

Kepler - Bug #3801

open dialog, common places pane has white box instead of text

01/29/2009 03:58 PM - Oliver Soong

Status:	Resolved	Start date:	01/29/2009
Priority:	Normal	Due date:	
Assignee:	Christopher Brooks	% Done:	0%
Category:	interface	Estimated time:	0.00 hour
Target version:	2.X.Y	Spent time:	0.00 hour
Bugzilla-Id:	3801		
Description			
XP Pro x64 SP2, Java 1.6.0_11, Kepler 1.0.0 from kepler-project.org.			
When I go to File->Open File..., the common places pane on the left has five icons and five white boxes where the icon labels are supposed to be.			
Image at the URL.			
Related issues:			
Blocks Kepler - Bug #4282: Duplicate of ptolemy.gui.Top		Resolved	08/05/2009

History

#1 - 01/29/2009 11:18 PM - Christopher Brooks

I can reproduce this but in the Ptolemy II devel tree, so it is not Kepler specific. Running \$PTII/bin/vergil will do it under Windows 2000 Server with both Java 1.5.0_17 and 1.6.0_05.

Running java -classpath . ptolemy.vergil.VergilApplication and then "File -> Open" will do it.

Interestingly, the plotter does not have this bug, even though both the Plotter and Vergil use ptolemy.gui.Top and JFileChooser.

There is this Sun bug, which is close, but not totally the problem: http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6548613
"Windows JFileChooser missing "My Recent Documents" in dropdown"

#2 - 03/12/2009 12:25 AM - Christopher Brooks

The whiteboxes in the Windows file browser dialog only occur in the HTML Viewer.

This command does not have the bug under Java 1.5.0_17 with Ptolemy II 5.0.1, but does have it with Java 1.5.0_17 with Ptolemy II 6.0.2, 7.0.1 and the svn head:

```
java -classpath "." ptolemy.vergil.VergilApplication doc/help.htm
```

The problem goes away if I comment out the stylesheet code in ptolemy.actor.gui.HTMLViewer._init():

```
if (_stylesheetURL != null) {
    // If _stylesheetURL is non-null, we set the style sheet
    // once and only once. If try to do this in a static initializer,
    // then the styles are wrong.
    HTMLDocument doc = (HTMLDocument) pane.getDocument();
    StyleSheet styleSheet = doc.getStyleSheet();
    styleSheet.importStyleSheet(_stylesheetURL);
    new HTMLToolkit().setStyleSheet(styleSheet);
    _stylesheetURL = null;
}
```

The problem is that ptill/doc/default.css sets the body to white:

```
BODY {
background: #ffffff;
```

which gives us the white boxes. Changing the background changes

the color of the white boxes.

The fix would be to come up with a css file does not set the background for the JFileChooser widget.

#3 - 03/12/2009 11:58 AM - Christopher Brooks

A class that demonstrates the bug where setting the background of an HTML widget also affects the background of the text in the Windows Places Bar in the Windows native file chooser (WindowsFileChooserUI). The Places Bar is the area on the left that has text for "My Recent Documents", "Desktop", "My Documents", "My Computer" etc. When we set the BODY style, this affects the background of the text. It looks like this is a bug in the WindowsPlacesBar code,

<http://sun.calstatela.edu/~cysun/documentation/java/1.5.0-source/j2se/src/share/classes/sun/swing/WindowsPlacesBar.java> looks like:

```
if (isXPPlatform) {
    buttons[i].setIconTextGap(2);
    buttons[i].setMargin(new Insets(2, 2, 2, 2));
    buttons[i].setText("<html>&center&gt;" + folderName + "&lt;/center&gt;&lt;/html>");
}
```

So, the problem is that the text in the Windows Places Bar is html and setting the body background color affects it.

I don't have a good solution for this, other than temporarily overriding the stylesheet in HTMLViewer() when we call _open(). Note that file chooser in ptolemy.gui.Query might also have this problem.

#4 - 03/12/2009 06:00 PM - Christopher Brooks

I believe I've fixed this.

For some reason, my previous comment to this bug was not emailed to the kepler-dev list, I think because I attached an attachment.

In that comment, I determined that the problem was because Windows specific code was setting the text of the buttons using html. See "How to Use HTML in Swing Components" at <http://java.sun.com/docs/books/tutorial/ui/swing/components/html.html>

I tried adjusting ptll/doc/default.css to set the body color to black:
BODY {
color: #000000;

but that did not work. I think the problem is that the text of the button is not inside a body:

<http://sun.calstatela.edu/~cysun/documentation/java/1.5.0-source/j2se/src/share/classes/sun/swing/WindowsPlacesBar.java>

has it as:
buttons[i].setText("<html>¢er>" + folderName + "</center></html>");

One possibility would be to remove the background setting for body in default.css. The downside of this is that pages that had different body background colors would render with those different background colors. This is not a huge problem, but we set the background in default.css for a reason, so we should not unset it.

Another alternative is to get rid of the Windows Places Bar on the left.

<http://java.sun.com/j2se/1.5.0/docs/guide/swing/1.5/> suggests:

4723745: Metal & Windows FileChooserUI classes cannot be used without ShellFolder
Description:

Since 1.4, the JFileChooser code has too strong a dependence on the native layer. An attempt was made to bypass this class for programs that use a customized "virtual" filesystem, but the algorithm is not 100% reliable. To toggle this behavior, use the client property FileChooser.useShellFolder, for example, to turn off use of the native set this to false:

```
JFileChooser.putClientProperty("FileChooser.useShellFolder",  
Boolean.FALSE);
```

My solution was to add an `_open()` method to `HTMLViewer` that saves the previous background color, sets the background to the value of a property, `"ToolBar.shadow"`, and then restores the original background color. This might work, so I've checked in. Worst case, we could make this conditional for Windows.

I'll submit the test case to Sun as a bug.

#5 - 03/17/2009 09:16 AM - Christopher Brooks

FWIW, Sun has acknowledged that this is a bug, see http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6817933

#6 - 06/15/2009 04:15 PM - Christopher Brooks

I'm reopening this bug, there are problems with the code under:

- Windows Server 2003 via Windows Remote Desktop. Java 1.6.0_04 and 1.6.0_14
\$PTII/bin/vergil, then File -> Open, then Cancel: HTML window scrambled, the links on the right of the welcome window are superimposed on the image on the left.
- Mac OS X, Java 1.5.0_16
\$PTII/bin/vergil, then File -> Open.
Move the File Dialog and see that the links on the right are super imposed on the image on the left.

It appears that calling `StyleSheet.addRule("body {background: #939393;}");` is what is causing the problem. The reality is that adding any rule causes the problem on the mac

http://www.gamedev.net/community/forums/topic.asp?topic_id=325758

Brian Hudson writes:

This happens for me as well, even when I actually open a model.

I also get the following exceptions:

```
Problem setting background color
java.lang.NullPointerException
at ptolemy.actor.gui.HTMLViewer._open(HTMLViewer.java:474)
at ptolemy.gui.Top$FileMenuListener.actionPerformed(Top.java:1139)
at javax.swing.AbstractButton.fireActionPerformed(Unknown Source)
at javax.swing.AbstractButton$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$Handler.mouseReleased(Unknown Source)
at java.awt.Component.processMouseEvent(Unknown Source)
at javax.swing.JComponent.processMouseEvent(Unknown Source)
at java.awt.Component.processEvent(Unknown Source)
at java.awt.Container.processEvent(Unknown Source)
at java.awt.Component.dispatchEventImpl(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
at java.awt.Component.dispatchEvent(Unknown Source)
at java.awt.LightweightDispatcher.retargetMouseEvent(Unknown Source)
at java.awt.LightweightDispatcher.processMouseEvent(Unknown Source)
at java.awt.LightweightDispatcher.dispatchEvent(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
at java.awt.Window.dispatchEventImpl(Unknown Source)
at java.awt.Component.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.run(Unknown Source)
java.lang.NullPointerException
Problem restoring background color.
at ptolemy.actor.gui.HTMLViewer._open(HTMLViewer.java:488)
at ptolemy.gui.Top$FileMenuListener.actionPerformed(Top.java:1139)
```

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.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.dispatchEvent(Unknown Source)
at java.awt.EventQueue.run(Unknown Source)

Charles Shelton writes:

Shelton Charles (CR/RTC3-NA) wrote:

Hi Eveyone,

I'm getting some weird behavior with the Ptolemy Intro Window. When I launch Ptolemy from Eclipse, the Ptolemy Intro Window appears with the Ptolemy Logo on the left and some useful links on the right, as normal.

But when I click File -> Open to open a model, sometimes after I open a model, or if I just click Cancel from the file dialog, the Ptolemy Intro Window redraws itself so that the text with the links is now overlaid on top of the the Ptolemy logo, and is virtually unreadable. The right side of the window where the text is supposed to be is empty. This appears to happened sporadically and is not always repeatable, but I have been able to reproduce this reliably by launching Ptolemy with no command line arguments, clicking File -> Open, then clicking Canel in the file dialog. After the file dialog disappears, the Ptolemy intro window is redrawn incorectly. This has started happening fairly recently, so I think this bug is relatively new. Sorry I don't have more information to go on.

By the way, I'm running the latest JDK 1.6.0_14 and using an older vesion of Eclipse 3.4.0

#7 - 06/15/2009 04:15 PM - Christopher Brooks

Assigning this to myself.

#8 - 08/05/2009 02:30 PM - Christopher Brooks

This is fixed in the Ptolemy tree.

I added ptolemy.actor.JFileChooserBugFix and modified ptolemy.gui.Top.ptolemy.gui.Query and ptolemy.actor.gui.TableauFrame to use it. Basically, what we do is get the background and save it, set the background to a value that will work properly, create the JFileChooser and then in a finally clause restore the original background. This is a hack to workaroud a known Sun bug:

http://bugs.sun.com/bugdatabase/view_bug.do?bug_id=6817933

I checked that the following work properly with no white boxes and no corruption of the html widget:

File -> Open
File -> SaveAs
The FileParameter Browse button.

Unfortunately, in Kepler the "Open Archive (KAR)" menu choice still has white boxes. To fix this, see the comment at the top of JFileChooserBugFix.

Unfortunately, the fixes to File->Open and File->SaveAs will not be visible in Kepler because Kepler contains a duplicate copy of Top in
ptll/src/ptolemy/gui/Top.java
(Bug 4282 at http://bugzilla.ecoinformatics.org/show_bug.cgi?id=4282)

To see this fix and workaround bug #4282:
cd build-area
ant update-ptolemy -Drev=head
rm ../ptll/src/ptolemy/gui/Top.java
rm ../ptll/target/classes/ptolemy/gui/Top*.class
ant run
rm ../ptll/src/ptolemy/gui/

I'm upgrading the severity of this bug because it makes Kepler look wrong under Windows when the user opens a file.

#9 - 08/26/2009 03:13 PM - Chad Berkley

Fixing 4282 will fix this bug.

#10 - 08/26/2009 03:13 PM - Chad Berkley

moving to 2.x.y because fixing 4282 will handle most of the problems. fix the gui problems after the 2.0 release.

#11 - 09/22/2009 03:45 PM - Christopher Brooks

Fixing Bug 4282 fixed most of these problems. The remaining issue is: the "Open Archive (KAR)" menu choice still has white boxes. To fix this, see the comment at the top of JFileChooserBugFix.

#12 - 03/24/2010 06:30 PM - Christopher Brooks

I'm reviewing old bugs.
This bug is still present in the devel tree.

The problem is that under Windows 2003, anything that uses JFileChooser will have white boxes in the left hand side. The fix is to use
ptolemy.gui.JFileChooserBugFix

However, this class:

```
./data-handling/src/org/ecoinformatics/seek/querybuilder/QBApp.java
```

is in a package that does not import any ptolemy packages, so I'm hesitant to add the import. If QBApp is fixed or shown to not have the bug then I believe this bug can be closed.

The following files should be merged from the head to the Kepler release branch.

```
trunk/modules/gui/src/org/kepler/gui/kar/DeleteArchiveAction.java  
trunk/modules/gui/src/org/kepler/gui/kar/ExportArchiveAction.java  
trunk/modules/gui/src/org/kepler/gui/kar/OpenArchiveAction.java  
trunk/modules/gui/src/org/kepler/gui/kar/RefreshFolderAction.java  
trunk/modules/gui/src/org/kepler/gui/kar/ViewManifestAction.java  
  
trunk/modules/module-manager-gui/src/org/kepler/modulemanager/gui/CurrentSuitePanel.java  
  
trunk/modules/gui/src/org/kepler/gui/ComponentLibraryPreferencesTab.java  
  
trunk/modules/actors/src/org/cipres/kepler/NexusFileReader.java
```

#13 - 04/23/2010 01:22 PM - Derik Barseghian

It looks like the files in comment#12 still need to be merged into 2.0. I'll do this later this afternoon.

#14 - 04/23/2010 02:32 PM - Derik Barseghian

merged the 8 files in comment#12 into 2.0, so moving this bug back to 2.X.Y target.

The first part of comment#12 re: QBApp still needs to be addressed.

#15 - 06/17/2012 01:57 PM - Christopher Brooks

Fixed.

data-handling/src/org/ecoinformatics/seek/querybuilder/QBApp.java was updated:

```
919 | crawl | 2012-06-11 17:46:03 -0700 (Mon, 11 Jun 2012) | 1 line
use PtFileChooser for OSX dialog boxes (bug 4112)
```

The way to check this:

```
cd kepler
```

```
find . -name "*.java" > ~/tmp/kj
```

```
cat ~/tmp/kj | xargs grep JFileChooser | grep import
```

Then look for files that import JFileChooser, but do not import JFileChooserBugFix

#16 - 03/27/2013 02:24 PM - Redmine Admin

Original Bugzilla ID was 3801

Files

HTMLCSSWindowsFileChooserBug.zip	1.6 KB	03/12/2009	Christopher Brooks
FileBrowserWhiteBoxes.png	22.6 KB	09/22/2009	Christopher Brooks