

Getting Started with ArcGIS Developer Subscription for Journalism Students

Despite the name, you do not need to be a developer to sign up for the ArcGIS Developer Program. It gives you access to all the mapping, analysis and data management features of [ArcGIS Online](#) and premium content in the [ArcGIS Living Atlas of the World](#), in addition to a set of development tools.

The free Essentials subscription includes 50 Service Credits per month for you to use to host data, perform analysis, geocode and/or generate directions. (See <https://developers.arcgis.com/pricing/credits/> for a breakdown of credit cost. If you are simply hosting a small amount of data, no more than a few MBs, and creating maps, you likely will not need to worry about credits. However, if you do use up all your credits, for example, by geocoding data, enriching features, or using other analysis tools, you will have the option to purchase a deployment plan or wait until your monthly renewal.)

The Essentials subscription also includes your own, personal ArcGIS Online organization, with a URL in the form <shortname>.maps.arcgis.com, where you can create, test and share your web maps and web apps. You will set the short name when you create an account.

This tutorial will guide you through the process of creating your account, uploading a shapefile to your organization, and creating and sharing your first map.

Step 1: Sign Up for the ArcGIS Developer Program

1. Go to <https://developers.arcgis.com/>.
2. Click **Sign Up for Free**.
3. Fill in the form, review and accept the [Terms of Use](#) and [Privacy Policy](#), and **Send Confirmation Email**.
You may also want to read the [Terms of Use FAQ](#), which explains the key terms in plain English. In particular, note that with the free Essentials subscription, you are not allowed to generate revenue from your maps or apps or use them for government or business purposes.
4. Once you've received the confirmation email, click on the link it contains to activate your subscription. You will need to choose a username and password for your account. Usernames must be unique throughout the ArcGIS domain and can contain only alphanumeric characters and a few special characters (. _ @). You can use your email address as your username.
5. Choose an **ArcGIS Online Name** for your organization and a short name for the **ArcGIS Online URL** to complete the activation.
The organization name will appear on your organization's homepage and can be anything you like. The short name must be 4-16 characters and can include only lowercase letters, numbers and dashes (-).

You are almost ready to finish activating your ArcGIS Developer Subscription. We just need a few details from you.

ArcGIS Online Name

This will be displayed on your ArcGIS Online homepage.

ArcGIS Online URL
 .maps.arcgis.com

This will be your ArcGIS Online homepage. 4-16 characters, lowercase letters, numbers and '-' only.

A green check-mark means that the short name is valid and available.

Commented [KA1]: This is how it looks when a developer subscription is activated from within My Esri. I'm not 100% sure it looks the same when signing up through the site but it should be similar...

Once your organization is set up, you can access it in a few different ways:

- Sign in with your username and password at <https://developers.arcgis.com/>, select **Password and Profile** from the drop-down menu at the top right and click on the Account URL Path.
- Sign in with your username and password at <http://www.arcgis.com/index.html>.
- Sign in with your username and password at the ArcGIS Online URL you chose when you activated your subscription.

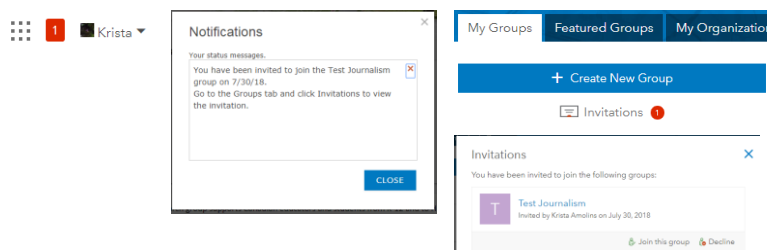
Step 2: Create a Group to Share Your Work

ArcGIS Online [groups](#) are a way to organize content and share it with specific individuals. Even if you choose to share all your content with the public, sharing it to a group will make it easier for you and others to find.

1. Sign in to your organization, if necessary.
2. Click on **Groups** in the menu bar.
3. Click **Create New Group**.
4. Enter a **Group Name**; comma-separated **Tags** that describe the group; and optionally a **Summary**. Leave the default options for all other fields. Click **Create Group**.
5. On the group details page, click **Invite Users**.
6. Uncheck the box beside **Only search for members in My Account**. Enter a name or keyword to search for the users you want to add to your group. Only users who have made their profiles visible to everyone (public) will appear in the search results. If you do not see the user(s) you want to add to your group, ask them to make their [profiles public](#), at least long enough for you to invite them.

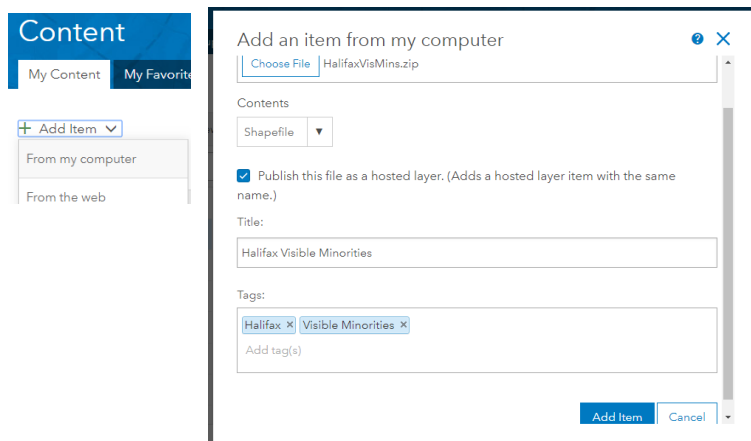
Alternatively, [edit the settings of your group](#) so that everyone can find it and can request to join, then let others know you would like them to join your group.
7. Click on a name in the **Users** list on the left to add the person to the **Invitation List**. Click **Send Invitation** when you are ready to invite users.

The users you invite will see a red notification badge at the top right of the browser the next time they sign in to ArcGIS Online and when they go to the Groups page, they will see that they have an invitation waiting. When they click on the invitation, they will have the option to either join the group or decline the invitation.



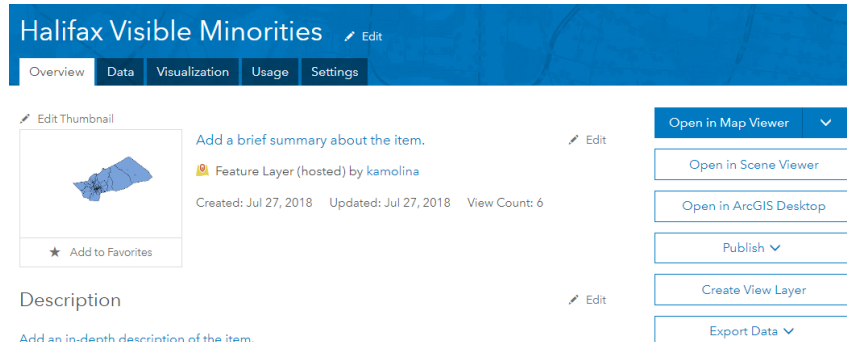
Step 3: Upload a Shapefile to Your Organization

1. Sign in to your organization, if necessary.
2. Click on **Content** in the menu bar.
3. Click **Add Item > From my computer**.
4. Click **Choose File**, then browse to and select the zipped shapefile you want to upload.
5. Make sure **Contents** is set to **Shapefile** and **Publish this file as a hosted layer** is checked. Change the **Title** to something short but descriptive. Add comma-separated **Tags** to describe the data. Click **Add Item** (you may need to scroll down).



6. Optional. Once the hosted feature layer has been created, you can edit the summary, description, and other information on its item details page.

- Click on **Share** on the item details page and check the box beside the group you created in Step 2, then click **OK**. This will make the layer visible to all the members of that group.



Step 4: Adding Data to a Map

Maps can contain many different layers from many different sources. For the purposes of this tutorial, you will only be adding the shapefile you uploaded in the previous step to your map. To learn about other types of layers you can add and how to find and add them, see the ArcGIS Online Help page [Add layers](#).

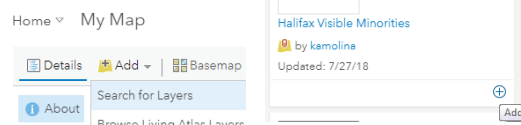
There are two ways to add a feature layer to a map.

Option A: Add the feature layer from its item details page:

- On the item details page, click **Open in Map Viewer**.
Note: this will add the layer to an existing map if you have already started one. To add the layer to an empty map, click the down arrow beside Open in Map Viewer and choose **Add to new map**.

Option B: Add feature layer from the Map Viewer:

- Click on **Map** in the menu bar.
- Click **Add > Search for Layers**.
- Find the layer you want to add in the list and click **+**.
- Click **←** at the top of the search pane to close it.



If you have more than a few items in your content, or if you are searching for layers in Living Atlas or ArcGIS Online, you will need to enter a search term and/or apply filters to narrow your search results. See the [Search for layers](#) section of the Add layers help page for more information.

- Click **Save** above the map and choose **Save**. Enter a **Title** and **Tags** then click **Save Map**.

Step 5: Changing the Layer Style

A map can tell many different stories depending on how the data are styled. The ArcGIS Online Map Viewer applies smart mapping to help you create beautiful and informative maps but it is still up to you to decide which attributes you want to show and how you want to symbolize them. Read [How to Smart Map](#) to learn more about smart mapping.

- Optional. Click on **Basemap** and choose a different basemap.
The basemap is the background for your map. Some of the basemaps in the gallery, for example, Imagery and Topographic, contain details that provide the viewer with additional geographic information such as the location of buildings and parks. Others, such as Light Grey Canvas, simply provide the viewer with basic geographic context. You should choose a basemap that complements your data and what you are trying to show.
- Pan (click and drag) and zoom (use the mouse scroll wheel or + and – buttons on the map) and/or hover over the layer in the **Contents** pane, click ⋮ (More Options) and select **Zoom to** so that the data are visible within the map extent.

- Hover over the layer in the **Contents** pane and click  **Change Style**.

- Choose an attribute to show** from the drop-down menu. If you want to visualize the data using more than one attribute, click **Add attribute** and select another attribute.

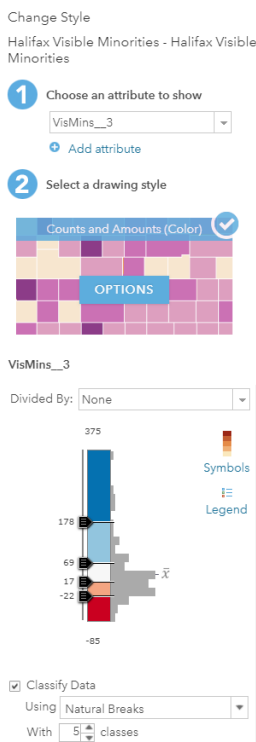
- Click **Select** to change the drawing style and/or **Options** to customize the colours, symbols, and other style options.

The available drawing styles will change depending on the type of attributes. See the [Change style quick reference](#) guide for a list of available styles and what types of questions they can answer. In the example at right, the attribute VisMins__3 is chosen as the attribute to show. (Note: When creating data, best practice is to use attribute names that describe the attribute so that you and others can understand what is being drawn.) The selected drawing style is Counts and Amounts (Color). The data are classified into 5 classes using the Natural Breaks method and a colour ramp symbol is chosen that emphasizes the values above and below average.

- Try different style options, different drawing styles, showing different attributes and, depending on your data, showing more than one attribute until you find a style that you think viewers will be able to understand.

Exploring all the different ways to style data is beyond the scope of this tutorial. You can find additional tutorials and other resources on Smart Mapping at <https://www.esri.com/en-us/smart-mapping> and <http://hed.esri.ca/resourcefinder/#/search=smart/lang=en>.

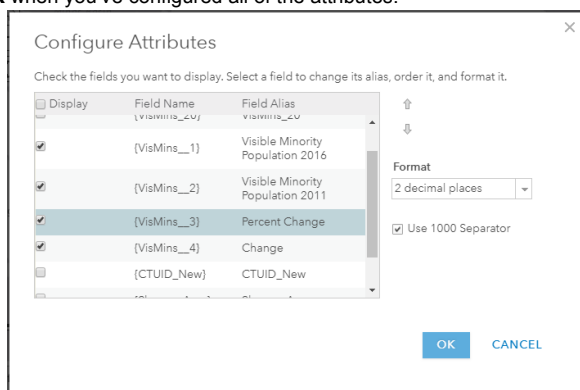
- Save** the map.



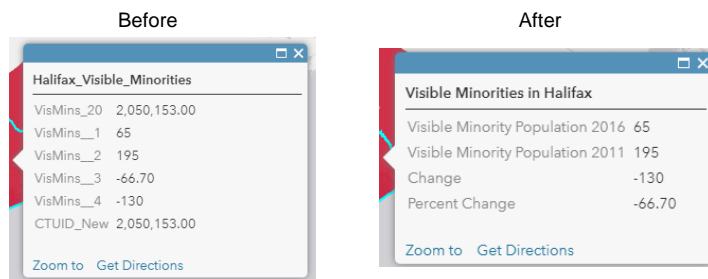
Step 6: Configuring Pop-Ups

Pop-ups appear when a viewer clicks on a feature on the map. They can provide the viewer with additional information about the feature – but only if they have been properly configured.

1. Hover over the layer in the **Contents** pane, click ⋮ (More Options) and select **Configure Pop-up**.
2. Remove any underscores and make any other edits in the **Pop-up Title** so that it is readable.
3. Click **Configure Attributes**.
4. Uncheck the **Display** box for any fields that contain IDs and any other information that is not relevant to your intended audience.
5. Change the **Field Alias** for all the fields that do not already have a meaningful alias. If you don't know what the data in a particular field represent, uncheck the Display box because your audience also won't know! Change the number of decimal places for any numeric fields, as needed. You can also re-order. Click **OK** when you've configured all of the attributes.



6. Click **OK** at the bottom of the **Configure Pop-up** pane to apply your changes.



Another option for configuring pop-ups is a custom attribute display. This option allows you to add and format text and include images. You can also add charts to your pop-ups to illustrate field values. See [Configure pop-ups](#) for more information.

Step 7: Embedding Your Map in a Website

All of the data, maps and apps that you create are private by default. You have the option to share them to a group, so that people in the group can see them, and/or share them with the public, so that everyone can see them. If you are sharing an item (app or map), then any items it contains (maps or data) must be shared in the same way or more openly. In other words, if you are sharing your map with a group, then any data it contains must also be shared with that group or with everyone. ArcGIS Online will usually warn you if this is not the case and give you the option to update sharing.

1. **Save** your map.
2. Click **Share**.
3. Check **Everyone (public)** and optionally any groups you want to share with. If a window pops up warning you that layers are not shared in the same way, click **Update Sharing** to make the layers public.
4. Click **Embed in Website**.
5. Set the size of your map, check the box to display the **Legend** and choose which other elements you want to display.
6. Click **Copy** to get the HTML code you will need to embed your map in a website. If you aren't ready to use it, you can save it in a text file.

In addition to embedding a map in a website, ArcGIS Online includes over two dozen configurable web app templates that present your map(s) in different ways. Click on Create a Web App to explore the available options and see [Choose a configurable app](#) to learn more about the different templates.

Resources

General

- ArcGIS Online Resources
<https://www.esri.com/en-us/arcgis/products/arcgis-online/resources>
- Item details
<http://doc.arcgis.com/en/arcgis-online/manage-data/item-details.htm>
- Get started with maps
<http://doc.arcgis.com/en/arcgis-online/get-started/get-started-with-maps.htm>

Uploading a shapefile

- Add items
<http://doc.arcgis.com/en/arcgis-online/manage-data/add-items.htm>
- Publish a shapefile or GeoJSON file
http://doc.arcgis.com/en/arcgis-online/manage-data/publish-features.htm#ESRI_SECTION1_49CE0570C3BA4AD8BF2DB28929FF7280
- Manage hosted feature layers (advanced topic)
<http://doc.arcgis.com/en/arcgis-online/manage-data/manage-hosted-feature-layers.htm>

Creating a map

- Choose basemap
<https://doc.arcgis.com/en/arcgis-online/create-maps/choose-basemap.htm>
- Add layers
<http://doc.arcgis.com/en/arcgis-online/create-maps/add-layers.htm>
- Change style
<https://doc.arcgis.com/en/arcgis-online/create-maps/change-style.htm>
- Configure pop-ups
<https://doc.arcgis.com/en/arcgis-online/create-maps/configure-pop-ups.htm>
- Share maps
<https://doc.arcgis.com/en/arcgis-online/share-maps/share-maps.htm>

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