How to Share Layers from ArcGIS Pro to ArcGIS Online

ArcGIS Online (AGOL) is a browser-based mapping platform for creating and sharing interactive maps. Use ArcGIS Pro to prepare and symbolize your layers before sharing to the cloud. ArcGIS Pro can be used to style layers, configure pop-ups and attribute tables, and create descriptive metadata.

Training

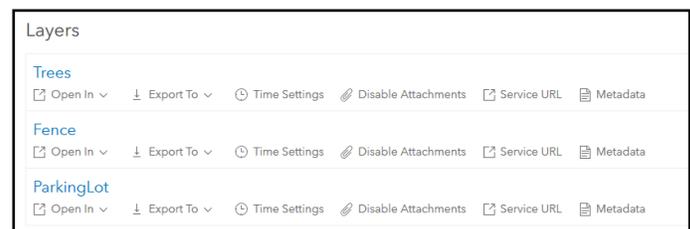The following data types can be shared from ArcGIS Pro to ArcGIS Online:
- **Standalone table**
- **Feature layer**
- **Tile layer**
- **Vector tile layer**
- **Map image**
- **Imagery**
- **Scene (3D data)**
- **Elevation (3D data)**

Share Feature Layer to ArcGIS Online

1. To share layers to ArcGIS Online, you must be signed in to an ArcGIS Online organizational account and have Publisher permissions. If not already signed in, click the dropdown next to **Not signed in** (upper right corner) and enter your ArcGIS Online credentials for.
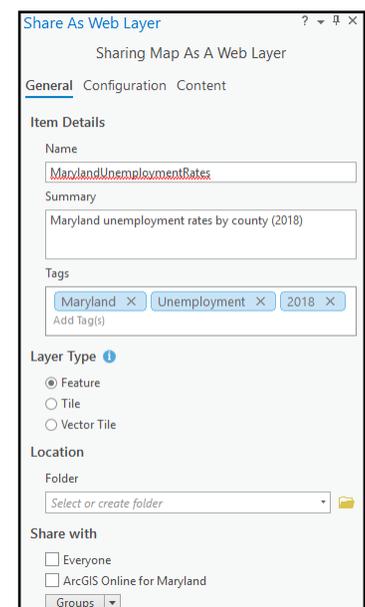
    🔒 Not signed in ▾

Note: Layers can be shared individually or as a group. If several layers are selected and shared as a group they will be stored together as a single content item (hosted feature layer); the overview section of the item details page will show the list of layers.

Layers
Trees
⧉ Open In ⌄   ⤓ Export To ⌄   🕓 Time Settings   🖉 Disable Attachments   ⧉ Service URL   📄 Metadata
Fence
⧉ Open In ⌄   ⤓ Export To ⌄   🕓 Time Settings   🖉 Disable Attachments   ⧉ Service URL   📄 Metadata
ParkingLot
⧉ Open In ⌄   ⤓ Export To ⌄   🕓 Time Settings   🖉 Disable Attachments   ⧉ Service URL   📄 Metadata

2. Use one of the options below to share layers:
    - In the contents pane, right-click the layer you wish to share. Go to **Sharing** > **Share as Web Layer**.
    - If you wish to share several layers together as a single service (ArcGIS Online content item), hold Ctrl and select multiple layers. Right-click one of the layers and go to **Sharing** > **Share as Web Layer**.

3. On the **Share As Web Layer** pane, fill in item details on the **General** tab:
    a. **Name**: This is how the layer will appear in ArcGIS Online.
    b. **Summary**: Short description of the data
    c. **Tags**: Enter keywords that will help others search for and find content. Press **Tab** after typing a tag. More information on using tags can be found here.
    d. **Layer Type**: If you are sharing a spatial layer, select the service type:
        - **Feature – Recommended for most layers.** A feature layer service is a dynamic, fully-functional web layer that can be filtered, queried, and re-styled.
        - **Tile** – Pre-drawn image tiles are produced for faster web performance. Tile layers are also referred to as raster tiles, and are commonly used for basemaps. Tile layers are time and resource intensive to generate; credits will be used if tiles are generated with ArcGIS Online.

Share As Web Layer ? ⌄ 📌 ✕

Sharing Map As A Web Layer

General   Configuration   Content

Item Details

Name
MarylandUnemploymentRates

Summary
Maryland unemployment rates by county (2018)

Tags
Maryland ✕   Unemployment ✕   2018 ✕
Add Tag(s)

Layer Type ⓘ
◉ Feature
○ Tile
○ Vector Tile

Location

Folder
Select or create folder   ▾   📁

Share with
☐ Everyone
☐ ArcGIS Online for Maryland
Groups ▾

- **Vector Tile** – Vector tiles are pre-drawn for better performance, but allow layers to be restyled. Vector tiles are time and resource intensive to generate; credits will be used if vector tiles are generated with ArcGIS Online. Vector tile layers can be updated in ArcGIS Online using [Replace Layer](#).
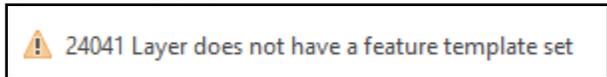
Note: If layers are intensive, load slowly, and do not change often, they can be shared as [tiles or vector tiles](#) to increase performance. Credits will be used if tiles are generated with ArcGIS Online.

  e. **Location** (optional): Select a folder from your ArcGIS Online Content.
  f. **Share with** (optional): Choose how to share the layers. By default, the layer is private.
     - **Everyone**: This makes the layer public. Anyone could find and use this layer.
     - **Your organization** (Note: If you are State of Maryland employee, this is **ArcGIS Online for Maryland**): This shares the layer to your organization. Anyone that has an ArcGIS Online account within this organization could find and use this layer.
     - **Groups**: This shares the layer to specified groups. Groups can be set up for users to share data among only the members in that group. Anyone that is a member of the group could find and use this layer. More information on [sharing in ArcGIS Pro](#) and [groups](#) can be found in Esri's documentation.
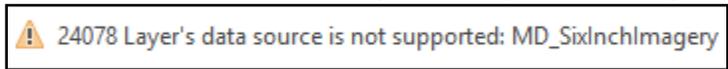
4. Click **Analyze** to check for warnings or errors. If any appear, double-click on them to open a help page.
   - If you see an error, you will not be able to publish until it has been fixed. Double-click the error to open the help page.

   ❌ 00102 Map does not contain a required layer type for web feature layer

   - If you see a warning such as the one below, you can proceed with publishing. Double-click the warning to open the help page.

   ⚠ 24041 Layer does not have a feature template set

   - If you see this warning, it indicates that one of your layers is not supported. This occurs if you have selected another web service or basemap. You can proceed with publishing, but this layer will not be included.

   ⚠ 24078 Layer's data source is not supported: MD_SixInchImagery

5. Edit other details on the **Configuration** tab such as editing capabilities, data syncing, and allowing others to export this data. Documentation on configuration options can be found [here](#).

6. Click **Publish**.

7. Once the layer has uploaded to ArcGIS Online, a message will appear indicating success.

   ✅ Successfully published web layer on 6/17/2020 2:48 PM
   Manage the web layer

8. Now, the layer can be added to a web map, shared to a group, edited collaboratively, or used by mobile apps such as [Collector for ArcGIS](#).

Overwrite Existing ArcGIS Online Layer

After pushing a layer from ArcGIS Pro to ArcGIS Online, data edits may need to be made. The layer can be modified in ArcGIS Pro and the previous version of the layer in ArcGIS Online can be overwritten to reflect the changes.

The existing layer can be overwritten if both are true:
- You own the layer.
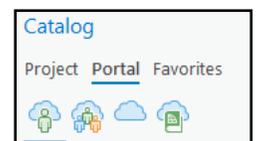- The location of the layer in ArcGIS Online has not changed while the Overwrite Web Layer pane is open.

1. After making edits to the layer in Pro, right-click the layer and go to **Sharing** > **Overwrite Web Layer**.

2. In the Overwrite Web Layer pop-up, select the layer to replace. Click **OK**.

3. The Overwrite Web Layer warning will appear. Click **OK** to continue.

Note: Any labels, pop-ups, and symbols will be overwritten to reflect current settings in ArcGIS Pro. If customizations for labels, pop-ups, and symbology have been saved in the web map in ArcGIS Online, check to ensure they are still in place after overwriting.

4. In the **Overwrite Web Layer** pane, edit the item details on the **General** tab.
    a. Name cannot be changed.
    b. Select description text:
        - **Use the item description from the web layer**: Preserves web layer description.
        - **Use the item description from the map or layer**: Overwrites the web layer description.
    c. **Summary**: Leave the previous summary or enter a new summary.
    d. **Tags**: Leave the previous tags or enter new tags.
    e. Layer Type and Location cannot be changed.
    f. **Share with**: Edit the sharing capabilities if applicable.

5. In the Overwrite Web Layer pane, edit other details on the **Configuration** tab such as editing capabilities, data syncing, and allowing others to export this data. Documentation on configuration options can be found [here](#).

6. Click Analyze before publishing to determine if the layers have any warnings or errors. See previous section for error and warning notes.

7. Click **Publish**.

Add Layer to ArcGIS Pro from ArcGIS Online

1. In the **Catalog** pane (View tab > Catalog Pane), click **Portal**. You are now able to access content through your ArcGIS Online account. Use the collections of content to find data:
    - **My Content**: Content that you own.
    - **Groups**: Content shared to groups that you are a member of.
    - **All Portal**: Items shared publicly to ArcGIS Online.
    - **Living Atlas**: Items available from Esri's ready-to-use Living Atlas of the World.
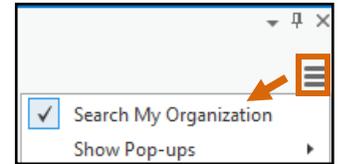

Note: Some items may have a generic online item icon next to them, indicating this cannot be added to Pro. These items include dashboards, story maps, and images.
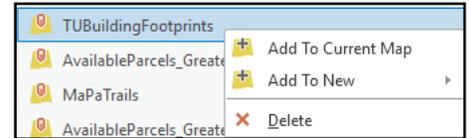
2. Search for any content by using the **Search** bar to enter keywords or tags.

3. Search for content within your organization by clicking **All Portal**.　　In the upper right corner, click the hamburger button and select **Search My Organization**.

4. To add a layer to ArcGIS Pro, right-click the layer and select **Add to Current Map** or **Add to New** > **Map**.

Note: If editing has been enabled for the layer, you can make edits or add features in Pro using the tools in the Edit ribbon. Updates will be synced to the cloud. Layers can be edited simultaneously by multiple users.

5. To add a map or scene to ArcGIS Pro, right-click the map and select **Add and Open**.