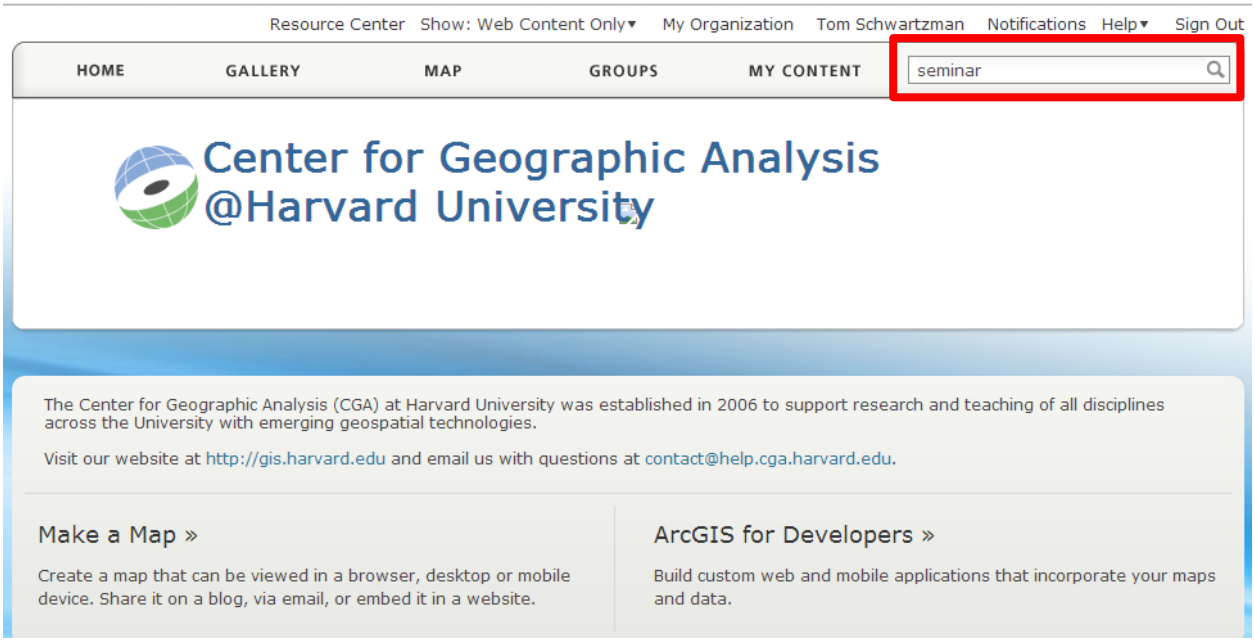
ArcGIS Online Hands-on Workshop Exercise
Exercise – ArcGIS Online (AGOL)

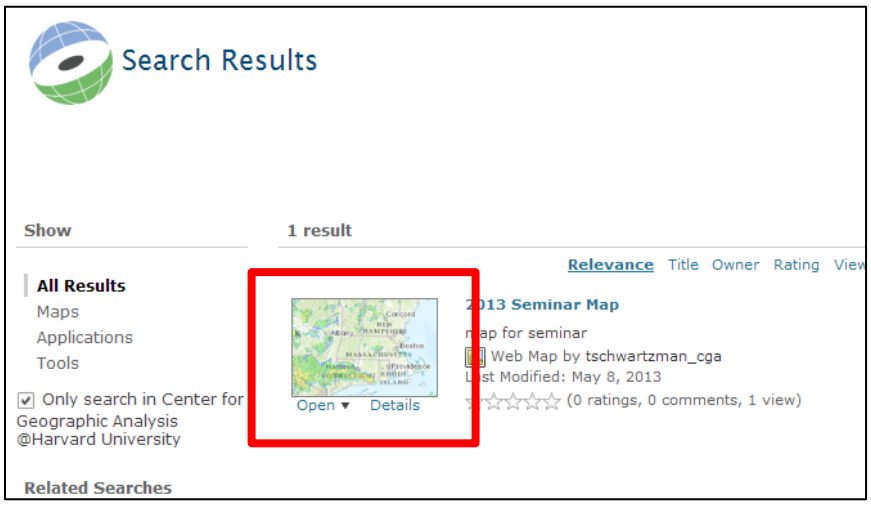
Part 1: Explore the Interface and Tools

Login to http://harvard-cga.maps.arcgis.com/ with the credentials supplied to you. This will bring you into the Harvard CGA organization site.

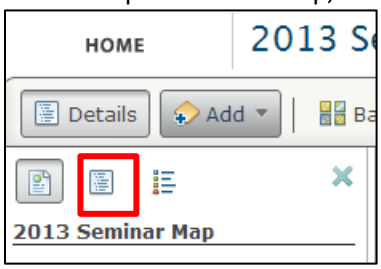
Search for content using the word “seminar” as seen below.

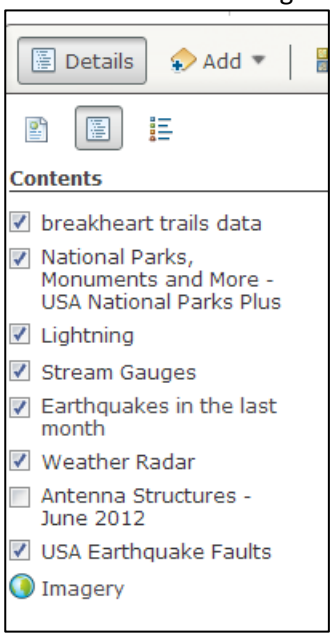


In the results shown, click on map to open it.

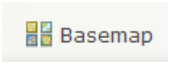


In the left panel of the map, click on the middle button to give you a list of layers in the map.

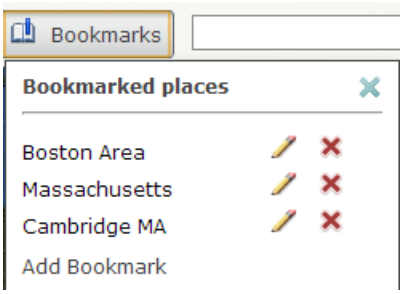




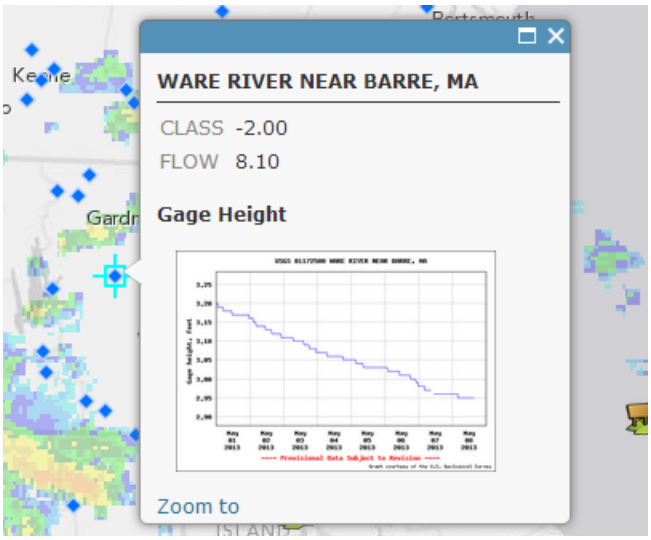
This map has a variety of layers from a variety of sources, some of which only draw when zoomed in. Take this opportunity to move around the map by using the zoom slider, your mouse and mouse wheel, and also to search for a place to zoom the map to it using the search box.

Try changing the basemap by clicking on the basemap button. 

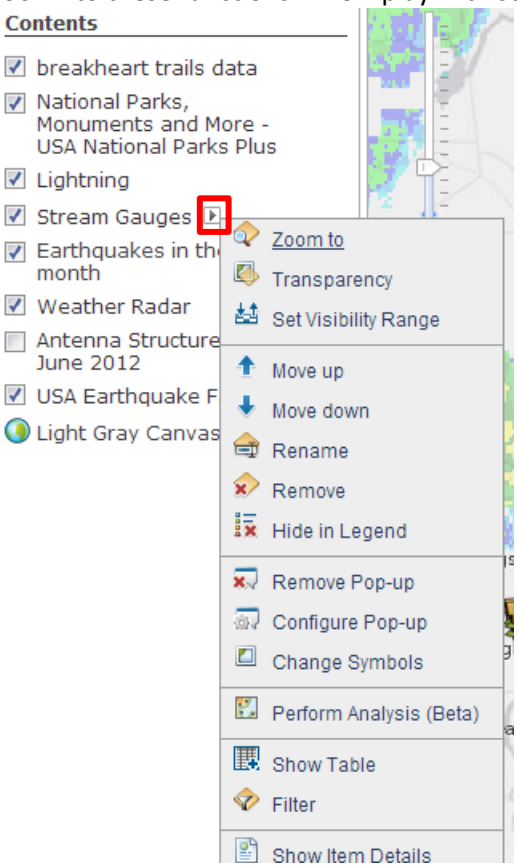
You can get back to some familiar locations using bookmarks – a few have been set up already but you can add more.



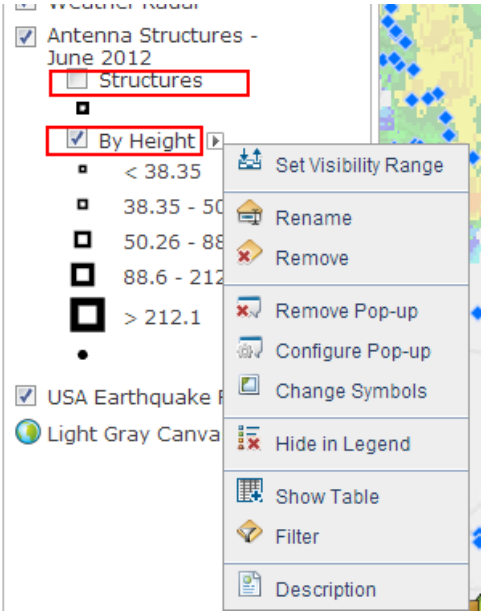
Let's use one of the above bookmarks to zoom in to Massachusetts. You should see some more layers appear – we'll focus on the blue dots, which are USGS stream gauges. Take a minute to click on one of the gauges (blue dots on the map) and you will get a popup with information about that gauge. The graph you see is coming live from the USGS site. If you click the graph, you will be taken the USGS site for this gauge.



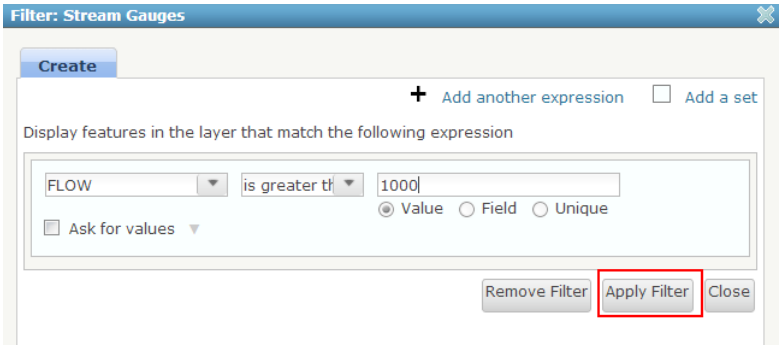
Hover over a layer in the Contents tab, and you should see a small arrow appear at the end of the layer name. If you click this, you will see options for this particular dataset. Here you can set transparency of the layer, change the layer order, rename, remove the layer, and other functionality. Take some time to look into these functions – we'll play with some of them in the exercise.



Some layers have multiple sublayers in them, for instance the Antenna Structures has two as seen below. You can set some properties for each sublayer individually and some properties for the group as

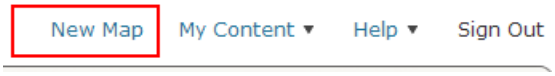
a whole. 

Let's add a filter to the stream gauges layer. A filter will limit what features are shown on the map. Choose "Filter" from the menu for this layer and you should see a dialog like the one below. In this dialog, build a query that says "Flow is greater than 1000". Apply this filter. Once the filter is applied, you should see fewer gauges on the map.



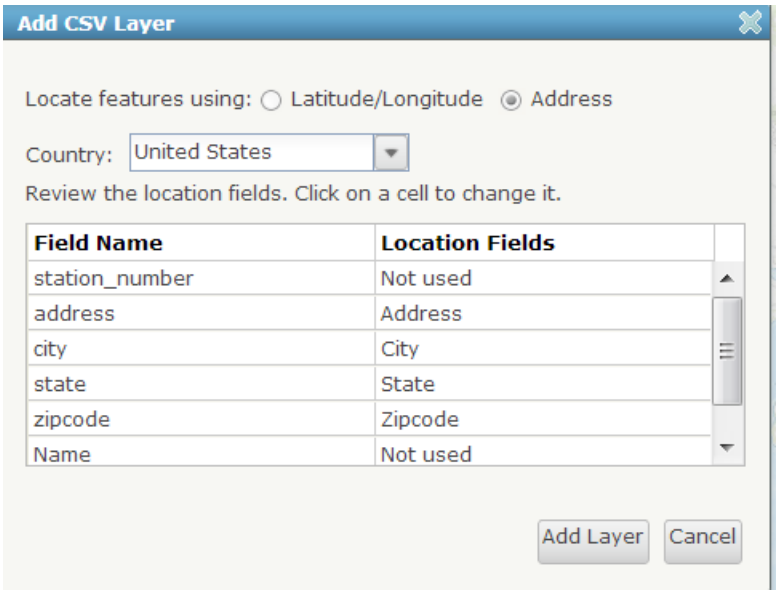
Part 2: Make A New Map

Click on the “New Map” button at the top of the map window. Don’t worry about saving the existing map.



Find the fire-stations-comma-delimited.csv file on your hard disk in the c:\seminar2014 folder – open it in excel and have a look. It contains addresses of fire stations in Cambridge.

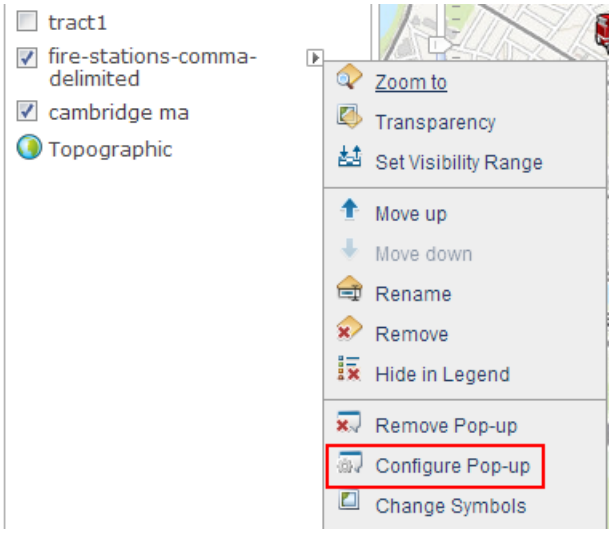
If you are running Chrome or Firefox, you can drag-and-drop this file from Windows Explorer right onto the map and you will be asked how ArcGIS Online should geocode the file. You can take the defaults and hit the add layer button at the bottom. If you are running IE, you will need to pull down the “Add” menu and choose “add from file” and then navigate to this csv file on your hard disk.

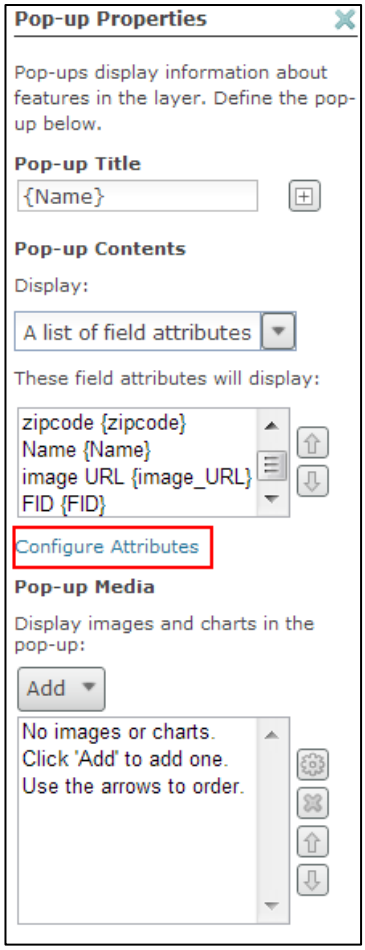


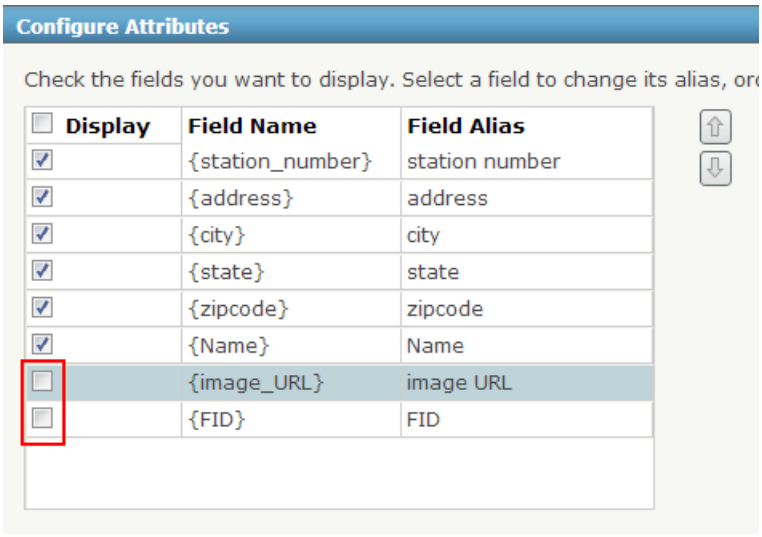
You should see a map of Cambridge with dots representing the fire stations.

Take a few minutes to change the symbols (layer menu->change symbols) to something you like, perhaps a fire truck symbol under the Safety-Health symbol group.

Next you will configure the popup by selecting some fields for display. First bring up the “Configure Popup” dialog and then choose the “Configure Attributes” link below. You can see in the list of fields we’ve chosen to hide a few.



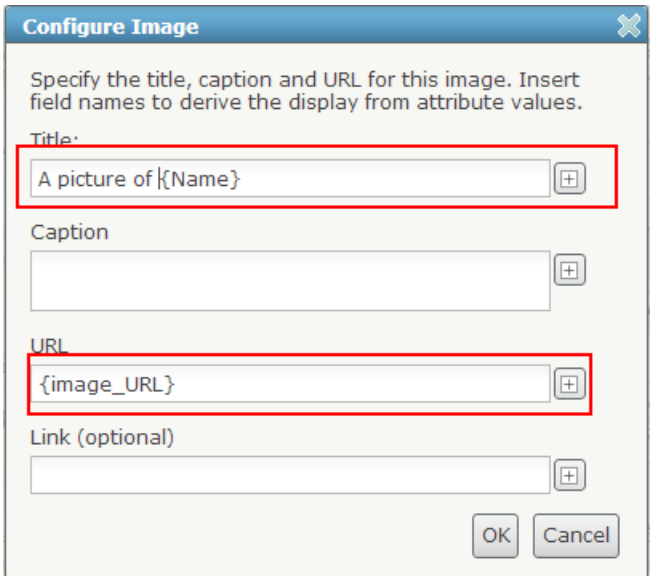




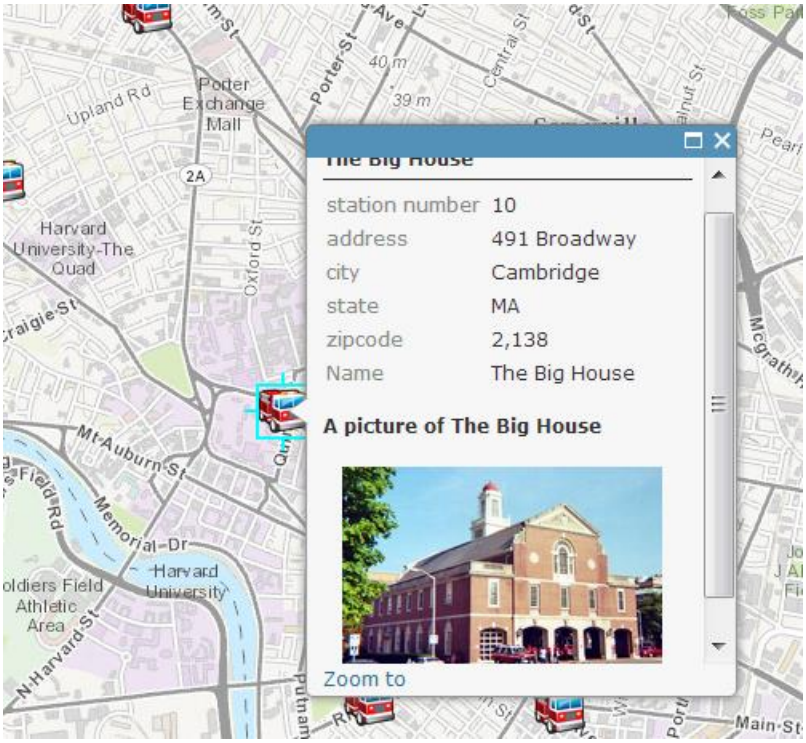
Now you will add an image using the link in the image_URL field.

Click the Add link under Pop-up media, choose image, and fill out the dialog. The only thing needed is the URL – we will get this from the field called image_URL. You can insert this by clicking on the + button next to the URL dialog. Feel free to fill in a title if you like. The names in curly braces tell the popup to substitute the value from the attributes of the feature – below we are using the {Name} and

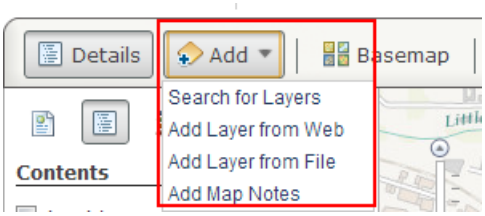
{image_URL} values:



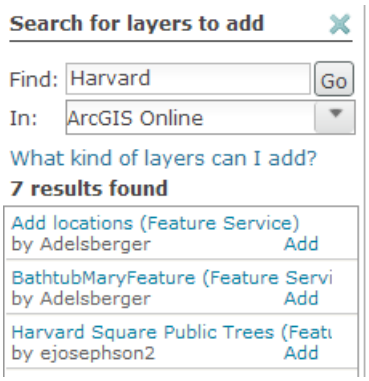
Make sure to click the “Save Pop-up” button after you are all done, and now try clicking on the various firestations in town (only the one near Harvard Square has an image).



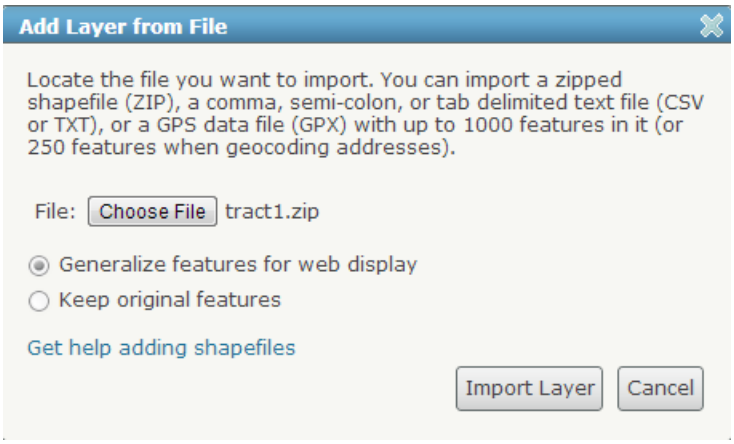
Using the "Add" button to add other layers:



Under the "Add" -> "Search For Layers", try searching ArcGIS Online using the keyword Harvard, and pick a layer from that list (e.g. Harvard Square Public Trees").

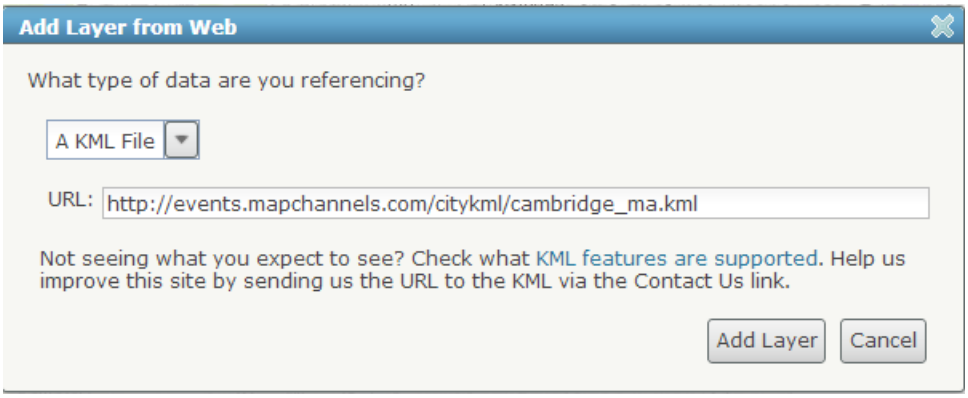


Under the "Add" -> "Add Layer From File", choose the file called tract1.zip in your c:\seminar2014 folder. This is a zipped up shapefile of census tracts for the area. Once it's loaded, play with the symbology - draw it based on a numeric census attribute (families, or median age etc).



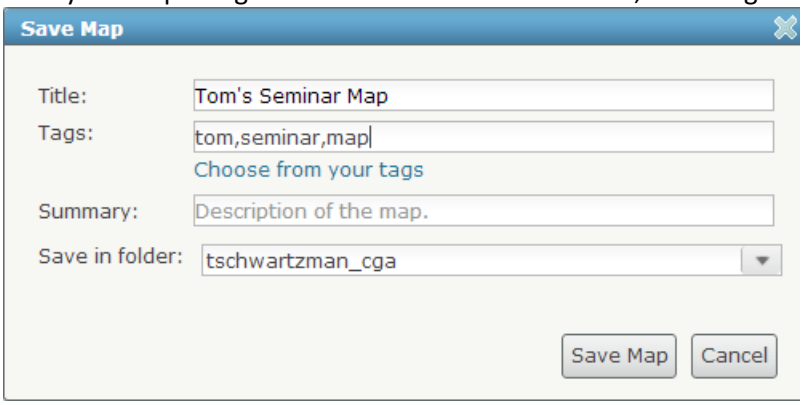
NOTE: the files you add directly to the map (shapefiles, csv, gpx) live in this map only. While you can share the map with others, the features you have uploaded cannot be reused in other maps unless you upload them again to that map. Later on, we'll see how we can upload a layer to share with others.

Under the "Add" -> "Add Layer from Web" dialog, choose the type of "KML File" and try this link:
http://events.mapchannels.com/citykml/cambridge_ma.kml



Congratulations – you've just added a few different kinds of content to your map.

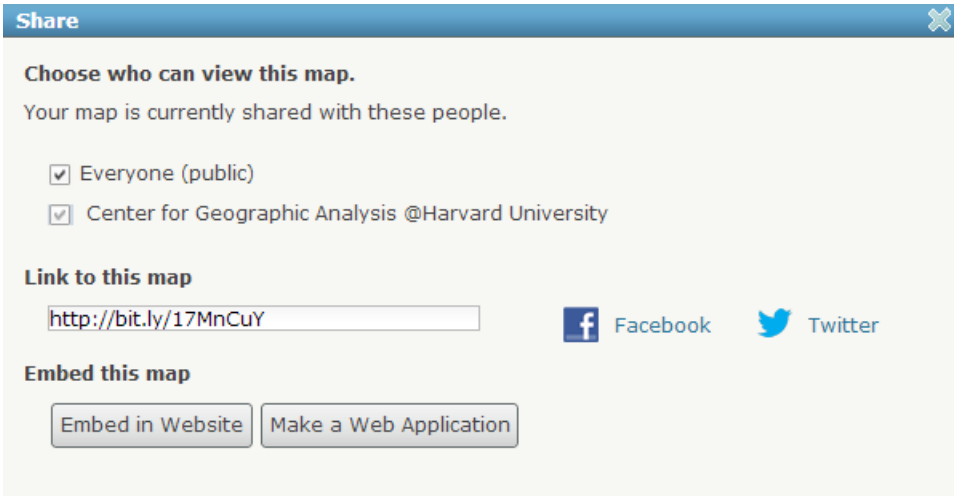
Save your map using the "Save" button. Give it a title, some tags for searching.



Part 3: Sharing Your Map

And now share your map. We can choose who to share it with – Everyone (public), members of the organization (CGA), groups I belong to or just me.

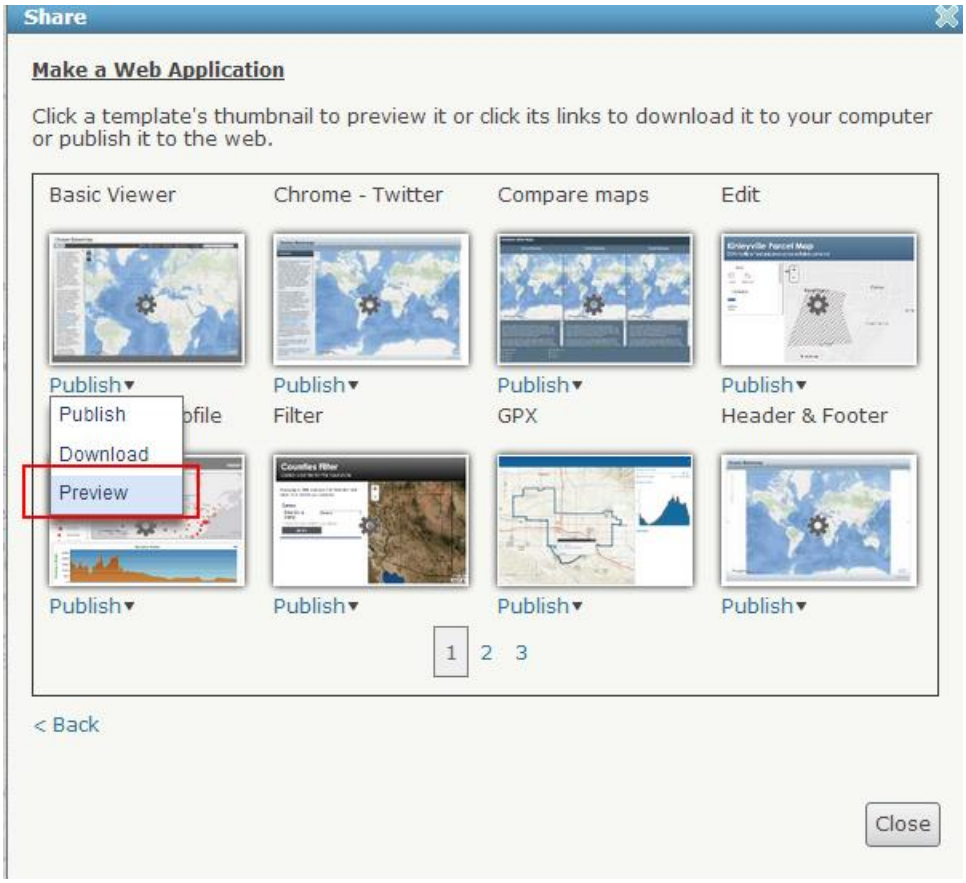
Choose the "Share" button – make this map available to the world by clicking on "Everyone".



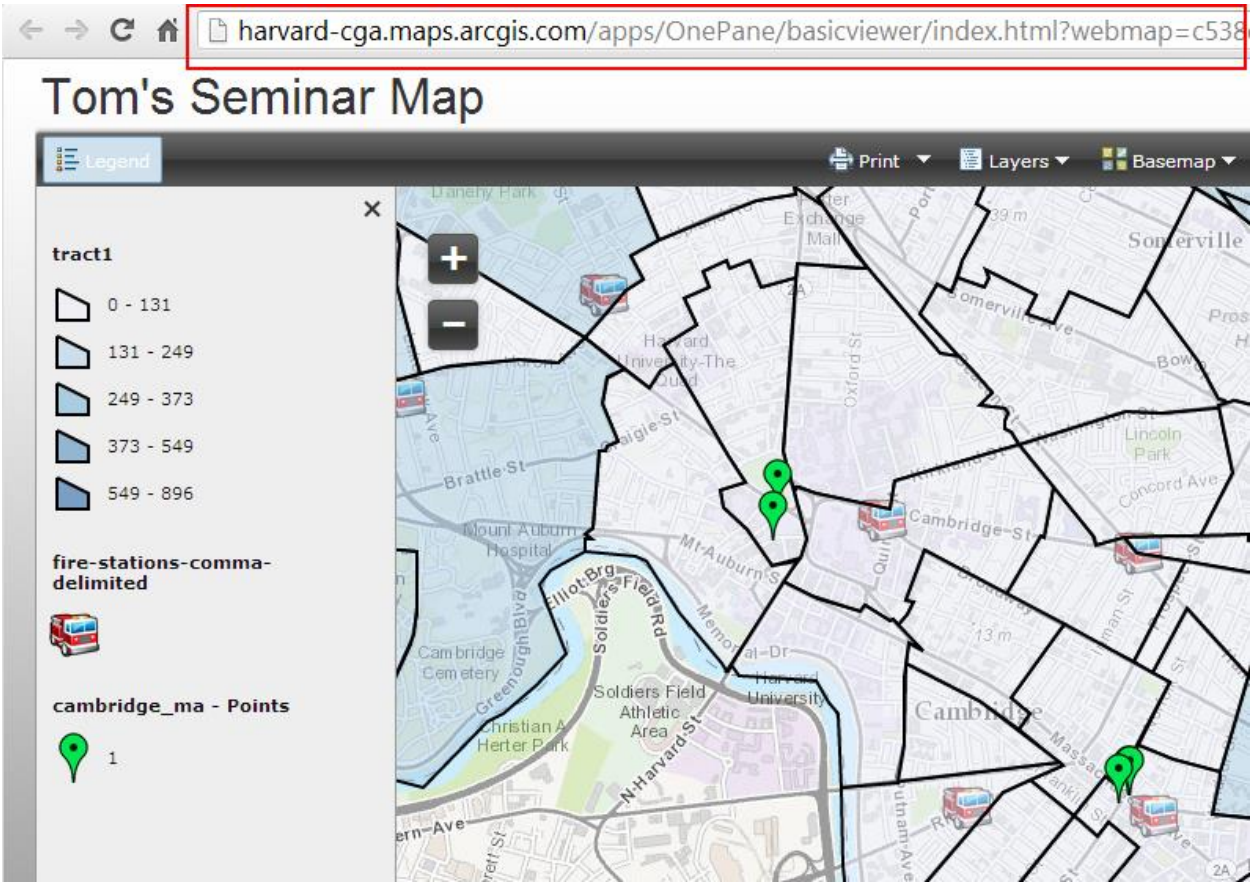
You can email the link to someone so they can view this map, or you can post it to facebook or tweet it.

More interesting is to make a web application out of it by clicking the “Make a Web Application” button.

Here you will see quite a few templates you can choose from to wrap your map up for viewing – let’s choose the Basic Viewer, and let’s preview it:

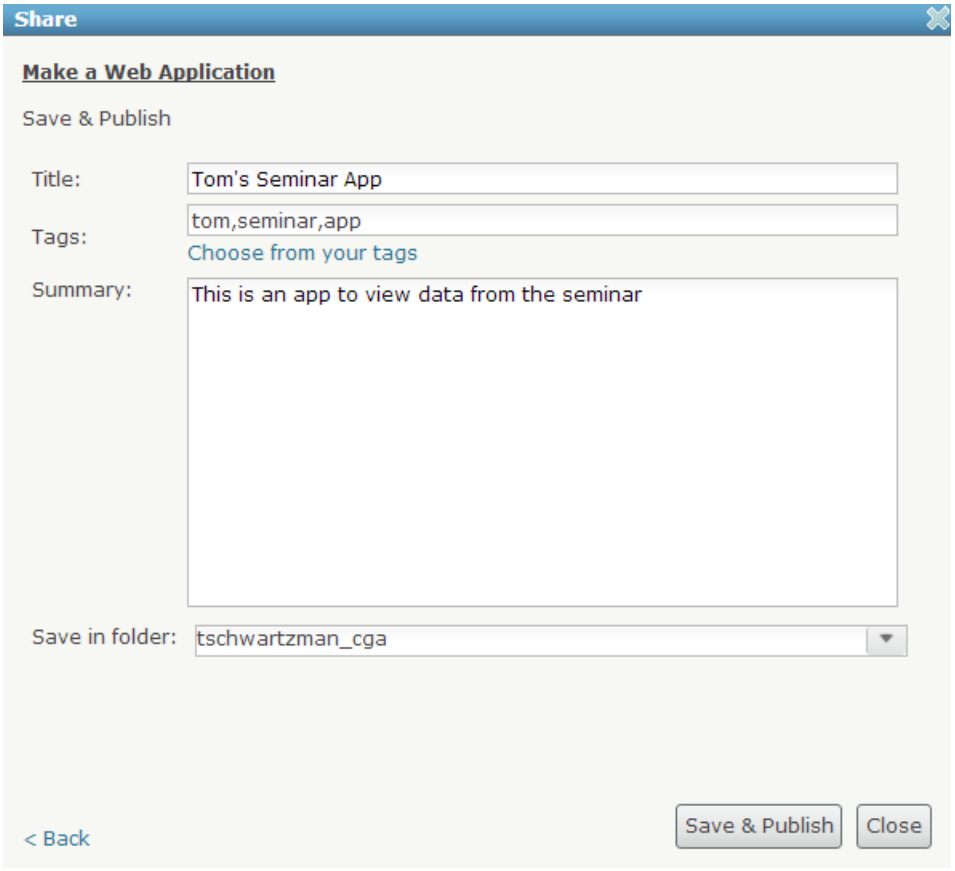


The result is an app that is a little simpler and a little more user friendly. You can pass this URL out to friends.

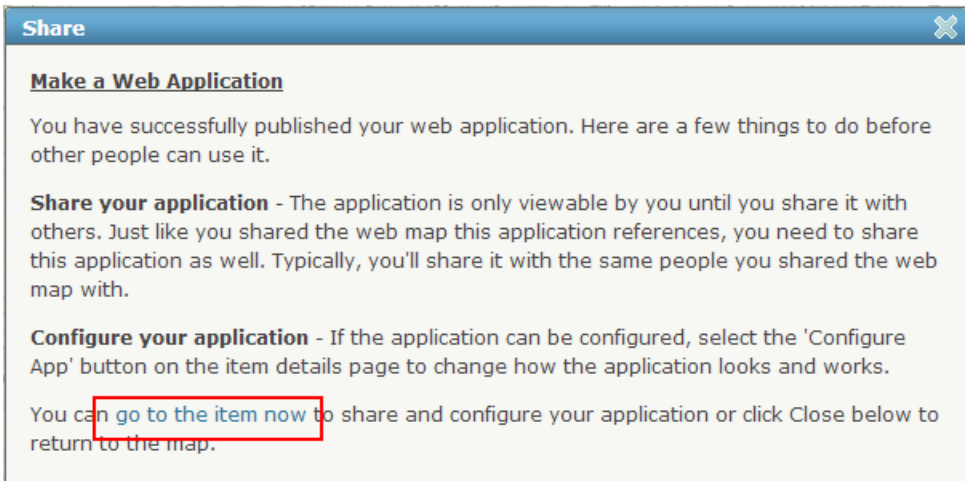


This particular template is a configurable one, so you can publish this and then change some of the look-and-feel.

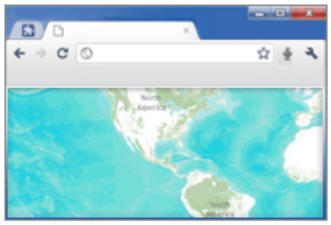
Instead of choosing preview, let's choose Publish and fill out that dialog..



Click on the link highlighted below to configure this app. Here you can set sharing (everyone) and also by clicking on the "Configure App" button you can change some of the behavior of the app. Play around with the configuration to hide certain tools or change the background color.



Tom's Seminar App



This is an app to view data from the seminar

Web Mapping Application by tschwartzman_cga

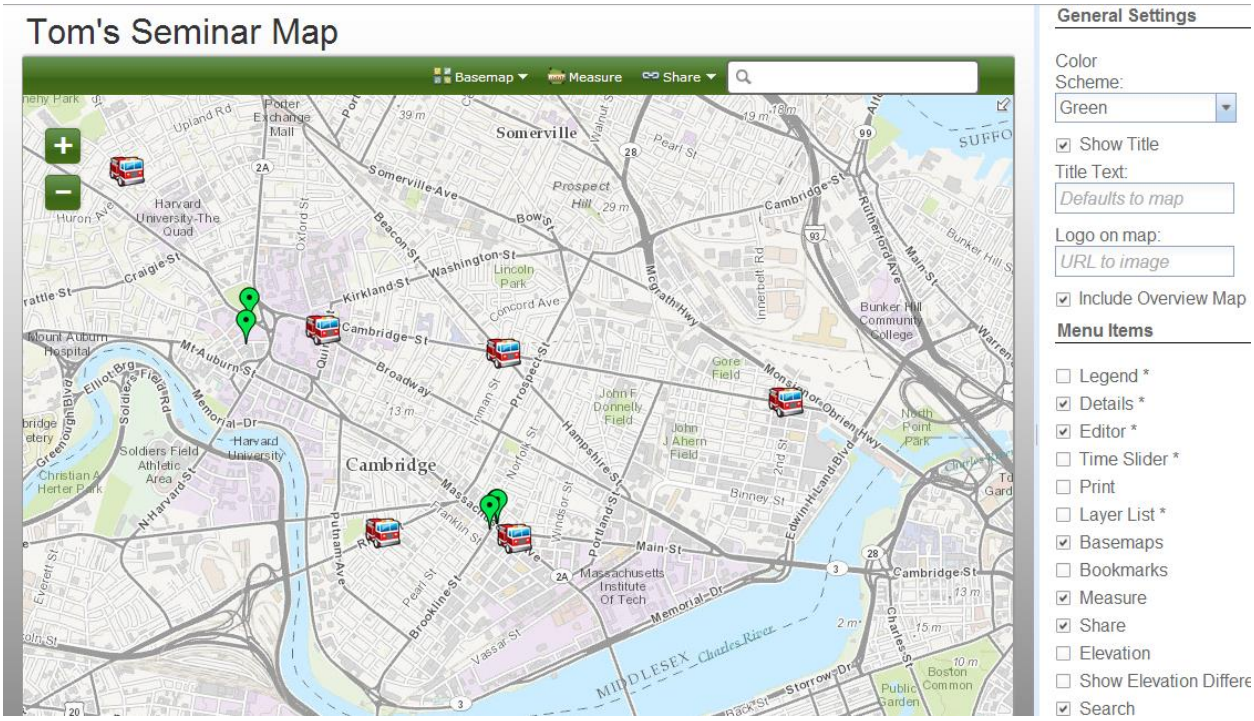
Last Modified: May 8, 2013

(0 ratings, 5 views)

Facebook Twitter

Open | Share | Edit | Delete | Move | Attach Code | Configure App

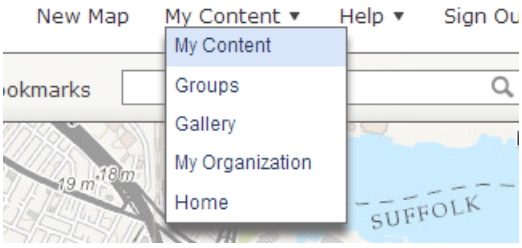
Description



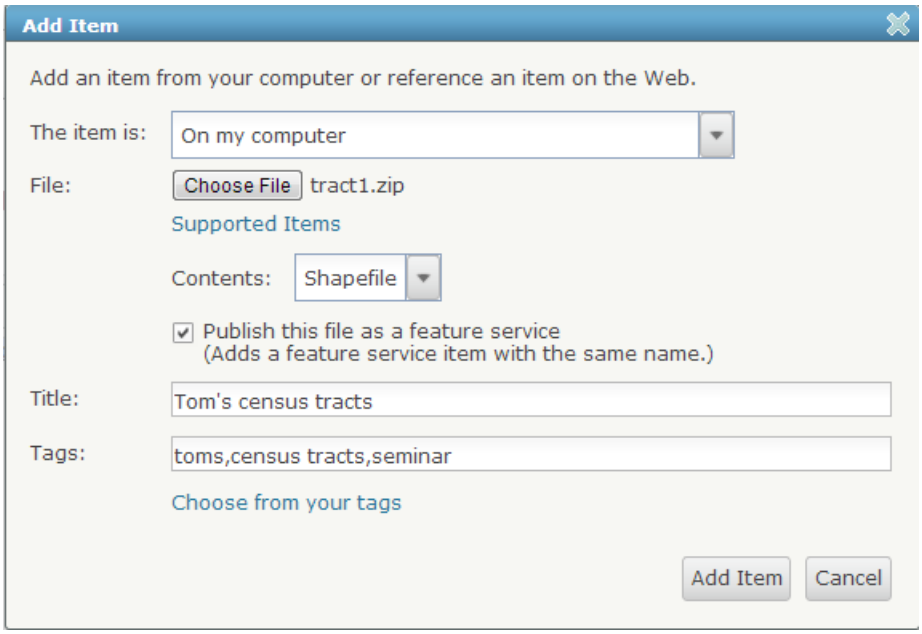
Part 4: AGOL Hosting Data

As mentioned earlier, shapefiles and csv/txt/gpx files you add directly to a map are available only to that map. To use them in other maps you would have to upload them again. We can make them available to others by uploading them to ArcGIS Online and allowing ArcGIS Online to host them for us.

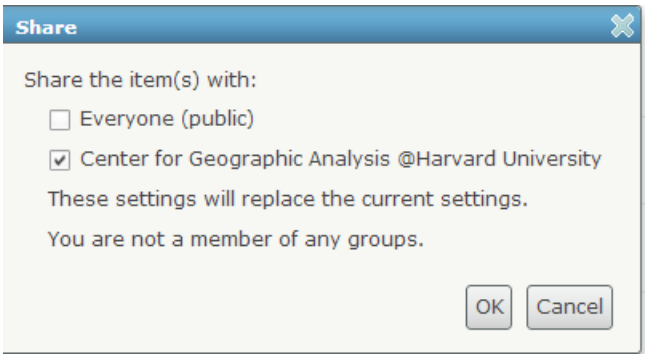
Let's try it. Click on the "My Content" link at the top of the site and choose "My Content"



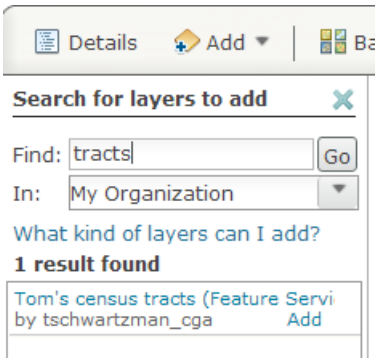
Now choose to add an item from your computer, and navigate to the file that has the data you want to share, for instance the Cambridge Fire Stations or census tracts. Below we've chosen the tract1.zip file (zipped up tracts shapefile), and have made sure to keep the checkbox checked that says to publish this as a feature service.



Choose who you want to share this with by clicking the Share button. You may be a member of groups within the CGA organization, and you can limit access to certain groups, the organization as a whole, or the public.



Now, this layer is available to everyone in the CGA organization and can be found via a search in the map viewer or even just in the organization.



NOTE: You can also push data to AGOL for hosting from ArcMap 10.2.x. While we don't have time for this in the exercise, you are encouraged to play with this sharing option if you are an ArcMap user.

Congratulations! You've published a map, and along the way learned how to consume data from many different sources, configure and share maps and apps.

There is plenty more to ArcGIS Online and you are encouraged to explore on your own.

Check out the online help, the ArcGIS Resources website (http://resources.arcgis.com), and Esri's training website for more information.