Kepler - Bug #2245

TRACKING: Batik SVG Rendering - remaining tasks

11/04/2005 10:56 PM - Matthew Brooke

Status:	In Progress		**Start date:**	11/04/2005
Priority:	Immediate		**Due date:**	
Assignee:	Matthew Brooke		**% Done:**	0%
Category:	interface		**Estimated time:**	0.00 hour
Target version:	3.X.Y		**Spent time:**	0.00 hour
Bugzilla-Id:	2245			

Description

tasks remaining before Batik SVG rendering is ready for primetime:

1) ASSIGNING ICONS
Icons can be assigned in actor moml, or can be assigned in the actor's java code. Assigning in moml means icons will show up for newly-created workflows, but **not** for old workflows. [Note that some actors can't be set via moml (eg EML200 datasource), so would need to add some to java code anyway]

Adding icon paths directly to the actors' java code (note that existing svg icons are currently defined in java code) means icons show up for all actors, in new **and** old workflows. Could move actual actor->svg icon mappings into a separate settings file? Or would this cause too much indirection and add complication?

2) MEMORY USAGE
Currently, if Batik has to display more than about 150 SVG icons, it causes a JVM crash with an OutOfMemoryError. This is also an issue when showing actor thumbnail icons in the actor library, since these are also rendered using Batik. So for example doing a search for a very common term that returns many actors (eg "a") causes an OutOfMemoryError.

Have looked for obvious places to save memory, but now i think we're just limited by what batik can do. Obvious solution is to start caching icons, since many of them may be the same, yet they all get rendered from scratch

3) BACKWARD-COMPATIBILITY
- Need to add code so old SVG icons are translated to have their origin at the top-left corner. They are currently cropped when displayed in batik, because Ptolemy's default origin for svg components is at the center of each actor icon, whereas the svg/batik standard is to have the origin at top-left.

4) TEXT WRAP:
In EML simple example plot, text at bottom is rendered using SVG, and it does not wrap, but extends off the screen. (text did wrap in the old-style svg handling). Note, however, that if annotation actor is re-created and text is pasted in again, it **does** wrap in the new instance, so this is really just a backwards-compatibility issue

5) SMALL ICON:
getIcon() method in XMLIcon works, but its success seems to be linked to the odd tree refreshing behavior described in bug [#1843](#1843). When 1843 gets fixed, we may be able to make getIcon() more efficient/intuitive, and this may in turn save some memory usage (see item (2) above)

Related issues:

Blocks Kepler - Bug #2324: SVG - old-style icon still displayed for certain a...	**In Progress**	12/16/2005
Blocks Kepler - Bug #2323: Remove text added with "Attribute" actor from olde...	**Resolved**	12/16/2005
Blocks Kepler - Bug #2322: SVG - Assigning Icons to the Correct Actors in Pro...	**Resolved**	12/16/2005
Blocks Kepler - Bug #2286: SVG - reduce svg file size	**Resolved**	11/22/2005
Blocks Kepler - Bug #2269: SVG - Small Icon (Actor Library Thumbnail)	**Resolved**	11/11/2005

Blocks Kepler - Bug #2268: SVG - Backward Compatibility	**Resolved**	**11/11/2005**
Blocks Kepler - Bug #2267: SVG - Memory Usage	**Resolved**	**11/11/2005**
Blocks Kepler - Bug #2266: SVG - Assigning Icons	**Resolved**	**11/11/2005**
Blocks Kepler - Bug #2374: SVG - Improve inital rendering times	**Resolved**	**02/28/2006**

History

#1 - 11/11/2005 12:08 PM - Matthew Brooke

Have assigned the above to separate bugs, as follows:

1) ASSIGNING ICONS - Bug #2266
2) MEMORY USAGE - Bug #2267
3 & 4) BACKWARD-COMPATIBILITY & TEXT WRAP - Bug #2268
5) SMALL ICON - Bug #2269

- now using this as a tracking mechanism for those bugs

#2 - 03/27/2013 02:19 PM - Redmine Admin

Original Bugzilla ID was 2245