

QGIS Application - Bug report #6861

SVG symbol scaling and output incorrect

2012-12-11 05:37 PM - Larry Shaffer

Status:	Closed	
Priority:	Normal	
Assignee:		
Category:	Symbology	
Affected QGIS version:	master	Regression?: No
Operating System:		Easy fix?: No
Pull Request or Patch supplied:		Resolution:
Crashes QGIS or corrupts data:		Copied to github as #: 15995

Description

This issue is to describe several SVG rendering issues currently present in 1.8 and master. I have a pull request in to fix these:

<https://github.com/qgis/Quantum-GIS/pull/353/commits>

The three related issues are:

A) When SVG symbol is set to map units and rendered using QPicture (e.g. when symbol is rotated) the symbol does not scale with the map item when zooming the page in or out in Print Composer. It will scale with the map item zoom, but not whole page zooming. (see attachment:svg-sym_zoomout-of-rotated.png and attachment:svg-sym_zoomin-of-rotated.png)

I have fixed this by adding a screen-only caching of the QPicture in the same way as a QImage is cached. On output to print/image, dpi, etc. is considered as before.

B) When SVG symbol is set to map units and rendered using QPicture and the SVG viewport is not square, the symbol would be stretched to fit a square. (see attachment:svg-sym_closeup.png and attachment:svg-sym_closeup_w-fix.png note the orange square in back is a separate layer whose non-SVG symbols are correctly sized for reference) Fixed with cached QPicture support for non-square symbols, as was already done with QImage caching.

C) Once A & B were fixed, the SVG symbol on output to print or image at a specific dpi was slightly smaller than on screen. This was more pronounced when the symbol was output at a smaller size, causing significant registration issues for symbols with overlapping labels (e.g. road shields). I fixed this by keeping the 'size' of the symbol as a double, then only casting to an integer when constructing a QImage for caching. This allowed for the output SVG (always a QPicture, using the 'size' as a double) to reasonably match what was rendered on the screen at various output zoom levels, page sizes and dpi.

Associated revisions

Revision 6a936b93 - 2013-01-04 09:43 AM - Larry Shaffer

Draw SVG symbol from cached QImage unless it exceeds half of cache size, then use QPicture

- Fix #6855, SVG markers/fills larger than half cache (559^2 X 32 + SVG) are drawn with QPicture
- Fix #6861, make QPicture SVG symbols scale with Composer page zoom
- Fix #6861, make SVG symbol output to print/image more accurate by setting 'size' to double
- Update/add support for non-squared SVG via QImage and QPicture, on screen and in output to print/image
- Non-squared SVG QImage/QPicture can now be used in pattern fill, without excess space

History

#1 - 2013-01-04 01:19 AM - Larry Shaffer

- Status changed from Open to Closed

Fixed in changeset commit:"6a936b936bdb189293c3e330da9404399034b71".

Files

svg-sym_zoomout-of-rotated.png	44.8 KB	2012-12-11	Larry Shaffer
svg-sym_zoomin-of-rotated.png	26.1 KB	2012-12-11	Larry Shaffer
svg-sym_closeup.png	25.9 KB	2012-12-11	Larry Shaffer
svg-sym_closeup_w-fix.png	34.7 KB	2012-12-11	Larry Shaffer