

Kepler - Bug #6634

Error message popup not generated when saving to a write protected directory.

12/17/2014 09:21 AM - Artur Szostak

| | | | |
|---|--------------------|------------------------|------------|
| Status: | Closed | Start date: | 12/17/2014 |
| Priority: | Normal | Due date: | |
| Assignee: | Christopher Brooks | % Done: | 100% |
| Category: | | Estimated time: | 0.00 hour |
| Target version: | 2.6.0 | Spent time: | 1.50 hour |
| Bugzilla-Id: | | | |
| Description | | | |
| In the Kepler GUI a message popup window should appear when the saving of a file fails. To reproduce the problem, run the following commands in a POSIX terminal (on Fedora 20 in this case): | | | |
| <pre>curl https://code.kepler-project.org/code/kepler/releases/installers/2.4/kepler-2.4-linux.tar.gz tar xzf - mkdir my_workspace chmod -w my_workspace cp ./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml original_configuration.xml cat original_configuration.xml head -n 257 > ./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml echo " <property name=\"_alternateDefaultOpenDirectory\" value=\"`pwd`/my_workspace\" class=\"ptolemy.kernel.util.StringAttribute\"/>" >> ./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml cat original_configuration.xml tail -n 1 >> ./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml ./kepler-2.4/kepler.sh</pre> | | | |
| Once Kepler has started (you might have to close the initial "welcome"/"upgrade" popup windows), follow these instructions: | | | |
| <pre>Click on the "File->Save" item from the menu bar. Click on the "OK" button in the "Please enter a name for this workflow" pupup window. Click on the "Save" button in the "Save" popup window.</pre> | | | |
| No error message popup appears, even though there is a log message in the terminal about "permission denied". | | | |

History

#1 - 12/17/2014 09:32 AM - Artur Szostak

Note: got the formatting wrong in the previous post. The terminal commands should be:

```
curl https://code.kepler-project.org/code/kepler/releases/installers/2.4/kepler-2.4-linux.tar.gz | tar xzf -
mkdir my_workspace
chmod -w my_workspace
cp ./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml original_configuration.xml
cat original_configuration.xml | head -n 257 > ./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml
echo " <property name=\"_alternateDefaultOpenDirectory\" value=\"`pwd`/my_workspace\" class=\"ptolemy.kernel.util.StringAttribute\"/>" >>
./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml
cat original_configuration.xml | tail -n 1 >> ./kepler-2.4/common-2.4.0/configs/ptolemy/configs/kepler/configuration.xml
./kepler-2.4/kepler.sh
```

#2 - 12/22/2015 02:50 PM - Christopher Brooks

- Target version changed from 2.4.0 to 2.6.0

- Assignee set to Christopher Brooks

I verified that Kepler-2.5 continues exhibit this bug where saving to a read-only directory results in a message to stdout.

Ptolemy II does not have this problem.

I just fixed this problem in the Kepler devel head.

To replicate with Kepler-2.5 (note that the case of the file and directory changed from kepler-2.4 to Kepler-2.5), use:

```
curl https://code.kepler-project.org/code/kepler/releases/installers/2.5/Kepler-2.5-linux.tar.gz | tar xzf -
mkdir my_workspace
chmod -w my_workspace
cp ./Kepler-2.5/common-2.5.0/configs/ptolemy/configs/kepler/configuration.xml original_configuration.xml
cat original_configuration.xml | head -n 257 > ./Kepler-2.5/common-2.5.0/configs/ptolemy/configs/kepler/configuration.xml
echo " <property name=\"_alternateDefaultOpenDirectory\" value=\"`pwd`/my_workspace\" class=\"ptolemy.kernel.util.StringAttribute\"/>" >> ./Kepler-2.5/common-2.5.0/configs/ptolemy/configs/kepler/configuration.xml
cat original_configuration.xml | tail -n 1 >> ./Kepler-2.5/common-2.5.0/configs/ptolemy/configs/kepler/configuration.xml
./Kepler-2.5/kepler.sh
```

See the original bug report for how to replicate.

The error is that when a workflow is stored in a unwritable directory the following appears in the console, but no dialog is popped up:

```
[run] Initializing Library Panel.
[run] *** Attempting to get ResourceBundle for SVG defaults ***
[run] *** svgRenderingMethod = SVG_BATIK_RENDERING ***
[run] Checking for patches...
[run] java.io.FileNotFoundException: /home/cxh/src/keplerbug2/my_workspace/Unnamed1.kar (Permission denied)
[run] at java.io.FileOutputStream.open0(Native Method)
[run] at java.io.FileOutputStream.open(FileOutputStream.java:270)
[run] at java.io.FileOutputStream.<init>(FileOutputStream.java:213)
[run] at java.io.FileOutputStream.<init>(FileOutputStream.java:162)
[run] at org.kepler.kar.KARBuilder.writeKARFile(KARBuilder.java:457)
[run] at org.kepler.kar.KARBuilder.generateKAR(KARBuilder.java:380)
[run] at org.kepler.kar.SaveKAR.saveToDisk(SaveKAR.java:154)
[run] at org.kepler.gui.kar.ExportArchiveAction.actionPerformed(ExportArchiveAction.java:432)
[run] at javax.swing.AbstractButton.fireActionPerformed(AbstractButton.java:2022)
[run] at javax.swing.AbstractButton$Handler.actionPerformed(AbstractButton.java:2348)
[run] at javax.swing.DefaultButtonModel.fireActionPerformed(DefaultButtonModel.java:402)
[run] at javax.swing.DefaultButtonModel.setPressed(DefaultButtonModel.java:259)
[run] at javax.swing.AbstractButton.doClick(AbstractButton.java:376)
[run] at javax.swing.plaf.basic.BasicMenuItemUI.doClick(BasicMenuItemUI.java:833)
[run] at javax.swing.plaf.basic.BasicMenuItemUI$Handler.mouseReleased(BasicMenuItemUI.java:877)
[run] at java.awt.Component.processMouseEvent(Component.java:6535)
[run] at javax.swing.JComponent.processMouseEvent(JComponent.java:3324)
[run] at java.awt.Component.processEvent(Component.java:6300)
[run] at java.awt.Container.processEvent(Container.java:2236)
[run] at java.awt.Component.dispatchEventImpl(Component.java:4891)
[run] at java.awt.Container.dispatchEventImpl(Container.java:2294)
[run] at java.awt.Component.dispatchEvent(Component.java:4713)
[run] at java.awt.LightweightDispatcher.retargetMouseEvent(Container.java:4888)
[run] at java.awt.LightweightDispatcher.processMouseEvent(Container.java:4525)
[run] at java.awt.LightweightDispatcher.dispatchEvent(Container.java:4466)
[run] at java.awt.Container.dispatchEventImpl(Container.java:2280)
[run] at java.awt.Window.dispatchEventImpl(Window.java:2750)
[run] at java.awt.Component.dispatchEvent(Component.java:4713)
[run] at java.awt.EventQueue.dispatchEventImpl(EventQueue.java:758)
[run] at java.awt.EventQueue.access$500(EventQueue.java:97)
[run] at java.awt.EventQueue$3.run(EventQueue.java:709)
[run] at java.awt.EventQueue$3.run(EventQueue.java:703)
[run] at java.security.AccessController.doPrivileged(Native Method)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:76)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:86)
[run] at java.awt.EventQueue$4.run(EventQueue.java:731)
[run] at java.awt.EventQueue$4.run(EventQueue.java:729)
[run] at java.security.AccessController.doPrivileged(Native Method)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:76)
[run] at java.awt.EventQueue.dispatchEvent(EventQueue.java:728)
[run] at java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:201)
[run] at java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:116)
[run] at java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:105)
[run] at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:101)
[run] at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:93)
[run] at java.awt.EventDispatchThread.run(EventDispatchThread.java:82)
[run] ptolemy.kernel.util.IllegalActionException: Error building the KAR file.: /home/cxh/src/keplerbug2
```

```

/my_workspace/Unnamed1.kar (Permission denied)
[run] at org.kepler.kar.KARBuilder.generateKAR (KARBuilder.java:384)
[run] at org.kepler.kar.SaveKAR.saveToDisk (SaveKAR.java:154)
[run] at org.kepler.gui.kar.ExportArchiveAction.actionPerformed (ExportArchiveAction.java:432)
[run] at javax.swing.AbstractButton.fireActionPerformed (AbstractButton.java:2022)
[run] at javax.swing.AbstractButton$Handler.actionPerformed (AbstractButton.java:2348)
[run] at javax.swing.DefaultButtonModel.fireActionPerformed (DefaultButtonModel.java:402)
[run] at javax.swing.DefaultButtonModel.setPressed (DefaultButtonModel.java:259)
[run] at javax.swing.AbstractButton.doClick (AbstractButton.java:376)
[run] at javax.swing.plaf.basic.BasicMenuItemUI.doClick (BasicMenuItemUI.java:833)
[run] at javax.swing.plaf.basic.BasicMenuItemUI$Handler.mouseReleased (BasicMenuItemUI.java:877)
[run] at java.awt.Component.processMouseEvent (Component.java:6535)
[run] at javax.swing.JComponent.processMouseEvent (JComponent.java:3324)
[run] at java.awt.Component.processEvent (Component.java:6300)
[run] at java.awt.Container.processEvent (Container.java:2236)
[run] at java.awt.Component.dispatchEventImpl (Component.java:4891)
[run] at java.awt.Container.dispatchEventImpl (Container.java:2294)
[run] at java.awt.Component.dispatchEvent (Component.java:4713)
[run] at java.awt.LightweightDispatcher.retargetMouseEvent (Container.java:4888)
[run] at java.awt.LightweightDispatcher.processMouseEvent (Container.java:4525)
[run] at java.awt.LightweightDispatcher.dispatchEvent (Container.java:4466)
[run] at java.awt.Container.dispatchEventImpl (Container.java:2280)
[run] at java.awt.Window.dispatchEventImpl (Window.java:2750)
[run] at java.awt.Component.dispatchEvent (Component.java:4713)
[run] at java.awt.EventQueue.dispatchEventImpl (EventQueue.java:758)
[run] at java.awt.EventQueue.access$500 (EventQueue.java:97)
[run] at java.awt.EventQueue$3.run (EventQueue.java:709)
[run] at java.awt.EventQueue$3.run (EventQueue.java:703)
[run] at java.security.AccessController.doPrivileged (Native Method)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDom
ain.java:76)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDom
ain.java:86)
[run] at java.awt.EventQueue$4.run (EventQueue.java:731)
[run] at java.awt.EventQueue$4.run (EventQueue.java:729)
[run] at java.security.AccessController.doPrivileged (Native Method)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDom
ain.java:76)
[run] at java.awt.EventQueue.dispatchEvent (EventQueue.java:728)
[run] at java.awt.EventDispatchThread.pumpOneEventForFilters (EventDispatchThread.java:201)
[run] at java.awt.EventDispatchThread.pumpEventsForFilter (EventDispatchThread.java:116)
[run] at java.awt.EventDispatchThread.pumpEventsForHierarchy (EventDispatchThread.java:105)
[run] at java.awt.EventDispatchThread.pumpEvents (EventDispatchThread.java:101)
[run] at java.awt.EventDispatchThread.pumpEvents (EventDispatchThread.java:93)
[run] at java.awt.EventDispatchThread.run (EventDispatchThread.java:82)
[run] ERROR (org.kepler.kar.SaveKAR:saveToDisk:163) Failed to create kar file: Error building the KAR fi
le.: /home/cxh/src/keplerbug2/my_workspace/Unnamed1.kar (Permission denied)
[run] INFO (org.kepler.objectmanager.repository.RepositoryManager:<init>:118) adding repository localRe
pository
[run] INFO (org.kepler.objectmanager.repository.RepositoryManager:<init>:118) adding repository keplerR
epository
[run] java.io.FileNotFoundException: /home/cxh/src/keplerbug2/my_workspace/Unnamed1.kar (No such file or
directory)
[run] at java.util.zip.ZipFile.open (Native Method)
[run] at java.util.zip.ZipFile.<init> (ZipFile.java:219)
[run] at java.util.zip.ZipFile.<init> (ZipFile.java:149)
[run] at java.util.jar.JarFile.<init> (JarFile.java:166)
[run] at java.util.jar.JarFile.<init> (JarFile.java:130)
[run] at org.kepler.kar.KARFile.<init> (KARFile.java:192)
[run] at org.kepler.gui.kar.ExportArchiveAction.actionPerformed (ExportArchiveAction.java:537)
[run] at javax.swing.AbstractButton.fireActionPerformed (AbstractButton.java:2022)
[run] at javax.swing.AbstractButton$Handler.actionPerformed (AbstractButton.java:2348)
[run] at javax.swing.DefaultButtonModel.fireActionPerformed (DefaultButtonModel.java:402)
[run] at javax.swing.DefaultButtonModel.setPressed (DefaultButtonModel.java:259)
[run] at javax.swing.AbstractButton.doClick (AbstractButton.java:376)
[run] at javax.swing.plaf.basic.BasicMenuItemUI.doClick (BasicMenuItemUI.java:833)
[run] at javax.swing.plaf.basic.BasicMenuItemUI$Handler.mouseReleased (BasicMenuItemUI.java:877)
[run] at java.awt.Component.processMouseEvent (Component.java:6535)
[run] at javax.swing.JComponent.processMouseEvent (JComponent.java:3324)
[run] at java.awt.Component.processEvent (Component.java:6300)
[run] at java.awt.Container.processEvent (Container.java:2236)
[run] at java.awt.Component.dispatchEventImpl (Component.java:4891)
[run] at java.awt.Container.dispatchEventImpl (Container.java:2294)
[run] at java.awt.Component.dispatchEvent (Component.java:4713)
[run] at java.awt.LightweightDispatcher.retargetMouseEvent (Container.java:4888)

```

```

[run] at java.awt.LightweightDispatcher.processMouseEvent (Container.java:4525)
[run] at java.awt.LightweightDispatcher.dispatchEvent (Container.java:4466)
[run] at java.awt.Container.dispatchEventImpl (Container.java:2280)
[run] at java.awt.Window.dispatchEventImpl (Window.java:2750)
[run] at java.awt.Component.dispatchEvent (Component.java:4713)
[run] at java.awt.EventQueue.dispatchEventImpl (EventQueue.java:758)
[run] at java.awt.EventQueue.access$500 (EventQueue.java:97)
[run] at java.awt.EventQueue$3.run (EventQueue.java:709)
[run] at java.awt.EventQueue$3.run (EventQueue.java:703)
[run] at java.security.AccessController.doPrivileged (Native Method)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDom
ain.java:76)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDom
ain.java:86)
[run] at java.awt.EventQueue$4.run (EventQueue.java:731)
[run] at java.awt.EventQueue$4.run (EventQueue.java:729)
[run] at java.security.AccessController.doPrivileged (Native Method)
[run] at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDom
ain.java:76)
[run] at java.awt.EventQueue.dispatchEvent (EventQueue.java:728)
[run] at java.awt.EventDispatchThread.pumpOneEventForFilters (EventDispatchThread.java:201)
[run] at java.awt.EventDispatchThread.pumpEventsForFilter (EventDispatchThread.java:116)
[run] at java.awt.EventDispatchThread.pumpEventsForHierarchy (EventDispatchThread.java:105)
[run] at java.awt.EventDispatchThread.pumpEvents (EventDispatchThread.java:101)
[run] at java.awt.EventDispatchThread.pumpEvents (EventDispatchThread.java:93)
[run] at java.awt.EventDispatchThread.run (EventDispatchThread.java:82)

```

Ptolemy II correctly handles this by popping up a dialog with the stack trace button. The Ptolemy II Vergil exception that is displayed in a stack trace dialog is:

```

java.io.FileNotFoundException: /home/cxh/src/keplerbug2/my_workspace/model.xml (Permission denied)
at java.io.FileOutputStream.open0 (Native Method)
at java.io.FileOutputStream.open (FileOutputStream.java:270)
at java.io.FileOutputStream.<init> (FileOutputStream.java:213)
at java.io.FileOutputStream.<init> (FileOutputStream.java:162)
at java.io.FileWriter.<init> (FileWriter.java:90)
at ptolemy.actor.gui.PtolemyEffigy.writeFile (PtolemyEffigy.java:215)
at ptolemy.actor.gui.PtolemyFrame._writeFile (PtolemyFrame.java:493)
at ptolemy.vergil.basic.BasicGraphFrame._writeFile (BasicGraphFrame.java:3313)
at ptolemy.actor.gui.TableauFrame._saveAsHelperCommon (TableauFrame.java:1289)
at ptolemy.actor.gui.TableauFrame._saveAsHelperJFileChooser (TableauFrame.java:1482)
at ptolemy.actor.gui.TableauFrame._saveAsHelper (TableauFrame.java:1165)
at ptolemy.actor.gui.TableauFrame._saveAs (TableauFrame.java:1139)
at ptolemy.actor.gui.PtolemyFrame._saveAs (PtolemyFrame.java:390)
at ptolemy.gui.Top$FileMenuListener.actionPerformed (Top.java:1446)
at javax.swing.AbstractButton.fireActionPerformed (AbstractButton.java:2022)
at javax.swing.AbstractButton$Handler.actionPerformed (AbstractButton.java:2348)
at javax.swing.DefaultButtonModel.fireActionPerformed (DefaultButtonModel.java:402)
at javax.swing.DefaultButtonModel.setPressed (DefaultButtonModel.java:259)
at javax.swing.AbstractButton.doClick (AbstractButton.java:376)
at javax.swing.plaf.basic.BasicMenuItemUI.doClick (BasicMenuItemUI.java:833)
at javax.swing.plaf.basic.BasicMenuItemUI$Handler.mouseReleased (BasicMenuItemUI.java:877)
at java.awt.Component.processMouseEvent (Component.java:6535)
at javax.swing.JComponent.processMouseEvent (JComponent.java:3324)
at java.awt.Component.processEvent (Component.java:6300)
at java.awt.Container.processEvent (Container.java:2236)
at java.awt.Component.dispatchEventImpl (Component.java:4891)
at java.awt.Container.dispatchEventImpl (Container.java:2294)
at java.awt.Component.dispatchEvent (Component.java:4713)
at java.awt.LightweightDispatcher.retargetMouseEvent (Container.java:4888)
at java.awt.LightweightDispatcher.processMouseEvent (Container.java:4525)
at java.awt.LightweightDispatcher.dispatchEvent (Container.java:4466)
at java.awt.Container.dispatchEventImpl (Container.java:2280)
at java.awt.Window.dispatchEventImpl (Window.java:2750)
at java.awt.Component.dispatchEvent (Component.java:4713)
at java.awt.EventQueue.dispatchEventImpl (EventQueue.java:758)
at java.awt.EventQueue.access$500 (EventQueue.java:97)
at java.awt.EventQueue$3.run (EventQueue.java:709)
at java.awt.EventQueue$3.run (EventQueue.java:703)
at java.security.AccessController.doPrivileged (Native Method)
at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDomain.java:76)
at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege (ProtectionDomain.java:86)
at java.awt.EventQueue$4.run (EventQueue.java:731)
at java.awt.EventQueue$4.run (EventQueue.java:729)

```

```

at java.security.AccessController.doPrivileged(Native Method)
at java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:76)
at java.awt.EventQueue.dispatchEvent(EventQueue.java:728)
at java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:201)
at java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:116)
at java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:105)
at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:101)
at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:93)
at java.awt.EventDispatchThread.run(EventDispatchThread.java:82)

```

ptolemy.actor.Top.FileMenuListener.actionPerformed() looks like:

```

try {
    if (actionCommand.equals("Open File")) {
        _open();
    } else if (actionCommand.equals("Open URL")) {
        _openURL();
    } else if (actionCommand.equals("Save")) {
        _save();
    } else if (actionCommand.equals("Save As")) {
        _saveAs();
    } else if (actionCommand.equals("Print")) {
        _print();
    } else if (actionCommand.equals("Close")) {
        if (!isDisposed()) {
            Window thisWindow = Top.this;
            WindowEvent wev = new WindowEvent(thisWindow,
                WindowEvent.WINDOW_CLOSING);
            Toolkit toolkit = Toolkit.getDefaultToolkit();
            EventQueue queue = toolkit.getSystemEventQueue();
            queue.postEvent(wev);
        }
    } else if (actionCommand.equals("Exit")) {
        _exit();
    }
} catch (Throwable throwable) {
    // If we do not catch exceptions here, then they
    // disappear to stdout, which is bad if we launched
    // where there is no stdout visible.
    MessageHandler.error("File Menu Exception:", throwable);
}

```

kepler/gui/src/org/kepler/gui/kar/ExportArchiveAction.java has:

```

try {
    for (ComponentEntity initiator : _saveInitiatorObjs) {
        karBuilder.addSaveInitiator(initiator);
    }
    karBuilder.setRegisterLSID(false);
    karBuilder.setRevision(false);
    if (_specificLSID != null) {
        karBuilder.setKarLSID(_specificLSID);
    }
    karBuilder.generateKAR(tableauFrame, overrideModDeps);

    // Update the File in case KARBuilder changes it for some reason
    _karFile = karBuilder.getKarFile();

    // return the new lsid
    return karBuilder.getKarLSID();

} catch (Exception ex) {
    log.error("Failed to create kar file: " + ex.getMessage());
    ex.printStackTrace();
}

return null;

```

I added the above to the catch block:

```
// If we do not catch exceptions here, then they
// disappear to stdout, which is bad if we launched
// where there is no stdout visible.
// See https://projects.ecoinformatics.org/ecoinformatics/issues/6634
MessageHandler.error("Failed to create KAR file:", ex);
```

In general, there are many `printStackTrace()` calls in this code, which means that the user will not see the exception when the error occurs when Kepler is started from an icon.

#3 - 12/22/2015 02:51 PM - Christopher Brooks

- % Done changed from 0 to 100

- Status changed from New to Closed

I'm closing this bug.