

Kepler - Bug #5508

Link to "Additional background information on Ptolemy" brings up empty page

10/05/2011 06:51 PM - Christopher Brooks

Status:	Resolved	Start date:	10/05/2011
Priority:	Normal	Due date:	
Assignee:	Christopher Brooks	% Done:	0%
Category:	installer	Estimated time:	0.00 hour
Target version:	2.3.0	Spent time:	0.00 hour
Bugzilla-Id:	5508		

Description

Under Windows Server 2008:

If I do Help -> Kepler Documentation,
and click on
"background information on Ptolemy"

I get a blank page that has
jar:file:!/ptolemy/configs/ptinyKepler/intro.htm in the title.

I looked in the jar file and the file is there?

View ->Source brings up a NPE?

```
java.lang.reflect.InvocationTargetException
at sun.reflect.NativeConstructorAccessorImpl.newInstance0(Native Method)
at sun.reflect.NativeConstructorAccessorImpl.newInstance(Unknown Source)
at sun.reflect.DelegatingConstructorAccessorImpl.newInstance(Unknown Source)
at java.lang.reflect.Constructor.newInstance(Unknown Source)
at ptolemy.actor.gui.TextEditorTableau$Factory.createTableau(TextEditorTableau.java:221)
at ptolemy.actor.gui.TextEditorTableau$Factory.createTableau(TextEditorTableau.java:279)
at ptolemy.actor.gui.TableauFrame$ViewMenuListener.actionPerformed(TableauFrame.java:1572)
at org.kepler.gui.MenuMapper$1.actionPerformed(MenuMapper.java:386)
at javax.swing.AbstractButton.fireActionPerformed(Unknown Source)
at javax.swing.AbstractButton$Handler.actionPerformed(Unknown Source)
at javax.swing.DefaultButtonModel.fireActionPerformed(Unknown Source)
at javax.swing.DefaultButtonModel.setPressed(Unknown Source)
at javax.swing.AbstractButton.doClick(Unknown Source)
at javax.swing.plaf.basic.BasicMenuItemUI.doClick(Unknown Source)
at javax.swing.plaf.basic.BasicMenuItemUI$Handler.mouseReleased(Unknown Source)
at java.awt.Component.processMouseEvent(Unknown Source)
at javax.swing.JComponent.processMouseEvent(Unknown Source)
at java.awt.Component.processEvent(Unknown Source)
at java.awt.Container.processEvent(Unknown Source)
at java.awt.Component.dispatchEventImpl(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
at java.awt.Component.dispatchEvent(Unknown Source)
at java.awt.LightweightDispatcher.retargetMouseEvent(Unknown Source)
at java.awt.LightweightDispatcher.processMouseEvent(Unknown Source)
at java.awt.LightweightDispatcher.dispatchEvent(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
at java.awt.Window.dispatchEventImpl(Unknown Source)
at java.awt.Component.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEventImpl(Unknown Source)
at java.awt.EventQueue.access$000(Unknown Source)
at java.awt.EventQueue$3.run(Unknown Source)
at java.awt.EventQueue$3.run(Unknown Source)
at java.security.AccessController.doPrivileged(Native Method)
at java.security.ProtectionDomain$1.doIntersectionPrivilege(Unknown Source)
at java.security.ProtectionDomain$1.doIntersectionPrivilege(Unknown Source)
at java.awt.EventQueue$4.run(Unknown Source)
at java.awt.EventQueue$4.run(Unknown Source)
at java.security.AccessController.doPrivileged(Native Method)
```

```
at java.security.ProtectionDomain$1.doIntersectionPrivilege(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventDispatchThread.pumpOneEventForFilters(Unknown Source)
at java.awt.EventDispatchThread.pumpEventsForFilter(Unknown Source)
at java.awt.EventDispatchThread.pumpEventsForHierarchy(Unknown Source)
at java.awt.EventDispatchThread.pumpEvents(Unknown Source)
at java.awt.EventDispatchThread.pumpEvents(Unknown Source)
at java.awt.EventDispatchThread.run(Unknown Source)
Caused by: java.lang.NullPointerException
at ptolemy.actor.gui.TextEditor.setBackground(TextEditor.java:144)
at java.awt.Window.setBackground(Unknown Source)
at java.awt.Frame.setBackground(Unknown Source)
at ptolemy.gui.Top.access$1001(Top.java:141)
at ptolemy.gui.Top$SetBackgroundRunnable.run(Top.java:1889)
at ptolemy.gui.Top.deferIfNecessary(Top.java:247)
at ptolemy.gui.Top.setBackground(Top.java:501)
at ptolemy.actor.gui.TextEditor.setBackground(TextEditor.java:238)
at javax.swing.JFrame.frameInit(Unknown Source)
at javax.swing.JFrame.<init>(Unknown Source)
at ptolemy.gui.Top.<init>(Top.java:162)
at ptolemy.actor.gui.TableauFrame.<init>(TableauFrame.java:133)
at ptolemy.actor.gui.TableauFrame.<init>(TableauFrame.java:168)
at ptolemy.actor.gui.TextEditor.<init>(TextEditor.java:104)
at ptolemy.actor.gui.TextEditor.<init>(TextEditor.java:91)
at ptolemy.actor.gui.TextEditorTableau.<init>(TextEditorTableau.java:89)
at ptolemy.actor.gui.TextEditorTableau.<init>(TextEditorTableau.java:68)
... 46 more
```

This page works on the Mac and I don't get the NPE.

History

#1 - 11/08/2011 06:54 PM - Derik Barseghian

I haven't been able to reproduce this on XP. I don't have Windows Server 2008, so will probably need you to test again when I release rc3.

#2 - 11/13/2011 06:03 PM - Christopher Brooks

The latest Kepler 2.3.0 rc3 continues to display a blank intro window under Windows Server 2008 when run with Java 1.7:

```
$ /cygdrive/C/Program\ Files/Java/jdk1.7.0/bin/java -version
java version "1.7.0"
Java(TM) SE Runtime Environment (build 1.7.0-b147)
Java HotSpot(TM) 64-Bit Server VM (build 21.0-b17, mixed mode)
```

```
Administrator@JOULE /cygdrive/c/Program Files/Kepler-2.3
$ /cygdrive/C/Program\ Files/Java/jdk1.7.0/bin/java -jar kepler.jar
```

Then do Help -> Kepler Documentation,
and click on
"background information on Ptolemy"
I get a blank page that has
jar:file:!/ptolemy/configs/ptinyKepler/intro.htm in the title.

The problem occurs when I run from the command line or via kepler.exe.
In both cases, Java 1.7 is being used.

However, the problem does **not** occur under Windows Server 2008 with
Java 1.6 when I invoked:

```
$ /cygdrive/C/Program\ Files/Java/jdk1.6.0_26/bin/java -version
java version "1.6.0_26"
Java(TM) SE Runtime Environment (build 1.6.0_26-b03)
Java HotSpot(TM) 64-Bit Server VM (build 20.1-b02, mixed mode)
```

```
Administrator@JOULE /cygdrive/c/Program Files/Kepler-2.3
```

```
/cygdrive/C/Program\ Files/Java/jdk1.6.0_26/bin/java -jar kepler.jar
```

The problem also does not occur under Windows 2003 when Kepler is invoked
with Java 1.6

Note that Windows Server 2008/Java 1.7 is quite close to Windows 7, so this bug could be quite common.

I can replicate this using the Ptolemy II nightly build under Java 1.7, so I'll take a look.

#3 - 11/14/2011 02:54 PM - Christopher Brooks

This is a Java 1.7 problem, I'm able to replicate the problem under Java 1.7 under Mac OS X.

I checked in a fix:

```
bash-3.2$ svn diff -r 62410 ~/ptII/ptolemy/actor/gui/HTMLViewer.java
```

```
Index: /Users/cxh/ptII/ptolemy/actor/gui/HTMLViewer.java =====
--- /Users/cxh/ptII/ptolemy/actor/gui/HTMLViewer.java (revision 62410)
+++ /Users/cxh/ptII/ptolemy/actor/gui/HTMLViewer.java (working copy)
@ -53,6 +53,7 @
```

```
import ptolemy.gui.Top;
import ptolemy.kernel.util.StringAttribute;
+import ptolemy.util.ClassUtilities;
import ptolemy.util.MessageHandler;

////////////////////////////////////
@ -356,6 +357,16 @
    * @see #getPage()
    */
    public void setPage(URL page) throws IOException {
+        URL jarURL = ClassUtilities.jarURLForResource(page.toString());
+        if (jarURL != null) {
+            // Under Java 1.7, JEditorPane.setPage() handles jar urls
+            // differently. In Java 1.6, setPage() would correctly open
+            // jar:file:/Users/cxh/ptII/ptolemy/ptsupport.jar!/doc/mainVergilPtiny.htm
+            // even though doc/MainVergilPtiny.htm is in doc/docConfig.jar,
+            // not ptsupport.jar. So, we look up the jar URL.
+            // See http://bugzilla.ecoinformatics.org/show\_bug.cgi?id=5508
+            page = jarURL;
+        }
        pane.setPage(page);
    }
}
```

This fix should be folded in to Kepler-2.3, which means creating another release candidate.

#4 - 11/14/2011 11:10 PM - Derik Barseghian

It's probably worth it, but note this means a large jump in the utilized revision of ptolemy (61797 to 62410) and represents a bit of work:

- build-area-2.3 needs to be deleted and recreated at release (due to movement of jars)
- bug#5540 should be fixed.
- Export As=>XML, PNG, etc need to be tested, I've seen work in this area in ptolemy
- I'll have to remember the black magic used to create a ptolemy 2.3 that doesn't keep a copy of the ptolemy code on our repository. (And I think I'm forgetting a few other kepler changes that should/will have to be included)

(In reply to comment #3)

This is a Java 1.7 problem, I'm able to replicate the problem under Java 1.7 under Mac OS X.

I checked in a fix:

```
bash-3.2$ svn diff -r 62410 ~/ptII/ptolemy/actor/gui/HTMLViewer.java
```

```
Index: /Users/cxh/ptII/ptolemy/actor/gui/HTMLViewer.java =====
--- /Users/cxh/ptII/ptolemy/actor/gui/HTMLViewer.java (revision 62410)
+++ /Users/cxh/ptII/ptolemy/actor/gui/HTMLViewer.java (working copy)
@ -53,6 +53,7 @
```

```
import ptolemy.gui.Top;
import ptolemy.kernel.util.StringAttribute;
+import ptolemy.util.ClassUtilities;
import ptolemy.util.MessageHandler;
```

```
////////////////////////////////////
@ -356,6 +357,16 @
```

- @see #getPage()


```

*/
public void setPage(URL page) throws IOException {
+   URL jarURL = ClassUtilities.jarURLForResource(page.toString());
+   if (jarURL != null) {
+       // Under Java 1.7, JEditorPane.setPage() handles jar urls
+       // differently. In Java 1.6, setPage() would correctly open
+       //
jar:file:/Users/cxh/ptll/ptolemy/ptsupport.jar!/doc/mainVergilPtiny.htm
+       // even though doc/MainVergilPtiny.htm is in doc/docConfig.jar,
+       // not ptsupport.jar. So, we look up the jar URL.
+       // See http://bugzilla.ecoinformatics.org/show\_bug.cgi?id=5508
+       page = jarURL;
+   }
pane.setPage(page);
}

```

This fix should be folded in to Kepler-2.3, which means creating another release candidate.

#5 - 11/14/2011 11:14 PM - Christopher Brooks

I would fold the change to HTMLViewer in to a branch just 2.3. I agree that there are many changes and we may not want all of them.

The missing Kieler Layout functionality should possibly be fixed.
It is very useful.

The export PNG facility could be skipped.

Just my \$0.02.

#6 - 11/15/2011 12:14 AM - Derik Barseghian

Do you mean you'd create a branch (61797 + 62410) in the ptolemy repo with this change for me to refer to?
Otherwise the solution is for me to copy the ptolemy 61797 source to the kepler repository, and patch, which is how 2.2 worked, and something I thought we discussed and decided is not good -- the keeping (and patching) of ptll code on the kepler repository.(?)
Kieler layout works in kepler 2.3, it just doesn't work on trunk, either because of a change in kepler trunk or a change in ptolemy trunk, so if we go with either of the above options there's nothing to fix. The Export options should likewise continue to work and shouldn't require extra testing.

#7 - 11/15/2011 10:18 AM - Christopher Brooks

Ok, I created a branch with:
svn copy -r 61797 svn+ssh://source.eecs.berkeley.edu/chess/ptll/trunk svn+ssh://source.eecs.berkeley.edu/chess/ptll/branches/kepler-2-3 -m "Creating Kepler-2.3 branch"

Is r61797 the right revision?

To check it out, use
svn co svn+ssh://source.eecs.berkeley.edu/chess/ptll/branches/kepler-2-3 ptll-kepler2.3

or

svn co <https://source.eecs.berkeley.edu/svn/chess/ptll/branches/kepler-2-3> ptll-kepler2.3

I checked in the change to HTMLViewer.java

For my own notes, I verified the fix with:

1. Checking out the branch
2. Copying ptll/build.default.xml to build.xml and excluding ptolemy/actor/lib/logic/fuzzy and ptolemy/domains/jogl
3. Building with ant
4. Copied ptll/jars.xml
5. Built the jar files with ant -f jars.xml jars
6. Created a script called "doit" that uses just jar files:
java -classpath "\${PTII}/ptolemy/ptsupport.jar:\${PTII}/ptolemy/vergil/vergil.jar:\${PTII}/lib/diva.jar:\${PTII}/doc/docConfig.jar:\${PTII}/ptolemy/domains/domains.jar" ptolemy.vergil.VergilApplication -ptiny
7. cd'd to a subdirectory so that \$PTII was not the cwd (thus avoiding

accidentally finding source files in the path.

8. Ran

sh ../doit

9. Clicked on Overview. The title of the window ended in

ptsupport.jar!/doc/mainVergil.htm

10. File -> New ->Graph Editor -> View -> JVM Properties indicates that

java.version = 1.6.0_29

11. Exit vergil.

12. Under Mac OS X, I had installed a preview version of Java 1.7, so

under Utilities, I selected the Java Preferences program and dragged

the 64 bit version of Java 1.7 to the top and exited Java Preferences.

13. Reran

sh ../doit

14. I get this stack trace in stdout, which I ignore:

Exception in thread "AWT-EventQueue-0" java.lang.IllegalArgumentException: Width (-1) and height (-1) cannot be <= 0

at java.awt.image.DirectColorModel.createCompatibleWritableRaster(DirectColorModel.java:1016)

at java.awt.image.BufferedImage.<init>(BufferedImage.java:357)

at sun.lwawt.macosx.CImage\$Creator.createFromImage(CImage.java:101)

at sun.lwawt.macosx.CPlatformWindow.getImageForTarget(CPlatformWindow.java:693)

at sun.lwawt.macosx.CPlatformWindow.updateIconImages(CPlatformWindow.java:519)

at sun.lwawt.macosx.CPlatformWindow.setVisible(CPlatformWindow.java:484)

at sun.lwawt.LWWindowPeer\$1.run(LWWindowPeer.java:260)

at java.awt.event.InvocationEvent.dispatch(InvocationEvent.java:251)

at java.awt.EventQueue.dispatchEventImpl(EventQueue.java:705)

at java.awt.EventQueue.access\$000(EventQueue.java:101)

at java.awt.EventQueue\$3.run(EventQueue.java:666)

at java.awt.EventQueue\$3.run(EventQueue.java:664)

at java.security.AccessController.doPrivileged(Native Method)

at java.security.ProtectionDomain\$1.doIntersectionPrivilege(ProtectionDomain.java:76)

at java.awt.EventQueue.dispatchEvent(EventQueue.java:675)

at java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:240)

at java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:157)

at java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:146)

at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:142)

at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:134)

at java.awt.EventDispatchThread.run(EventDispatchThread.java:91)

15. The various links in the splash screen work

16. File -> New ->Graph Editor -> View -> JVM Properties has:

java.version = 1.7.0-ea

#8 - 11/15/2011 08:10 PM - Derik Barseghian

Yes r61797 is right.

Thanks for doing this.

I'll try to switch kepler-2.3 to use this branch, probably early next week.

(In reply to comment #7)

Ok, I created a branch with:

```
svn copy -r 61797 svn+ssh://source.eecs.berkeley.edu/chess/ptll/trunk  
svn+ssh://source.eecs.berkeley.edu/chess/ptll/branches/kepler-2-3 -m "Creating  
Kepler-2.3 branch"
```

Is r61797 the right revision?

To check it out, use

```
svn co svn+ssh://source.eecs.berkeley.edu/chess/ptll/branches/kepler-2-3  
ptll-kepler2.3
```

or

```
svn co https://source.eecs.berkeley.edu/svn/chess/ptll/branches/kepler-2-3  
ptll-kepler2.3
```

I checked in the change to HTMLViewer.java

For my own notes, I verified the fix with:

1. Checking out the branch
2. Copying ptll/build.default.xml to build.xml and excluding
ptolemy/actor/lib/logic/fuzzy
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4. Copied ptll/jars.xml
5. Built the jar files with
ant -f jars.xml jars
6. Created a script called "doit" that uses just jar files:
java -classpath
"\${PTII}/ptolemy/ptsupport.jar:\${PTII}/ptolemy/vergil/vergil.jar:\${PTII}/lib/diva.jar:\${PTII}/doc/docConfig.jar:\${PTII}/ptolemy/domains/domains.jar"
ptolemy.vergil.VergilApplication -ptiny
7. cd'd to a subdirectory so that \$PTII was not the cwd (thus avoiding accidentally finding source files in the path).
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9. Clicked on Overview. The title of the window ended in
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Exception in thread "AWT-EventQueue-0" java.lang.IllegalArgumentException: Width (-1) and height (-1) cannot be <= 0
at
java.awt.image.DirectColorModel.createCompatibleWritableRaster(DirectColorModel.java:1016)
at java.awt.image.BufferedImage.<init>(BufferedImage.java:357)
at sun.lwawt.macosx.CImage\$Creator.createFromImage(CImage.java:101)
at
sun.lwawt.macosx.CPlatformWindow.getImageForTarget(CPlatformWindow.java:693)
at
sun.lwawt.macosx.CPlatformWindow.updateIconImages(CPlatformWindow.java:519)
at
sun.lwawt.macosx.CPlatformWindow.setVisible(CPlatformWindow.java:484)
at sun.lwawt.LWWindowPeer\$1.run(LWWindowPeer.java:260)
at java.awt.event.InvocationEvent.dispatch(InvocationEvent.java:251)
at java.awt.EventQueue.dispatchEventImpl(EventQueue.java:705)
at java.awt.EventQueue.access\$000(EventQueue.java:101)
at java.awt.EventQueue\$3.run(EventQueue.java:666)
at java.awt.EventQueue\$3.run(EventQueue.java:664)
at java.security.AccessController.doPrivileged(Native Method)
at
java.security.ProtectionDomain\$1.doIntersectionPrivilege(ProtectionDomain.java:76)
at java.awt.EventQueue.dispatchEvent(EventQueue.java:675)
at
java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:240)
at
java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:157)
at
java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:146)
at
java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:142)
at
java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:134)
at java.awt.EventDispatchThread.run(EventDispatchThread.java:91)
15. The various links in the splash screen work
16. File -> New ->Graph Editor -> View -> JVM Properties has:
java.version = 1.7.0-ea

#9 - 11/21/2011 02:58 PM - Derik Barseghian

I've switched kepler-2.3 to use this new branch of ptolemy.
On Windows XP I installed java 1.7 (runtime 1.7.0.01_b08) and recompiled and started kepler-2.3, and tried the 'background information on Ptolemy', and it works.

I think this is safe to close, but will leave open until we test on the next rc.

#10 - 11/21/2011 07:28 PM - Derik Barseghian

Verified fixed in rc4 on XP w/ java7

#11 - 11/22/2011 11:17 AM - Christopher Brooks

Verified fixed in rc4 on Windows Server 2008 w/ java7

#12 - 03/27/2013 02:30 PM - Redmine Admin

Original Bugzilla ID was 5508