

- 28 -

Create REST API actions
in Copilot Studio



MONTHLY MASTERY

FEATURE-A-DAY

with Copilot Studio



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Katerina Chernevskaya



REST API actions

Why it matters?

Custom connectors **bring external resources** into your apps, enabling:

- Access to data and services **beyond** your environment.
- Integration with **third-party** tools for enhanced functionality.
- Real-time **synchronization** and data flow across systems.

In Copilot Studio, creating an action based on a REST API simplifies this process.

It eliminates the need for separate tools and provides a unified environment to design, test, and deploy.



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REST API actions

Prepare the API definition

Gather [API documentation](#) and [endpoint](#) information.

Use [OpenAPI Swagger](#) specifications for accurate representation.

Collaborate with a [developer](#) to create the Swagger file.

Alternatively, use [open-source tools](#) such as:

- [Postman](#)
For API exploration and exporting Swagger files.
- [SwaggerHub](#)
A dedicated tool for creating and validating Swagger files.
- [Stoplight](#)
Visual design for API documentation.



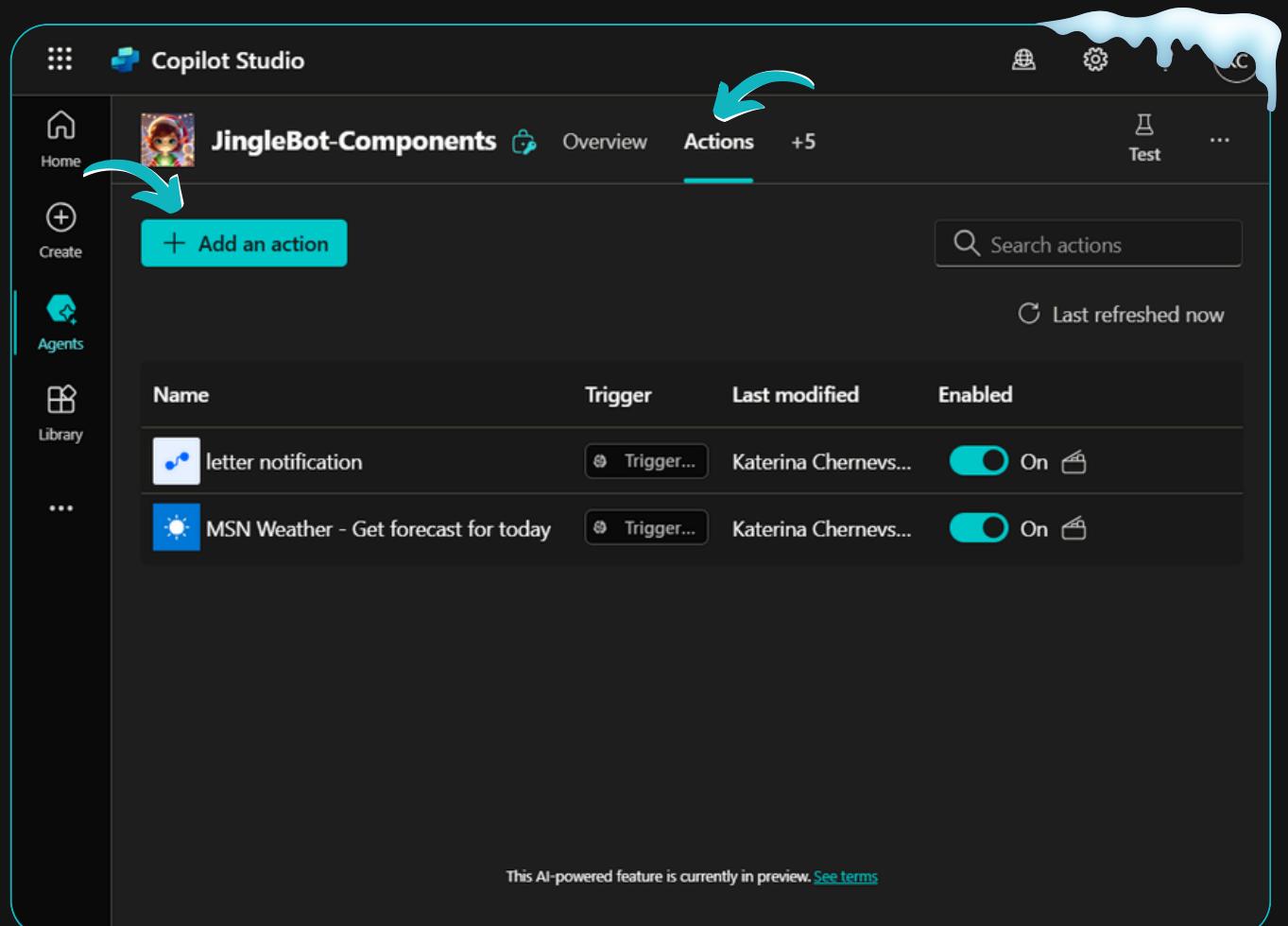
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REST API actions

Create in Copilot Studio

Open the **agent** where you want to create a REST API action.

Navigate to **Actions** and select **+ Add an action**.



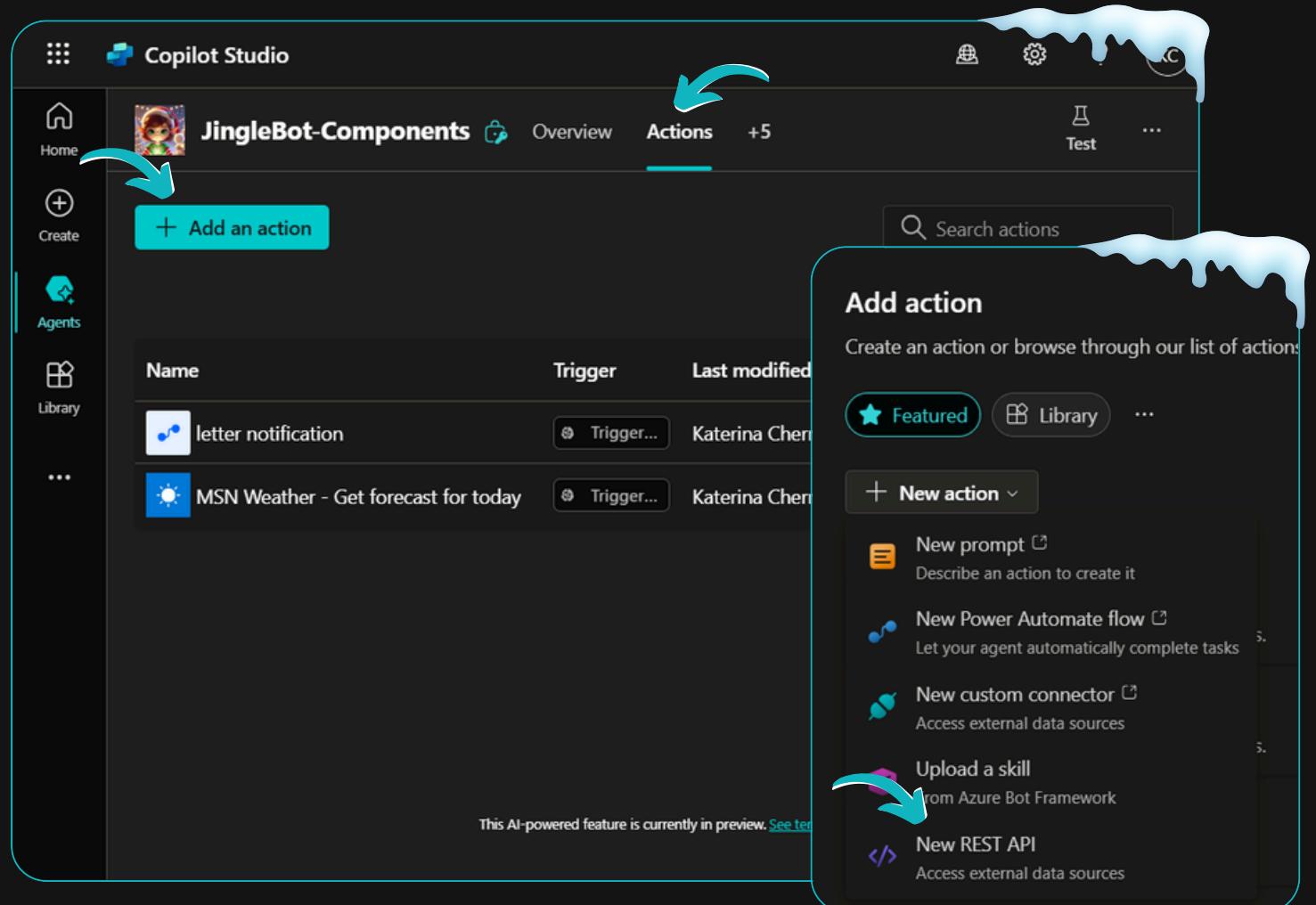
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REST API actions

Create in Copilot Studio

Open the **agent** where you want to create a REST API action.
Navigate to **Actions** and select **+ Add an action**.
Select **New REST API**.



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REST API actions

Upload Swagger file

Click on the option to **upload** the Swagger file.

Browse your system for the prepared **Swagger** file, ensure it is in **YAML** format (or JSON).

Click **Next** to continue.

The screenshot shows the 'Add REST API plugin' wizard with the 'Upload specification' step selected. The left sidebar lists steps: Upload specification, API plugin details, Authentication, Select Actions, Configure action, Select action parameters, Review, Publish. The main area has a title 'Upload REST API specification' and a sub-section 'Add REST API plugin'. It includes a 'File Name' input field with 'spec.yaml' typed in, a 'Browse API specification' button, and a code preview pane showing YAML code. A large blue arrow points from the 'File Name' field to the 'File Name' field in the next step's screenshot.



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REST API actions

Add details

Provide **name** and **description** for your action.

Ensure the description is clear and precise, as it will serve as a trigger for AI to perform the intended action.

Add REST API plugin

Upload specification

API plugin details

Action name *

Azure AI Foundry Endpoint API

Description *

API for Azure AI Foundry Endpoint.

Solution ⓘ

If no solution is selected, one will automatically be created for you.

JingleBotComponents

Back

Next

Save and Close

Ensure you selected the solution for action components.



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REST API actions

Authentication

Select the **authentication method** and provide all required details.

Add REST API plugin

Upload specification

API plugin details

Authentication

Select Actions

Configure action

Select action parameters

Review

Publish

Authentication

Configure your plugin to authenticate users.

Choose authentication implemented by your API

API key

Parameter label *

Authorization

Parameter name *

Authorization

Parameter location *

Header

Back

Next

Save and Close



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REST API actions

Configure action

Select an **action** to configure it.

Make sure that you described all actions in the Swagger file.

The screenshot shows two overlapping windows of the 'Add REST API plugin' configuration tool. The top window is titled 'Configure your action' and contains a list of actions: 'Process input', 'Action name *' (set to 'Process input'), and 'Action description * ⓘ' (set to 'Sends user's questions to the Prompt Flow and returns the model's response'). A blue callout bubble points to the action description with the text: 'This description will help AI to do its work as well. Make it clear.' An illustration of a reindeer holding a star is also visible. The bottom window is titled 'Select and configure your action' and shows a search bar and a single result: 'Score a machine learning model'. A red arrow points from the bottom window towards the action description in the top window.



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REST API actions

Select action parameters

Provide **values** for each parameter.

The screenshot shows a dark-themed UI for adding a REST API plugin. On the left, a vertical checklist lists steps: Upload specification (checked), API plugin details (checked), Authentication (checked), Select Actions (checked), Configure action (unchecked), and Select action parameters (unchecked). Below the checklist is a 'Review' step (unchecked) and a 'Publish' step (unchecked). A small reindeer sticker is positioned next to the 'Select action parameters' step. To the right, a section titled 'Review your action's parameters' contains a sub-section 'Process input' with four input fields: Content-Type (application/json), azureml-model-deployment (redacted), input (chat_history), and question (question). Below this are sections for Output name (answer) and Output description (answer). At the bottom are 'Back', 'Next', 'Save and Close', and 'Cancel' buttons.

Describe each inputs to allow AI understand its purposes



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REST API actions

Review and publish

Review all provided details. Make changes if required.

Once you are ready, click **Next**.

Add REST API plugin

X

Review your action

Almost done! Make sure you review your action's details before creating it.

Action details

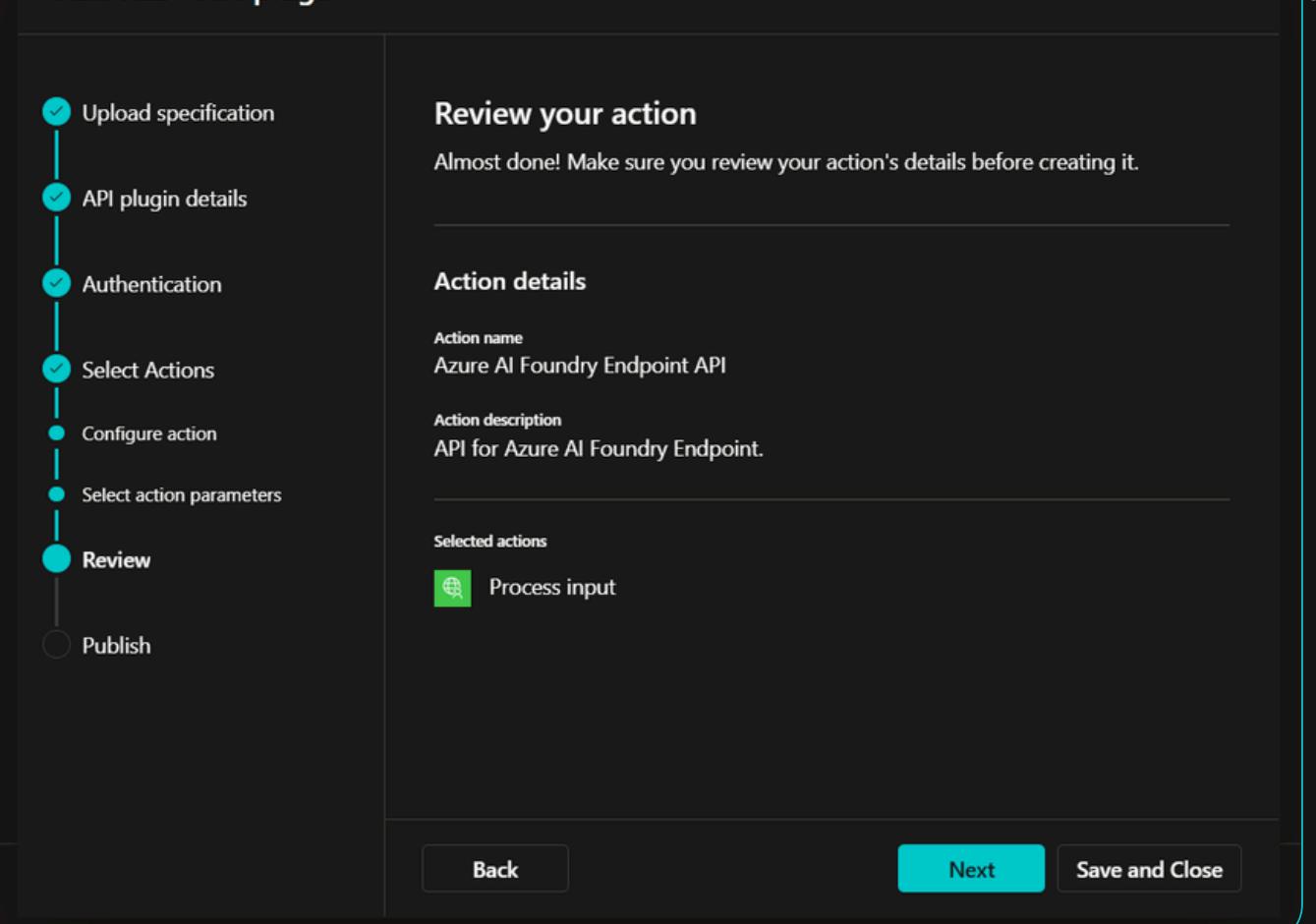
Action name: Azure AI Foundry Endpoint API

Action description: API for Azure AI Foundry Endpoint.

Selected actions

Process input

Back Next Save and Close





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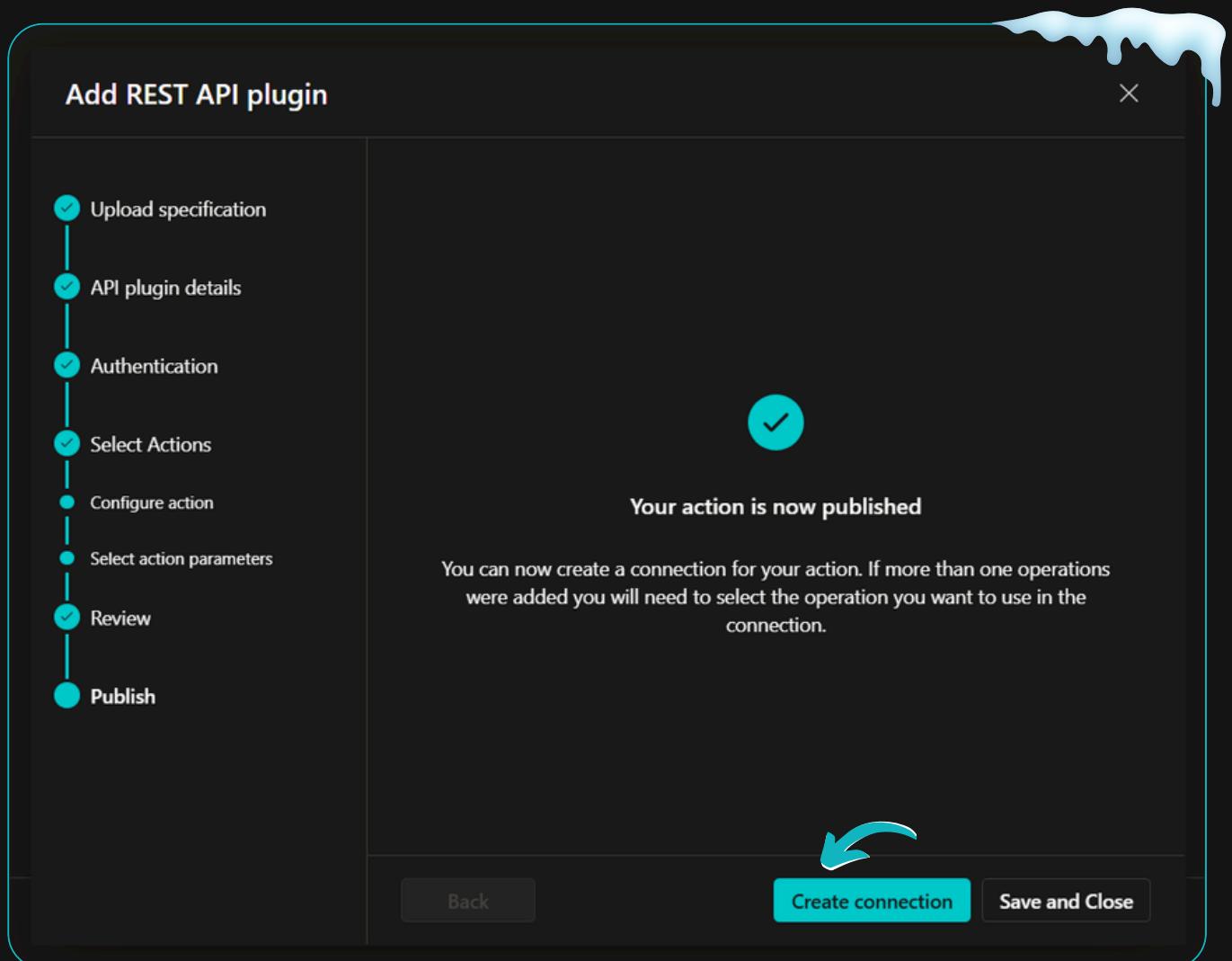


REST API actions

Create connection

Wait when the action will be published.

Once it is published, click **Create connection** to proceed.



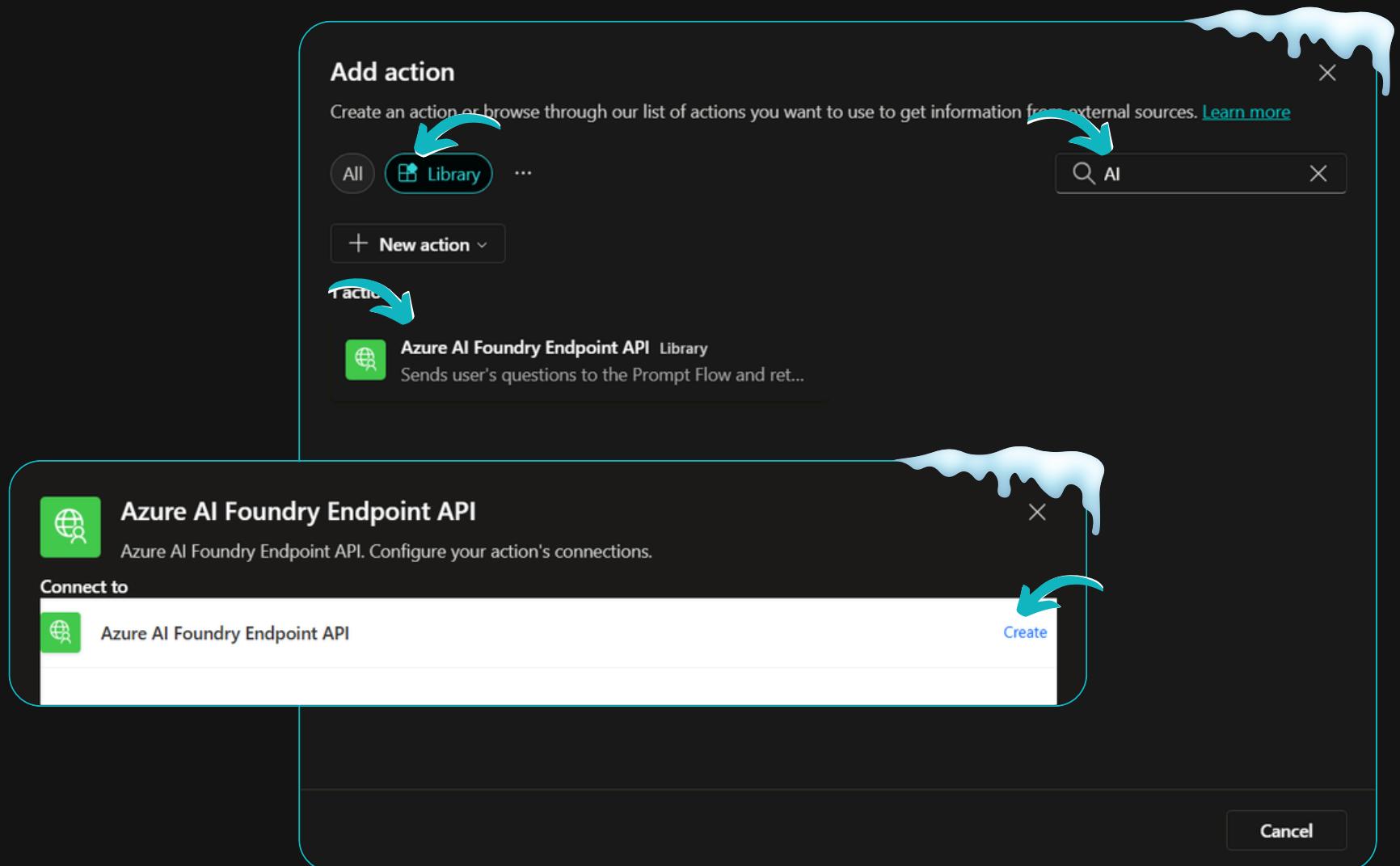
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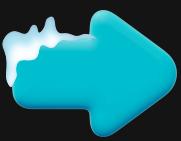
REST API actions

Create connection

Navigate to the **Library** section and **search** for your action.
Select the **newly created agent**.
In the **Connect to** window, click **Create**.



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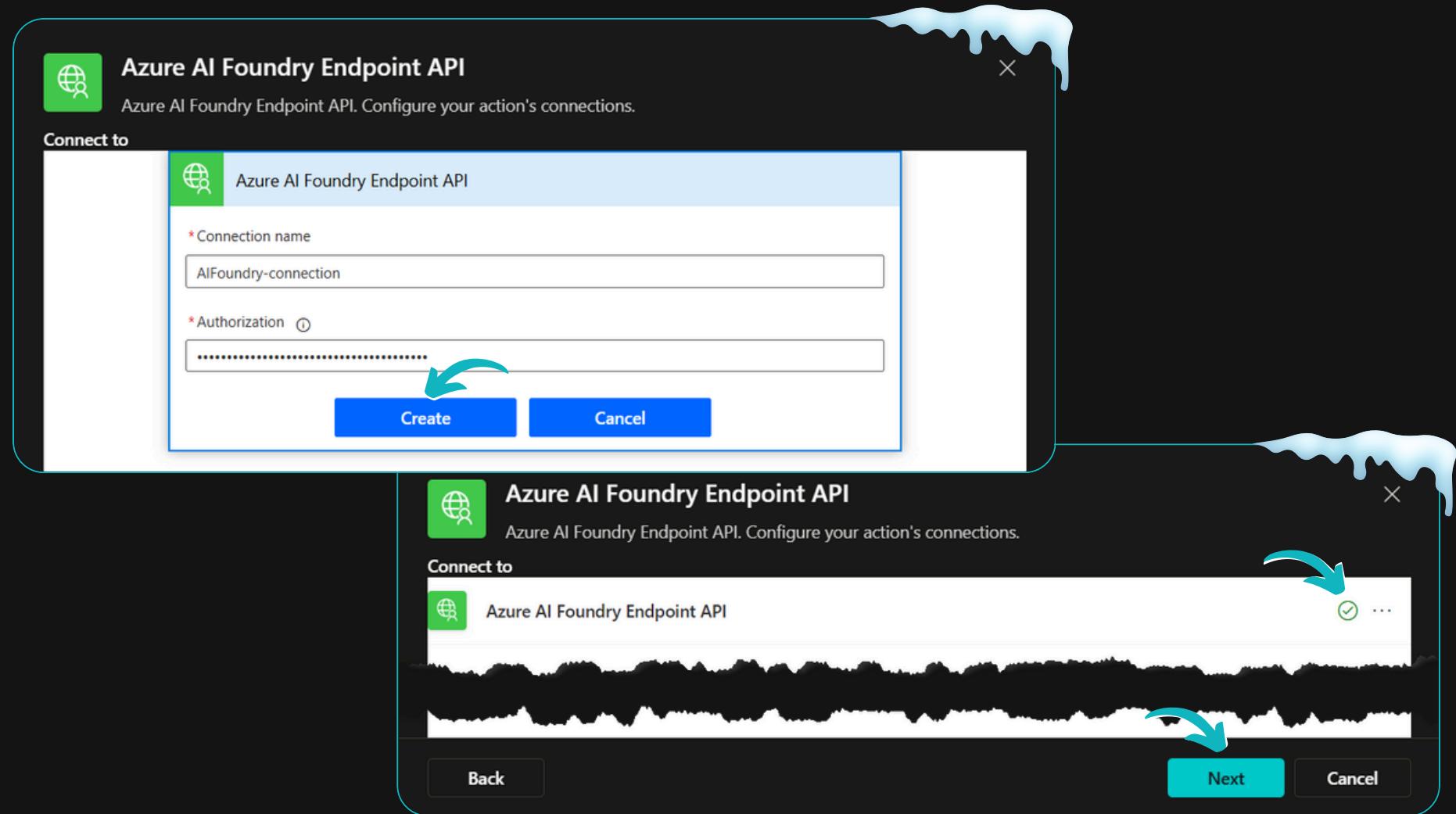
REST API actions

Create connection

Provide **Connection name** and **Authorization** value.

Once connection will be configured it will be marked in **green**.

Click **Next**.



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REST API actions

Configure action

Provide the **general information** for the action: name, description and authentication type.

Scroll down.

 **Azure AI Foundry Endpoint API**
Azure AI Foundry Endpoint API. Configure your action's, options, inputs and outputs

[Open code editor](#)

Name *
Score a machine learning model 30/64

Description for the agent to know when to use this action *
Sends user's questions to the Prompt Flow and returns the model's response.
[Learn more](#) 75/1024

Authentication

End user authentication
Control which user authentication type will be used
User authentication

Usage Description
Describes the purpose of the connector action
Connection to the Prompt Flow 29/1024

[Back](#) [Add action](#) [Cancel](#)



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REST API actions

Configure action

Click **+ Add** to include inputs for the action.

These inputs will **dynamically** hold values
to be sent to the API endpoint.

Scroll down.

Azure AI Foundry Endpoint API

Azure AI Foundry Endpoint API. Configure your action's, options, inputs and outputs

Inputs and outputs

Inputs 2

Outputs 6

Inputs	Outputs
= question	Answer
question	answer
= chat_history	Links
chat_history	links
	Searchqueries
	searchqueries
	Docs
	docs
	Links
	links
	Queries
	queries

Inputs can be re-ordered to define the order in which the agent will try to fill the information.

Back **Add action** **Cancel**



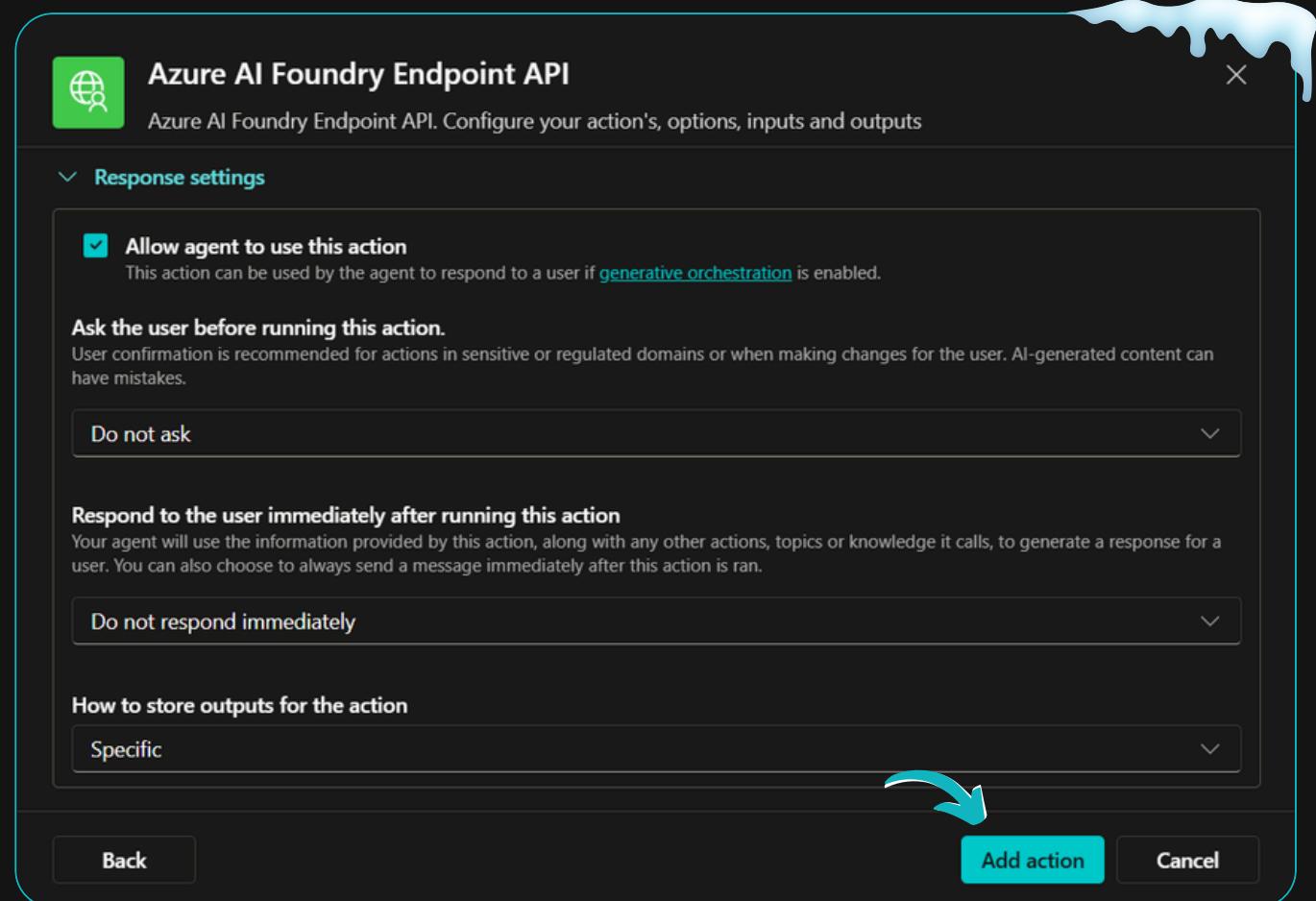
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REST API actions

Configure action

Review **Response settings**, make changes if required.
Once you are ready, click **Add action**.



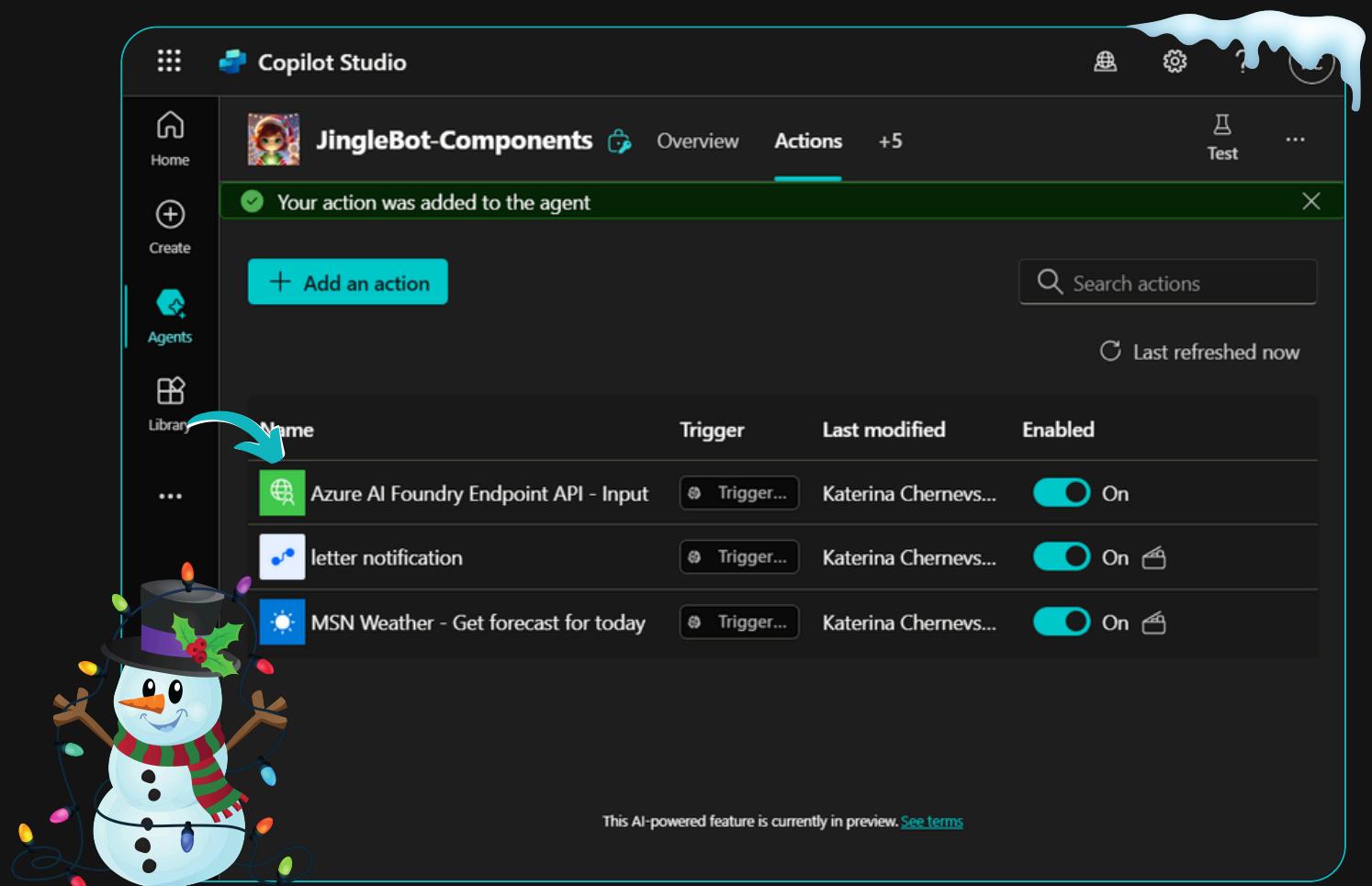
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REST API actions

Configure action

Your new **REST API action** has been added to the **Action** list!



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REST API actions

Benefits

Ease of use

A single interface for API integration.

Scalability

Add multiple external services without extra configuration overhead.

Customization

Tailor actions to your specific app needs.

Time-saving

No need for external deployment or tools.

Collaboration

Leverage Swagger files prepared by developers.



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Today's Task: Create your first REST API action



1. Prepare the Swagger file

Use tools or collaborate with developer to prepare a Swagger file.

2. Create the REST API action

Follow the instruction from this guide and craft the REST API action.

3. Configure the action

Create a connection and customize the action parameters.



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