

WORKSHOP

Custom Connector Masterclass

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PPCC 2025

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Event Invitation Code:
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Mats Necker



@matzzt



www.nckr.de



matsnecker



Hamburg, Germany



Working with BizApps > 15 years



Nowadays > CRM & PP



Solution Architect / Developer / Consultant



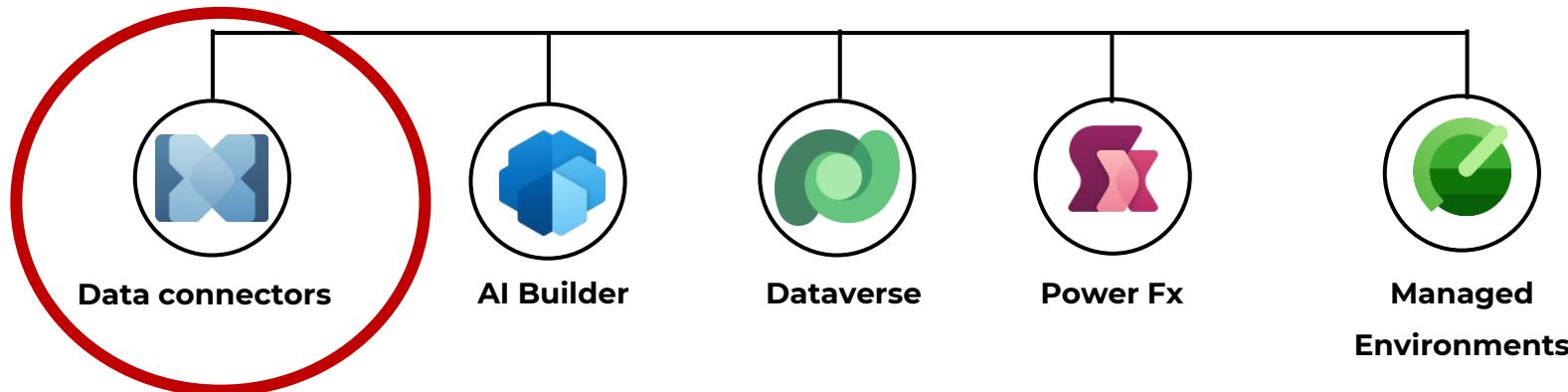
CEO
dhino



“No matter where your data currently resides [...] your Microsoft Cloud can connect to all your data and turn it into impact.”

Charles Lamanna
Corporate Vice President Microsoft

Microsoft Power Platform



1500+ Connectors



Why Custom Connectors?



Add services that are not currently supported



Expand connectors that currently don't have the trigger/action you want



Custom connectors are simple to build, don't require a lot of coding



Can be built using the wizard, a postman collection, or with your favourite IDE (for instance VS Code)



Can be shared, packaged and certified via GitHub



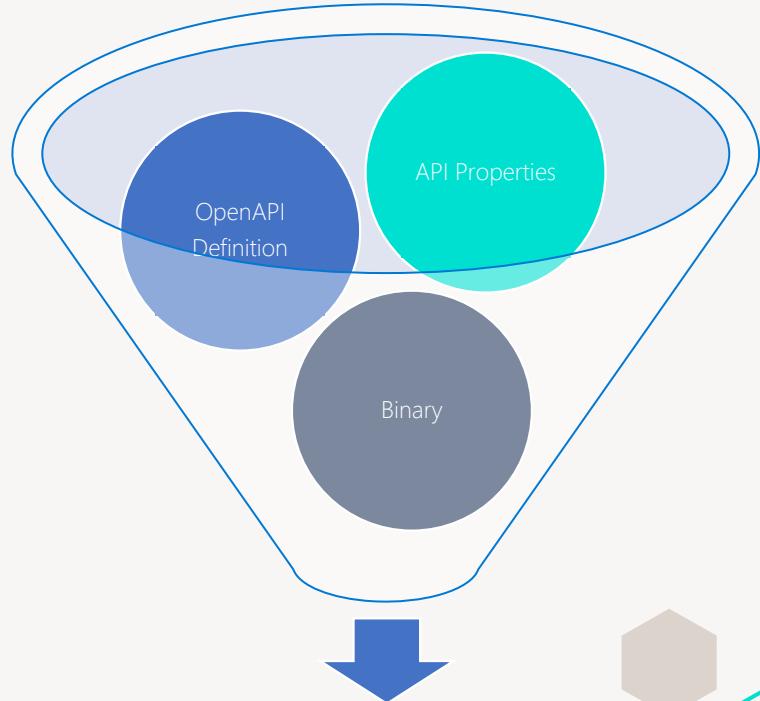
A formal definition of a
REST API



Allows the **REST API** to talk to
Microsoft Power Apps, Power
Automate, Copilot Studio, and
Logic Apps

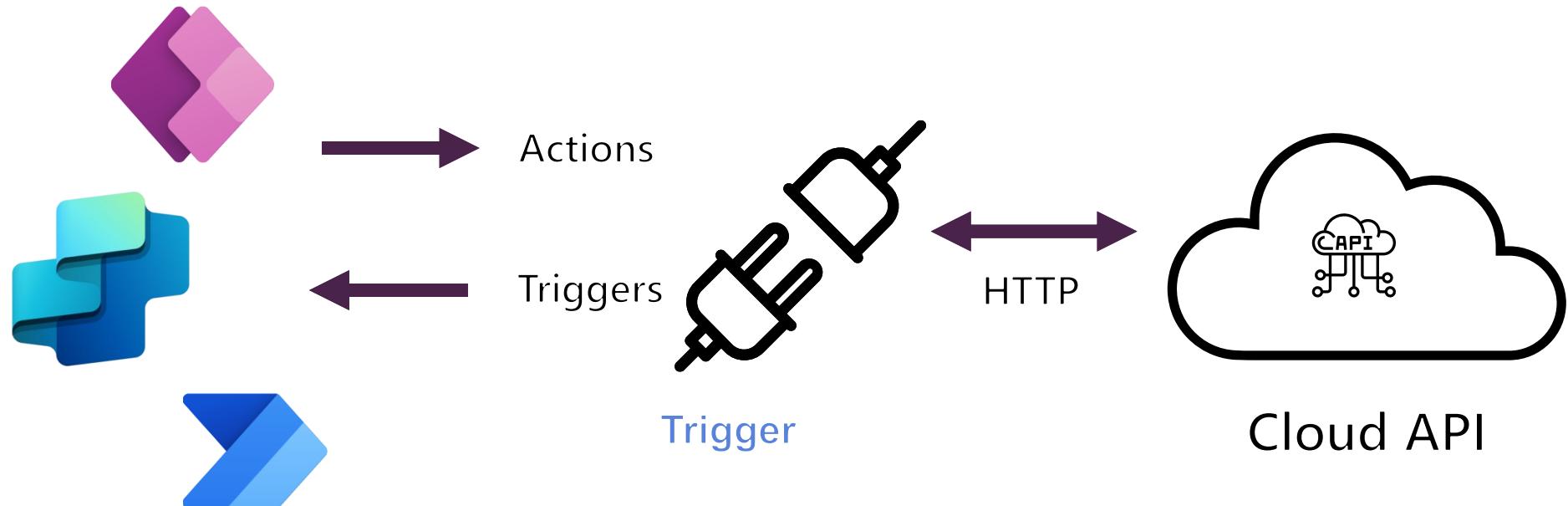


Currently **1500+** connectors in
the product

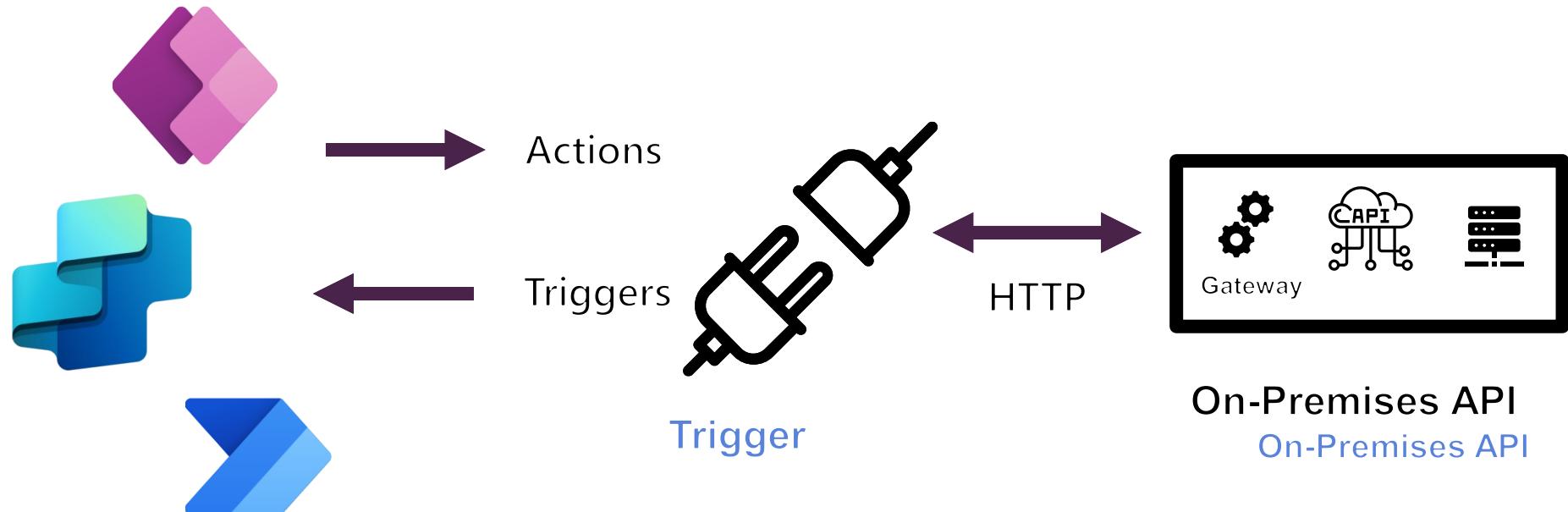


Connector

How do they work?

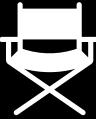


How do they work?

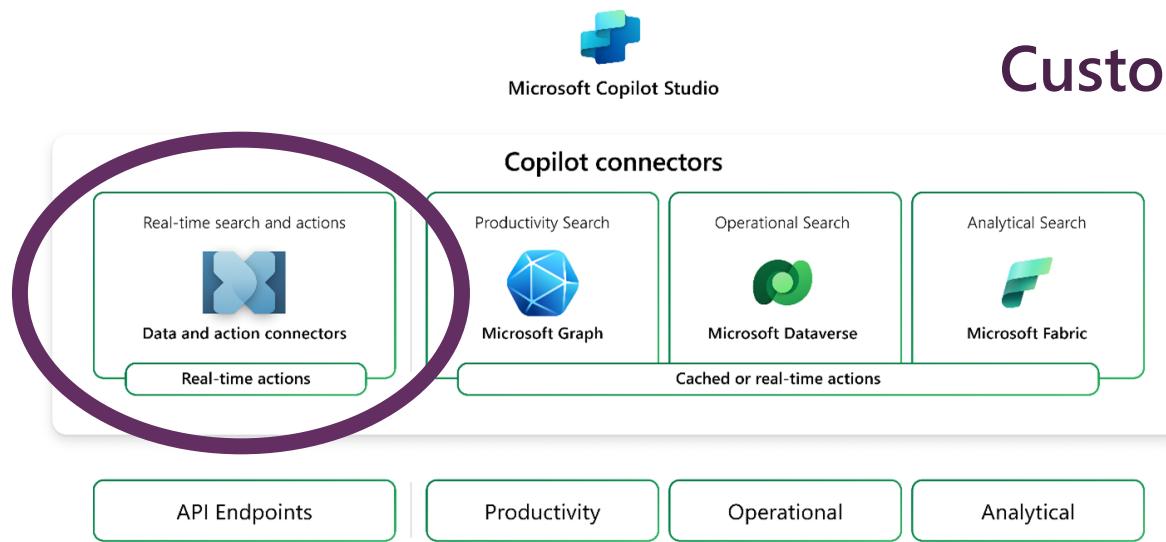




Types of Custom Connectors

 Connector Type	 Custom Connector	 Certified Connector	 Independent Publisher Connector
 API Availability	 Public or private	 Public	 Public
 Service Owner	 Connector developer or someone else	 Connector developer	 Someone else
 Audience	 Internal	 Everyone	 Everyone

Why is now the best time to start with Custom Connectors?



Custom Connector Developer
=
AI Developer

LAB 00 – Preparations & Environment



Lab Link

**aka.ms/ppcc25-cc-
masterclass**

LAB 02

Make your connector dynamic

Dynamic Option List

The screenshot illustrates the use of a dynamic option list in Microsoft Power Automate. On the left, a "Get Questionnaires By Category" action is shown with a dropdown menu for "Category". The dropdown lists "HR" and "Marketing", with "Enter custom value" as an option. A red arrow points from this dropdown to the "Actions" pane on the right. The "Actions" pane shows a list of available actions under the "Actions" tab, including "Add Questionnaire", "Get Categories", "Get Questionnaires", and "Get Questionnaires By Category". The "Get Categories" action is highlighted with a red box. The "Get Questionnaires By Category" action is also visible at the bottom of the list.

Use values from other
actions as parameters!

LAB 02 – Make your connector dynamic



Lab Link

**aka.ms/ppcc25-cc-
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Dynamic Schema

Submit Questionnaire

* Category	Marketing
* Questionnaire	Product Interest
Campaign No.	No. of campaign
Start Date	Start date of campaign
End Name	End date of campaign
Budget	Maximum budget for the campaign
Audience	Target audience

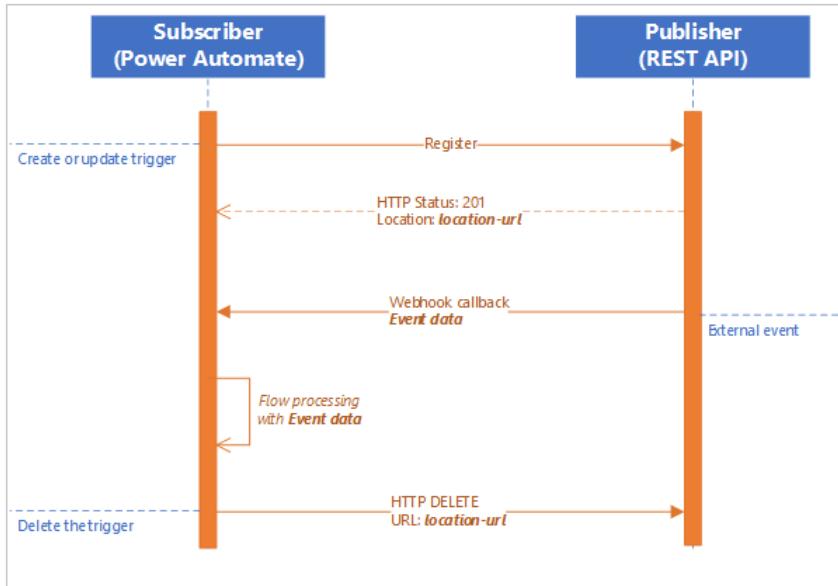
Submit Questionnaire

* Category	HR
* Questionnaire	Employee Onboarding Form
Employee No.	No. of employee
First Name	First name of employee
Last Name	Last name of employee
Comment	Comment about employee performance

Dynamic schema of action (and their responses)
based on parameters

Custom Trigger

Webhook Trigger



Trigger Endpoint will be registered
in source

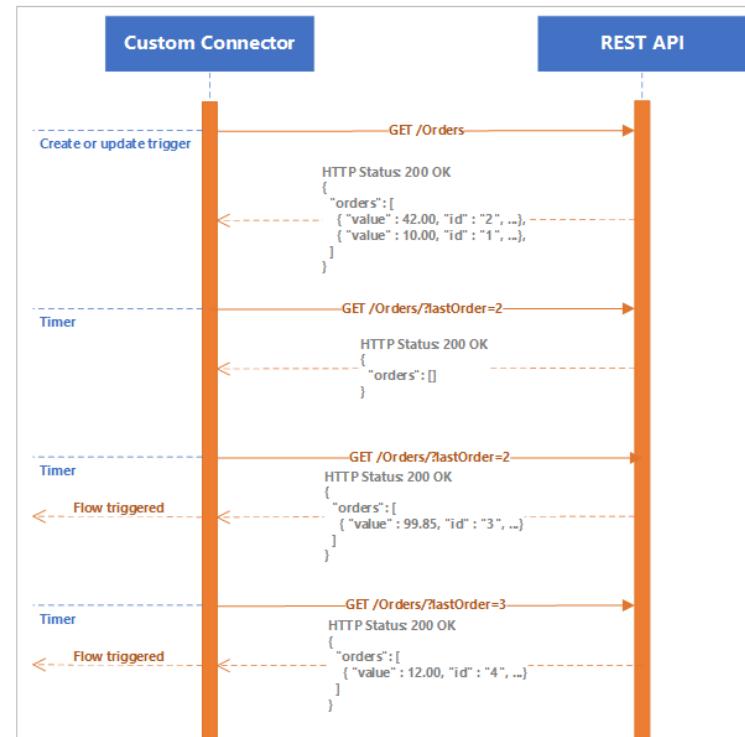
Source calls trigger endpoint

Must be supported by source

Custom Trigger

Polling Trigger

- Connector pulls changes on schedule
- Longer delay
- More sources support this



LAB 03 – Advanced Features



Lab Link

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LAB 04

Copilot Studio Integration



Copilot Studio

Copilot Studio is your tool for **building agents** and **extending Microsoft 365 Copilot**.

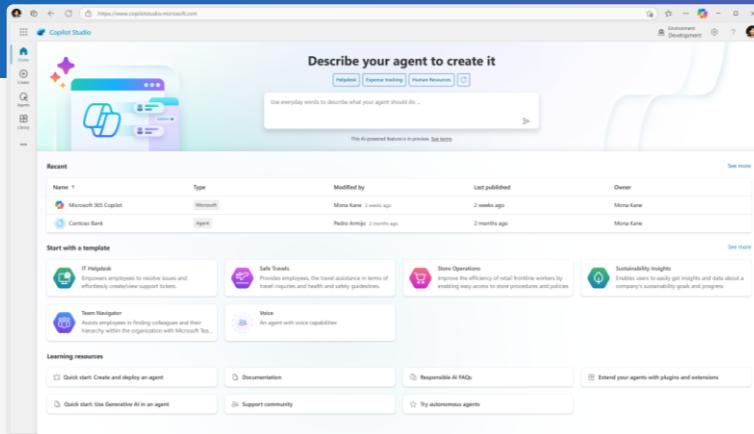
- ✓ Meet your users where they already are

- ✓ Access everything in one place

- ✓ Automate your workflows

- ✓ Integrate with your external apps

- ✓ Connect to your data in Microsoft 365



Building enterprise agents
to transform business processes



Enhancing MS Copilot
to improve information workers productivity



Works with Azure Foundry

A range of tools for agent creation

No code



Pro code

For end users

The screenshot shows the Copilot Studio interface with a wizard titled 'Field Service agent'. It asks for a name ('Travel budget') and provides a summary of the agent's purpose: 'Provide details to employees about travel expense budget approvals'. Below this, there are sections for 'Data sources' (using Microsoft Graph API) and 'Output' (HTTP POST to a travel expense budget API). A note at the bottom says 'Agent Studio is currently in preview mode'.

Agent builder

For makers

The screenshot shows a flowchart titled 'Travel budget' in Copilot Studio. It starts with 'Describe what the logic does' (asking questions about travel expense budget approvals), followed by 'Add step' (choosing 'Read API value'), 'Type name' (entering 'Expense budget'), and 'Output to' (choosing 'HTTP POST to travel expense budget'). A note at the bottom says 'Agent Studio is currently in preview mode'.

Copilot Studio

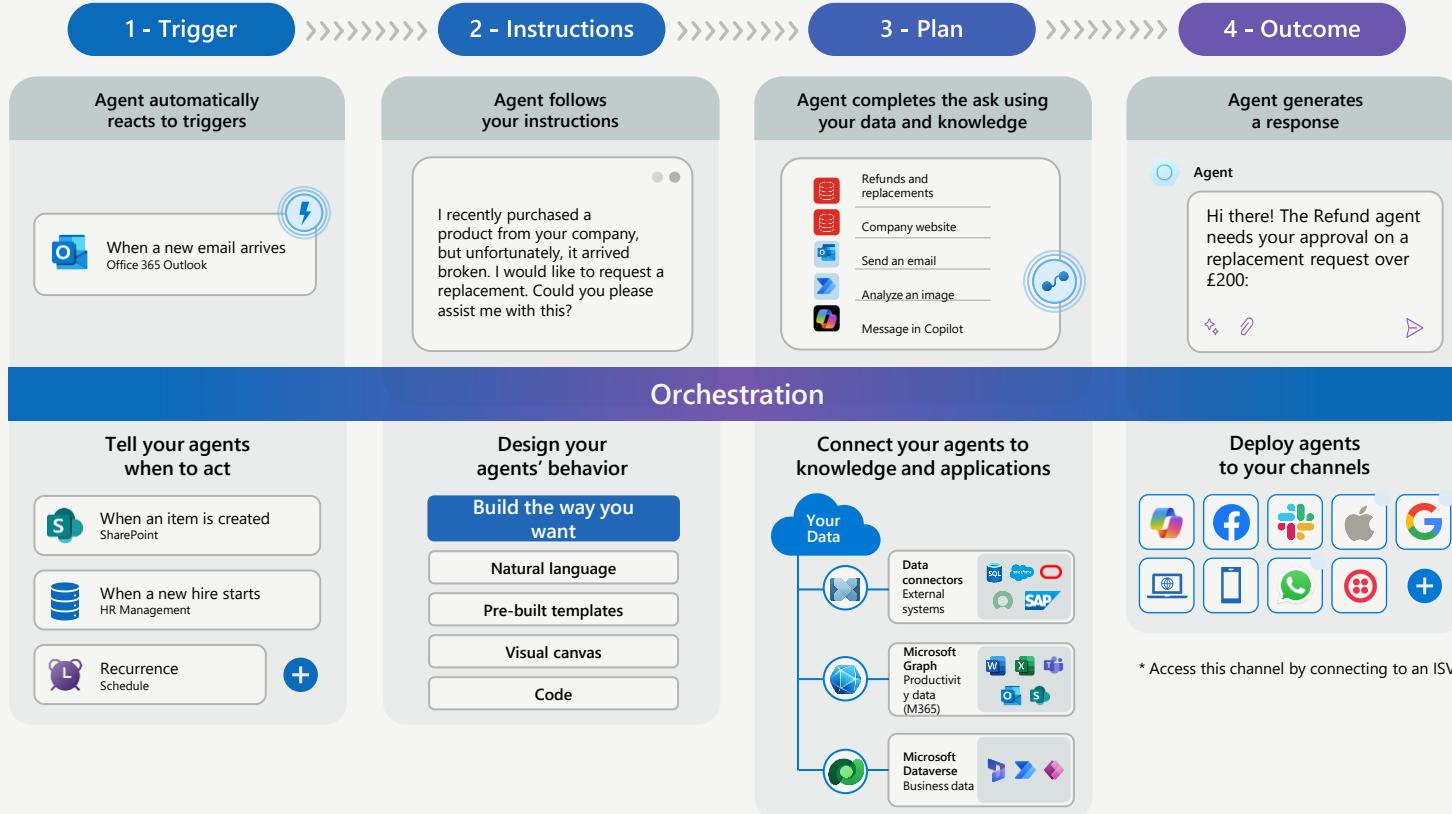
For developers

The screenshot shows the 'Model catalog' in Visual Studio, listing various AI models such as 'get flight status', 'get flight delay', 'get flight arrival', 'get flight departure', 'get flight info', 'get flight schedule', 'get flight history', 'get flight delay history', 'get flight arrival history', 'get flight departure history', 'get flight info history', 'get flight schedule history', 'get flight history history', 'get flight status history', 'get flight delay history history', 'get flight arrival history history', 'get flight departure history history', 'get flight info history history', 'get flight schedule history history', 'get flight history history history', and 'get flight status history history history'. A note at the bottom says 'Agent Studio is currently in preview mode'.

Copilot Studio, Azure AI Foundry & Visual Studio

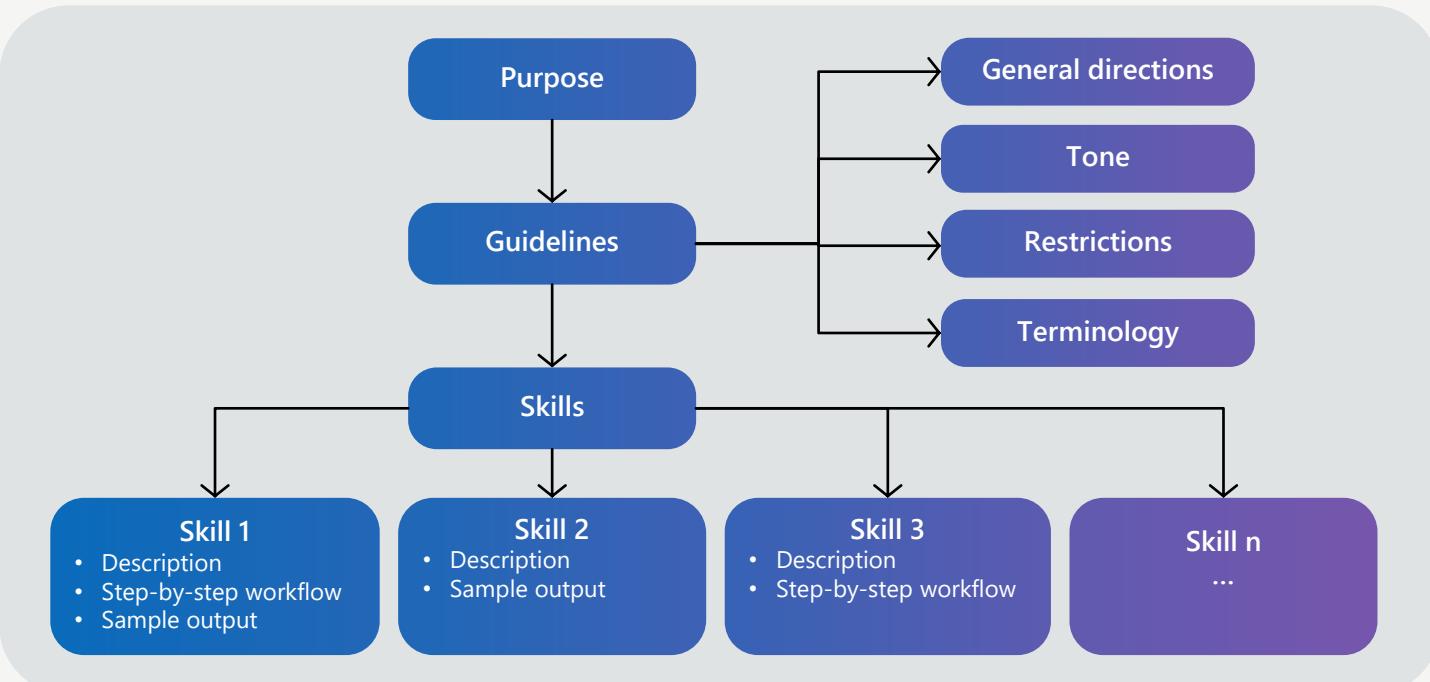
Data protection, agent sharing & usage limits, and reporting & cost management

How does it all fit together?



Instructions are key to success

A well-structured set of instructions ensures that the agent understands its role and tasks and how to interact with users.





Model Context Protocol

Preview

A universal interface that allows AI models to interact with external tools, data sources, and user environments in a consistent and scalable way

Standardized Context
for AI Models

Seamless Integration
with Copilot Studio

Improved Developer Efficiency
and UX

Governance, Monitoring, Extensibility

The screenshot shows the Copilot Studio interface with the MCP tools section open. A specific tool, "Request for Proposal Agent", is selected under the "D365 Sales MCP Server". The "Initiation" tab is active, displaying the "Details" section. The "Name" field contains "GitHub access for my agent". The "Action" section shows "Model Context Protocol GitHub". The "Connection" section lists "Mona.Kane@contoso.com". The "Available to" section shows "Agent". Below this, there's an "Advanced" link. The "MCP tools" section includes a link to "Model Context Protocol documentation". A table lists a single tool entry: "Tool name" is "net-leads" and "Description" is "Create or update a single file in a repository".



MCP Servers vs. Connectors



vs.





South Coast
Summit

MCP Servers **vs.** Connectors



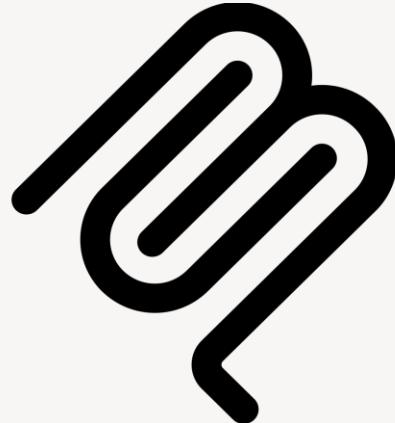
vs.





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MCP Servers & Connectors



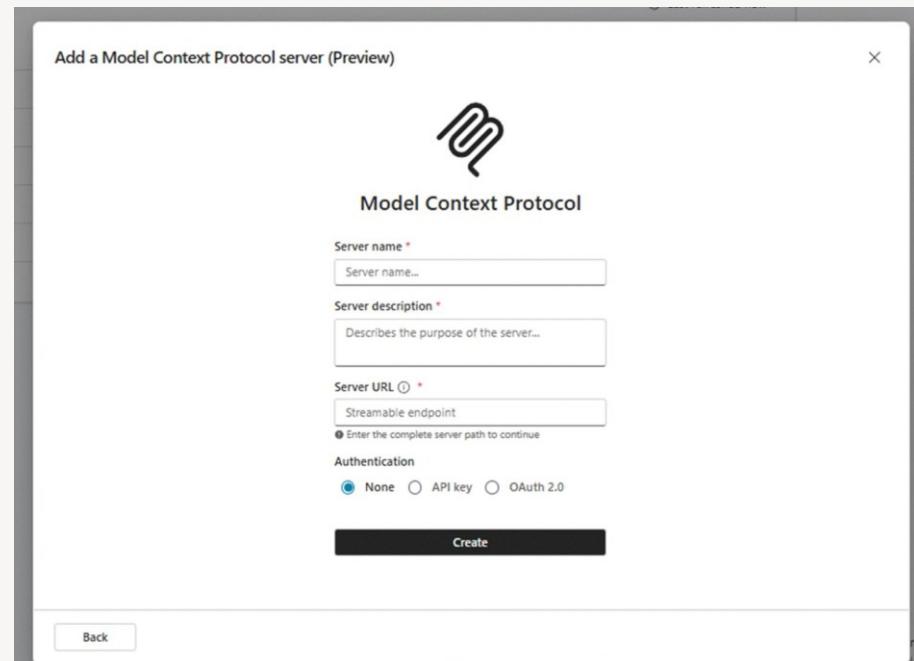
&





MCP Servers & Connectors

- MCP Servers can be added as a connector action
 - Both as a new connector as well as an existing connector
- Benefit from:
 - Data loss prevention
 - Multiple authentication methods
 - Virtual Network support
 - Certification for ISVs
- Easy creation of MCP Servers in Copilot Studio via the new wizard (preview)





MCP Servers & Connectors

MCP Servers

- Only works in Copilot Studio
- Multiple tools can be added at once
- Agentic capabilities without configuration
- No update needed after adding or removing a tool in the MCP Server
- Data loss prevention on server level

Connectors

- Works in Copilot Studio, Power Apps, Power Automate & Logic Apps
- Connector actions (tools) must be added one by one in Copilot Studio
- Connector needs to be updated when adding or removing a connector action
- Data loss prevention on action level

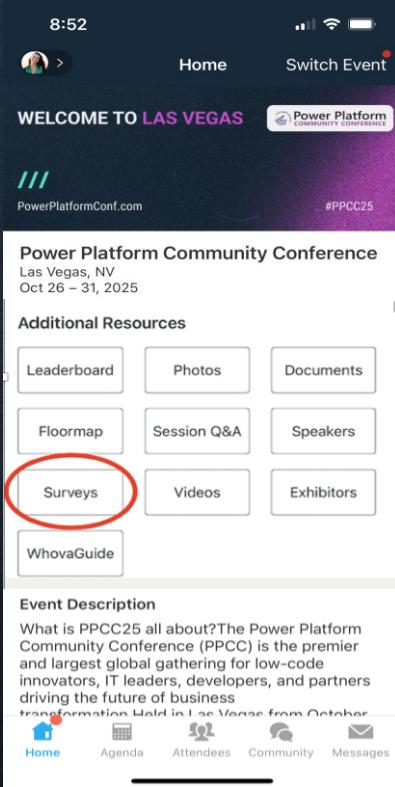
LAB 04 – Copilot Integration



Lab Link

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Session Feedback Surveys



We really want to hear from YOU!

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

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- Scroll down on the Power Platform Community Conference Homepage to 'Additional Resources' to click 'Surveys'.
- Click Session Feedback.
- Scroll down to find this session title.
- Complete the session feedback survey.
- Finally, click 'Submit'
- It's just that easy!

THANK YOU

PPCC 2025 DAY 1