

## Kepler - Bug #4244

### Dragging ImageAttribute into Kepler results in not finding the gif

07/13/2009 12:57 PM - Christopher Brooks

<b>Status:</b>	Resolved	<b>Start date:</b>	07/13/2009
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Chad Berkley	<b>% Done:</b>	0%
<b>Category:</b>	build system	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2.X.Y	<b>Spent time:</b>	0.00 hour
<b>Bugzilla-Id:</b>	4244		

#### Description

Start Kepler  
Search for ImageAttribute  
Drag in the Image icon.  
The following exception appears.

I think this is because ptllplanetlcon.gif is not being copied?  
build-area/settings/ptolemy-includes  
is probably the file to edit. I edited it but running "ant run"  
or "ant change-to -Dsuite=kepler" does not seem to help.

There is probably a larger problem in that every Ptolemy actor  
that uses a resource such as a gif or sound file that is located  
in the Ptolemy tree needs to be identified and the build system  
updated to properly copy the resource.

Here's the exception:

```
ptolemy.kernel.util.IllegalActionException: Error evaluating expression: $PTII/ptolemy/vergil/kernel/attributes/ptllplanetlcon.gif  
in .Unnamed1.Image.source
```

Because:

```
Cannot read file '/Users/cxh/src/kepler/ptolemy/target/classes/ptolemy/vergil/kernel/attributes/ptllplanetlcon.gif'  
in .Unnamed1.Image.source
```

Because:

```
Cannot read file '/Users/cxh/src/kepler/ptolemy/target/classes/ptolemy/vergil/kernel/attributes/ptllplanetlcon.gif' or  
'/Users/cxh/src/kepler/ptolemy/target/classes/ptolemy/vergil/kernel/attributes/ptllplanetlcon.gif'  
at ptolemy.data.expr.Variable.validate(Variable.java:1450)  
at ptolemy.moml.MoMLParser.endDocument(MoMLParser.java:667)  
at com.microstar.xml.XmlParser.doParse(XmlParser.java:162)  
at com.microstar.xml.XmlParser.parse(XmlParser.java:132)  
at ptolemy.moml.MoMLParser.parse(MoMLParser.java:1398)  
at ptolemy.moml.MoMLParser.parse(MoMLParser.java:1370)  
at ptolemy.moml.MoMLParser.parse(MoMLParser.java:1526)  
at ptolemy.moml.MoMLChangeRequest._execute(MoMLChangeRequest.java:270)  
at ptolemy.kernel.util.ChangeRequest.execute(ChangeRequest.java:171)  
at ptolemy.kernel.util.NamedObj.executeChangeRequests(NamedObj.java:699)  
at ptolemy.kernel.util.NamedObj.requestChange(NamedObj.java:1687)  
at ptolemy.actor.CompositeActor.requestChange(CompositeActor.java:1349)  
at ptolemy.vergil.basic.EditorDropTarget$DTListener.drop(EditorDropTarget.java:450)  
at java.awt.dnd.DropTarget.drop(DropTarget.java:430)  
at sun.awt.dnd.SunDropTargetContextPeer.processDropMessage(SunDropTargetContextPeer.java:500)  
at sun.awt.dnd.SunDropTargetContextPeer.access$800(SunDropTargetContextPeer.java:53)  
at sun.awt.dnd.SunDropTargetContextPeer$EventDispatcher.dispatchDropEvent(SunDropTargetContextPeer.java:812)  
at sun.awt.dnd.SunDropTargetContextPeer$EventDispatcher.dispatchEvent(SunDropTargetContextPeer.java:736)  
at sun.awt.dnd.SunDropTargetEvent.dispatch(SunDropTargetEvent.java:29)  
at java.awt.Component.dispatchEventImpl(Component.java:3926)  
at java.awt.Container.dispatchEventImpl(Container.java:2068)  
at java.awt.Component.dispatchEvent(Component.java:3903)  
at java.awt.LightweightDispatcher.retargetMouseEvent(Container.java:4256)  
at java.awt.LightweightDispatcher.processDropTargetEvent(Container.java:4007)  
at java.awt.LightweightDispatcher.dispatchEvent(Container.java:3861)  
at java.awt.Container.dispatchEventImpl(Container.java:2054)  
at java.awt.Window.dispatchEventImpl(Window.java:1801)
```

```
at java.awt.Component.dispatchEvent(Component.java:3903)
at java.awt.EventQueue.dispatchEvent(EventQueue.java:463)
at java.awt.EventDispatchThread.pumpOneEventForHierarchy(EventDispatchThread.java:269)
at java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:190)
at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:184)
at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:176)
at java.awt.EventDispatchThread.run(EventDispatchThread.java:110)
```

## History

### #1 - 07/13/2009 03:49 PM - Christopher Brooks

Below are some of the actors that call setExpression on \$CLASSPATH or \$PTII and presumably include a resource in the actor.

I generated the list with:

```
adm/bin/ptlltfiles >& /tmp/f
cat /tmp/j | xargs grep setExpression > /tmp/e
egrep '(\$CLASSPATH|\$PTII)' /tmp/e
```

```
./ptolemy/actor/lib/jai/JAIImageReader.java:    fileOrURL.setExpression("$CLASSPATH/doc/img/PtolemyII.jpg");
./ptolemy/actor/lib/jvasound/AudioReader.java:    .setExpression("$CLASSPATH/ptolemy/actor/lib/jvasound/voice.wav");
./ptolemy/actor/lib/jvasound/ClipPlayer.java:    fileOrURL.setExpression("$PTII/ptolemy/actor/lib/jvasound/voice.wav");
./ptolemy/actor/lib/jmf/MovieReader.java:    .setExpression("$CLASSPATH/ptolemy/actor/lib/jmf/MrPtolemy.mov");
./ptolemy/actor/lib/security/KeyStoreActor.java:    fileOrURL.setExpression("$PTII/ptKeystore");
./ptolemy/data/properties/lattice/PropertyConstraintSolver.java:    .setExpression("$CLASSPATH\\trainedConstraints");
./ptolemy/domains/giotto/cgc/CActorBase.java:    .setExpression("$PTII/ptolemy/domains/giotto/cgc/demo/task_code.c");
./ptolemy/domains/ptinyos/kernel/PtinyOSDirector.java:    tosRoot.setExpression("$PTII/vendors/ptinyos/tinyos-1.x");
./ptolemy/domains/ptinyos/kernel/PtinyOSDirector.java:    tosDir.setExpression("$PTII/vendors/ptinyos/tinyos-1.x/tos");
./ptolemy/vergil/actor/lib/MonitorImage.java:    .setExpression("$CLASSPATH/ptolemy/vergil/kernel/attributes/ptIIplanetIcon.gif");
./ptolemy/vergil/kernel/attributes/ImageAttribute.java:    .setExpression("$PTII/ptolemy/vergil/kernel/attributes/ptIIplanetIcon.gif");
./ptolemy/vergil/pdfrender/PDFAttribute.java:    source.setExpression("$PTII/ptolemy/vergil/pdfrender/sample.pdf");
```

Chad writes:

We do handle the resources for actors, but we just make assumptions about where they are located. We treat the tolemy/ptolemy directory as a source dir so we don't look for resources there. Since tolemy has a different organization than kepler, we need to add exclusions/inclusions based on the different organization. If the pdf file were in resources/\*\* then it would be found. In order for it to be found where it is now, I'd have to add all of the tolemy source into the classpath, which I don't really want to do because I want to be able to package kepler with no source files at all.

The above list is a start, though not all the resources need to be copied. I'd go with:

```
./ptolemy/vergil/actor/lib/MonitorImage.java:    .setExpression("$CLASSPATH/ptolemy/vergil/kernel/attributes/ptIIplanetIcon.gif");
./ptolemy/actor/lib/security/KeyStoreActor.java:    fileOrURL.setExpression("$PTII/ptKeystore");
./ptolemy/vergil/kernel/attributes/ImageAttribute.java:    .setExpression("$PTII/ptolemy/vergil/kernel/attributes/ptIIplanetIcon.gif");
./ptolemy/vergil/pdfrender/PDFAttribute.java:    source.setExpression("$PTII/ptolemy/vergil/pdfrender/sample.pdf");
./ptolemy/actor/lib/jvasound/AudioReader.java:    .setExpression("$CLASSPATH/ptolemy/actor/lib/jvasound/voice.wav");
./ptolemy/actor/lib/jvasound/ClipPlayer.java:    fileOrURL.setExpression("$PTII/ptolemy/actor/lib/jvasound/voice.wav");
```

If JAI and JMF are available in Kepler, then you will need these:

```
./ptolemy/actor/lib/jai/JAIImageReader.java:    fileOrURL.setExpression("$CLASSPATH/doc/img/PtolemyII.jpg");
./ptolemy/actor/lib/jmf/MovieReader.java:    .setExpression("$CLASSPATH/ptolemy/actor/lib/jmf/MrPtolemy.mov");
```

These can be ignored:

```
./ptolemy/data/properties/lattice/PropertyConstraintSolver.java:    .setExpression("$CLASSPATH\\trainedConstraints");
./ptolemy/domains/giotto/cgc/CActorBase.java:    .setExpression("$PTII/ptolemy/domains/giotto/cgc/demo/task_code.c");
./ptolemy/domains/ptinyos/kernel/PtinyOSDirector.java:    tosRoot.setExpression("$PTII/vendors/ptinyos/tinyos-1.x");
./ptolemy/domains/ptinyos/kernel/PtinyOSDirector.java:    tosDir.setExpression("$PTII/vendors/ptinyos/tinyos-1.x/tos");
```

A larger issue is the Ptolemy II demos that are available from within Kepler. Some of them access data files that are in the demo directories. These data files will need to be copied. One way to find out what's missing is to follow the Ptolemy copyright link and run all the demos.

### #2 - 07/13/2009 04:57 PM - Christopher Brooks

If this is not fixed in 2.0, then these actors should be removed and

any Ptolemy demos that use them removed from Kepler.

Isn't this as simple as adding files to  
build-area/settings/ptolemy-include?

"ptolemy/actor/lib/javasound/voice.wav" is in that file, but apparently not  
being copied. What is the procedure for having the build system copy  
resources to a location that can be accessed at runtime?

Below is a list of demos that use the affected actors

```
cd ptil/ptolemy/configs/doc
grep .xml completeDemosPtinyKepler.htm | awk -F \" '{print $2}' > /tmp/x

bash-3.2$ grep ImageAttribute `cat /tmp/x` | awk '{print $1}' | sort | uniq
.../domains/continuous/demo/ContinuousInsideDE/ContinuousInsideDE.xml:
.../domains/continuous/demo/LevelCrossingDetector/LevelCrossingDetector.xml:
.../domains/continuous/demo/NewtonsCradle/NewtonsCradle.xml:
.../domains/continuous/demo/Sinusoid/Sinusoid.xml:
.../domains/ct/demo/SinuBouncingBall/SinuBouncingBall.xml:
.../domains/fsm/demo/ChainedTransitions/ChainedTransitions.xml:
.../vergil/kernel/attributes/demo/AnimateVergil/AnimateVergil.xml:
bash-3.2$ grep AudioReader `cat /tmp/x` | awk '{print $1}' | sort | uniq
.../domains/sdf/demo/SynthesizedVoice/SynthesizedVoice.xml:
bash-3.2$ grep ClipPlayer `cat /tmp/x` | awk '{print $1}' | sort | uniq
.../domains/de/demo/RealTimeComposite/RealTimeComposite.xml:
bash-3.2$
```

### #3 - 03/25/2010 11:09 AM - Christopher Brooks

Closing.

The problem was that dragging certain actors would fail because  
resources associated with the actor were not present.

For example

Search Components -> "Image"

Under Workflow Documentation, drag "Image"

Formerly, this would fail because the gif was not included.

This now works.

I checked other actors listed in this bug and we are good to go  
in Kepler-2.0-rc1

### #4 - 03/27/2013 02:26 PM - Redmine Admin

Original Bugzilla ID was 4244