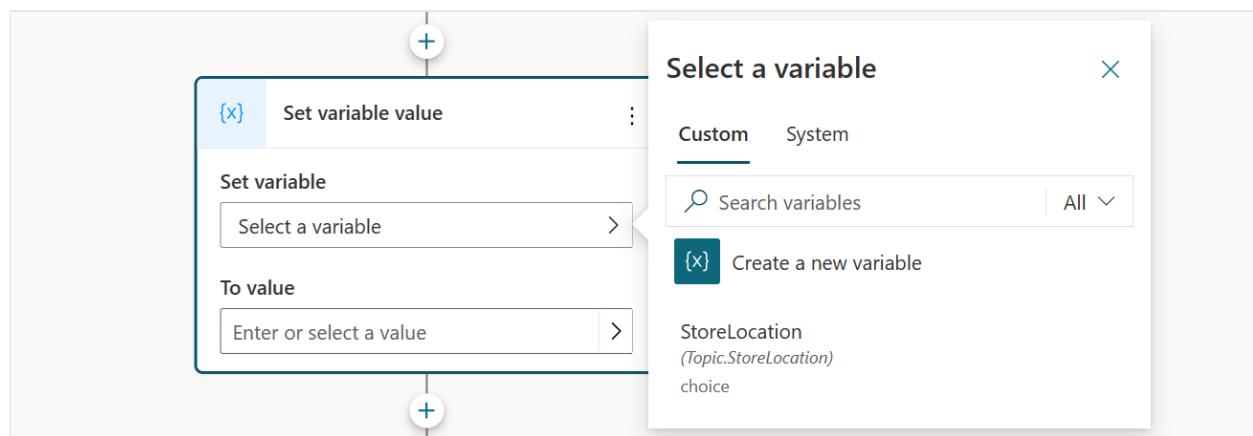
As a result of the new authoring capabilities in Power Virtual Agent, a bot author/maker can then retrieve that object from Power Automate, use the parse node feature and using the new variable features to extract the information from that object and format it as required (for example, within a custom Adaptive Card)

Variables, Variable Watch Window Improvements and Testing

Today in the latest release, variables have been significantly updated to not only include a selection of variable nodes to create new variables and update them, utilize system data and variables but also bot makers can also include Power FX formulas to be able to manipulate data and perform calculations within the runtime of Microsoft Copilot Studio.

When testing, it is critical to be able to test variables within the topic process flow when creating conversational experiences. To do this, the variable watch window was previously in the topic mini-map where a bot maker/author could use the testing panel within Microsoft Copilot Studio to test topics and the data between them. Testing variables is now available in the variable panel on the side panel within the authoring canvas, under **Test**. Together with the testing panel window, bot makers/authors can now watch the variables and their data within this panel for both topic and global level variables. Additionally, as this panel has a large amount of space, this testing experience is improved for topics that have a large number of variables within them.

[Learn more about the latest features around Variables and PowerFX in Microsoft Copilot Studio](#)



Write your bot in YAML

Fusion teams are enabled in Microsoft Copilot Studio with the capabilities to author conversational experiences that use both the graphical user interface (GUI) authoring tool, leveraging rich responses, adaptive cards and more that can be utilized by everyone, together with developers who can choose to switch to the code view within a topic to directly build or edit the YAML that is referenced by the interface in real time.

```

Topics > Lesson 2 - A simple topic with a condition and variable

1 kind: AdaptiveDialog
2 beginDialog
3 id: main
4 intent:
5   intentName: Lesson 2 - A simple topic with a condition and variable
6   triggerPhrase:
7     - Find my nearest store
8     - Check store location
9     - Find a store
10    - Show me the nearest location
11    - Store near me
12    - Store near me
13
14 actions:
15   - kind: SendActivity
16     id: qvduia
17     activity: I'd be glad to help find a store near you.
18
19 + kind: SetVariable
20   id: setvariable_MHujgB
21   variable:
22
23 + kind: Question
24   id: LbMwpD
25   alwaysPrompt: true
26   variable: init:Topic.Storelocation
27   prompt: Which location are you interested in?
28   entity:
29     kind: EmbeddedEntity
30
31     kind: ClosedListEntity
32     smartMatchingEnabled: true
33     items:
34       - id: Redmond
35         displayName: Redmond
36       - id: Seattle
37         displayName: Seattle
38       - id: Kirkland
39         displayName: Kirkland
40
41 + kind: ConditionGroup
42   id: HE63RU
43   conditions:
44     - condition:
45       condition: Topic.Storelocation = 'cr389_bot2.topic.Lesson2.main.LbMwpD'.Redmond
46       actions:
47         - kind: SendActivity
48           id: kHzTPE
49           activity: "Check out the Company Store at our Visitor Center. The address is: 4567 Main St., Redmond, 26132."
50
51       . id: Rgfpvu
52       condition: Topic.Storelocation = 'cr389_bot2.topic.Lesson2.main.LbMwpD'.Seattle
53       actions:
54         - kind: SendActivity
55           id: X7ewlp
56           activity: "Our [Topic.Storelocation] store is located in the U District in the University Village. The address is: 1234 E. University Village St., Seattle, 34567."
57
58       . id: lQwPFf
59       condition: Topic.Storelocation = 'cr389_bot2.topic.Lesson2.main.LbMwpD'.Kirkland
60       actions:
61         - kind: SendActivity
62           id: jtgsoeo

```

Events

Events introduces additional capabilities within the Microsoft Copilot Studio web interface to create and manage the conversational experience. Traditionally, trigger phrases are used to detect the intent from a spoken sentence or word and the best matched topic if found. Events are an alternative way to specifically manage events that are either sent to or received from the user or alternative systems.

GPT Enabled Features

Conversation Booster (Preview) Boosted Conversations: Bot Makers/Authors are empowered to create a useful bot in seconds by connecting it to a datastore, such as a public facing website, allowing the bot to be able to generate answers to questions using that datastore. You can leverage this feature at bot creation or within the 'AI Capabilities' section in the bot's settings.

Co-Pilot (Preview): Co-creating Bots with AI has never been easier using Copilot in Microsoft Copilot Studio. In our latest release, Bot Makers can now utilize Copilot on the topic screen when creating a new topic, entering a name and an initial prompt to build the topic directly within Microsoft Copilot Studio. Bot Makers/Authors can also use Copilot, using the Copilot button within the topic, to open the Copilot panel on the side of the authoring screen to update the topic using natural language, including select specific nodes.

AI capabilities

Enable intelligent features in your bot. You consent to your data flowing outside your organization's compliance and geo boundaries. By proceeding, you agree to the [supplemental preview terms](#).

AI capabilities are premium features and can be enabled or managed by your administrators. [See pricing tiers](#)

[Learn more about responsible AI at Microsoft](#)

Boost conversational coverage (preview) 

Allow your bot to create responses to users' questions. Information for these responses comes from a website you choose. Your bot will only create responses if it receives a message that doesn't match a topic you've created.

Boosting conversational coverage is intended to help your bot respond to a wider range of information, but it's not intended to replace topic authoring.

Here's what you need to know about this feature:

- This feature is **experimental** and you'll need to speak to your administrator to enable publishing.
- Generating responses from site content **does not guarantee accuracy or relevance**.
- The feature runs on Azure OpenAI service. [Learn more about OpenAI service](#).

Boost conversations

Enter your website

How to choose a website

- Pick a publicly accessible website, such as your primary company domain or customer support site.
- Ensure that the site you select is accurate and up-to-date - the bot will use it as the basis for its conversations.
- Ensure the site is indexed or found by Bing.
- Don't use sites with forums or comments from end users; this can reduce the relevancy of answers.
- Don't include query strings, more than two levels of depth, special characters, or the character '*' in your URL.

Bot content moderation

Choose the level of content moderation you'd like your bot to include while boosting conversational coverage. A higher level of moderation means that the bot's answers will be more relevant. A lower level of moderation means that the bot will generate more answers. [See more](#)

High (default)
Bot generates fewer answers, but responses are more relev...

Intelligent authoring support with Copilot (preview)

Write a description of a topic you'd like your bot to cover and Copilot will build it out for you.

Intelligent authoring support is available when you create or edit any preview bot. You can turn it on in the [user settings](#).

Internal documentation support (preview)



Application Insights Integration by default

Application Insights is now integrated by default within Microsoft Copilot Studio. Application insights allows for administrators to monitor the performance of applications, in this case, Microsoft Copilot Studio, both proactively to understand how that application is performing and reactively to review root cause analysis and determine the cause of an incident. Within Microsoft Copilot Studio, administrators can connect their Power Virtual Agent bot to an instance of Application Insights within the settings area using a connection string, and specify to log incoming and outgoing messages, whether or not to log sensitive activity properties and node actions by default. Additionally, bot authors can choose to directly within a topic, log custom events with properties using the new 'Log custom telemetry event' node.

How to get started with structured learning for Microsoft Copilot Studio unified authoring

To get started with structured learning of Microsoft Copilot Studio, we are in the process of launching our brand new Microsoft Copilot Studio in a Day training directly on Microsoft Learn with additional material for instructors. At this time, we do have our preview lab materials that can be accessed here, which will provide readers with a selection of labs they can use to get started. Additionally, our Microsoft Partners will be training on our latest release of Microsoft Copilot Studio, transitioning within June, so check out their [Events on the Microsoft Events page](#). (Note: ensure when booking which version the event is targeting)

Migrating your Microsoft Copilot Studio classic Bots

See the heading 'Cloning an existing Microsoft Copilot Studio classic Bot' section within this document

Testing Guidance in Microsoft Copilot Studio unified authoring

With any application, it is vital that companies ensure there is enough time within the migration process to complete adequate testing. What is adequate testing is dependent on the type of bot and conversational experience a company builds, together with any additional or connected infrastructure and technology. As many organizations will consider migrating their bots to unified authoring, you should consider the testing framework and the company process to ensure that, even if you have a simple bot, you have embedded testing into your migration checklist.

Testing and Deployment Practices

There are a range of resources available to assist with business application technology deployments, and specifically best practices around conversational projects using Microsoft Copilot Studio. Check out the links below to learn more:

- [Success By Design](#)
- [PowerCAT Microsoft Copilot Studio Playbook ↗](#)
- [Microsoft Copilot Studio Bot Testing Framework by PowerCAT ↗](#)

Warning

Ensure you have completed all of your testing and complied with your organizational policies before deploying your migrated bot to production.

Recommendations when working with Microsoft Support

Raising any issues to Microsoft should include the snapshot of the bot, found in the testing pane and the metadata of the bot, found in the **Bot details** section of the bot management area, under **Advanced** such as *Environment ID, Tenant ID, Bot App ID*.

Key concepts for Bot Framework Composer users

Article • 11/15/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

If you're used to designing bots in Bot Framework Composer, you'll find that some things are different in the Microsoft Copilot Studio preview, and some things are similar. The following table lists some key concepts in Composer and where to find similar concepts in Microsoft Copilot Studio preview.

Composer concept	Microsoft Copilot Studio concept	Description
Dialogs and triggers	Topics	Use topics to organize conversation flow or paths. A topic has a set of <i>trigger phrases</i> that indicate when the bot should start the topic and a set of <i>nodes</i> that describe the topic's conversation path.
Intents	Trigger phrases	Add trigger phrases to a topic for the phrases, keywords, and questions that a customer is likely to type related to a specific issue. Microsoft Copilot Studio uses natural language understanding to parse what a customer types and find the most appropriate topic.
Actions and prompts	Nodes	Use nodes, such as messages, questions, and conditional branches, on the authoring canvas to create a topic's conversation path.
Bot response variation	Response variations and question variations	Use response and question variations to add variety to your bot's messages and questions.
Suggested actions	Quick replies	Use quick replies to provide default reply options to the customer.

Composer concept	Microsoft Copilot Studio concept	Description
Entities	Entities	Define and use entities to extract semantic information from what a customer types.
State, storage, and properties	Variables	Use variables to track state.
Formulas and expressions	Power Fx	Use Power Fx to create expressions.

Get access to Microsoft Copilot Studio

Article • 01/03/2024

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

This topic includes details about Copilot Studio Licensing. You can also review the [Microsoft Power Platform Licensing Guide](#) to learn more.

If you already have licenses, see the [Assign licenses and manage access to Microsoft Copilot Studio](#) topic.

Copilot Studio is [available in the US Government Community Cloud \(GCC\) plan](#).

For more information and to request assistance, visit the [Microsoft Copilot Studio Community](#).

Microsoft Copilot Studio for Microsoft Teams plan

Copilot Studio for Teams enables customers to build conversational interfaces within Teams. The copilots can use data stored in Microsoft Dataverse for Teams or many other sources, using the supplied standard connectors.

Capabilities available in the Copilot Studio app in Teams are available as part of select Microsoft 365 subscriptions with Microsoft Power Platform and Teams capabilities, excluding plans for US government environments (GCC, GCC High, and DoD), EDU A1, and SUB SKUs.

This table compares key capabilities in the Copilot Studio for Teams plan, which is available in select Microsoft 365 subscriptions, against the standalone Copilot Studio subscription. For a full, comparative list, see the [Microsoft Power Platform Licensing Guide](#).

Also see the [Quotas, limits, and configuration values](#) topic for other capacity considerations.

[+] Expand table

Capability	Select Microsoft 365 subscriptions	Microsoft Copilot Studio subscription
Deploy copilot to channels	Teams	Any channel supported by Copilot Studio
Power Automate connectors	Standard connectors for flows triggered from Copilot Studio	Premium connectors for flows triggered from Copilot Studio
Web security	Secure access enabled by default, can't generate secrets to enable secure access	Can generate secrets and turn on or off secure access by the copilot author
Create (edit) with Copilot	Not available	Can create and iterate on topics by describing what you want, then AI builds it
Use Microsoft Bot Framework skills	Not available	Can extend Copilot Studio copilots with Microsoft Bot Framework skills
Use a Copilot Studio copilot as a Bot Framework skill	Not available	Use a Copilot Studio copilot as a skill
Integrate Microsoft Bot Framework dialogs	Not available	Develop custom dialogs with Bot Framework Composer
Hand off copilot conversation to a live agent	Not available	Trigger hand-off to a live agent

Note

A paid, standalone Copilot Studio subscription is required to run flows with premium connectors with copilots.

Similarly, usage rights and functionality are part of paid, standalone Power Automate subscriptions serve automation scenarios and cannot be applied to Copilot Studio scenarios.

Upgrading your license

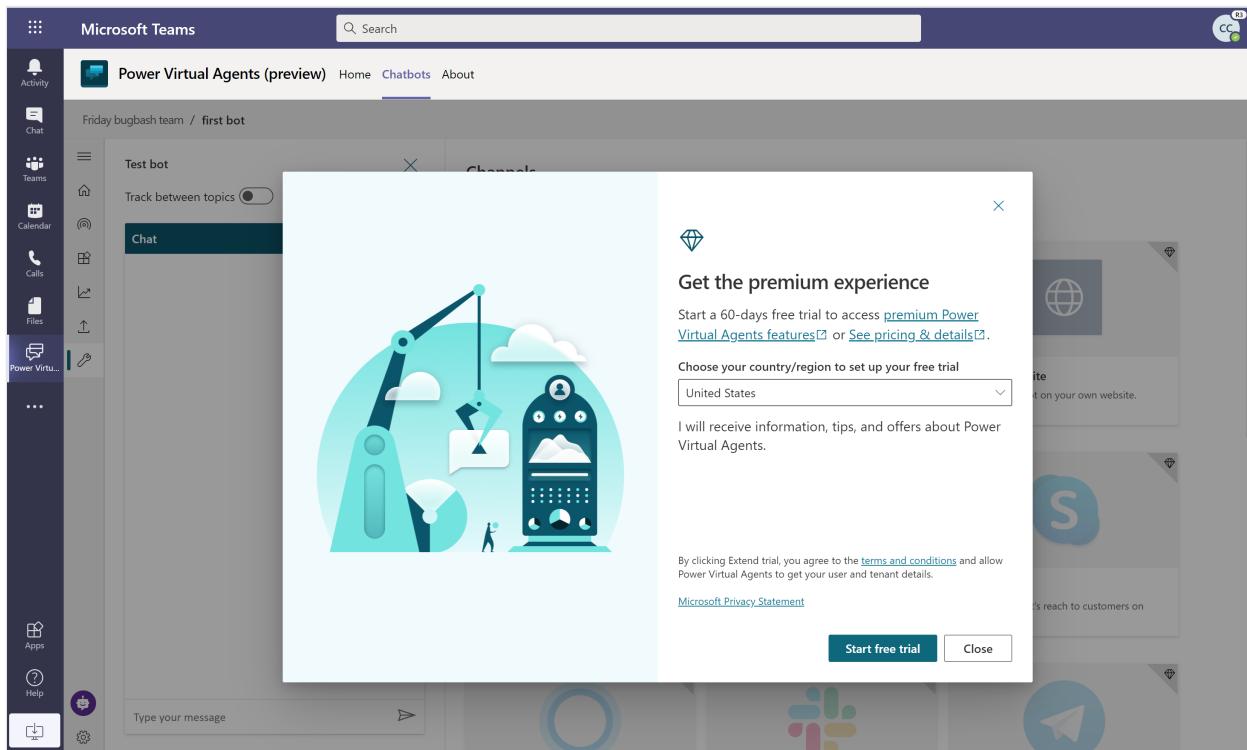
To access the full range of Copilot Studio capabilities, upgrade your plan to a standalone Copilot Studio subscription.

After you upgrade your license, you can continue using the same copilot in the same environment. Capabilities that were previously only available in a standalone license are now be available. These capabilities might include [billed sessions that require Copilot Studio capacity](#).

You can upgrade within the Copilot Studio app for Teams from **Settings > Channels**. Select the apps you want to publish to and you're prompted to upgrade.

The screenshot shows the Microsoft Copilot Studio app interface. On the left, there's a sidebar with various options: Overview, Topics, Entities, Generative AI, Analytics, Publish, Settings (which is expanded), Details, AI integration tools, and Channels. The 'Channels' option is highlighted with a red box. At the top, there are two status messages: one in red about data loss prevention policies and one in yellow about channel settings being unavailable due to the same policies. Below these, the 'Channels' section is titled 'Configure your chatbot channels to meet your customers where they are.' It lists six channels with icons: Microsoft Teams (purple), Demo website (blue), Custom website (grey), Mobile app (pink), Facebook (blue), and Skype (light blue). Each channel has a description and a link to learn more.

You can [start a 60 day free trial of Microsoft Copilot Studio](#) to try out all the capabilities. You're prompted to sign up for a trial if you try to create a copilot without a license.



Note

The option to create a free trial may be disabled. For more information, see the [Self-service sign-up disabled](#) section.

Standalone Microsoft Copilot Studio subscription

The standalone Copilot Studio subscription allows you to build copilots on any supported channel and connect to any data using premium connectors.

You can obtain a standalone Copilot Studio subscription from the Microsoft 365 admin center. For more information, see [Assign licenses and manage access to Microsoft Copilot Studio](#).

Other subscriptions that include Microsoft Copilot Studio

Entitlements for Copilot Studio are included in Digital Messaging and Chat add-ons for Dynamics 365 Customer Service. For more information, see the [Dynamics 365 Licensing Guide](#).

Use prebuilt copilot templates in Microsoft Teams

Article • 01/03/2024

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

ⓘ Note

This topic applies to copilots created in the Microsoft Copilot Studio app in Microsoft Teams only. Templates aren't currently supported for the Copilot Studio web app.

Copilots help your employees to self-serve human resources (HR), IT, and other internal employee functions by providing automated responses and taking meaningful actions. This copilot automation increases an employee's efficiency and saves your organization money and time.

You can use templates created by the Copilot Studio team to help you create and customize bots to your needs.

Employee frequently asked questions (FAQ) template

The Employee FAQ copilot template helps you create a bot to handle your employee's most common questions. The template adds content that matches your business needs. <https://www.microsoft.com/en-us/videoplayer/embed/RWFMe0?postJs||Msg=true>

The template can log an employee's escalation request, notify a human expert, and prompt a quick response to the employee—all within Teams.

The copilot obtains employee feedback so you can make improvements to the copilot over time.

A copilot can be customized and extended to suit your needs with no developer and data science background required.

Download the copilot template from GitHub:

- [Employee FAQ copilot template ↗](#)

Quickstart: Create and deploy a Microsoft Copilot Studio copilot

Article • 12/09/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

Microsoft Copilot Studio empowers teams to quickly and easily create powerful copilots using a guided, no-code graphical experience without needing data scientists or developers.

This quickstart article helps you create a copilot for the first time. You learn how to add topics to your copilot, test content changes in real-time, and deploy your copilot to a test page. Once deployed, you can analyze the performance of your copilot.

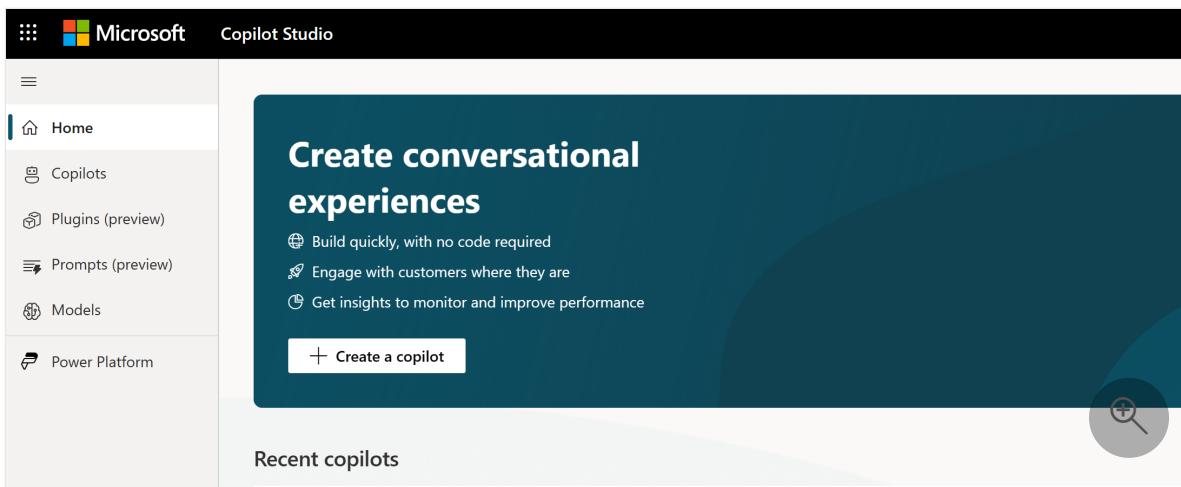
Prerequisites

[Learn more about what you can do with Microsoft Copilot Studio.](#)

Web app

Explore the home page

Microsoft Copilot Studio has an app-level home page, listing all your copilots. On this page you can create a new copilot, view recent copilots, and access learning resources like videos, documentation, and learning paths.



In the navigation menu, select **Copilots** to open the **Copilots** page. All copilots you create in a given environment appear here. In your list of copilots, you can see metadata such as owner, when it was last published, and who last modified the copilot.

Create a copilot

1. Go to the [Microsoft Copilot Studio introduction website](#). Supported browsers include Microsoft Edge, Chrome, and Firefox.
2. On the website, select **Try free** and sign in with your work email address.

Note

Personal Microsoft accounts are currently not supported.

Introducing Microsoft Copilot Studio at Microsoft Ignite 2023.

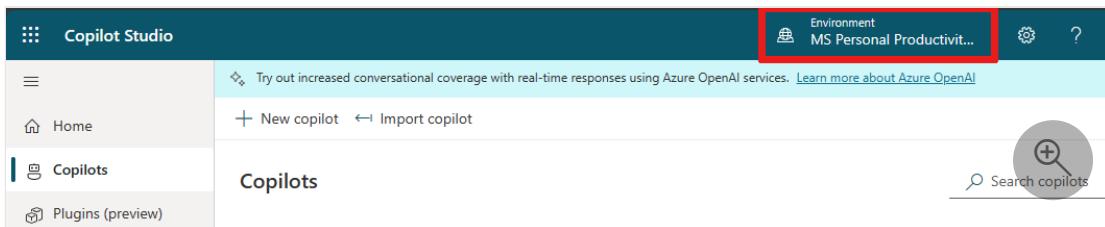
Microsoft Copilot Studio

Customize Microsoft Copilot for Microsoft 365 or build your own copilot experiences.

[Try free](#)

[Try a demo](#)

3. After you sign up, a default [Power Apps environment](#) is made for you. For most users, this default is sufficient. However, to specify a custom Power Apps environment, select another one, using the environment picker.



ⓘ Note

Microsoft Copilot Studio is only supported in these data locations. Outside of these locations, create a custom environment with **Region** set to a supported data location before you create your copilot.

For more information on creating a custom Power Apps environment, see [Working with environments](#).

4. Once signed up, you land on the **Home** page. Select **Create a copilot**.
5. A wizard starts. Give your copilot a name.

6. In the **What language do you want your copilot to speak?** field, select a language. The language dropdown is prepopulated with the browser locale.

The screenshot shows the Microsoft Copilot Studio interface. At the top, it says "Create a copilot". Below that, "Step 1 of 2" is indicated. The "Set up the copilot" section contains three items: "Start fresh with a new copilot, and start making it yours.", "Want to convert a classic copilot to the new authoring canvas? [Start here](#).", and "Want to enable voice capabilities for your copilot? [Start here](#)". To the right, there are fields for "Copilot name" (set to "Copilot 1") and "What language do you want your copilot to speak?" (set to "English"). Below these is a section titled "Boost your conversations with generative answers" with a sub-instruction "Let your copilot create responses in real time with generative answers and information from a website you choose." It includes a "Enter your website" input field and a note about AI-generated content. A circular button with a magnifying glass icon is visible on the right.

7. (Optional) To boost conversations with AI-generated responses, add a URL to the **Boost your conversations with generative answers** field.
8. (Optional) You can make customizations and enhancements before finalizing your copilot.

Choose **Edit advanced options** at the bottom of the page.

- Select a copilot icon to give your copilot a personality and represent your business scenario. You can select from the prepopulated list of icons or upload a custom icon. This icon gets displayed in the chat window when the copilot responds.
- Choose prepopulated **Lesson topics** to provide starter content and familiarize yourself with copilot topics.
- Select the solution for your copilot and the schema name.

These options are all advanced options, which can be changed later.

9. Select **Create**.

Creating your first copilot in a new environment can take up to 15 minutes. Additional copilots get created faster.

10. You're redirected to the copilot's **Overview** page.

(!) Note

Copilot operations like publish and authentication configurations might take a few more minutes to be ready for use.

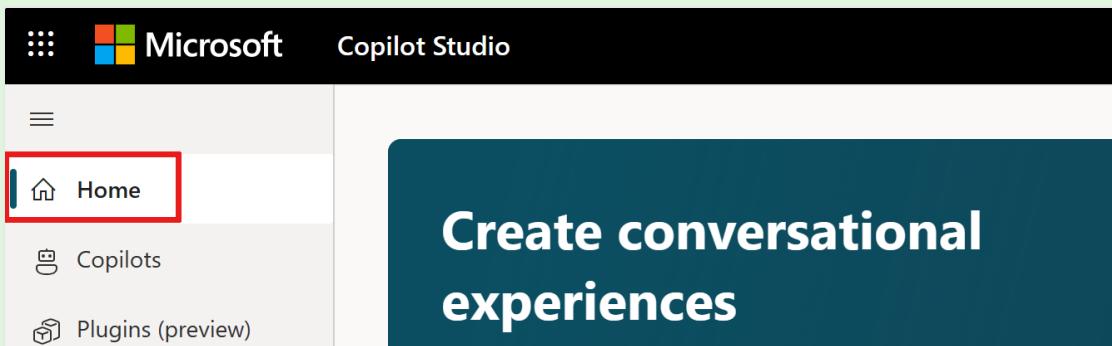
Familiarize yourself with Copilot Studio

While waiting for processing, you might want to:

- Explore the overall user interface for Copilot Studio.
- Explore topics and start creating and editing topics.
- Experiment with the preloaded user topics and system topics.
- Interact with your copilot using the **Test copilot** chat pane.
- Review [Key concepts - Authoring Microsoft Copilot Studio copilots](#) to better understand authoring.

💡 Tip

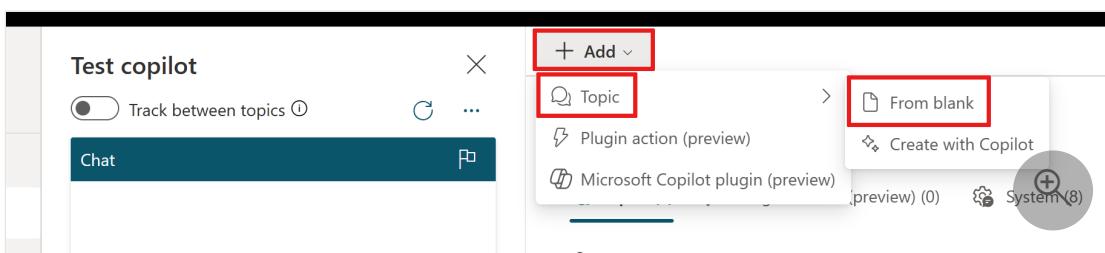
Select **Home**, in the navigation menu, to go back to the app-level home page from your copilot.



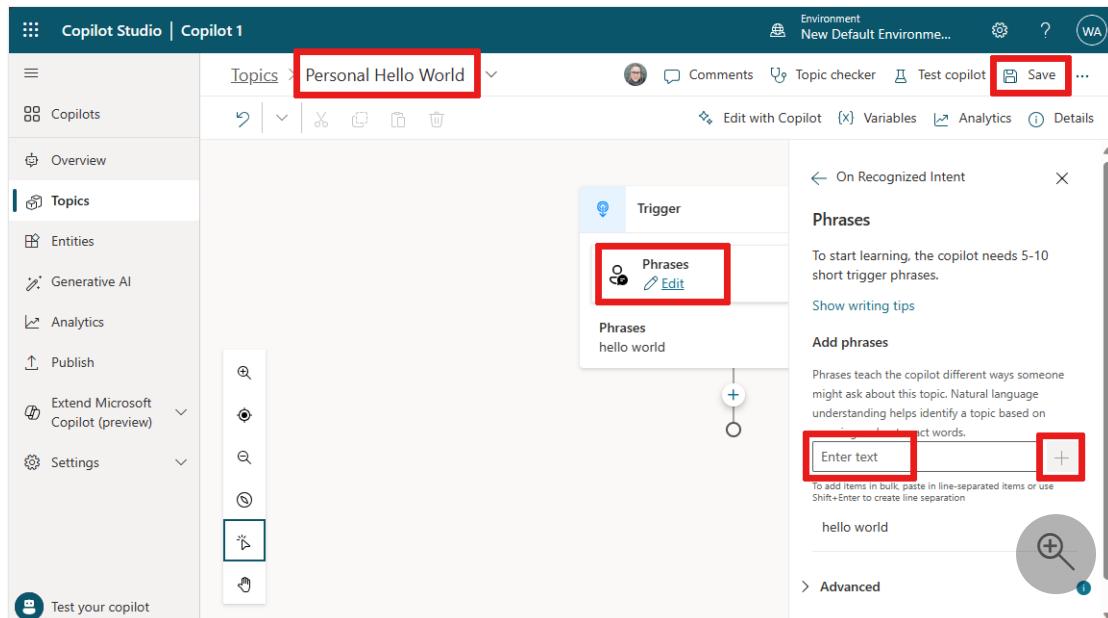
Create a topic

With a new copilot, you can start creating topics. A topic is a dialog tree that describes how your copilot responds to a user's question.

1. In the navigation menu, select **Topics**, then select **Add** at the top of the page. From **Add**, select **Topic**, and then **From blank**.

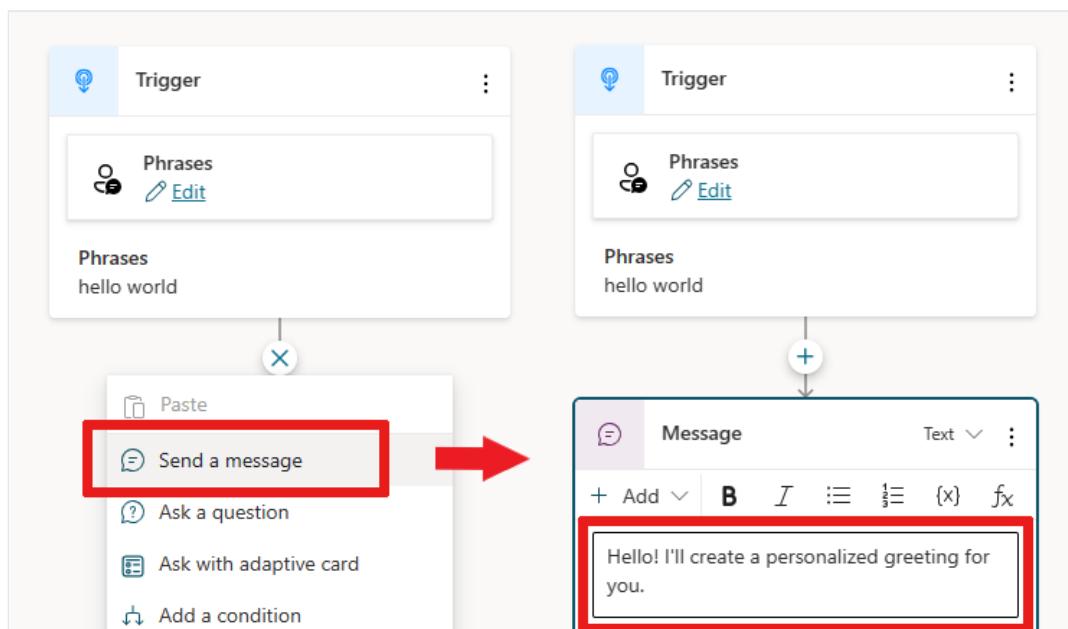


2. Here you build a topic by giving it a name and configuring a trigger. Trigger phrases are examples of user questions or utterances that teach the copilot to respond when the questions or utterances are detected.
- Name your topic 'Personal Hello World' at the top.
 - In the **Trigger** box under **Phrases**, select **Edit**. The **On Recognized Intent** pane appears.
 - Add 'hello world' text, also called an utterance, under **Add phrases**.
 - Select the + icon next to the phrase box to add it to your trigger.
 - Select the **Save** icon at the top to save your trigger.



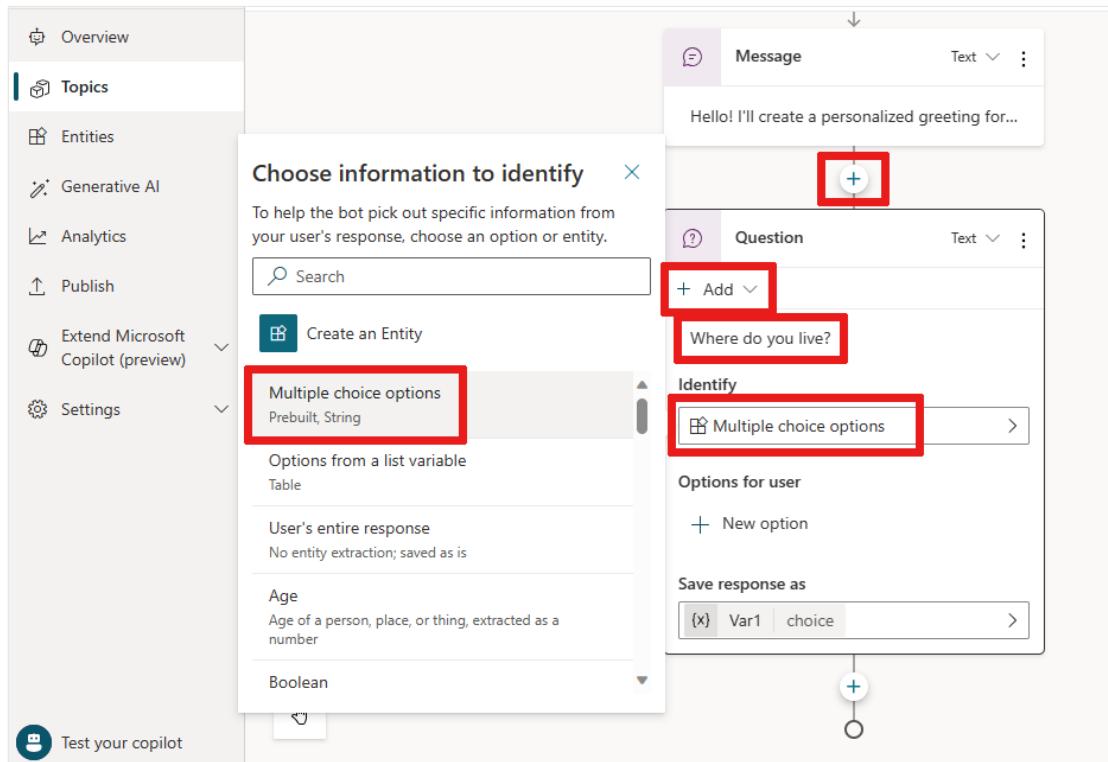
3. Select the (+) icon below your trigger node and select **Send a message**.

- Enter 'Hello! I'll create a personalized greeting for you.' into the newly added **Message** node.



- b. Select the **Save** icon at the top to save your trigger.
4. Select the (+) icon below your new message node and add an **Ask a question** node.

Enter the question text, 'Where do you live?', in the **Ask a message** box. Select **Multiple choice options** under **Identify** to give the customer a choice in responses.



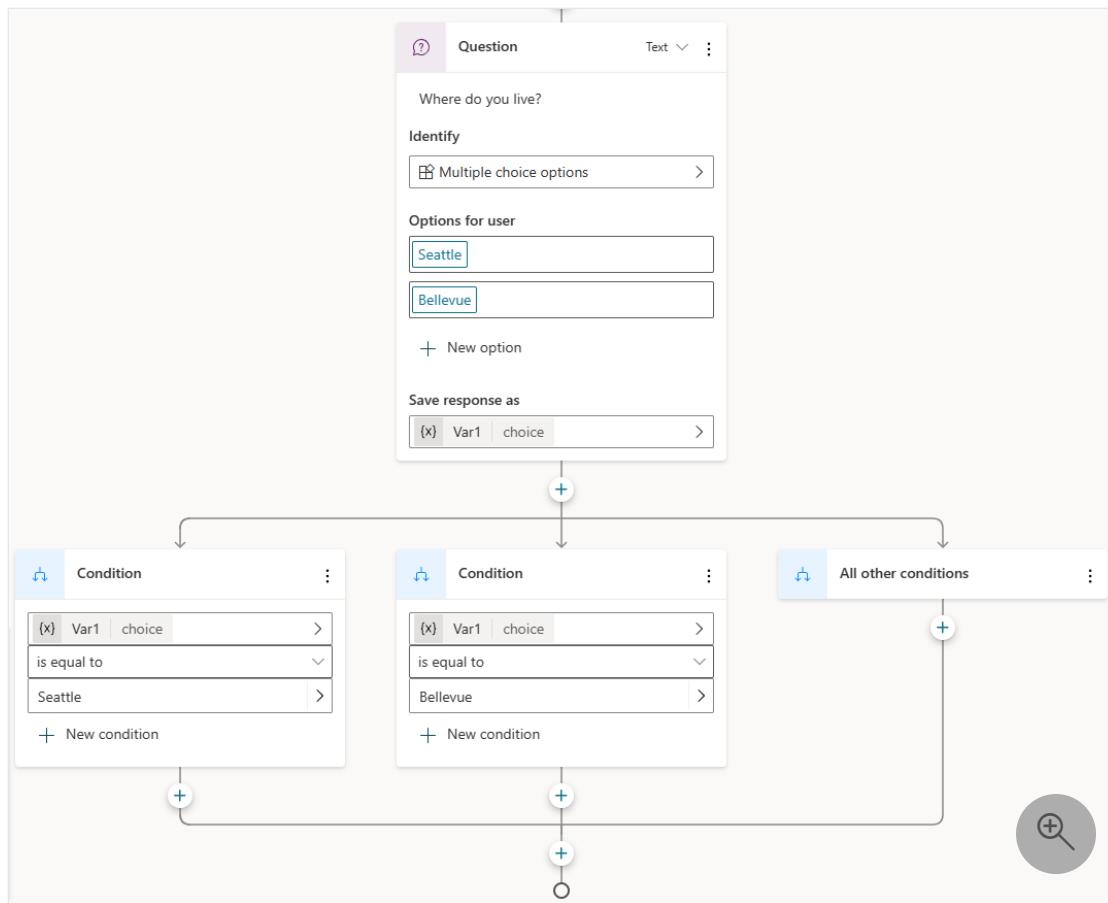
With **Multiple choice options** selected, you need to add more options.

5. Add two options for the user, by selecting **+ New option** under **Options for user** in the **Question** node, then enter 'Seattle' as the text. Add another option and enter 'Bellevue' as the text.

Each option is presented in the copilot chat as a multiple choice button to the user.

6. View the whole dialog tree in the authoring canvas to understand the conversation flow.

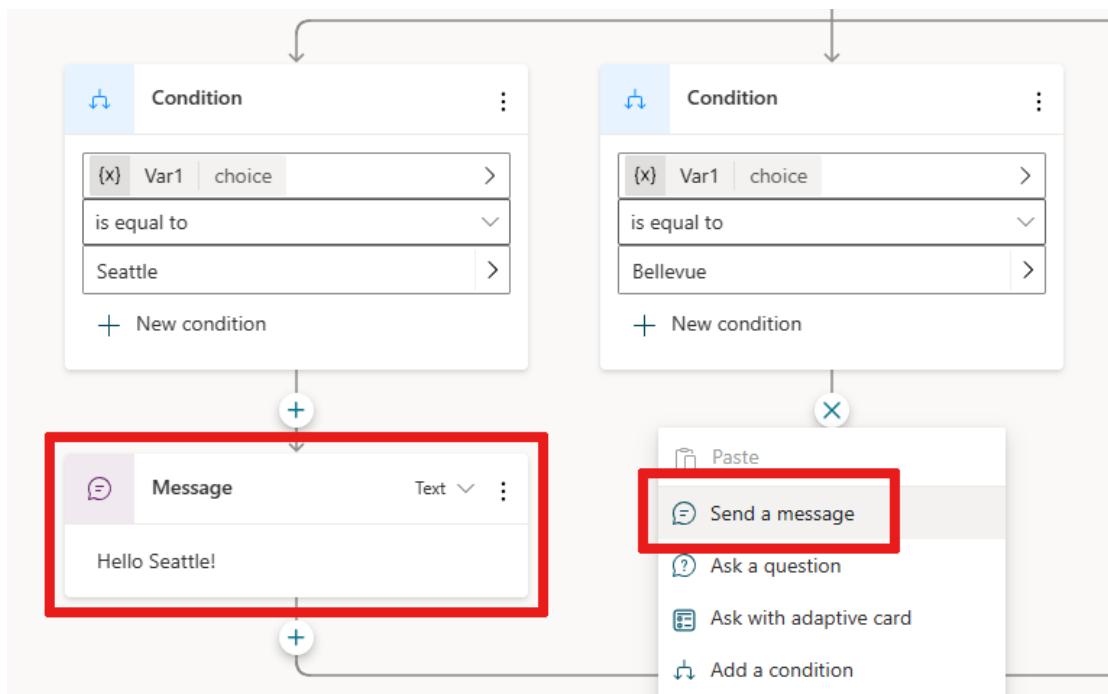
The dialog tree creates separate paths in the conversation, depending on the customer's response. This path leads the customer to the best resolution for each user response.



In the forked conversation path, the nodes automatically check for 'Seattle' in one path and 'Bellevue' in the other path to take the best next step.

- Finally, select the (+) icon below each of the **Condition** nodes to add a **Message** node in each branch.

Add a small message like 'Hello Seattle!' in the Seattle branch and 'Hello Bellevue!' in the Bellevue branch.

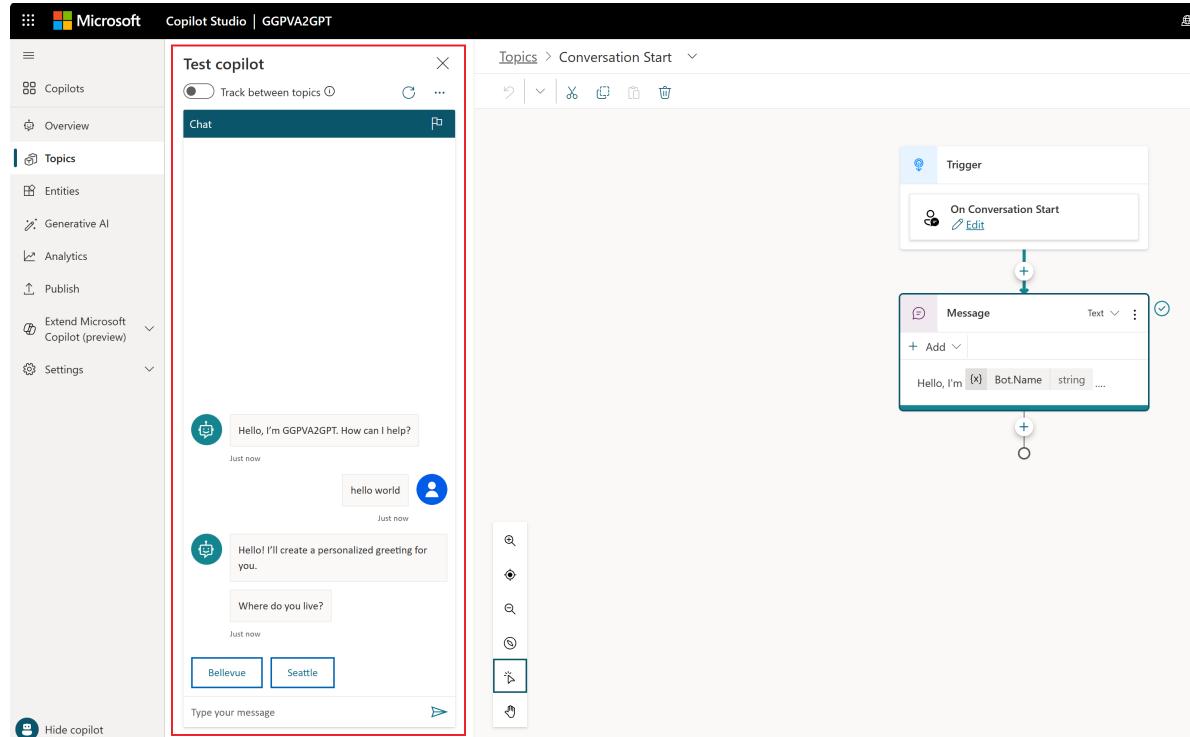


8. Select the **Save** icon at the top to save your trigger.

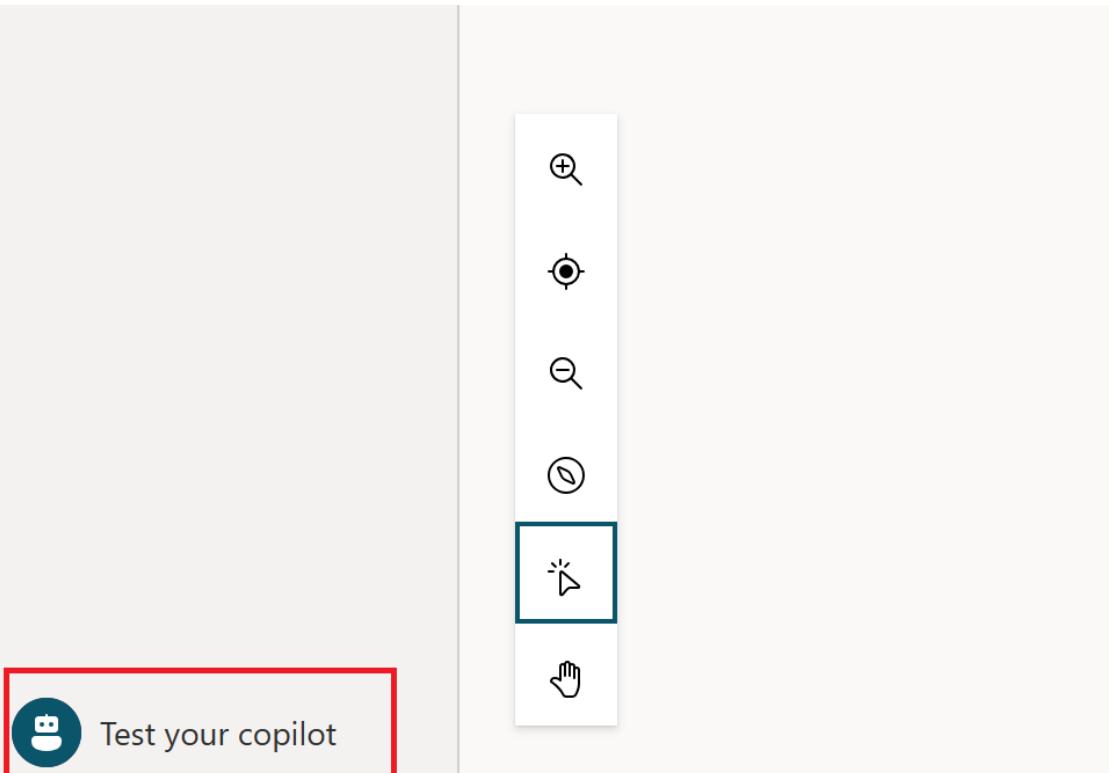
You now have a basic branching dialog tree, congratulations! You can begin to create more complex versions of this tree by incorporating [variables](#), [entities](#), and [Power Automate flows](#).

Test your content in real time

With content authored into a dialog tree, test the conversation in real time to see if it's working as you expected. You can test, using the **Test your copilot** pane.

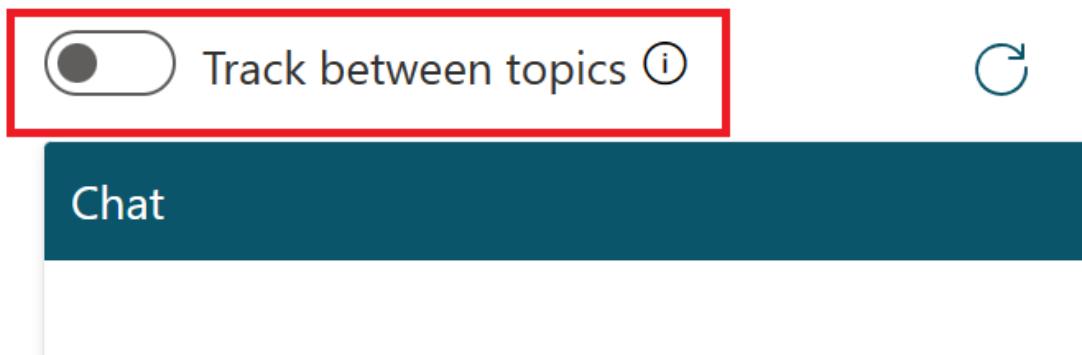


1. If the test copilot pane isn't showing on your screen, select **Test your copilot** at the bottom of the navigation menu.



2. Try out your newly authored dialog tree by typing into the test copilot pane.
3. Turn on **Track between topics** at the top, which enables you to follow along with the copilot as it executes your dialog. You see parts of your dialog tree highlighted as the copilot gets to that portion of the dialog.

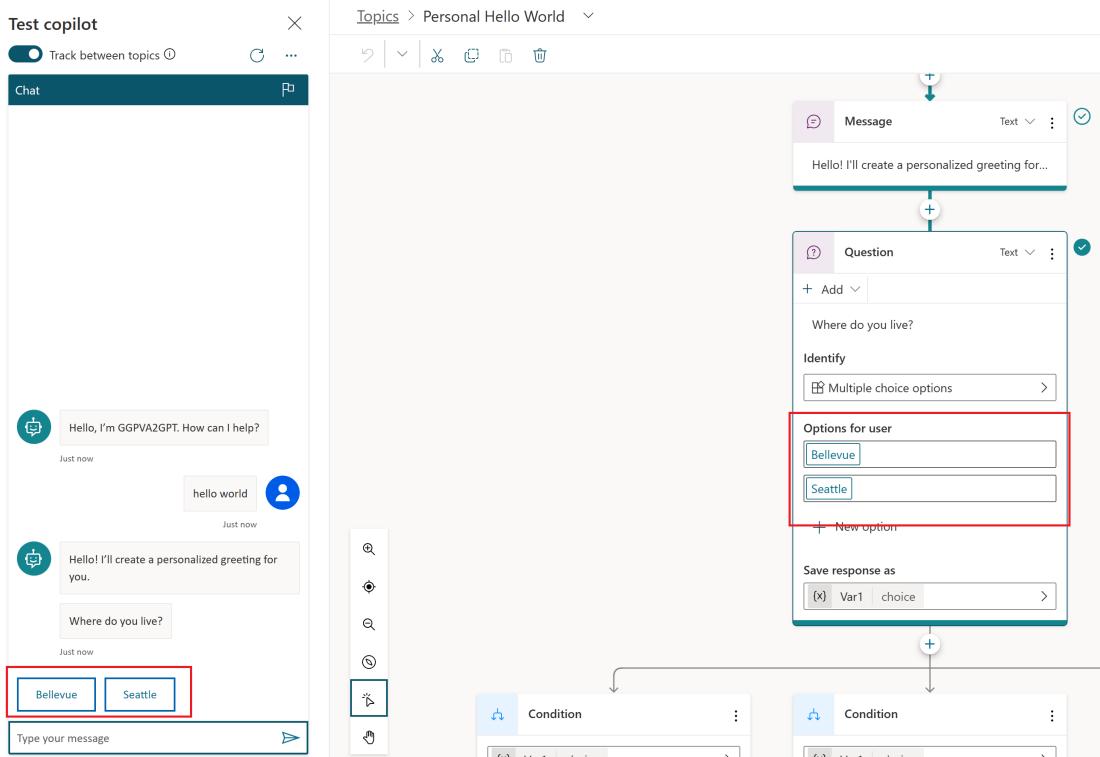
Test copilot



4. Type "hello world" in the chat window, and send the message to the copilot. You see the top portion of your dialog tree highlighted in green, and **Seattle** and **Bellevue** presented as user options in the test copilot pane.

The copilot is now waiting for you to respond, displaying suggestions on how to respond. These suggestion buttons reflect what you authored within your dialog tree in the **Ask a question** node.

In the test copilot, you can either select these suggestion buttons to continue, or you can enter your response into the chat window.



5. Continue the dialog by selecting the Seattle branch.

You see the chat stop once you reach the bottom of this branch. If you author more content, the dialog continues, but since we only created a small dialog tree, we reach the end of the content quickly.

This test experience empowers you to quickly create and test a conversation to ensure that the conversation flows as anticipated. If the dialog doesn't reflect your intention, you can change the dialog, and save it. The latest content is pushed into the test copilot, and you can try it out again. The published version of the copilot doesn't change, so feel free to play around with your content until you're happy with it.

Publish your copilot - web app

Once you're fine with the content authored in your copilot, you can publish your copilot to a website.

1. In the navigation menu, select the **Publish**.
2. Select **Publish** to activate your copilot. If the publish is successful, you see a green banner on the top of the page.

The screenshot shows the Microsoft Copilot Studio interface. On the left, there's a navigation sidebar with icons for Copilots, Overview, Topics, Entities, Generative AI, and Analytics. Below these are sections for 'Extend Microsoft Copilot (preview)' and 'Settings'. The main area is titled 'Publish' and contains a message about publishing being turned off. It features a large 'Publish' button with an upward arrow icon. Below it is a section for 'Published copilot details' which states 'Your copilot has not been published yet.' There's also a 'Optimize your copilot' section with three small preview cards.

3. Select the demo website link under **Share your copilot** to see it in action on a demo website.

A new window opens in your browser. If you don't see a new window, check if a pop-up blocker is active and, if so, allow the window to be opened. Usually, you can allow pop-ups from the URL field directly.

The webpage demonstrates what your copilot looks like to an end-user who comes to your webpage. The copilot canvas is at the bottom. You can interact with it by typing into the window or by selecting a starter phrase from the provided options.

For more information on publishing your copilot to other channels, see the documentation under [Publication key concepts](#).

Analyze the performance of your copilot

When your copilot completes interactions with users, the statistics are recorded in your copilot's analytics. To view analytics, select **Analytics** from the navigation menu.

Here, you can find key performance indicators (KPIs) showing:

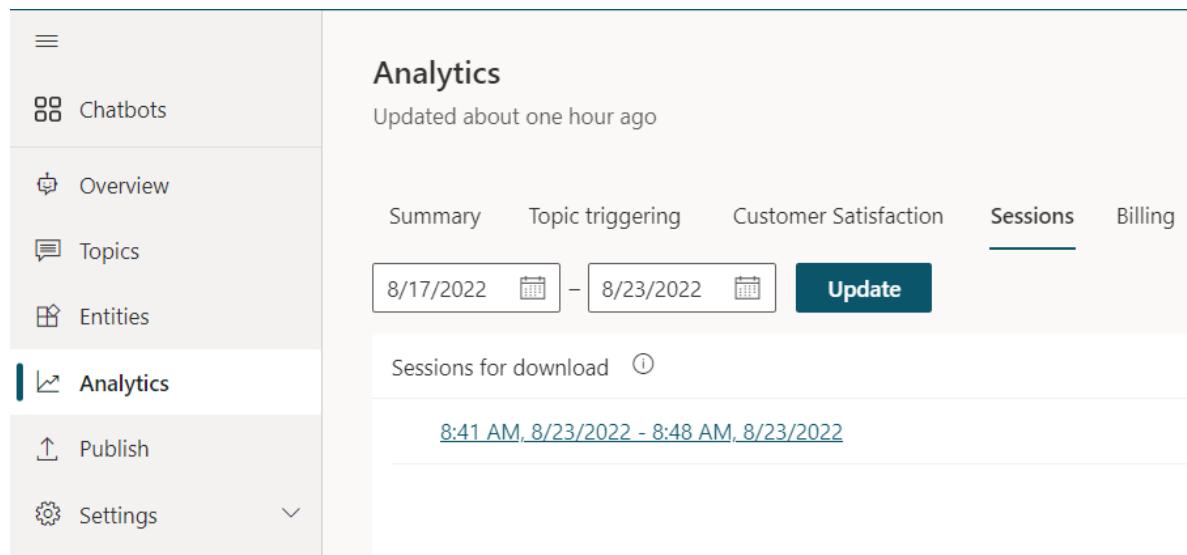
- The volume of sessions your copilot handled.
- how effectively your copilot was able to engage end-users and resolve issues
- escalation rates to human agents
- abandonment rates during conversations

You find customer satisfaction information at the KPI level and in the **Customer Satisfaction** tab.

 **Note**

There is up to a 1-hour delay between when the conversations occur and when the statistics for those conversations appear in the analytics views. Also, all interactions with the copilot are logged in analytics, including interactions from your demo website, custom website, or test copilot.

You can also view detailed session history and transcripts by selecting **Analytics > Sessions**. Here, you can download a CSV file with the full session transcript. You can tune the performance of your copilot and change the content in your topics to improve your copilot's efficiency.



The screenshot shows the Microsoft Copilot Analytics interface. On the left is a sidebar with navigation links: Chatbots, Overview, Topics, Entities, Analytics (which is selected and highlighted in blue), Publish, and Settings. The main area has a title 'Analytics' and a subtitle 'Updated about one hour ago'. Below this are tabs: Summary, Topic triggering, Customer Satisfaction, Sessions (which is underlined in blue to indicate it is active), and Billing. Underneath the tabs are two date input fields: '8/17/2022' and '8/23/2022', separated by a calendar icon, with an 'Update' button to their right. A section titled 'Sessions for download' contains a link: '8:41 AM, 8/23/2022 - 8:48 AM, 8/23/2022'.

For more information, see [Analytics key concepts](#).

Community help and support for Microsoft Copilot Studio

Article • 02/08/2024

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

You can get support for Copilot Studio on the community forums, and features released for general availability are eligible for support through Microsoft Support.

For training and certification preparation, see the [Copilot Studio training paths and modules](#), which include the [Create copilots with Microsoft Copilot Studio] learning path that can help prepare you for [Exam PL-200: Microsoft Power Platform Functional Consultant](#).

Microsoft Copilot Studio community forums

Check community forums to find user solutions that might help you.

- [Ask the community](#)

Visit the Copilot Studio community to get answers and tips directly from other Copilot Studio users.

- [Submit an idea](#)

Do you have a great idea that makes Copilot Studio even better? We'd love to hear from you!

Microsoft support

If you're an administrator of your Microsoft Copilot Studio tenant, you can use the Microsoft Power Platform admin center to request support from Microsoft.

1. Sign in to the Power Platform admin center [↗](#).
2. In the side pane, select **Help + Support**, and then select **New support request**.

The screenshot shows the Microsoft Power Platform admin center interface. On the left, there's a navigation sidebar with several sections: Home, Environments, Advisor (Preview), Analytics, Billing, Resources, Help + support (which is selected and highlighted with a red box), Data integration, Data (preview), Policies, and Admin centers. The main content area has a header with 'Get Help + support', 'Export to Excel', and a search bar. Below the header, it says 'Help + support' and lists 'Support requests' and 'Known issues (Preview)'. A welcome message says 'Welcome to the Power Platform support portal' and encourages users to create a new support request. A prominent purple button labeled 'New support request' is also highlighted with a red box. In the bottom right corner of the main area, there's a circular 'Feedback' button with a plus sign.

For more information about help and support in the Power Platform admin center, see [Get Help + Support](#) at the Microsoft Power Platform admin documentation library.

AI-based copilot authoring overview

Article • 12/11/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

With large AI language models, Microsoft Copilot Studio transforms how you build copilots. A copilot can significantly reduce manual authoring and configuration.

- **Create an instantly useful copilot.** With no manual authoring of topics required, an "empty" copilot can respond to your users with relevant information.
- **Author topics, using natural language.** Describe what you want your topic to do, and Copilot Studio creates it for you. Your copilot includes conversational responses and multiple types of nodes. Use the suggested default topic or as a starting point for further development.

Prerequisites

- An account for Microsoft Copilot Studio.

ⓘ Note

If you need a Microsoft Copilot Studio account or want to see how to build a copilot, see the [Quickstart guide for building copilots with generative AI](#).

- The [current version of Microsoft Copilot Studio](#). The copilot type shouldn't be **Classic**. Classic copilots have **(classic)** added to their name, for example "Contoso store hours (classic)".

	Name	Bot type
	Contoso Yarn Sales	...
	Contoso store hours (classic)	... Classic

- AI-based authoring might be subject to usage limits or capacity throttling.

Generate a copilot's responses on-the-fly

Copilot Studio uses a natural language understanding model to analyze the user's question and determine the right topic. Typically, [you create multiple topics](#) within a copilot to account for what a user might ask.

Sometimes, a copilot user asks a question that has no built topic. By default, the copilot prompts the user to rephrase their query. After two prompts, if the copilot still can't determine the user's intent, the copilot escalates to a live agent through the [system Escalate topic](#).

You can specify a [system Fallback topic](#) to customize the response and actions the copilot takes, but this topic isn't always helpful for the user.

The [Boost conversations](#) option in Copilot Studio helps solve that issue by using the natural language processing capabilities of Azure OpenAI. OpenAI's GPT technology with [the AI already in Copilot Studio](#) include transformer-based natural language understanding that helps the copilot to:

- Understand a user's intent by parsing what they type and determining what they're asking.
- Find, collate, and parse relevant information from a URL you specify.
- Create a plain language response for the copilot user.

In other words, if the copilot doesn't have an answer for the user's question, it can get the information and create an "on-the-fly" answer.

See the [Boost conversations](#) article for how to set up and use **Boost conversations**. You also learn how to select effective URLs.

Create and edit topics by talking to AI

A copilot author usually creates multiple, [individual topics](#), with each topic relating to an issue or action.

Topic authoring can take time, which often requires specialized knowledge in conversational user experiences and deep technical or domain knowledge. These requirements aren't always possible in every organization. For example, [fusion teams](#) work in multiple disciplines directly in the Copilot Studio authoring canvas.

The **Create with Copilot** option in the Copilot Studio canvas lets you describe what you want, then the AI produces a topic path that achieves your goal. Copilot Studio combines natural language understanding models with Azure OpenAI to:

- Understand what the copilot author wants to achieve by parsing their request.
- Make nodes within a topic work together and construct each topic for the best effect.
- Generate a series of connected nodes that together form one full topic.
- Use plain language in user-facing node text that aligns with the copilot author's request.

Instead of copilot authoring that takes several hours, it can instead take minutes to complete.

To create and edit topics with AI, see the [Create \(and edit\) with Copilot](#) article.

Next steps

- Get up and running with the [Quickstart guide for building copilots with generative AI](#)
- Dive in and start using the [Boost conversations](#) capability in your copilots.
- Have a conversation with the AI to [Create \(and edit\) with Copilot](#).

Quickstart guide for building copilots with generative AI

Article • 12/13/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

Microsoft made copilot build even simpler with AI-powered capabilities in Microsoft Copilot Studio. Whether you're new to conversational AI or a seasoned developer, our intelligence platform is with you and your team every step of the way.

This quickstart helps you get started quickly to create and boost a copilot with expanded natural language understanding (NLU) capabilities. With intelligent authoring of AI-powered copilots, create a new topic or edit an existing one. You can describe what you want the copilot to do. Or, your copilot can generate conversational responses, if there's no matching topic.

Prerequisites

- An account for Copilot Studio. If you don't have an account, see the [Microsoft Copilot Studio introduction website](#) and select **Try free**.

ⓘ Note

Personal Microsoft accounts aren't supported. Use a work account instead.

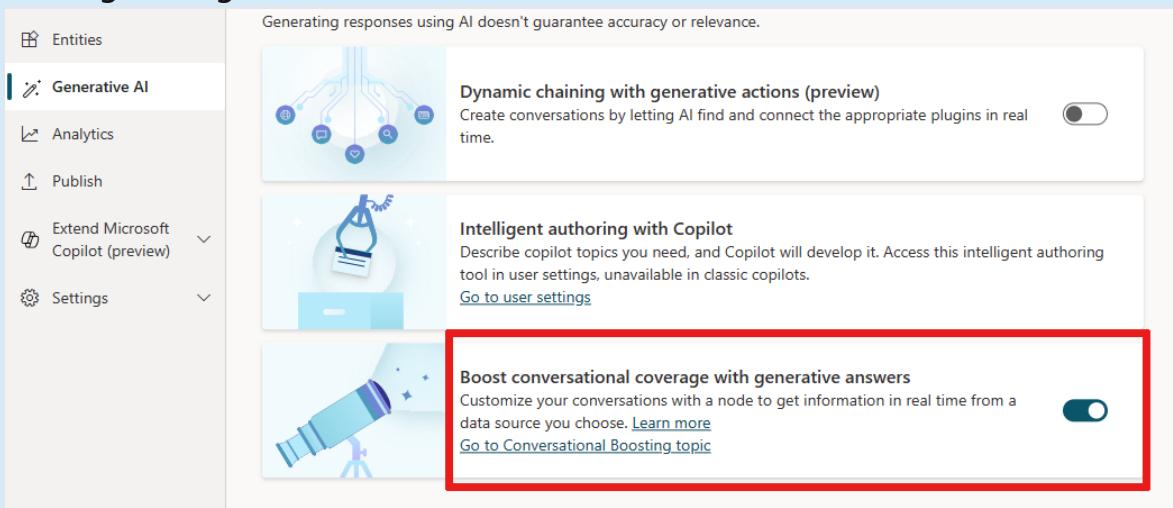
- Supported browsers include Microsoft Edge, Chrome, and Firefox.
- Use the [current version of Copilot Studio](#).
- When creating your copilot, avoid the **(classic)** type, as shown, added to the copilot name. The classic type is for an older version.

Name	Bot type
 Contoso Yarn Sales	...
 Contoso store hours (classic)	Classic

- Your copilot must be created in the US region. View the list of [Supported languages](#).
- Generative AI might be subject to [usage limits](#) or capacity throttling.

ⓘ Important

To enable **Boost conversations**, your admin can turn on **Boost conversational coverage with generative answers**.



The screenshot shows the Microsoft Copilot Studio interface. On the left, there's a sidebar with options like Entities, Generative AI (which is selected), Analytics, Publish, Extend Microsoft Copilot (preview), and Settings. The main area displays three cards: one about generating responses with AI, another about dynamic chaining with generative actions (which is currently off), and the third, which is highlighted with a red box, is about boosting conversational coverage with generative answers. This third card includes a description, a 'Learn more' link, a 'Go to Conversational Boosting topic' link, and its own toggle switch which is turned on.

For more information, see [Generative Answers](#).

How copilot conversations work

Copilot Studio uses a [customized NLU model and AI capabilities](#) to understand what a user types, then responds with the best copilot topic. A copilot topic is a portion of a conversational thread between a user and the copilot. Topics are linked together to form nodes. For more information, see [Create and edit topics](#).

For example, you might create a copilot for your customers to ask common questions about your business. Your support overhead is reduced by deflecting support calls. In the copilot, you can create a topic about your store's opening hours and name the topic **Store hours**.

When a customer asks a question such as "When do you open?" or "What are your opening hours?", the copilot uses NLU to understand the *intent* behind the question. The copilot matches that intent to the best topic, the **Store hours** topic.

The copilot follows the *conversation flow*, which is a group of connected nodes, that you define in the **Store hours** topic. These questions use `if/else` arguments, or logic gates, to determine which store the customer wants. The final output of the topic shows the hours and contact information for that store's location.

However, you can't anticipate all the types of questions your customers ask. To help mitigate this, Copilot Studio incorporates a powerful new AI-powered capability that uses the latest advancements in NLU models. With **Boost conversations** enabled and your copilot linked to a public or Bing-indexed website, your copilot automatically generates responses. These responses are conversational, plain language, and don't depend on the copilot builder to create topics for every eventuality.

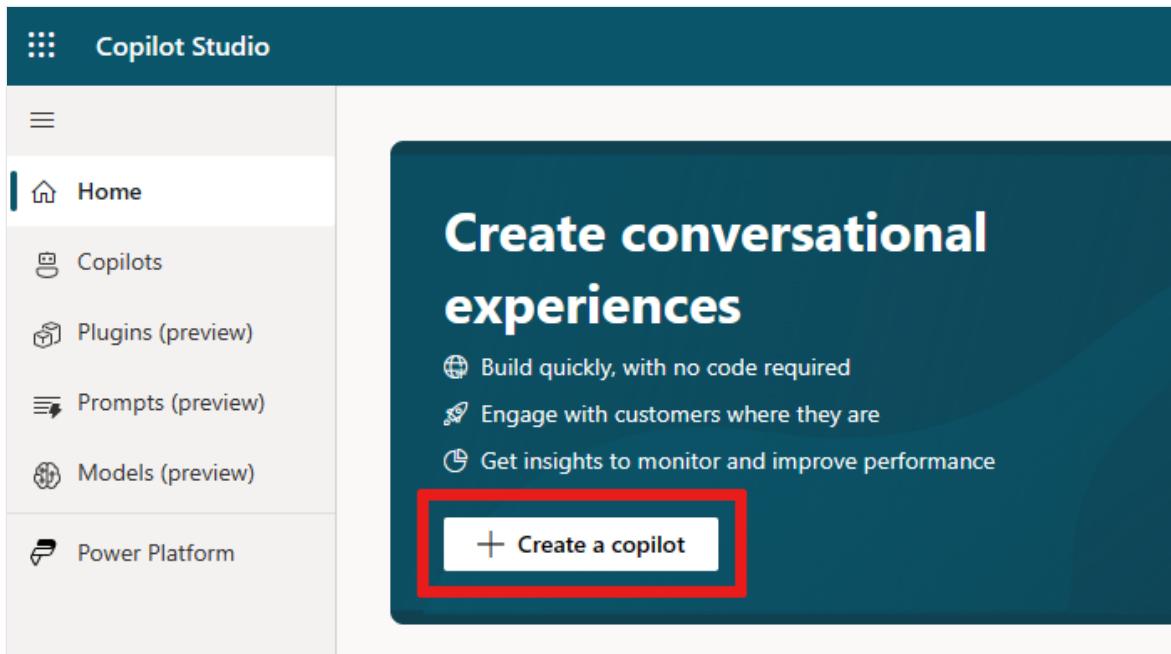
Your copilot uses AI powered by the Azure OpenAI GPT model, which is also used in Bing, to create copilot topics from a simple description of your needs. Similarly, you can modify and update any topic in your copilot by describing the changes you want to make.

Ready to get started? The first step is to create your copilot.

Create a boosted copilot

For any user-sent message that can't be matched to an existing topic, your copilot can look for an answer on a fallback website. The copilot turns the answer into a simple message that it sends to the user.

1. Go to the [Microsoft Copilot Studio home page](#).
2. You can select **Create a copilot** from the **Home** page or **+ New copilot** from the **Copilots** page.

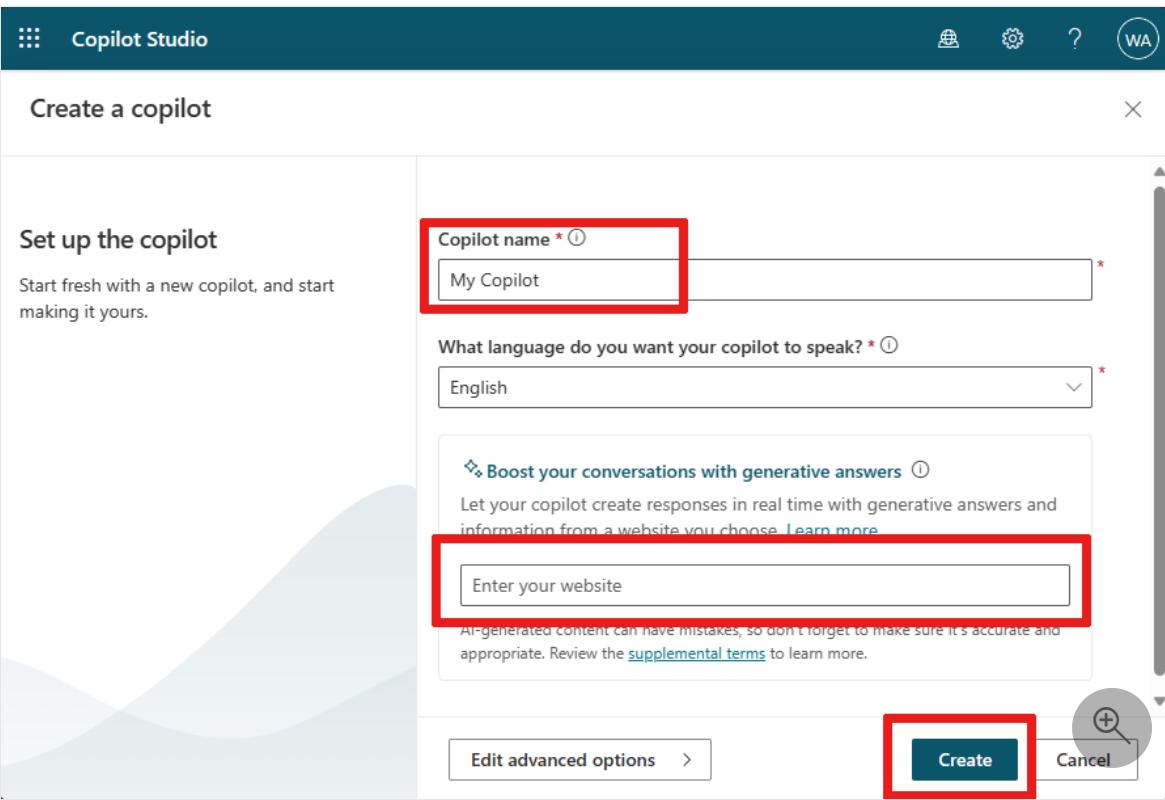


3. Enter a name for your copilot and add a fallback URL. This fallback website is where the copilot can search for answers if it can't find the right topic for a user question.

 **Tip**

Any URL with text works, for example <https://www.microsoft.com/en-us/store/>.

To add a fallback URL later, after you create a copilot, go to **Generative AI** in the navigation menu. Add your URL to the **Websites** field. Select **Save** at the top.



ⓘ Note

The copilot creation only prompts you for one fallback website. You can add other data sources, including internal resources like Sharepoint or OneDrive, and public websites. For more information about including more data sources, see [Use Copilot Studio to edit a topic](#).

4. Select Create.

For more information, see the [Generative answers](#). You can also find instructions for enabling boosted conversations in copilots you already created.

Create a new topic in Copilot Studio

1. With your copilot open on the Topics page, select + Add > Topic > Create from description. You might need to select Hide copilot in the navigation menu for a better view.

Your bot may not work as intended right now due to your organization's data loss protection policy. Check affected topics or contact your admin. [Learn more](#)

Copilots

Topics

Entities

Generative AI

Analytics

Publish

Extend Microsoft Copilot (preview)

Settings

Test your copilot

+ Add

Topic

Plugin action (preview)

Microsoft Copilot plugin (preview)

From blank

Create from description

Name	Trigger	Description
Encyclopedia	Phrases	
Goodbye	Phrases	This topic triggers when you say "goodbye".
Greeting	Phrases	This topic is triggered when you say "hello".
Lesson 1 - A simple topic	Phrases	
Lesson 2 - A simple topic	Phrases	
Lesson 3 - A topic with multiple steps	Phrases	
Personal Hello World	Phrases	

⚠ Note

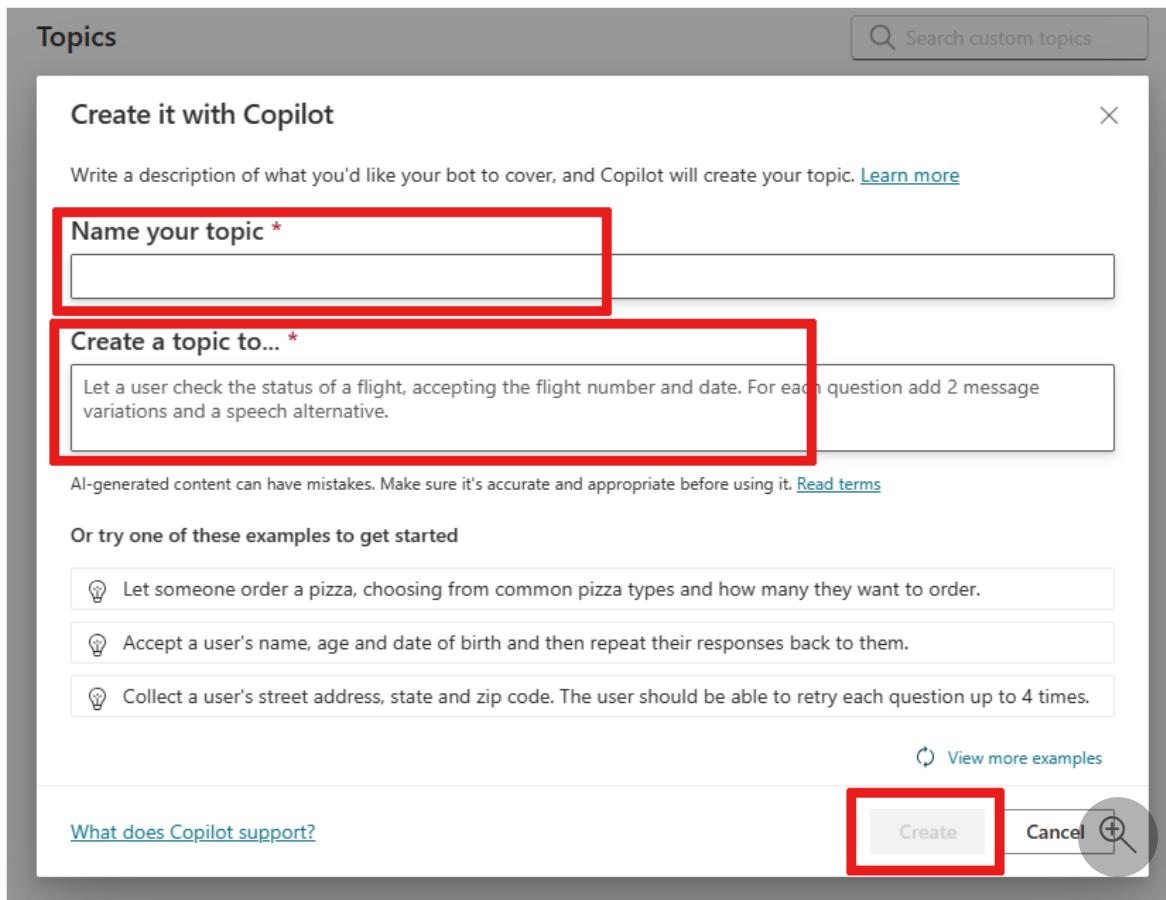
If you don't see the **Create from description** option, you may need to enable **Intelligent authoring support**:

- Select the **Settings** icon in the top menu, then **General settings**.

The screenshot shows the Copilot Studio settings interface. At the top, there are three icons: a globe, a gear (which is highlighted with a red box), and a question mark. Below these, the word "Settings" is displayed. Underneath, there is a section titled "Copilot Studio" with a blue "General settings" link, which is also highlighted with a red box. At the bottom of this section, there is a link to "Power Platform admin center →".

- Turn the switch **On** under **Build** and iterate on your topics by describing what you want.

2. In the **Create it with Copilot** window that appears, enter a name in **Name your topic**.
3. In the **Create a topic to...** field, describe your topic in simple, plain English. See the examples in the **Or try one of these examples to get started** section to understand the structure of a description. Select **View more examples** to generate new examples.



ⓘ Note

Normally, to test the basic chat functionality, you can select an example to use it. But this quickstart helps you use a fallback website. The examples don't have a fallback website.

4. Select **Create**.

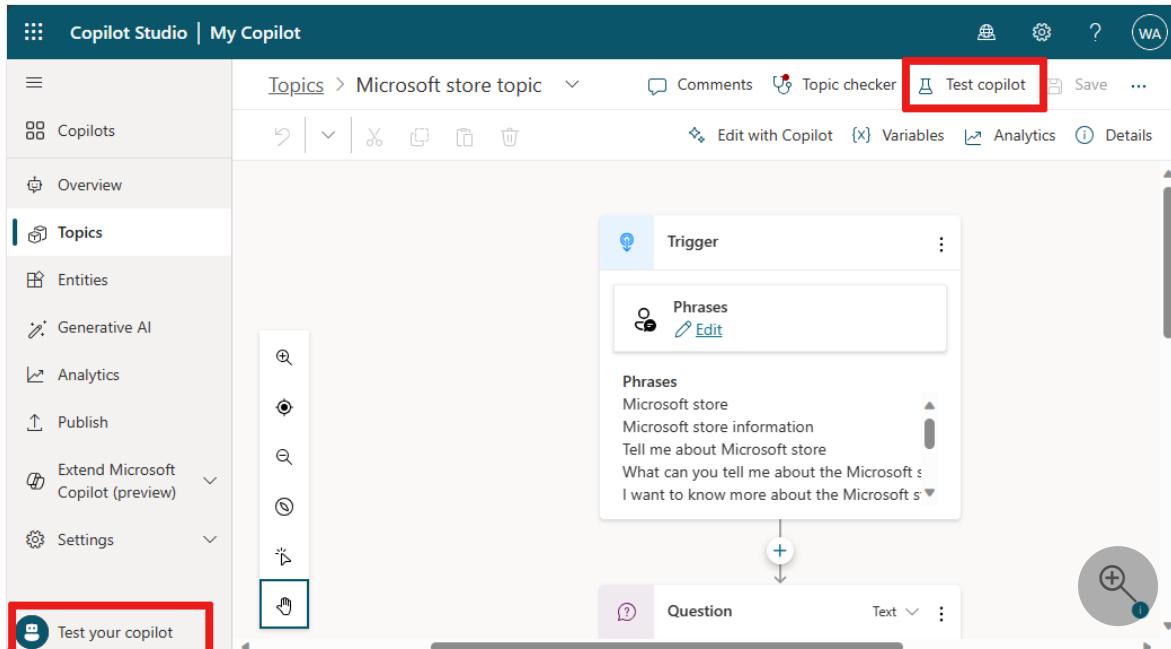
Once your topic is created, your copilot is ready for testing.

You can explore ways to extend and enhance your boosted copilot and topic in [Create and edit with Copilot](#).

Test your copilot's boosted conversational reach

When testing, you can see how a copilot conversation progresses with each question and answer, then fine-tune a topic directly:

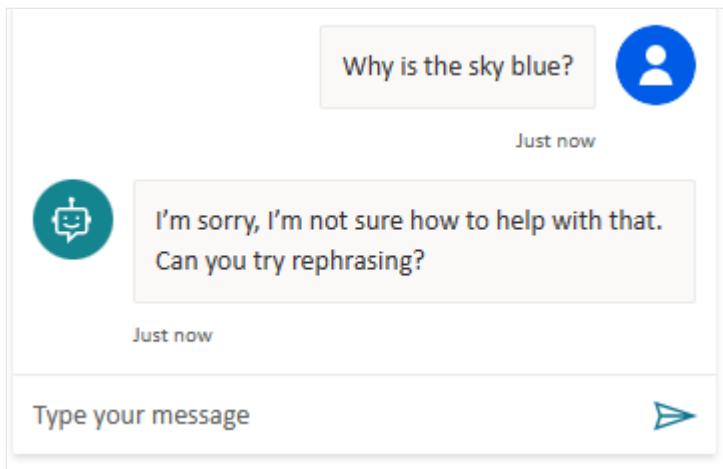
1. Select one of your topics, then choose **Test copilot** above the authoring canvas.
- Alternatively, select **Test your copilot** from the side navigation menu.



2. In the **Type your message** prompt, ask the copilot about the return policy of the organization whose website you linked to. For example, you can type *What is your return policy?* or *How do I get to your store?*.

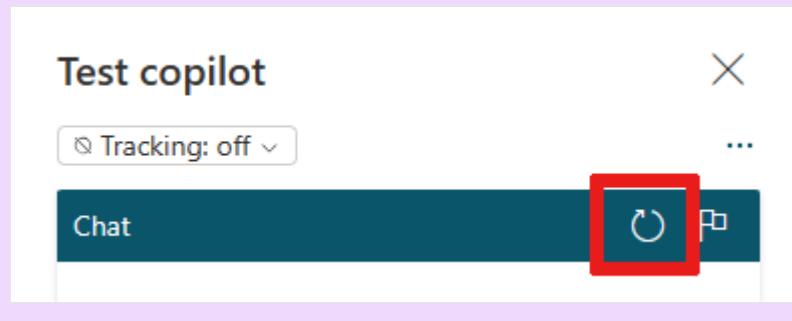
The copilot retrieves information from the website and returns a response. The response provides a link to where it found that information and allows you to provide feedback.

3. (Optional) Try asking the copilot about something not on your fallback website, such as *Why is the sky blue*. Since the copilot can't find a relevant copilot topic or answer, it replies with a **system fallback topic** and asks you to rephrase the question.



ⓘ Note

After you test your copilot, you can select the reset icon at the top of the **Test copilot** pane to clear previous conversations. Resetting makes it easier to follow the flow of the current topic without getting confused by previous conversations.



You can return to the authoring canvas at any time to revise the conversation path. The **Test copilot** pane automatically refreshes when you select **Save** after editing your topics.

To troubleshoot error codes in the chat, see [Error codes: Microsoft Copilot Studio](#).

Add features to further develop your copilot

You can enhance your copilot to make it unique and enjoyable. Try adding images and video clips, adaptive cards, entities, and variable expressions.

For more information, see [Key concepts - Enhanced authoring](#) or continue your copilot-building journey by exploring the rest of the [Microsoft Copilot Studio documentation](#).

Generative answers

Article • 12/15/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

Generative answers in Microsoft Copilot Studio allow your copilot to find and present information from multiple sources, internal or external, without created topics.

Generative answers can be used as primary information sources or as a fallback source when authored topics can't answer a user's query. As a result, you can quickly create and deploy a functional copilot. You don't need to manually author multiple topics that might not address all customer questions.

In the past, when a copilot can't determine a user's intent, it asks the user to rephrase their question. If after two prompts, the copilot still can't determine the user's intent, the copilot escalates to a live agent, using the [system Escalate topic](#).

Today, before involving a live agent, the copilot uses natural language processing (NLP) to:

- Parse what a user types to determine what they're asking.
- Find, collate, and parse relevant information from a specified source. This source can be your company's website, or from multiple sources, including Sharepoint and OneDrive for Business.
- Summarize search results into plain language delivered to the copilot user.

This article helps you get started, using generative answers as a fallback topic, when a user's intent can't be addressed by existing copilot topics.

ⓘ Note

Generative answers with search and summarize discuss how your copilot can query information sources, using generative answers in a single topic node.

Your workflow might look like:

1. You create a copilot and enable generative answers. You test it thoroughly.
2. After testing, you publish your copilot to instantly provide answers, help, and guidance to your copilot users.
3. You create individual topics for frequently asked questions. These topics might develop from [analytics from previous copilots](#) or existing support issues.

Generative answers as a fallback

When a copilot can't find a matching intent (topic) for the user's query, it uses generative answers and tries to answer a question. This behavior is called "Generative Answers for fallback." If the user's intent isn't matched to topics or generative answers, the fallback [system topic](#) is used. System topics can escalate a query for the copilot.

Generative answers aren't limited to fallback scenarios. Your copilot can also use other web sites, external or internal web sources, and knowledge sources such as SharePoint or OneDrive for Business.

Generative answers can use these sources:

- External resources:
 - [Bing Web Search](#)—doesn't require external configuration
 - [Bing Custom Search](#) ↗—requires external configuration
- Internal resources:
 - SharePoint
 - OneDrive for Business
 - Documents uploaded to Dataverse
 - Custom data (internal or external): supply your own source, such as a Power Automate Flow or from Skill.

Note

You can expand your copilot's use of generative answers in [Generative Answers with Search and Summarize](#).

Source authentication

In addition to [URL considerations](#), you might need to authentication for your sources. For example, if you use an internal SharePoint site or OneNote as a source for [generative answers](#).

For more information, see [Information sources](#).

Prerequisites

- An account for Microsoft Copilot Studio.

 **Note**

If you don't have a Microsoft Copilot Studio account, or you haven't created copilots before, see the [Quickstart guide for building copilots with generative AI](#).

- If you already have a copilot created, enable the **generative answers** option in the [Generative AI page](#).
- Review AI response generation training, model, and usage in the [FAQ for generative answers](#) and [Learn more about Azure OpenAI](#).
- Generative answers might be subject to usage limits or capacity throttling.
- Languages other than English aren't supported.

Increasing your copilot's reach

1. Go to the [Microsoft Copilot Studio home page](#).
2. Select **Create a copilot** on the Home page or **New copilot** from the Copilots page.
3. Enter a name for your copilot.
4. Select a language for your copilot.
5. Provide a website you'd like the copilot to use for generating answers.

See the [URL considerations](#) section for the types of URLs you can use.

Copilot Studio

Create a copilot

Set up the copilot

Start fresh with a new copilot, and start making it yours.

Copilot name * ⓘ
My Copilot

What language do you want your copilot to speak? * ⓘ
English

Boost your conversations with generative answers ⓘ
Let your copilot create responses in real time with generative answers and information from a website you choose. [Learn more](#)

Enter your website

AI-generated content can have mistakes, so don't forget to make sure it's accurate and appropriate. Review the [supplemental terms](#) to learn more.

Create

6. Select Create.

You now see your copilot's Overview page.

Change your URL or toggle generative answers

You can customize further, after your copilot is created, from the **Generative AI** page.

- To enable or disable generative answers, toggle the option in the **Boost conversational coverage with generative answers** section.
- To change the URL, add more websites or remove them in the **Websites** section.

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](#) [Go to Conversational Boosting topic](#)

Websites ⓘ

Enter your website	Add
https://www.microsoft.com/store/	...

Websites ⓘ

Website	Data source
https://www.microsoft.com/store/	Public website

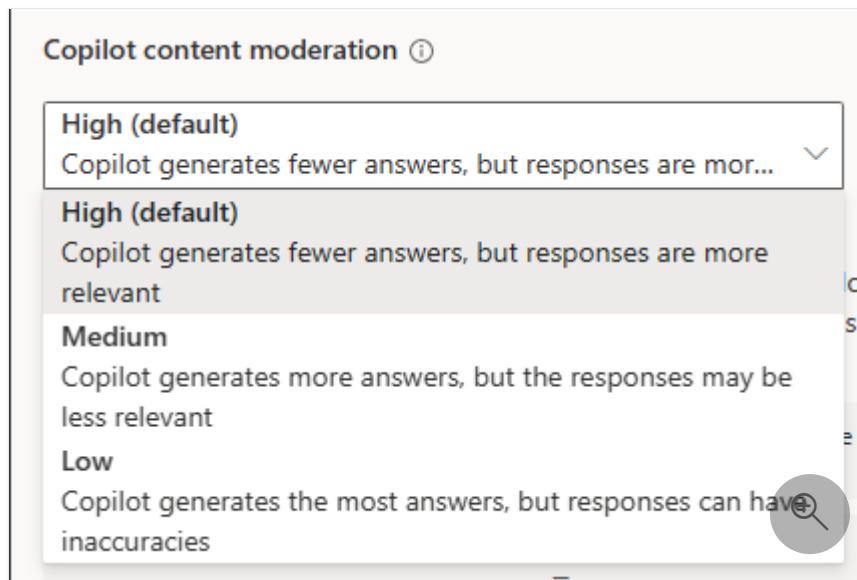
Content moderation

Adjust the content moderation settings from the **Generative AI** page.

1. Under **Copilot content moderation**, select the level you want for your copilot.

[+] Expand table

High	Medium	Low
Copilot's answers are more relevant. (default)	Copilot generates more answers, but might be irrelevant or undesirable.	Copilot generates the most answers, but might be inaccurate.



2. Select **Save** at the top of the page.

Test your copilot to see how well it responds to questions related to the content from your website. You might want to test edge case questions to decide if you need a lower moderation to be more inclusive.

URL considerations

The URL used in your copilot represents the scope of content for generating responses. There are requirements and restrictions on some URLs.

URL type and structure

- The URL can have up to two levels of depth—subpaths indicated by a forward slash `/`. A trailing forward slash, however, is allowed.

[+] Expand table

Valid	Not valid
www.contoso.com	www.fabrikam.com/engines/rotary/dual-shaft
www.fabrikam.com/engines/rotary	
www.fabrikam.com/engines/rotary/	

- If the URL redirects to another top-level site, the content isn't included in results:
For example, if www.fabrikam.com redirects to www.contoso.fabrikam.com, your copilot doesn't generate responses from content on either of those URLs.
- URLs that point to a website, requiring authentication or ones not indexed by Bing.
For example, wikis and SharePoint sites require authentication, therefore can't be used:
 - fabrikam.visualstudio.com/project/_wiki
 - fabrikam.sharepoint.com

URL domain structure

Any publicly viewable content in the URL you specify, including subdomains under a top-level domain, generate content for your copilot.

Examples of useful or unuseful domains:

- If you use www.fabrikam.com/engines/rotary, the content on www.fabrikam.com/engines/rotary/dual-shaft is also used by the copilot to generate responses.
Content on www.fabrikam.com/tools isn't used, since *tools* isn't a subdomain of *rotary*.
- If you use www.fabrikam.com (the *www* exists), the content on *news.fabrikam.com* (the *www* doesn't exist) isn't used, since *news.* is a subdomain under the top-level domain *fabrikam.com*.
- If you use *fabrikam.com*, then content on www.fabrikam.com and *news.fabrikam.com* is used, since they sit under the top-level domain *fabrikam.com*.

Social network & forum URLs

Your copilot might generate nonsensical, irrelevant, or inappropriate answers if you use a forum or social network site as your URL. Therefore, community content on social networks often increases the risk of more answers being rejected.

For more information, see the [FAQ for generative answers](#). AI is trained to avoid generating malicious and offensive responses.

Search engine URLs

Don't include URLs of search engines like *bing.com*, as they don't provide useful responses.

Test your copilot's generative answers reach

1. Select **Test your copilot** at the bottom of the navigation pane.
2. In the **Test copilot** pane, ask your copilot questions that take advantage of the generative answers capability.

Generative answers works well with a large variety of question types.

However, some types might produce less helpful responses, including:

- Personal questions.
- Questions that require authenticated access to content.
- Questions that have no related content at a specified URL.

Forming questions

- Your copilot has difficulty answering questions that require calculations, comparisons, or form submissions. Your copilot might not understand comparative and superlative terms such as better or best, latest, or cheapest in a question.
- If the copilot can't generate an answer to a question, it prompts you to rephrase the question. After two of these prompts, the copilot initiates the [system Escalate topic](#). System topics are topics automatically included with each copilot.
- To learn more about how Bing interprets the question against the URL you specify, add `site: \<your URL here>` to the end of your question to see the top Bing results for the question.
- You might need to disable the sample topics, lessons 1-3, that automatically come with a new copilot. They're used before any URLs are accessed.

Select the  next to a sample topic on your **Topics** page and toggle the **Status** to enable or disable.

Topics

The screenshot shows the 'Topics' section of Microsoft Copilot Studio. At the top, there are three tabs: 'Topics (8)', 'Plugin actions (preview) (0)', and 'System (9)'. Below the tabs is a table with columns for Name, Trigger, and Description. The table lists several topics, including 'Goodbye', 'Greeting', 'Lesson 1 - A simple topic', 'Lesson 2 - A simple...', 'Lesson 3 - A topic w...', 'Microsoft store top...', and 'Start Over'. A context menu is open over the 'Lesson 1 - A simple topic' row, featuring options: 'Details', 'Make a Copy', 'Status' (with a toggle switch), and 'Delete'. The 'Status' option and its toggle switch are highlighted with a red box.

Name	Trigger	Description
Goodbye	Phrases	This topic triggers...
Greeting	Phrases	This topic is triggered...
Lesson 1 - A simple topic	Phrases	
Lesson 2 - A simple...		
Lesson 3 - A topic w...		
Microsoft store top...		
Start Over	Phrases	

For more information, see [Use lesson topics in Microsoft Copilot Studio](#).

Tip

In your chat window, you can provide feedback on how well the AI does by selecting the "thumbs up" or "thumbs down" icon underneath the generated answer.

If you see an irrelevant or inappropriate generated response, select the thumbs down icon to let us know. You can also include more detailed feedback.

We'll use this feedback to improve the quality of the AI.

What's supported

Quotas

Quotas are default constraints applied to copilots that limit how often messages can be sent to a copilot. The purpose of quotas is to throttle the client's service load, which protects a service from being overloaded and the client from unexpected resource usage.

Copilots with generative answers enabled have a limit on the number of queries they can make derive answers from the URL you specified. Normal conversations that use copilot topics follow the [usual quotas and limitations](#).

Pricing

The use of the boosted conversations capability isn't billable and follows the [usual quotas and limitations](#).

Generative answers with Search and summarize content

Article • 12/28/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

When you create your copilot, you [enter a URL your copilot uses to generate responses](#). This URL is used in all features of the copilot. However, you can boost your copilot's conversations by using multiple internal and external information sources within individual topics.

Within a copilot's topic, you can add a **Create generative answers** node. This node allows you to specify more sources that the node searches based on your inputs. Information sources defined in the **Generative answers** node override sources you specified at the copilot level, which functions as a fallback.

These sources include:

- External sources:
 - Bing Search
 - Bing Custom Search
- Internal resources:
 - Azure OpenAI on your data
 - Documents uploaded to Dataverse
 - SharePoint
 - OneDrive for Business
 - Custom data (internal or external): Supply your own content from any source.
For example, a Power Automate Flow, a Skill, or other source.

Information sources

Different information sources have different capabilities, such as the number of inputs, the type or format of the data, and how (or if) the source needs authentication to access it.

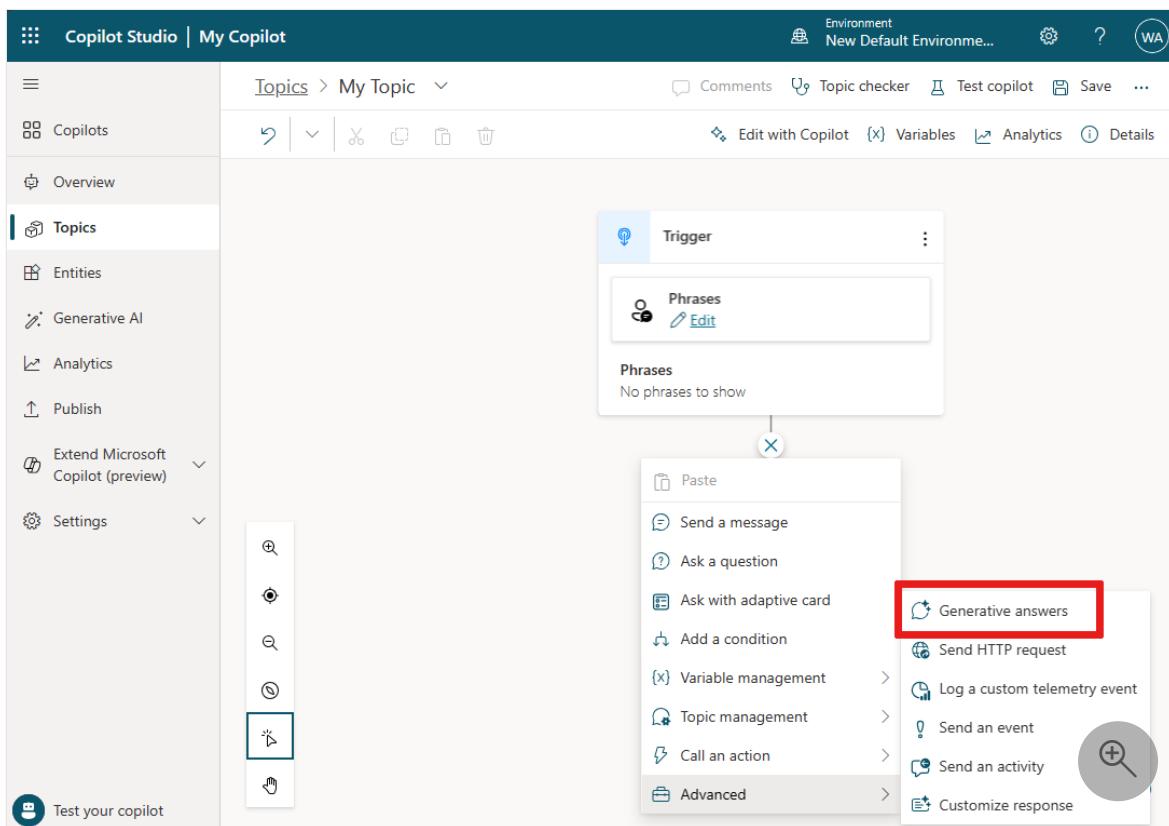
[\[+\] Expand table](#)

Name	Source	Description	Number of Inputs	Authentication
Bing Search	External	Searches the query input on Bing; returning results only from provided websites	4 public URLs (for example, <i>microsoft.com</i>)	None
Bing Custom Search	External	Query input filtered based on a website configuration external to Microsoft Copilot Studio	Each search ID can use more than 4 URLs (Bing Custom Search also provides other functionality) but you can only connect to one search ID	None
Azure OpenAI on your data	Internal		Defined by your Azure OpenAI Service connection	Bot user's Microsoft Entra ID authentication
Documents	Internal	Searches documents uploaded to Dataverse, returning results from the document contents	Limited by Dataverse file storage allocation	None
SharePoint	Internal	Connects to a SharePoint URL, uses GraphSearch to return results	4 URLs	Bot user's Microsoft Entra ID authentication
OneDrive for Business	Internal	Connects to a OneDrive for Business URL, uses GraphSearch to return results	4 URLs	Bot user's Microsoft Entra ID authentication
Custom data	Internal	Uses a JSON code block to define the URLs and content to use	One variable, populated with the JSON results to be summarized	Dependent on source

Bot user authentication for information sources means that when a specific user asks a question of the bot, the bot will only surface content that that specific user can access.

Add a generative answers node

1. Select the **Topic** page and open a topic. Find where you want to use generative answers.
2. Select the plus icon to open the new node menu.
3. Under **Advanced**, select **Generative answers**.



4. A new node called **Create generative answers** is added to your topic and opens the **Properties** pane automatically. Or, access the **Properties** pane by selecting the node's **...** then **Properties**.

You can specify and configure your new data sources:

- Use a Bing Custom Search to search many websites
- Use a connection to Azure OpenAI on your data
- Upload documents to use as a data source (preview)
- Use content on SharePoint or OneDrive for Business
- Use a custom data source

Authentication

Some sources require authentication, since the copilot makes calls on behalf of the user in the chat window. Calls use the account credentials from *powerva.microsoft.com*.

The authentication settings configured in the copilot need manual authentication with the **Service Provider** type of **Microsoft Entra ID**.

To configure authentication and create a Microsoft Entra ID, see:

- [Configure user authentication in Microsoft Copilot Studio](#).
- [Configure user authentication with a Microsoft Entra ID](#).

Include delegated permissions for **Microsoft Graph**:

1. `Files.Read.All`
2. `Sites.Read.All`

Supported content

Generative answers obtain content stored in these formats:

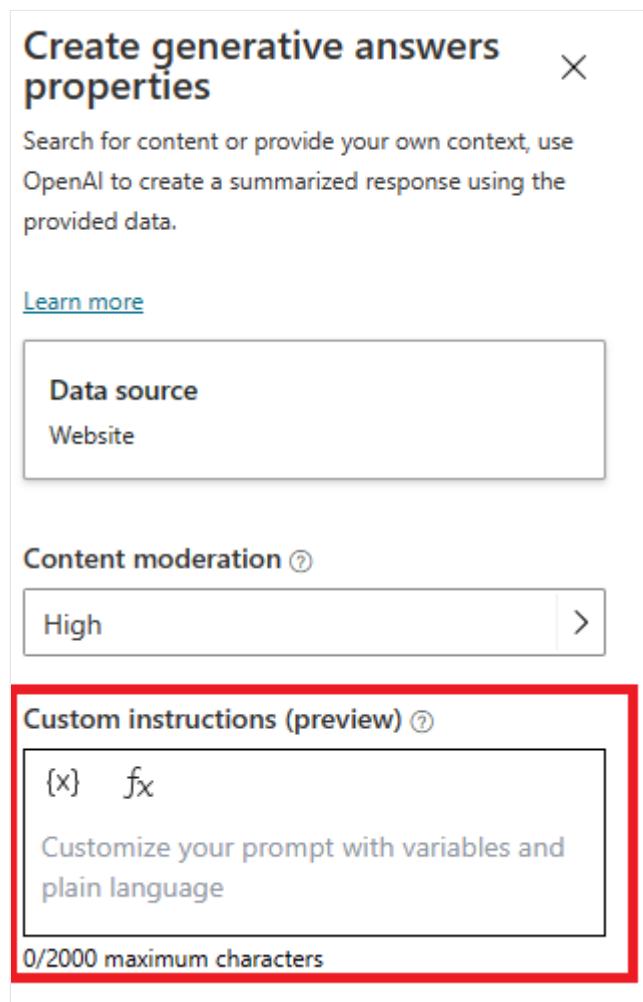
- SharePoint pages (aspx pages)
- Word documents (docx)
- PowerPoint documents (pptx)
- PDF documents (pdf)

Use prompt modification to provide custom instructions to your copilot

Article • 12/28/2023

Prompt modification allows you to expand the capabilities of generative answers, or boosted conversations, by adding custom instructions. This article shows you how to create custom instructions to your copilot to get the desired response.

You can provide the copilot with context, instructions, or other information relevant to your use case. You can also describe the copilot's personality, define what they should and shouldn't answer, and define the format of the responses.



Samples of prompt modifications and the resulting response:

Expand table

Custom Instruction	User question	Copilot response
You're an AI assistant that helps people find information and	What can you tell about me,	Dear John, I'm sorry to say, But I don't have info on you today. I'm just an AI

Custom Instruction	User question	Copilot response
responds in rhyme. If the user asks you a question you don't know the answer to, say so.	John Doe?	with knowledge in my brain, But without your input, I can't explain. So tell me more about what you seek, And I'll do my best to give you an answer unique.
Format the response as a series of steps, starting each step with 'Step 1:', 'Step 2:', etc. Don't use numbered lists. Each step must be bolded.	How do I add a new email account?	Step 1: Open the email application on your device. Step 2: Select the option to add a new account. Step 3: Enter your email address and password. Step 4: Follow the on-screen instructions to complete the setup process.
If a user asks about the best coffee shops, don't include competitors such as 'Java Junction', 'Brewed Awakening', or 'Caffeine Castle' in the response. Instead, focus on promoting Contoso Coffee and its offerings.	Are the coffee beans at Java Junction the same as Contoso Coffee?	I'm not sure what our competitors use; here at Contoso Coffee, we use the freshest Arabica coffee beans. In fact, we roast our own beans to ensure the best coffee experience.
Your tone should be friendly, helpful, cheerful, and expressive. - Always greet users warmly and use a smiley emoji. - Use positive language. - Offer your help proactively. - Use emojis and exclamation marks for cheerfulness. - Keep the conversation engaging with expressive language. - End conversations positively.	What's the weather like today?	Hello! 😊 It's a beautiful day! Great for a park walk. 🌳☀️ Anything else I can assist with? 😊

Best practices for custom instructions

When using custom instructions with generative answers, it's important to follow [best practices for prompt engineering](#). Here are some tips to help you get the most out of this feature:

- **Be specific:** Custom instructions should be clear and specific, so the copilot knows exactly what to do. Avoid vague or ambiguous language that could lead to confusion or incorrect responses.

- **Use examples:** Provide examples to illustrate your instructions and help the copilot understand your expectations. Examples help the copilot generate accurate and relevant responses.
- **Keep it simple:** Avoid overloading your custom instructions with too many details or complex logic. Keep your instructions simple and straightforward so the copilot can process them effectively.
- **Give the copilot an “out”:** Give the copilot an alternative path for when it's unable to complete the assigned task. For example, when the user asks a question, you might include "respond with 'not found' if the answer isn't present." This alternative path helps the copilot avoid generating false responses.
- **Test and refine:** It's important to test your custom instructions thoroughly to ensure they're working as intended. Make adjustments as needed to improve the accuracy and effectiveness of your copilot's responses.

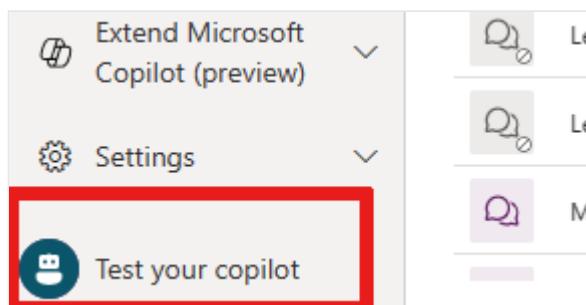
Capabilities

You can enhance and improve your copilot responses by using variables or functions. These capabilities are useful as your copilot increases scale.

- **Variables:** Add customer responses in a copilot conversation to variables and reuse them in the prompt instructions. For more information, see [variables](#).
- **Functions:** Add logic to your prompt instructions, using Power Fx. For more information, see [creating expressions](#).
- **Character limit:** Prompt instructions are limited to 2,000 characters.

Test your new prompt

1. Select **Test your copilot** at the bottom of the navigation pane.



2. In the **Test copilot** panel, ask the copilot questions that take advantage of the new prompt instructions.

Search public data or use a Bing Custom Search for generative answers

Article • 12/28/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

You can search publicly available data by using the Bing search engine API.

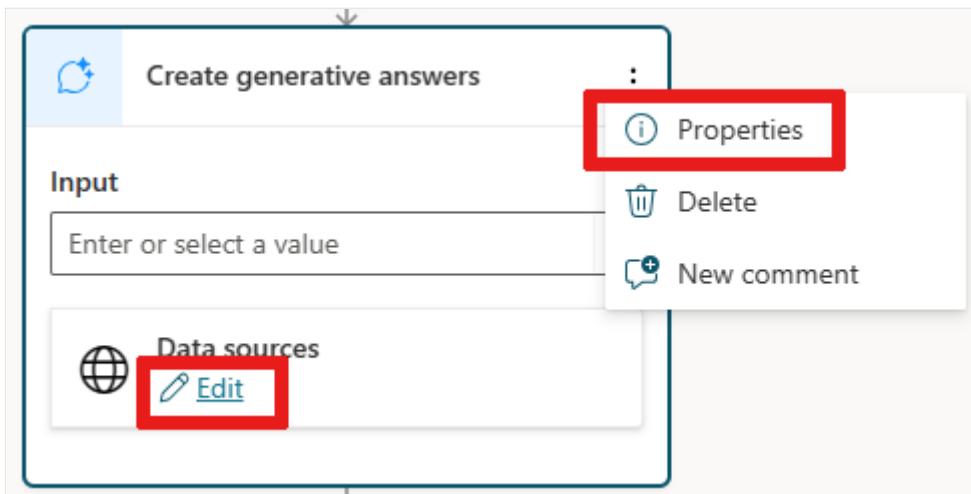
You can use the default Bing Search configuration or build a tailored search for specific content using [Bing Custom Search](#). Bing Search helps you boost your copilot by including many sources without configuring each source individually. To use Bing Custom Search as a source, you need a custom search instance connected to the [Create generative answers](#) node.

ⓘ Note

To create a Bing Custom Search, see [Quickstart: Create your first Bing Custom Search instance](#).

To use Bing search or Bing Custom Search:

1. Open the **Data source** configuration pane from one of two places:
 - a. On the **Create generative answers** node, select **Edit** under **Data sources**.



- b. Alternatively, select the **...** in the **Create generative answers** node, then select **Properties** to open a pane, and finally select **Data source**.
2. Under **Search public data** you can choose how you want to search:

Data source

Data sources
Choose up to 4 public websites and 4 Microsoft internal sites for your bot to use to create dynamic, generative answers.

Search public data [?](#)

Search public websites [▼](#)

Search public websites [▼](#) **ual input** [▼](#)

Search with Bing Custom Search [+](#)

- To use Bing Search, choose **Search public websites**.
- To use a Bing Custom Search, choose **Search with Bing Custom Search** and enter your Custom Configuration ID in the **Configuration ID** input box.

💡 Tip

To get the **Configuration ID**:

1. From the **Bing Custom Search web portal**, open the search instance you want to use.
 - a. Select **Production** from the top menu, and then under the **Endpoints** section select the **Web API** tab.
 - b. Copy the **Custom Configuration ID**.

3. Save changes to your topic.

 **Important**

Information sources defined in the **Generative answers** node take priority at the copilot level. Copilot level sources function as a fallback.

Connect your data to Azure OpenAI for generative answers

Article • 12/28/2023

ⓘ Important

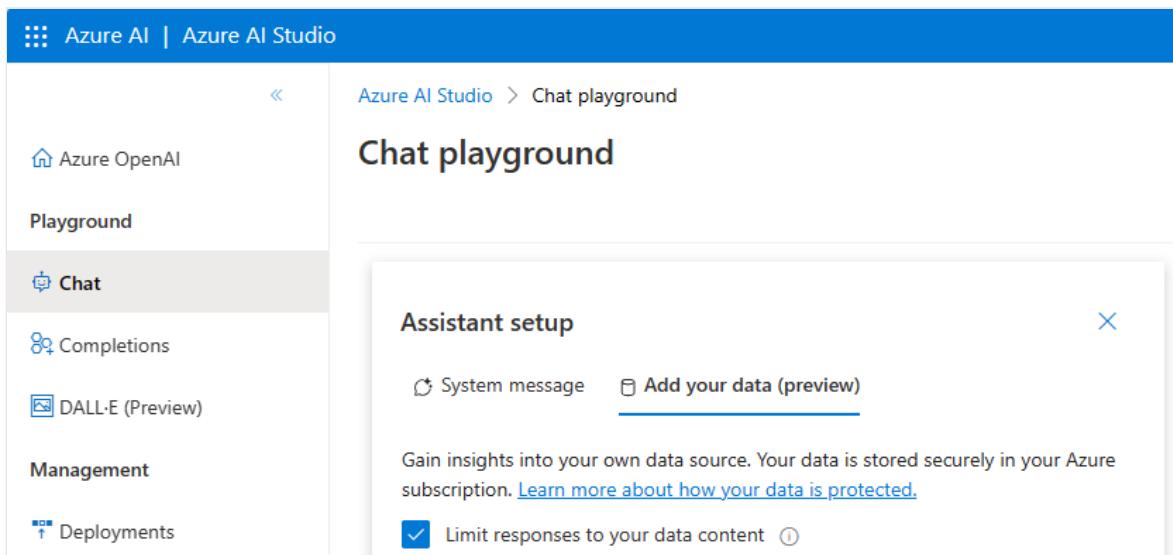
Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

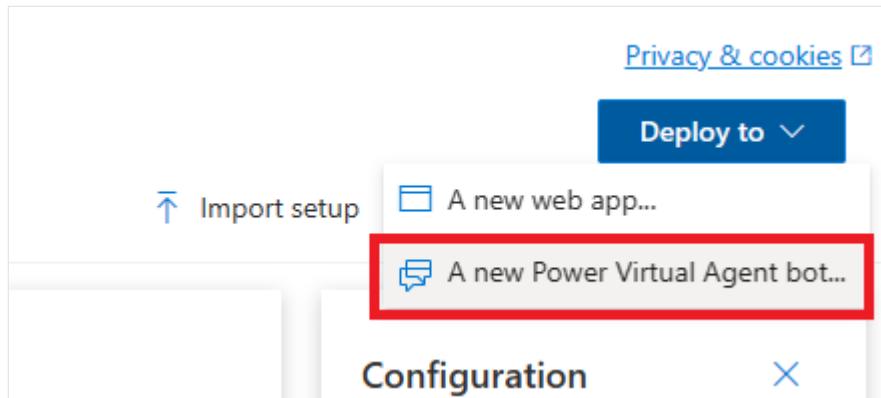
When you connect data through Azure OpenAI in Microsoft Copilot Studio, your copilots can use resources from Azure through the generative answers node. [Azure OpenAI on your data](#) works with the powerful language models. The models of OpenAI and Azure Cognitive Search index your data and provide responses while complying with your organizational policies.

Prerequisites

- Connect your data source using [Azure OpenAI Studio](#).



- Connect a Copilot Studio copilot to your data by selecting **Deploy to** and then **A new Microsoft Copilot Studio bot**. The copilot is created and automatically connects to your Azure resource in your default environment.



① Note

A **Conversational boosting** system topic is automatically generated when the copilot is created from Azure OpenAI Studio.

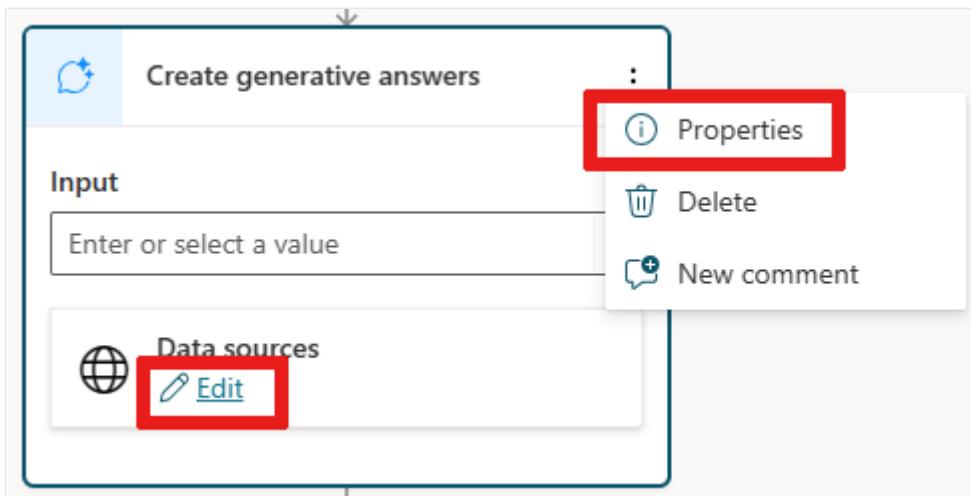
A screenshot of the Azure OpenAI Studio Topics page. On the left, a sidebar menu includes "Chatbots", "Overview", "Topics" (which is selected and highlighted in blue), "Entities", "Analytics", "Publish", and "Settings". The main content area has a header "Topics ⓘ" and tabs for "Custom (7)" and "System (9)". A note below states: "System topics are the core of your bot. Without them, your bot will not function or handle errors properly. You can't delete these topics." A table lists three system topics: "Conversation Start" (triggered by "On Conversation Start"), "Conversational boosting" (triggered by "On Unknown Intent"), and "End of Conversation" (triggered by "On Redirect").

Type	Name ↓	Trigger ↑
Conversation Start		On Conversation Start
Conversational boosting		On Unknown Intent
End of Conversation		On Redirect

boosted topic

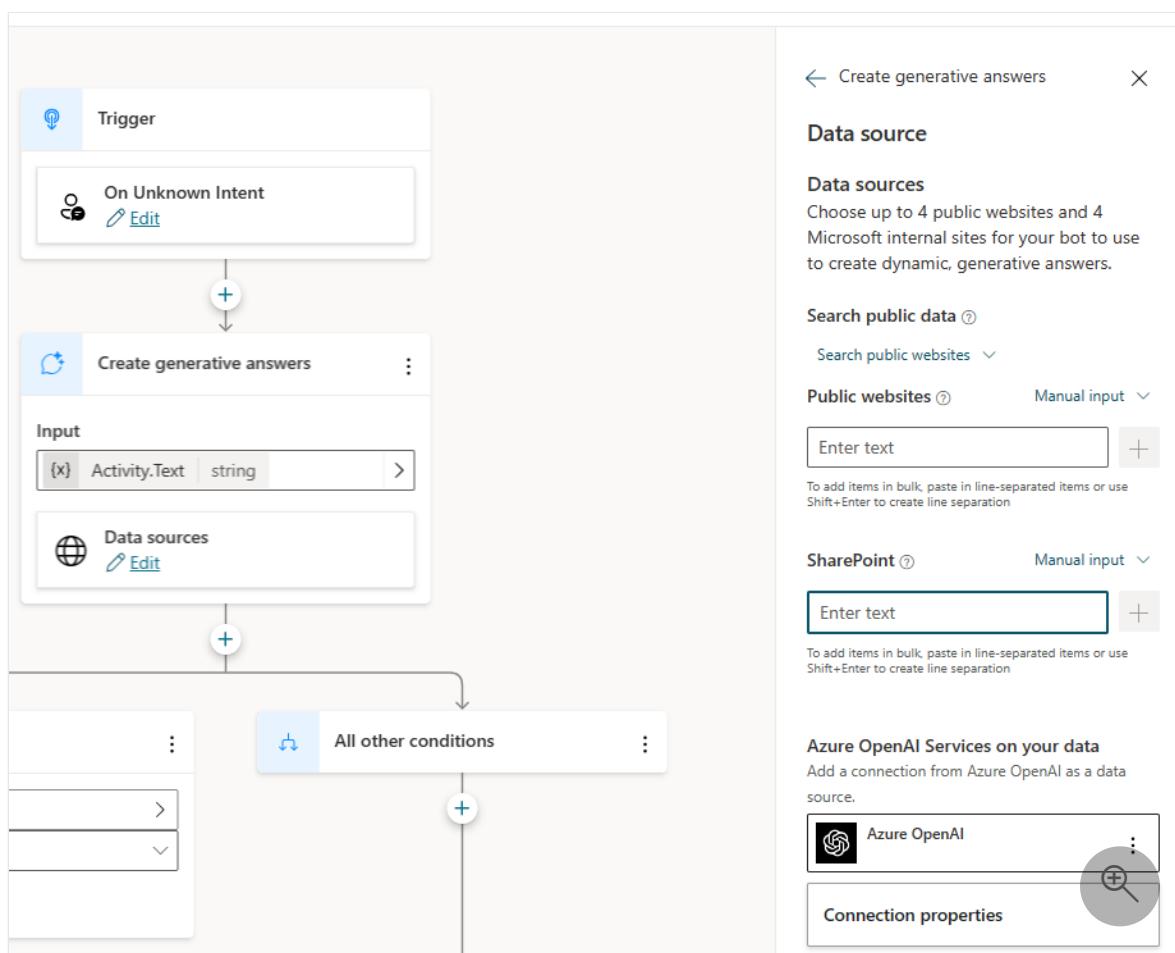
Use Azure OpenAI in Copilot Studio

1. Open the **Data source** configuration pane from one of two places:
 - a. On the **Create generative answers** node, select **Edit** under **Data sources**.



- b. Alternatively, select the **...** in the **Create generative answers** node, then select **Properties** to open a pane, and finally select **Data source**.

2. Edit the connection to the Azure OpenAI Service.



3. Select **Save** to save any changes to your topic.

The topic now generates answers from the information sources defined by your Azure OpenAI connection.

ⓘ Important

Information sources defined in the **Generative answers** node take priority at the copilot level. Copilot level sources function as a fallback.

Use uploaded documents for generative answers (preview)

Article • 12/28/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

[This article is prerelease documentation and is subject to change.]

You can upload your own documents for your copilot to [generate answers with generative AI](#). The documents are used across your copilot, but you can [specify individual nodes that shouldn't use uploaded documents](#).

When a copilot user asks a question, and the copilot doesn't have a defined topic to use, the copilot generates an answer from your uploaded documents. The copilot uses generative AI to answer the user's question and provides an answer in a conversational style.

Uploaded documents are stored securely in Dataverse. The number of documents you can upload is only limited by the available file storage for your Dataverse environment.

Image, audio, video, and executable files are not supported. See [Supported document types](#) for a full list.

ⓘ Important

This is a preview feature. Preview features aren't meant for production use and may have restricted functionality. These features are available before an official release so that customers can get early access and provide feedback.

Uploading a document

Warning

Contents of the files you upload will be available to all users.

Uploaded file content is available to anyone chatting with the copilot, regardless of file permissions or access controls.

To upload a document:

1. With a copilot open, expand **Settings** on the side navigation pane, and select **Generative AI**.
2. Under **Upload a document (preview)**, upload your documents in one of two ways:
 - Drag and drop files and folders onto the field that says **Drag and drop files here or click to browse**.
 - Select **click to browse** to open a file window where you can select the files you want.

Upload a document (preview)

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](#) 

 **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

3. Select **Save** at the top of the **Generative AI** page.

After uploading your documents

- Once uploaded, your content in the document might take a few minutes to be ready for use by the copilot.
- Uploaded documents create new copies and don't overwrite existing documents, even if they have the same name.

Tip

Uploading documents with the same name can result in duplicate files.

Therefore, when updating an existing file, you might want to add a version number to the file name before uploading it to distinguish it from the previous version.

- The uploaded document becomes part of the copilot solution, therefore exporting and importing a copilot solution includes the documents.

Downloading or deleting a document

To download or delete an uploaded document, hover over the document name and select the download or delete icon.

The screenshot shows a file upload interface. At the top, there is a placeholder text 'Drag and drop files here or [click to browse](#)' with a note 'Up to 3 MB per file'. Below this, a table lists a single file: 'Name' (Contoso FAQ-1.docx), 'Size' (12.4 KB), and 'Actions' (download icon and delete icon).

Name	Size	
Contoso FAQ-1.docx	12.4 KB	

Disable documents as a data source for a generative answers node

Documents used as a data source for the copilot are used as a data source by default for all generative answers nodes.

To exclude a specific generative answers node from using documents as a data source:

1. Open the topic with the generative answers node you want to exclude.
2. On the top menu bar, select **More options > Open code editor**.
3. Insert the following lines of code immediately after the line `variable: Topic.`

Answer:

```
yml  
fileSearchDataSource:  
    searchFilesMode:  
        kind: DoNotSearchFiles
```

4. Select **Save** at the top of the page.

Supported document types

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

File types, such as images, video, executable files, and audio, can't be used as an uploaded document.

Use content on SharePoint or OneDrive for Business for generative answers

Article • 02/02/2024

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

This capability works by pairing your copilot with a URL, such as *contoso.sharepoint.com/sites/policies*. When a copilot user asks a question and the copilot doesn't have a topic to use for an answer, the copilot searches the URL and all sub-paths. For example, a URL such as *contoso.sharepoint.com/sites* also includes subpaths like *contoso.sharepoint.com/sites/policies*. Generative answers summarize this content into a targeted response.

ⓘ Important

Content analysis and retrieval requires authentication. To authenticate your copilot, see [Authentication](#). The **No authentication** and **Only for Teams** authentication options can't retrieve information from Sharepoint or OneDrive for Business.

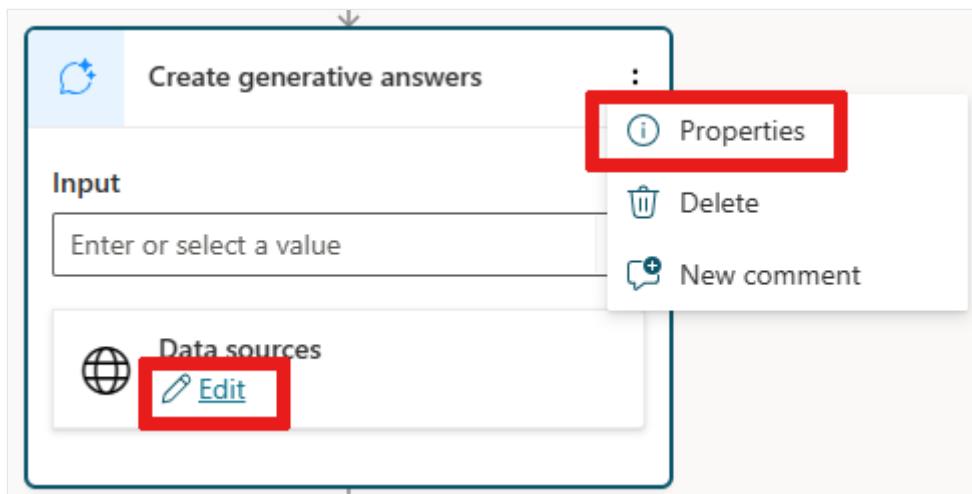
When configuring authentication, scopes control user access. Specify **Sites.Read.All**, **Files.Read.All** in the scopes field near the existing **profile** and **openid** values. These scopes don't give users increased permissions when using the copilot, but allow their permissible content from the Sharepoint site as configured for generative answers.

Due to memory limits, generative answers can only use SharePoint files that are under 3 MB. If a file is larger than 3 MB, consider splitting it into multiple smaller files.

Use SharePoint or OneDrive for Business

1. Open the **Data source** configuration pane from one of two places:

- a. On the **Create generative answers** node, select **Edit** under Data sources.



- b. Alternatively, select the **...** in the **Create generative answers** node, then select **Properties** to open a pane, and finally select **Data source**.
2. Under **SharePoint** in the **Data source** pane, add the SharePoint or OneDrive for Business URLs you want to use. Separate multiple URLs with manual line breaks (with **Shift + Enter**).

Public websites ⓘ Manual input ▾

Enter text +

To add items in bulk, paste in line-separated items or use Shift+Enter to create line separation

SharePoint ⓘ Manual input ▾

Enter text +

Shift+Enter to create line separation

! Note

A best practice is to omit *https://* from the URL. Recognized SharePoint URLs will be from the *sharepoint.com* domain. Sharepoint site URLs cannot be more than two levels deep.

3. Select **Save** at the top to save your topic changes.
 4. Test your copilot with phrases that you expect to return content.
- If the user account you used to sign in to *powerva.microsoft.com* doesn't have access to the SharePoint site, you won't get content or you might see a system

error.

 **Important**

Information sources defined in the **Generative answers** node take priority at the copilot level. Copilot level sources function as a fallback.

Use a custom data source for generative answers

Article • 01/29/2024

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

In some cases, your data might not exist in a supported data source. However, you can provide your own data through Power Automate cloud flows or through HTTP requests. You then format the results into a JSON object as a `Table` variable or expression to generate answers.

The custom data field takes a `Table` as an input, with the below properties:

[] Expand table

Name	Required	Description
<code>Content</code>	True	Source content that is used to be summarized and answer the input question.
<code>ContentLocation</code>		Optional URL for the citation of the source content
<code>Title</code>		Optional title for the citation of the source content

Here's a sample table:

```
Power Apps
[
{
  Content: "This is a sample piece of text that was provided for testing purposes, to be replaced with content of your choice",
  ContentLocation: "https://contoso.com/p1.htm",
  Title: "Contoso Sample"
},
{
  Content: "This is a second bit of sample text that can be replaced with
```

```

    content of your choice",
    ContentLocation: "https://fabrikam.com/p2.htm"
},
{
    Content: "This is a third bit of sample text that can be replaced with
content of your choice",
    Title: "Adventure Works Cycles Sample"
},
{
    Content: "This is a fourth bit of sample text that can be replaced with
content of your choice"
}
]

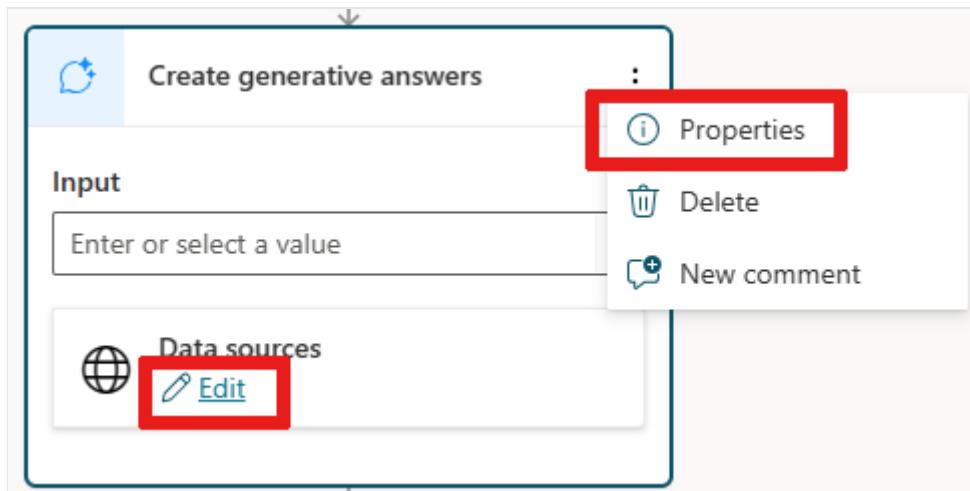
```

Copilot answers are generated from `Content` and include the link to the data source in `ContentLocation`. If a `Title`, is it used for the citation.

Use custom data

1. Open the **Data source** configuration pane from one of two places:

- a. On the **Create generative answers** node, select **Edit** under **Data sources**.



- b. Alternatively, select the `...` in the **Create generative answers** node, then select **Properties** to open a pane, and finally select **Data source**.

2. In the **Custom data** field, enter the JSON array you want to use or the variable for the array.
3. Select **Save** to save any changes to your topic.

ⓘ Important

Information sources defined in the **Generative answers** node take priority at the copilot level. Copilot level sources function as a fallback.

Create and edit with Copilot Studio

Article • 12/28/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

Normally, you can manually [create and edit topics](#), but Microsoft Copilot Studio lets you create and iterate on topics with a description. By describing what you want and having AI build it for you, time is saved in creating and updating copilot topics.

AI understands what you want to do, then automatically creates a topic with different node types and conversational responses.

The [AI-based copilot authoring overview](#) shows how this capability works. You can also use copilot authoring with [Generative answers](#) to boost conversations.

Prerequisites

- An account for Microsoft Copilot Studio.

ⓘ Note

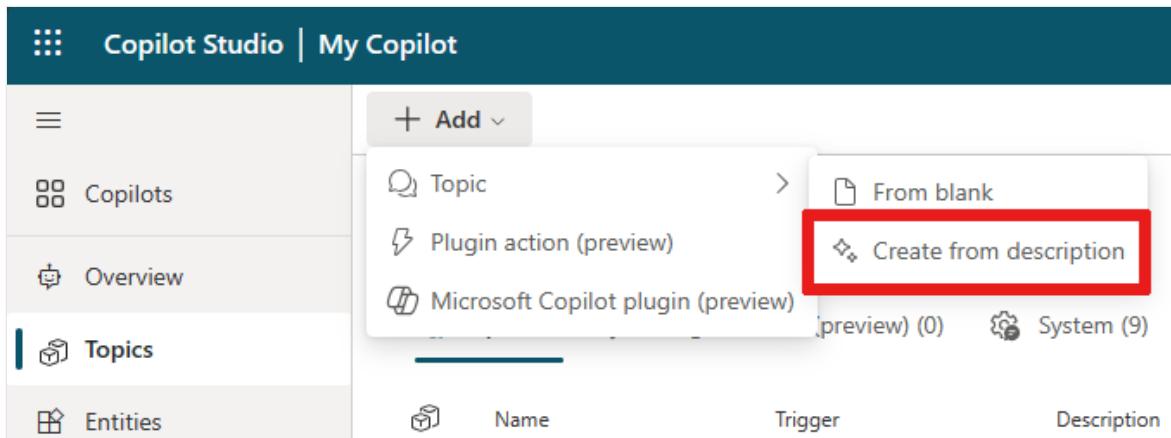
To create an account or get more familiar with Copilot Studio, see the [Quickstart guide for building copilots with generative AI](#).

- Review the [AI response generation training, model, and usage FAQ](#) and [Learn more about Azure OpenAI](#).
- This capability might be subject to usage limits or capacity throttling.
- To see the language support, go to [Supported languages](#).

Use Copilot Studio to create a topic

You can create a new topic from a description on the **Topics** page in your copilot.

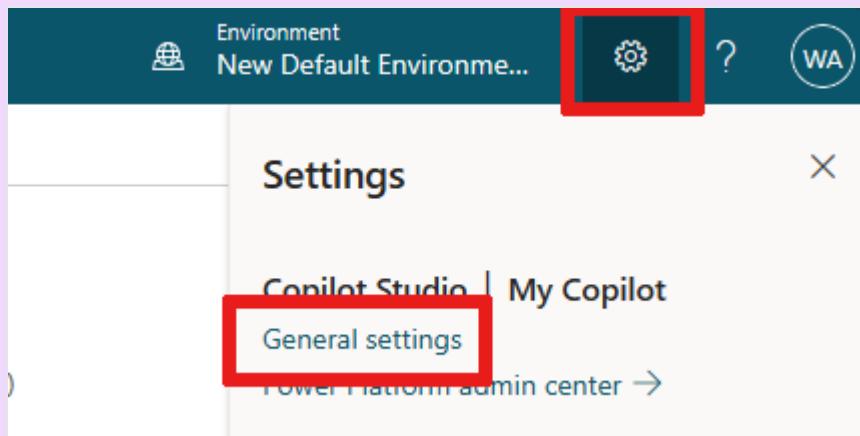
1. Select **+ Add > Topic > Create from description**.



(!) Note

If you don't see the **Create from description** option, enable **Intelligent authoring support**:

- a. Select the **Settings** icon on the top menu and then **General settings**.



- b. Set the switch under **Intelligent authoring support** to **On**.

2. In the **Create it with Copilot** window, add a name in the **Name your topic** field.

3. In the **Create a topic to...** field, describe the topic you want to create in simple, plain English. You can include questions you want the copilot to ask, messages it should show, and details of the behavior you want the copilot to take.

Create it with Copilot

[X](#)

Write a description of what you'd like your bot to cover, and Copilot will create your topic. [Learn more](#)

Name your topic *

Create a topic to... *

Let a user check the status of a flight, accepting the flight number and date. For each question add 2 message variations and a speech alternative.

AI-generated content can have mistakes. Make sure it's accurate and appropriate before using it. [Read terms](#)

Or try one of these examples to get started

 Let someone order a pizza, choosing from common pizza types and how many they want to order.

 Accept a user's name, age and date of birth and then repeat their responses back to them.

 Collect a user's street address, state and zip code. The user should be able to retry each question up to 4 times.

 [View more examples](#)

[What does Copilot support?](#)

[Create](#)

[Cancel](#)

You can select any of the examples to automatically insert them into the **Create a topic to...** field. Select **View more examples** to generate new suggestions.

4. Select Create.

The authoring canvas generates and opens a new topic. The topic includes trigger phrases, and one or more nodes, based on your description.

Tip

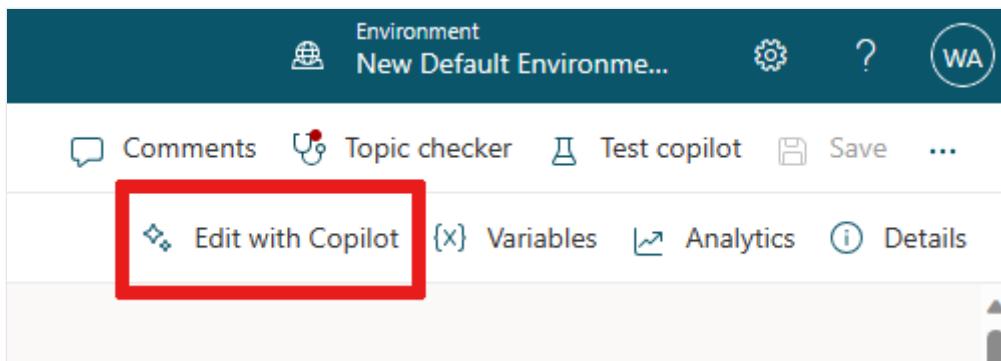
For more information on editing topics manually, see [Create and edit topics in your Microsoft Copilot Studio copilot](#).

Use Copilot to edit a topic

You can make changes to any topic using the power of natural language understanding (NLU). For example, if you want to move or update the nodes, you can describe what you want in the **Edit with Copilot** pane.

1. From the **Topics** page in your copilot, select the topic you want to modify.

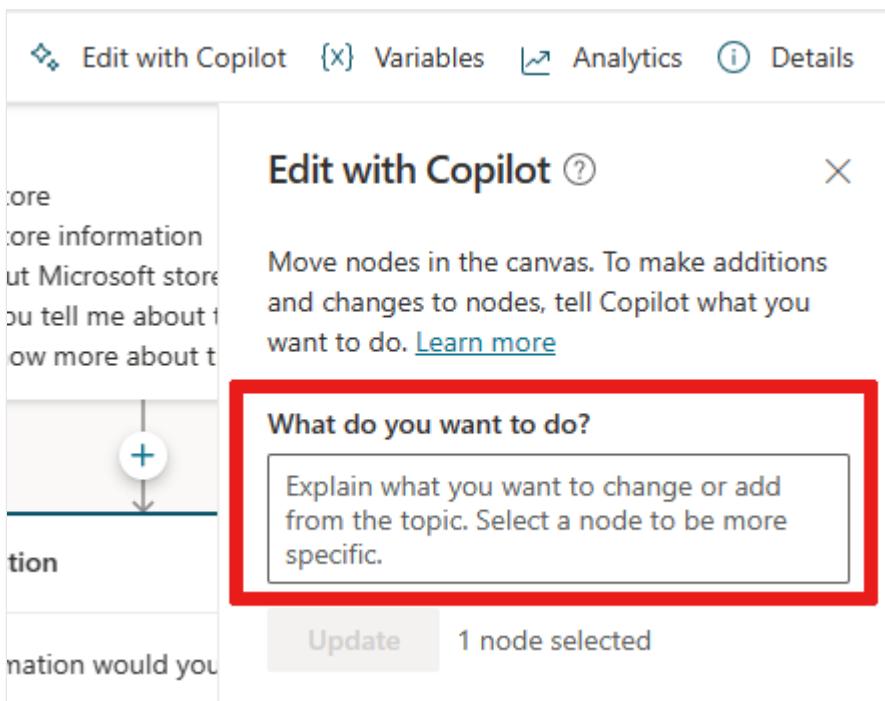
2. Choose **Edit with Copilot** on the menu bar.



💡 Tip

When describing a task for your copilot, there's no need to mention canvas elements. For example, adding *ask the user their full name* to a question node, you don't have to direct the AI with *ask the user their full name in the question node*.

3. In the **What do you want to do?** field, describe the change or addition to the topic.



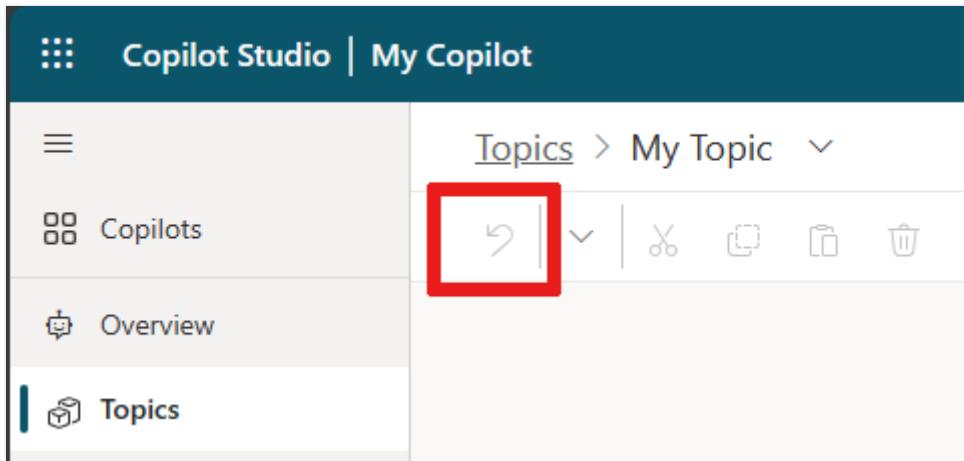
Use simple, plain English to direct the AI, like in these examples:

- *add a question to ask the user for their date of birth*
- *add 2 message variations to all questions in the topic*
- *summarize the information collected from the user in an Adaptive Card*

4. Select **Update**.

You can continue to [edit topics](#) or describe more changes.

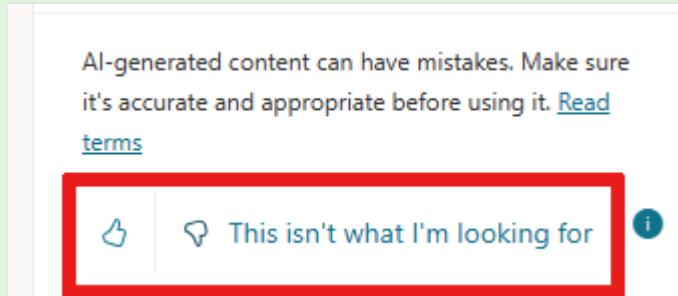
If you don't like the changes, select the **Undo** button and try again.



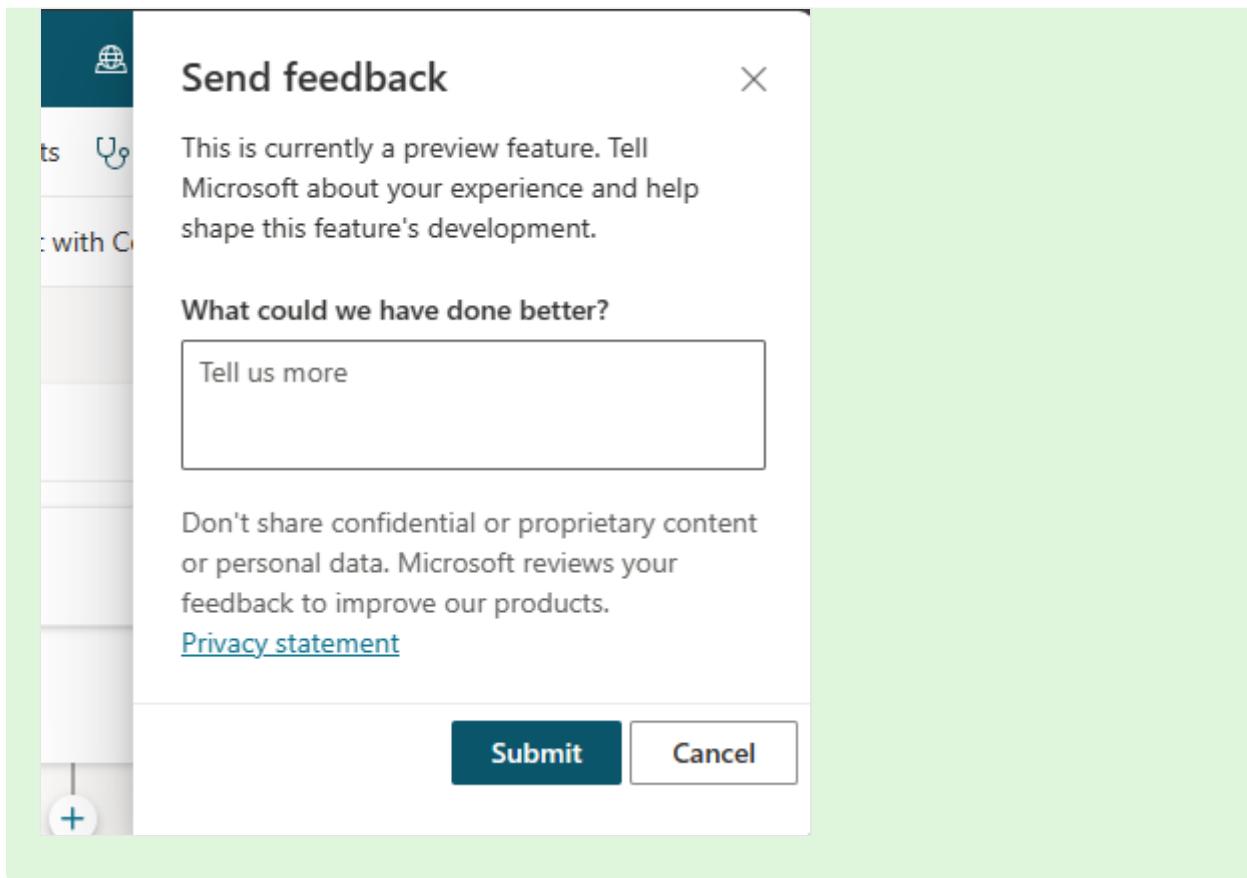
You can update your description under the **What you asked for** label on the **Edit with Copilot** pane.

💡 Tip

To give feedback on the AI, select the "thumbs up" or "thumbs down" icon at the bottom of the **Edit with Copilot** panel.



Select the thumbs down icon to see the **Send feedback** pane and add detailed feedback. We'll use this feedback to improve the quality of the AI.



What's supported

Topic node support

Copilot can create **Message**, **Question**, and **Condition** nodes when building and iterating on topics. Other node types aren't currently supported.

There are some limitations on how Copilot Studio works with nodes:

- Copilot understands the required properties on **Message**, **Question**, and **Condition** nodes, such as text to prompt the user or the appropriate output variables. However, Copilot doesn't understand advanced properties of these nodes, such as the reprompt and interruption settings on a Question node.
 - You can still manually edit these properties.
- **Condition** nodes created by Copilot Studio that branch a topic from a multiple choice question show errors in the generated conditions.
 - You can [troubleshoot these errors](#) manually.

AI features for Teams and Classic bots

Article • 12/28/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

With bots in the Microsoft Copilot Studio app in Teams or **Classic** bots in the Copilot Studio web app, you can enable extra features that improve the core AI.

Copilots include next-generation AI features that supersede or replace the features listed in this article.

You can use these AI features for backwards compatibility with older bots and support some scenarios. In most cases, you should [create or convert your bots with the unified authoring canvas](#) to get the best implementation of multiple AI technologies.

Important

Generative AI features, such as [generative answers](#) and [natural language understanding](#), are only available if you create or convert a bot [using the unified authoring canvas](#) in the Copilot Studio web app.

Prerequisites

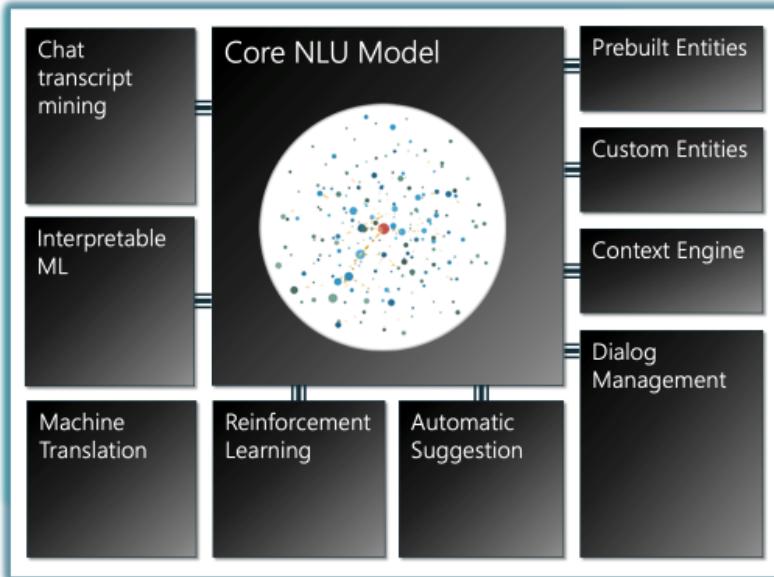
You can use the AI features if:

- Your bot is marked **Classic**.
- Or, a bot you created in the Teams app.
- You created your bot before May 23, 2023.

[Learn more about what you can do with Microsoft Copilot Studio.](#)

AI models in Microsoft Copilot Studio - background

A suite of AI capabilities.
On a single service.



Copilot Studio hosts multiple AI models and AI capabilities on a single service. The core feature is a transformer-based natural language understanding (NLU) model.

Traditionally, intent triggering—how an AI model determines the intent of a question by using NLU—is formalized as a multi-class classification problem. The model is highly associated with known categories. But any change in these categories means you need to build a new AI model.

Copilot Studio, however, employs a language understanding model that uses an example-based approach, powered by a deep neural model. This type of large-scale model only needs to be trained once, with large amounts of data, using AI supercomputing. The AI is then used with a few examples without further training.

This model is part of the [AI at Scale](#) initiative by Microsoft. The way AI is developed and used is changing. In Copilot Studio, this model allows for an intuitive way for copilot makers to create content confidently, without having to involve AI experts.

With the Copilot Studio model, you provide a few examples when you craft trigger phrases for a topic. The examples for a single topic are usually 5 to 10 phrases.

Shorter trigger phrases are better, and you should aim for 2 to 10 words per phrase. Trigger phrases should be semantically different. For example, changing a single verb or

noun could be enough to expand a topic's coverage.

Other changes or additions between phrases can be:

- Articles such as *the*, *a*, or *an*
- Capitalization
- Contractions such as *you're* or *don't*

Plurals don't improve the triggering because contractions are already accounted for in the AI model.

Entities used in related topics automatically identify in user intents when matched with their trigger phrases. For example, the user intent "I want to book a ticket to Boston" matches with the trigger phrase "I want to book a ticket to Paris."

Topic overlap detection

Topic overlap detection helps improve topic triggering accuracy by finding overlaps between topics. Resolving topic overlaps reduces the copilot's need to ask clarifying questions before triggering a topic.

💡 Tip

Topic overlap detection is in general availability and supports **all languages supported in Microsoft Copilot Studio**.

After you enable advanced AI capabilities, you can view a list of overlapped topics. In the navigation menu, select **Analytics**, then select the **Topic triggering** tab.

 Microsoft Power Virtual Agents | Support Bot

≡ Chatbots Overview Topics Entities Analytics Publish Settings Details Channels Agent transfers Security Skills AI capabilities

Analytics

Updated about one hour ago

Summary Topic triggering Customer Satisfaction Sessions Billing



Overlapping topics

Trigger phrases that are too similar blur the boundaries between topics. To improve triggering, review overlapping topics and trigger phrases. [Learn more](#)

🕒 Updated 4 minutes ago

Similarity ⓘ ↓	Topics (5)	Overlaps
94	I stopped sharing the subscription with	1
94	I deactivated the subscription sharing f	1
91	Languages supported in Microsoft 365	1
91	Use Microsoft 365 in other languages?	1
90	Where can I get technical support?	1

The list shows each overlapping topic along with a similarity score. This score represents the overall overlapped status for a topic and the number of topics that overlap with the listed one. The AI determines the similarity score as it evaluates how semantically similar the overlapping trigger phrases are to each other. A higher score means a topic has one or more trigger phrases close to another topic's trigger phrases.

You can sort the list by its similarity score, topic name, or number of trigger phrase overlaps.

If you select an item in the list, the **Topic overlap details** pane opens.

The screenshot shows the 'Topic overlap details' pane. At the top, it says 'Languages supported in Microsoft 365'. Below that is a note: 'Rewrite or remove trigger phrases to distinguish between topics. [Learn more](#)'. The main section is titled 'Overlapping trigger phrases (1)'. It lists two overlapping trigger phrases: 'For which languages is Microsoft 365 available?' and 'Can I use Microsoft 365 in languages other than the one I originally purc...'. Each phrase has a trash can icon to its right. At the bottom are 'Save' and 'Cancel' buttons.

In this example, there's one trigger phrase in the "Languages supported in Microsoft 365" topic (*For which languages is Microsoft 365 available?*) that semantically overlaps with a trigger phrase in the "Use Microsoft 365 in other languages?" topic (*Can I use Microsoft 365 in languages other than the one I originally purchased?*). Here, the AI determines that both trigger phrases are semantically similar. The phrases have similar sentence structure, words, and grammar.

Using semantically similar trigger phrases for two different topics can lead to confusion. The bot might not know which topic to open and asks follow-up questions to the bot user.

Identifying semantically similar trigger phrases can also help you consolidate *topics* if they're too similar. You can edit the topics to make them more distinct.

On the **Topic overlap details** pane, you can select the link to go directly to a topic. You can also make changes to the trigger phrase or delete it. Select **Save** to apply any changes.

After you save your changes, the overlapping status automatically refreshes. You can manually refresh the topic overlap status, using the refresh icon in the **Overlapping topics** section.

Overlapping topics

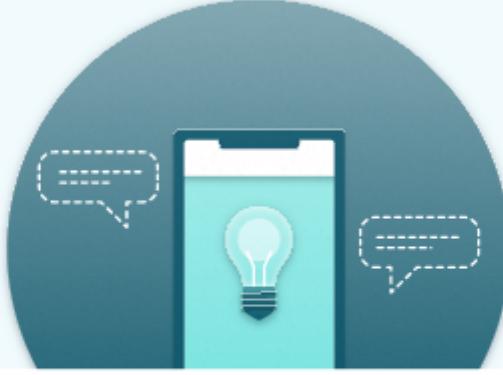
Trigger phrases that are too similar blur the triggering, review overlapping topics and tri

Updated 6 minutes ago

Topic suggestion from chat transcripts (preview)

This feature analyzes sessions between your bot and users and gives suggestions based on unmatched user input.

Once enabled, go to [Analytics > Topic triggering \(preview\)](#). A list of potential topics are shown with the number of times a query about this topic was made by users of the bot. The top 200 suggestions are shown.



Topic suggestions from chat transcripts (preview)
Each topic suggestion represents related queries about the same issue. Your bot was unable to match these to an existing topic - consider adding a new topic to expand coverage.

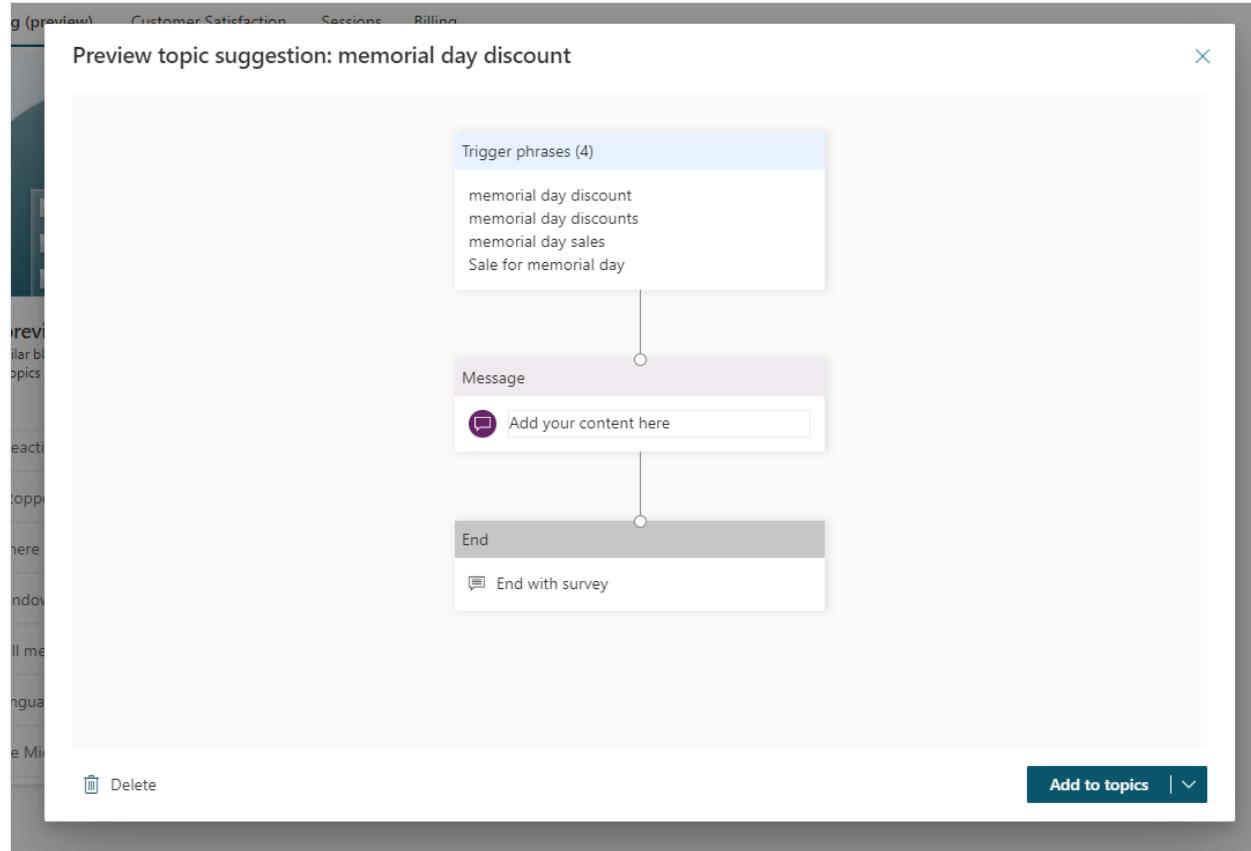
Updated 17 hours ago

Topic suggestions (4)	Sessions ↓
memorial day discount	4
holiday deals	3
Surface laptop 4	3
Hololens	2

The topic suggestion analyzer automatically runs once every one to two hours. The analyzer scans all new queries made since the analyzer last ran. The analyzer groups together queries that don't match an existing topic and shows them in the list. Your bot needs at least 100 new conversations from the last time any suggestion was generated to trigger the process. Suggestions with more than three user sessions are shown.

When you select an item in the suggestion list, a topic suggestion window appears, showing the topic with some suggested trigger phrases. The suggested trigger phrases are based on queries made by bot users that aren't matched to an existing topic.

You can choose to delete the entire suggested topic, for example if the topic is irrelevant to the bot, or add it to your list of topics by selecting **Add to topics**.



Enable or disable Generative AI

ⓘ Important

You can't enable these features for bots *not* marked **Classic**. This includes any bots created (or converted) in the web app after May 23, 2023, or any bots that aren't created with the unified authoring canvas.

The unified authoring canvas includes improvements to the types of AI used by Microsoft Copilot Studio. We recommend you [create and convert your bots with the unified authoring canvas](#).

To enable these older AI capabilities in Microsoft Copilot Studio:

1. Open your bot:

- In the web app, the bot must be marked with **Classic**.

- In the Teams app, the bot can be any bot.
2. From the navigation menu, select **Generative AI**.
3. For each feature, select the checkbox to turn it on or off.
4. Select **Save** at the top of the tab.

Your bot may not work as intended right now due to your organization's data loss prevention policies. Address affect admin. [Learn more](#)

Generative AI

Select options to enable intelligent features. Review [supplemental terms and conditions](#) to learn more about features in preview.

Topic overlap detection
Helps you improve triggering accuracy by finding overlaps between topics. Reduces the need for the bot to ask clarifying questions before triggering a topic. [Learn more](#)
[See overlapping topics](#)

On

Topic suggestions from chat transcripts (preview)
Analyzes chat transcripts for end user queries that don't trigger a topic. The system provides suggestions for new topics that will help you address those gaps. [Learn more](#)
[See suggestions from transcripts](#)

On

Create and configure copilot plugins (preview)

Article • 12/19/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

[This article is prerelease documentation and is subject to change.]

Create plugins in Microsoft Copilot Studio to use in your copilots across Microsoft products. These plugins can call connected services, perform actions, and provide answers for your copilot users without needing to manually author complex conversation flows.

Copilot plugin building connects the Microsoft 365 tenant and the Power Platform environment when you [enable the Microsoft 365 Copilot setting in the Power Platform admin center](#).

These connections allow you to use plugins in Microsoft Copilot for Microsoft 365 and use data across Dynamics 365, Power Platform, and Microsoft 365.

This article gives an overview of the ways you can create and use copilot plugins and provides links for individual configuration steps.

ⓘ Important

During this preview, you can use plugins in Microsoft Copilot. You can't use plugins in custom copilots that you build with Microsoft Copilot Studio.

Prerequisites

To create AI plugins that your end users can use in their chats with Microsoft Copilot, you need:

- A license for Microsoft Copilot Studio (or an existing Power Virtual Agents license).
- Your Microsoft 365 tenant admin to [deploy the Dynamics 365 and Copilot Studio app in the Microsoft 365 admin center](#).

End users in your tenant can use conversational and AI plugins in their chats with Microsoft Copilot if you configure these settings, author and publish an AI plugin, and [the user enables the connection from within their chat with Microsoft Copilot](#).

Copilot plugins

Plugins are discrete, reusable building blocks that work across Power Platform, Dynamics 365, and Microsoft 365. All plugins within your [Microsoft 365 tenant](#) are shared from a central plugin registry in Dataverse. When you create or change a plugin and publish it, the changes are pushed to all your copilots that use the plugin.

When you create a plugin, you use simple language to describe what the plugin should do. Next, you provide a data source or other connection that the copilot uses when reading a description and determining the best plugin for a conversation. The copilot automatically asks the user for more information, if needed, for the plugin to work.

For example, you build an app to manage leads. You add a copilot to improve the efficiency of end users when using the app. You want to streamline the creation of leads from contacts and help users get insights into the next actions they should take.

However, when your copilot user says to the copilot "Create a new lead from this contact" or "What are the key things I need to do?" the copilot doesn't have the information to correctly answer the question or create the lead.

Instead of manually designing a conversation flow within the copilot to account for these scenarios, you create and connect the following plugins to the copilot:

- A Power Automate flow plugin takes the contact data provided by the copilot user to create the lead.
- A prompt plugin summarizes the latest conversations the copilot user had with the contact.

Now when the copilot user asks to create a lead, the flow plugin is triggered and the lead is created from the data already provided by the user. The user can also ask for an abstract or summary, which triggers the prompt plugin and return a summary of actions.

Plugin categories and types

There are two categories of plugin that you can create in Copilot Studio: conversational plugins and AI plugins.

Conversational plugins

These plugins are similar to [standard topics in Copilot Studio](#) that you use to create a functional copilot.

You create, configure, and publish conversational plugins in a similar manner to topics. Afterwards, they're added to the plugin registry and available for use in Microsoft Copilot.

See [Create conversational plugins for Microsoft Copilot \(preview\)](#) for details on how these plugins work and how to create and use them.

AI plugins

These plugins let you connect your copilot to data or perform activities. During this preview, you can use plugins in Microsoft Copilot. You can't use plugins in custom copilots that you build with Microsoft Copilot Studio.

You create and configure AI plugins in Copilot Studio. You can also create and edit some types of AI plugins in Power Apps.

The following table describes each type of AI plugin, with links to articles explaining where and how to create them:

[] [Expand table](#)

AI plugin type	Description	Creation in Copilot Studio	Creation in Power Platform
AI builder prompts	Prompts enable your users to use natural, plain language to get answers and perform actions with Microsoft Copilot. They use natural language understanding (NLU) to understand a user's intent and map it to an associated piece of information, data, or activity.	Generate content or extract insights with AI Builder prompts	Create a custom prompt (preview) in Power Automate or Power Apps
Power Automate flows	Flows can be called from within a Microsoft Copilot chat that can perform actions or retrieve information across the end user's environment.	Create custom automation with Power Automate flows	Not available

AI plugin type	Description	Creation in Copilot Studio	Creation in Power Platform
Power Platform custom connectors	Custom connectors let your plugin retrieve and update data from external sources accessed through APIs. Connectors make it possible to access data from popular enterprise systems such as Salesforce, Zendesk, MailChimp and GitHub, and are routinely used by makers in their Power Apps and flows.	Update or get answers about external data with connectors	Create a connector AI plugin (preview) in Power Automate or Power Apps
OpenAI plugins	Open AI plugins provide access to data sources, allowing specific data to be surfaced through AI experiences not normally available through general models.	Add an OpenAI plugin	Not available.

Use plugins in Microsoft Copilot

End users in your tenant can use conversational and AI plugins in their chats with Microsoft Copilot if:

1. Your Microsoft 365 tenant admin deploys the Dynamics 365 and Copilot Studio app in the Microsoft 365 admin center.
2. The end user enables the connection from within their chat with Microsoft Copilot.

Deploy the Dynamics 365 and Copilot Studio app (admin)

1. Sign in to the Microsoft 365 admin center with your admin account.
2. Expand **Settings** on the side navigation pane and select **Integrated apps**.
3. Go to the **Available apps** tab and select the entry **Dynamics 365 and Copilot Studio**. The app's details pane opens.
4. Select **Deploy** to enable the app in chats with Microsoft Copilot.

The screenshot shows the Microsoft 365 Admin Center interface. On the left, there's a navigation sidebar with various options like Home, Users, Teams & groups, Roles, Resources, Marketplace, Billing, Support, Settings, Domains, Search & intelligence, Org settings, and Integrated apps. The 'Integrated apps' option is highlighted with a green border. The main content area is titled 'Integrated apps' and contains a sub-section for 'Available apps'. It lists several apps, including 'DevDynamics', 'Dynamic Signal', 'Dynamics 365 (DAILY)', 'Dynamics 365 and Copilot Studio', and 'Dynamics Bot'. The 'Dynamics 365 and Copilot Studio' app is selected and shown in more detail on the right. The details view includes sections for 'Basic info', 'Actions', and 'Assigned users'. The 'Basic info' section shows the app is available to all users, has a type of 'App (Custom app)', and is not deployed. It also lists 'Host products' like Microsoft 365, Teams, Bing, and Edge. The 'Actions' section has links for 'Deploy app' and 'Block app'. The 'Assigned users' section indicates that all users can install it.

Enable the connection in Microsoft Copilot

Microsoft Copilot end users need to create a connection between their chat instance and the plugin registry. They only need to create a connection once, then they can interact with all existing and any future plugins that are available to do them.

The end user needs to go to the Power Platform Copilot plugins configuration portal, where they can enable the plugins they want.

They can get to the portal by asking about plugins in their chat with Microsoft Copilot. They receive a short summary about plugins and a link to the portal:

The screenshot shows a Microsoft Copilot chat message. The message starts with 'How can I use a plugin?' at 1:02 PM. Below it, a summary is provided: 'Plugins can enhance your Copilot experience by bringing in data from various external services, and are currently available for Microsoft 365 Chat in Teams. You can use natural language to query for business data from these services. Select Message Extensions and Power Platform connectors can also function as Microsoft 365 Chat Plugins. Plugins can be installed from the plugin menu, and Power Platform plugins can be enabled by visiting this link: [Power Platform Copilot plugins configuration portal](#)'. At the bottom, it says 'In addition, you can also create your own plugin using low code [Microsoft Copilot Studio](#)'. There are 'Copy' and 'Like' buttons at the bottom.

Users can also ask directed questions about data connections or how to perform cross-organizational tasks, for example they could ask:

- *How can I use a plugin?*
- *Tell me about Power platform Copilot plugins*
- *How can I get data from an external system?*
- *How can I get data from Salesforce?*

Share AI plugins

By default, plugins are only visible and usable in Copilot Studio by the person who authored them.

However, the plugin author can share their plugins in the portal where they created them. For example, you can share an AI Builder prompt from the **AI prompts** page by selecting **Share** for the prompt. The same applies for Power Automate flows (from the **Flows** page in Power Automate) or for custom connectors from the **Custom connectors** page.

Related topics

 Expand table

Topic	Description
Create conversational plugins for Microsoft Copilot (preview)	Create plugins that can respond to a user's question with extra data.
Create AI plugins for Microsoft Copilot (preview)	Create plugins that perform actions and query data across a user's environment with Power Automate flows, AI Builder prompts, Power Platform connectors, and OpenAI connections.
Use plugin actions in Microsoft Copilot Studio (preview)	Create complex topics for use in copilots you build in Copilot Studio, without doing anything complex.

Create conversational plugins for Microsoft Copilot (preview)

Article • 02/02/2024

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

Microsoft Copilot provides out of the box experiences to engage with content and resources from across your organization. In some situations, answers and interaction with external systems are required. With Microsoft Copilot Studio, you can author a conversational topic that can be published as a Copilot Plugin. Once your Tenant Admin approves the Plugin, it can be added to your organization's M365 Chat experiences.

For this preview, you can create a conversational plugin that receives the user's query (stored in the **Activity.Text** variable), processes it by completing one or more operations, and then sends one or more responses back to the user in the M365 Chat.

ⓘ Important

You can't use conversational plugins that you've created in Microsoft Copilot Studio as a [plugin action](#).

What is a Microsoft Copilot Plugin and how does it work?

Microsoft Copilot's conversational system uses orchestration logic and large language models to help the user achieve their goals. This system interprets the user's request, determining the best course of action, then activates the appropriate system, plugin, component, or series of components. Finally, a generated result is returned to the user.

A conversational plugin built in Microsoft Copilot Studio enables you to extend your app's behavior. You can create new abilities that aren't natively in Microsoft Copilot, like

calling a specific API, applying sophisticated business logic, or accessing data sources that require configuration outside of Microsoft Copilot's access.

Unlike a traditional component model that creates a hard-coded integration point with the copilot, a maker in Microsoft Copilot Studio creates a conversational plugin. This maker gives descriptive text to the Microsoft Copilot's orchestrator about the plugin's abilities. The orchestrator can then make its own decision about when the plugin would be most useful and ask the user appropriate questions to fill plugin parameters.

Prerequisites

- End users must have a license to use Microsoft Copilot for Microsoft 365.
- Your M365 Tenant must also be participating in the [Microsoft Copilot Plugins Preview ↗](#)
- Microsoft Copilot Studio application must be a Microsoft Copilot Studio copilot, not a Power Virtual Agents "Classic" bot.
- Before end-to-end works, the Microsoft 365 Tenant Admin needs to enable the **Dynamics 365 and Microsoft Copilot Studio Integrated Apps** category in the Microsoft Admin Center.

Important

In this preview, there are some limitations:

1. Your topic will not be able to interact (ask questions of) the user, and can only process the incoming query from the user (in the variable **Activity.Text**) and send a response.
2. Responses will be limited to text, no media or adaptive cards will be supported
3. In this preview, Copilot Studio will not be able to authenticate the user, so SharePoint and Onedrive sources for generative answers will not be functional.
4. This preview will be limited to English language copilots.
5. All users of Microsoft Copilot within your organization will be able to interact with the copilot, the copilot will not support authenticating the user itself
6. If your Dataverse Environment has a security group assigned, the Plugin may not be visible or work in M365 Chat.

Creating a basic conversational plugin to publish to Microsoft Copilot

Your topic used within Microsoft Copilot chat uses the System variable **Activity.Text** as an input that represents the user's question in Microsoft Copilot. The chat processes it, such as passing it to **Generative Answers**, and returns the result as one or more messages. These messages could include the response that comes from **Generative Answers** or **Send a Message** nodes. Multiple messages can be included and sent separately to form the output.

The following steps help you create a new conversational plugin within Microsoft Copilot Studio. You author basic capabilities and publish them to the Microsoft Admin Center. You can choose and enable the plugin in the UI.

1. From the left navigation pane in Copilot Studio, choose the **Extend Microsoft Copilot (preview)** option, and then **Conversational plugins**.
2. From this page, choose **Add conversational plugin** affordance in the bar above the authoring canvas, which opens the authoring canvas with a new conversational plugin.
3. The authoring canvas appears with a new **Microsoft Copilot (preview)** trigger node on it.
4. Before authoring further, set the name of the toipc in the top panel above the authoring canvas. This name is visible to the user and admin in the Microsoft Copilot and Microsoft Admin Center respectively.
5. In the Trigger node's description, provide a clear description of how the conversational plugin can help the user and what it can do. Unlike other descriptions, this one has functional purpose and is used by the Microsoft Copilot to determine whether to invoke your plugin or not. Use clear sentences to describe what your plugin does for the user and what it returns.
6. In the conversational plugin, create any type of logic that doesn't require user interaction (no buttons, questions, cards, or other prompts). The authoring canvas menu for conversational plugins is limited to remove options that could require user interaction.
7. For this example, we use the **Generative Answers** node to execute a search for web content and provide an answer to the user in Microsoft Copilot.
8. To use the Generate Answers node, select the plus on the canvas under the trigger node, then select **Generative answers** under the Advanced tab of the popup menu.
9. For the **Input** field, invoke the variable picker by selecting the arrow in the **Input** box.
10. Choose the system variable **Activity.Text** which represents the user's last query to Microsoft 365 Copilot. This query was what the user asked in M365 Chat which

caused Microsoft Copilot to invoke the plugin.

11. Select the **Data Sources** link in the center of the **Generative Answers** tile.
12. Enter a link to a public website that has content you want for your bot. This web content gets used to answer user questions.

 **Note**

Don't choose content that's not indexed by Bing, for example 301 redirects.

13. Once the link is added (don't forget to hit "+" once entering the URL), the properties panel can be closed
14. If you wish, you send one or more messages to the user as a response. You can use a **Send a Message** node, or another **Generate Answer** node call, or multiple of these actions as your conversational plugin needs.
15. Finally, the conversational plugin can be saved with save icon in the top right corner of the page.

Publishing your conversational plugin to Microsoft Copilot

Publishing your conversational plugin creates a new plugin in the Dataverse registry for your Tenant. Once available there, your tenant admin needs to approve your plugin to be available to users in the Microsoft Copilot plugins catalog.

In Microsoft Copilot, your conversational plugin is labeled as *Conversational plugin name* in the add plugins UI. As such, specify your conversational plugin name and copilot name for readability.

 **Important**

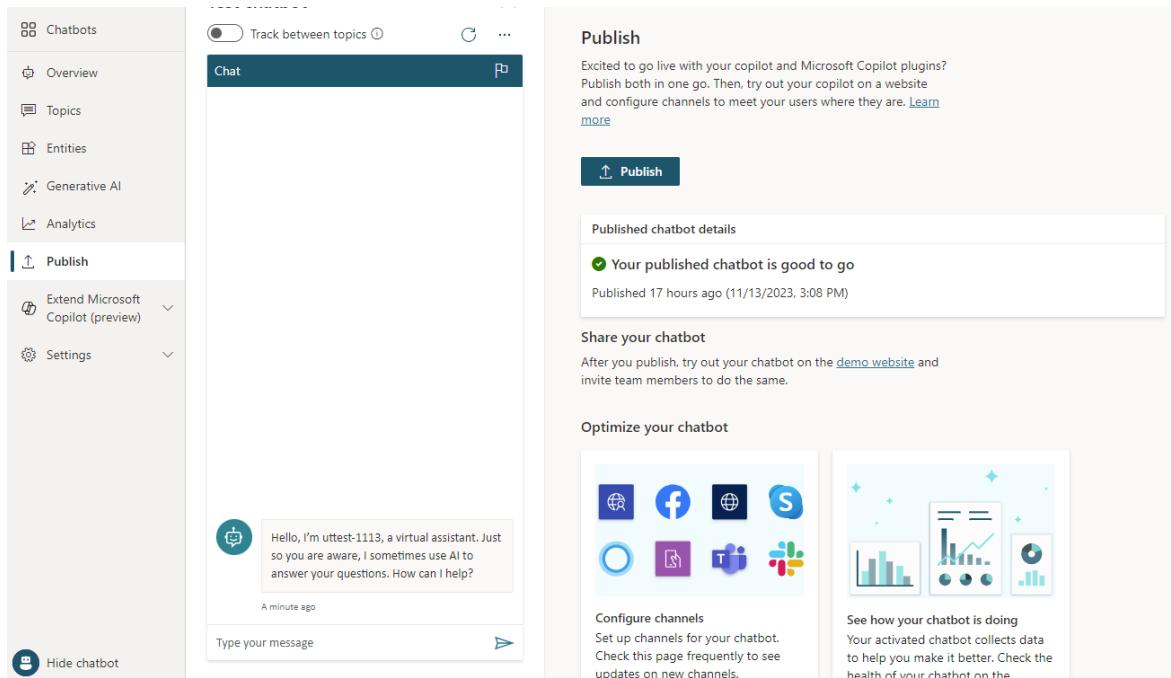
During this preview, the first time you publish your conversational plugin, the Microsoft Copilot admin UI will show your conversational plugin after approximately four hours. Changes you make to the internals of your conversational plugin after that will happen immediately.

If you disable, then publish your conversational plugin, and then to reenable and republish, the four hour wait will reoccur.

To publish your conversational plugin:

1. First, create and save your conversational plugin as described in the prior section

2. Go to Publish on the side navigation pane of Copilot Studio.
3. Choose Publish. The publish should complete quickly. The actual availability in the Microsoft Admin Center can take up to 4 hours.



4. Your Admin can find the **Dynamics 365 and Microsoft Copilot Studio integrated app** in the Microsoft Admin Center under **Settings**, then **Integrations to be reviewed and approved**. In this preview, Deploy/Block is at this category level only.
5. Once your Tenant admin approves the integrated app, it should appear in the user's list of plugins in their Microsoft Copilot UI.

Plugins

Preview

Search for plugins 

Plugins allow Copilot to reference apps on your behalf. Copilot may share some of your Microsoft 365 enterprise data with plugins you've turned on. ⓘ

Untitled



Axe Inventory



Get all names



Jokes about Elephants



Test



Get Active Repair Items



Untitled



More plugins

Once enabled, your user can ask questions to Microsoft Copilot and see the plugin invoked and return the most relevant results.

Note

To unpublish your conversational plugin from the catalog, in conversational plugin details, unclick the **Status** checkbox, save your conversational plugin, and then republish, which will remove it from the Dataverse registry and Microsoft Copilot app catalog.

Tip

Interacting with the Microsoft Copilot orchestrator is likely to be a different experience than you might have had integrating with previous systems.

1. The Microsoft Copilot will always rewrite your answers with its own voice. It's not possible in this preview to have the content passed through unchanged to the end user.
2. The description of your conversational plugin is critical to how reliably it will be invoked. The description teaches the Orchestrator what your plugin is good at and what answers it can provide. Be sure to use clear prose when writing the description, and consider experimenting with changes to get the best outcome.

Create AI plugins for Microsoft Copilot (preview)

Article • 11/15/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

AI Plugins can be used to extend Microsoft Copilot, or used within a custom copilot as a plugin action.

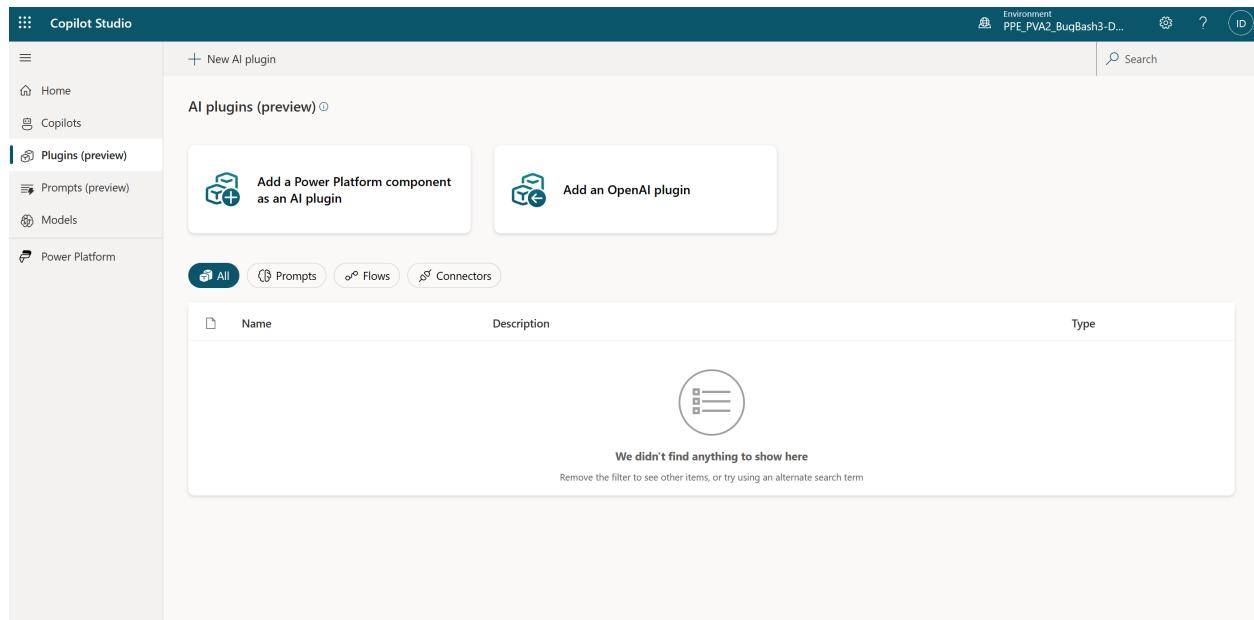
You can create multiple types of AI plugins in Microsoft Copilot Studio:

- Prompt plugins, which use AI Builder and natural language understanding to target the specific scenarios and workflows within your business.
- Flow plugins, which use Power Automate flows to perform actions, and retrieve and work with data.
- Connector plugins, which use Power Platform connectors to access data from other systems, such as popular enterprise products like Salesforce, Zendesk, MailChimp, and GitHub.
- OpenAI plugins, which use connections to custom OpenAI models that you create.

This article provides instructions for creating, sharing, or publishing plugins.

After you create plugins, [enable them for use in Microsoft Copilot](copilot-plugins-overview.md#use-plugins-in-microsoft-copilot), or [add them to a custom copilot as a plugin action](#).

AI plugins can be created on the [AI plugins \(preview\)](#) page in Copilot Studio, under [Plugins \(preview\)](#) on the side navigation pane:



The remainder of this article describes how to create each type of plugin.

Generate content or extract insights with AI Builder dynamic prompts

The experience to create prompt plugins in Copilot Studio is the same as in Power Apps. Any plugins you create in either Copilot Studio or Power Apps go to the plugin registry and populate in both apps.

To create prompt plugins:

1. Sign in to Copilot Studio and select **Plugins (preview)** on the side navigation pane.
2. Select **Add a Power Platform component as an AI plugin**.
3. Select **Generate content or extract insights**.
4. Enter a name for your prompt, and then use plain, conversational language to describe what you want to achieve, for example *Summarize this text as a paragraph with fewer than 50 words*. You can also use prebuilt templates to help identify what your prompt can do and how it could be worded.
5. In your prompt, add a dynamic value for each input that the end user should provide in their chat with Microsoft Copilot. You can add dynamic values as phrases or words in your prompt by selecting the phrase and then selecting **Add dynamic value**, or you can add dynamic values without selecting any text and then provide your own label. In this example, the word `text` turns into a dynamic variable.
6. Expand the **Test your prompt** section and enter sample data for each dynamic value. Select **Test prompt** to evaluate how well the prompt works.
7. Select **Save custom prompt**.

After you create your plugin, you need to [enable it for use in Microsoft Copilot](#).

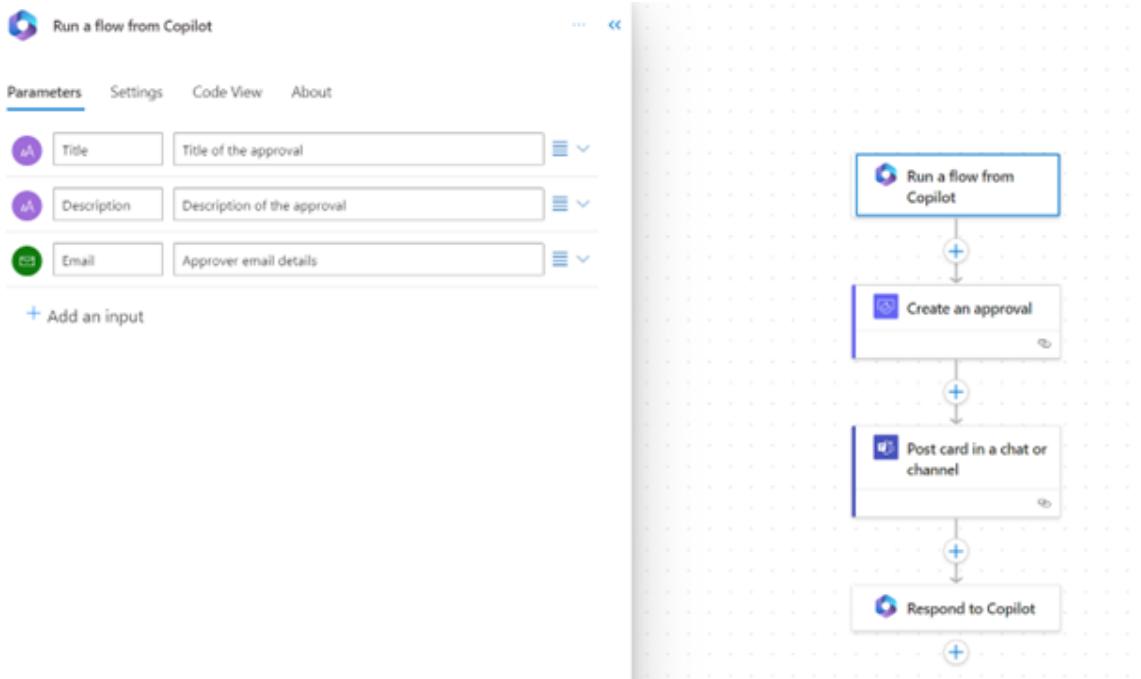
For more information about building and using prompt plugins, see [AI Builder prompts](#).

Custom automation with Power Automate flows

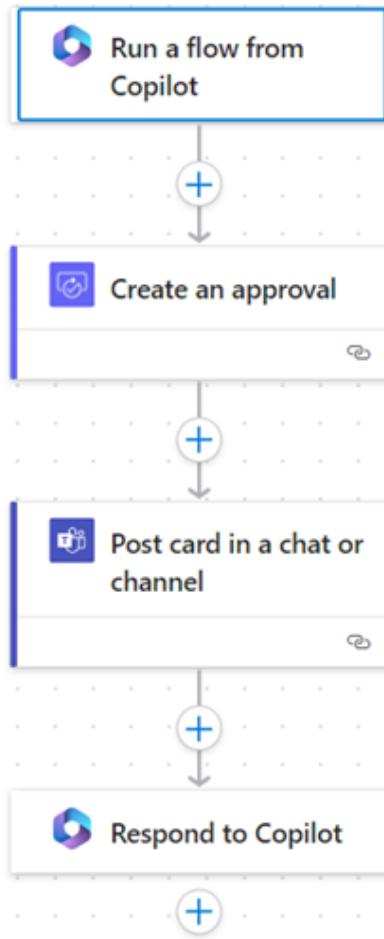
Power Automate flow plugins let you define flows that can be called from AI surfaces in Power Platform. Flow plugins use the new **Run from Copilot** trigger and **Respond to Copilot** action to define custom processes that can be invoked with natural language.

To create automation plugins:

1. Sign in to Copilot Studio and select **Plugins (preview)** on the side navigation pane.
2. Select **Add a Power Platform component as an AI plugin**.
3. Select **Custom Automation**.
4. The flow editor automatically opens with the **Run from Copilot** trigger and **Respond to Copilot** action present.
5. You can add inputs to your trigger for information you might want to collect from your users. Provide helpful text descriptions for each input so the AI can correctly identify what to extract from a user's data or inputs.



6. Add actions to your flow such as the **Create an approval** and **Post a message to Teams chat** to create an approval process.
7. Optionally add parameters to the **Respond to copilot** action for any output you want to send back to the bot.



8. Save your flow with a meaningful flow name and test or run it at least once. The AI uses the title and description of the flow to determine when to invoke the flow plugins. Ensure your flows run correctly, as only tested flows show up as available plugins in Microsoft Copilot.

After you create your plugin, [enable it for use in Microsoft Copilot](#).

Update or get answers about external data with connectors

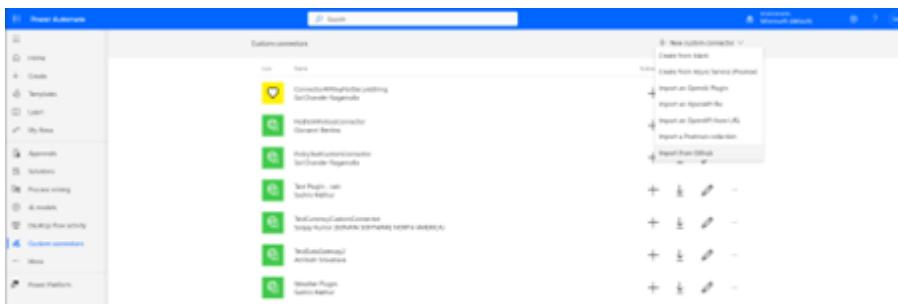
Connector plugins let you define connector actions that can be invoked from AI surfaces in Power Platform. Connector plugins require identification of actions that are enabled for use in Microsoft Copilot and the capture of information that large language models require to effectively identify and utilize the plugin, such as **Summary** and **Description** fields.

! Note

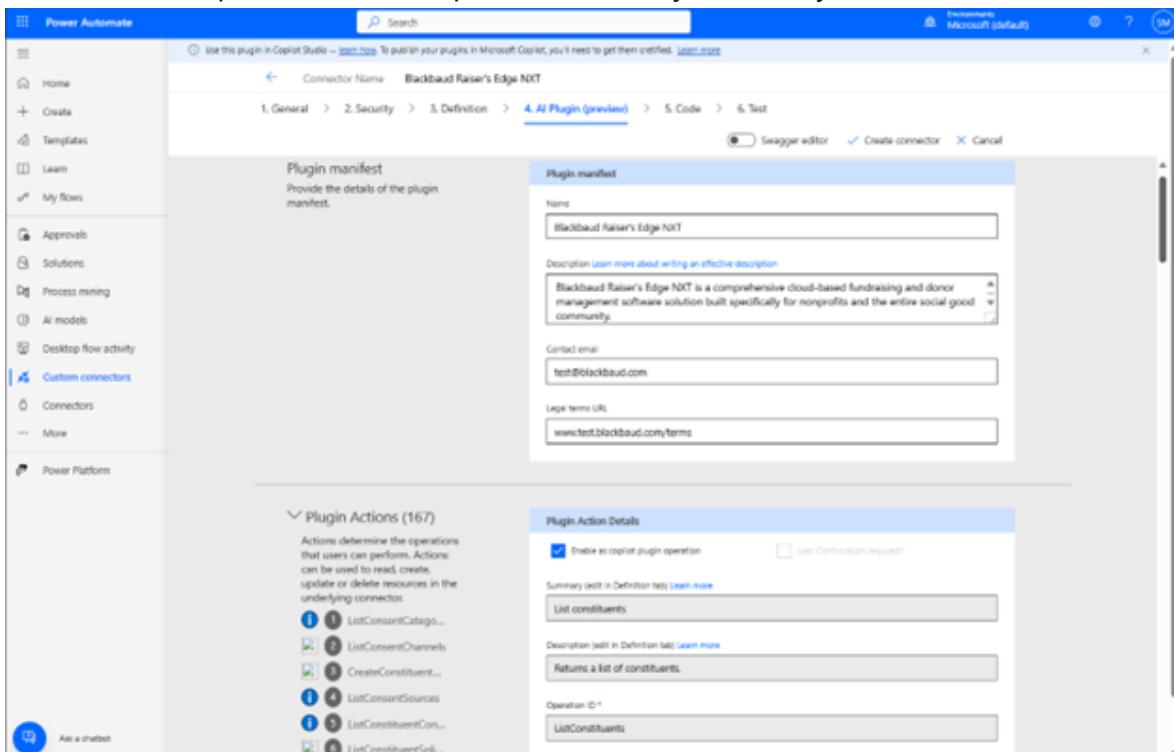
Connector plugins are required to be certified before they can be used in Microsoft Copilot. [Learn more](#).

To create connector plugins:

1. Sign in to Copilot Studio and select **Plugins (preview)** on the side navigation pane.
2. Select **Add a Power Platform component as an AI plugin**.
3. Select **Update or get answers about external data** to get started creating a plugin using a connector.
4. The **Custom connector** editor page automatically opens. Here you can open your connector from the available list or create a new one.

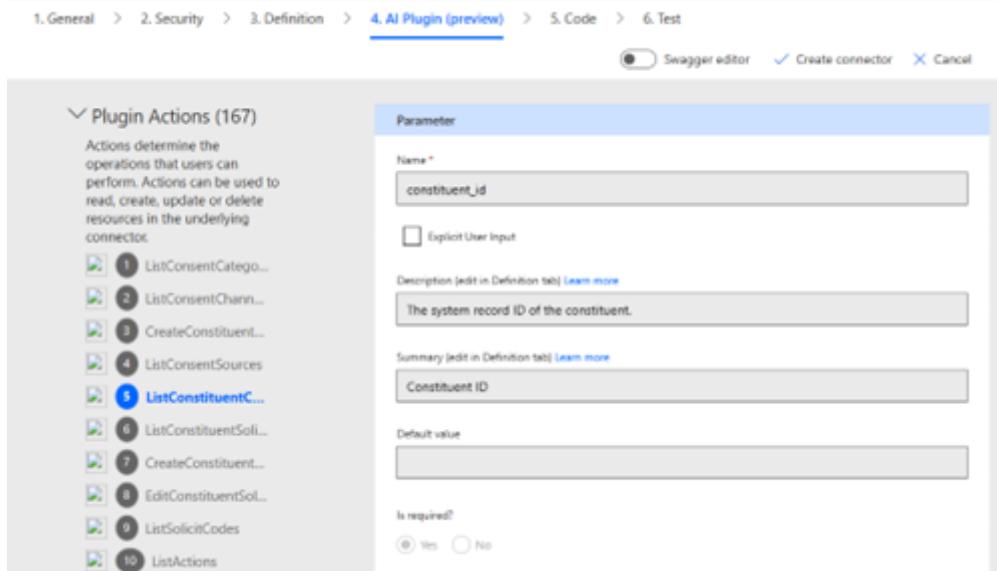


5. On the **AI plugin** tab, add your plugin information such as a summary and description under **Manifest details**. Select the connector actions to enable them. Add text descriptions so that copilot can identify and use your actions.



6. Select the input parameter in the **Request** section of the action and enter a description. For actions where the input parameters don't have descriptive names and descriptions, it's helpful to add human readable text to aid the AI in using the

actions effectively. For example, a field "id" can be better described as the "Account Identifier" or b_date can be described as "Birth Day of Contact in MM/DD/YYYY format." Such descriptions help large language models interact effectively with the plugin.



7. Select **Create/Update Connector** and the connector's Swagger gets updated with appropriate annotations.
8. Follow the instructions to certify the connector so that the plugin can be used in Microsoft Copilot. [Learn more](#).

After you create your plugin, [enable it for use in Microsoft Copilot](#).

Add an OpenAI plugin

OpenAI plugins allow the AI to access data that's not normally available to them based on their available training data.

This data can include:

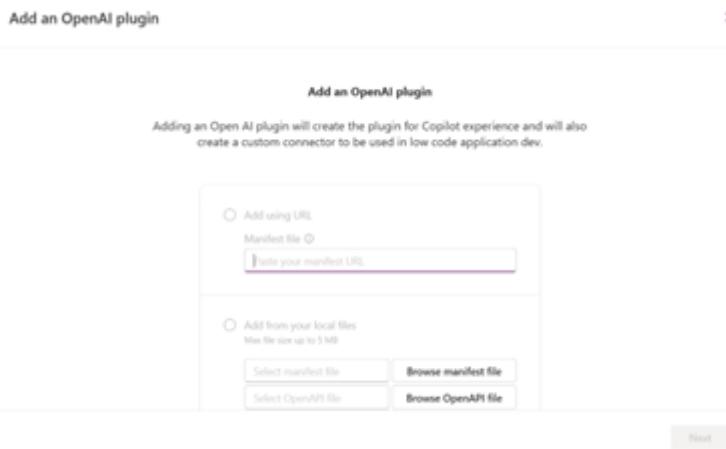
- Personal information.
- Specific product, feature, or content details that aren't available publicly.
- Access to line of business application records.
- Data accessed as part of an integration with specific websites, software, or services.

Depending on the plugin, end users of the copilot can also perform actions against the data such as make updates, additions, or delete content.

Users can create OpenAI plugins and use them to generate connectors to integrate data sources with the Power Platform and to integrate AI chat capabilities in Microsoft products like Microsoft Teams.

To create an OpenAI plugin:

1. Sign in to Copilot Studio and select **Plugins (preview)** on the side navigation pane.
2. Select **Add an OpenAI plugin**.
3. Provide your manifest for the Open AI plugin. You can add a link to the location of the manifest file, or by manually selecting and uploading the manifest file from a local machine.



4. After providing your manifest, select **Next**.
5. Select the authentication type for your plugin from the available options. You might be asked to provide authentication details, if necessary for the connection.



The following authentication types are supported:

- **No Auth** - Anonymous plugins that require no extra credentials.
- **API Key** - Requires a parameter label, name, and the location for the label.
Later, when creating a connection to the connector or plugin, you're prompted to provide your API Key.
- **OAuth 2.0** - Requires a client ID, client secret, authentication URL, token URL, refresh URL, and scope.

6. Select Add Plugin.

The screenshot shows the Microsoft Copilot AI plugins interface. At the top, there are two buttons: 'Add a Power Platform component as an AI plugin' and 'Add an OpenAI plugin'. Below these are four navigation tabs: AI, Prompts, Flows, and Connectors. A search bar is at the top right. The main area displays a table with columns for Name, Description, and Type. One row is visible, showing 'My New OpenAI Plugin' with the description 'Default plugin with all skills enabled' and the type 'Connector'.

Name	Description	Type
My New OpenAI Plugin	Default plugin with all skills enabled	Connector

Your copilot plugin is generated along with your custom connector for the plugin. Both are available for use within your organization and can be included in solutions that you export. For more information, see [Create a custom connector from an OpenAI definition](#).

After you create your plugin, [enable it for use in Microsoft Copilot](#).

Use plugin actions in Microsoft Copilot Studio (preview)

Article • 01/06/2024

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

You can extend the capabilities of your copilot by adding one or more plugin actions. Plugin actions are used by your copilot to respond to users automatically, using [generative actions](#), or you can call them explicitly from within a topic.

[This article is prerelease documentation and is subject to change.]

Core plugin action types

Plugin actions are based on one of the following core action types:

- Prebuilt connector action
- Custom connector action
- Power Automate cloud flow
- Bot Framework Skill

ⓘ Important

You can't use [conversational plugins created in Microsoft Copilot Studio](#) as plugin actions.

Each core action has additional information that describes its purpose, allowing the copilot to use GPT to generate questions. These questions are required to fill the inputs needed to perform the action. Therefore, you don't need to manually author question nodes to gather all inputs needed, such as the inputs on a flow. Inputs are handled for you during runtime.

Plugin actions can generate a contextual response to a user's query, using the results of the action. Alternatively, you can explicitly author a response for the plugin action.

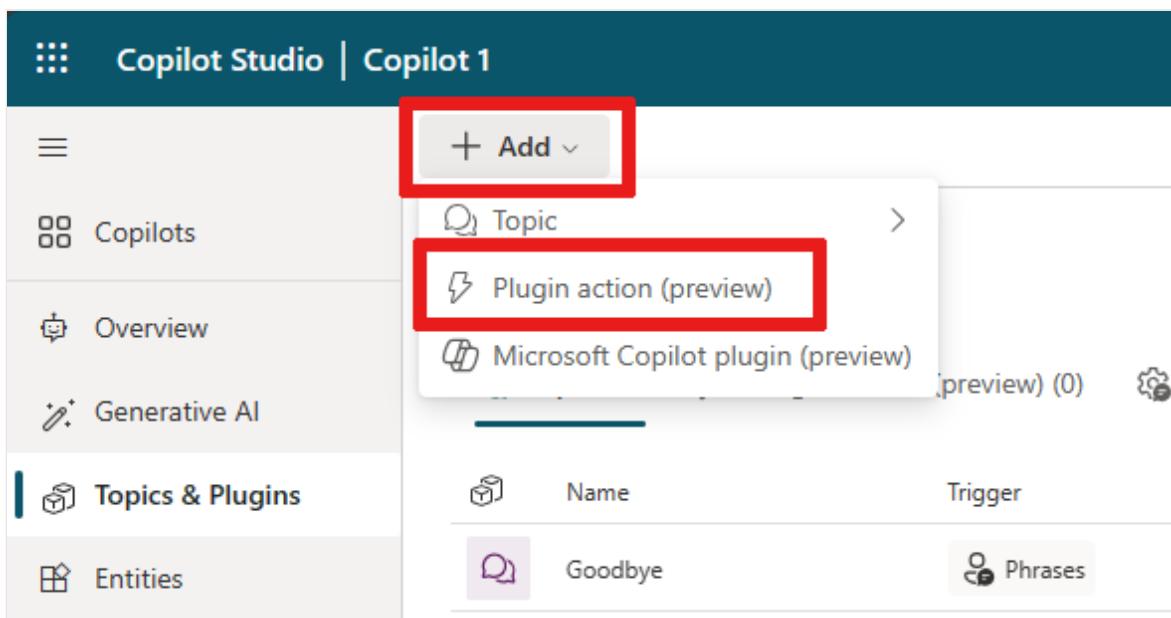
Tip

When using generated questions from a plugin action, inform your users that some of the conversation is generated by AI.

For example, add an extra message in the start conversation **system topic**. This topic determines the message shown to your users when a new conversation starts.

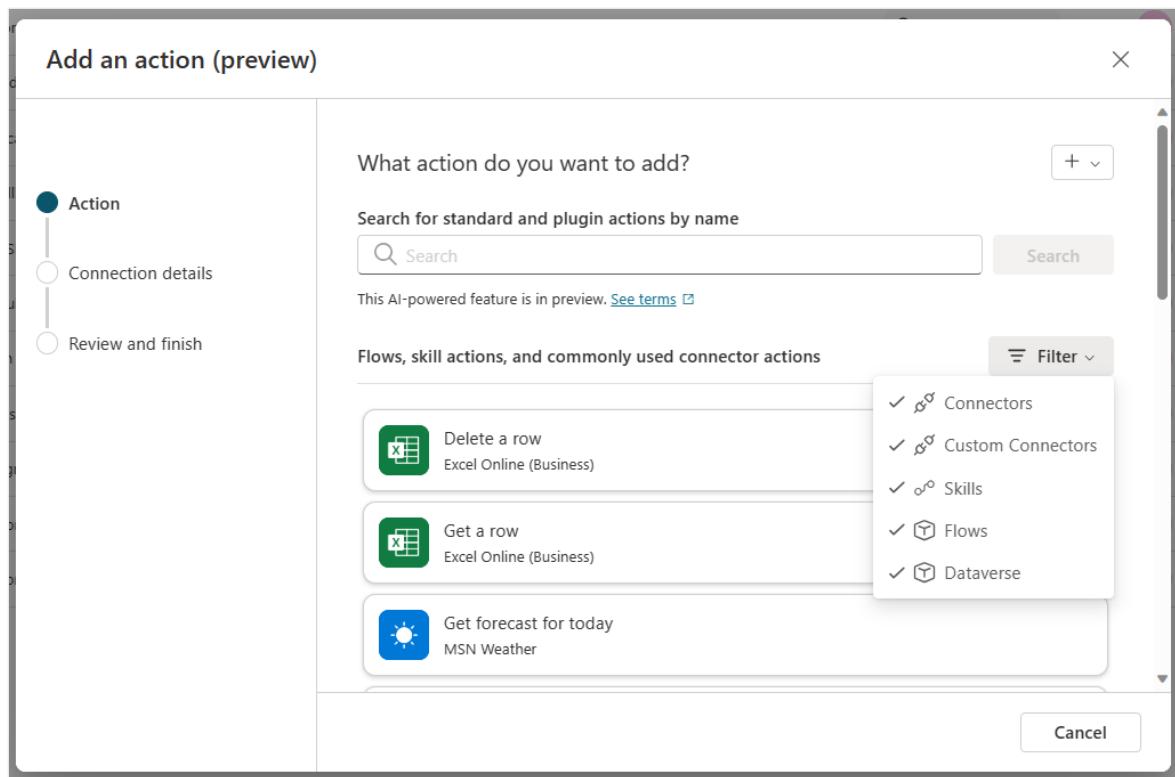
Add a plugin action

1. Open your copilot and select **Topics & Plugins** from the menu.
 2. Select **+ Add**.
 3. Select **Plugin action (preview)**.



4. In the **Add an action (preview)** wizard, search for a plugin action you want to use and select it.

The default list shown has Power Automate Flows and custom connectors available within your environment. This list includes commonly used prebuilt connectors and Bot Framework Skills that are registered with your copilot. For more information, see [Create AI plugins for Microsoft Copilot \(preview\)](#).

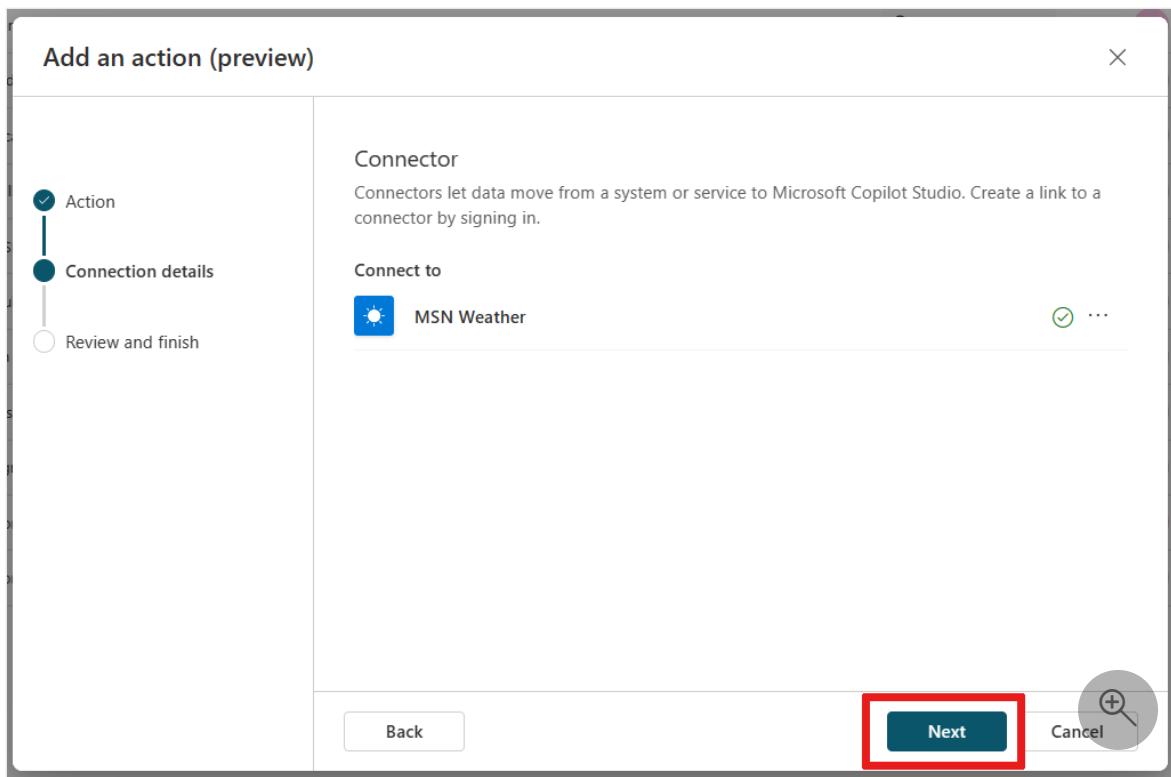


ⓘ Important

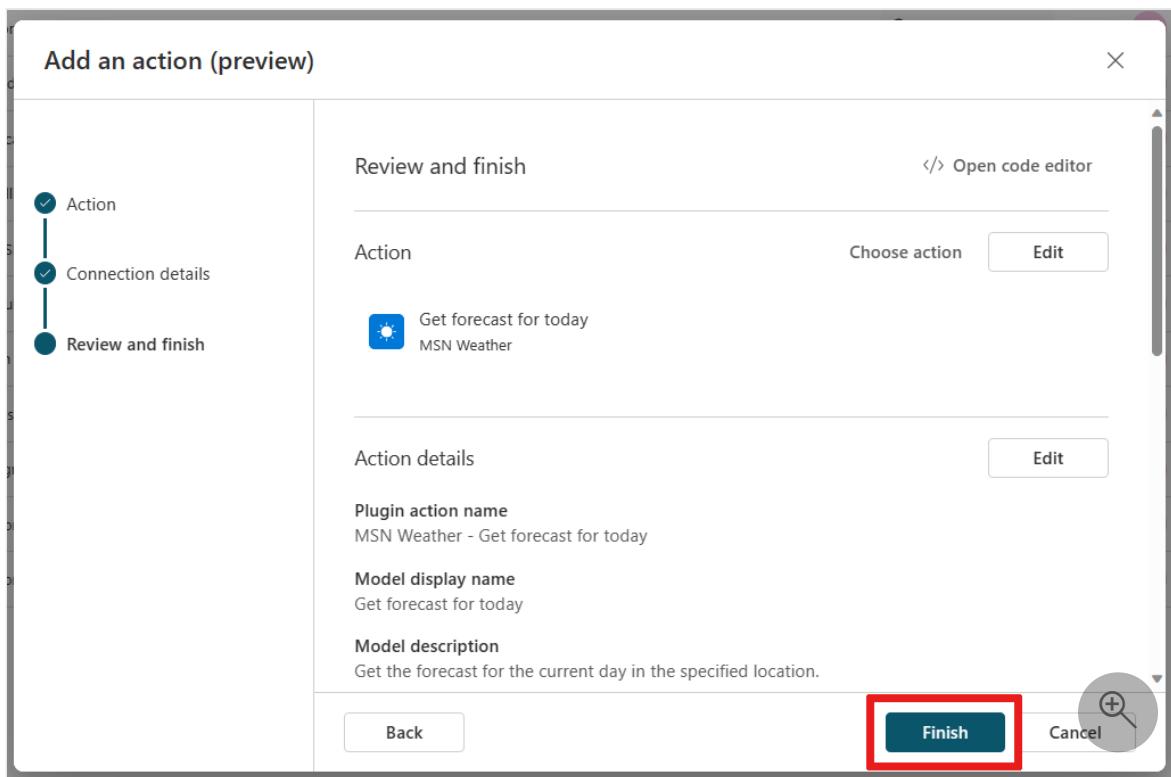
Some plugin actions created from AI Plugins, such as Dynamic Prompts and those based on Dataverse APIs, require **authentication**.

5. Configure the connection for the action.

Depending on the plugin, your connection is automatically configured, as shown in the example. Alternatively, you're required to configure the connection if instructions are given in the wizard. Once your connection is successfully configured, select **Next**.



6. Review and [make changes to your plugin actions configuration](#) if needed. Select **Finish** to add the plugin action to your copilot.



Call a plugin action

If you enabled [generative actions](#), your plugin action is called automatically in response to a relevant user query.

Alternatively, you can [call a plugin action explicitly from within a topic](#).

Test your plugin action

Ask your copilot a relevant question, using the test chat. You can toggle (show or hide) the view for the chat pane at the bottom of the navigation menu.

Your copilot selects and runs your plugin action based on the name and description. You can author high quality descriptions, using the dedicated tracing mode to see which plugin actions your copilot selected from the [generative actions](#) page.

Alternatively, if you [added a plugin action to a topic](#), you can test it by entering a message similar to one of the trigger phrases for that topic.

You can see a weather plugin action being tested in this screenshot:

Chat



Hello, I'm Virtual Agent. How can I help?

Just now

today's forecast



Just now



What location would you like to get the forecast for? Please provide a valid search query such as City, Region, State, Country, Landmark, Postal Code, latitude and longitude.

Just now

check for Orlando, FL



Just now



Are you sure you want to check the weather for Orlando?

Just now

actually check for Seattle



Just now



Are you sure you want to check the weather for Seattle?

Just now

yes

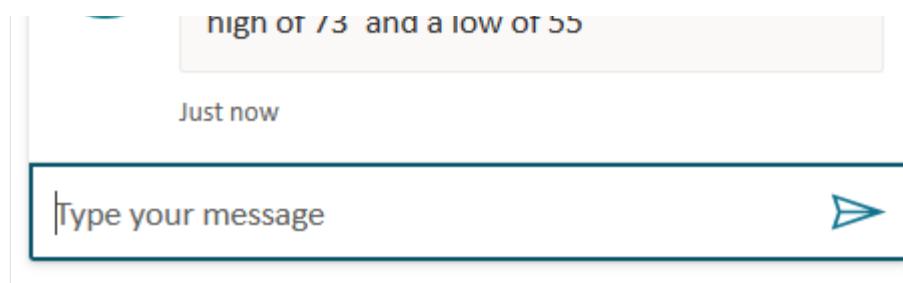


Just now



The weather in Seattle is forecast to have a

High of 67° and a Low of 55°



GPT-driven conversations can be more fluid than traditionally authored questions. Users can answer more than one question in a single turn or fix values they entered previously.

In this example, you can see that the copilot user first chose to check the weather for **Orlando, FL** but then, at the confirmation stage, they indicated that they wanted to change their location to **Seattle**. This change to the input value can be done at any time, not just at the confirmation stage.

Making changes to your plugin action configuration

There are many ways to configure your plugin action. On the final step of the plugin action wizard, called **Review and Finish**, you can make changes to your plugin action's configuration by clicking **Edit** next to the appropriate section.

Action details

Here you can configure details about your action, including the **Model display name** and **Model description** for your plugin action. Usually, the name and description are prepopulated for you based on the action you selected.

On this page, you can select the **Ask the user before running this action** checkbox, which is useful for actions that make changes for a user, such as inserting or updating a record in a table.

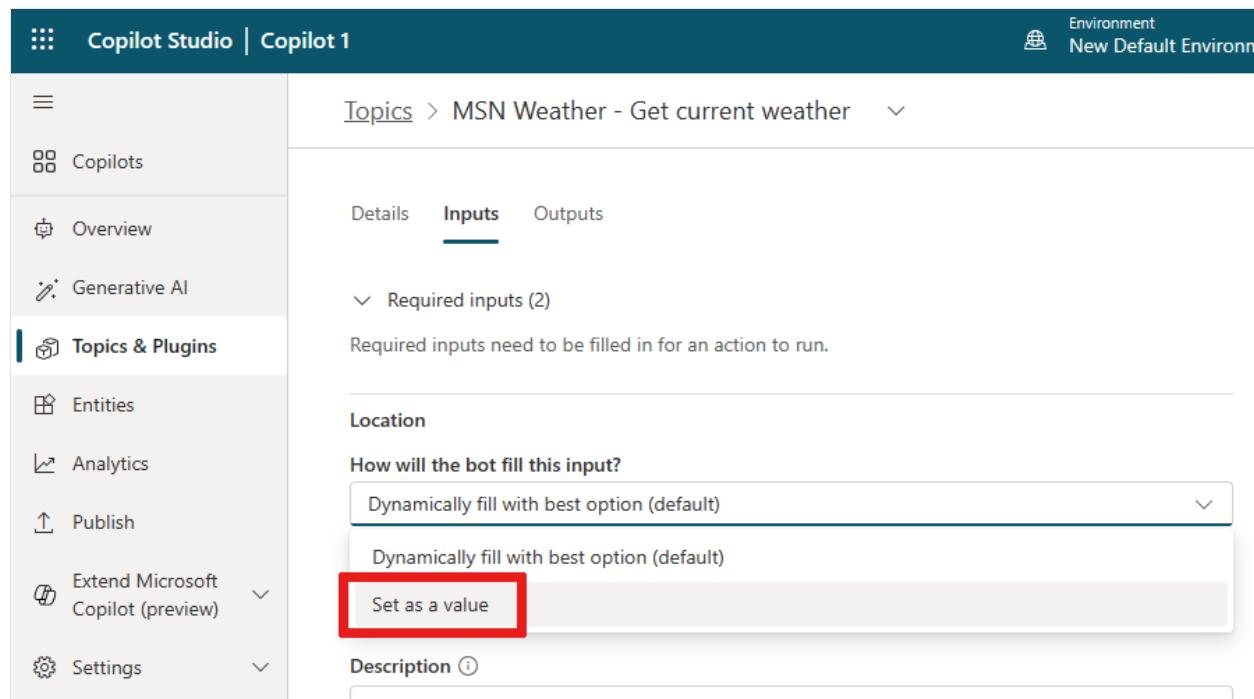
Inputs

The **Inputs** section allows you to manage the **Display name** and **Description** for each input on your action. The name and description help the copilot generate a question to the user. For example, a generated question for the location input could be, *What is the location you would like to check the weather for? You can enter a City, Region, State, Country, Landmark or Postal Code*"

You can change the **Identify as** option to a specific entity type, depending on the input being collected, which can help the copilot accurately extract a value from a user's

response.

By default, each input is set to **Dynamically fill with the best option**. The copilot tries to populate the value from available context, such as extracting a value from the user's message. If no appropriate value is found, it generates a question to ask the user for a value. You can override an input with a value instead of asking the user. To override, change the **How will the bot fill this input?** dropdown to **Set as a value**, then enter a value. This value can be a literal value, an existing variable, or a Power Fx formula.

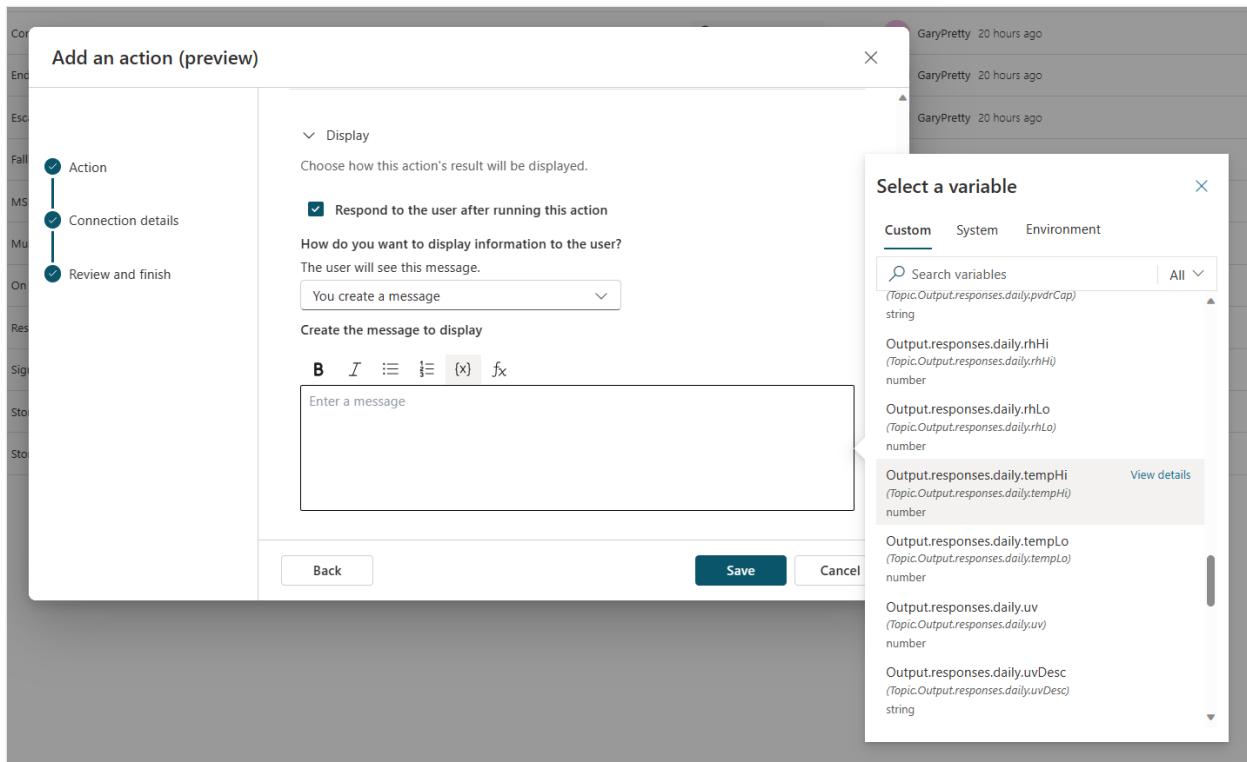


The screenshot shows the Copilot Studio interface with the title bar "Copilot Studio | Copilot 1" and an environment switch "Environment New Default Environment". The left sidebar includes "Copilots", "Overview", "Generative AI", "Topics & Plugins" (which is selected), "Entities", "Analytics", "Publish", "Extend Microsoft Copilot (preview)", and "Settings". The main area shows a "Topics" path "Topics > MSN Weather - Get current weather". The "Inputs" tab is active, displaying "Required inputs (2)". A dropdown for the "Location" input is open, showing "Dynamically fill with best option (default)" and "Set as a value", with "Set as a value" highlighted by a red box. A "Description" section is also visible.

Outputs

By default, your plugin action is configured to automatically generate a contextual response for a user, based on their query and the result of the action. For example, if a user asks, "What is the current temperature in London?", a contextual reply is generated using GPT, such as "The current temperature in London is 9 degrees Celsius."

Alternatively, you can choose to author a specific response for your plugin action to return. As with the confirmation editor, you can insert references to output variables from the action using the variable picker, as shown in this example.



Calling a plugin action from within a topic

You can call a plugin action explicitly from within a topic, similar to calling other action types like Power Automate Flows. Depending on your use case, you might use your Flow as part of a wider topic, which uses more nodes. Or, like in the weather example, adding a single plugin action node to a topic might be all you need.

To call a plugin action from within a topic:

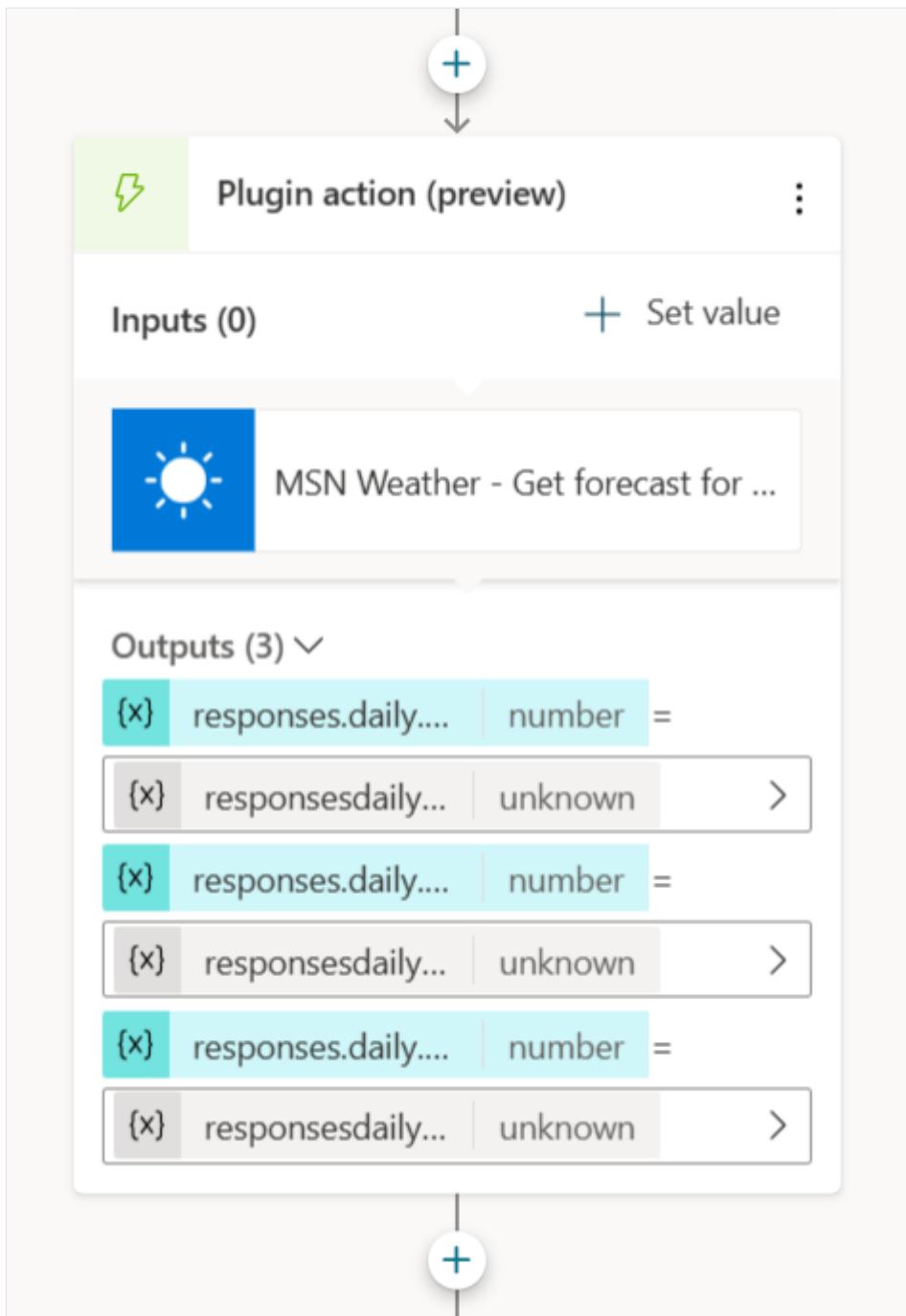
1. In Microsoft Copilot Studio, go to the [Topics page](#) for the copilot you want to edit.
2. Create a new topic, and name it **Get weather**.
3. Add the following **Trigger phrases**:
 - will it rain
 - today's forecast
 - get weather
 - what's the weather

The screenshot shows the Microsoft Bot Framework Composer interface. On the left, a 'Trigger' node is open, displaying a list of 'Phrases' such as 'will it rain', 'today's forecast', 'get weather', and 'what's the weather'. Below the node is a '+' icon for adding more. To the right, a context panel titled 'On Recognized Intent' is visible, with a 'Phrases' section containing tips for adding trigger phrases. It includes a text input field 'Enter text' and a note about using Shift+Enter for line separation. Below this are four examples of phrases: 'will it rain', 'today's forecast', 'get weather', and 'what's the weather'. At the bottom of the panel is a link to 'Advanced'.

4. Select **Add node (+)** and then select **Call an action**. Switch to the **Plugin actions (preview)** tab and then select the plugin action you created earlier, **Get weather forecast**.

The screenshot shows the Microsoft Bot Framework Composer interface. On the left, a context menu is open with options like 'Paste', 'Send a message', 'Ask a question', 'Ask with adaptive card', 'Add a condition', 'Variable management', 'Topic management', 'Call an action', and 'Advanced'. The 'Call an action' option is highlighted. To the right, a 'Select an action' dialog is open, showing the 'Plugin actions (preview)' tab selected. A search bar is at the top, followed by a list of actions. The first action listed is 'Add a plugin action (preview)', and below it is 'MSN Weather - Get forecast for today', which is described as 'Get the forecast for the current day in the specified location.'

5. Your **plugin action (preview)** node is now added to your topic.



6. Select Save.

Overriding inputs when calling a plugin action from a Topic

By default, when your plugin action runs, your copilot generates questions for the user to populate the required inputs. However, you might want to override one or more inputs and provide an explicit value instead of asking the user. You can override in the [plugin action configuration](#) within the **Inputs** section. Or, you might override values only when your plugin action is used from a specific topic:

1. Select **Set value** on the node and choose the input you would like to override.

The screenshot shows a workflow interface with a main panel and a modal window.

Main Panel:

- Top bar: "get weather" and "what's the weather".
- Central area: A blue circular button with a plus sign.
- Plugin action (preview) section:**
 - Inputs (0)**: An empty list.
 - Outputs (3) ▾**:
 - (x) responses.daily.... | number = [Input field]
 - (x) responsesdaily... | unknown > [Input field]
 - (x) responses.daily.... | number = [Input field]
 - (x) responsesdaily... | unknown > [Input field]
 - (x) responses.daily.... | number = [Input field]
 - (x) responsesdaily... | unknown > [Input field]

Modal Window: "Select a plugin input to override" (Custom tab selected):

- Search bar: "Search variables" and "All".
- Variables:
 - Location** (*Topic.Location*) string
 - units** (*Topic.units*) string [View details](#)

1. Click the "Set value" button for each input field in the "Plugin action (preview)" panel.
2. Enter the value for the input by typing a value, selecting a variable, or using a formula.

The screenshot shows the Microsoft Copilot AI Plugins interface. At the top, there's a green button with a lightning bolt icon labeled "Plugin action (preview)". Below it is a blue button with a plus sign. The main area has a title "Plugin action (preview)" with a three-dot menu icon. It shows "Inputs (1)" with a placeholder "(x) units string = Metric". To the right is a "Set value" button. Below this is a section for "Outputs (3)" containing five rows, each with a placeholder "(x) responses.daily.... number = responsesdaily... unknown >". The first row is highlighted in teal, while the others are in grey. A large blue plus sign is at the bottom center.

Now that this input is overridden, the copilot doesn't ask the user for a value.

Enable authentication for AI Plugins

Some plugin actions, when created based on AI Plugins, require authentication to work correctly, such as Dynamic Prompt or others that call a Dataverse API.

Plugins are always run in the Microsoft Copilot runtime in the end-user context and can't be run unless authentication is enabled. Two types of authentication methods are supported:

The screenshot shows the 'Authentication' configuration screen in Copilot Studio. At the top, there's a message: 'Contact your admin to discover the plan that's right for you. [See more](#)'. Below this, a note says 'measures for the copilot and your users.' On the left, there's a sidebar with a shield icon and the text 'Authentication: Verify a user's identity during a chat.' In the main area, the title 'Authentication' is followed by a description: 'Verify a user's identity during a conversation. The bot receives secure access to the user's data and is able to take actions on their behalf, resulting in a more personalized experience.' A link '[Learn more](#)' is provided. Under 'Choose an option', three radio buttons are shown: 'No authentication' (selected), 'Only for Teams and Power Apps', and 'Manual (for custom website)'. Each option has a detailed description below it. At the bottom right are 'Save' and 'Close' buttons.

- **Integrated authentication (Teams and Power Apps):** This authentication setup can be employed if your copilot is in the Teams channel. The setup also works with embedded copilots in any Power Platform app that uses tokens built with the PPAPI standard.
- **Manual authentication (third-party bots):** This authentication method involves the setup of an Entra ID connection.

To create a manual authentication connection:

1. Set up an [Entra ID app](#).
2. Set up [manual authentication on your Copilot Studio copilot](#).
3. Allow your app to use delegation to [fetch a token on behalf of the user](#). Be sure to add any necessary scopes.

Authentication

X

Require users to sign in

Redirect URL

https://token.botframework.com/.auth/web/redirect

Copy

Service provider *

Azure Active Directory v2



Client ID *

Client secret *

Token exchange URL (required for SSO) [Learn more about SSO](#)

Tenant ID

91bee3d9-0c15-4f17-8624-c92bb8b36ead

Scopes ⓘ

profile openid

Save

Close

Use Generative Actions in Microsoft Copilot Studio (preview)

Article • 01/06/2024

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

[This article is prerelease documentation and is subject to change.]

Generative actions allow you to replace the traditional, natural language-based approach for topic triggering (using the trigger phrases you've defined in each topic). Instead, your copilot uses GPT to select one or more [topics](#) or [plugin actions](#) to respond to a user's query. All topics and plugin actions have an associated description, which is the primary piece of information used when selecting which item should be selected.

ⓘ Important

This is a preview feature. Preview features aren't meant for production use and may have restricted functionality. These features are available before an official release so that customers can get early access and provide feedback.

💡 Tip

When using AI-generated content, such as the generated questions when running a plugin action, it's a good idea to inform your users that some of the conversation may be generated by AI.

For example, you could add an extra message in the [Start conversation System topic](#), which controls the message shown to your users when a new conversation is started with the bot.

Enable generative actions

To enable the generative actions preview:

1. Navigate to the **Generative AI** page using the left hand navigation.
2. Enable the toggle for **Dynamic chaining with generative actions**.
3. Click **Save** at the top of the page.

Once generative actions is enabled, the **Topics** page in the left hand navigation is replaced with **Plugins (preview)**.

The screenshot shows the Copilot Studio interface. The left sidebar has a 'Copilot Studio' header and includes links for 'Copilots', 'Overview', 'Plugins (preview)', and 'Entities'. The 'Generative AI' section is currently selected, indicated by a blue bar. Under 'Generative AI', there are sections for 'Analytics', 'Publish', 'Extend Microsoft Copilot (preview)', and 'Settings'. The main content area is titled 'Generative AI' and contains a note about enabling intelligent features. It then lists three features with toggles:

- Dynamic chaining with generative actions (preview)**: Create conversations by letting AI find and connect the appropriate plugins in real time. The toggle is turned on (blue).
- 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. The 'Go to user settings' link is present.
- Boost conversational coverage with generative answers**: Customize your conversations with a node to get information in real time from a data source you choose. The 'Learn more' and 'Go to Conversational Boosting topic' links are present. The toggle is turned off (grey).

How your copilot responds to user queries with generative actions

Generative actions create more natural and fluid conversations for users in your copilot.

When a user sends a message, GPT selects one or more **plugin actions** or **topics** in its response. Various factors determine which topics and plugin actions are used. The

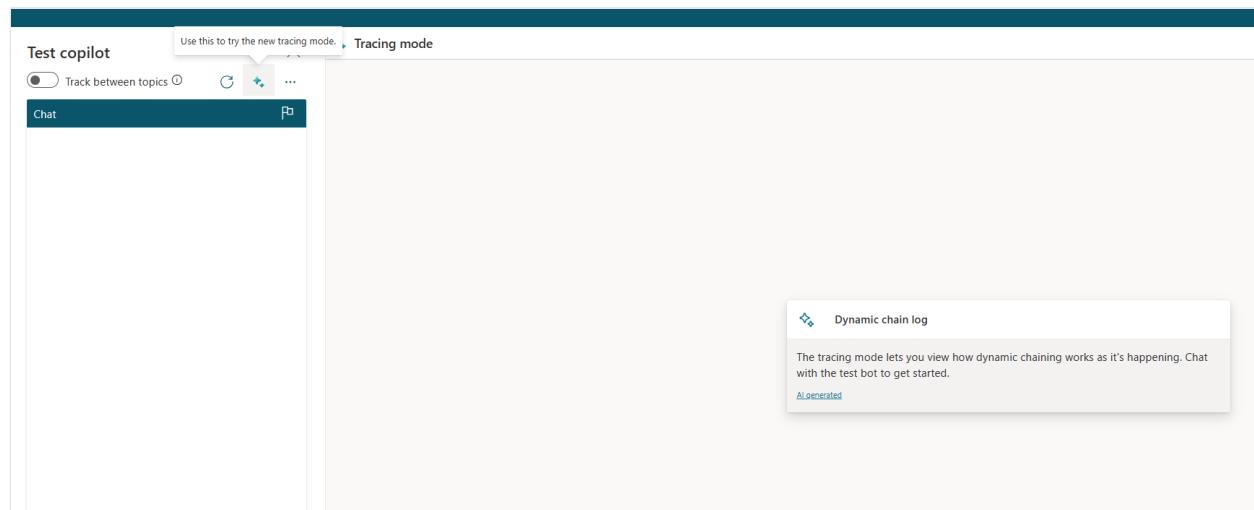
primary factor comes from the description with each item. Other factors include the name and any inputs or outputs (and their names and descriptions).

Once [plugin actions](#) and [topics](#) are selected, a plan is generated that determines the order they get executed. The copilot prepopulates any inputs required by the plugin actions and topics. These inputs are extracted values from the user's query or identified values from the previous conversation context.

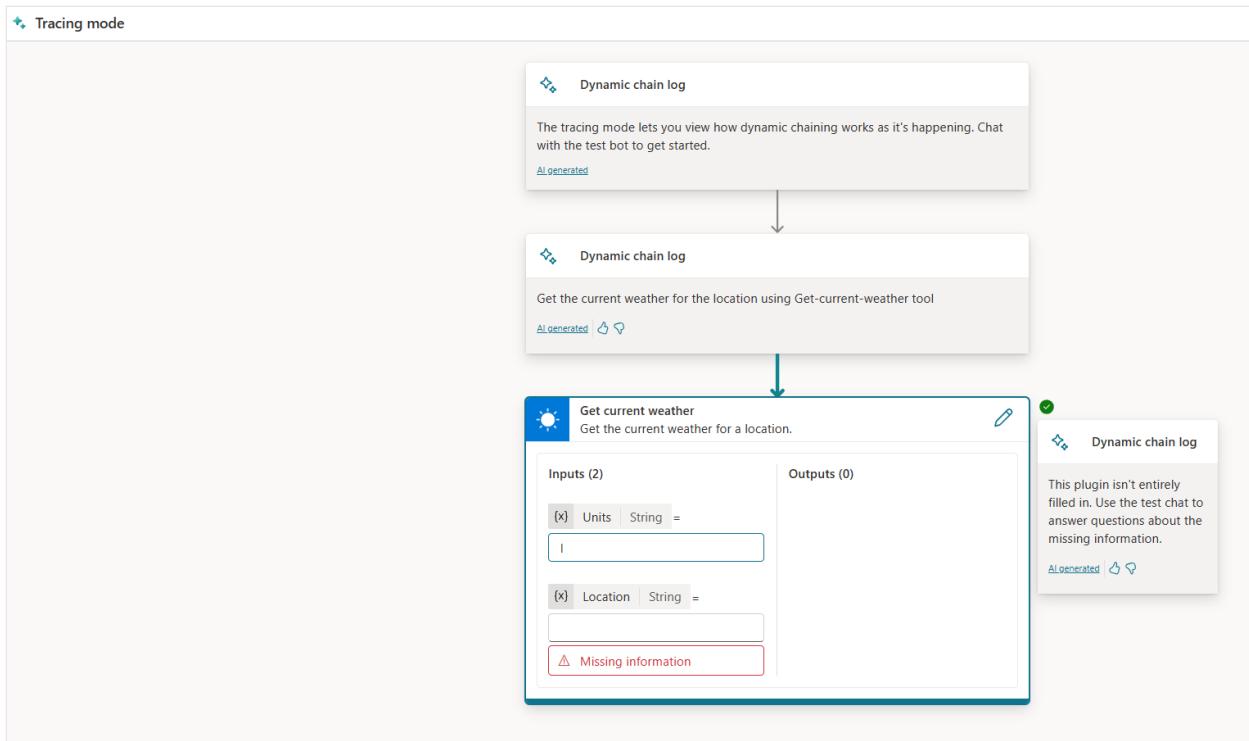
The plan is reassessed and updated, if needed, after each new message is received from the user. The reassessment allows for scenarios such as interruption, where additional items are added to the plan, or cancellation.

Testing your copilot using generative actions

When testing your copilot with generative actions enabled, you can open the new tracing mode, by selecting the tracing mode button at the top of the test canvas pane.



Now, when you ask your copilot a question in your test canvas, you can see a visual representation of the plan that was generated. Here, the user asked, "what's the weather like?", and you can see the plugin action that was selected to respond and the missing input that needs to be collected, along with annotations from the copilot about its decision making.

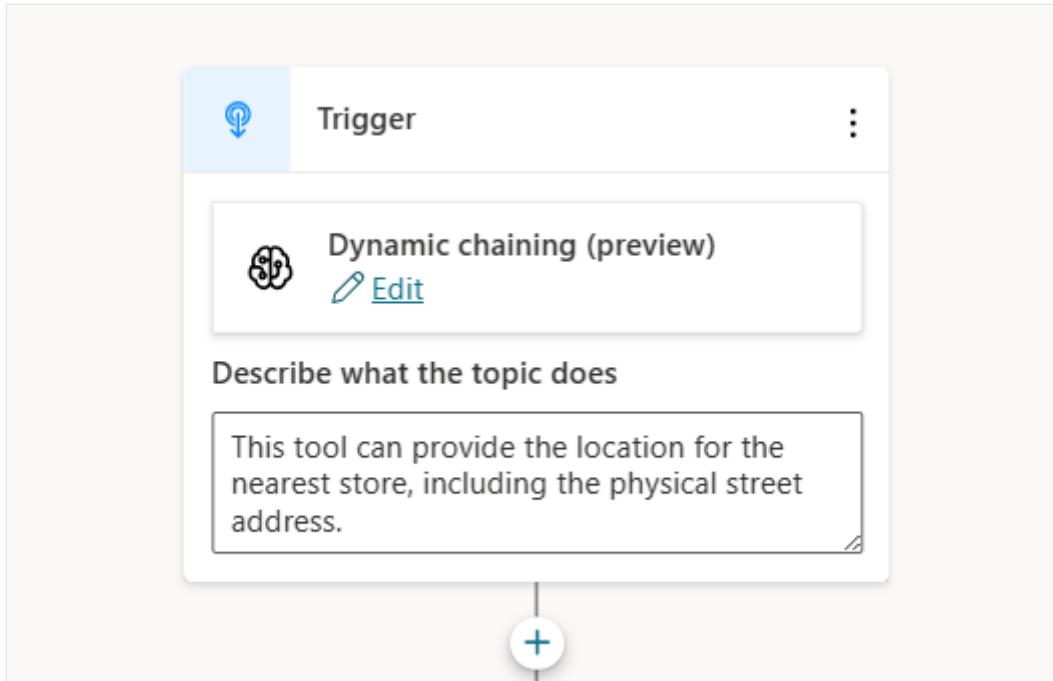


Authoring descriptions

Once generative actions are enabled, each of the [plugin actions](#) and [Topics](#) within your copilot must have a high quality description to ensure your copilot selects the right ones to respond to a user.

For plugin actions, authoring a description is part of the wizard used to add them to the copilot. They're often prepopulated for you, but you can make changes as appropriate. You can find more details about how to add and manage plugin actions in your copilot [at the plugin actions article](#).

For topics, once generative actions is enabled, the **Dynamic Chaining** trigger is shown in place of the previous **Phrases** trigger, which allows you to add or edit the description for the topic.



Tip

For any topics that have trigger phrases that exist within your copilot when you enable generative actions, a default description is generated for you using those trigger phrases. In many cases this should allow your topic to be selected in response to relevant user queries, it's a good idea to amend the description using the advice provided in this article.

Writing a good quality description

Here are some best practices for drafting clear, concise, and relevant descriptions for topics and plugin actions within your copilot.

- Use simple and direct language. Avoid jargon, slang, or technical terms.
- Use the active voice and the present tense for descriptions. For example, write "This plugin provides weather information" instead of "Weather information is provided by this plugin".
- Use keywords that relate to the plugin's functionality and the user's intent. For example, if the plugin provides weather information, use keywords like "weather", "forecast", "temperature", "rain", "snow", and so on.
- For the description, write a short and informative summary of the plugin's functionality. The summary should be one or two sentences long and explain what the plugin does and how it benefits the user.
- As well as a good description, use a descriptive and unique name for the plugin that is a short phrase. Avoid using generic or ambiguous names that could be

confusing. For example, instead of naming the plugin "Weather", name it "Weather Forecast" or "Weather Report".

Here is an example of a description for a Topic that can provide information about current weather conditions.

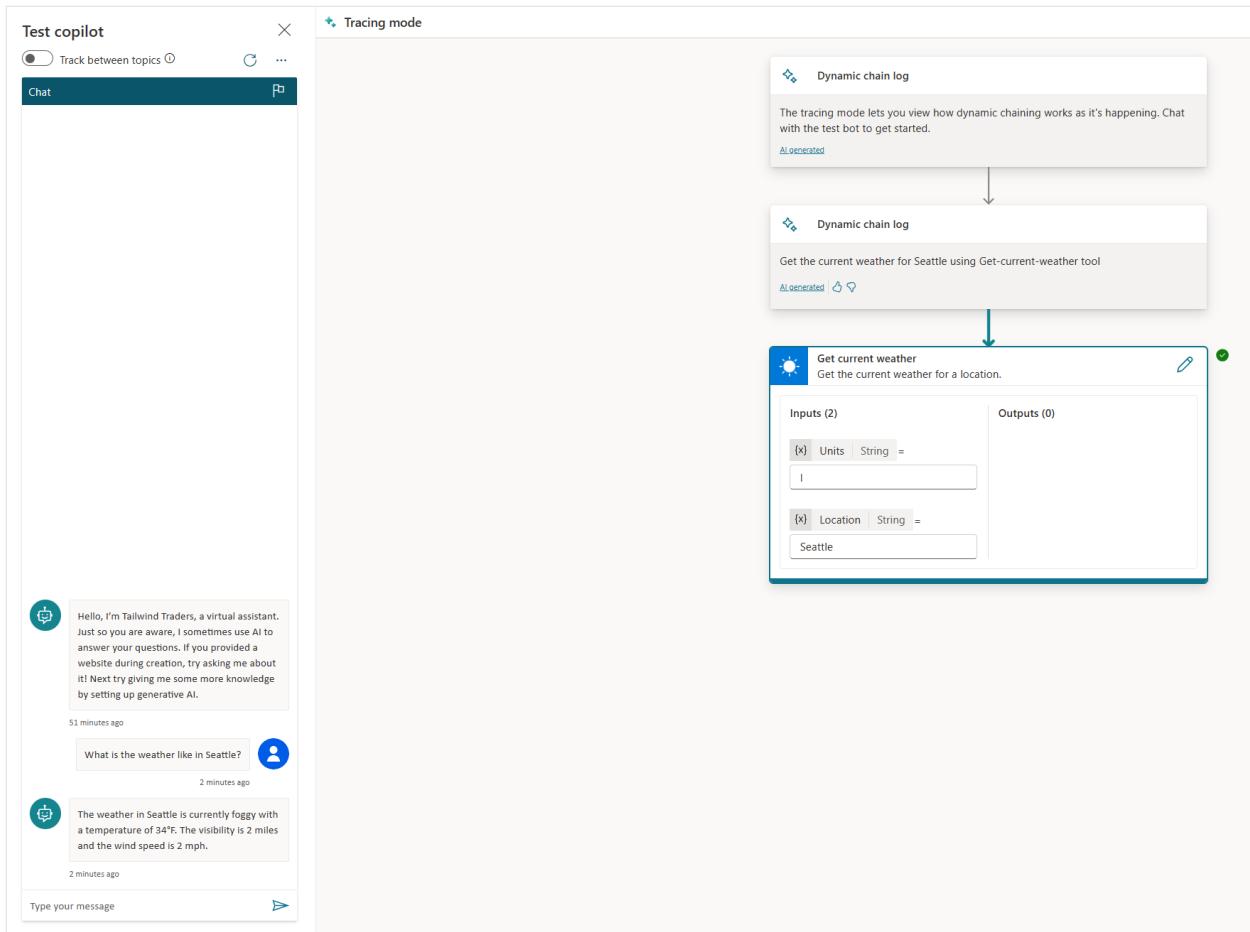
```
Name: Weather Forecast  
Description: This topic provides weather information for any location in the world. You can ask for the current weather, the hourly forecast, or the daily forecast.
```

Examples of generative actions handling user requests

The following examples are based on a copilot that has two custom topics, one for finding store hours and another for locating a nearby store, and a plugin action based on the prebuilt MSN Weather connector.

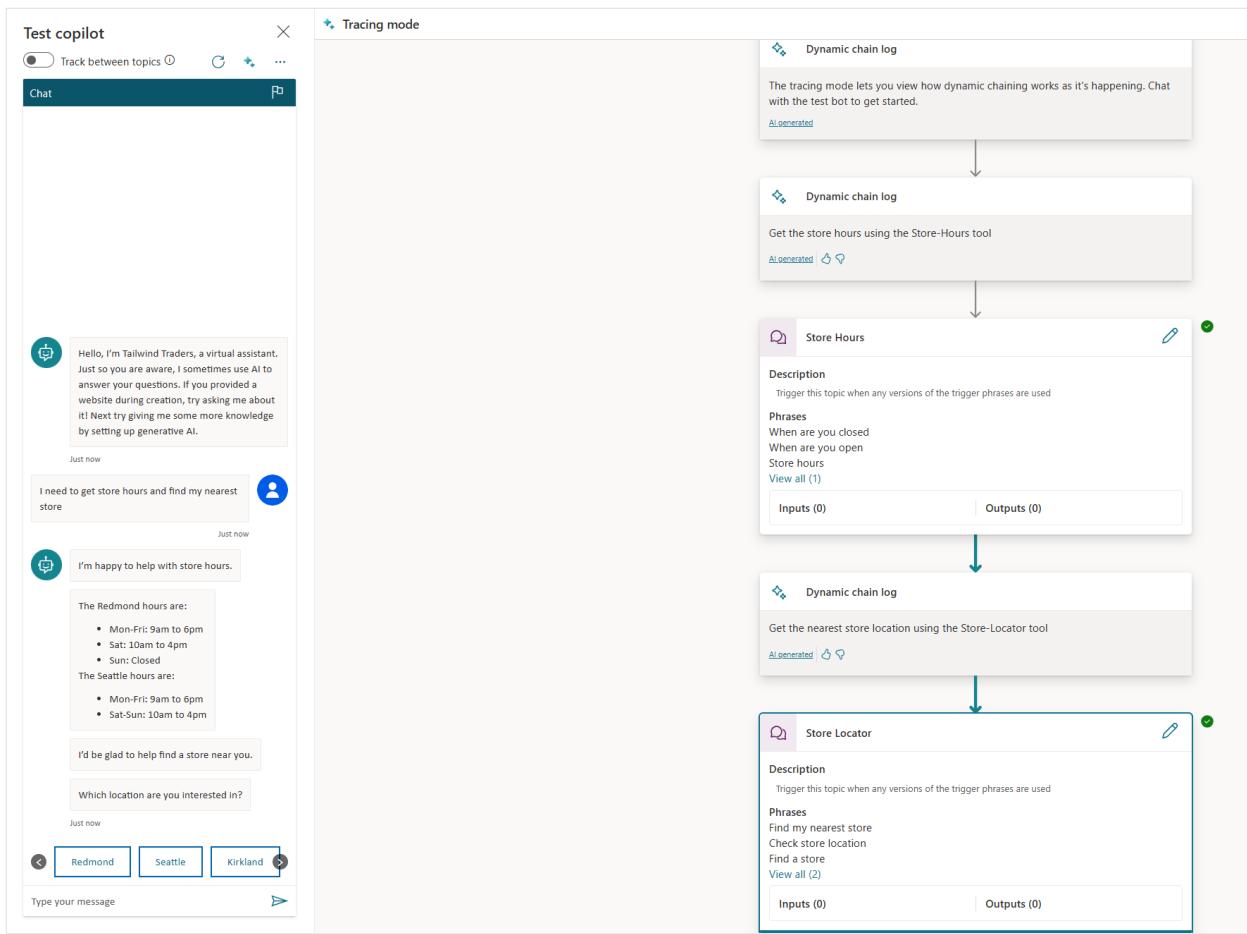
Example 1

In this example, the user asks, "What is the weather like in Seattle?". The copilot selects the current weather plugin action and also prepopulates the Location input with `Seattle`, which was extracted from the user's question.



Example 2

In this example, the user asks, "I need to get store hours and find my nearest store". Here, the copilot selects two items, the **Store Hours** topic and the **Store Locator** topic, and chains them together to respond to both parts of the user's query.



Example 3

In this example, the user has found their nearest store, which was identified as Kirkland, earlier within the conversation. The user then asked, "what's the weather like there?". Here, the copilot selects the current weather plugin action, but prepopulates the location with `Kirkland`, based on the recent conversation context.

Test copilot

Track between topics ⚙️

Chat

Just now

Hello, I'm Tailwind Traders, 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.

Just now

find my nearest store

I'd be glad to help find a store near you.

Just now

Which location are you interested in?

Just now

Kirkland

Our Kirkland is located in downtown Kirkland. The address is: 1234 Central Way, Kirkland, 98321.

Just now

what's the weather like there?

The weather in Kirkland, WA is currently foggy with a temperature of 34°F. The visibility is 2.4 miles and the wind speed is 2.0 mph.

Just now

Type your message ➤

Tracing mode

Dynamic chain log

The tracing mode lets you view how dynamic chaining works as it's happening. Chat with the test bot to get started.

AI generated

Dynamic chain log

Get the current weather for Kirkland using Get-current-weather tool

AI generated

Get current weather

Get the current weather for a location.

Inputs (2)

(x) Units String = I

(x) Location String = Kirkland

Outputs (0)

Microsoft Copilot Studio plugin architecture

Article • 11/15/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

A **plugin** is a reusable piece of code that can perform a specific task or provide specific functionality for a copilot. For example, a plugin can help a copilot answer a natural language query, execute a workflow, connect to an external system, or provide topic-specific guidance. A **copilot** is a conversational or UX-based assistant that helps users accomplish their tasks and goals in a specific domain or application.

A plugin, in this context, is created in the plugin authoring experience in the Microsoft Copilot Studio. This feature allows users to create and edit plugins using a graphical user interface and publish them to the plugins registry.

The plugins registry helps you create a plugin once and use it in multiple copilots. The registry provides storage and management for metadata and execution information for plugins. Users can apply the power and flexibility of plugins to enhance the capabilities of copilots without writing code for each copilot separately. The various copilots interact with the plugins registry to discover plugins and execution information available for a user. This capability enables AI plugins to be created once and reused many times.

A plugin is born

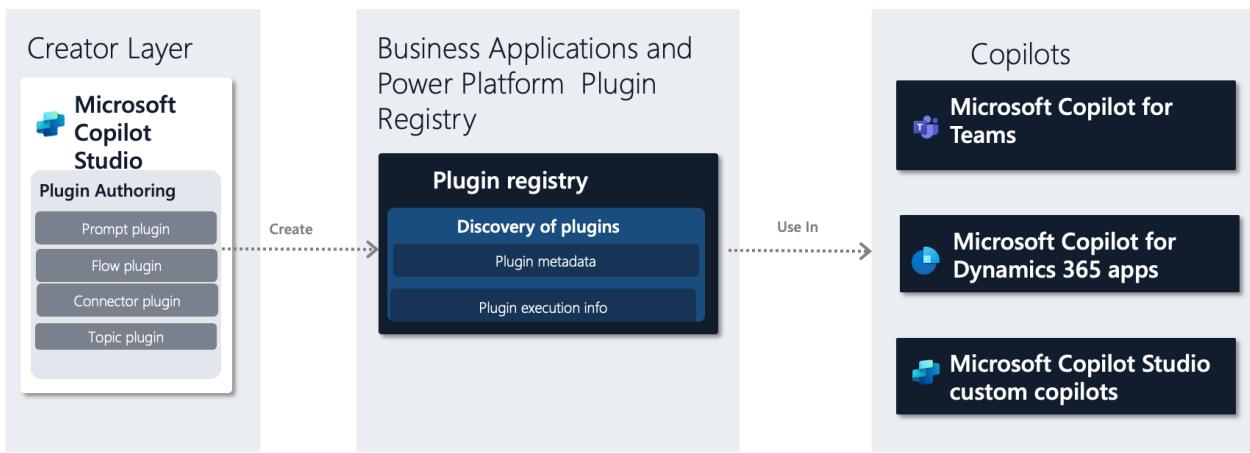


Figure: Plugin Authoring using Microsoft Copilot Studio

Creator Layer

The Creator Layer of Microsoft Copilot Studio is where users can create and edit plugins. This layer supports four types of plugins: Prompt, Flow, Connector, and Topic.

- **Prompt** plugins are plugins that can answer natural language queries from users using natural language processing (NLP) and natural language generation (NLG) techniques. For example, a prompt plugin can answer a question like "What are the sales opportunities for ACME Corp?" by querying data in Microsoft Dataverse and generating a natural language response that can be customized (such as a bulleted list).
- **Flow** plugins are plugins that can execute multi-step workflows using Microsoft Power Automate. For example, a flow plugin can create a new contact in Microsoft Dynamics 365 after manager approval or send an email to a customer with a prescribed template.
- **Connector** plugins are plugins that can connect to external systems or data sources using Microsoft Power Platform connectors. For example, a connector plugin can connect to Salesforce or SAP using Power Platform connectors and retrieve or update data. Connector plugins can be certified connectors that are shared across tenants or environment-specific custom connectors.
- **Topic** plugins are single-turn conversational threads between a user and a copilot that can be created to answer a specific user utterance. For example: a topic about store hours with a trigger phrase *check store hours* can return the store hours. These topics can still handle user utterances such as "see store opening hours" due to the power of LLMs.

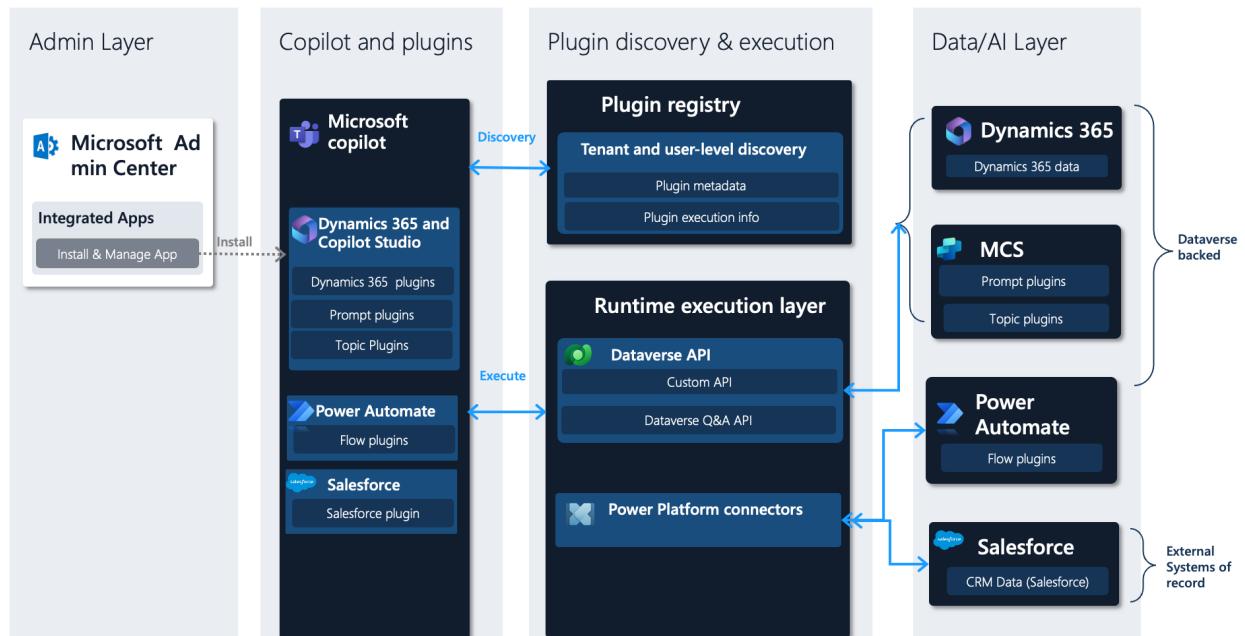
Business applications and Power Platform plugin registry

The plugins registry stores and manages the plugin metadata and execution information. The registry is a single source for discovery of plugins authored from Microsoft Copilot Studio. The registry helps you discover integrated apps available at the tenant level used in the Microsoft Admin center by Microsoft 365 Teams. The registry shows you plugins available to a user, or used by copilots in Microsoft Copilot Studio. A plugin has the same security as its underlying artifact, such as a flow and can provide a customized list of plugins for a specific user role.

Copilot samples

This sample set of the various copilots integrates with the plugins registry to consume plugins. These copilots include Microsoft copilots for Dynamics 365 apps, Microsoft copilots for Teams, and custom copilots authored using Microsoft Copilot Studio. The list is expected to grow in the future as more first-party and third-party copilots are developed.

A plugin in Microsoft Copilot



Admin Layer

The administration layer is where administrators can use the Microsoft Admin Center to choose the integrated apps available for their tenant. Administrators can allow, deploy, or block apps for specific or all users. An integrated app can have multiple plugins. The apps available from Microsoft Copilot Studio-created plugins are retrieved from the plugins registry and include:

- **Dynamics 365 and Microsoft Copilot Studio:** Includes Dynamics 365 plugins from teams such as Microsoft Dynamics 365 Sales and Microsoft Dynamics 365 Field Services. You can create custom prompts and topic plugins.
- **Power Automate:** Includes Power Automate flow plugins.
- **Connector specific:** A sample of Salesforce and SAP plugins are called out here. Every certified connector plugin created by Microsoft or ISVs shows up as their own integrated app for fine-grained management.

 **Note**

App names are subject to modification.

Plugin Discovery and Execution

The plugins available to a user include plugins assigned through deployed integrated apps. The plugins available to a user are discovered through the plugins registry. Users are free to further customize the plugins based on how they want to use the plugin flyout experience. The plugin execution information gets retrieved from the plugins registry and includes the runtime path.

There are two runtime execution paths supported today:

1. **Plugins that are Dataverse-based:** Microsoft Dynamics 365 plugins that access or modify Dataverse data, Microsoft Copilot Studio topic plugins, and prompt plugins. This path supports Microsoft Entra ID authentication. The calls are made to the underlying system on behalf of the user.
2. **Plugins that use the the Power Platform connector ecosystem:** This path helps execute connectors that provide access to internal and external systems of record. It supports explicit configuration of credentials per user such as Salesforce connection credentials that are then maintained per user.

If a user doesn't find a suitable plugin for their task, they can navigate to the Microsoft Copilot Studio and create a plugin that addresses their needs.

Data/AI Layer

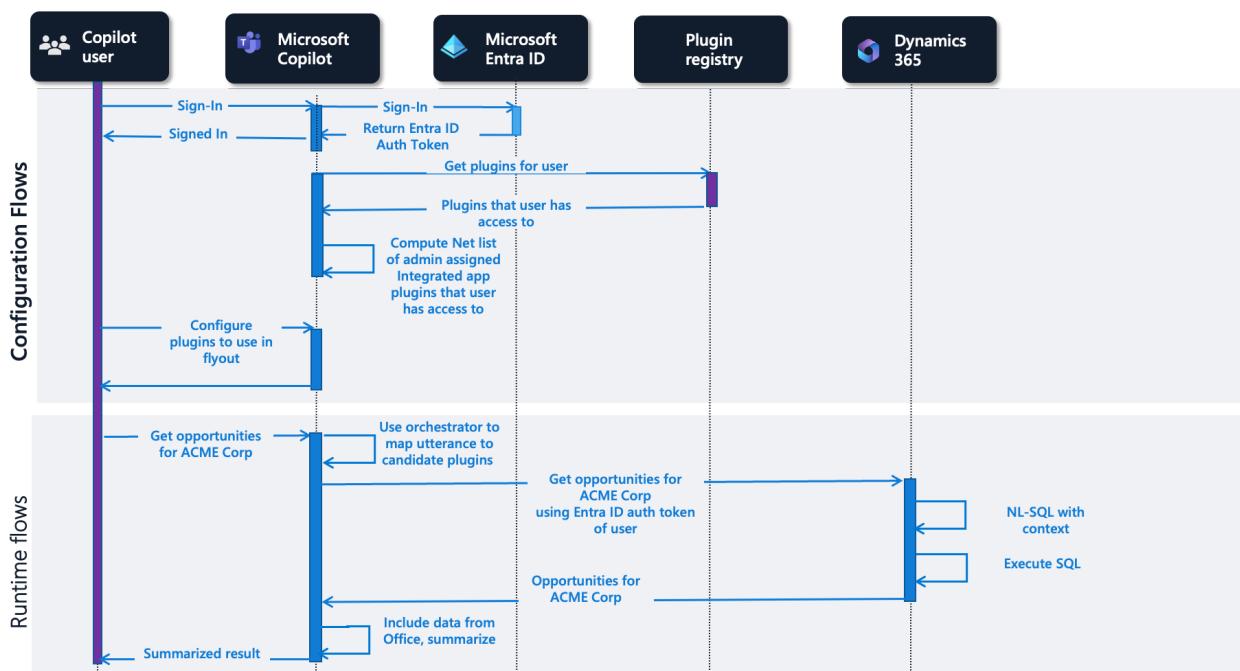
This layer represents the various data stores and systems where the data and business logic reside. These stores and systems include Sales, Field Service and other Dynamics

365 products, Microsoft Copilot Studio, Power Automate, external systems such as Salesforce, SAP, and others.

Data and control flows for some plugin types

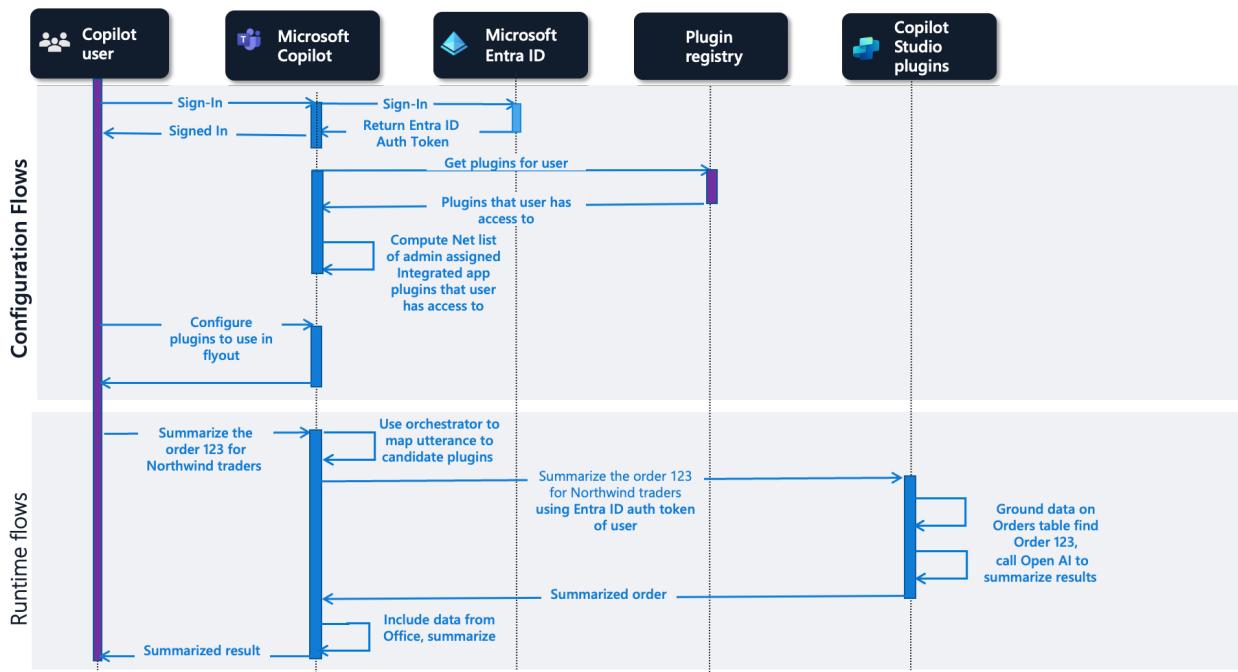
As a prerequisite for all flows, an administrator uses the Microsoft Admin Center to configure the corresponding integrated apps and assigns them to users, including the Copilot user referenced here. In these flows, we first see the **configuration phase** for a copilot user in Copilot for Teams. After the user signs in, the plugins applicable for that user are retrieved from the plugin registry. The plugins in a user's flyout belong to the integrated apps their administrator configures for them and the ones they have access to in the plugin registry. The user can then configure the plugins they want to use in the copilot experience in the flyout in their Copilot for Teams experience.

Dynamics 365 plugins



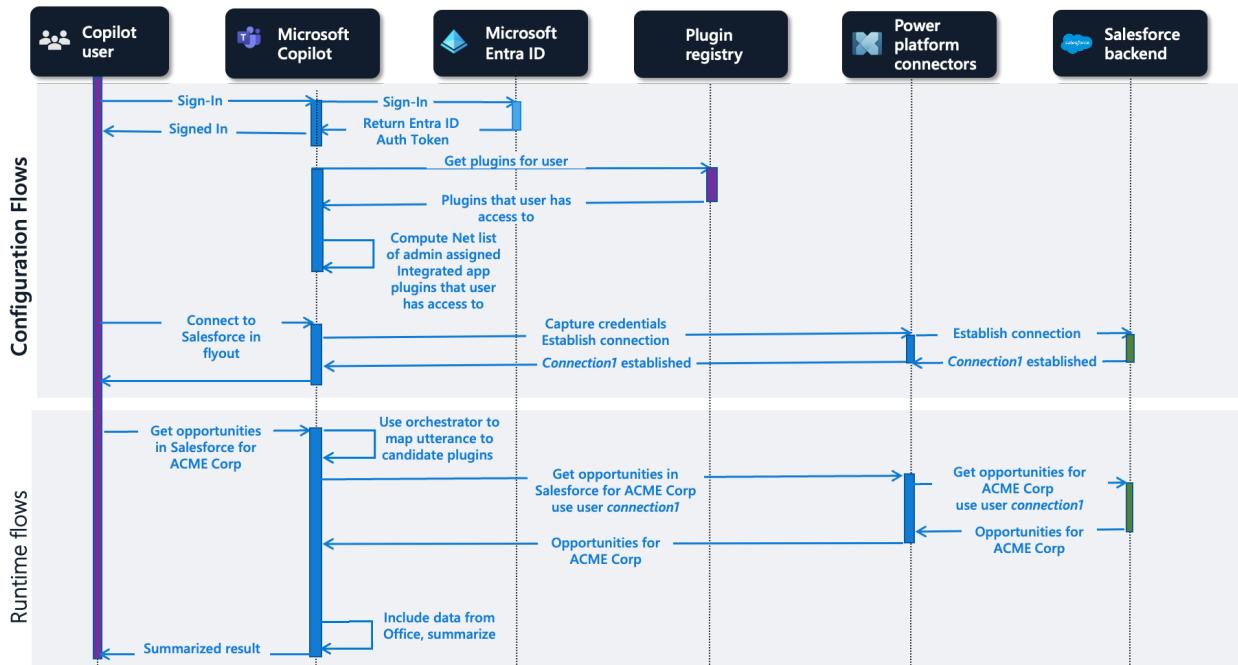
In the runtime flow for the Dynamics 365 plugins, the orchestrator maps a copilot user's utterance of *Get opportunities for ACME corp* to a set of candidate plugins. A plugin from Dynamics 365 is found to be best candidate and then executed, translating the user's utterance to SQL against the dynamic data the user has access to. The results are then returned to the user. Teams copilot can additionally add data from Microsoft 365 and summarize the results.

Microsoft Copilot Studio plugins



In the runtime flow for Copilot Studio prompt plugins, the user's utterance is again mapped to a plugin. In this case, the matching plugin is a prompt authored in Microsoft Copilot Studio. The prompt grounds data in Dataverse table *orders* and calls into Open AI to summarize the results for order 123 and returns the summary to the user.

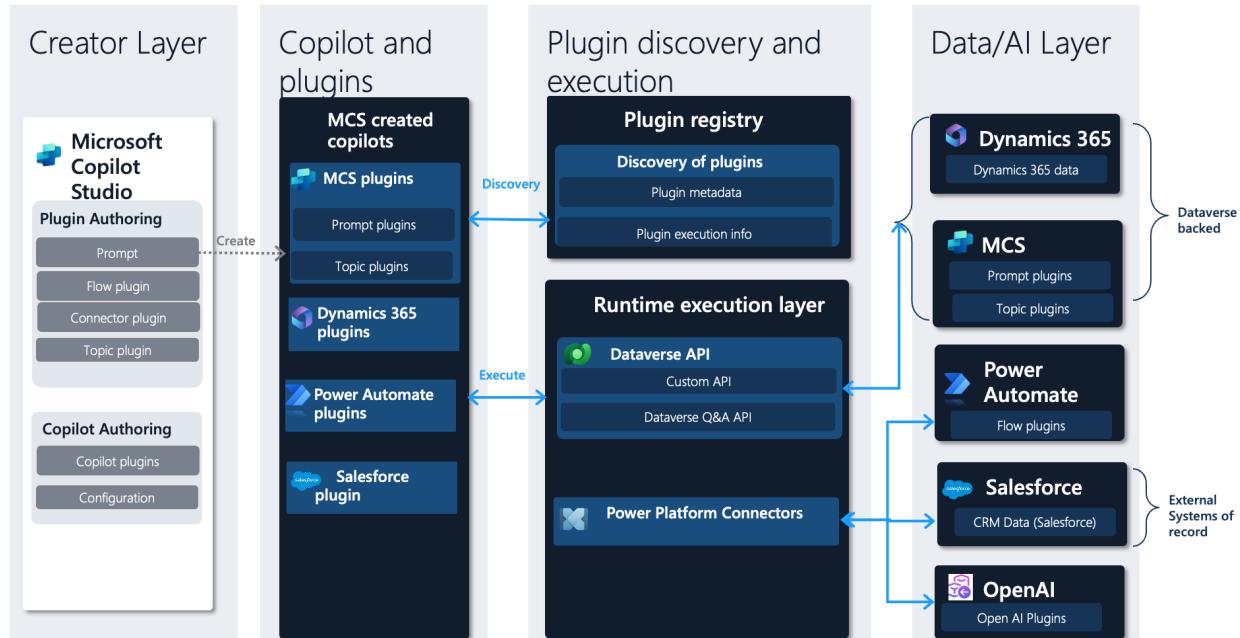
Connector plugins



The configuration flow for Salesforce or other connector-based plugins starts with a **Connect** experience in the flyout where the user can enter connection information for Salesforce. At runtime, the user utterance is mapped to a candidate plugin and this plugin is executed using the Power Platform Connector infrastructure. The results are then returned to the user.

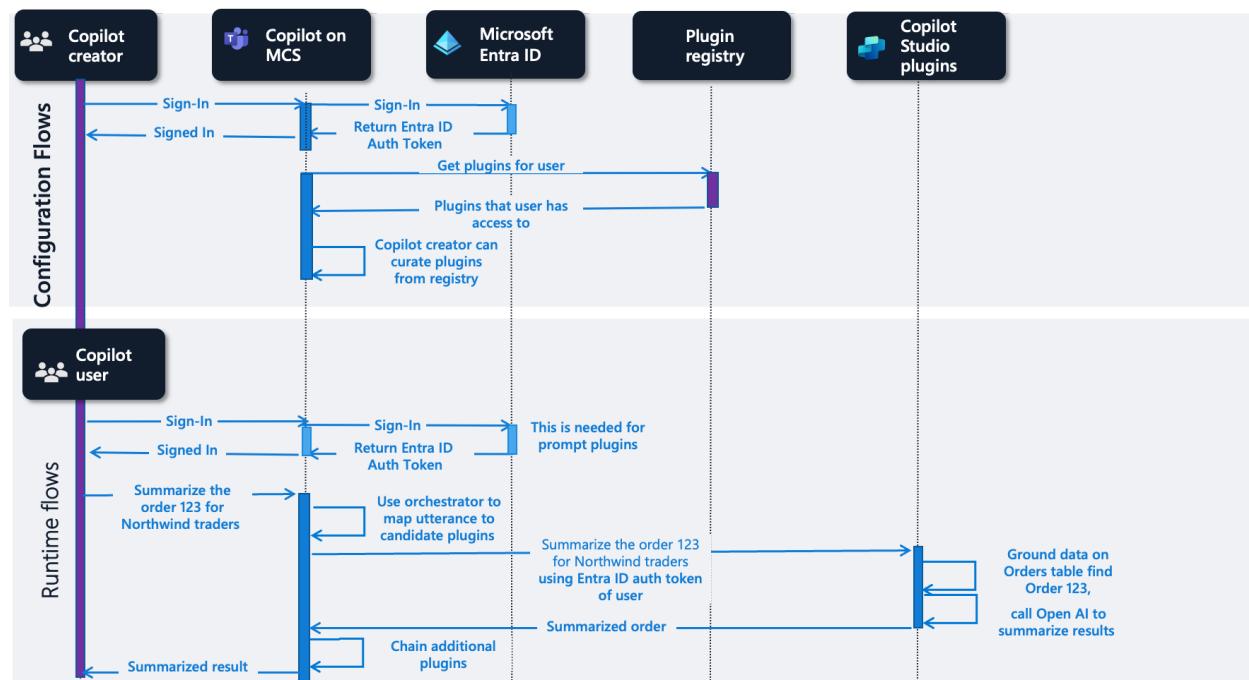
Plugins used in Microsoft Copilot Studio copilots

Microsoft Copilot Studio can be used to create copilots in addition to plugins. Dynamics 365 teams or third parties can build these copilots.



Similar to the creator layer, the plugin discovery, execution, and Data/AI layer look like the figure shown. The difference is in how you manage curation of plugins for the copilot. The copilot creator chooses amongst available plugins from their Dataverse environment.

Data and Control flows for some plugin types



Here's an example of a prompt plugin used from a copilot built in Microsoft Copilot Studio. The configuration flow includes a copilot creator curating the plugins for the copilot from the plugin registry. At runtime, the authenticated copilot user summarizes order 123 for Northwind traders. This summary maps the utterance to candidate plugins. The matching plugin is a prompt authored in Copilot Studio. The prompt uses data from the *orders* table in Dataverse. The results are summarized using OpenAI and are returned to the user.

Conclusion

By authoring a plugin in Microsoft Copilot Studio, you can further the reach of your plugin across copilots in Microsoft Dynamics 365, Microsoft Copilot for Teams, and other third-party copilots. Using plugins in this way allows the flexibility to create once and deploy across multiple copilots.

Assign licenses and manage access to Microsoft Copilot Studio

Article • 11/15/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

This topic is written for tenant admins. If you want to sign up for Microsoft Copilot Studio as an individual, see the [Sign up for a Microsoft Copilot Studio trial](#) topic.

To create and manage bots with Microsoft Copilot Studio, you need:

- A license for each user, also known as a "per user license" (or "Power Virtual Agent User License" as referred to on the [Microsoft 365 admin center](#)), should be assigned to individual users who need access to create and manage chatbots.
- A license for your organization, also known as a "tenant license" (or "Power Virtual Agent" as referred to on the [Microsoft 365 admin center](#)), should be acquired by the tenant admin. This license cannot be assigned to individual users.

ⓘ Note

Users of your bot don't need a special license. After you publish your bot, anyone who can access where you published the bot can interact with the bot.

More information: [Licensing guide](#)

ⓘ Important

If you purchase a Microsoft Copilot Studio license through volume licensing or any channel other than the [Microsoft 365 admin center](#), you need to acquire both a tenant license and a user licenses through that channel, preferably as part of a single transaction.

Prerequisites

- Learn more about what you can do with Microsoft Copilot Studio.

Web app

Buy a tenant license

Purchase licenses for your organization by going to the [Microsoft 365 admin center](#). You'll need to sign in with an admin account to buy licenses.

1. Go to the [Microsoft 365 admin center](#) and sign in with your admin account.
2. On the side pane, expand the **Billing** menu, and then select **Purchase services**.
3. Search for **Power Virtual Agent**, and complete the checkout process.

Acquire user licenses

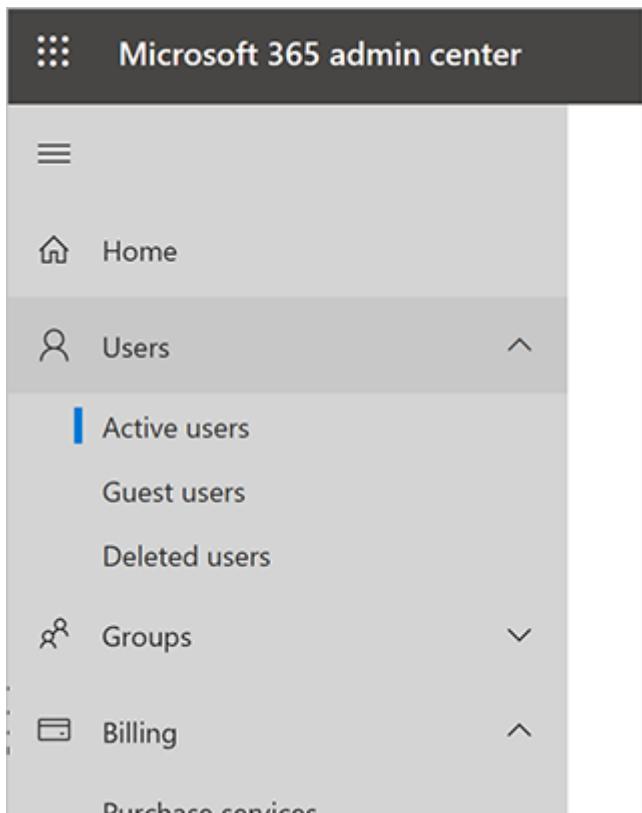
1. After you've purchased a Microsoft Copilot Studio license from the Microsoft 365 admin center, you need to purchase user licenses to give users access to the product. In the Microsoft 365 admin center, go to **Billing**, and then select **Purchase services**.
2. Scroll down to the **Add-ons** section.
3. Look for **Power Virtual Agent User License**. Select the number of licenses you need, and complete the checkout process.

ⓘ Important

If you purchased a Microsoft Copilot Studio license through volume licensing or any channel other than the [Microsoft 365 admin center](#), you need to acquire both a tenant license and user licenses through that channel, preferably as part of a single transaction.

Assign licenses to users

1. Go to the [Microsoft 365 admin center](#) and sign in with your admin account.
2. On the side pane, expand the **Users** menu, and then select **Active users**.



3. Select a name, and then select **Manage product licenses**.

The screenshot shows the 'Active users' page in the Microsoft 365 admin center. At the top, there are buttons for 'Add a user', 'Refresh', 'Reset password', 'Assign to group', 'Manage product licenses' (which is highlighted in blue), and 'Manage roles'. Below this is a table with columns for 'Display name ↑', 'Username', and 'Licenses'. Two users are listed: 'gds' (Unlicensed) and 'Alex Wu' (Unlicensed). A checkmark is next to 'Alex Wu'.

Display name ↑	Username	Licenses
gds		Unlicensed
Alex Wu	<input type="button" value="🔍"/>	Unlicensed

4. On the flyout pane, select the check box next to **Power Virtual Agent user license**, and then select **Save changes**.

Repeat these steps to add more users, or exit the Microsoft 365 admin center if you're finished.

ⓘ Note

To simplify user license management, you can assign licenses to an Microsoft Entra ID security group. More information: [Assign licenses to users by group membership in Microsoft Entra ID](#)

The users can now sign in to the [Microsoft Copilot Studio portal](#).

How to differentiate between tenant and user licenses

If you are unsure whether you have both of the required licenses, on the [Microsoft 365 admin center](#) go to **Billing** and then **Subscriptions** to see the list of active licenses. For Microsoft Copilot Studio you should see two licenses:

- Power Virtual Agent
- Power Virtual Agent User License

You can only assign the "Power Virtual Agent User License" to specific users. You don't need to assign the "Power Virtual Agent" license.

Trial plans

Users in your organization can try Microsoft Copilot Studio for a limited time period.

You can [disable or enable the ability for users to sign up for a trial themselves](#) by modifying the **AllowAdHocSubscriptions** flag in your organization settings.

Subscription capacity

When you purchase a license, you gain capacity for the specified number of billed sessions. Microsoft Copilot Studio pools this capacity across the entire tenant.

The consumption of the capacity isn't reported at the tenant level, but [can be seen for each individual bot](#).

See [Quotas and rate limit capacity considerations for Microsoft Copilot Studio](#) for more information.

Using Power Automate with a Microsoft Copilot Studio license

- See [Quotas, limits, and configuration values](#)
- See [how to use Power Automate with Microsoft Copilot Studio](#)

Microsoft Copilot Studio for US Government customers

Article • 11/15/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

This article is for US government customers who are deploying Microsoft Copilot Studio as a part of a Microsoft Copilot Studio Government Community Cloud (GCC) plan. It provides you with an overview of features that are specific to these plans.

Government plans are designed for the unique needs of organizations that must meet US compliance and security standards.

We recommend that you read this topic and the [Microsoft Copilot Studio introduction topic](#).

The Microsoft Copilot Studio US Government Service Description serves as an overlay to the general Microsoft Copilot Studio Service Description. It defines the unique commitments and differences compared to the general Microsoft Copilot Studio offerings that are available to our customers since December 2019.

Microsoft Copilot Studio US Government plans and environments

Licensing for Microsoft Copilot Studio US Government plans is the same as for public cloud. They are available through the Volume Licensing and Cloud Solution Provider purchasing channels. For more information, see the [Assign user licenses and manage access](#) topic.

The Microsoft Copilot Studio GCC environment is compliant with the Federal requirements for cloud services, including FedRAMP High.

In addition to the features and capabilities of Microsoft Copilot Studio, organizations that use Microsoft Copilot Studio US Government plans benefit from the following unique features:

- Your organization's customer content is physically separated from customer content in non-US-Government plans for Microsoft Copilot Studio.
- Your organization's customer content is stored within the United States.
- Access to your organization's customer content is restricted to screened Microsoft personnel.

- Microsoft Copilot Studio US Government complies with all certifications and accreditations that US Public Sector customers require.

GCC High environment

Beginning February 2022, eligible customers can choose to deploy Microsoft Copilot Studio US Government to the GCC High environment.

Microsoft has designed the platform and our operational procedures to meet the requirements aligning with the DISA SRG IL4 compliance framework.

This option enables and requires the customer to use Microsoft Entra ID for Government for customer identities, in contrast to GCC, which uses the public Microsoft Entra ID.

For the US Department of Defense contractor customer base, Microsoft operates the service in a manner that enables these customers to meet ITAR commitment and DFARS acquisition regulations, as documented and required by their contracts with the US Department of Defense. A Provisional Authority to Operate has been granted by DISA.

Customer eligibility

Microsoft Copilot Studio US Government plans are available to:

- (1) US federal, state, local, tribal, and territorial government entities, and
- (2) other entities, which handle data that is subject to government regulations and requirements and where use of Microsoft Copilot Studio US Government plans is appropriate to meet these requirements, subject to validation of eligibility.

Microsoft's validation of eligibility includes confirmation of handling data subject to International Traffic in Arms Regulations (ITAR), law enforcement data subject to the FBI's Criminal Justice Information Services (CJIS) Policy, or other government-regulated or controlled data. Validation may require sponsorship by a government entity with specific requirements for the handling of data.

Entities with questions about eligibility for Microsoft Copilot Studio US Government should consult their account team. Microsoft revalidates eligibility when it renews customer contracts for Microsoft Copilot Studio US Government plans.

Differences between customer data and customer content

Customer data, as defined in the [Online Service Terms](#), means all data, including all text, sound, video, image files, and software that is provided to Microsoft by, or on behalf of, customers using an Online Service.

Customer content refers to a specific subset of customer data that has been directly created by users, such as content stored in databases through entries in the [Dataverse](#) entities (for example,

contact information). Content is generally considered confidential information, and in normal service operations, is not sent through the Internet without encryption.

For more information on how Microsoft Copilot Studio protects customer data, see the [Microsoft Online Services Trust Center](#).

Data segregation for Government Community Cloud

When provisioned as part of Microsoft Copilot Studio US Government plans, the Microsoft Copilot Studio service is offered in accordance with the National Institute of Standards and Technology (NIST).

In addition to the logical separation of customer content at the application layer, the Microsoft Copilot Studio US Government service provides your organization with a secondary layer of physical segregation for customer content by using infrastructure that is separate from the infrastructure used for commercial Microsoft Copilot Studio customers. This type of usage includes using Azure services in Azure's Government Cloud. To learn more, see [Azure Government](#).

Customer content located within the United States

The Microsoft Copilot Studio US Government service runs in datacenters physically located in the United States and stores customer content at rest in datacenters physically located only in the United States.

Restricted data access by administrators

Access to Microsoft Copilot Studio US Government customer content by Microsoft administrators is restricted to personnel who are US citizens. These personnel undergo background investigations in accordance with relevant government standards.

Microsoft Copilot Studio support and service engineering staff do not have standing access to customer content hosted in the Microsoft Copilot Studio US Government service. Any staff who requests temporary permission elevation which would grant access to customer content must first have passed the following background checks.

Microsoft Personnel	Description
Screening and Background Checks ¹	
U.S. citizenship	Verification of U.S. citizenship
Employment history check	Verification of seven (7) year employment history
Education verification	Verification of highest degree attained
Social Security number (SSN) search	Verification that the SSN the employees provides is valid

Microsoft Personnel	Description
Screening and Background Checks ¹	
Criminal history check	A seven (7) year criminal record check for felony and misdemeanor offenses at the state, county, and local level and at the federal level
Office of Foreign Assets Control list (OFAC)	Validation against the Department of Treasury list of groups with whom U.S. persons are not allowed to engage in trade or financial transactions
Bureau of Industry and Security list (BIS)	Validation against the Department of Commerce list of individuals and entities barred from engaging in export activities
Office of Defense Trade Controls Debarred Persons list (DDTC)	Validation against the Department of State list of individuals and entities barred from engaging in export activities related to the defense industry
Fingerprinting check	Fingerprint background check against FBI databases
CJIS background screening	State-adjudicated review of federal and state criminal history by state CSA appointed authority within each state that has signed up for the Microsoft CJIS IA program
Department of Defense IT-2	Staff who request elevated permissions to customer data or privileged administrative access to DoD SRG L5 service capacities must pass DoD IT-2 adjudication, based on a successful OPM Tier 3 investigation.

¹. Applies only to personnel with temporary or standing access to customer content hosted in Microsoft Copilot Studio US Government (GCC and GCC High)

Certification and accreditation

Microsoft Copilot Studio US Government plans are designed to support the Federal Risk and Authorization Management Program (FedRAMP) accreditation at a High Impact level. FedRAMP artifacts are available for review by federal customers who are required to comply with FedRAMP. Federal agencies can peruse these artifacts in support of their review to grant an Authority to Operate (ATO).

 **Note**

Microsoft Copilot Studio is authorized as a service within the Azure Government FedRAMP ATO.

For more information, including how to access the FedRAMP documents, review the [FedRAMP Marketplace](#).

Microsoft Copilot Studio US Government plans have features designed to support customers' CJIS Policy requirements for law enforcement agencies.

Microsoft Copilot Studio US Government and other Microsoft services

Microsoft Copilot Studio US Government plans include several features that allow users to connect to, and integrate with, other Microsoft enterprise service offerings such as Power Apps and Power Automate US Government.

Microsoft Copilot Studio US Government services run within Microsoft datacenters in a manner consistent with a multi-tenant, public cloud deployment model; however, client applications are limited to the web-user client and are not available in Microsoft Teams. Government customers are responsible for managing client applications.

Microsoft Copilot Studio US Government plans use the Office 365 customer administrator UI for customer administration and billing.

The Microsoft Copilot Studio US Government service maintains the actual resources, information flow, and data management. For purposes of FedRAMP ATO inheritance, Microsoft Copilot Studio US Government plans use Azure (including Azure for Government) ATOs for infrastructure and platform services, respectively.

If you adopt the use of Active Directory Federation Services (ADFS) 2.0 and set up policies to help ensure your users connect to the services through single sign-on, any customer content that is temporarily cached will be in the United States.

Microsoft Copilot Studio US Government and third-party services

Microsoft Copilot Studio US Government plans provide the ability to integrate third-party applications into the service through Power Automate Cloud Flow which uses [Connectors](#) and [Skills](#). These third-party applications and services might involve storing, transmitting, and processing your organization's customer data on third-party systems that are outside of the Microsoft Copilot Studio US Government infrastructure and therefore are not covered by the Microsoft Copilot Studio US Government compliance and data protection commitments.

Important

Review the privacy and compliance statements provided by the third parties when assessing the appropriate use of these services for your organization.

[Governance Considerations](#) can help your organization bring awareness about the capabilities available across several related themes, such as architecture, security, alert and action, and monitoring.

Microsoft Copilot Studio US Government and Azure Services

The Microsoft Copilot Studio US Government services are deployed to Microsoft Azure Government. Microsoft Entra ID is not part of the Microsoft Copilot Studio US Government accreditation boundary, but takes reliance on a customer's [Microsoft Entra ID](#) tenant for customer tenant and identity functions, including authentication, federated authentication, and licensing.

When a user of an organization employing ADFS attempts to access the Microsoft Copilot Studio US Government service, the user is redirected to a login page hosted on the organization's ADFS server.

The user provides credentials to their organization's ADFS server. The organization's ADFS server attempts to authenticate the credentials using the organization's Active Directory infrastructure.

If authentication is successful, the organization's ADFS server issues a SAML (Security Assertion Markup Language) ticket that contains information about the user's identity and group membership.

The customer's ADFS server signs this ticket using one half of an asymmetric key pair and then sends the ticket to Microsoft Entra ID via encrypted TLS. Microsoft Entra ID validates the signature using the other half of the asymmetric key pair and then grants access based on the ticket.

The user's identity and group membership information remain encrypted in Microsoft Entra ID. In other words, only limited user-identifiable information is stored in Microsoft Entra ID.

You can find full details of the Microsoft Entra ID security architecture and control implementation in the Azure SSP.

The Microsoft Entra ID account management services are hosted on physical servers managed by the Microsoft Global Foundation Services (GFS). Network access to these servers is controlled by GFS-managed network devices using rules set by Azure. Users do not interact directly with Microsoft Entra ID.

Microsoft Copilot Studio US Government service URLs

You use a different set of URLs to access Microsoft Copilot Studio US Government environments, as shown in the following table. The table also includes the commercial URLs for contextual reference.

Commercial	US Government (GCC)	US Government (GCC High)
web.powerva.microsoft.com	gcc.powerva.microsoft.us	high.powerva.microsoft.us
flow.microsoft.com	gov.flow.microsoft.us	high.flow.microsoft.us
make.powerapps.com	make.gov.powerapps.us	make.high.powerapps.us

Commercial	US Government (GCC)	US Government (GCC High)
flow.microsoft.com/connectors	gov.flow.microsoft.us/connectors	high.flow.microsoft.us/connectors
admin.powerplatform.microsoft.com	gcc.admin.powerplatform.microsoft.us	high.admin.powerplatform.microsoft.us
admin.powerplatform.microsoft.com	gcc.api.powerva.microsoft.us	high.api.powerva.microsoft.us

For those customers that implement network restrictions, ensure access to the following domains is made available to your end users' access points:

GCC customers

- *.azure.net*
- *.azure.us*
- *.azure-apihub.us*
- *.azureedge.net*
- *.crm9.dynamics.com*
- *.microsoft.com*
- *.microsoft.us*
- *.microsoftonline.com*
- *.usgovcloudapi.net*
- *.windows.net*

Refer to the [IP ranges](#) for *AzureCloud.usgovtexas* and *AzureCloud.usgovvirginia* to enable access to Dataverse instances that users and administrators may create within your tenant.

Connectivity between Microsoft Copilot Studio US Government and Public Azure Cloud services

Azure is distributed among multiple clouds. By default, tenants are allowed to open firewall rules to a cloud-specific instance, but cross-cloud networking is different and requires opening specific firewall rules to communicate between services. If you are a Microsoft Copilot Studio customer and you have existing SQL instances in Azure public cloud which you need to access, you must open specific firewall ports in SQL to the Azure Government Cloud IP space for the following datacenters:

- USGov Virginia
- USGov Texas

Refer to the [Azure IP Ranges and Service Tags - US Government Cloud](#) document, focusing attention on *AzureCloud.usgovtexas*, and *AzureCloud.usgovvirginia*. Also note that these are the IP ranges required for your end users to have access to the service URLs.

Microsoft Copilot Studio US Government feature limitations

Some of the features available in the commercial version of Microsoft Copilot Studio are not available to Microsoft Copilot Studio US Government customers. The Microsoft Copilot Studio team is actively working on making these features available to US Government customers and will update this article when these features become available.

Feature or capability	Available in GCC	Available in GCC High
Microsoft Copilot Studio Analytics ¹	✗ No	✗ No
Microsoft Copilot Studio Microsoft Teams app experience	✗ No	✗ No
Teams channel in the Microsoft Copilot Studio web app	✓ Yes	✗ No
Transfer to agents	✓ Yes	✗ No

1. Alternatively, you can create [Custom Analytics using a Power BI dashboard \(blog\)](#).

Requesting support

Having a problem with your service? You can create a support request to get the issue resolved.

More information: [Contact Technical Support](#)

Sign up for a Microsoft Copilot Studio trial

Article • 11/15/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

This article explains how to sign up for Microsoft Copilot Studio as an individual. If you're an admin, see [Assign user licenses and manage access to Microsoft Copilot Studio](#).

Follow the instructions below to sign up for a Microsoft Copilot Studio trial. After you complete the process you'll be able to use Microsoft Copilot Studio to create and publish bots.

1. Go to the [sign-up page](#).
2. Enter your email address and then select **Sign up**.

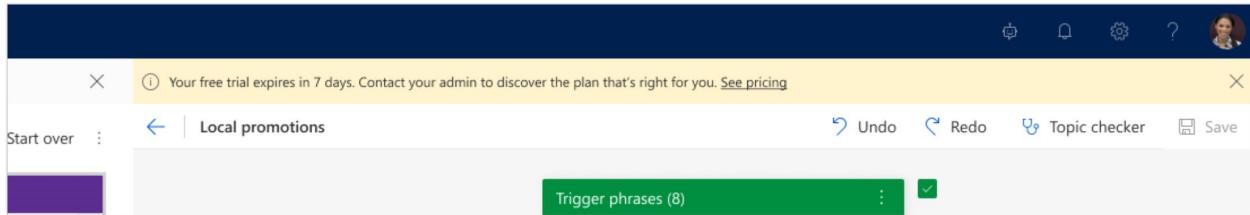


You'll then be taken to the Microsoft Copilot Studio sign-in page and you can start using your account.

Prerequisites

- Learn more about what you can do with Microsoft Copilot Studio.

Trial expiration



After you finish the sign-up process, your time-limited free trial for Microsoft Copilot Studio will start. You will see notification and receive emails to inform you about the trial expiry. When the trial expires, you will be able to extend the trial by 30 days.

The screenshot shows a tablet displaying the Power Virtual Agents interface. On the screen, it says "Your Power Virtual Agents trial has expired" and "To continue, extend your trial for 30 days or see pricing options." Below this, there are two buttons: "Extend trial" and "See pricing". The tablet also displays a "Test chat" window and a bot editor. The bot editor shows a flowchart with conditions, questions, and messages. The test chat window shows a conversation with a user named "luca@email.com" and a bot named "Contoso Bot". The user asks about a printer issue, and the bot responds with options to look up the issue or describe it directly.

! Note

Your bot will continue to work for up to 90 days after your trial has expired so you don't have to worry about extending at the exact time of expiry.

Troubleshooting the sign-up process

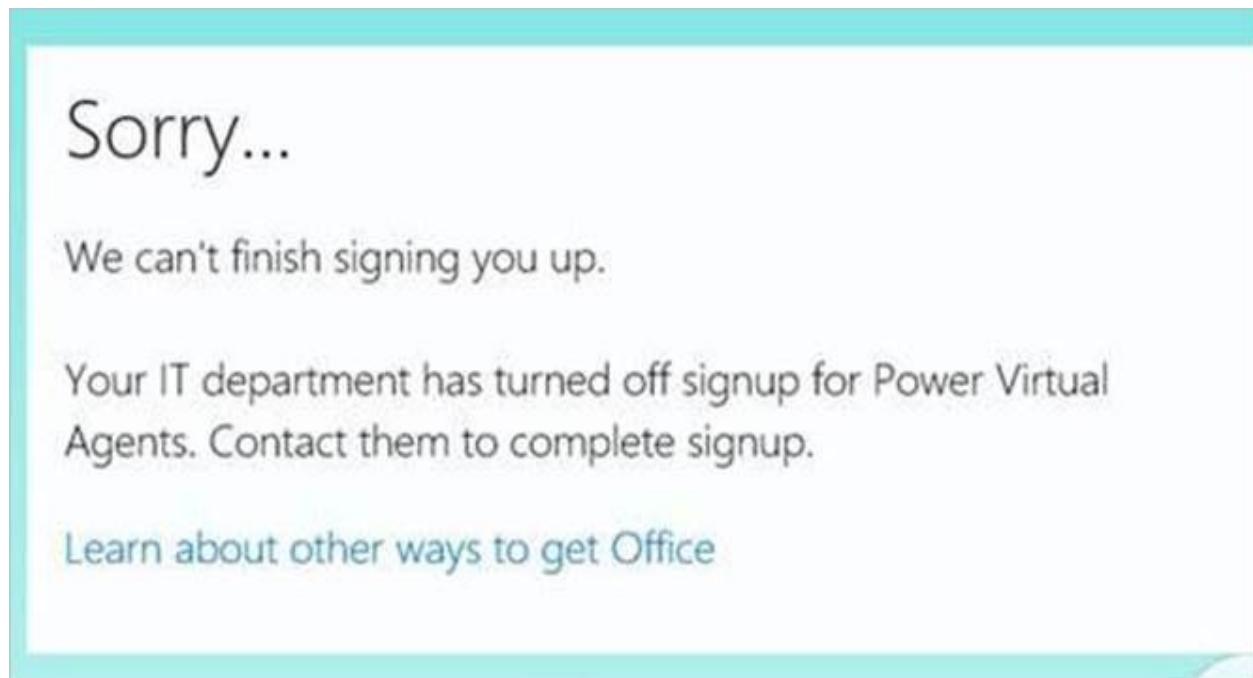
In most cases, you'll be able to sign up for Microsoft Copilot Studio using the steps in this article. Some issues might prevent you from signing up.

Personal email address

You can't sign up for Microsoft Copilot Studio using a personal email address. You need to use your work or school account to finish the sign up.

Self-service sign-up disabled

If you receive a message that your sign-up couldn't be completed it means your organization's IT administrator has disabled self-service sign-up for Microsoft Copilot Studio. To finish signing up, contact your IT administrator and ask them to follow the instructions to [enable sign-up](#).



Working with environments in Microsoft Copilot Studio

Article • 11/15/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

With Microsoft Copilot Studio, you can create bots in different environments and easily switch between them.

An environment is a space to store, manage, and share your organization's business data. The bots you create are stored in an environment (apps and flows are also stored in environments). Environments may also have different roles, security requirements and target audiences, and each environment is created in a separate location. See the following topics for more information:

- [Supported data locations](#)
- [Power Platform environments overview](#)

Prerequisites

- [Learn more about what you can do with Microsoft Copilot Studio.](#)

Leverage environments

There are many strategies for using multiple environments. For example, you can:

- Create separate environments that correspond to specific teams or departments in your company, each containing the relevant data and bots for each audience.
- Create separate environments for different global branches of your company.
- Create separate environments to satisfy data residency requirements.

You can also build all your bots in a single environment if you don't need or want to use different ones.

 **Note**

We recommend using a non-default production environment for bots that you want to deploy to production.

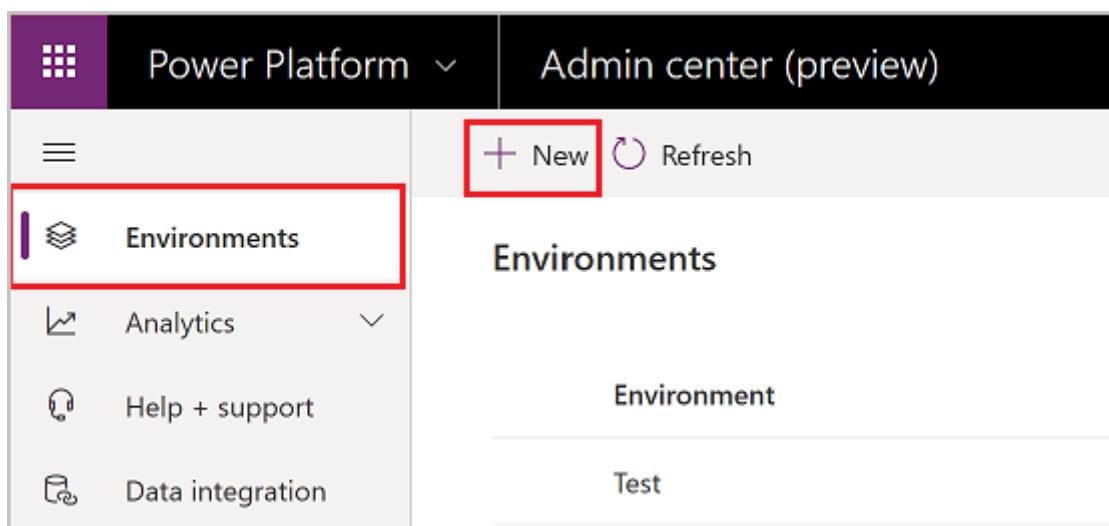
[Learn more about types of environments.](#)

Create a new environment for your bots

When you first sign in and create a new bot, a default environment is created for you.

You can, however, create additional environments by using the [Power Platform Admin Center](#).

1. Go to <https://admin.powerplatform.com> and sign in using your work account.
Use the same tenant that you use for Microsoft Copilot Studio.
2. Go to the **Environments** tab and select **+ New** to open the **New environment** pane.



- For **Name**, specify a unique name for the environment.
- For **Environment** select the environment type.

 **Note**

A production environment is intended for production scenarios and won't be subject to the same restrictions as a trial environment. If you

are trying out Microsoft Copilot Studio for free, you'll need to make sure you set the environment to **Trial**. The standard limitations for trial environments apply.

- For **Region** select the [support data region](#) where you want the environment to be created.
- Set **Create a database for this environment?** to **Yes**
- Select **Next**.

New environment X

Created on ↓

2019/11/14 00:04

2019/11/11 21:07

Name *

Type ① *

Region *
Local environments can provide quicker data access.

Purpose

Create a database for this environment? ①
 Yes

Next Cancel

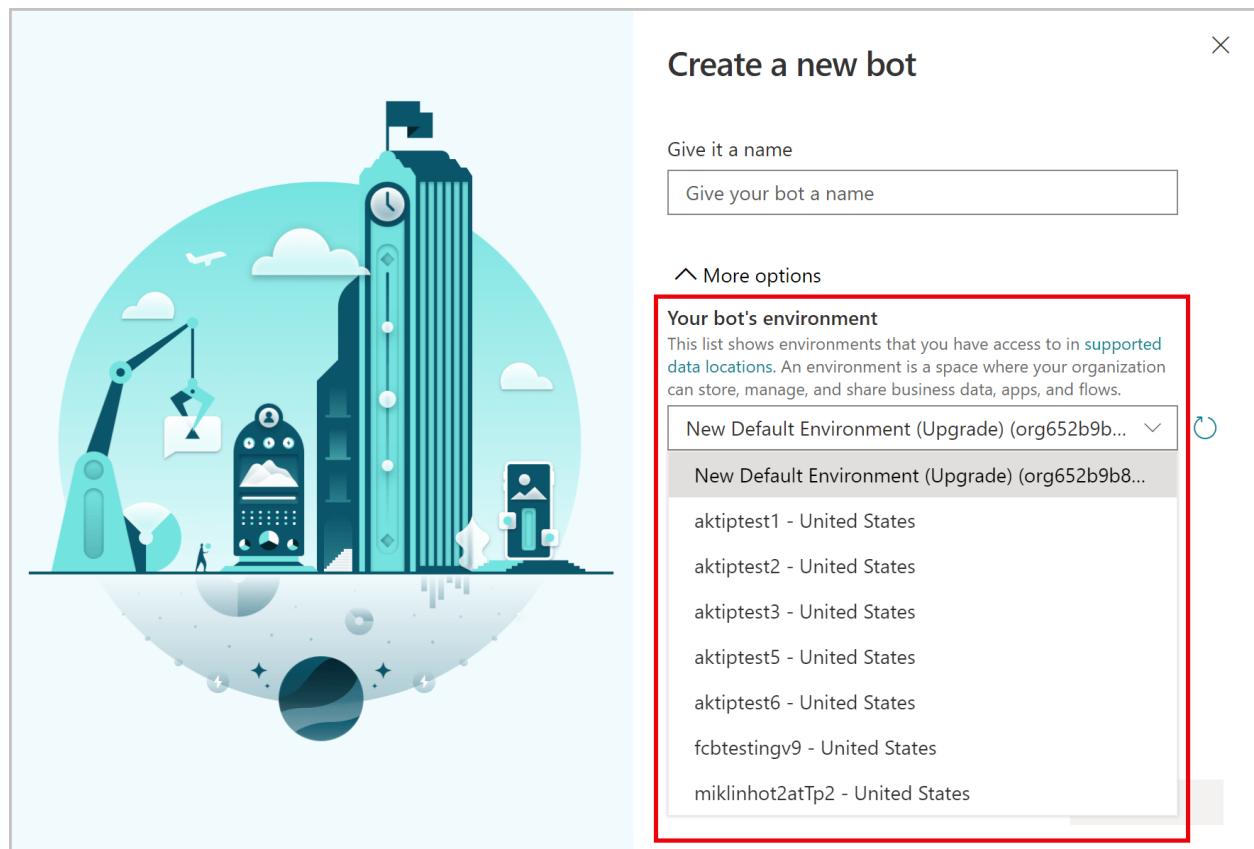
! Note

The environment needs to be created in a supported region, otherwise you won't be able to use it when creating a bot. More information: [Supported data locations](#).

3. Specify the details of the database, such as the language and currency type, and then select **Save**.
4. You'll be returned to the **Environments** tab. Select **Refresh** to see the environment. You'll also see a notice explaining that it may take a few minutes to fully create the environment.
5. After the environment is created, you can return to the [Microsoft Copilot Studio portal](#) and use the environment to create a new bot.

Create a bot in an existing environment

To create a bot in an existing environment, select the environment in the [bot creation window](#).



Create a bot in an existing environment where you don't have access

To create a bot in an environment where you don't have access, you'll need to be a system administrator or contact the system administrator. You then need to complete the following:

1. Create a bot in the environment (this step will install the necessary Microsoft Copilot Studio solutions).
2. Assign the security role of "bot author" to you in the environment. More information: [Create users and assign security roles](#).

You can then return to the [Microsoft Copilot Studio portal](#) and create a bot in the environment.

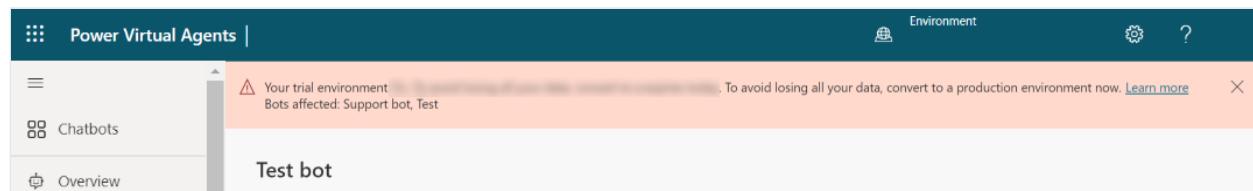
More information:

- [Power Platform - Environments overview](#)
- [Power Platform - Configure environment security](#)

Trial environments

When you trial Microsoft Copilot Studio, you can create trial environments that expire after 30 days. When the environment expires, all the bots in the environment will be deleted. The data associated with the bot, including any flows and resources you have been using, will be lost.

If you have created your own environment and selected **Trial** as the environment type, you'll receive email messages shortly before it expires. In the Microsoft Copilot Studio portal, you'll also see a notification if you have bots created in a trial environment that is going to expire in less than two weeks.



! Note

Note that there is a difference between an expiring environment and an expiring license. If your license is expiring, you will be able to extend it without losing any data. More information: [Sign up for a Microsoft Copilot Studio trial](#).

Converting a trial environment to a production environment

When using a trial environment and you want to retain the bots for longer than 30 days, you must [convert the trial environment to a production environment](#).

Supported operations

Microsoft Copilot Studio supports the following environment lifecycle operations, as described in [Power Platform environments overview](#):

- Back up and restore
- Delete
- Recover
- Copy
- Reset

The following operation is unsupported:

- Move

Known issues with creating a bot

When you are creating your bot, you might encounter the following issues.

Insufficient permissions for the selected environment

In this case, you see this error: "You do not have permissions to any environments. Please get access from an administrator."

You will need to [create a new environment](#). Use that environment to create your bot.

The environment doesn't show up in the drop-down menu of Microsoft Copilot Studio

Your environment might not show up in the drop-down menu due to one of the following:

- The environment doesn't have a database created. To resolve this issue, go to admin.powerplatform.com ↗ to [create a database in your environment](#).

- The environment is created in an unsupported region. More information: [Supported data locations](#).

Configure data movement across geographic locations for generative AI features outside United States

Article • 11/15/2023

Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

With [the generative AI features in Microsoft Copilot Studio](#), you can instantly build useful chatbots without creating complex conversation flows or manual authoring and configuration.

These capabilities are available now in environments created for the United States and are rolling out to other [supported geographic locations](#) starting in November, 2023.

Some non-United States geographic locations may require your global and Power Platform admins to enable these features in your environment.

If these features haven't been enabled for your environment, bot authors will see an error banner in Copilot Studio on the copilots overview page:



Features with generative AI are not available in your environment. Please contact your admin. [Learn more](#)

You can continue to configure some Copilot Studio generative AI capabilities, but you'll also see the an error message when testing your copilot if the features are disabled.



Features with generative AI are not available in your environment. Contact your admin.
[Learn more](#)

Just now | Surfaced with Azure OpenAI |

Important

The underlying infrastructure for Copilot Studio is only available in the Power Platform environment regions located in the United States and some [geographic locations](#).

Accessing Copilot Studio generative AI features from regions outside the United States, ****results in data movement across regional boundaries****. Once enabled, any data movement that occurred while this feature was enabled **cannot be reversed by removing your consent**.

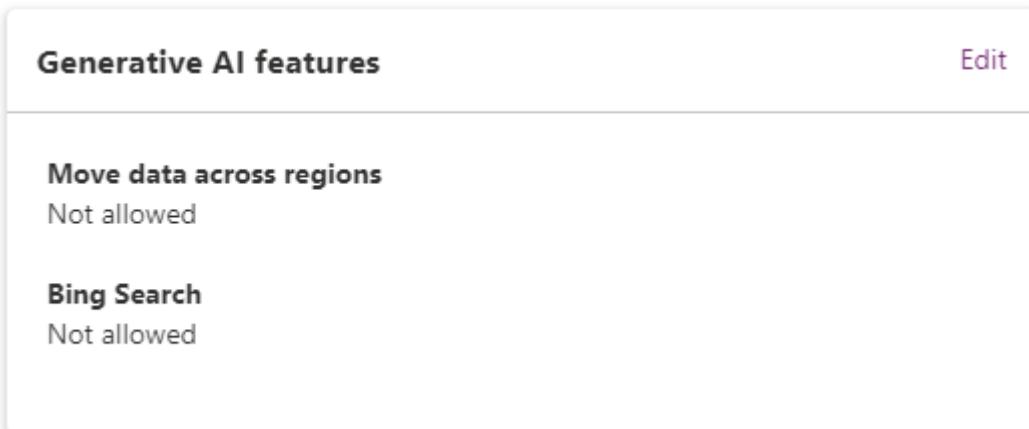
Data from Copilot Studio generative AI features in the Europe, Switzerland, and France geographies are handled by the underlying infrastructure hosted in the Sweden or Switzerland regions. Features powered by Bing are separately governed by the [Microsoft Services Agreement](#) and [Microsoft Privacy Statement](#).

Only global and Power Platform admins can enable and disable generative AI features for environments outside the United States.

Enable data across geographic locations

You can allow Copilot Studio generative AI features in your Power Platform environments outside the United States geographic location:

1. Open the [Power Platform admin center](#).
2. Select **Environments** in the navigation pane.
3. Select your environment.
4. On the side of the screen, select **Edit** on the **Generative AI features** card.



5. Read the information in the panel and select the checkbox to consent to the terms of use.

Generative AI features



Agree to the following terms to enable generative AI features. [Learn More](#)

Move data across regions

- Terms of use for data movement across geographical data boundaries

I understand that generative AI features use the Azure OpenAI Service. By using them, I agree to my data being stored and processed by the Azure OpenAI Service outside of my environment's geographic region or compliance boundary. [See terms](#)

Bing Search

- Terms of use for Bing Search

I understand that some generative AI features use Bing Search. Your data will flow outside your organization's compliance and geo boundaries. Customer's use of Bing Search is governed by the [Microsoft Services Agreement](#) and the [Microsoft Privacy Statement](#).

6. Select Save.

After your consent, the status on the **Generative AI features** card shows **Allowed** and Copilot Studio generative AI features are enabled in the environment.

Generative AI features	Edit
Move data across regions Allowed	
Bing Search Allowed	

You can disallow Bing Search usage separately from data movement across regions; however, in order to use Bing Search, data movement across regions must also be allowed.

Data storage and processing geographic regions

The following table provides information about the location of the Azure OpenAI and Bing Search geographic regions used by Power Platform, based on the Power Platform environment region where you have enabled data movement.

Power Platform environment geographic region	Data storage and processing region for Azure OpenAI	Data storage and processing region for Bing Search
Australia, United Kingdom, United States	Within the respective geographic region	United States
Europe, France, Germany, Norway, Switzerland	Sweden or Switzerland	United States
Asia, Brazil, Canada, India, Japan, Singapore, South Africa, South Korea	United States	United States

Disable data across geographic locations outside the United States

Disable data movement across geographic locations by following these steps:

Warning

Any data movement that happened while this feature was enabled cannot be reversed by removing your consent.

1. Open the [Power Platform admin center](#).
2. Select **Environments** in the navigation pane.
3. Select your environment.
4. On the side of the screen, select **Edit** on the **Generative AI features** card.
5. Clear the checkbox for the terms of use.
6. Select **Save**.

After you remove your consent, the status on the **Generative AI features** card shows **Not allowed**, disabling Copilot Studio generative AI features in the environment.

See also

[Enable copilots and generative AI features in regions](#)

Configure data loss prevention for Microsoft Copilot Studio chatbots

Article • 11/15/2023

ⓘ Important

Power Virtual Agents capabilities and features are [now part of Microsoft Copilot Studio](#) following significant investments in generative AI and enhanced integrations across Microsoft Copilot.

Some articles and screenshots may refer to Power Virtual Agents while we update documentation and training content.

Organizational data is the most important asset administrators are responsible for safeguarding. The ability to build automation to use that data is a large part of their company's success.

Users can rapidly build and roll out their high-value bots for their end-users. They can connect their bots with many data sources and services. Some of these sources and services might be external, third-party services, and might even include some social networks.

Users generally have good intentions, but they can easily overlook the potential for exposure. This sort of exposure can result from data leakage or connections to services and audiences that shouldn't have access to the data.

Administrators can govern chatbots in your organization using data loss prevention (DLP) policies with existing and Microsoft Copilot Studio connectors. DLP policies are created in the [Power Platform admin center](#). To create a DLP policy, you need to be a [tenant admin](#) or have the [Environment Admin role](#).

Prerequisites

- Review concepts about [DLP policies](#)

Microsoft Copilot Studio connectors

Microsoft Copilot Studio connectors can be classified within a DLP policy under the following data groups, which are presented in the Power Platform admin center when

reviewing DLP policies:

- Business
- Non-business
- Blocked

You can use the connectors in DLP policies to protect your organization's data from any malicious or unintentional data exfiltration by your chatbot makers.

 **Important**

The connectors need to be in a single data group as data can't be shared among connectors that are in different groups.

The following Microsoft Copilot Studio connectors are available in the Power Platform admin center.

Name
 Skills with Power Virtual Agents (preview)
 Chat without Azure AD authentication in Power Virtual Agents (preview)
 Microsoft Teams channel in Power Virtual Agents (preview)
 Direct Line channels in Power Virtual Agents (preview)
 Facebook channel in Power Virtual Agents (preview)
 Omnichannel in Power Virtual Agents (preview)

Connector name	Description
Skills with Microsoft Copilot Studio	Block bot makers from using skills in Microsoft Copilot Studio chatbots.

Connector name	Description
	See Example 1: Use DLP to block skills in Microsoft Copilot Studio chatbots and Example 2: Use DLP to block HTTP requests from Microsoft Copilot Studio chatbots for more details.
Chat without Microsoft Entra ID authentication in Microsoft Copilot Studio	<p>Block bot makers from publishing chatbots that aren't configured for authentication.</p> <p>Bot users will require authentication to chat with the chatbot.</p> <p>See Example 3: Use DLP to require end-user authentication for Microsoft Copilot Studio chatbots for more details.</p>
Microsoft Teams channel in Microsoft Copilot Studio	Block bot makers from enabling or using the Teams channel.
Direct Line channels in Microsoft Copilot Studio	<p>Block any Direct Line channel.</p> <p>For example, the Demo website, Custom website, and Mobile app channels would be blocked.</p>
Facebook channel in Microsoft Copilot Studio	Block bot makers from enabling or using the Facebook channel.
Omnichannel in Microsoft Copilot Studio	Block bot makers from enabling or using the Omnichannel channel.

Example DLP policy configurations

To help you get started with Microsoft Copilot Studio chatbot governance, we created the following examples that detail different scenarios:

- [Example 1: Use DLP to block skills in Microsoft Copilot Studio chatbots](#)
- [Example 2: Use DLP to block HTTP requests from Microsoft Copilot Studio chatbots](#)
- [Example 3: Use DLP to require end-user authentication for Microsoft Copilot Studio chatbots](#)

Use PowerShell to enable and administer DLP enforcement for chatbots in your organization

You can configure whether DLP policies should be applied to your chatbots with the `PowerAppDlpErrorSettings` and `PowerVirtualAgentsDlpEnforcement` PowerShell cmdlets.

You can:

- Confirm if DLP is enabled for bots in your tenant