

ArcGIS Pro FAQ








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1 Getting Started



- 1. Which version of ArcGIS should I use?** Use the most recent release of ArcGIS Pro. Avoid using ArcGIS desktop, as it will be discontinued in the near future.
- 2. Can ArcGIS Pro read data stored in Excel files?** To include an Excel file in your project, first download the package which allows ArcGIS to interpret Excel tables, Microsoft Access Database Engine 2016. The package is available through Microsoft at this link.
- 3. How do I create a new project?** Go to *Project - New - Start Without a Template* and select the location where you want your file to be stored.
- 4. How do I open an existing project?** Go to *Project - Open - Recents* and select your project, or simultaneously press the CTRL and letter O keys.
- 5. Can I use ArcGIS Pro on my Mac?** ArcGIS Pro is only compatible with Windows. You cannot install ArcGIS Pro to a Mac without changing operating systems. To use ArcGIS Pro on your Mac, you would have to install the application Parallels and run a Windows operating system on your computer, or use a remote application service.

2 Basics






- 1. How do I change the map in the background of my project?** You can change your basemap by going to the ribbon and selecting *Map - Basemap* , then selecting an option from the basemap gallery.
- 2. What is the difference between a vector and raster file?** A vector file contains points, lines, or polygons (areas) represented by a string of geographical coordinates. A raster file contains a single, continuous surface divided into an even grid. You can think of vectors as a set of locations like bus stops, cities or states. You can think of a raster as a surface that represents one variable, like temperature, air pollution, or land use.
- 3. How do I adjust the zoom of my layer?** There are a number of ways you can adjust your zoom in ArcGIS. From the banner, you can select Maps and zoom to the extent of your project's data (select *Full Extent* ) or to the features you have selected (select *Zoom to Selection* ). From here, you can also zoom in (select *Fixed Zoom In* ); zoom out (select *Fixed Zoom Out* ); undo to your previous zoom extent (select *Previous Extent* ); or redo your zoom extent (select *Next Extent* ). You can also zoom in and out manually using your mouse or track pad, or by pressing the CTRL key and the plus (+) or minus (-) key respectively.



4. **How do I adjust the drawing order of my layers?** In the *Contents* pane, go to *Drawing Order* and select the layer you would like to move. Use your cursor and drag it above or beneath the other layers as needed.
5. **Can my zoom fit exactly to the extent of my active layer?** Yes! In the *Contents* pane, right click on the layer you want to zoom to and select *Zoom to Layer* .
6. **Where do I find my analysis tools?** Navigate to the ribbon and select *Analysis - Tools*  to open the *Geoprocessing* tab. In the search bar, type the name or function of the tool you are looking for.
7. **How do I reset my panes to their default settings?** Navigate to the ribbon and select *View - Reset Panes*  - *Reset Panes for Mapping (Default)*.
8. **Where do I access the properties of my layer?** In the *Contents* pane, right click on the desired layer and select *Properties* .
9. **Why does my project say my files can't be found?** Your project does not store data, it just creates references to data found on your computer. This means that if you move your data files the references your project relies on will no longer be accurate. Return your files to their original location, or go to the *Contents* pane and select *Properties*  - *Source - Set Data Source*, then navigate to the new location of your data.

3 Importing Data





1. **How do I add data into my project?** The simplest way to add data into your project is by navigating to the ribbon and selecting *Map - Add Data* . This will open your computer's files. Navigate to the location of your data and add it to your project. Once added, it should appear in the *Contents* pane. You can also navigate to your data location in the *Catalog* pane and select and drag the file containing your data onto the map with your cursor directly.
2. **In what file format should I download my GIS data?** Generally, for vectors you can choose shapefiles (.shp) or geodatabases (.gdb). Rasters typically should be downloaded as images (.jpg, .png, .tif, etc.).
3. **How do I plot coordinates from a file?** You can plot coordinates from an Excel or .csv file by navigating to the ribbon and selecting *Analysis - Tools* . From here, search for the tool *XY Table to Point* in the *Geoprocessing* tab. In the tool, set the Excel or .csv file you wish to add as a feature class. Then identify the names of the fields in your file that represent the x coordinate (longitude) and y coordinate (latitude), setting them as x field and y field in the tool respectively. This is important, as ArcGIS cannot map the file without knowing which fields represent each geographic coordinate. Once you have completed these steps, run the tool.



4 Editing Data

- 1. How can I select a feature?** Navigate to the ribbon and select *Map - Select* , then using your cursor click your feature in the map directly. Alternatively, open your layer's attribute table and select the desired feature's row.
- 2. Can I select multiple features?** Yes! Navigate to the ribbon and select *Map - Select* , click each desired feature in the map while holding down the CTRL key. Alternatively, open your layer's attribute table and select each desired feature's row while holding down the CTRL key, or select a series of multiple features in a row while holding down the SHIFT key.
- 2. Where can I find my attribute table?** Select your desired layer in the *Contents* pane, then navigate to the ribbon and select *Feature Layer - Data - Attribute Table* . Alternatively, right click on the layer you are examining in the *Contents* pane and select *Attribute Table* .
- 3. How can I edit the data in my attribute table?** Open the attribute table of your desired layer. Edit individual data for the specific field of a feature by double clicking directly into the cell you wish to change and typing the data you wish to change it to.
- 4. How can I add a new field to my attribute table?** With your desired attribute table open, select *Add Field* . This will open a new *Fields* tab and a new, blank field you can fill in with information regarding what kind of information that field will represent, including its name and data format.
- 5. How do I join two tables?** To join two tables, first ensure they each have a corresponding field that will tell ArcGIS which will connect the two sets of data to the proper features in the attribute table. In other words, we need a unique identifier to designate which rows in the separate tables represent the same feature. Once you ensure both tables have a field that correlates the data to the proper feature in the other table, select the feature layer in the *Contents* pane that you want to join the table to, right click and choose *Joins and Relates - Add Join*. The feature layer will be the input table, and indicate the field that will connect your features under input join field. Set the join table as your data table, and indicate the field that will connect it to the features under join table field. Leave *keep all target features* checked, and select *validate join*. Open the attribute table of the feature you added data into, and ensure that the join has been completed properly and that data from the other table has been added to it in the appropriate rows.
- 6. After I join two tables, when should I save it as a new layer?** Joining two tables does not permanently affect your file, it only connects their data inside of your current project. By saving as a new file, you create a new layer that is exactly the same as your joined version, but where the join data is permanently connected to it. Without saving as a new layer, the join is only local to your project, and if you access the feature in a separate project it will only have its original data from before you completed the join. Determine whether your project warrants a permanent connection between the two joined tables, or whether you only need it temporarily within your current project. Then decide how the joined feature would best be saved. Also note that sometimes, when joins do not function properly, saving the joined feature as a new feature and using this new version can solve the issue.


7. **Why can't I select features in a specific layer?** You can only select features from your active layer. To make a layer active, select it in the *Contents* pane. Once the layer is selected, you can select and modify its features.
8. **How do I select features in a layer that meet specific criteria?** With your desired layer selected in the *Contents* pane, navigate to the ribbon and select *Map - Select by Attributes* . Set the field of the desired criteria as Input Rows, indicate your preferred Selection type, and then select Create Expression to determine how the criteria will be applied. Select *Apply*, then *OK* to close the tool window.
9. **How do I create a new layer from a subset of features in an existing layer?** Select the features you wish to export from your active layer using the steps outlined in 4.2. Once you have selected your desired features, right click on your active layer in the *Contents* pane and select *Selection - Make Layer From Selected Features* .

5 Mapping

1. **How do I create an image of my map?** To create an image, or *layout*, of your map, navigate to the ribbon and select *Insert - New Layout* , then select your preferred layout size. This will launch a new *Layout* tab. Navigate to the ribbon, select *Map Frame* , then select the option which shows you a preview of the map you wish to display in your layout. After selecting this, draw a box on the blank page below, which will mark the extent of the page your map will fill. Once drawn, your map should immediately fill the square to the extent that it fits.
2. **What elements should I include in my layout?** This depends on the type of map you create. Most maps require a title, key, and data attribution. If your map provides spatial information, including a distance scale and north arrow can help represent physical space. If location names are relevant to your map, consider including them as labels. Think about the content of your map and communicate it with the appropriate elements in your layout.
3. **What is a coordinate reference system?** A coordinate reference system is a framework which assigns each location in the world to a specific geographical location.
4. **What CRS is my layer using?** To find the CRS of your current layer, right click on it in the *Contents* pane, then select *Properties*  - *Source - Spatial Reference*. This will display a table containing your layer's spatial information.
5. **How do I make my layer's CRS match another layer?** Navigate to the ribbon and select *Analysis - Tool*  - *Project*. Select the layer whose CRS you are modifying under Input Dataset or Feature Class and a name and location for the new layer under Output Dataset or Feature Class. Under Output Coordinate System, select the other layer whose CRS you want the new layer to match. Alternatively, you can scroll through the provided CRS list and select your desired version. Make sure you open the *Project* tool and not the *Define Projection* tool, which will not transform your layer.

6. **Why did changing my map's CRS not work?** Changing the CRS of a map redraws it under a new reference system, but you must also set the map so it displays the new CRS in the map view. To do this, navigate to your *Contents* pane and right click *Map* under *Drawing Order*. Then select *Properties - Coordinate System* and search for the CRS you would like to change the map to, or select the layer of your project whose CRS you would like it to match.
7. **What classification method should I use for my map?** The ideal classification method will depend on how you want to visually represent your data. Here are some of the most common methods:
 - Manual interval divides classes by your manually selected intervals.
 - Defined interval divides classes according to a predetermined interval size.
 - Equal interval divides the range of attributes into intervals of equal size.
 - Quantile divides classes so that each contains an equal number of features.
 - Natural breaks divides classes based on gaps in the range of data values.
8. **How do I get my layout to zoom to the extent of my map?** In your *Layout* tab, navigate to the *Contents* pane and right click on the layer you wish to zoom to. Then select *Zoom To Layer* . This will display the layer to the fullest extent possible in the space provided.
9. **I accidentally closed my Layout tab. How do I reopen it?** In the *Catalog* pane, select *Project - Maps* . This will display all of the layouts you have created in the current project. Click on the one you wish to reopen.

6 Exporting Data

1. **My layout is finished. How do I export it?** In the ribbon, select *Share - Export Layout* , then select your desired file type and location.
2. **I shared my project file with someone. Why can't they see my data?** Your data is not stored in your project file; instead, your project file creates references to data located locally on your computer. This means that in order to send a functional project file you need to send the data it references. If your data and project files are in the same folder on your computer, save them together as a .zip folder and share the .zip file instead.