

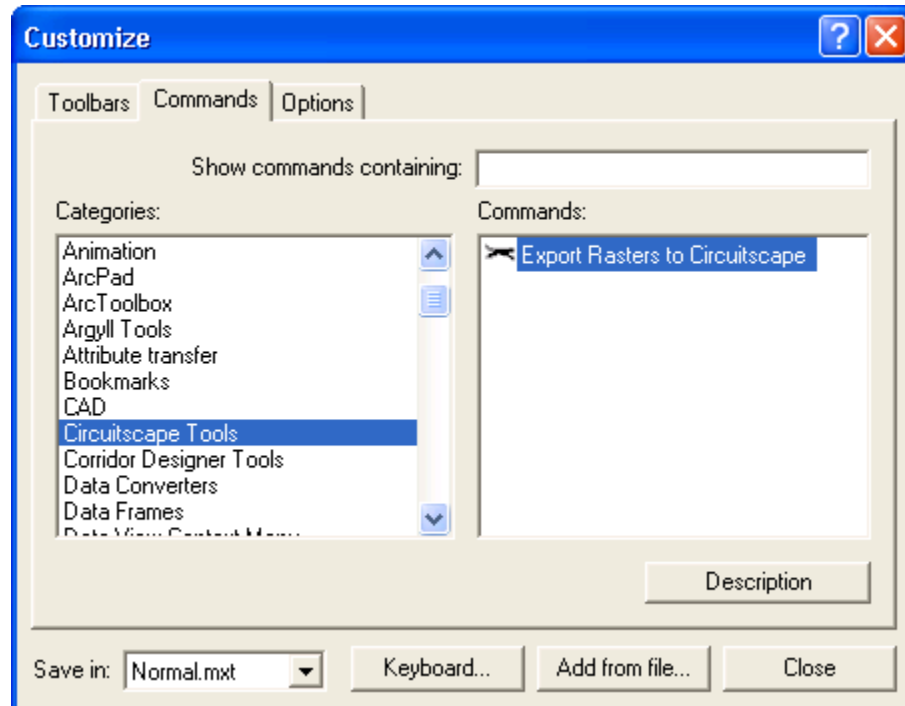
ArcGIS Export to Circuitscape Instructions




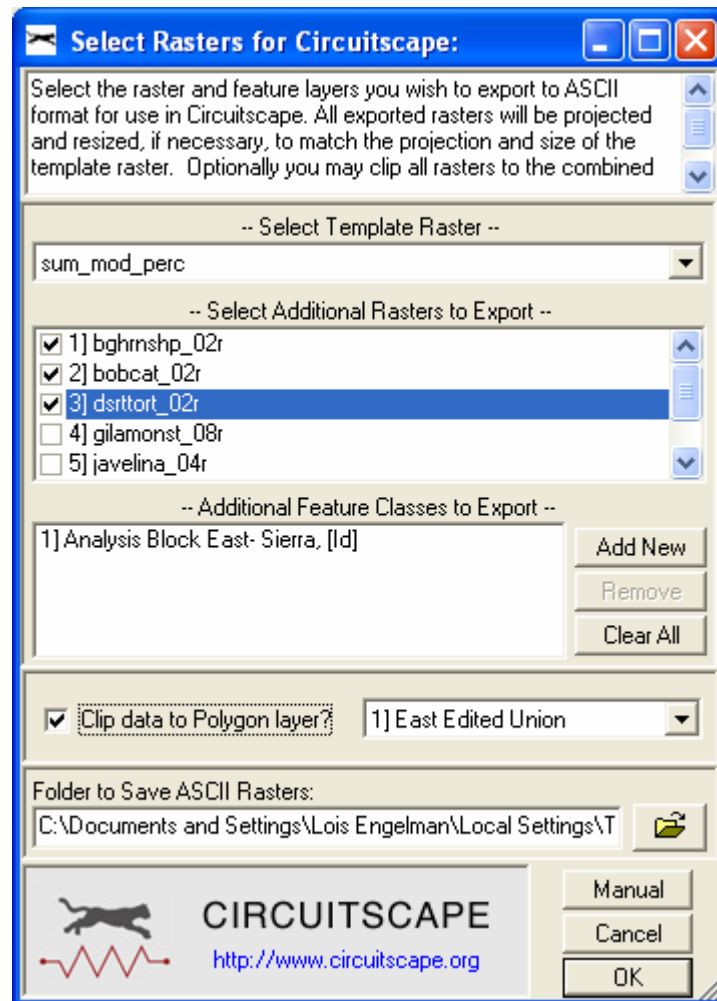
This tool will export ArcGIS vector and raster data into ASCII rasters, suitable for analysis in Circuitscape (see <http://www.circuitscape.org>). Circuitscape requires data in ASCII raster format, with identical cell sizes and extents, and with all datasets in the same spatial reference. This tool will reproject and resize all rasters to match a template raster, and export all ASCII rasters to a specified directory.

Optionally you may choose to export only those portions of a raster that lie within polygons of a polygon layer. This may be the case if you wish to analyze connectivity within a particular corridor polygon.

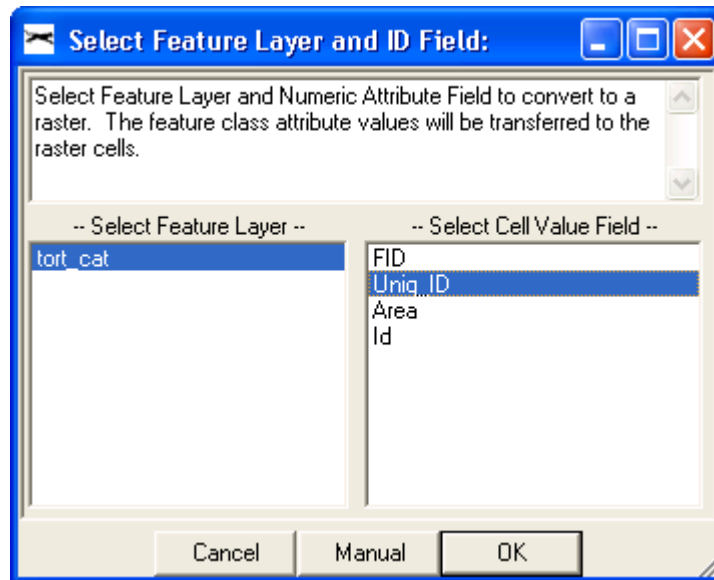
- 1) Make sure ArcGIS is closed.
- 2) Install the tool by running the file "Export_to_Circuitscape.EXE".
- 3) Start ArcMap.
- 4) Click the "Tools" menu, then "Customize".
- 5) In the "Customize" dialog, select the "Commands" tab and then select the category "Circuitscape Tools".
- 6) Drag the command named "Export Rasters to Circuitscape" somewhere on an existing toolbar.
- 7) If you want this tool to always be available when you open ArcMap, then set the "Save in:" option to "Normal.mxt". If you want this tool to only be available in this particular project, then set the "Save in:" option to be the name of your current MXD file.



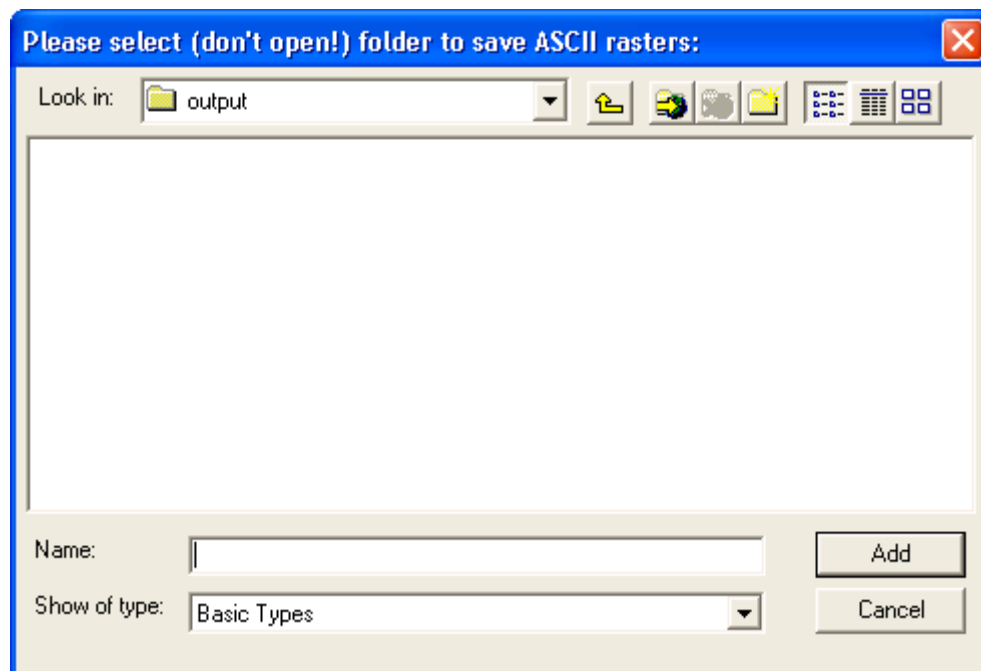
- 8) Make sure that all your rasters and feature classes are available in your map.
- 9) Click the “Export Rasters to Circuitscape” button  to open the main dialog “Select Rasters for Circuitscape:”



- 10) **Set Template:** Pick the raster that you want to use for a template. All new ASCII rasters will be projected to this template projection, clipped to the template extent, snapped to the template origin and assigned the template cell size.
- 11) **Select Additional Rasters (Optional):** Pick all the additional rasters you wish to convert to ASCII. You do not have to select any if you do not need to. **Note:** The “template” raster does not appear in this list. If you select a new template raster, then this list will regenerate itself without the template raster.
- 12) **Select Additional Feature Classes (Optional):** You may also convert point, polyline or polygon feature classes to ASCII rasters, in the same manner as the additional rasters described above. In this case, all raster cells representing the features will be assigned integer cell values based on some integer attribute field, and all other cells will be assigned a “NoData” value (-9999).
 - a. Click the “Add New” button to open the “Select Feature Layer and ID Field” dialog:



- b. Select the feature layer and appropriate cell value attribute field you wish to convert. Note that only numeric attribute fields are listed because the ArcGIS feature-to-raster export functions can only accept numeric values.
 - c. Click “OK” to add the feature layer to the list. Note that you can also remove that feature layer from the list with the “Remove” button, or clear all feature layers from the list with the “Clear All” button.
- 13) **Clip Data to Polygon Layer (Optional):** If you wish to only analyze the portions of the layers that lie within polygons of a polygon layer (such as if you had a potential corridor you wished to analyze), then check the “Clip data to Polygon Layer” checkbox and select the polygon layer in the list.
- 14) Select the output folder you wish to save to.



- 15) Click “OK” and it will go to work. Upon completion, you should have a set of new ASCII rasters in your specified folder. You can check their headers to make sure they are all the same size and extent.
- 16) Upon completion you will get a report detailing what it did.

