Create polygon features

In this topic

In the Create Features pane, polygon construction tools create single-part and multipart polygon features. Segment construction tools appear on the construction toolbar when a tool allows you to sketch connected straight lines, arcs, and curves.

Vertices for z-enabled features are assigned z-values based on the current elevation input mode setting. To learn more, see Specify an elevation for 3D features.

The following sections include steps for polygon and freehand polygon features. For steps to create circular or square polygon features see the following topics:

- Create circles and ellipses
- Create squares and rectangles

Tip:

While sketching geometry, to delete all vertices between the first vertex and another vertex, right-click the vertex and click Trim Before. To delete all vertices between a vertex and the last vertex, right-click the vertex and click Trim After.

Polygon

To create a polygon feature, click Polygon and click the map, or right-click and specify a coordinate location for the first vertex. Right-click and use the context menu to specify coordinates or apply constraints, and use tools on the construction toolbar to create straight and curved segments.

1. In the Catalog pane, do one of the following to add the layer to your map:
   - Expand Databases, expand the database containing your data, and drag the feature class onto the map.
   - Right-click the default database and create a new polygon feature class.

   Creating a feature class or dragging one onto a map adds the layer to the current map and creates a feature template with default settings.

2. On the Edit tab, in the Snapping group, enable your snapping preferences.

   Tip:

   You can press and hold the spacebar to temporarily turn snapping off as you sketch a feature.

3. On the Edit tab, in the Features group, click Create.

   The Create Features pane appears.

4. In the pane, click a polygon feature template.

   The construction toolbar appears at the bottom of the map.

5. Next to the tool palette, click the Active template button.

   The tool palette and the feature attribute table for the template appear in the pane.

6. In the attribute table, type the values you want to apply to the new feature.
    - For group templates, click a template icon to display its attribute table.
7. In the pane, click Polygon.
8. Create the new polygon feature using one or more of the following methods:
    - Click the map, drag the pointer, and click the map again.
    - Right-click and use the context menu to specify x,y,z coordinate locations, distance, and direction.
    - Use the tools on the construction toolbar to include other segments in a series of connected arcs, curves, or straight lines.

9. To finish a component part of a multipart feature, right-click and click Finish Part, and repeat step 8 to create the next component feature.
10. To finish the feature, right-click and click Finish, or press the F2 key.

ArcGIS Pro

Help

1. In the Catalog pane, do one of the following to add the layer to your map:
    - Expand Databases, expand the database containing your data, and drag the feature class onto the map.
    - Right-click the default database and create a new polygon feature class.

    Creating a feature class or dragging one onto a map adds the layer to the current map and creates a feature template with default settings.

2. On the Edit tab, in the Snapping group, enable your snapping preferences.

    Tip:

    This tool temporarily disables snapping until you finish a feature. You can press and hold the spacebar to temporarily turn snapping on as you sketch a feature.

3. On the Edit tab, in the Features group, click Create.

    The Create Features pane appears.

4. In the pane, click a polyline feature template.

    The construction toolbar appears at the bottom of the map.

5. Next to the tool palette, click the Active template button.

    The tool palette and the feature attribute table for the template appear in the pane.

6. In the attribute table, type the values you want to apply to the new feature.
    - For group templates, click a template icon to display its attribute table.
7. In the pane, click Freehand.

    If snapping is turned on, it is temporarily disabled until you finish the feature.

8. Click the map, drag the pointer, and create the feature.
9. To finish the feature, click the map.

    Finish runs automatically and segments are converted to Bézier curves.

Note:

Polygon feature classes contain the vector geometry of a feature and its descriptive attributes. When you create new polygon features, consider the following:

- Polygon features are fully enclosed areas bound by straight line segments, circular arcs, elliptical arcs, and Bézier curves created between vertices. You can create objects that have closed planar regions. Examples include lakes, vegetation boundaries, and building footprints.
- Multipart polygon features are used to store one or more polygons as a single polygon feature with one set of attributes. For example, you can create a series of noncontiguous island polygons and store them as one island feature. You can create single part and multipart features on the same layer.