Need to Clip an Image?

ArcGIS supplies several methods of clipping image data. In addition to using the Clip tool in the Raster toolbox in ArcToolbox, there are other ways to quickly output a clipped raster. Here are two simple interactive methods—using the ArcPad toolbar that comes with ArcMap and exporting an image with the spatial extent of the current view that has the information available to georeference it.
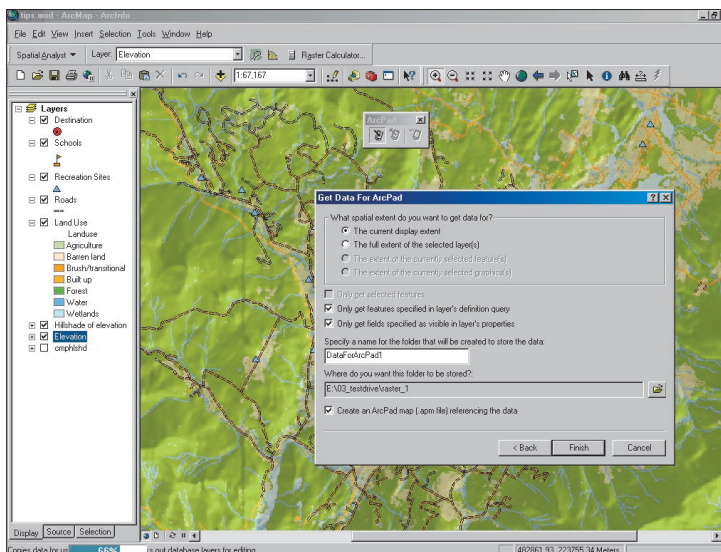
ArcPad Extraction Option

Use the ArcPad toolbar in ArcMap to extract an image. Clicking on the Get Data For ArcPad button in the toolbar will invoke a wizard for extracting data from the current map document and placing it in a checkout folder. This wizard writes vector features to new shapefiles and compresses raster images and saves them in MrSID format. The Get Data For ArcPad wizard contains several panels for defining properties related to the data being extracted. The layers in the map that will be extracted are specified in the first pane. For this use of the extraction utility, check only the image layer to be clipped. In the second pane, the extent to be exported is specified. The default setting is the current view, but a specified spatial extent may also be used. This utility requires a separate folder for each extraction so provide a unique name and a destination for the extracted file.

1. Start ArcMap and open the map document containing the image. Zoom the map display to the desired extent.

2. Make the ArcPad toolbar visible by choosing View > Toolbars > ArcPad.

3. Click on the Get Data For ArcPad button. In the first pane of the export wizard, check the box next to the image layer to be clipped. Click Next.

4. In the second pane of the export wizard, choose the current extent as the area to be exported and choose a destination for the new file. Click Finish.

5. The summary pane tells if the extraction was successful and how many and which layers were extracted.

Export the View as an Image

Export the extent of the current view in the Data Frame as an image. Georeferencing information for images in BMP, JPEG, PNG, TIFF, or GIF format can be supplied for the image by specifying that ArcGIS write a World File when exporting the image.

1. Start ArcMap and load the project containing the raster layer to be clipped (or start a new map and load that raster layer).

2. Zoom to the desired extent in ArcMap. If the map contains other layers, turn off all the layers except the image to be clipped.

3. Choose File > Export from the Standard menu.

Use the Get Data For ArcPad wizard in the ArcPad toolbar in ArcMap to export an image clipped to the current view or a specified spatial extent.
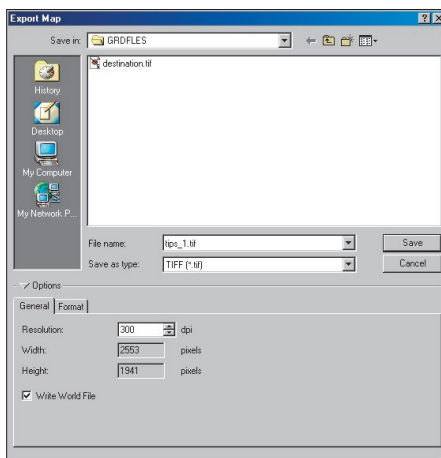
4. In the Export Map dialog box, choose a place to save the exported file and type a File name for the export file.

5. From the Save as Type drop-down box, choose a raster format (TIFF, BMP, JPEG, PNG, or GIF).

6. Click on Options to expand the Export Map dialog box. Click the General tab at the bottom of the Export Map dialog box.

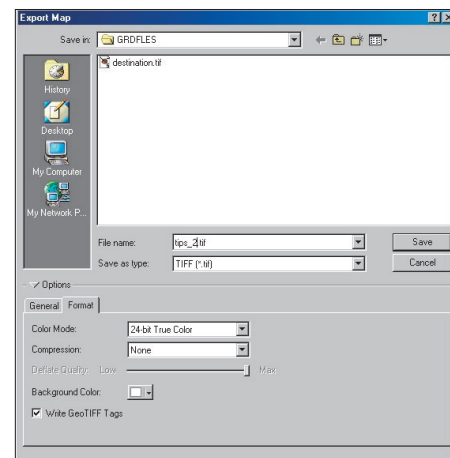**7.** Check the box next to Write World File. Click Save.

This option, available when exporting the map from Data View, creates an additional file called a World File that contains information that helps ArcGIS (and other software) georeference the image with a location in the world. This file will have the same name as the image file and a file extension that is based on the first and last letters of the image's file extension plus the letter "w". (For example, the TIFF image MyMap.tif would have a World File called MyMap.tfw.)

The TIFF file format can also store georeferencing information internally. These files are called GeoTIFFs. ArcGIS can write GeoTIFF tags for images exported from the Data View.

1. Start ArcMap and load the project containing the raster layer to be clipped (or start a new map and load that raster layer).

2. Zoom to the desired extent in ArcMap. If the map contains other layers, turn off all the layers except the image.

3. Choose File > Export from the Standard menu.

4. In the Export Map dialog box, choose a place to save the exported file and type a File name for the export file.

5. Click the Save as type drop-down arrow and choose TIFF. Click the Options arrow to expand the dialog box and click the Format tab. In the Format tab, check the box next to Write GeoTIFF Tags.

6. Click Save.

Georeferencing information for images in BMP, JPEG, PNG, TIFF, or GIF format can be supplied for the image by specifying that ArcGIS write a World File when exporting the image.

A TIFF file can store georeferencing information. ArcGIS can write the GeoTIFF tags that supply this information for images exported from the Data View.