Create a device refresh agent

Introduction

In this lab, you'll create a medium-complex device refresh/order agent in Copilot Studio. The agent will guide a new employee through the order process of a new (hardware) device.

Estimated Time

50 minutes

Objectives

At the end of this lab, you will be able to:

- Create a declarative Agent from within Copilot Studio.
- Create an icon for the agent using the Microsoft Designer in Copilot Chat.
- Create actions and add specific instructions to the agent.

Logon Information

Use your available accounts / tenants in compliance to your internal regulations, permissions, and licensing capabilities at your own risk. Alternatively, use the given credentials to login into the hackathon tenant and environment.

Requirements

Access to Copilot Studio:

- Assigned Copilot Studio User license, or
- Assigned M365 Copilot license, or
- Member of the Power Platform Tenant Setting: Copilot Authors (preview) Security Group

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Lab: Create a device refresh agent

In this exercise, you'll create a device refresh agent and further extend it throughout the next exercises.
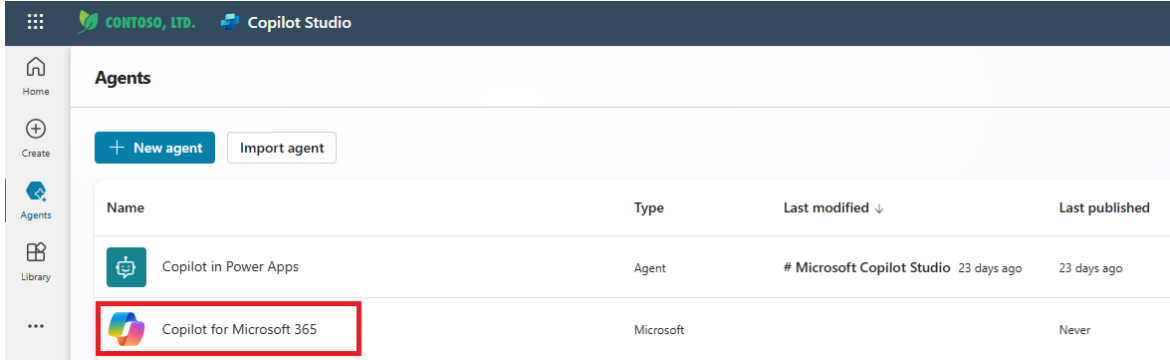
Exercise 1: Create the agent in Copilot Studio

Tasks

1. Open a new browser window and navigate to https://copilotstudio.microsoft.com and select the environment where the agent should be created, e.g., personal productivity (default) environment.
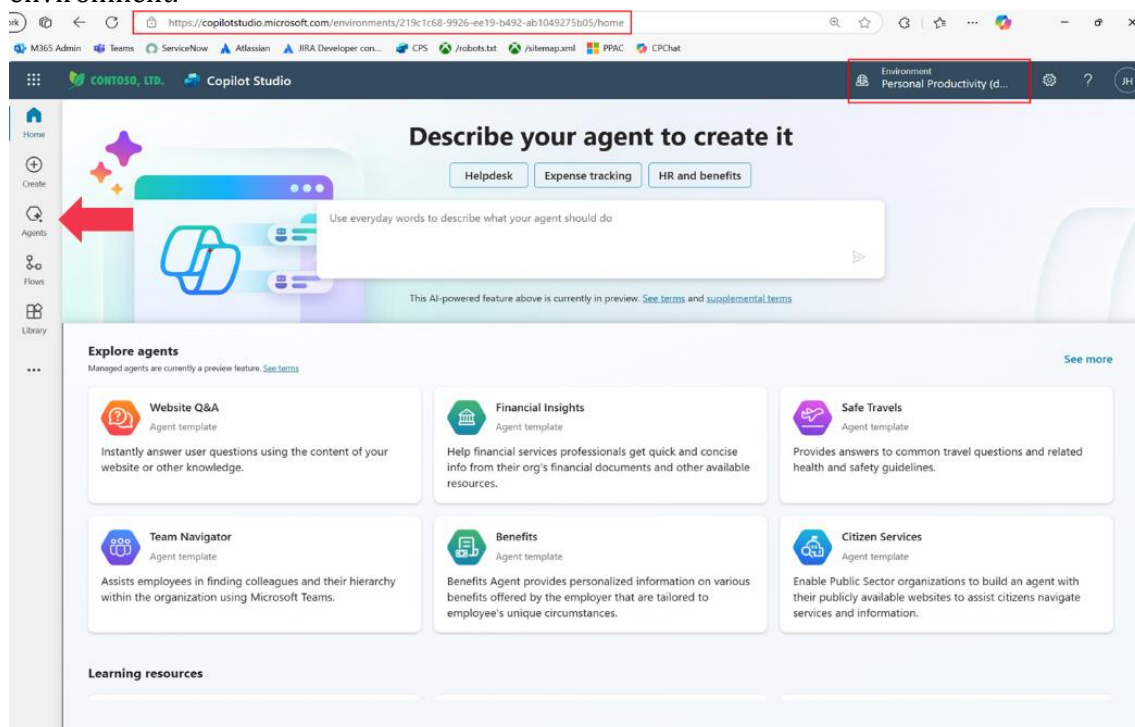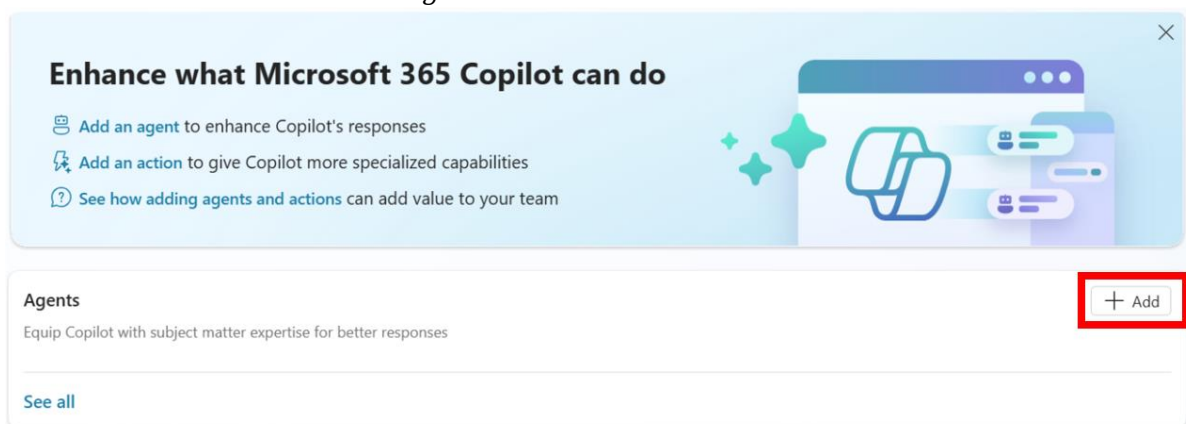

2. Select Agents on the left navigation.
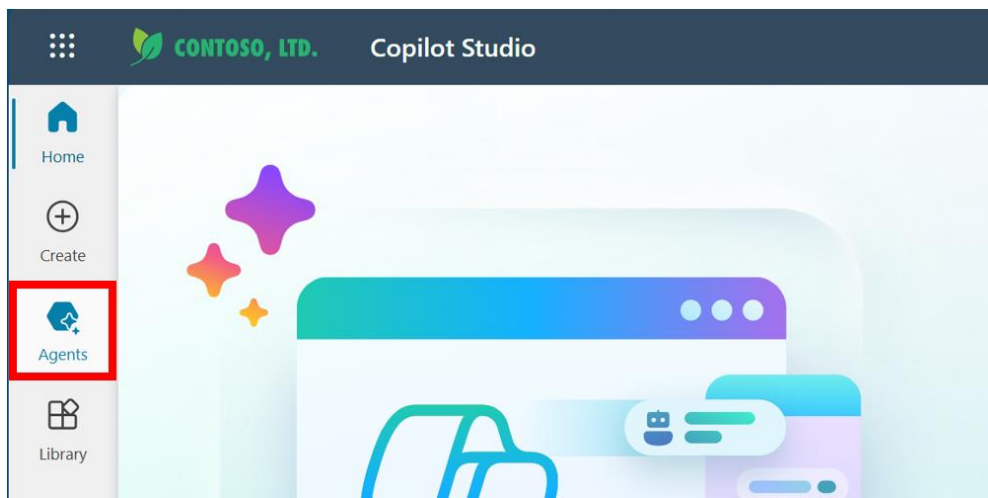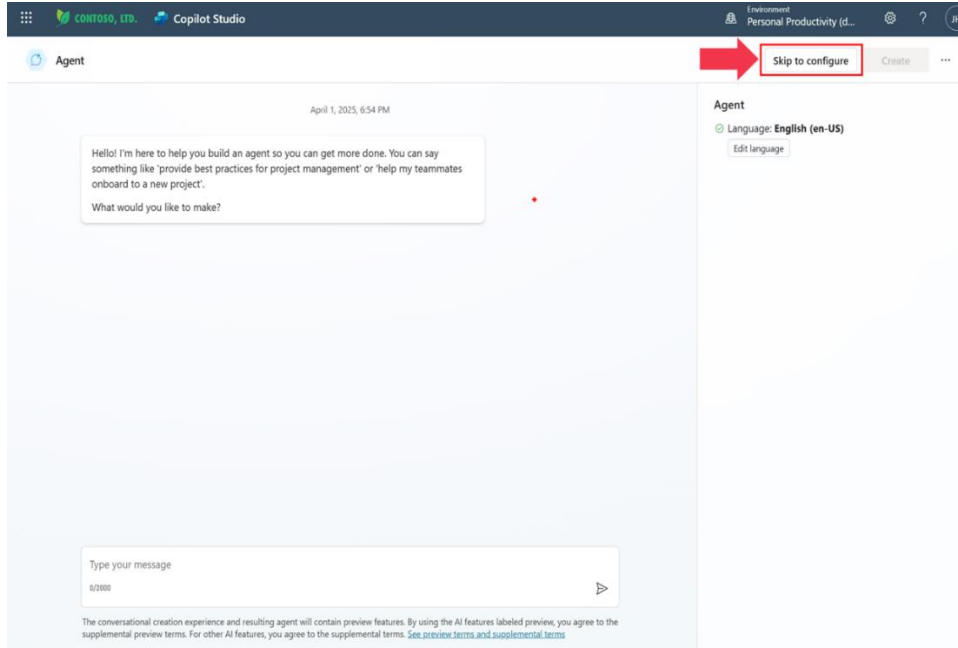
3. Click on **Copilot for Microsoft 365**

4. *Click on **+ Add** button within the Agents section.*

5. Instead of continuing the agent creation in the form of a conversation, you can navigate to the direct configuration with "**Skip to configure**"

Now, you have the option to configure the agent with a title, description, instruction and starter prompts. Please fill out the following with examples provided (you are able to make changes afterwards).

Title: "*Device Refresh Agent*"

Description: "*This agent is used to perform the device refresh process within Contoso.*"

Instruction:

"*You will be prompted with details of a newly added employee. Respond according to the instructions below: 1. Send a friendly welcome message to the user. Ask them if they are ready to begin onboarding. 2. Once the user says yes, retrieve a list of devices and ask the user to select a device. 3. Create a record once the user has made their choice from the list provided. Don't call this action until the user has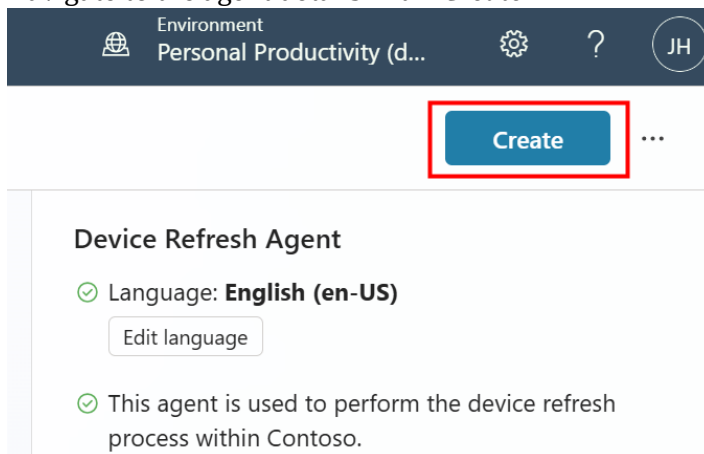 indicated their choice, Share details of the record created with the user. Always format the messages you send in an engaging way.*"

6. Navigate to the agent details with "*Create*"

Exercise 2: Create the agent icon

Tasks

7. Open a new **browser** tab and navigate to https://m365.cloud.microsoft/chat/
8. Prompt to create an icon, e.g.:
    "Create an agent icon with a surface laptop in the middle and white and blue stripes on the corners of the icon."
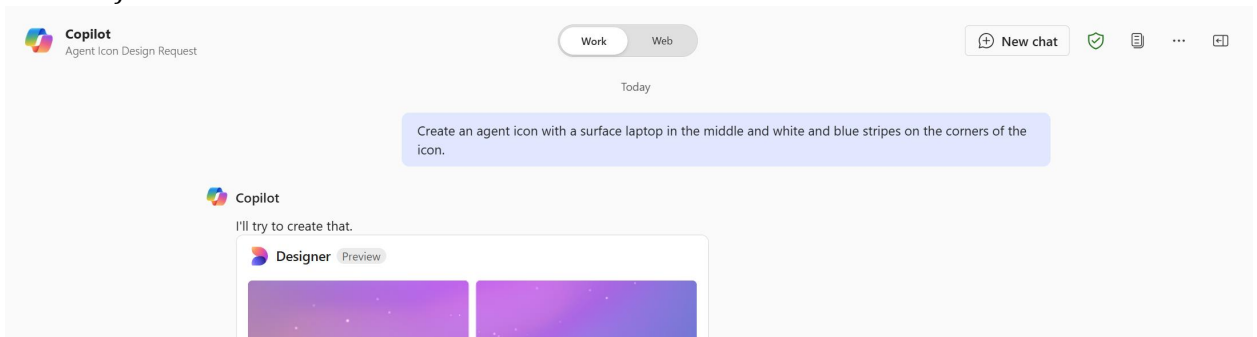
9. Click on your favorite icon and *save* it to your *Downloads* folder.
10. Open the image with "*Photos*" and "*Save as*" as a .PNG file.
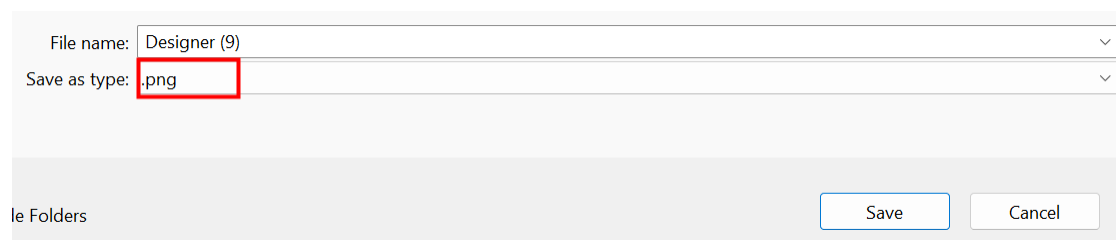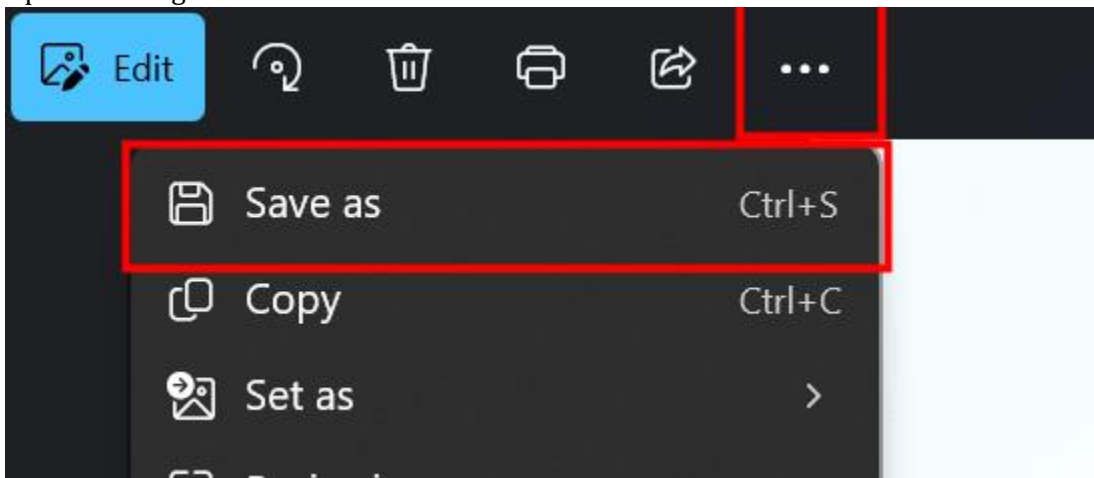
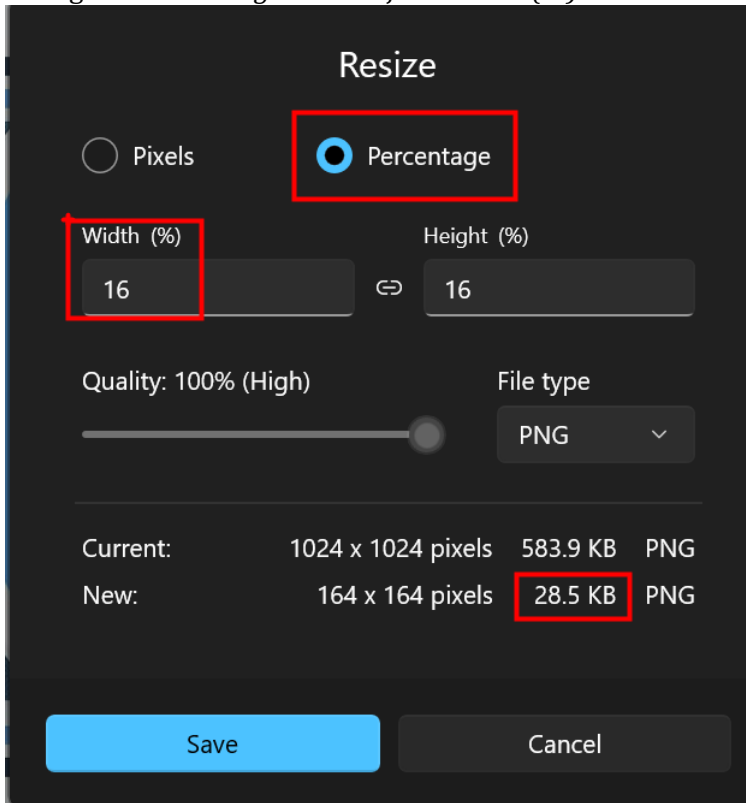11. Navigate to the folder where you stored the .png file and open it in "*Photos*". Now, you need to reduce the file size to below 30 KB. Click on *(...)* and "*Resize image*".
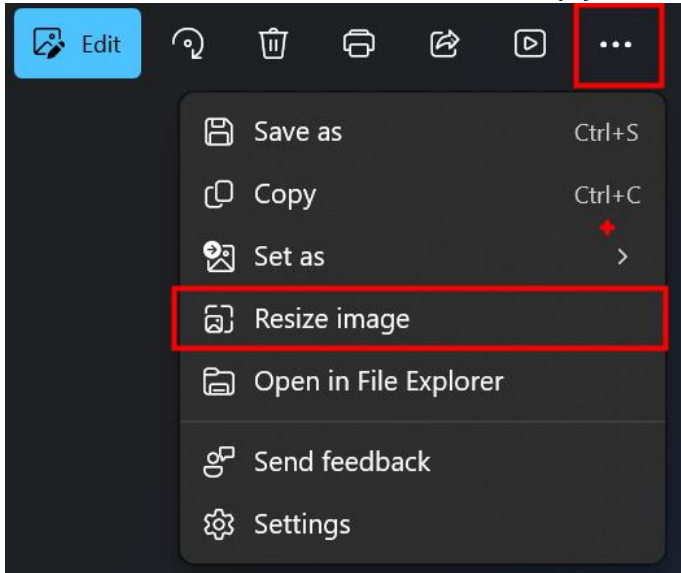

12. Change to "*Percentage*" and adjust "*Width (%)*" to a size that is below 30 KB.


13. Next, click "*Save*" and add e.g. "small" to the file name. Then, close the image in the Photos App.
14. Go back to your previous browser tab to see the overview of your agent copilot studio. (if you have closed the tab, navigate to *copilotstudio.microsoft.com*, go to the correct environment, go

to "*Library*" in the left navigation pane and open your previously created Agent, named "*Device Refresh Agent*".

15. Click "*Edit*"
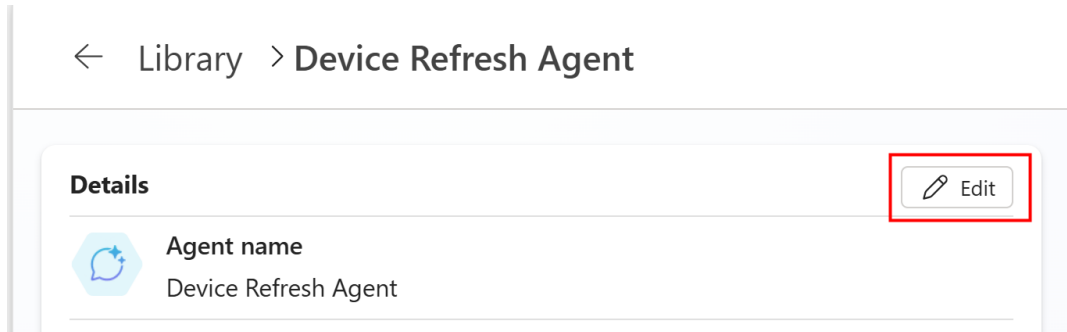
16. Click "*Change icon*" and then "*Change icon*" in the pop-up.
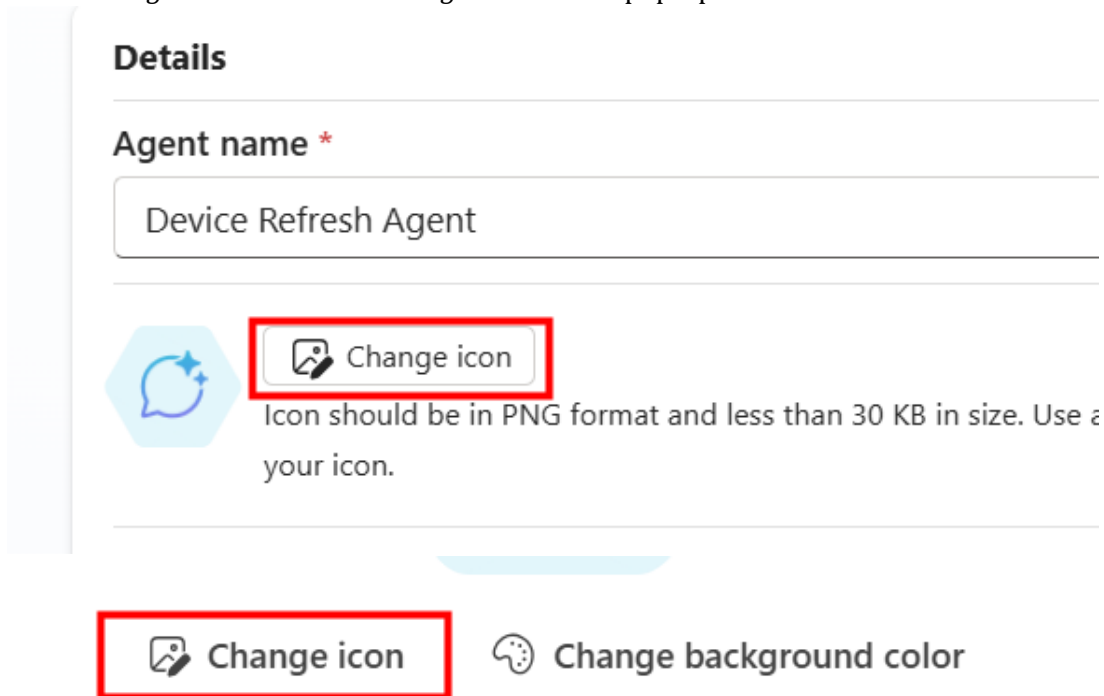
17. From the file picker, select the.png file that you have previously reduced in size (<30KB), e.g. with the ending "small".
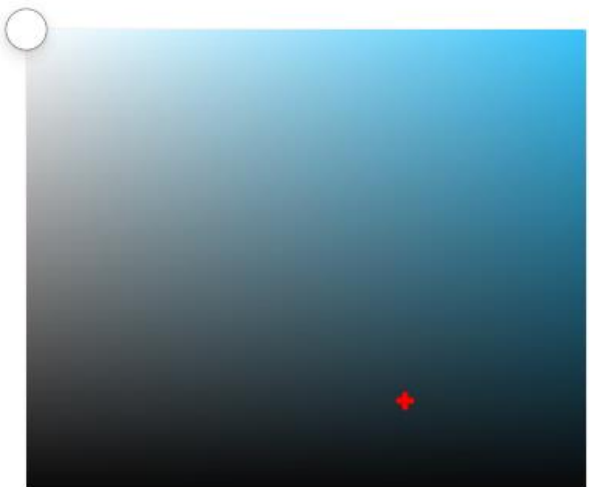
18. Navigate to "*Change background color*"
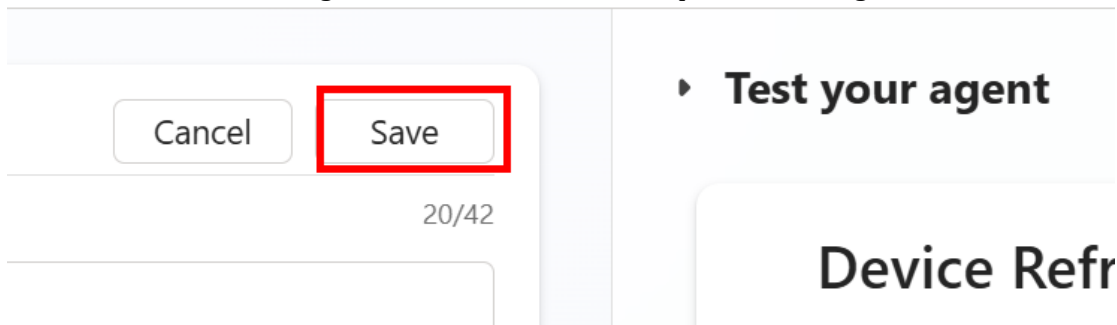
19. Set the hex color to, e.g., "ffffff" for a white boarder color and *"Close".*

20. Click "*Save*" and, on the agent overview, make sure to press "Save" again!

Result:

← Library › **Device Refresh Agent**

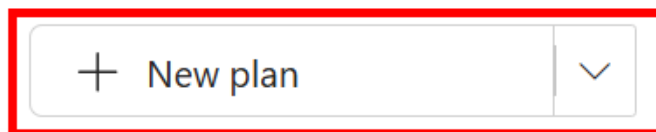✓ Changes saved successfully   ✕

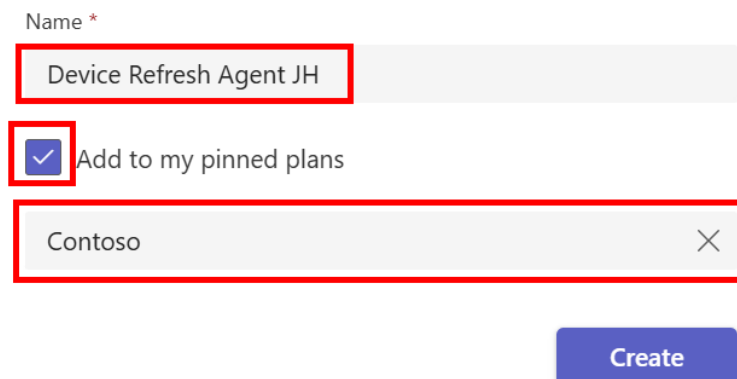# Exercise 3: Prepare your Device Refresh Planner.

This exercise shows how to prepare the Device Excel for Agent retrieval, create a Planner for task creation, and add the necessary actions.

Tasks

1. Go to https://planner.cloud.microsoft/ and create a new plan with *"+New plan"* in the bottom left corner.
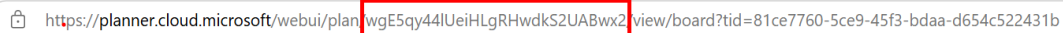

2. Create a new "*Basic*" plan with the name "*Device Refresh Agent* YOUR INITIALS" that is stored in the "*Contoso*" SharePoint Site (see screenshot). Activate the checkbox "*Add to my pinned plans*".

3. Click "*Create*" to create the Planner.

4. Inspect the Browser URL and extract the Plan Id. *"…plan/PLANID/view/…"*
   Store the Plan Id in a Notepad or file of your choice, you will require it later!

   https://planner.cloud.microsoft/webui/plan wgE5qy44lUeiHLgRHwdkS2UABwx2 view/board?tid=81ce7760-5ce9-45f3-bdaa-d654c522431b
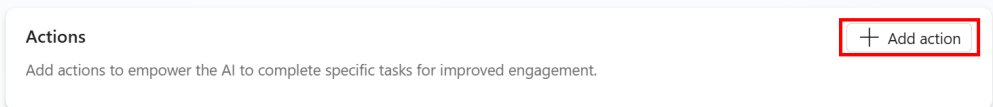
Exercise 4: Create the actions for agent use and test

# Note: Actions have been renamed to Tools in the UI

This exercise shows you how to create actions in agents within Copilot Studio. First, you will create an action to list devices from a previously prepared excel file the user is able to order (stored on the Contoso SharePoint). After that, you are asked to create another action that can create new planner tasks.

Tasks

1. Go back to the tab with Copilot Studio, scroll down and click "*Add action*".

   Actions   + Add action
   Add actions to empower the AI to complete specific tasks for improved engagement.

2. Search for "*List rows present in a table*" and select the "*Excel Online (Business)*" Connector action "*List rows present in a table*".
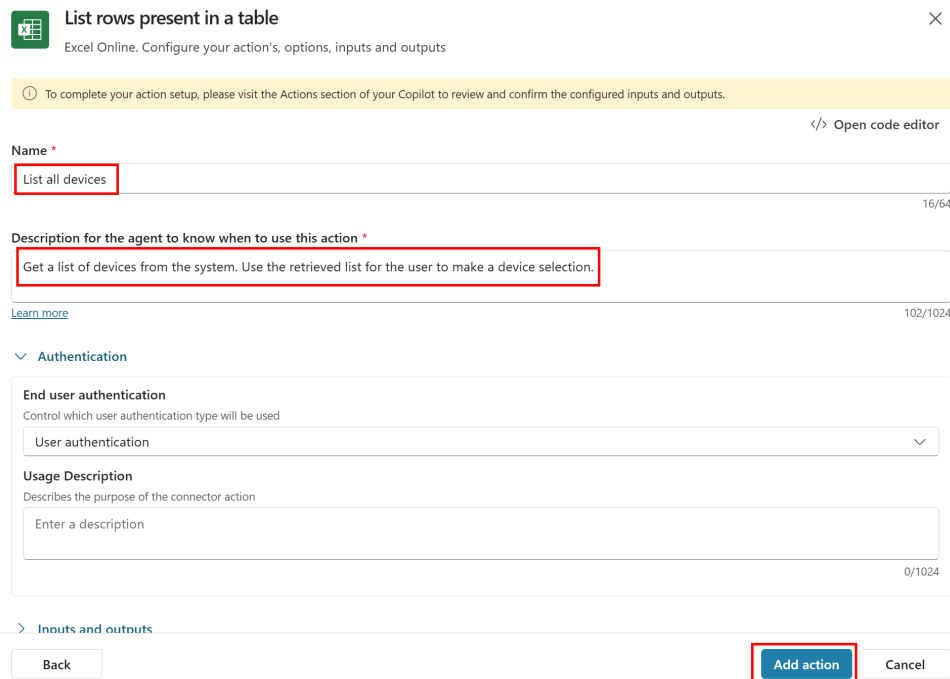
   Add action   ✕
   Create an action or browse through our list of actions you want to use to get information from external sources. Learn more

   (All) 🔲 Library …   🔍 List rows present in a tab ✕

   + New action ⌄

   237 actions

📗 List rows present in a table Excel Online (Business)	📗 List rows present in a table Excel Online (OneDrive)
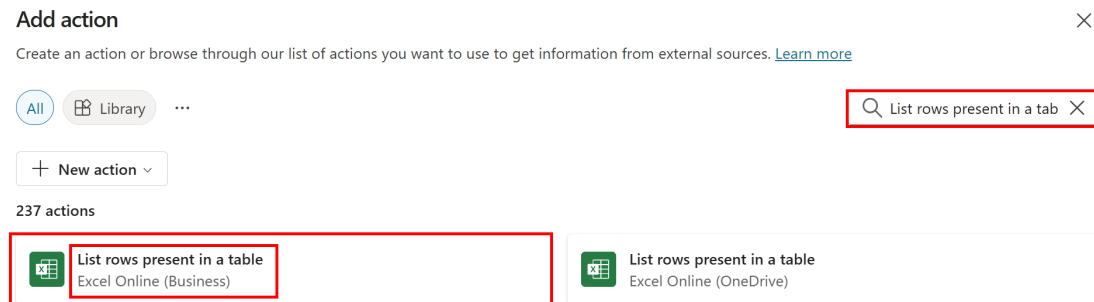
3. Next, make sure that the Excel (Business) Connector is successfully created with a green check icon "✅". Then, click "*Next*".

   📗 Excel Online (Business)   ⊘ …

4. Change the following:
   - Name: "*List all devices*"
   - Description: "*Get a list of devices from the system. Use the retrieved list for the user to make a device selection.*"
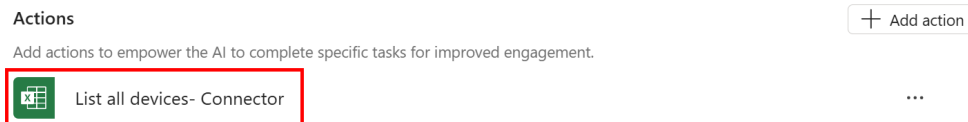
Leave the rest as is and click "*Add action*".

5. Now, you are going to make some minor modifications to the action.
    Under Actions, click on the name of you Action "*List all devices*".

6. Navigate to the "*Input*" Tab, where you then change the following (see screenshot below):
    a. *Location*:
        i.   How will the agent fill this input?: Set as value → Confirm
        ii. Value: https://YOURTENANTSPURL.sharepoint.com/sites/Contoso
    b. *Document Library*:
        i.   How will the agent fill this input?: Set as value → Confirm
        ii. Value: Documents (you will be able to select it once the Location part is correct)
    c. *File*:
        i.   How will the agent fill this input?: Set as value → Confirm
        ii. Value: devices.xlsx
    d. *Table*:
        i.   How will the agent fill this input?: Set as value → Confirm
        ii. Value: devices

Details **Inputs** Outputs

There are additional inputs available as an option for this action. If you add these inputs, they will need to be filled in for the action to run.

Add

Location Required

How will the agent fill this input?

Set as a value

Value

https://m365cpi95514857.sharepoint.com/sites/Contoso

Document Library Required

How will the agent fill this input?

Set as a value

Value

Documents

File Required

How will the agent fill this input?

Set as a value

Value

devices.xlsx

Table Required

How will the agent fill this input?

Set as a value

Value

devices

7. Click "*Save*"
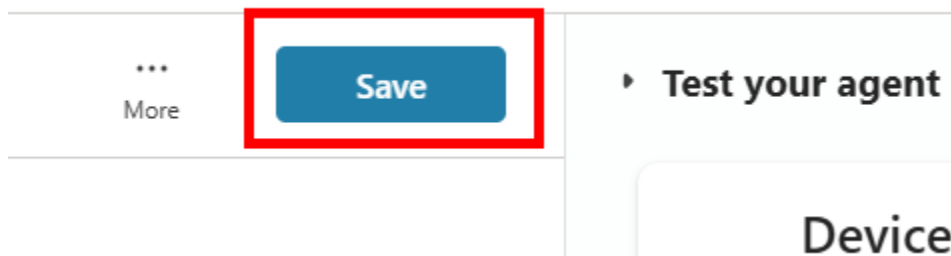
8. Next, you will create the Planner action.
   In the agent overview, click "A*dd action*" in the Actions section.
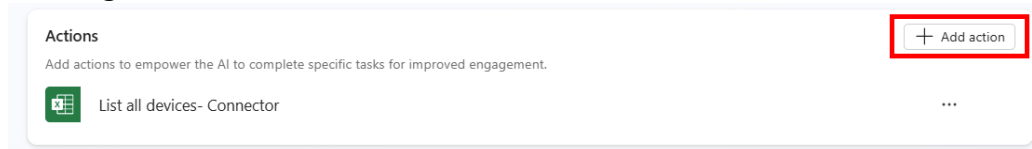
9. Search for "*Planner*" and select "*Create a task*" from the Planner connector.
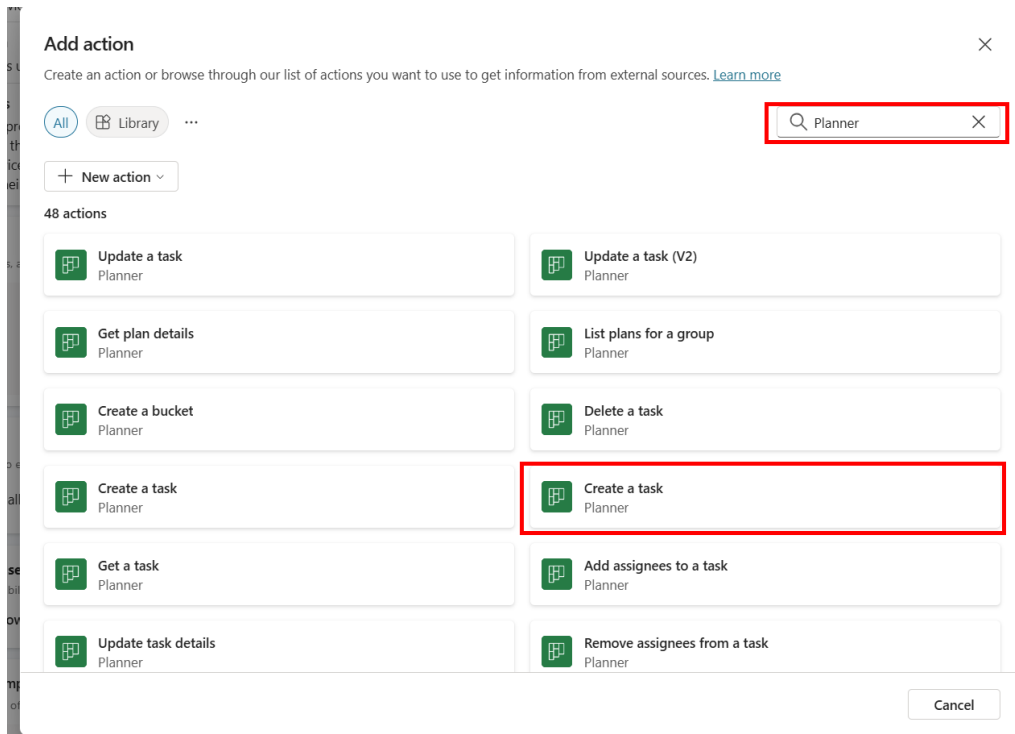
10. Verify the green checkmark of the Planner Connector and press "*Next*".
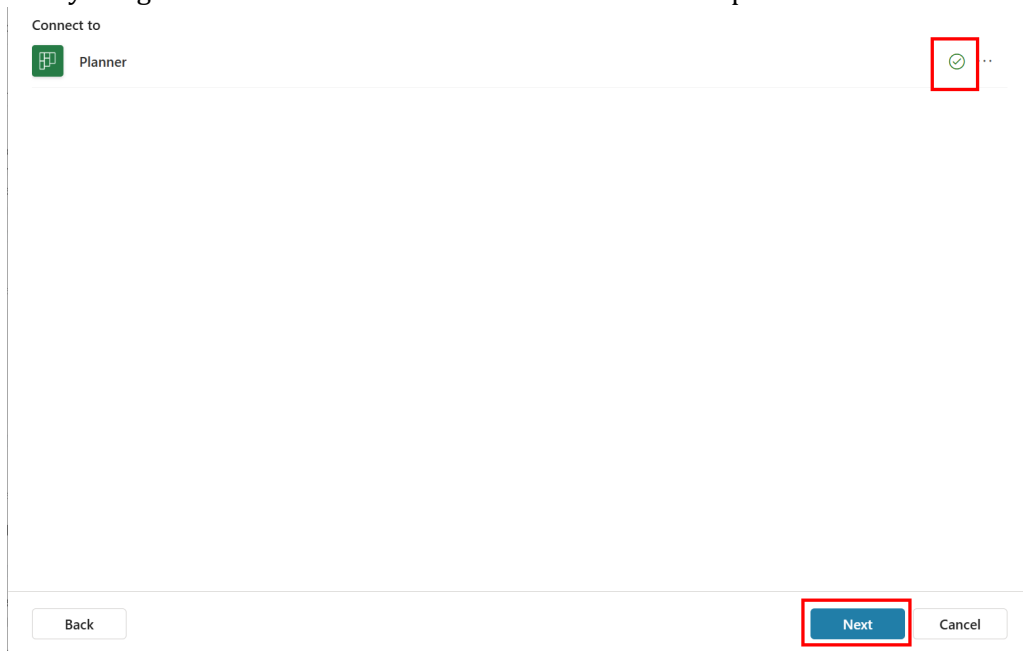
11. Change the following:
    - Name: "*Create purchase task*"
    - Description: "*Used to create PO requests when the employee indicates their laptop preference. Make up a PO ID using the format 'REQ' and then add five random numbers, but not a straight series of numbers. When calling this do not ask the user for any details.*

Next, click "*Add action*"

12. From the agent overview, navigate back into the agent by clicking on the "*Create purchase task*" action.

13. Navigate to the "*Input*" Tab, where you then change the following (see screenshot below):
    a. Group Id:
       i. How will the agent fill this input?: Set as value → Confirm
       ii. Value: "*Contoso*" (Can be selected)
    b. Plan Id:
       i. How will the agent fill this input?: Set as value → Confirm
       ii. Value: Insert the *Plan Id* you extracted in a previous exercise and stored in your notepad.
    c. Title:
       i. How will the agent fill this input**?: Dynamically fill the best option (default)**
       ii. Description: "*Use to create PO requests when the employee indicates their laptop preference. When calling this action ask the user for any details. Make up a PO ID using the format 'REQ' and then add five random numbers, but not*

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a straight series of numbers. Append the selected device from the previous response of the user to the description."

14. Click "*Save*" and navigate back to the agent overview.
15. Click "*Publish*" at the top right.

16. Click "*Publish*" in the pop-up. Feel free to adjust the details if you want to use the agent in Copilot Chat and share it with other users. Otherwise, leave as is.

17. Now, go to the starter prompts section of your agent by clicking on "Add starter prompts".
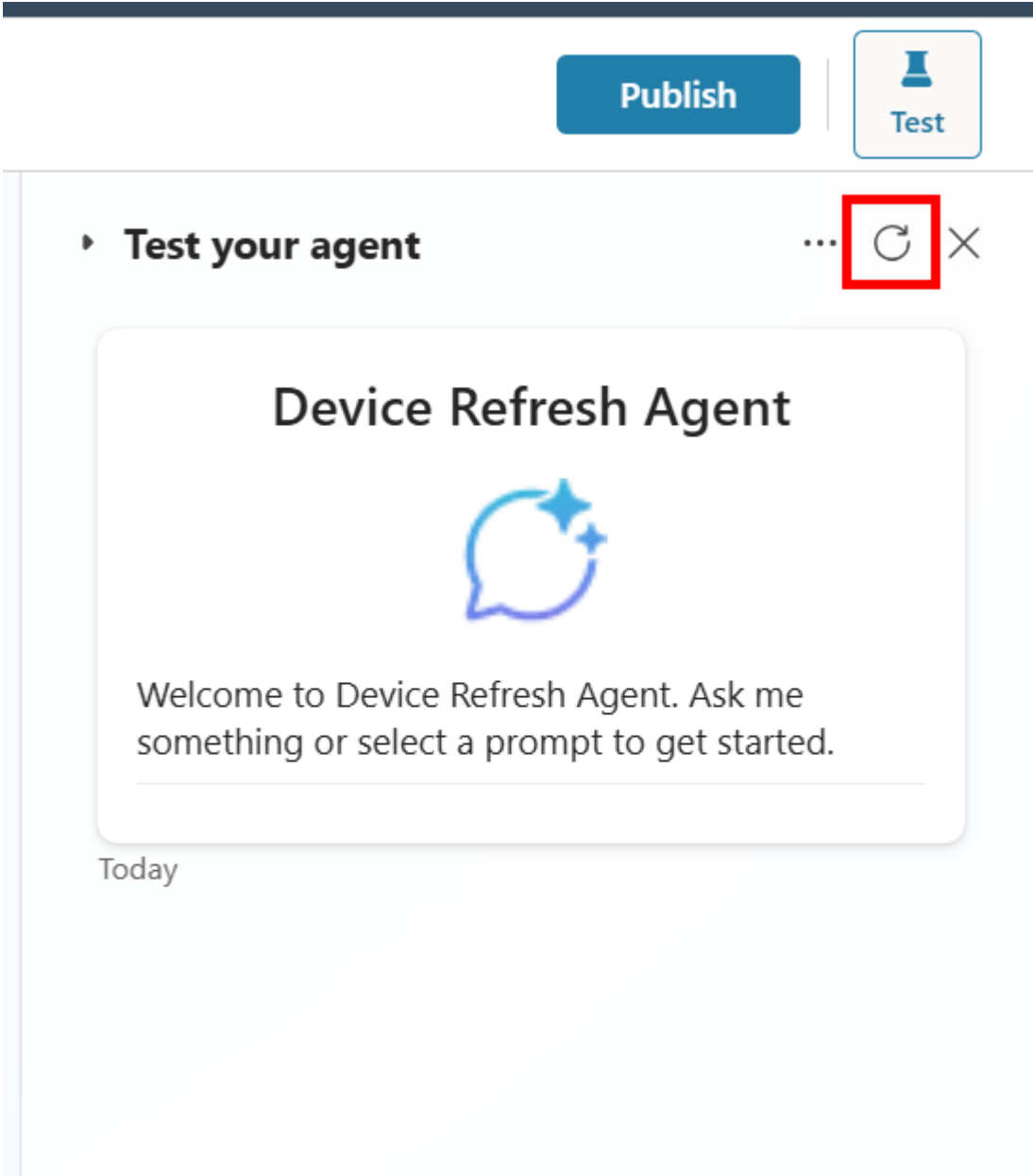
18. Add the following
    Title: "*Start*"
    Prompt: "*Hi Agent, I want to start my onboarding process and order a new device.*"
    and press "*Save*"

19. To see the new starter prompt, click the "*Refresh*" icon in the Test your agent pane.

20. Test the conversation with agent by clicking on the starter prompt.

21. When you first use or test your agent, you need to establish a connection. Press "Connect" in the test pane once you come to that part of the conversation and then establish the connection in the next step by clicking on "*Connect*"

22. Close the "Manage your connection" tab once you established all connections and press "*Retry*" in the test your agent pane.
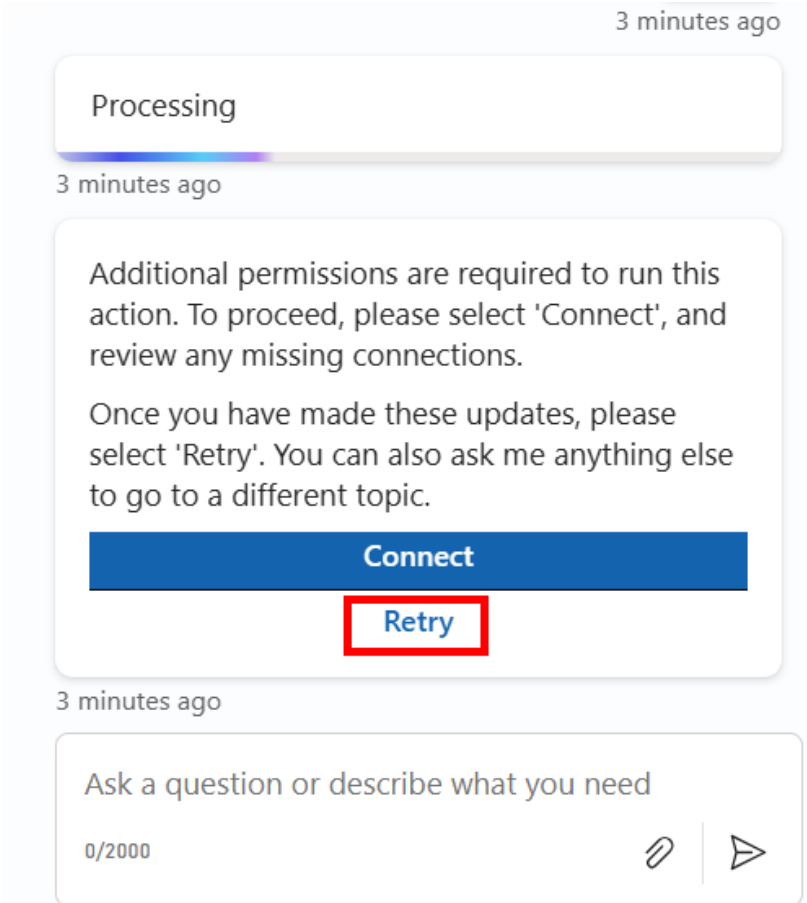
23. Select your laptop/hardware of choice by stating it in your next prompt in the test your agent pane.
24. Next, check the Planner for the created device order.

In case the agent does not orchestrate according to your preferred behavior, feel free to make adjustments to the instructions as necessary.