Making Custom Maps with ArcGIS Online

ArcGIS Online (also referred to as ArcGIS.com) is a free web application developed by Esri that allows a user to create and share interactive maps on the Web. It allows for the integration of your own geographic data and content published by Esri, ArcGIS users and other authoritative data providers. Users can store data, maps and applications as well as create and join groups where data and maps can be shared publically. In this activity, you will become familiar with the ArcGIS Online interface and create a map using the Map Viewer.
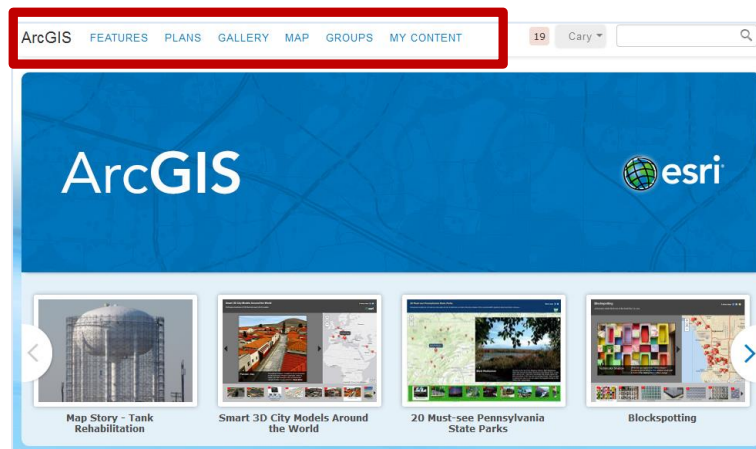
Create a Public (Free!) ArcGIS Online Account

If you do not already have an ArcGIS Online Account, open a browser on your computer and go to the following URL to set up your account: https://www.arcgis.com/home/createaccount.html

If you already have an account, go straight to http://arcgis.com/home and sign in.

Getting Started

After signing in, you will be directed to the ArcGIS Online homepage (www.arcgis.com/home) and should see your **username** in the top menu.

From the home page you can explore ArcGIS Online **FEATURES**, learn about paid subscription **PLANS**, explore the map **GALLERY**, open the ArcGIS Online **MAP**, and access your personal **GROUPS** and **CONTENT**.
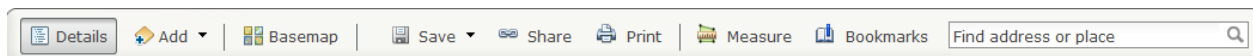

Explore the Map Viewer

- Click on **MAP** at the top of the home page. This opens the **ArcGIS Online Map Viewer**.

- Explore the **Map Viewer**. Notice the buttons along the banner for adding data, changing the basemap, saving, sharing and printing your map.

- There are also three icons on the left **Details panel** that switch between **About the Map**, **Contents** and **Legend**.

About this map   Contents of map   Legend

- In the upper right corner, find the search box `Find address or place 🔍`.
- Type in an address or location and locate it on the map. You may have to zoom out to see where you are.

View Additional Basemaps

There are nine basemaps available in the ArcGIS Online Map Viewer. Basemaps are always below other data layers in your map.

- Click the **Basemap** button and click on one of the basemap thumbnails.
- Explore the other basemaps available on ArcGIS Online. Be sure to zoom in as details change with zoom levels.

Save Your Map

- In the ArcGIS Online Map Viewer, click the **Save** button 💾 Save ▾ .
- Give your map a **Title.** Add some tags (key words). The **Summary** is optional. Click **Save Map**.
- Your map is now saved to your ArcGIS Online account in the **My Content** section.
- In the future (not now), to see and access your maps, click **My Content** in the upper right corner of the Map Viewer. Click on the map title to open the map.

Add Existing Layers from ArcGIS Online

- Click the **Add** button and choose **Search for Layers**.
- In the **In:** box, choose **ArcGIS Online**.
- **Search** for a topic that interests you. For example water, population, weather or NOAA. Notice the "**within map area**" checkbox. Checking this on and off will change the results based on your zoom area.

    Search for Layers ◀
    Find: water [GO]
    In: ArcGIS Online ▾
    ☑ Within map area

- Once you have found a layer or two that you like, click **Add** to add it (them) to your map.
- Explore the information. Be sure to notice who published the map. Not all data is credible.
- Click **Done Adding Layers**.

Add Content from CT ECO

The CT ECO (Connecticut Environmental Conditions Online) website http://cteco.uconn.edu is maintained by the CT DEEP and UConn CLEAR. It is a place to go for maps and map viewers for Connecticut. CT ECO also makes these map layers available to use in applications like ArcGIS Online through web map services. This section takes you through adding a CTECO map service to your map.

- Click the **Add** button and choose **Search for Layers**.

- In the **In:** box, choose **A GIS Server**.

- In the **URL:** box, type ctecoapp2.uconn.edu. Be sure the **Find:** box is empty and blank. Click **Go**.

- Many map services are available on this server and are listed. Find one or several that interest you and click **Add**.

- Click **Done Adding Layers** at the bottom.

- While in the **Contents** tab, click on the layer title. The layers contained in the map service will be listed. Notice that often just the **Connecticut State Outline** is checked on.

- Check in the box next to other layers in the map service so they will draw on your map.

- **Save your map.**

Speeding Along? Try adding other CT ECO data layers

Try adding more layers on the **ctecoapp2.uconn.edu** server. Or try a different CT ECO Server. Change the URL to **ctecoapp3.uconn.edu**. This server stores statewide imagery for Connecticut. Try adding the **Ortho_2012** map service**.** This is the most recent high resolution color imagery available for the state of Connecticut. Nice, huh!?

Add a Map Note Layer

A Map Note is a layer that can be added to your map and edited as a graphic.

- Click the **Add** button and choose **Add Map Notes**.

- Give the layer a **name** (whatever it is you will be creating). If you need some ideas, choose "study sites" or "interesting areas" or "places visited."

- Click **Create**.

- In the **Add Features** window on the left, choose one of the shapes. There are **point**, **line** and **area** choices. Your mouse will change to allow you to add features to the map. After the feature is added, edit the **Title** and Description (optional). The Title and Description text will appear in the pop-up window of the feature. If you have a link, you can add that too.

- Click **CHANGE SYMBOL**. Explore the options here and make a choice. Notice that the change symbol box is different for points, lines and polygons.

- Click **Close**.

- Add more features until you are happy. When you are finished, click the **Edit** button along the top to end your edit session. You can always turn it back on later to make changes or add more features.

- **Save** your map.

Note that Map Notes are stored as part of your online map. They can be exported to a layer that is saved to My Contents and reused in other ArcGIS Online maps or shared with others.

Import Your Own Data to a Web Map

ArcGIS Online allows you to upload and add your own geographic data to an online map. Data types include GPS data (gpx format), GIS data (zipped shapefile) or comma, semi-colon, or tab delimed text files (csv or txt). This is too much for today, but at least you know it's possible!

Share Your Map

ArcGIS Online has tools built into it to allow you to share your interactive map with the public and allow it to be found using the search tools.

- Click on the **Share icon** on the menu bar at the top.

- In the **Share** window, check the box next to **Everyone (public)**. This allows others to search and find your map based on the keywords you provided in the title and description.

- Notice the URL under **Link to this map**. This is the internet location where your map is saved. You can share your map with others by copying and pasting this URL into an email or by posting it on your website. If you wish, open your email in a new browser window and email the link to yourself or a friend.

- Next to **Link to this map** are icons for **Facebook** and **Twitter**. ArcGIS Online makes it easy to share your map through these social media outlets. If you have a Facebook or Twitter account and you want to share your map, go ahead and give it a try!

There are also options for embedding your map in a website but we'll save that for another day.

Extra: Creating a Web Mapping Application

In addition to embedding a map using HTML code, ArcGIS Online also allows you to create a web mapping application that can be downloaded and installed on your individual website (requires some know-how) or hosted on ArcGIS Online (anyone can do it!).

- Click on **Make a Web Application.**

- Notice several pages of web templates.

- **Preview** a template or several by clicking on the **small black arrow** next to the word **Publish** under one of the templates and select **Preview**. This will open a new tab and display your map in the template you choose. Cool, right?

- Once satisfied with a web application, click **Publish**. You may have some more options and when finished with those, click **Save**.

- The map description page (also reachable through My Content) contains the **Share** tools for the **Web Application**.

Save your map!