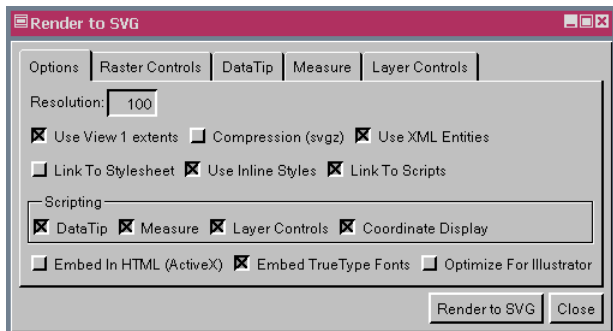


Render Complex Layouts to SVG



Scalable Vector Graphics (SVG) is a graphics file format and web development language created by the World Wide Web Consortium (W3C). SVG is based on XML and is well suited to GIS and mapping applications. The Render to SVG feature in TNTmips (Layout/Render to SVG) provides a variety of options for the creation of your SVG files. These options are also supported by the SVG class available for use in SML, the TNT products' scripting language, so you can create SVG output when running SML scripts.

The Render to SVG window is organized into five panels: Options, Raster Controls, DataTip, Measure, and Layer Controls. The last three of the choices are only active if you have turned on the corresponding Scripting choices on the Options panel.

General Controls.

- **Set resolution.**

A resolution of approximately 100 will produce an SVG file with the same amount of resolution you see on your screen. Higher resolutions will provide more detail than you are currently viewing if greater detail is present in the objects in the layout. Resolution applies to all input layer types.

- **Render full layout.**

Layers off by map scale at full view and hidden layers are not rendered to SVG file.

- **Clip output to View.**

Layers that are off by map scale at full view but are drawn in the current View are rendered to the SVG file if you choose the Use View 1 extents option.

- **Link to stylesheet.**

Caution, some SVG viewers may not support stylesheet lookup.

- **Use inline styles.**

Inline styles are part of the SVG file.

- **Apply compression.**

Choosing compression creates a gzipped SVG file with an svgz extension.

- **Use XML entities.**

If you think you may be editing the SVG file, use of XML entities may simplify this task.

- **Embed in HTML.**

Currently only useful in Internet Explorer environments.

- **Embed TrueType fonts.**

Embedded fonts only work with version six or later of the Adobe SVG viewer or if using the Batik SVG viewer.

- **Optimize for Illustrator.**

Avoids styling issues with scaled view areas if SVG is for use with Adobe Illustrator.

Raster Controls.

- **Link to or embed rasters.**

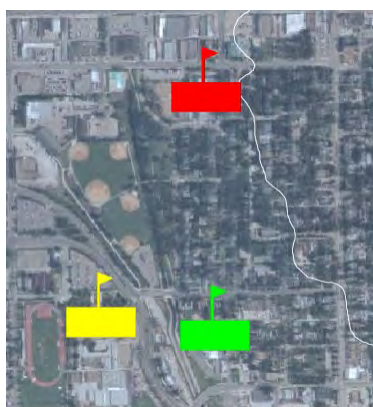
- **Use PNG.**

PNGs use only lossless compression.

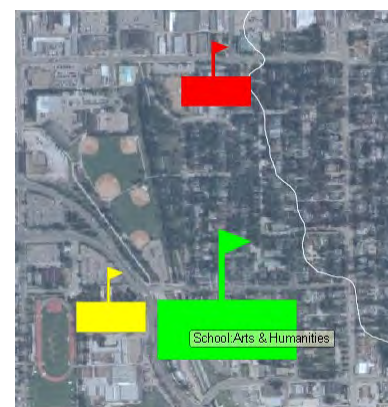
- **Use JPEG and set quality.**

A value of 100 means best quality compression and lower values indicate decreased quality (increased loss).

(continued on other side)



without mouseover



with mouseover

The illustrations above provide an example of the functionality that can be introduced to your SVG viewing by including JavaScripts with your SVG. Examples of these kinds of JavaScripts are described on the back of this page.

JavaScript Controls.

- **Link to JavaScripts.**

Remember with linked files that when you want to copy your SVG file to another location you need to find and copy all the link files also. All linked files are named the same as the SVG file with different extensions.

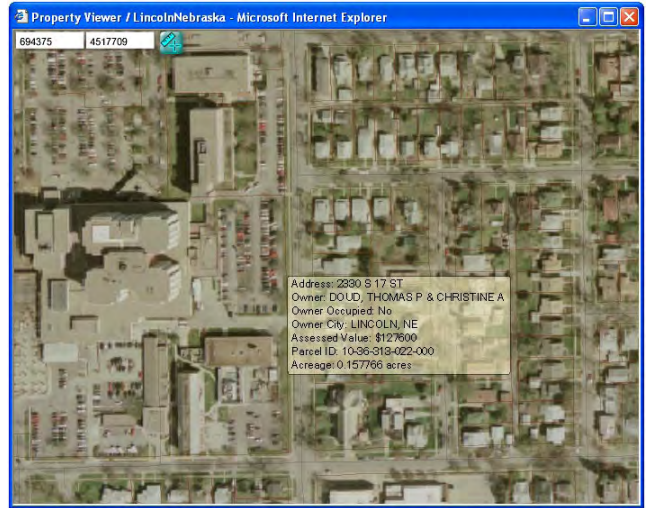
- **Embed JavaScripts.**

Turn off the Link To Scripts toggle to embed JavaScripts.

- **Sample JavaScripts.**

You can create your own JavaScripts and incorporate them in your SVG output. The sample interactivity scripts provided with the TNT products are designed for use with geodata to provide DataTips, a measurement tool, coordinate display, and layer controls. The right-click based layer controls are designed for Adobe's SVG browser plug-in while the other sample scripts provided, including the Layer Control Panel, should work with most browsers. There are tabbed panels to set the options for the DataTip, Measure, and Layer Controls scripts. These tabs are inactive until the corresponding scripting option is turned on. The result of the DataTip sample script with a 2.0 enlargement ratio (the zoom factor for symbol size change when the mouse is paused over the symbol) is shown above at the right. The Coordinate Display script has no options—it uses the coordinate reference system used by the first group in the layout.

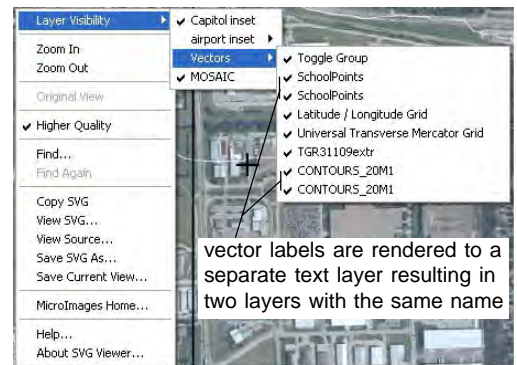
DataTips. If you select the DataTips script, the SVG file produced will provide DataTips when you pause the mouse over a visible vector element. The DataTips you receive are as they are set up in TNTmips for the closest element regardless of which layer it is in. Multiline DataTips are supported for individual layers as shown at the right. Multiline DataTips, which are initially created as virtual fields in the TNT products, and other virtual fields become permanent when rendered to SVG, which means DataTip content does not update after changes in element attributes. Symbol size change on mouseover is also set on the DataTip panel and is illustrated on the other side of this page. You can also set the highlight mode and whether to blink the highlight.



Layer Controls. There are two methods for including layer controls in your SVG file: a layer control panel and the Adobe layer control menu. You can choose either, both, or neither. The Adobe layer control menu is available from the right mouse button



The control panel layer controls (left) are positioned at the upper left of the browser window and the menu layer controls (right) are accessed from a right mouse button menu over the browser.



menu along with other options and is supported by the Adobe SVG viewer only.

Coordinate Display. This script places coordinate readout boxes (shown at the upper left of the Property Viewer / LincolnNebraska Microsoft Internet Explorer window above) that provide the current cursor position in the same coordinates as the bottom group within the layout or View.

Measure. You can choose the Freehand Measurement Tool paradigm, which draws the line and/or polygon for the measurement as you drag the cursor while holding the left mouse button. If you turn this option off, each click produces a vertex in the measurement line/polygon. Dragging is not recommended in this mode. Note the polygon (in the case shown at the right, a rectangle) is filled with transparent color as it is drawn.

