ArcGIS Pro Assistant (Beta) documentation

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This document includes the help content for the ArcGIS Pro Assistant (Beta) release. There are five functional modes to test in this release:ArcGIS Pro Help, ArcGIS ProActions, ArcPy Code, Graph Query, and Query Layer.

Use the ArcGIS Pro Assistant (Beta)

The ArcGIS Pro Assistant can enhance productivity by helping you complete GIS tasks efficiently. It is embedded in ArcGIS Pro and uses artificial intelligence to answer your questions, perform actions, generate queries, and generate Python code for ArcPy.

The ArcGIS Pro Assistant (Beta) includes the following modes:

- **ArcGIS Pro Help**—The assistant answers ArcGIS Pro help documentation questions in a conversational manner.
- **ArcGIS Pro Actions**—If corresponding AI-assisted actions are available, the assistant performs the actions upon request.
- **ArcPy Code**—The assistant generates Python code snippets that use the ArcPy Python site package.
- **Graph Query**—The assistant generates openCypher queries for a given knowledge graph schema. These queries can then be used in knowledge graph workflows.
- **Query Layer**—The assistant creates query layers by generating SQL queries for a specified database connection and table schemas.

Access and use the ArcGIS Pro Assistant

To access and use the assistant, complete the following steps:

1. Ensure that ArcGIS Pro 3.6 is installed, including the following application features listed in the **AI Models** section on the **ArcGIS Pro Setup** installation dialog box: **Semantic Search** and **Tool Suggestions**.
   If ArcGIS Pro 3.6 is already installed, you can modify the setup to add these application features if necessary.
2. Install the ArcGIS Pro Assistant 3.6 (Beta) by downloading and running the setup provided on the ArcGIS Pro Assistant Early Adopter site.
3. Once installation is complete, start ArcGIS Pro and sign in to an ArcGIS organization that allows the use of beta features and allows the use of the assistant.
4. In an open ArcGIS Pro project, click the **Help** tab on the ribbon, and in the **Assistant** group, click **Assistant (Beta)** ✨ to open the **Assistant (Beta)** pane.
5. Click **OK** to dismiss the **Notice**, if necessary.
6. Choose from the following modes to work with the assistant:

ArcGIS Pro Help	Type a question in the window at the bottom of the pane to begin a help conversation. Learn how to explore the documentation with the assistant
ArcGIS Pro Actions	Click the **ArcGIS Pro Actions** card to perform an action using the assistant. Learn how to perform actions with the assistant
ArcPy Code	Click the **ArcPy Code** card to type prompts to create Python code snippets that use the ArcPy Python site package.
Graph Query	Click the **Graph Query** card to select a knowledge graph and ask natural language questions about it. Learn how to create graph queries with the assistant

Query Layer	Click the **Query Layer** card to select database tables and ask natural language questions about them. Learn how to create a query layer with the assistant

7. Continue your conversation by typing follow-up questions to the responses you receive.

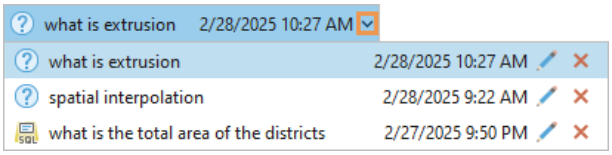
Conversations

The questions you type are collected together in conversations. The assistant assumes that all questions in a conversation are related, all in reference to a single workflow, for example. The assistant uses this context to provide relevant responses within a conversation. To shift to a new context or workflow, click **New Conversation** to begin a new conversation.

Tip:

- To copy a question to the clipboard, hover over the question in the scrollable area of the pane and click **Copy Question**.
- To copy a response to the clipboard, hover over the response and click **Copy Response**.

The drop-down menu at the top of the **Assistant (Beta)** pane shows the current conversation. Type a new prompt in the box at the bottom of the pane to continue working in the current conversation. If additional conversations are present, select them from the menu to read the history of the conversation and begin working within its context. The title of the conversation is the text of the first question in the conversation. From this drop-down menu, you can change the title of a conversation and delete any conversations you no longer need. There is no limit to the number of stored conversations.



Each conversation is automatically saved and stored in your conversation history, persisted locally on your computer. They are stored as `.json` files in your user profile at `\AppData\Local\ESRI\ArcGISPro\Assistant\Sessions`. Conversations are saved whether or not you save the current project, and they persist across your ArcGIS Pro sessions and projects.

Caution:

During the beta phase, your questions, prompts, enabled functions, along with the generated outputs and responses are collected to help improve product performance and reliability. Do not enter production, private, or sensitive data or information into the assistant.

Learn more about privacy at Esri

Feedback

You can provide feedback for the responses you receive from the assistant. Hover over a response and click either the **Good Response** or **Poor Response** button. Add your comments, agree to the privacy statement, and click **Submit**.

Your feedback improves the quality of responses and the overall experience of using the assistant.

Related topics

Ask the ArcGIS Pro Assistant (Beta) for help
Perform an action with the ArcGIS Pro Assistant (Beta)
Generate Python and ArcPy code (Beta)
Create a graph query with the ArcGIS Pro Assistant (Beta)
Create a query layer with the ArcGIS Pro Assistant (Beta)

Ask the ArcGIS Pro Assistant (Beta) for help

You can ask the ArcGIS Pro Assistant (Beta) questions about the features and capabilities of ArcGIS Pro 3.6. The assistant can provide information about this software version only. It cannot provide information from other resources such as Esri Community posts or Esri Technical Support content.

You can ask for definitions of terms, explanations of concepts, and guidance on accomplishing workflows or resolving problems. Prompts do not always need to be formed as questions. For example, you can use questions, phrases, or statements such as the following:

- What is a pour point?
- Spatial interpolation.
- How do I change the feature selection color?
- How can I make ArcGIS Pro run faster?
- I don't see a pop-up when I click a feature.

Questions should be phrased in natural, conversational language. Spelling and grammar do not need to be perfect. Short questions are more effective than long ones, both in terms of response time and answer quality.

The assistant can't answer questions that are outside the scope of its knowledge, that it does not understand, or that cross its ethical guidelines. If the assistant replies that it cannot help you, you can try rephrasing the question. If that doesn't work, you can provide feedback.

Start a conversation

When the **Assistant (Beta)** pane is open in ArcGIS Pro, you can ask the assistant a question.

To start a conversation with the assistant, complete the following steps:

1. In the **Assistant (Beta)** pane, click the menu button ☰, and click **ArcGIS Pro Help**.
2. In the box at the bottom of the pane, type a question or prompt in natural conversational language and click **Ask the question**.
   The answer appears in the pane with one or more links to relevant documentation. In some cases, the assistant may ask you to clarify the question. If follow-up questions are returned, you can click any of them to ask them within the current conversation.

   Tip:

   To cancel a question, click **Cancel** in the window. The question and the cancellation message remain in the conversation history.

3. Optionally, continue the conversation by asking another related question.
   Alternatively, click **New conversation** to change the subject.

   Note:

   Subsequent questions are part of the same conversation until you start a new conversation. During a conversation, the assistant uses the context from previous questions to influence its answers to later questions. Changing the subject within a conversation may lead to incorrect or confusing answers. It also makes it harder for you to keep track of your conversation history.

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Perform an action with the ArcGIS Pro Assistant (Beta)

The ArcGIS Pro Assistant (Beta) can perform actions in an ArcGIS Pro session, such as styling a layer, zooming to content, or selecting features based on an attribute. The assistant is designed to increase productivity by enabling a more efficient way to use the tools necessary for your current task.

The actions available to the assistant are a limited subset of the capabilities of ArcGIS Pro. More actions will be supported in future releases. Some actions, such as zooming to a layer, are applied immediately. For requests that require running a geoprocessing tool, the assistant opens the tool with preset parameters from your current session. The assistant may ask for additional input or clarification.

Tip:

The assistant can answer questions about its capabilities. Ask the assistant to outline the available actions that it can perform.

Categories of available actions you can use include, but are not limited to, the following:

Category of actions	Description
Search	Find items in the project, including maps, layouts, feature classes, layer files, layer packages, tables, datasets, models, scripts, folders, databases, and toolboxes, by using the name, partial name, type, or metadata elements.
Data management	Manage data, including modifying data in database and geodatabase workspaces.
Contents	Manage items in the **Contents** pane of the current map, including reordering, grouping, ungrouping, removing, and deleting layers or tables.
Basemaps	Set or remove the basemap for a map or scene.
Maps	List, open, close, and create maps and scenes in a project. Make a map or scene the active view in a project, change the viewing mode of a map or scene, and update map and scene properties including the name and reference scale.
Add data	Add data, layers, and stand-alone tables to the map.
Navigation	Get or set the camera's position and height in a scene, get the map scale, zoom and pan to layers, and navigate to coordinates. Zoom to, pan to, or flash selections. Zoom and pan to bookmarks, create, rename, and update bookmarks. Enable and disable view linking.
Selection	Select and unselect features and records in layers and tables in the active map, and report selection count. Identify layers by selection state.
Geoprocessing	Open and run geoprocessing tools.
Layers	Manage layers in the active map, including finding and renaming layers, and querying and changing layer properties, including visibility, transparency, definition queries, symbol scaling, scale ranges, time extent, selectability, editability, and more. Open the Fields view and get field descriptions. Expand and collapse group and non-group layers.
Data validation	Enhance data quality and integrity for accurate spatial analysis and visualization by automating data validation workflows, identifying attribute and geometry errors, and validating spatial relationships.

Categories of available actions

Category of actions	Description
Data filtering	Filter data using SQL definition queries on a layer, including creating, updating, setting, changing, retrieving, and removing active definition queries.
Feature visualization	Update the appearance of a feature layer by setting layer symbology (simple, single symbol, graduated color, graduated symbol, unique value, proportional, dot density, heat map) and adjusting symbology and visual variable properties.
Raster visualization	Set, update, or create renderers for raster or imagery layers. Create and update colorizer types rgb, stretch, colormap, classify, unique value, vector field, discrete color, and shaded relief. Update the properties of existing colorizers including raster band, classes, classification method, normalization, fields, color ramps, and color schemes.
Styles	Find style items within project styles.
Geocoding	Use ArcGIS World Geocoder to find addresses or points of interest, and convert between addresses, points of interest, and geographic coordinates.
Tables	Open, activate, refresh table panes, and switch the table pane mode. Set or switch table properties and manage the state of fields, rows, and columns.
Layouts	Create layouts based on a paper size or template, rename or remove layouts, and list layout templates. Query and update layouts, including getting and setting the size of the page, getting and setting the size and position of elements, finding elements by type, removing elements, and printing and exporting a layout.
Export	Export a map from the project.
Knowledge graph	Work with knowledge graphs or knowledge graph services by querying and selecting data in the investigation view of a knowledge graph service.
Portal management	Manage current portals.

Note:
You can build custom actions for the assistant using ArcGIS Pro SDK.

To perform an action using the assistant, complete the following steps:

1. In the **Assistant (Beta)** pane, click the **ArcGIS Pro Actions** card, or click the menu button ☰, and click **ArcGIS Pro Actions** ✨.
2. In the box at the bottom of the pane, type a question or prompt in natural conversational language to ask the assistant to perform an action and click **Ask the question** ➢.
   For example, type `zoom to the cities layer` or `zoom to cities`, or, if you have a map layer of census data, type `symbolize the census layer`.

   The assistant responds by performing the action or, if necessary, asks for clarification or more information.
3. Clarify your request or verify that the action was performed correctly.

Keep the following in mind when performing actions with the assistant:

- As the conversation with the assistant continues, previous context is considered. This means that you can refine or supplement a request for action without explaining it again. For example, if your initial request was `apply`

`graduated color to counties using a field with population info`, your follow-up request could be `change the number of classes to 10`. You don't need to specify the field again in this example.

- When you know the tool or action you want, precise terminology achieves better results. For example, type `open the buffer tool`.
- In long-running conversations, if you start to see unexpected, incorrect, or unhelpful responses from the assistant, consider starting a new conversation.

Related topics

Ask the ArcGIS Pro Assistant (Beta) for help
Generate Python and ArcPy code (Beta)
Create a graph query with the ArcGIS Pro Assistant (Beta)
Create a query layer with the ArcGIS Pro Assistant (Beta)

Generate Python and ArcPy code (Beta)

Use the **ArcPy Code** mode of the ArcGIS Pro Assistant (Beta) to generate Python code snippets that use the ArcPy Python site package.

When you provide natural language prompts to describe the actions you want to perform, the assistant returns a Python code snippet that can be copied for use in an ArcGIS Notebooks, the Python window, a script editor, or other Python interface.

Generate ArcPy code

To generate code snippets from a natural language request, complete the following steps:

1. In the **Assistant (Beta)** pane, click the **ArcPy Code** card, or click the menu button ☰, and click **ArcPy Code** ✨.
2. Using natural language, type a prompt into the text box at the bottom of the **Assistant** pane to describe the actions you want to perform.
3. Press `Enter` on your keyboard, or click **Ask the question** ▷ to submit the prompt.
   The prompt and the response provided by the assistant are recorded in the **Assistant** pane.
4. Optionally, click the **Copy Code** button 📋 to copy the Python code provided by the assistant and paste it into a Python code interface.

   The code snippets generated by the assistant typically must be updated to use specific dataset paths, variable names, parameter settings, and so on, before being run. Review the ArcPy function reference or ArcGIS Pro geoprocessing tool reference for more information.

Note:
The ArcPy Assistant is not trained to generate code using the ArcGIS API for Python.

Known limitations (beta)

The code generated currently provides limited responses for the following ArcPy modules:

- `arcpy.mp`—For map and project automation
- `arcpy.sharing`—For sharing web maps, layers, and tools

These areas are under active development.

Related topics

Use the ArcGIS Pro Assistant (Beta)
Ask the ArcGIS Pro Assistant (Beta) for help
Python in ArcGIS Pro
Create a script tool
ArcGIS Pro Python reference
Use tools in Python
Perform an action with the ArcGIS Pro Assistant (Beta)
Create a graph query with the ArcGIS Pro Assistant (Beta)
Create a query layer with the ArcGIS Pro Assistant (Beta)

Create a graph query with the ArcGIS Pro Assistant (Beta)

Use the ArcGIS Pro Assistant (Beta) to generate openCypher queries for a specified knowledge graph schema by asking questions in natural, conversational language. The resulting queries can be used in knowledge graph workflows.

To query a knowledge graph using the assistant, complete the following steps:

1. In the **Assistant (Beta)** pane, click the **Graph Query** card, or click the menu button ☰, and click **Graph Query** .
2. From the **Data Connection** drop-down menu, select the knowledge graph to query.
3. Type a question in the window in conversational language to get information about the knowledge graph in the form of a graph query.
4. Once a query is generated, expand the **Explanation** heading to see the reasoning used to generate the graph query.
5. Click the **Add to current investigation** button to add the query to the currently active investigation, where you can also run the query.
6. Continue your conversation by typing follow-up questions.

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Create a query layer with the ArcGIS Pro Assistant (Beta)

You can create query layers by connecting to a database and using the ArcGIS Pro Assistant (Beta) to ask natural language questions about it. The assistant does not work with file geodatabases, because query layers are not supported on file geodatabases. The assistant generates SQL queries for a specified database connection and table schemas that can be added to a map as a query layer.

To create query layers using the assistant, complete the following steps:

1. In the **Assistant (Beta)** pane, click the **Query Layer** card, or click the menu button ☰, and click **Query Layer**.
2. Select a database and one or more tables to set the data context for your conversation.
   The **Share feedback and schema for invalid queries** check box is checked by default. If an invalid query is generated, the **Query Layer Assistant Feedback** dialog box appears. The query is recorded automatically—you don't need to paste it into the feedback box. Click **Submit** to submit the invalid query for review. Uncheck the check box if you don't want to share feedback.
3. Type a question in the window in conversational language to get information about the selected tables.
   When a valid query is generated, the SQL statement displays, and options to add the query as a layer appear.
4. Add a query layer by doing one of the following:
   - Click **Add to Current Map** to add the query as a layer in the current map.
   - Click **Add to New Map** to add the query as a layer in a new map.
5. Optionally, expand the **Explanation** section to understand how the SQL query was generated.

Tip:

Click the **Edit Query** button to open the **Edit Query Layer** dialog box. This allows you to modify a query—for example, to change a field name or a value—without asking another question.

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