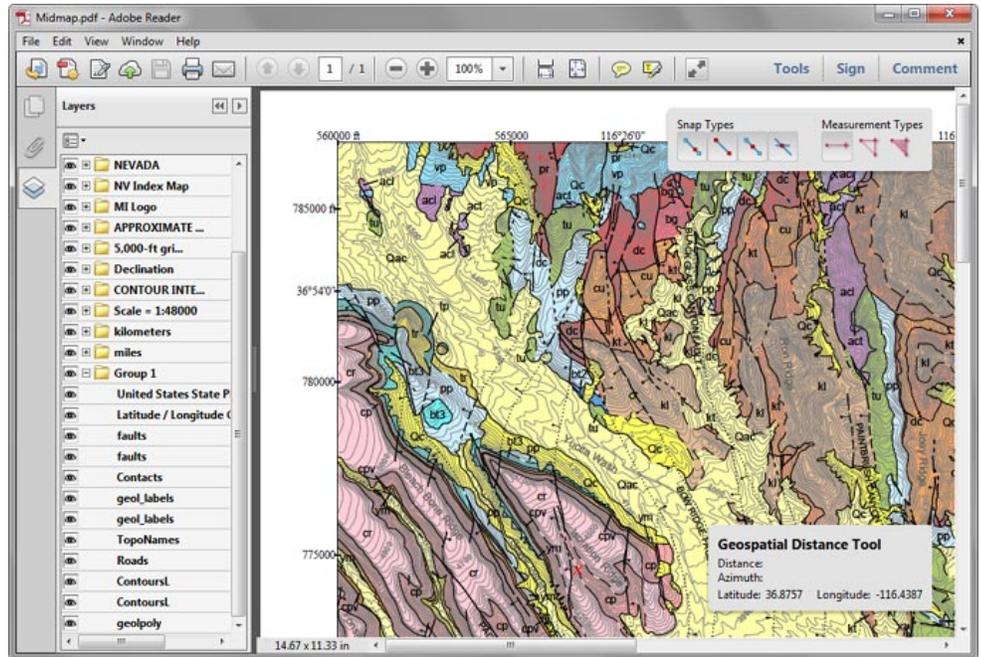


Render to PDF

The Render to PDF operation in TNTmips and TNTedit allows you to render the contents of the View window to a PDF file. The operation can render layers in simple groups or complex map layouts, including raster and geometric layers, WMS and ArcIMS layers, map grids, legends and scale bars, and text. Complex line and point symbols, including those created by CartoScripts, can be reproduced faithfully in the PDF file. Georeference information is automatically transferred, producing a Geospatial PDF file that can be used with the analysis tools in Adobe Reader to get coordinate readouts and make measurements (see illustration to the right). You also have the option to include layer controls in the PDF file so that any individual layer can be turned on or off in Adobe Reader. To use the Render to PDF operation, choose Display / Render to / PDF from the Display Manager.



PDF file rendered from a complex TNTgis map layout with layer controls included, so any individual layer can be toggled on and off in Adobe Reader. Georeference information is automatically transferred to create a Geospatial PDF file. Adobe Reader provides a Geospatial Location Tool to provide coordinate readouts (in Latitude/Longitude) and a Measuring Tool (shown above) to measure distance, perimeter, and area (tools available on the Edit / Analysis submenu in Adobe Reader XI).

When you render a map layout to PDF, the page size in the PDF file is set to be the same as that specified in the layout. When you render a display layout or group, the page size in the direction of maximum spatial extents of the data is set to be 8.5 inches in the PDF file.

Options

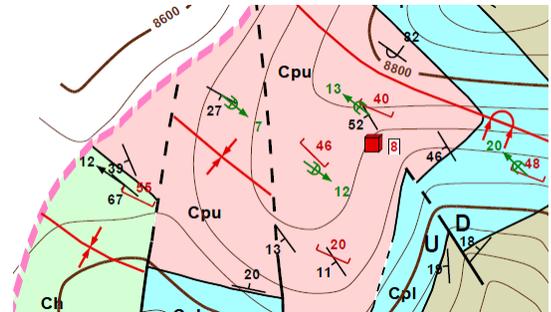
The Options tabbed panel on the Render to PDF window provides the main controls on the rendering operation.

Extents: The Extents menu allows you to set the extents of the display to be rendered. The Entire Display option renders the entire extents of the display, including areas outside the current View window(s). The menu also provides a Match View option for each open View window, allowing you to render just the area shown in a particular View. Turn on the *View Finished PDF* toggle button to open the PDF file in your default PDF viewer when rendering is complete.

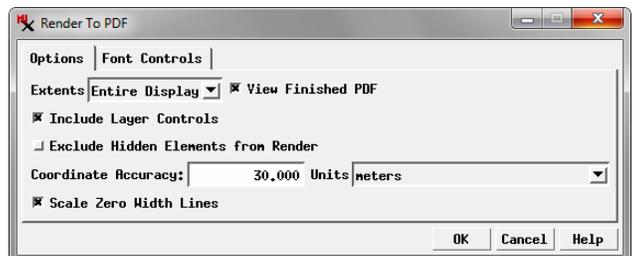
Layer Controls and Hidden Layers: Turn on the *Include Layer Controls* toggle button to create a PDF file with layer controls that appear in the Adobe Reader sidebar and allow individual layers to be turned off or on (as in the illustration at the top of the page).

If you do not choose to include layer controls, layers that have been set manually to be hidden in the View are not rendered to the PDF file. Layers that are hidden by map scale at the current display scale are rendered to the PDF file if they are set to be shown at the design scale of the group or layout. Conversely, layers that are on at the current view scale are not rendered if they are set to be hidden at the design scale.

(continued)



Render to PDF can convert complex line and point symbology faithfully into PDF. The illustration above shows a section of a PDF file rendered from a geologic map layout in TNTgis with complex symbols created using CartoScripts.

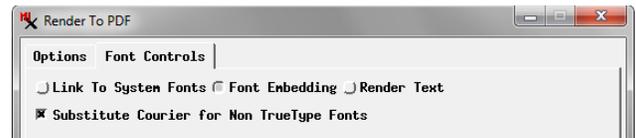


NOTE: Rendering from web tilesets, including Bing Maps and MapQuest public reference layers, is not permitted in TNTgis software.

If you choose to include layer controls, all hidden layers are rendered to the PDF file (with their layer controls set to off) unless you turn on the *Exclude Hidden Elements from Render* toggle.

Coordinate Accuracy: In the Render to PDF operation, images and geometric elements are rendered to virtual screen pixels and positions are stored in virtual screen coordinates. The size of the virtual screen pixels, and thus the spatial detail that is retained in the PDF file, is set by the value in the Coordinate Accuracy field. The default value in this field is based on the cell size of the highest-resolution raster object being rendered or on the bounding extents of the group/layout if there are no raster layers. Use the Units menu to choose the distance units to use to specify the accuracy. Smaller values in the Coordinate Accuracy field result in a higher-resolution rendering with more detail, but with a larger file size for the PDF file.

If geometric layers include line elements which have line widths set to 0, rendering of these lines to the PDF file is governed by the state of the *Scale Zero Width Lines* toggle. If this toggle is on, an appropriate map scale is set for these lines so that the line width changes with the view scale in the PDF viewer; lines appear thicker when you zoom in and thinner when you zoom out. If this toggle is off, the zero-width lines draw with a width of one screen pixel regardless of the view scale.



Font Controls

Settings on the Font Controls tabbed panel determine how text is stored in the PDF file. Text strings are stored by default as text along with a specification of the font to use to display the text. Turning on the *Link to System Fonts* toggle sets the file to use the fonts installed on the computer on which the file is viewed to display the text. If the specified font is not present, the text does not display as intended. If you turn on the *Font Embedding* toggle, specified TrueType fonts are stored in the PDF file, so the PDF file can display with the intended fonts even if they are not installed on the destination computer.

Only TrueType (and OpenType) scaleable fonts can be embedded in PDF files. If you are embedding fonts and the source data includes text using non-TrueType fonts, you can turn on the *Substitute Courier for Non TrueType Fonts* toggle to embed the Courier font instead. Otherwise these text strings are rendered (rasterized) to the PDF file. Turning on the *Render Text* toggle causes all text strings to be rasterized to the PDF file, which removes the need to link to or embed fonts but causes the text to have a ragged appearance unless you are using a very small virtual pixel size for the rendering (which leads to a much larger file size).

