

Kepler - Bug #2324

SVG - old-style icon still displayed for certain actors

12/16/2005 04:33 PM - Matthew Brooke

Status:	In Progress	Start date:	12/16/2005
Priority:	Normal	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:	2324		

Description

For certain actors, described below, the old-style icon is still displayed when an actor is dragged to the canvas:

1) for any actors that have an icon defined in the MOML file thus:

```
...
<property name="_icon" class="ptolemy.vergil.icon.BoxedValueIcon">
<property name="attributeName" class="ptolemy.kernel.util.StringAttribute"
value="value">
</property>
<property name="displayWidth" class="ptolemy.data.expr.Parameter" value="60">
</property>
</property>
...
```

(this is an example - not necessarily all "BoxedValueIcon". The thing to look for is name="_icon")

Note that "ESRI Shape File Displayer" (org.kepler.gis.display.JumpSHPDisplayer) actually has a custom icon (_iconDescription) defined in the java code - so I am not sure where this other "_icon" definition is coming from.

2) actors that have an accompanying "<actorname>Icon.xml" file - like ptolemy.domains.sdf.lib.SequenceToArray has an accompanying SequenceToArrayIcon.xml file in ptolemy/domains/sdf/lib/, which is automatically pulled in by the MOMLParser and added to the actor.

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Note that, in many cases, showing the old-style icon **may** still be appropriate (for example, org.sdm.spa.StrinConst uses a box to display the user-entered string inside. Replacing this with a big icon would probably not be a good idea. A similar argument also applies to entries in the actor library under the Variable->Parameter node (eg ColorParameter, FileParameter etc).

However, other actors, like the "ESRI Shape File Displayer" (org.kepler.gis.display.JumpSHPDisplayer) could (and should) have its existing icon replaced with an appropriate new-style icon.

So, since we can't distinguish between these 2 general cases programmatically (without resorting to keeping a hard-coded list of actors in an "omissions" list), how can we handle the situation?

How about a policy that allows actor developers to override the "designed" icon by defining this as "<property name='_icon' ..etc" in the MOML, **ONLY** if it is absolutely necessary (eg to present a box with user text in it)? Other, non-essential uses of "<property name='_icon' ..etc" would then just be removed from the MOML. If users want to define icons to show up under the old-style rendering scheme, such icons could be defined in the MOML as an SVG "_iconDescription". Same goes for separate <actorname>Icon.xml files. However - some of these exist in the PTII codebase, so we can't remove those.

Not sure what to do. Any comments, thoughts, other solutions?

Related issues:

Blocked by Kepler - Bug #2245: TRACKING: Batik SVG Rendering - remaining tasks

In Progress 11/04/2005

Blocks Kepler - Bug #2345: Actor Library classname/icon mapping problems

Resolved 01/26/2006**History****#1 - 03/02/2006 08:36 PM - Matthew Brooke**

Additional info (specific case), reported by Dan:

if you look at the compositeBiodiversityExample.xml workflow (in workflows/eco/) we now get a simple yellow rectangle at the left of the composite labeled 'BiodiversityIndex'. Double clicking on the rectangle does bring up a html page with equations as it should, but no one would know that from the box! (which is a 'DocumentationAttribute'). It used to say 'Double click to see documentation'

#2 - 04/07/2006 10:59 AM - Matthew Brooke

looked thru the 3 workflows created by Matt, which show all the current actors. According to these WFs, the following actors currently do not show the new-style icons (WF's are in kepler/workflows/test):

all-actors-displayed-part1a.xml

Array To Sequence
 Sequence To Array
 Switch
 Select
 Repeat
 TextAttribute (shows val)
 Constant (shows val)
 String Constant (shows val)
 Single Fire Constant (should show val?)
 Permanent String Constant (should show val?)
 Equals
 Boolean Switch

all-actors-displayed-part1b.xml

Create Expression From Query
 File Array Printer
 ENM PCP
 ESRI Shape File Displayer
 GML Displayer

all-actors-displayed-part2.xml

SProxy (shows val - should it?)
 Multiply Or Divide
 Average
 Add Or Subtract
 Absolute Value
 Differential Equation
 Integrator
 Dot Product
 Accumulator
 Counter
 Uniform Distribution Random Number Generator
 Gaussian Distribution Random Number Generator
 BasicUnits
 CGSUnitBase
 ElectronicUnitBase
 SI
 Parameter
 ColorParameter
 FileParameter
 PortParameter
 StringParameter
 RequireVersion: 6.0-devel
 ScopeExtendingAttribute
 SingletonAttribute
 (plus some repeats)

Other actors that don't have icons are the "shapes" (these show the actual shape reflected in their names - Ellipse etc) and the image display (which displays a user-settable image) - these are (presumably) OK

#3 - 04/07/2006 11:21 AM - Dan Higgins

DocViewer seems to be missing from your list. It only displays a rectangle. It should have text saying something like 'Show Documentation'.

There is also a 'Documentation Attribute' (which doesn't even show up correctly in the actor tree).

#4 - 04/07/2006 04:06 PM - Matthew Brooke

ah! - the DocViewer was in there, but it had no text label (as Dan had previously pointed out in an email), and its tooltip said "SingletonAttribute".

See Bug [#2382](#) for a discussion of the missing "Documentation Attribute"

#5 - 04/12/2006 02:42 PM - Matthew Brooke

changed icon assignments for:

Permanent String Constant (src/org/resurgence/actor/PermanentStringConstant.java)

and

Single Fire Constant (src/org/geon/ConstOnce.java)

...so icon actually displays the value of the constant typed in by the user.

#6 - 04/12/2006 03:18 PM - Matthew Brooke

note to self (or whoever has to change these "**Constant" icons in future...)

Actual icon is `ptolemy.vergil.icon.BoxedValueIcon`. If we need to change the outline color, rounded corners, etc, we'll need to override this class

Assignment:

For PTL classes (notably `ptolemy.actor.lib.Const` and `ptolemy.actor.lib.Expression`), the icon assignment isn't made in the actor code or the actor moml file - it's made as the moml is parsed at runtime, in the class `ptolemy.moml.filter.AddIcon`. This class contains a hard-coded `HashMap` (aptly named `"_actorsThatShouldHaveIcons"`), which contains the names of actors that get these icons added.

So - instead of adding the Kepler actors to this list (which didn't seem like the right thing to do), I instead assigned the `BoxedValueIcon` in the specific actor constructors (which also doesn't seem like the right thing to do, but less-not-right than the other option...). Here's the code to put in the constructor:

```
BoxedValueIcon icon = new BoxedValueIcon(this, "_icon");
    icon.displayWidth.setExpression("25");
    icon.attributeName.setExpression("value");
```

(TODO the "25" max width should really be accessible from a common central place, so all actors can be changed easily)

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- NOTE ***

For future reference, the `AddIcon` filter contains mappings for:

`ptolemy.actor.lib.TrigFunction`,

`ptolemy.actor.lib.MathFunction` and

`ptolemy.actor.lib.Scale`,

...all of which receive the `ptolemy.vergil.icon.AttributeValueIcon` (which is the superclass of `BoxedValueIcon`). HOWEVER - the

`AttributeValueIcon` displays the value ON TOP OF the new svg icon, whereas `BoxedValueIcon` overrides the new SVG icon completely ===

#7 - 04/17/2006 05:05 PM - Matthew Brooke

added a line to `build-ptolemy.xml`, to exclude files of the form `*Icon.xml`, since these interfere with new SVG icons.

For reference, the remaining actors that **still** don't display the new icon assignments are now shown in a new test workflow -

`kepler/workflows/test/IconsNotShowing.xml`

#8 - 04/18/2006 03:37 PM - Matthew Brooke

Fixed some typos in `uiSVGMappingsByClass` props file, and removed some references to `BoxedValueIcon` in actor moml.

Only actors that still do not get new icons are all descendents of `ptolemy.kernel.util.Attribute`, which which does not yet have a call to:

```
ComponentEntityConfig.addIconTo(this);
```

...as previously added to `Director` and `ComponentEntity`

#9 - 04/18/2006 03:46 PM - Matthew Brooke

The remaining actors without new icons are as follows:

BasicUnits (ptolemy.data.unit.UnitSystem)
CGSUnitBase (ptolemy.data.unit.UnitSystem)
ElectronicUnitBase (ptolemy.data.unit.UnitSystem)
SI (ptolemy.data.unit.UnitSystem)

DocViewer (ptolemy.kernel.util.SingletonAttribute)

Parameter (ptolemy.data.expr.Parameter)
ColorParameter (ptolemy.actor.gui.ColorAttribute)
FileParameter (ptolemy.data.expr.FileParameter)
PortParameter (ptolemy.actor.parameters.PortParameter)
StringParameter (ptolemy.data.expr.StringParameter)

ScopeExtendingAttribute (ptolemy.data.expr.ScopeExtendingAttribute)

RequireVersion (ptolemy.kernel.attributes.RequireVersion)

#10 - 04/20/2006 12:28 PM - Matthew Brooke

OK - set icons by LSID (in uiSVGIconMappingsByLSID.properties) for:
BasicUnits, CGSUnitBase, ElectronicUnitBase, SI (all set to blank teal icon)
and DocViewer (set to new Documentation SVG icon).

Remaining changes are low priority:

a) Still need to change all these to a royal blue dot:

Parameter (ptolemy.data.expr.Parameter)
FileParameter (ptolemy.data.expr.FileParameter)
StringParameter (ptolemy.data.expr.StringParameter)
ScopeExtendingAttribute (ptolemy.data.expr.ScopeExtendingAttribute)
RequireVersion (ptolemy.kernel.attributes.RequireVersion)

b) change to royal blue dot, keep the arrow, but make arrow solid black:

PortParameter (ptolemy.actor.parameters.PortParameter)

c) Make dot show the actual color picked:

ColorParameter (ptolemy.actor.gui.ColorAttribute)

(Note - have removed the test workflow from cvs, now most of these are fixed - kepler/workflows/test/lconsNotShowing.xml)

#11 - 04/03/2009 01:01 PM - Chad Berkley

As of 4/3/09, this is the status of this bug:

a) Still need to change all these to a royal blue dot:

(done)Parameter (ptolemy.data.expr.Parameter)
(green dot)FileParameter (ptolemy.data.expr.FileParameter)
(red dot)StringParameter (ptolemy.data.expr.StringParameter)
(done)ScopeExtendingAttribute (ptolemy.data.expr.ScopeExtendingAttribute)
(black dot)RequireVersion (ptolemy.kernel.attributes.RequireVersion)

b) change to royal blue dot, keep the arrow, but make arrow solid black:

(blue dot but with empty arrow)PortParameter (ptolemy.actor.parameters.PortParameter)

c) Make dot show the actual color picked:

(always shows pink)ColorParameter (ptolemy.actor.gui.ColorAttribute)

#12 - 03/27/2013 02:19 PM - Redmine Admin

Original Bugzilla ID was 2324