

Exporting GIS Data to Google Earth Using Arc2Earth

Arc2Earth is an extension that can be used to export files and information from ArcMap into Google Earth. Individual layers can be exported, as well as entire maps, and features such as Google Earth information buttons can be turned on so that attribute data from the layer(s) will display in Google Earth as a pop up window.

The Arc2Earth extension is available on computers 1, 13, and the TA machine.

To get started:

Open your map in ArcMap.

On the menu bar go to View → Toolbars → Arc2Earth

You should see this toolbar appear on your screen in ArcMap:



To Export an Entire Map:

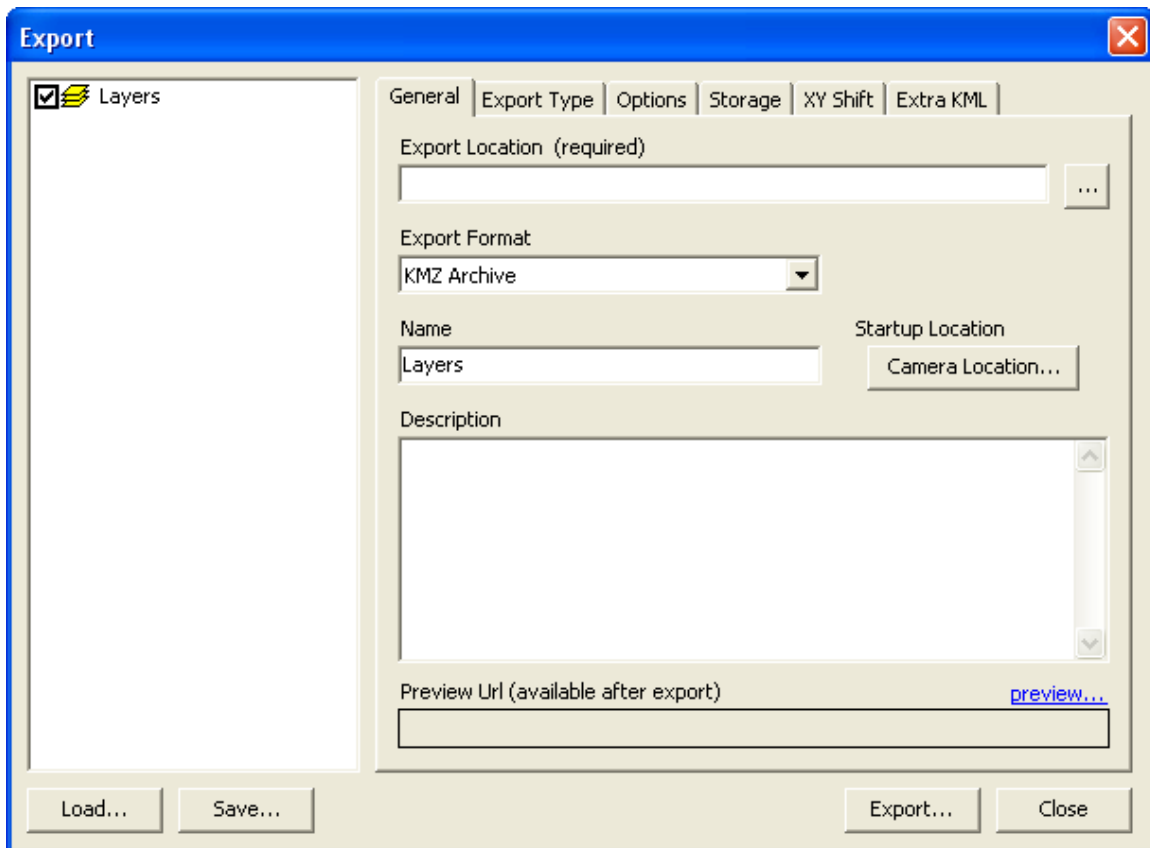
Exporting the entire map will typically work for maps with simple layer configurations.

If you need to include specific information for certain layers, or only need to export one layer, follow the instructions for exporting a single layer into Google Earth below.

(Individual layers can be exported separately to form one map in Google Earth).

- Go to the Export dropdown on the Arc2Earth toolbar and choose “Export All Layers (vector).” Note: Make sure that you have your layers in the order you would want them to appear in a legend and with the correct names. (You can alter the names of your layers in properties.)

- *This is the default screen:*



- The default options are generally correct, but look through them carefully.
 - A legend of all your layers will be created by default, unless that box is unchecked in the “Options” tab. You can preview your legend by clicking the Preview button.
 - If you have made graphics (such as labels) in ArcMap and you do NOT want them to transfer into Google Earth, uncheck the Include Graphics as a layer button in the “Options” tab.
 - Also take a look at the Export Type tab. “Export map as multiple layers” should be selected by default.
- To change the settings for a specific layer, click on the layer on the left side bar and check/uncheck the necessary boxes. Don’t forget to take a look at the other tabs (Labels, Info Window, Time Data, Regions, Extra Layer KML).
 - *Extrude features* can be used if the layer you are exporting has information about height (such as building height). This is found under the Layer tab when looking at a selected layer. This would make your buildings appear in 3D in

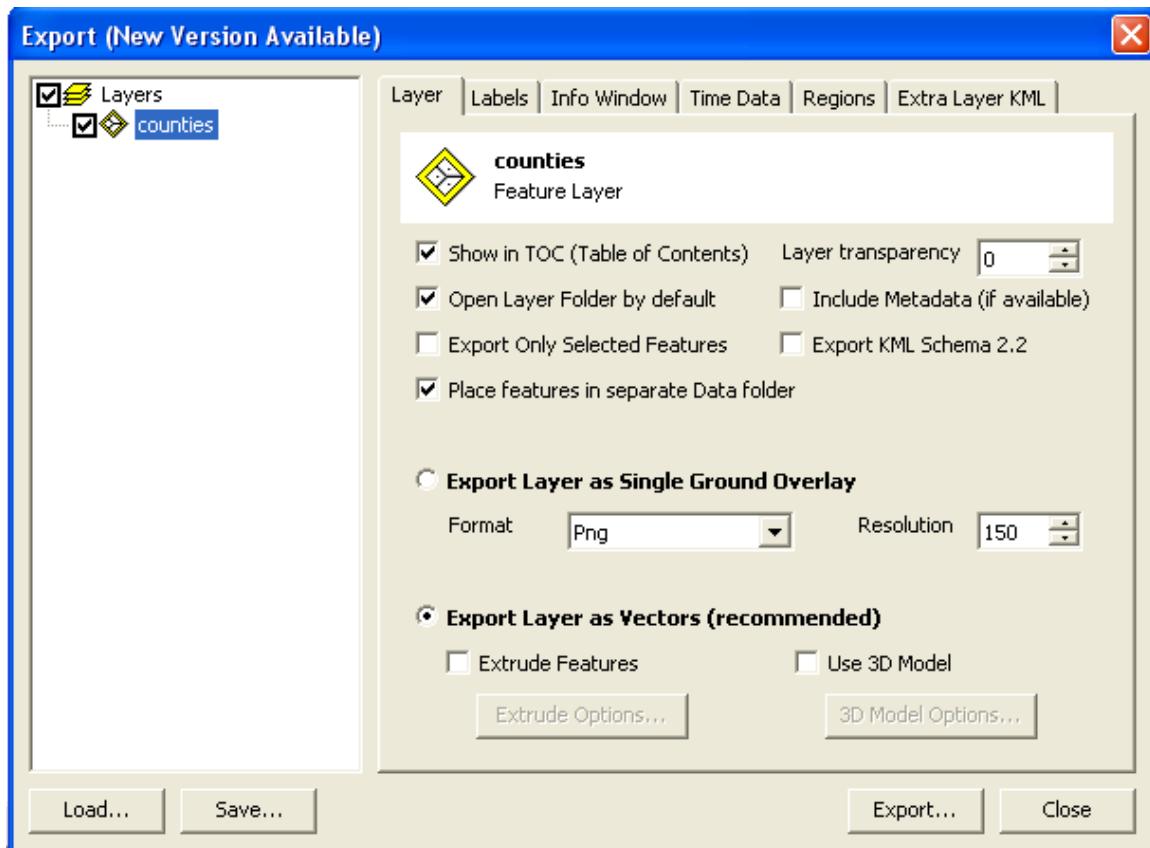
Google Earth. Go to extrude options and choose extrude feature based on attribute value, then select the appropriate field and measurements.

- *Create InfoWindow Balloons* will create buttons in Google Earth that can be clicked to display information from your attribute table. This is found under the “Info Window” tab when a particular layer is selected. If you need to change any field names, you can do this in the properties of the layer (fields tab) in ArcMap. The field is based on html, so it can be altered as needed once in Google Earth by going to the properties of the popup button.
- Once you have arranged the settings for the entire map and the layers, click the Export button.
- It may take a few moments for the map to export. When it finishes, click the “Preview” button to see your map in Google Earth. Once in Google Earth, details such as the size, color, and shape of information buttons can be changed (see below). There are more options for information buttons in Google Earth Pro which is on computer 1 and the TA computer in the GIS Lab.

To Export a Single Map Layer:

- Select the layer that you would like to export by clicking on its name in your ArcMap side bar. Go to the Export dropdown on the Arc2Earth toolbar and choose “Export Selected Layer (vector)”.

- *This is the layer default screen:*



- You will see boxes that can be checked in order to extrude features or create pop up info windows.
 - *Extrude features* can be used if the layer you are exporting has information about height (such as building height). This would make your buildings appear in 3D in Google Earth. Go to Extrude Options and choose extrude feature based on attribute value, then select the appropriate field and measurements.
 - *Create InfoWindow Balloons* will create buttons in Google Earth that can be clicked to display information from your attribute table. This is found under the “Info Window” tab when a particular layer is selected. If you need to change any field names, you can do this in the properties of the layer (fields tab) in ArcMap. The field is based on html, so it can be altered as needed once in Google Earth by going to the properties of the popup button.

- Once you have arranged the settings for the layer, click the “Export” button.
- It may take a few moments for the map to export. When it finishes, click the Preview button to see your map in Google Earth. Once in Google Earth, details such as the size, color, and shape of information buttons can be changed (see below). There are more options for information buttons in Google Earth Pro which is on GIS lab computers 1 and the TA machine.

Modifying Pop Up Windows in Google Earth

- ***Adding pictures to information buttons***
 - If you chose to create pop up information windows when you exported your information from ArcMap, a Data folder will be created underneath the exported layer in Google Earth. If you expand this folder you will see a long list of items (usually items are called “no name”). Each of these represents a single information button. If you click on one of the buttons on your Google Earth map, you will find that it is highlighted on this list.
 - To modify the size, color, or transparency of *all* of your information buttons, right click on the Data folder and choose Properties. In Properties you can change the size, color, shape, or transparency of your buttons.
 - To modify an individual information button, right click on that item under the Data folder. You can give that particular button a name in the top field and modify its size, color, etc. in the Style, Color tab.
 - The Description tab will contain html language that describes the information you brought in using ArcMap. In this display, you can add html language of your own to insert a picture that will be displayed when the pop up button is clicked on your map in Google Earth.
- To insert a **picture**:
 - Type the following sequence into the Description box:
 - `<description>Write a description of your photo here. <`


- Example : <description> Somerville Movie Theater <
 - Where it says to insert the location of your picture above, this could be a link copied and pasted from a website, or a saved location on your H: drive (don't use spaces). You can copy and paste the location of a picture file by going to it in MyComputer.
 - To enter a web link into the description box

Example:

<description>www.somervilletheatreonline.com<description>

Example of the pop info window with picture and web link:

Somerville Movie Theater



Address: 49 DAVIS SQ
 Owner: B F PROPERTIES
 Description: MOVIE THTR
 Land Value: 730800
 Build Value: 2440200
 Land Use: Commercial

www.somervilletheatreonline.com