



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

Table of Contents

Lab: Create a device refresh agent	3
Exercise 1: Create the agent in Copilot Studio	3
Exercise 2: Create the agent icon	7
Exercise 3: Prepare your Device Refresh Planner.....	11
Exercise 4: Create the actions for agent use and test.....	12

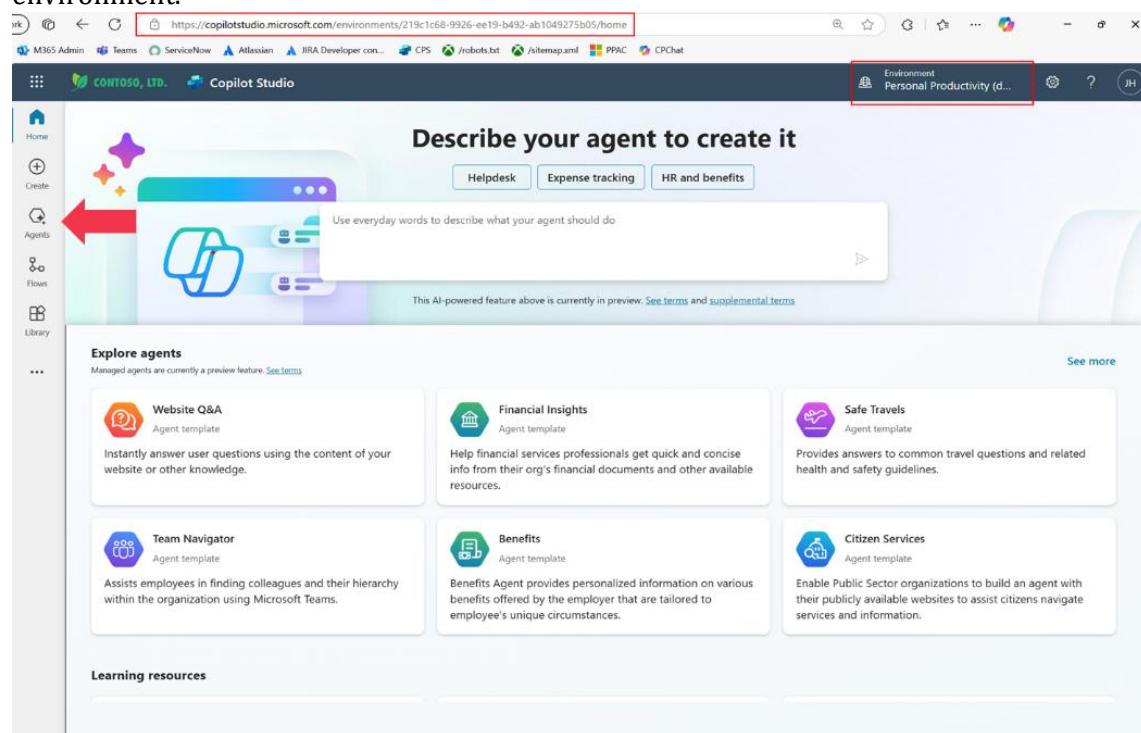
Lab: Create a device refresh agent

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

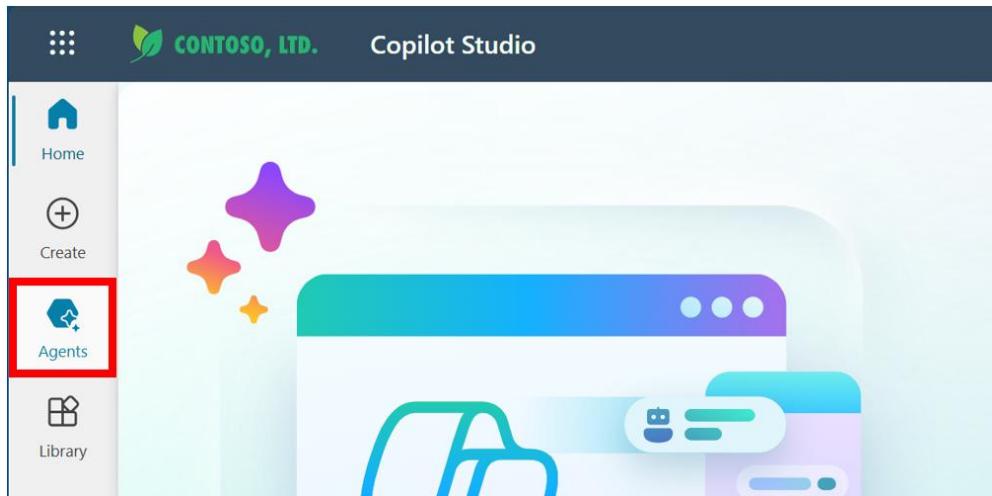
Tasks

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.



The screenshot shows the Copilot Studio web interface. At the top, there's a navigation bar with various links like M365 Admin, Teams, ServiceNow, Atlassian, JIRA Developer con..., CPS, /robots.txt, /sitemap.xml, PPAC, and CPChat. Below the bar, the title 'Copilot Studio' is visible, followed by 'Environment Personal Productivity (d...)' which is highlighted with a red box. On the far left, a vertical navigation menu includes Home, Create, Agents (which is selected and highlighted with a red arrow), Flows, and Library. The main content area has a heading 'Describe your agent to create it' with tabs for Helpdesk, Expense tracking, and HR and benefits. It features an AI-powered feature for describing agents using everyday words. Below this, there's a section titled 'Explore agents' with a preview notice. It lists several agent templates: Website Q&A (Agent template), Financial Insights (Agent template), Safe Travels (Agent template), Team Navigator (Agent template), Benefits (Agent template), and Citizen Services (Agent template). Each card provides a brief description of the agent's function. At the bottom of the main content area, there's a 'Learning resources' section.

2. Select Agents on the left navigation.



3. Click on **Copilot for Microsoft 365**

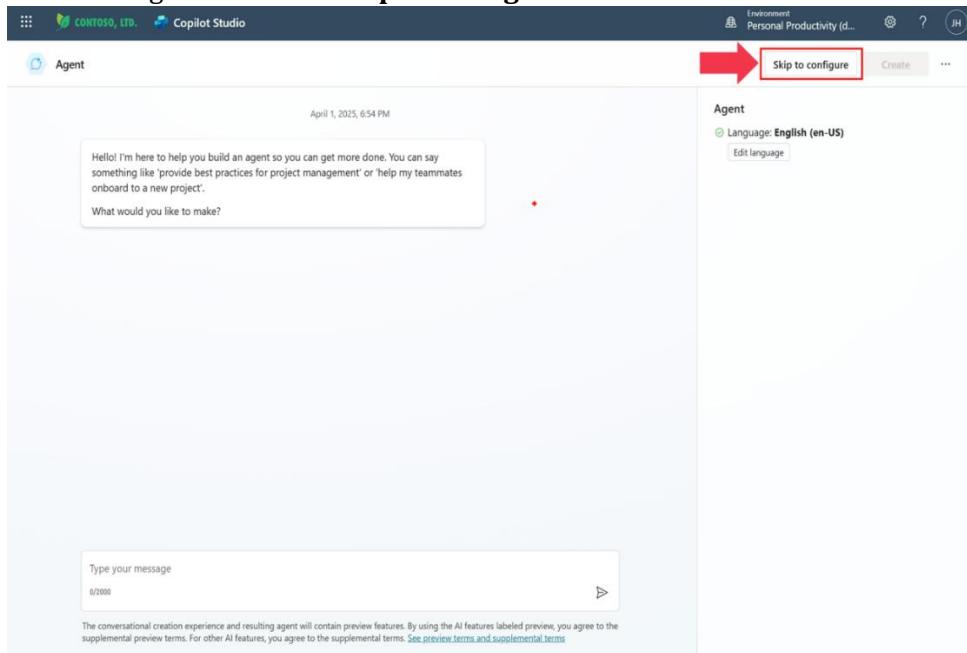
A screenshot of the "Agents" section in Copilot Studio. The sidebar on the left shows the "Agents" icon highlighted with a red box. The main table lists two agents: "Copilot in Power Apps" and "Copilot for Microsoft 365". The "Copilot for Microsoft 365" row is also highlighted with a red box. The table has columns for Name, Type, Last modified, and Last published.

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

A screenshot showing a modal window titled "Enhance what Microsoft 365 Copilot can do". It contains three items: "Add an agent to enhance Copilot's responses", "Add an action to give Copilot more specialized capabilities", and "See how adding agents and actions can add value to your team". Below the modal is a section titled "Agents" with a sub-instruction "Equip Copilot with subject matter expertise for better responses" and a "See all" link. To the right of the "Agents" section is a red box highlighting the "+ Add" button.

Device Refresh Agent

- 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.”

Device Refresh Agent

The screenshot shows the 'Device Refresh Agent' creation page in Copilot Studio. The top navigation bar includes icons for Environment, Personal Productivity (d...), Settings, Help, and a user profile (JH). The main form fields are:

- Name:** Device Refresh Agent (highlighted with a red box)
- Icon:** Change icon (with a placeholder icon and instructions about file format).
- Description:** This agent is used to perform the device refresh process within Contoso.
- Instructions:** 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.
- Starter prompts:** Add starter prompts (button).

On the right side, there is a summary section titled 'Device Refresh Agent' with the following details:

- Language:** English (en-US) (with an 'Edit language' button).
- Notes:** This agent is used to perform the device refresh process within Contoso.
- Instructions:** 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.

6. Navigate to the agent details with "Create"

The screenshot shows the 'Device Refresh Agent' details page. The top navigation bar includes icons for Environment, Personal Productivity (d...), Settings, Help, and a user profile (JH). The main content area displays the following information:

- Language:** English (en-US) (highlighted with a red box).
- Notes:** This agent is used to perform the device refresh process within Contoso.

A large blue 'Create' button is visible at the bottom of the page, highlighted with a red box.

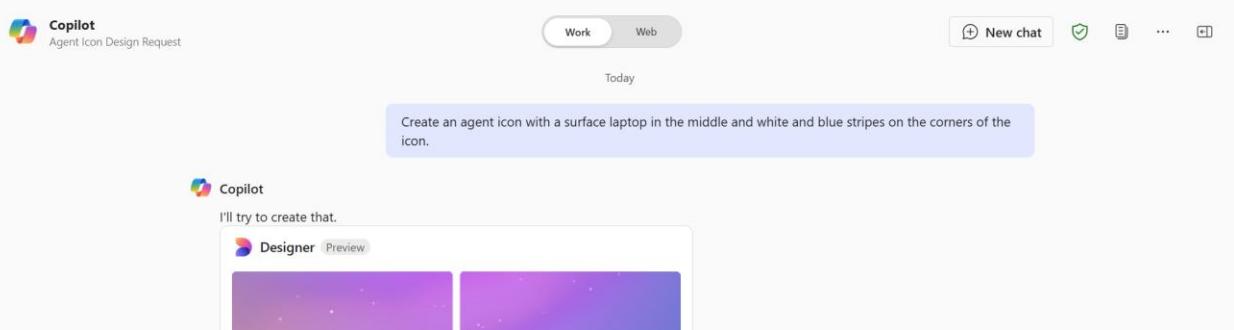
Exercise 2: Create the agent icon

Tasks

7. Open a new **browser** tab and navigate to <https://m365.cloud.microsoft/chat/>

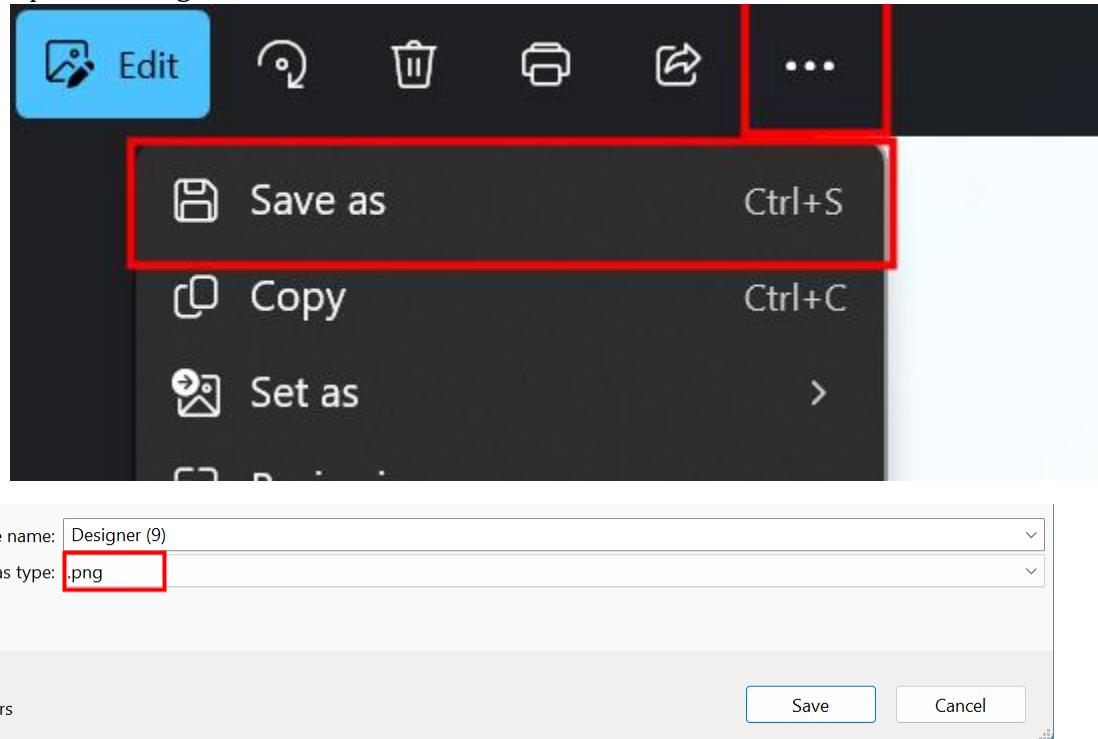
8. Prompt to create an icon, e.g.:

"Create an agent icon with a surface laptop in the middle and white and blue stripes on the corners of the icon."

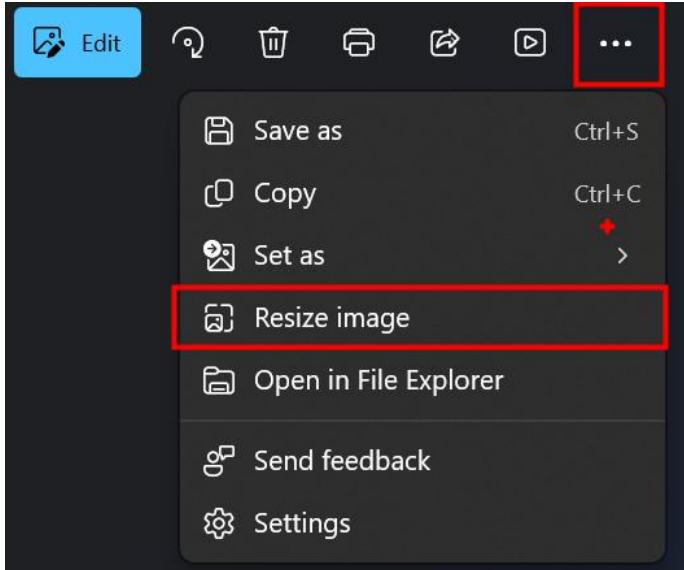


9. Click on your favorite icon and *save* it to your *Downloads* folder.

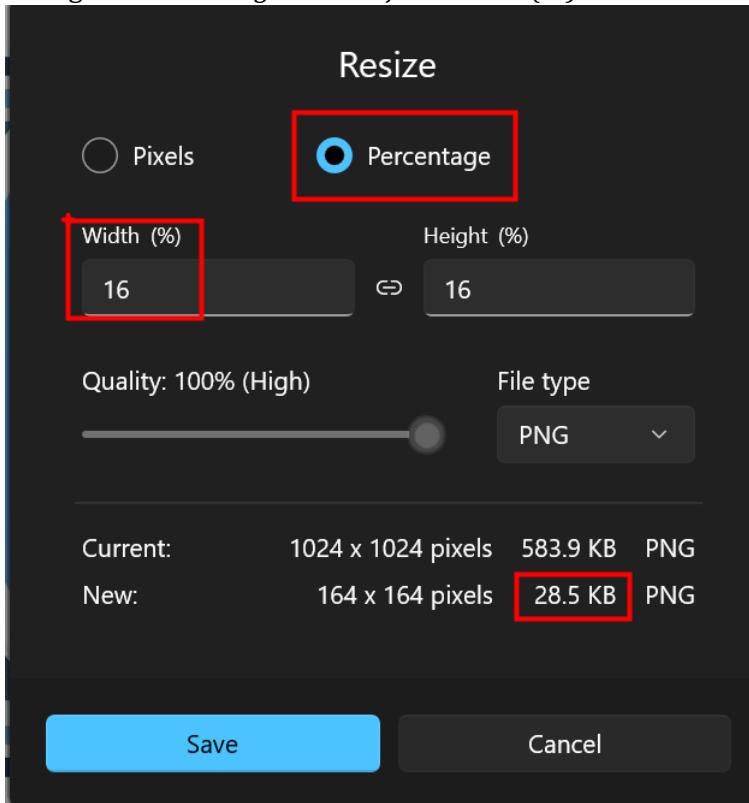
10. Open the image with "Photos" and "Save as" as a .PNG file.



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.



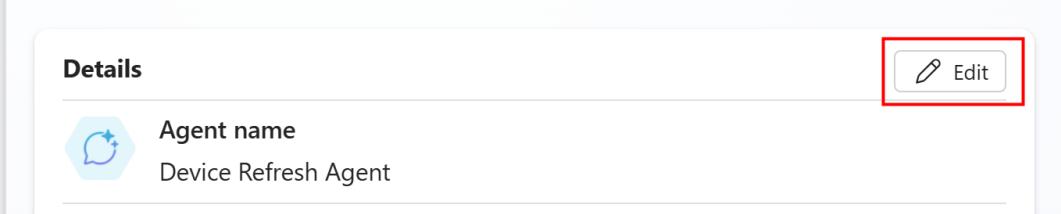
13. Next, click "Save" and add e.g. "small" to the file name. Then, close the image in the Photos App.
14. Go back to your previous browser tab to see the overview of your agent copilot studio. (if you have closed the tab, navigate to copilotstudio.microsoft.com, go to the correct environment, go

Device Refresh Agent

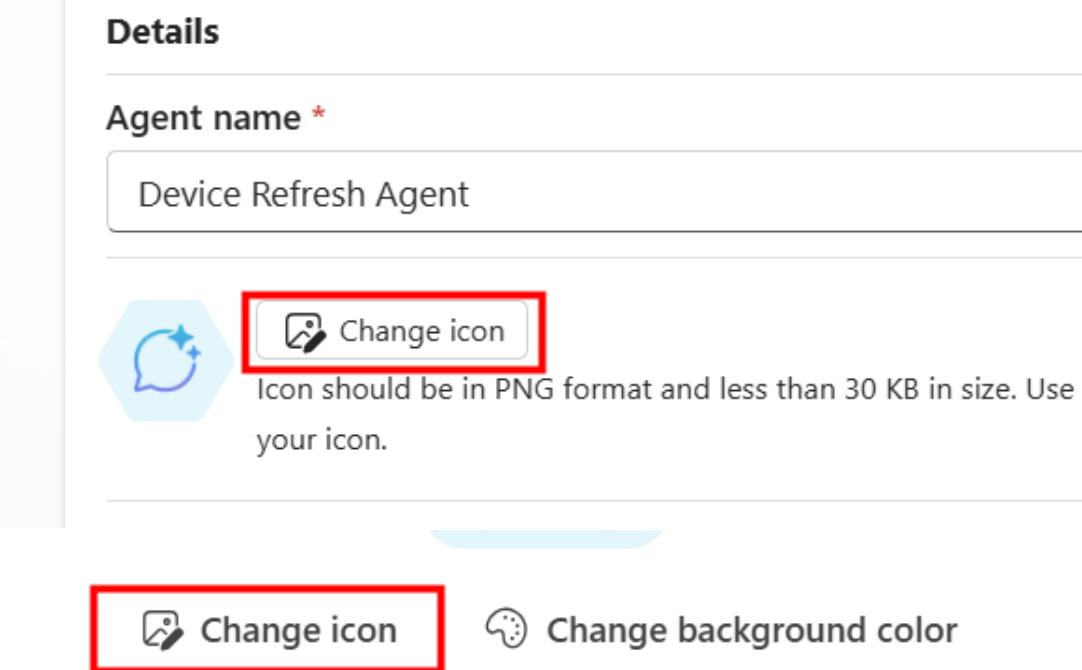
to “Library” in the left navigation pane and open your previously created Agent, named “Device Refresh Agent”.

15. Click “Edit”

← Library > Device Refresh Agent

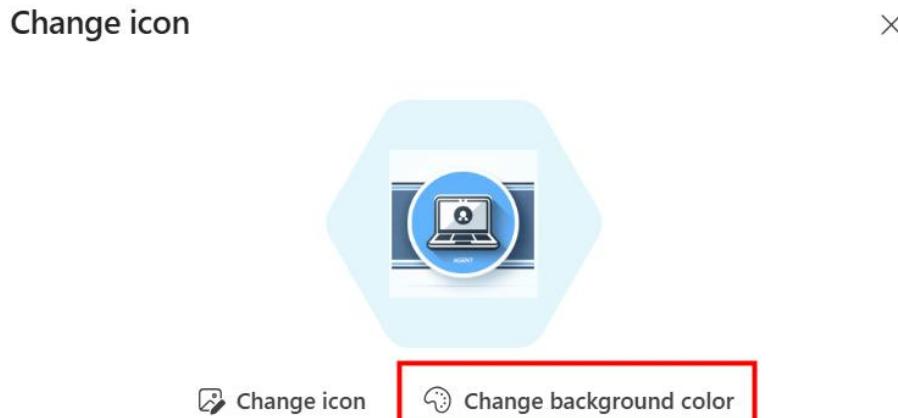


16. Click “Change icon” and then “Change icon” in the pop-up.



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”

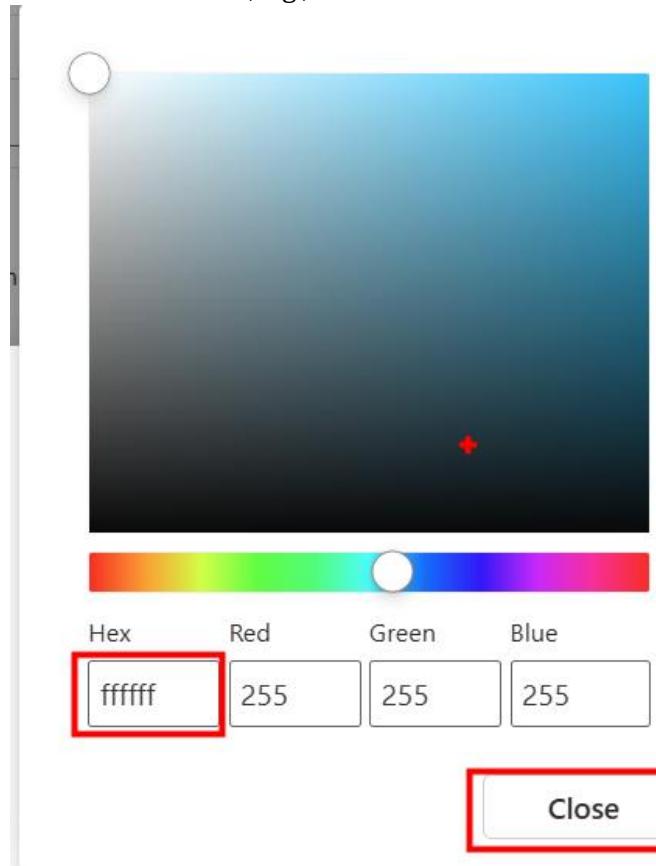


Upload a new icon for your agent. The icon should be in PNG format and less than 30 KB in size.

Save

Cancel

19. Set the hex color to, e.g., “`ffffff`” for a white boarder color and “*Close*”.



Device Refresh Agent

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

The screenshot shows a save dialog box with 'Cancel' and 'Save' buttons, where 'Save' is highlighted with a red box. To the right, a success message 'Changes saved successfully' is displayed in a green box with a checkmark icon, also highlighted with a red box.

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”.

A screenshot of the Microsoft Planner 'Create Plan' dialog. It shows a 'Name *' field containing 'Device Refresh Agent JH' (highlighted with a red box), a checked 'Add to my pinned plans' checkbox (highlighted with a red box), a 'Contoso' dropdown menu (highlighted with a red box), and a 'Create' button at the bottom.

3. Click “Create” to create the Planner.

- 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!

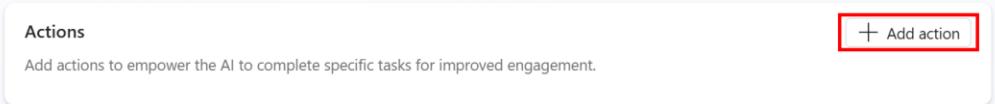
 <https://planner.cloud.microsoft/webui/plan/wgE5qy44lUeiHLgRHwdkS2UABwx2/view/board?tid=81ce7760-5ce9-45f3-bdaa-d654c522431b>

Exercise 4: Create the actions for agent use and test

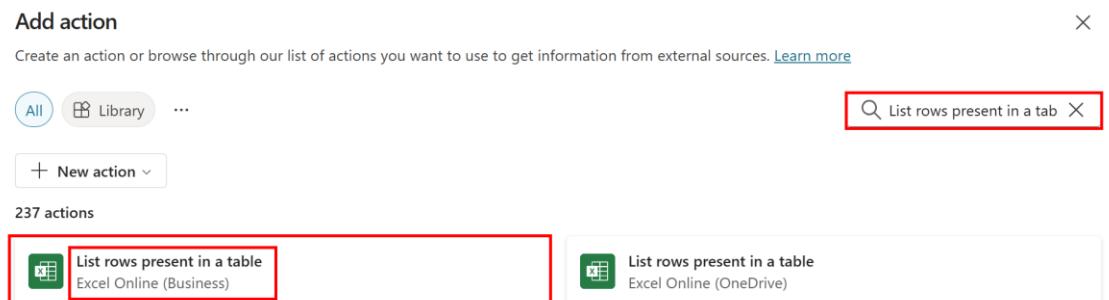
This exercise shows you how to create actions in agents within Copilot Studio. First, you will create an action to list devices from a previously prepared excel file the user is able to order (stored on the Contoso SharePoint). After that, you are asked to create another action that can create new planner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

Tasks

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



- Search for "List rows present in a table" and select the "Excel Online (Business)" Connector action "List rows present in a table".



- Next, make sure that the Excel (Business) Connector is successfully created with a green check icon "✓". Then, click "Next".



- 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."

Device Refresh Agent

Leave the rest as is and click “Add action”.

The screenshot shows the configuration interface for an action named "List all devices". The "Name" field contains "List all devices". The "Description for the agent to know when to use this action" field contains the instruction: "Get a list of devices from the system. Use the retrieved list for the user to make a device selection.", which is highlighted with a red box. The "Authentication" section is collapsed. The "Inputs and outputs" section is collapsed. At the bottom right, there are "Back", "Add action" (which is highlighted with a red box), and "Cancel" buttons.

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

-
- The screenshot shows the "Actions" configuration page. It lists "Add actions to empower the AI to complete specific tasks for improved engagement." One item, "List all devices- Connector", is highlighted with a red box. At the top right, there is a "+ Add action" button. Below the list, there are "Back", "Add action" (highlighted with a red box), and "Cancel" buttons.
6. Navigate to the “Input” Tab, where you then change the following (see screenshot below):
- Location:*
 - How will the agent fill this input?: Set as value → Confirm
 - Value: <https://<YOUR-TENANT-URL>.sharepoint.com/sites/allcompany>
 - Document Library:*
 - How will the agent fill this input?: Set as value → Confirm
 - Value: Documents (you will be able to select it once the Location part is correct)
 - File:*
 - How will the agent fill this input?: Set as value → Confirm
 - Value: devices.xlsx
 - Table:*
 - How will the agent fill this input?: Set as value → Confirm
 - Value: devices

Device Refresh Agent

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://m365cp095514857.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

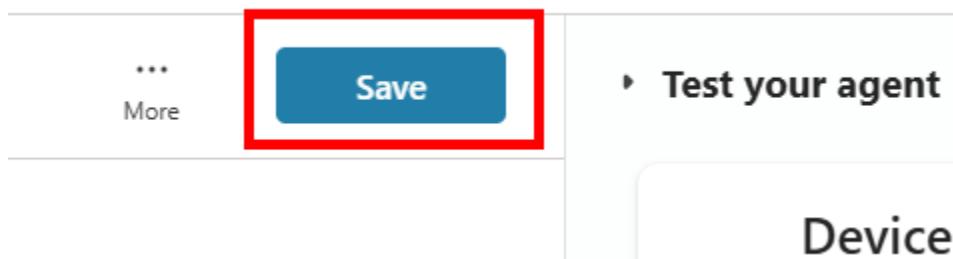
Value
devices.xlsx

Table Required

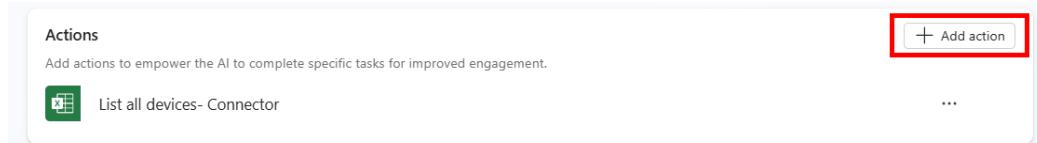
How will the agent fill this input?
Set as a value

Value
devices

7. Click “Save”

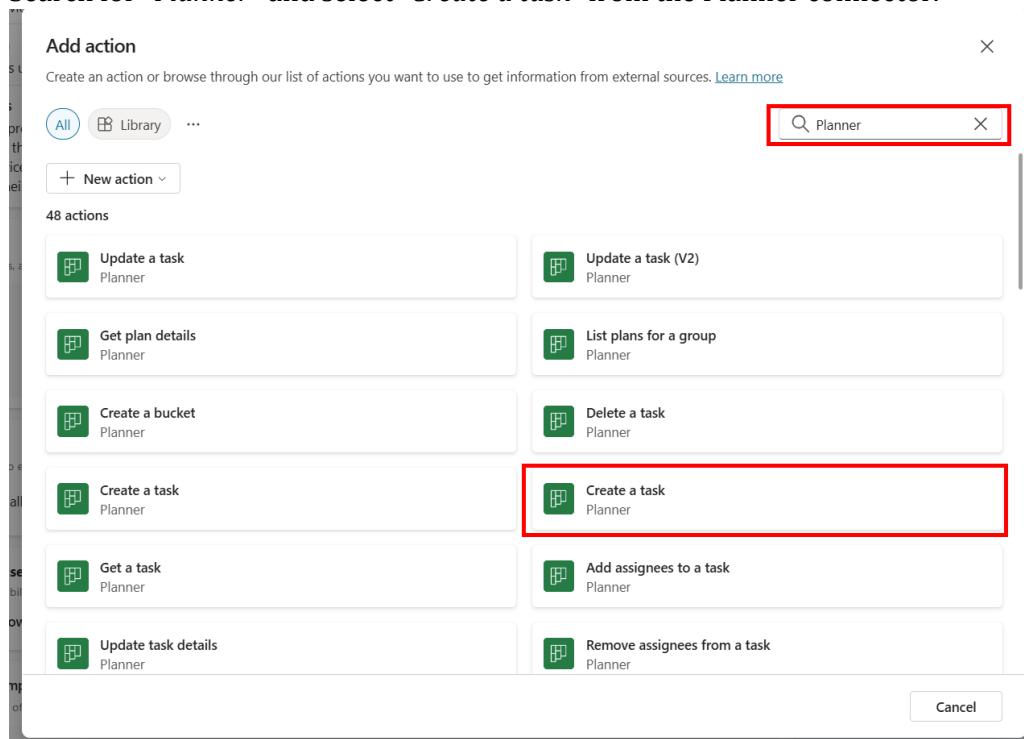


8. Next, you will create the Planner action.
In the agent overview, click “Add action” in the Actions section.

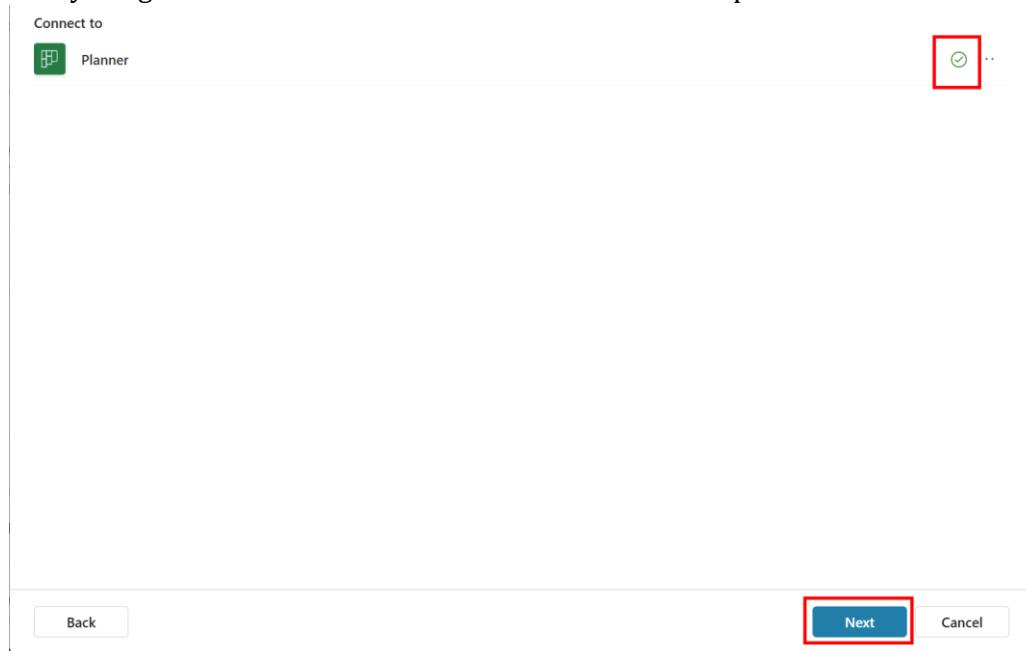


Device Refresh Agent

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”

Create a task

Name *

Create purchase task

Description for the agent to know when to use this action *

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.

Authentication

User authentication

Usage Description

Enter a description

Add action

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

Actions

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

List all devices- Connector

Create purchase task- Connector

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*

Device Refresh Agent

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

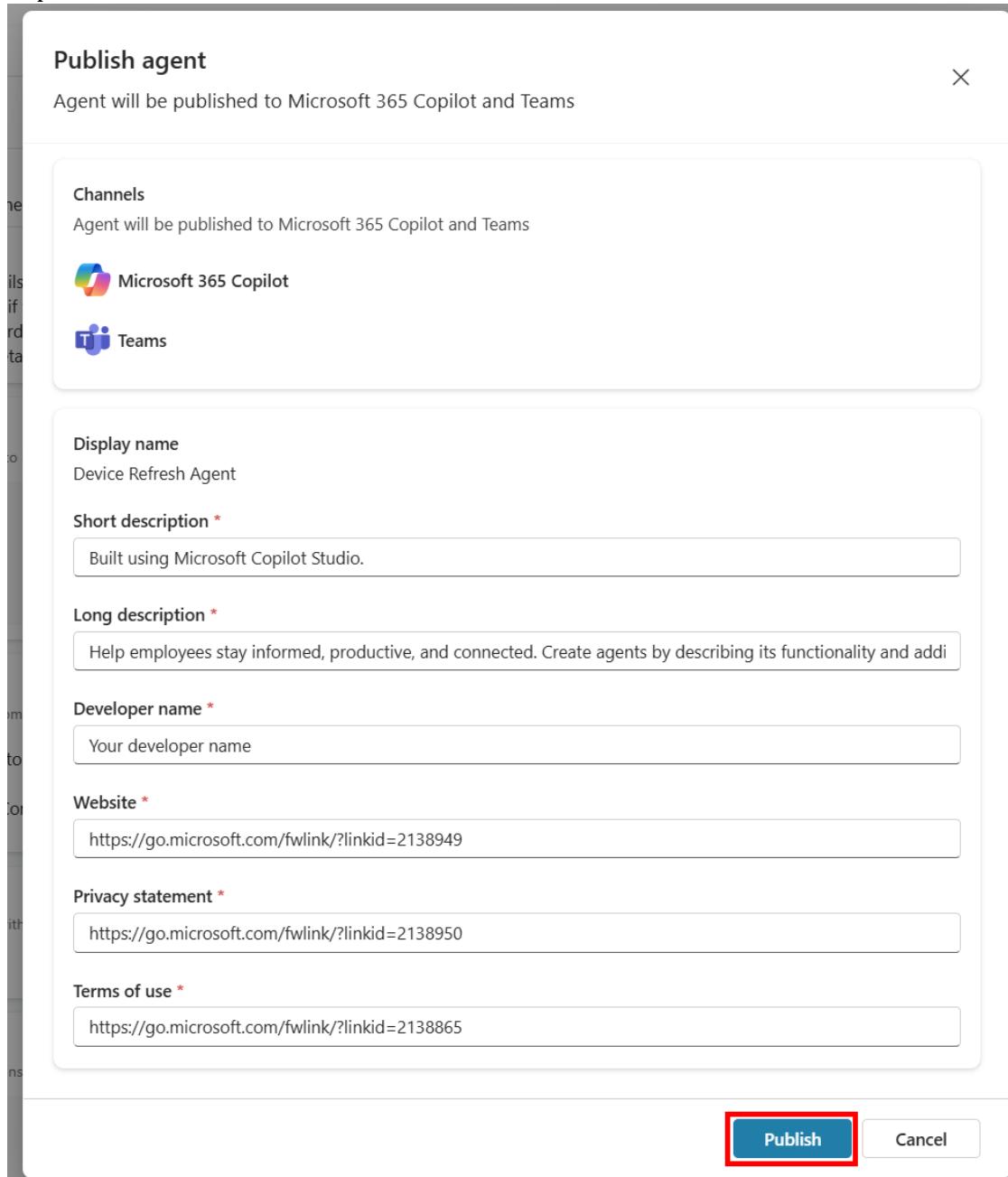
The screenshot shows the 'Inputs' tab of the configuration interface. It includes fields for 'Group Id' (containing 'Contoso'), 'Plan Id' (containing 'wgE5qy44lUeiHLgRHwdkS2UABwx2'), 'Title' (containing 'Required'), 'Display name' (containing 'Title'), 'Identify as' (containing 'User's entire response'), and a 'Description' field which contains the instruction: "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 a straight series of numbers. Append the selected device from the previous response of the user to the description." The 'Save' button at the top right is highlighted with a red box.

14. Click “Save” and navigate back to the agent overview.

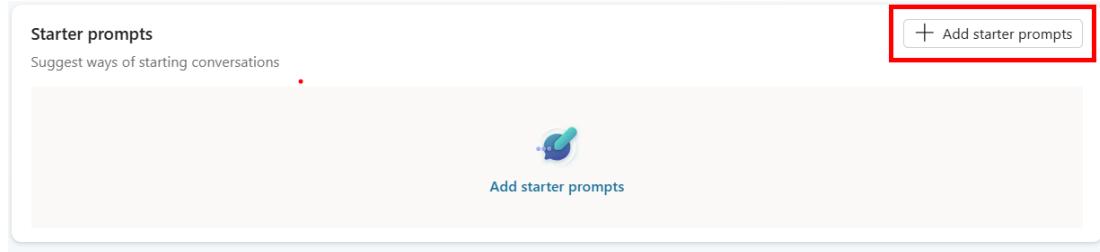
15. Click “Publish” at the top right.

The screenshot shows the agent overview page. On the left, the 'Details' section displays the agent's name ('Device Refresh Agent') and a brief description ('This agent is used to perform the device refresh process within Contoso'). The 'Instructions' section provides a script for interacting with users. The 'Knowledge' section allows adding external resources. The 'Actions' section lists two connector actions: 'List all devices' and 'Create purchase task'. The 'Additional settings' section has a 'Web browsing' toggle set to 'Disabled'. On the right, there is a 'Test your agent' panel titled 'Device Refresh Agent' with a message placeholder and a 'Today' button. The 'Publish' button at the top right is highlighted with a red box.

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”.



Device Refresh Agent

18. Add the following

Title: "Start"

Prompt: "*Hi Agent, I want to start my onboarding process and order a new device.*"
and press "Save"

Starter prompts
Suggest ways of starting conversations

Title: Start

Prompt: Hi Agent, I want to start my onboarding process and order a new device.

Save

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

Test

Test your agent

...

Device Refresh Agent

Welcome to Device Refresh Agent. Ask me something or select a prompt to get started.

Today

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”

something or select a prompt to get started.

Start

Hi Agent, I want to start my onboarding process and order a new device.

A minute ago

Hi Agent, I want to start my onboarding process and order a new device.

Just now

Hello Johannes Huber! Welcome aboard! 🎉
I'm here to assist you with your onboarding process and help you order a new device. Are you ready to begin your onboarding journey?
😊

Just now

Yes!

Just now

Processing

Just now

Additional permissions are required to run this action. To proceed, please select 'Connect', and review any missing connections.

Once you have made these updates, please select 'Retry'. You can also ask me anything else to go to a different topic.

Connect **Retry**

Just now

Ask a question or describe what you need

0/2000

Make sure AI-generated content is accurate and appropriate before using. [See terms](#)

Manage your connections

Manage connections		Refresh		
All	Connected	Expired	Not Connected	Stale
<input type="checkbox"/>	Name	Used By	Status	
<input type="checkbox"/>	Excel Online (Business)	1 action	Not Connected	Connect
<input type="checkbox"/>	Planner	1 action	Not Connected	Connect

Device Refresh Agent

22. Close the “Manage your connection” tab once you established all connections and press “Retry” in the test your agent pane.

3 minutes ago

Processing

3 minutes ago

Additional permissions are required to run this action. To proceed, please select 'Connect', and review any missing connections.

Once you have made these updates, please select 'Retry'. You can also ask me anything else to go to a different topic.

Connect

Retry

3 minutes ago

Ask a question or describe what you need

0/2000



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.