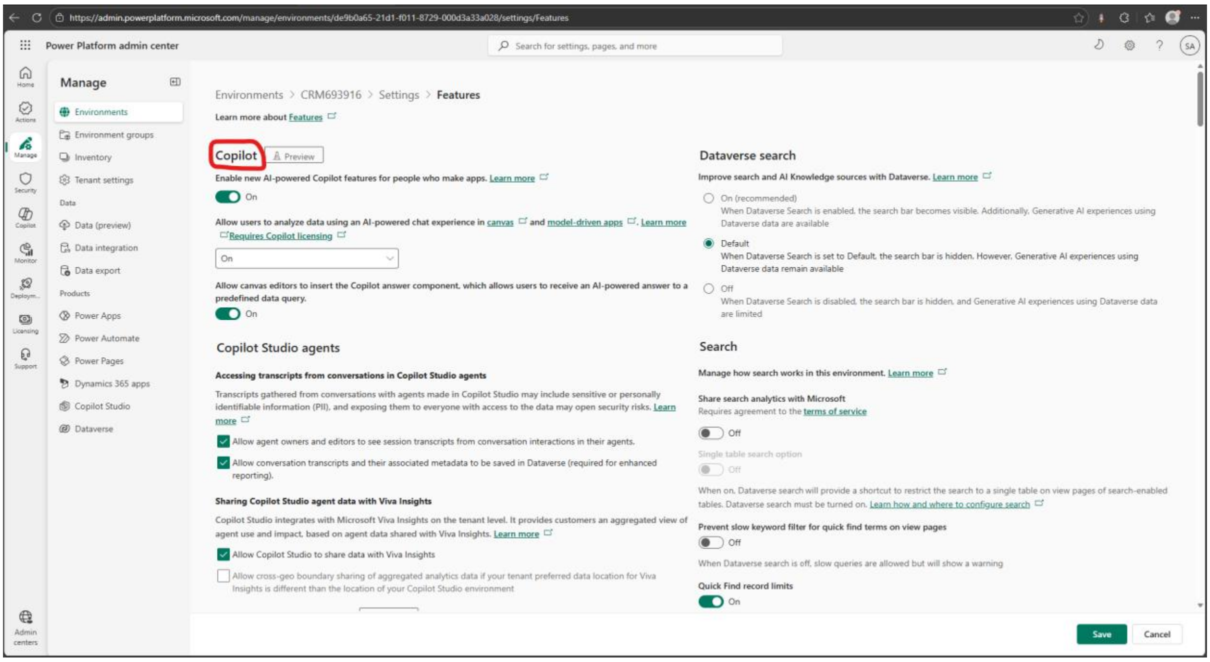
Hands-On Demo: Enhancing OOB agent for Model-Driven App in Dataverse

Prerequisites

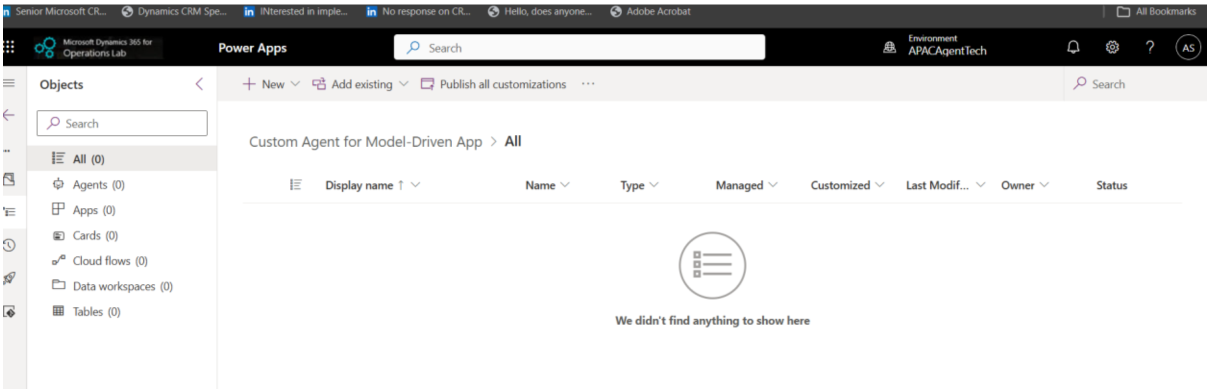
Please make sure that the following prerequisites are completed

1. Access to a Dataverse environment
2. Copilot studio license user license. This is required to publish the agent.
3. In Power platform admin center, go to **Settings > Product > Features** and confirm that the Copilot feature is enabled.



Step 1: Creating the Solution

Login to the Maker Portal. Click on **Solutions** and then select **New Solution** . Name your solution “Custom Agent for Model-Driven App” and add a meaningful publisher prefix if needed. Remember, a solution acts as a container for all components, such as apps, tables, and automation.

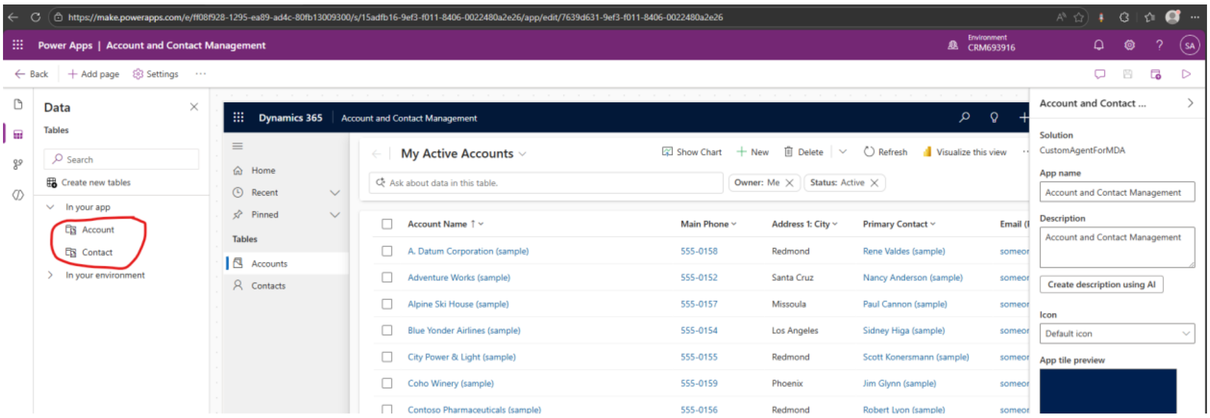


Step 2: Adding a Model-Driven App

Inside your new solution, click **New** , choose **App** , and then select **Model-Driven App** . Name your app “Account and Contact Management.” Using clear, descriptive names will help you and others manage and maintain the app more easily in the future.

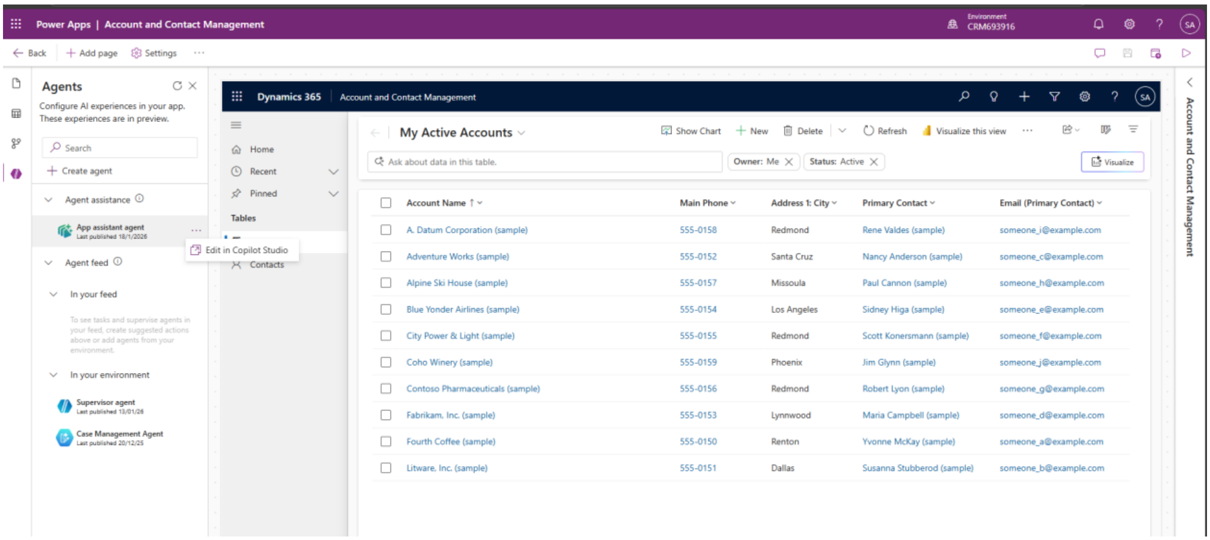
Step 3: Adding Tables

On the left navigation panel, click **Data** and expand **In Your Environment** . Hover over **Account** , click the three dots, and select **Add to App** . Do the same for the **Contact** table. These tables serve as the core data entities for your app. Rename the area name to “Tables” to make the navigation panel more intuitive. If you wish to change the layout, remember that navigation can be customised to fit your needs.

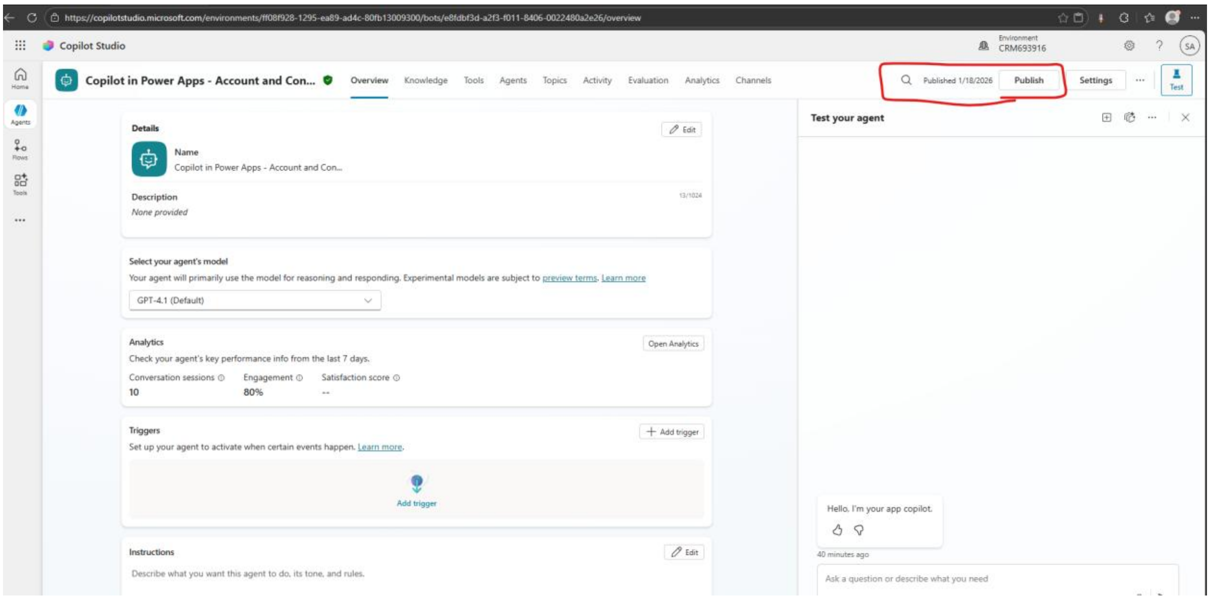


Step 4: Configuring the Agent

Under **Agents** , open **Agent Assistance** . Find the **App Assistant Agent** , click the three dots, and select **Configure** . The configuration might take a few moments. This step connects the agent to your app’s data and functionality. Once done, click the three dots again and choose **Edit in Copilot Studio**.

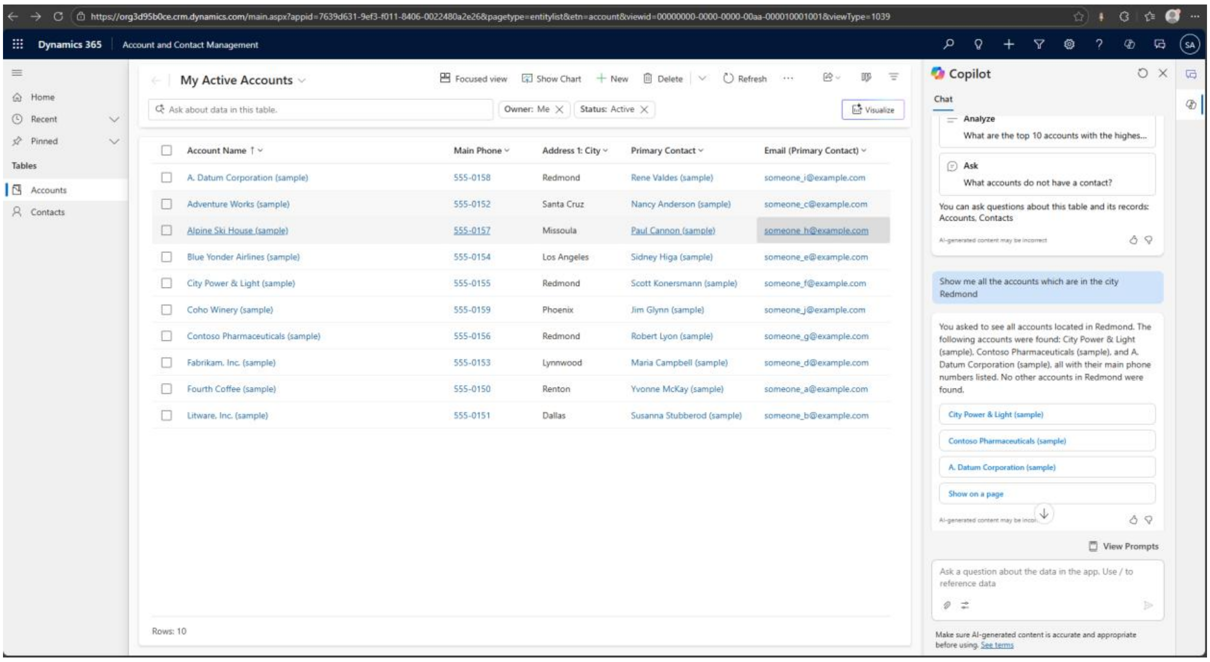


This opens the low-code editor where you can refine your agent's behaviour. In the new tab, publish the agent to make it available within your app.



Step 5: Testing the Agent's OOB capabilities

Return to your app and open the Copilot side pane. Try interacting with the agent by running a sample query, such as "Show me all accounts in Redmond." If you are wondering about real-time updates, know that the agent retrieves data based on the most current information available in Dataverse at the time of your query.



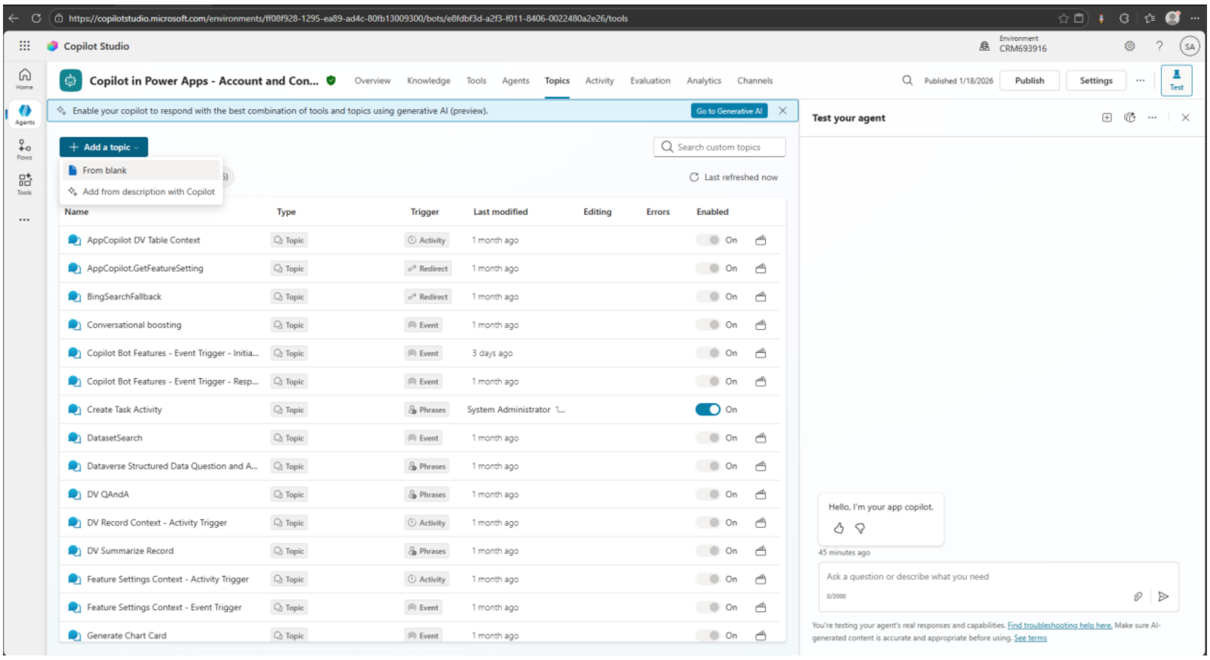
Step 5: Customizing the agent to give it Create ability

Step One: Opening the Custom Agent and Adding a New Topic

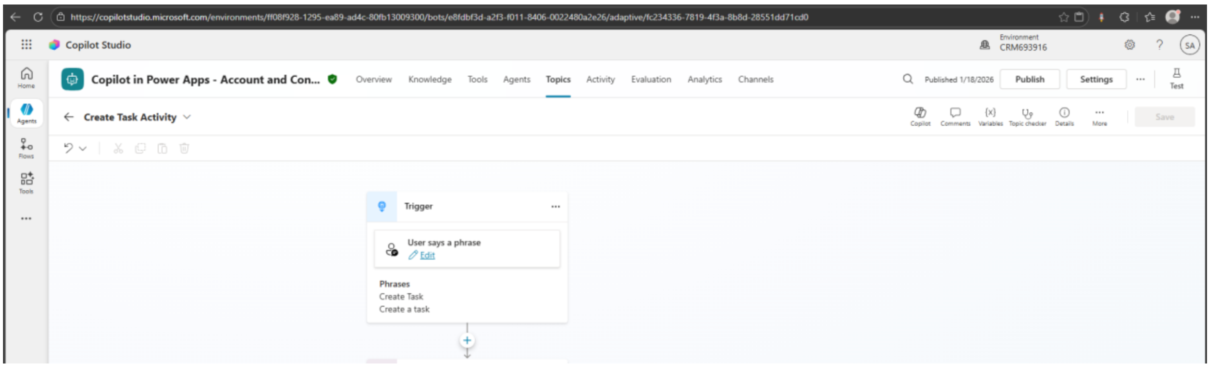
1. **Access Copilot Studio:** Log in to Copilot Studio and locate your Model-Driven App's custom agent under **Agent Assistance**.

2. **Edit the Agent:** Click the three dots next to your agent, select **Edit in Copilot Studio**, and open the low-code editor.

3. **Add a New Topic:** In the topics section, click **+ New topic**. Name the topic (e.g., "Create Task Activity")

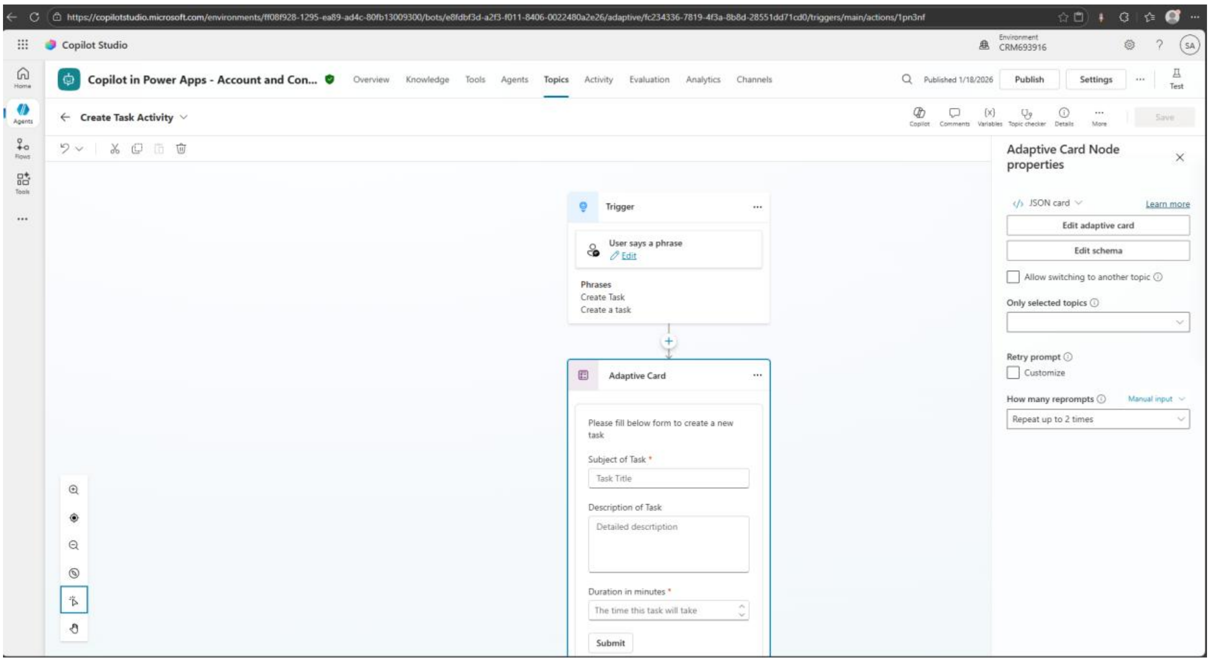


4. Add trigger phrases such as “create task” or “create a task.”

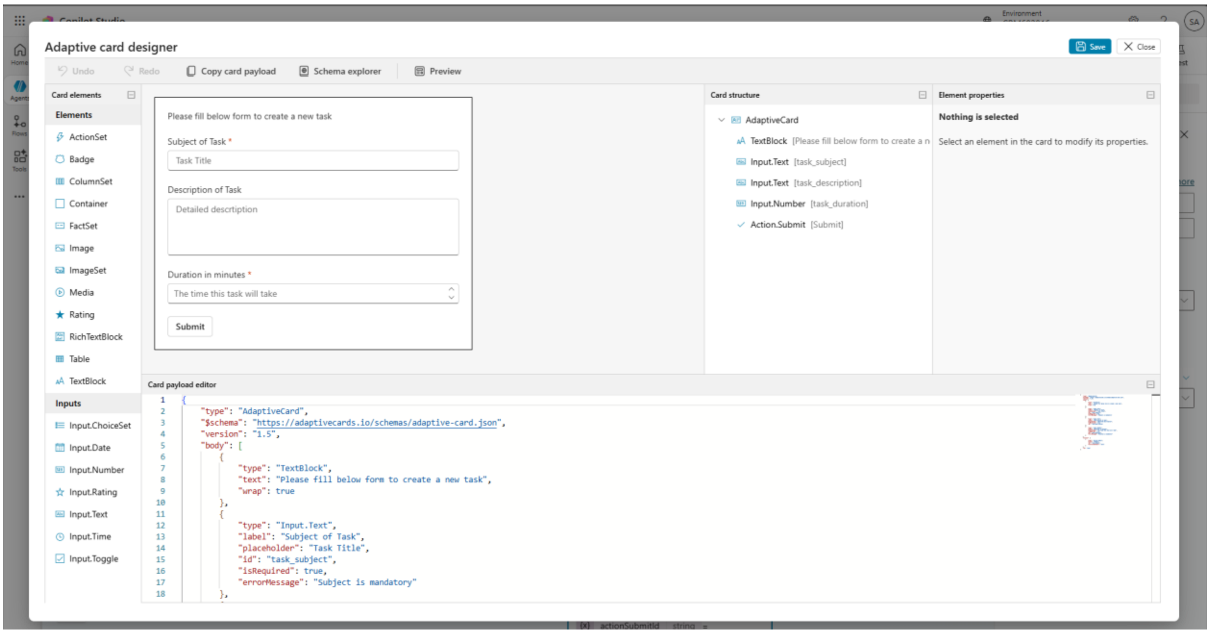


Step Two: Configuring the Adaptive Card with Required Fields and IDs

1. **Insert an Adaptive Card:** Within your new topic, choose **Ask a question** and select **Adaptive Card**.



2. **Design the Card:** Add fields for task creation: **Subject** (single-line, required), **Description** (multi-line, optional), and **Duration in Minutes** (number, required). Assign IDs: **task_subject**, **task_description**, **task_duration**.



The Adaptive card JSON will be something like this:

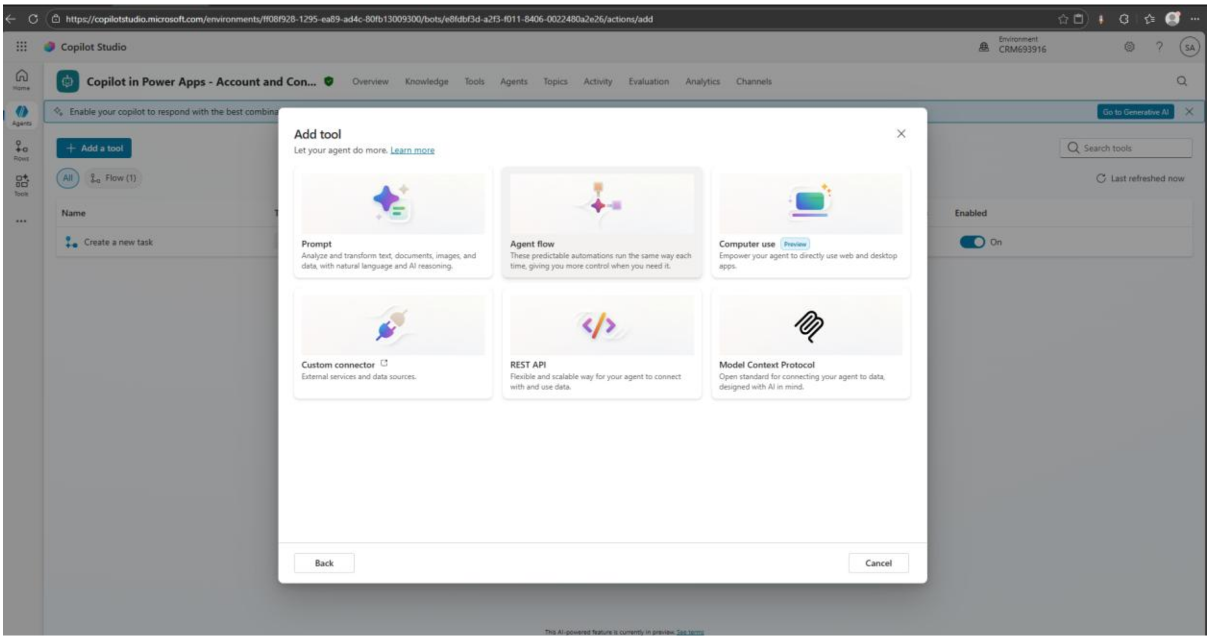
```
{
    "type": "AdaptiveCard",
    "$schema": "https://adaptivecards.io/schemas/adaptive-card.json",
    "version": "1.5",
    "body": [
        {
```

```json
                "type": "TextBlock",
                "text": "Please fill below form to create a new task",
                "wrap": true
            },
            {
                "type": "Input.Text",
                "label": "Subject of Task",
                "placeholder": "Task Title",
                "id": "task_subject",
                "isRequired": true,
                "errorMessage": "Subject is mandatory"
            },
            {
                "type": "Input.Text",
                "label": "Description of Task",
                "placeholder": "Detailed descrtiption",
                "isMultiline": true,
                "id": "task_description"
            },
            {
                "type": "Input.Number",
                "label": "Duration in minutes",
                "placeholder": "The time this task will take",
                "isRequired": true,
                "id": "task_duration",
                "errorMessage": "Duration is mandatory"
            }
        ],
        "actions": [
            {
                "type": "Action.Submit",
                "title": "Submit",
                "id": "task_submit",
                "associatedInputs": "auto"
            }
        ],
        "id": "task"
}
```

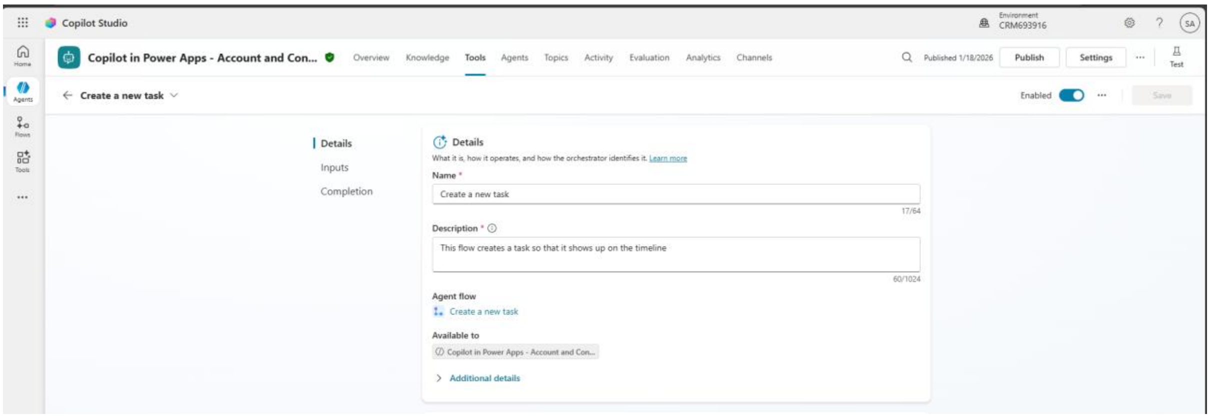
3. **Save the Card:** Review the card layout and save your changes.

Step Three: Creating the Power Automate Flow for Task Creation

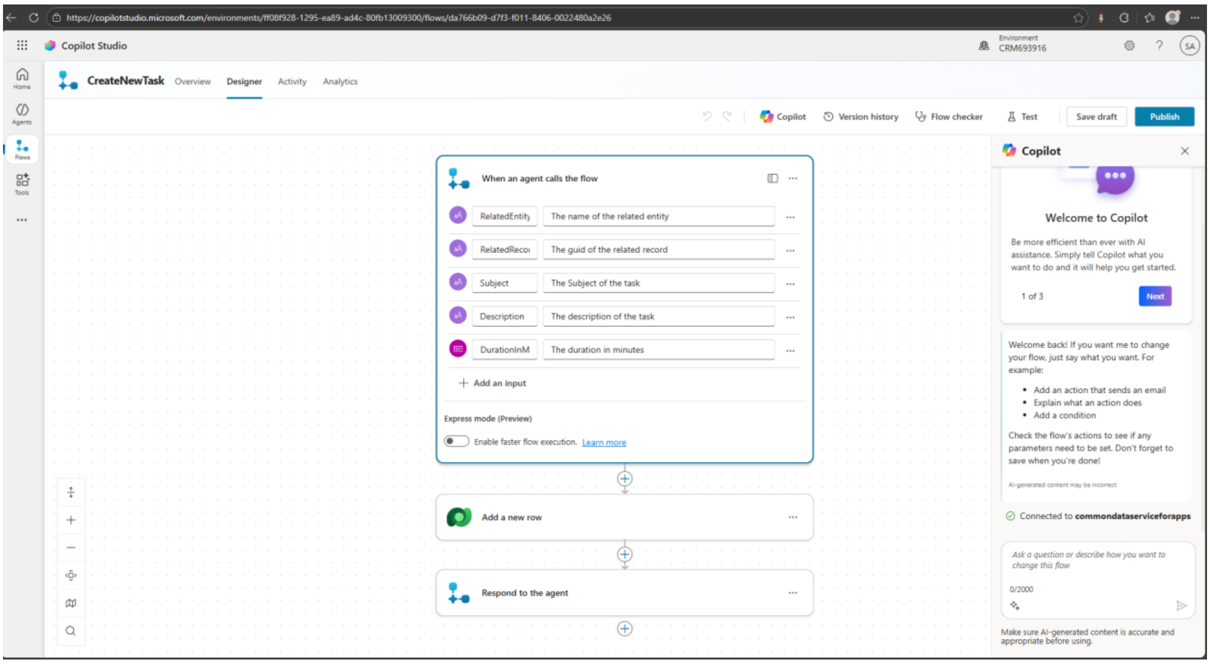
1. **Open Tools section:** In Copilot Studio, select **Add a tool button** and choose **Agent Flow**.



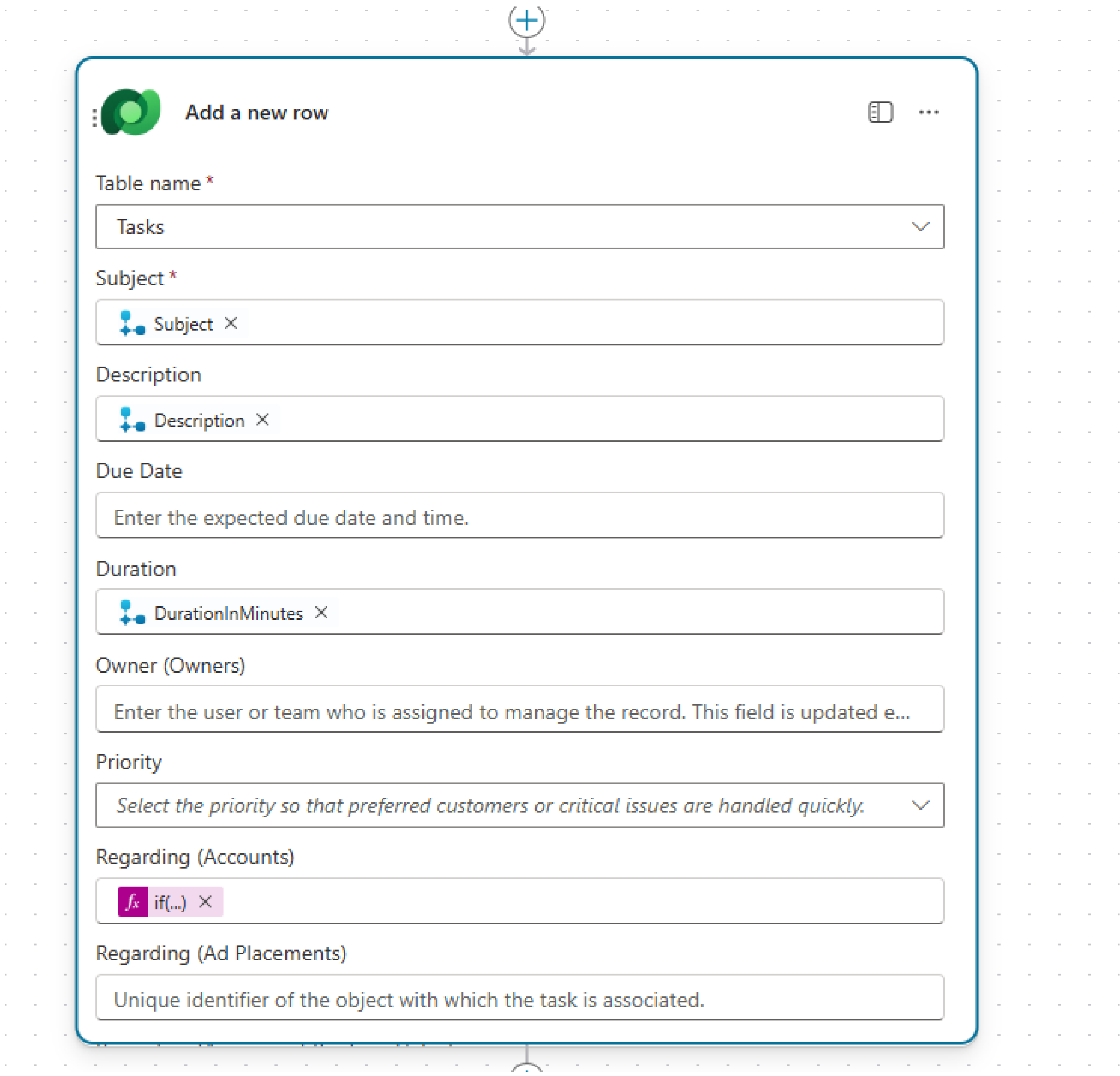
2. **Configure the Flow:** Name the flow “Create a New Task.”



3. Add variables: **relatedEntity** (text), **relatedRecord** (text), **subject** (text), **description** (text),   (number). Add a Dataverse “Add a new row” step for the Tasks table, mapping subject, description, and duration, and use expressions for regarding fields.

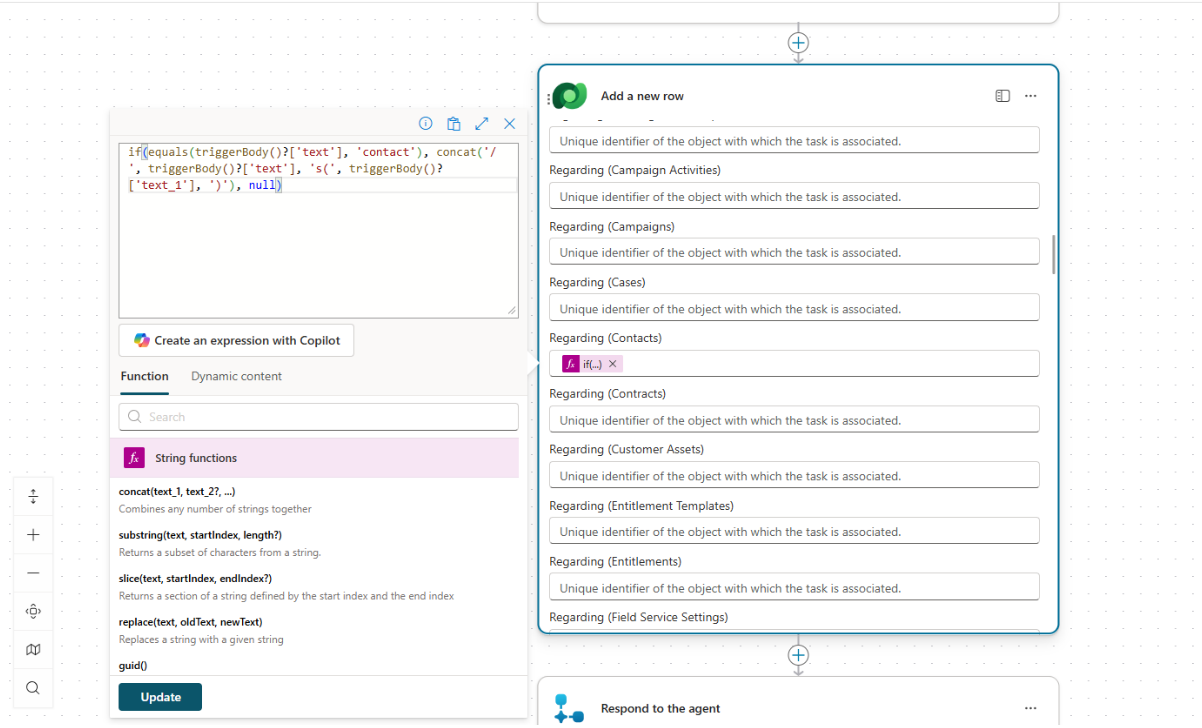


Copilot Studio
Environment
CRM693916
CreateNewTask
Overview
Designer
Activity
Analytics
Copilot
Version history
Flow checker
Test
Save draft
Publish
When an agent calls the flow
RelatedEntity
The name of the related entity
RelatedRecor
The guid of the related record
Subject
The Subject of the task
Description
The description of the task
DurationInM
The duration in minutes
Add an input
Express mode (Preview)
Enable faster flow execution.
Learn more
Add a new row
Respond to the agent
Copilot
Welcome to Copilot
Be more efficient than ever with AI assistance. Simply tell Copilot what you want to do and it will help you get started.
1 of 3
Next
Welcome back! If you want me to change your flow, just say what you want. For example:
Add an action that sends an email
Explain what an action does
Add a condition
Check the flow's actions to see if any parameters need to be set. Don't forget to save when you're done!
Connected to commondataserviceforapps
Ask a question or describe how you want to change this flow
0/2000
Make sure AI-generated content is accurate and appropriate before using.



4. Provide this Expression for Account: if(equals(triggerBody()?['text'], 'account'), concat('/', triggerBody()?['text'], 's(', triggerBody()?['text_1'], ')'), null)

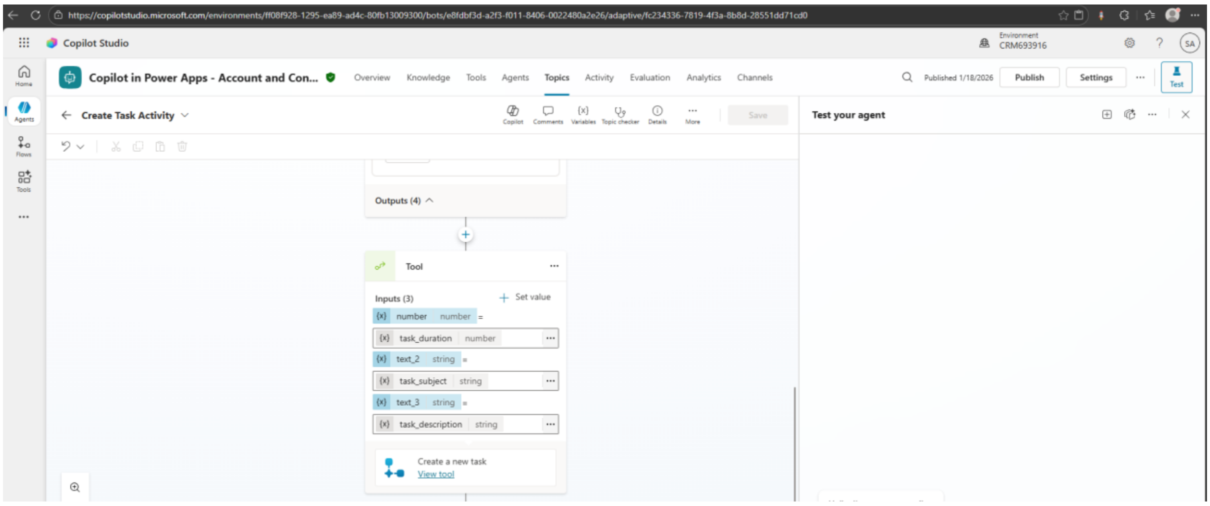
5. Provide this Expression for Contact: if(equals(triggerBody()?['text'], 'contact'), concat('/', triggerBody()?['text'], 's(', triggerBody()?['text_1'], ')'), null)



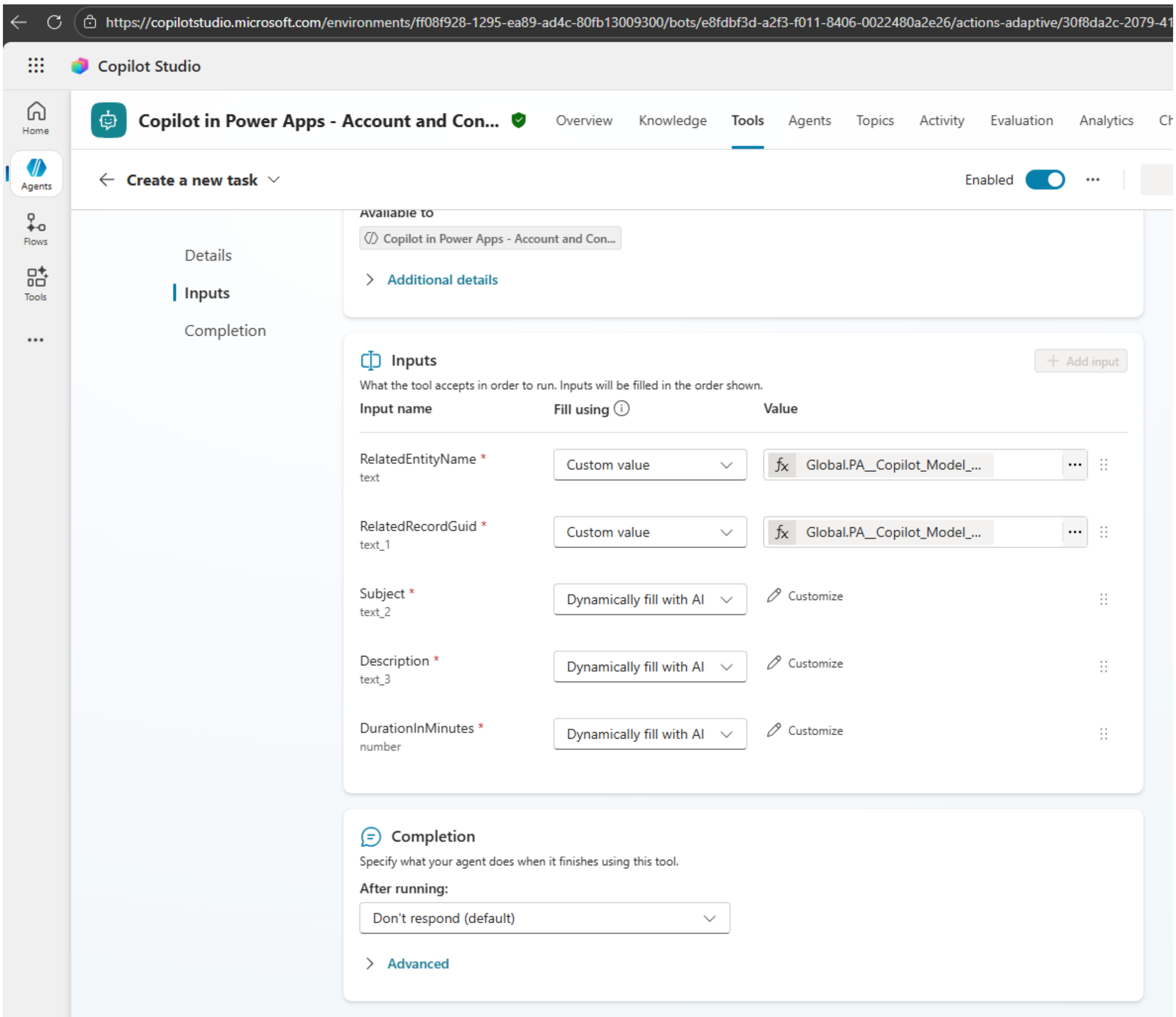
6. **Save and Test the Flow:** Test the flow to confirm it creates tasks as expected.

Step Four: Integrating the Flow with the Topic and Mapping Variables

1. **Link the Flow:** In your topic, add the Power Automate flow as an action step.



2. **Map Variables:** Map the adaptive card fields (subject, description, duration) to their respective flow parameters. For **related entity** and **record**, use custom values with out-of-the-box variables.



Give this variable in RelatedEntityName: Global.PA__Copilot_Model_PageContext.pageContext.entityTypeName

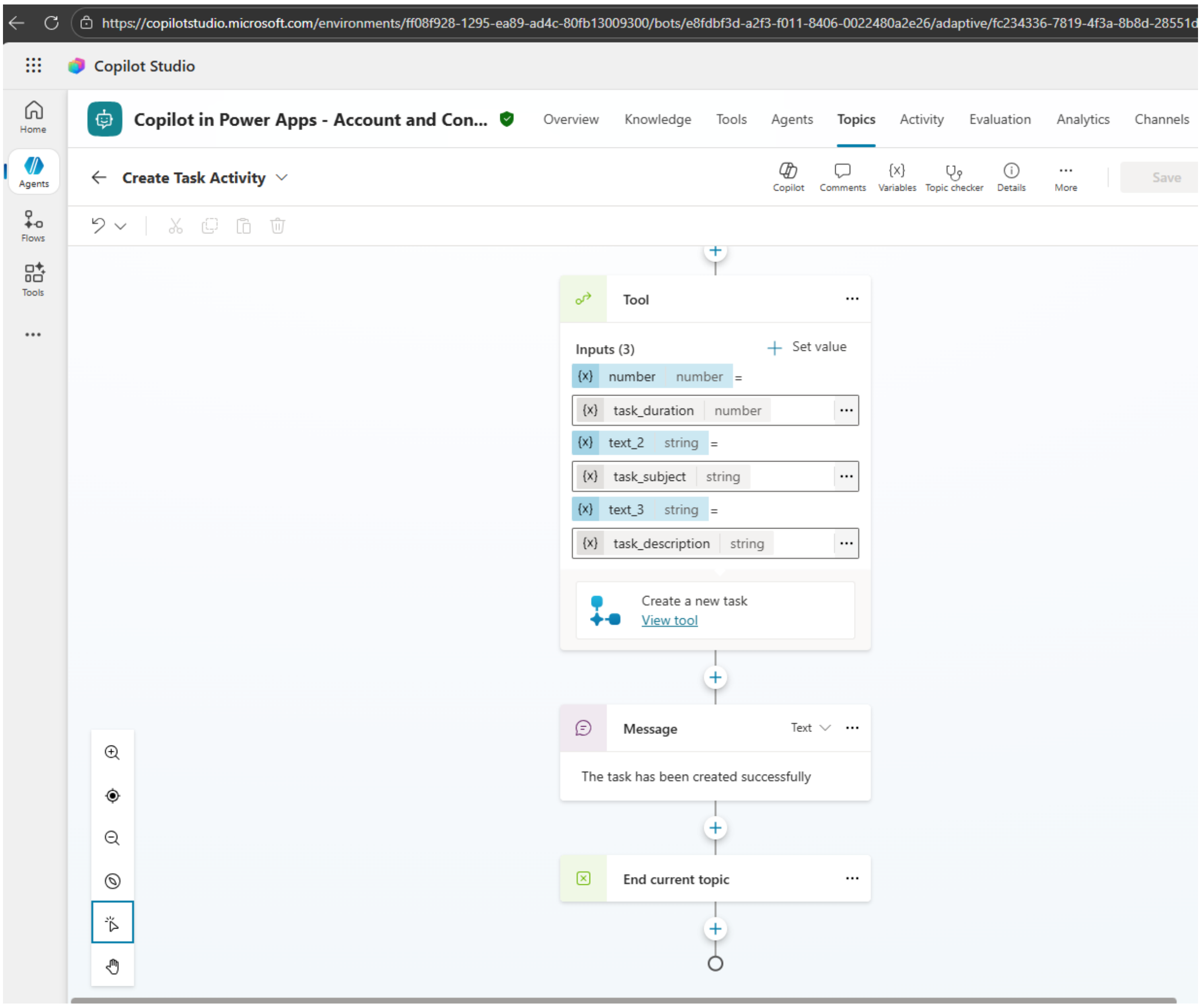
Give this variable in RelatedRecordGuid: Global.PA__Copilot_Model_PageContext.pageContext.id.guid

These are context variables which automatically tell the agent which record is open which chatting with the agent.

3. **Handle Output:** Use the flow's output to confirm task creation or display an error if necessary.

Step Five: Adding a Confirmation Message and Ending the Topic

1. **Confirmation Message:** After the flow runs, add a **Send a message** step to confirm successful task creation (e.g., "Your task was created successfully and added to the account timeline.").

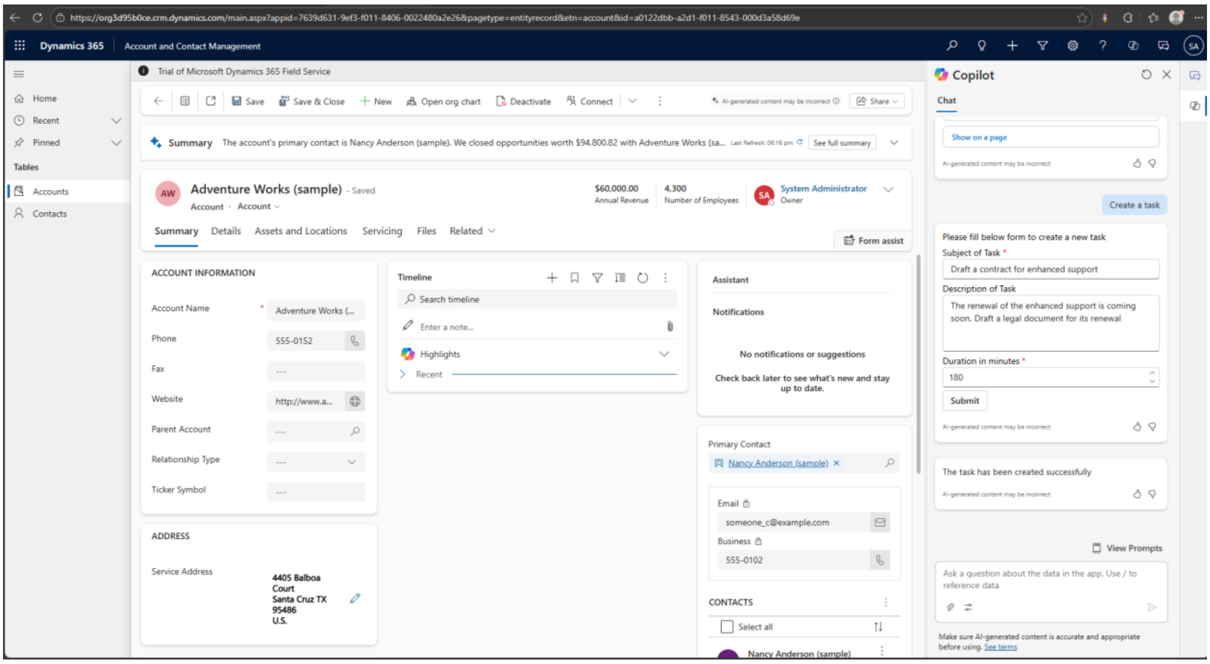


2. **End the Topic:** Use the **End topic** action to close the conversation gracefully.

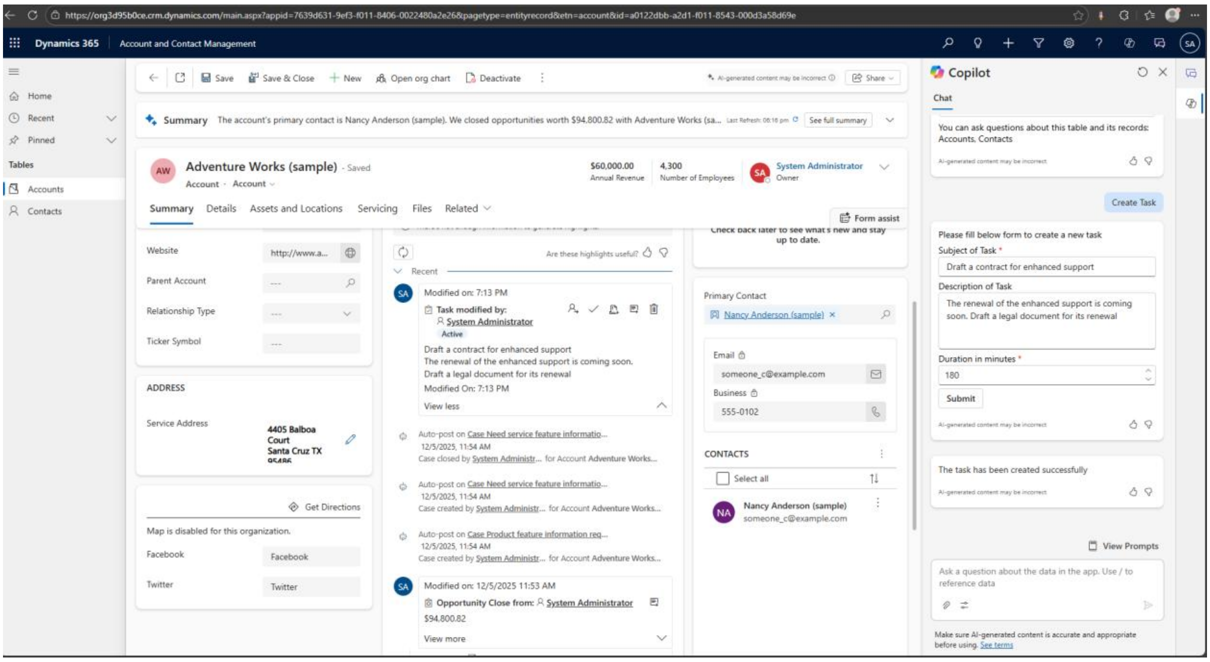
Testing: Verifying Task Creation in an Account Timeline

1. **Open the Account Record:** In your app, navigate to the relevant account (e.g., Adventure Works).

2. **Test the agent:** Type create task and fill the adaptive card and click submit.



3. You should see a message that the task is created successfully and the task is visible in the timeline.



Conclusion

By following these steps, you can equip your Copilot Studio custom agent with the ability to create tasks, streamlining your workflow and enhancing user experience.