

User Interface - Bug #2703

Bug # 2677 (New): fix drawing and functional differences between P2J GUI and 4GL GUI

VIEW of a dynamic widget abends

09/10/2015 06:28 PM - Greg Shah

Status:	New	Start date:	
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:	Cleanup and Stabilization for GUI	case_num:	
billable:	No		
vendor_id:	GCD		
Description			
Related issues:			
Related to User Interface - Bug #2754: dynamic widget attribute assignment br...		New	

History

#1 - 09/10/2015 06:33 PM - Greg Shah

- File *minimal_view_dynamic_widget_in_4gl_20150910.png* added

- Target version set to Milestone 12

- Start date deleted (09/10/2015)

Running this code (testcases/uast/minimal_view_dynamic_widget.p):

```
DEF VAR f AS HANDLE.  
  
DEFINE FRAME fr0 WITH SIZE 40 BY 10.  
  
CREATE FILL-IN f.  
f:SCREEN-VALUE = "ttt".  
f:FRAME = FRAME fr0:HANDLE.  
  
VIEW f.
```

will generate this abend:

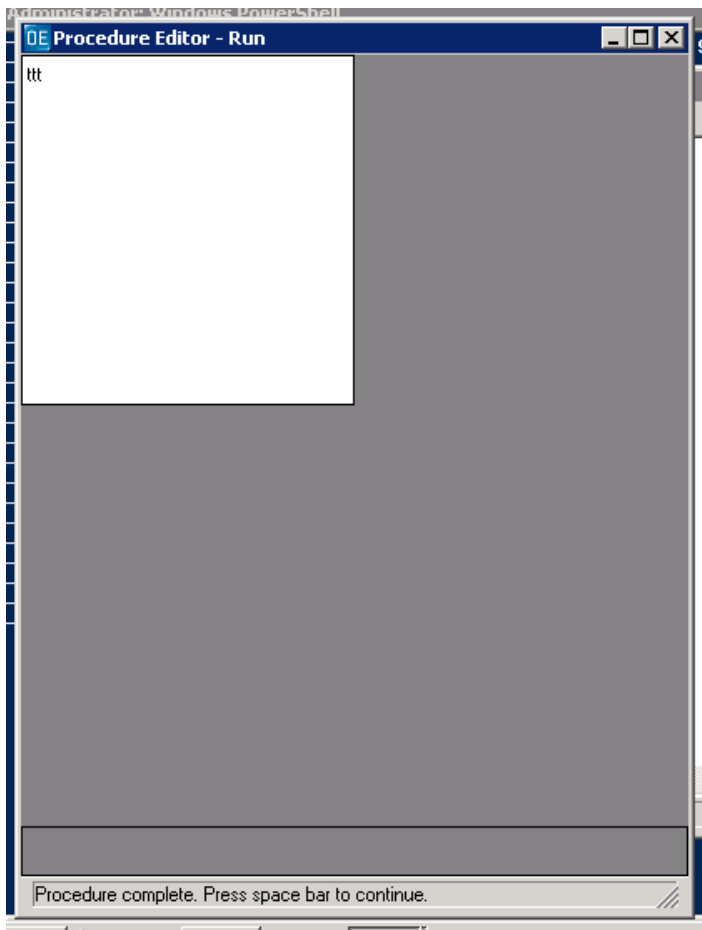
```
Exception in thread "AWT-EventQueue-0" com.goldencode.p2j.net.SilentUnwindException: Connection ended abnormal  
ly  
    at com.goldencode.p2j.net.RemoteObject$RemoteAccess.invokeCore (RemoteObject.java:1420)  
    at com.goldencode.p2j.net.InvocationStub.invoke (InvocationStub.java:97)  
    at com.sun.proxy.$Proxy2.getLegacyTextMetrics (Unknown Source)  
    at com.goldencode.p2j.ui.client.FontManager.getTextMetrics (FontManager.java:719)  
    at com.goldencode.p2j.ui.client.FontManager.getTextWidth (FontManager.java:298)  
    at com.goldencode.p2j.ui.client.gui.MenuItemGuiImpl.width (MenuItemGuiImpl.java:426)  
    at com.goldencode.p2j.ui.client.gui.SubMenuGuiImpl.getMaxSubMenuItemIdWidth (SubMenuGuiImpl.java:270)  
    at com.goldencode.p2j.ui.client.gui.MenuGuiImpl.width (MenuGuiImpl.java:529)  
    at com.goldencode.p2j.ui.client.gui.MenuGuiImpl.width (MenuGuiImpl.java:345)  
    at com.goldencode.p2j.ui.client.widget.AbstractContainer.dimension (AbstractContainer.java:227)  
    at com.goldencode.p2j.ui.client.widget.AbstractWidget.physicalDimension (AbstractWidget.java:335)  
    at com.goldencode.p2j.ui.client.widget.AbstractWidget.physicalBounds (AbstractWidget.java:941)  
    at com.goldencode.p2j.ui.client.widget.AbstractContainer.findMouseSource (AbstractContainer.java:259)  
    at com.goldencode.p2j.ui.client.gui.WindowGuiImpl.findMouseSource (WindowGuiImpl.java:625)  
    at com.goldencode.p2j.ui.client.gui.driver.swing.SwingMouseHandler.findMouseSource (SwingMouseHandler.j  
ava:249)  
    at com.goldencode.p2j.ui.client.gui.driver.swing.SwingMouseHandler.processAction (SwingMouseHandler.jav  
a:282)  
    at com.goldencode.p2j.ui.client.gui.driver.swing.SwingMouseHandler.processAction (SwingMouseHandler.jav
```

```

a:264) at com.goldencode.p2j.ui.client.gui.driver.swing.SwingMouseHandler.mouseClicked(SwingMouseHandler.java
:52)
    at java.awt.Component.processMouseEvent(Component.java:6519)
    at javax.swing.JComponent.processMouseEvent(JComponent.java:3312)
    at java.awt.Component.processEvent(Component.java:6281)
    at java.awt.Container.processEvent(Container.java:2229)
    at java.awt.Component.dispatchEventImpl(Component.java:4872)
    at java.awt.Container.dispatchEventImpl(Container.java:2287)
    at java.awt.Component.dispatchEvent(Component.java:4698)
    at java.awt.LightweightDispatcher.retargetMouseEvent(Container.java:4832)
    at java.awt.LightweightDispatcher.processMouseEvent(Container.java:4501)
    at java.awt.LightweightDispatcher.dispatchEvent(Container.java:4422)
    at java.awt.Container.dispatchEventImpl(Container.java:2273)
    at java.awt.Window.dispatchEventImpl(Window.java:2719)
    at java.awt.Component.dispatchEvent(Component.java:4698)
    at java.awt.EventQueue.dispatchEventImpl(EventQueue.java:747)
    at java.awt.EventQueue.access$300(EventQueue.java:103)
    at java.awt.EventQueue$3.run(EventQueue.java:706)
    at java.awt.EventQueue$3.run(EventQueue.java:704)
    at java.security.AccessController.doPrivileged(Native Method)
    at java.security.ProtectionDomain$1.doIntersectionPrivilege(ProtectionDomain.java:76)
    at java.security.ProtectionDomain$1.doIntersectionPrivilege(ProtectionDomain.java:87)
    at java.awt.EventQueue$4.run(EventQueue.java:720)
    at java.awt.EventQueue$4.run(EventQueue.java:718)
    at java.security.AccessController.doPrivileged(Native Method)
    at java.security.ProtectionDomain$1.doIntersectionPrivilege(ProtectionDomain.java:76)
    at java.awt.EventQueue.dispatchEvent(EventQueue.java:717)
    at java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:242)
    at java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:161)
    at java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:150)
    at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:146)
    at java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:138)
    at java.awt.EventDispatchThread.run(EventDispatchThread.java:91)
com.goldencode.p2j.net.SilentUnwindException: Connection ended abnormally
    at com.goldencode.p2j.net.Queue.transactImpl(Queue.java:1142)
    at com.goldencode.p2j.net.Queue.transact(Queue.java:585)
    at com.goldencode.p2j.net.BaseSession.transact(BaseSession.java:223)
    at com.goldencode.p2j.net.HighLevelObject.transact(HighLevelObject.java:163)
    at com.goldencode.p2j.net.RemoteObject$RemoteAccess.invokeCore(RemoteObject.java:1424)
    at com.goldencode.p2j.net.InvocationStub.invoke(InvocationStub.java:97)
    at com.sun.proxy.$Proxy4.standardEntry(Unknown Source)
    at com.goldencode.p2j.main.ClientCore.start(ClientCore.java:277)
    at com.goldencode.p2j.main.ClientCore.start(ClientCore.java:100)
    at com.goldencode.p2j.main.ClientDriver.start(ClientDriver.java:201)
    at com.goldencode.p2j.main.CommonDriver.process(CommonDriver.java:398)
    at com.goldencode.p2j.main.ClientDriver.process(ClientDriver.java:95)
    at com.goldencode.p2j.main.ClientDriver.main(ClientDriver.java:267)
Caused by: com.goldencode.p2j.net.ApplicationRequestedStop: Queue stop is requested by application
    at com.goldencode.p2j.net.Conversation.block(Conversation.java:329)
    at com.goldencode.p2j.net.Conversation.waitMessage(Conversation.java:257)
    at com.goldencode.p2j.net.Queue.transactImpl(Queue.java:1128)
    ... 12 more

```

In the 4GL it should look like this:



#2 - 10/14/2015 02:39 PM - Greg Shah

- Assignee set to Eugenie Lyzenko

#3 - 10/14/2015 09:01 PM - Eugenie Lyzenko

The root cause is in the sample:

```
...  
CREATE FILL-IN f.  
f:SCREEN-VALUE = "ttt".  
f:FRAME = FRAME fr0:HANDLE.  
...
```

Setting screen value is happening too early. We need to set up frame handle first. If not to do this currently code:

```
...  
public void setScreenValue(character value)  
{  
    frame.setScreenValue(this, value);  
}  
...
```

will produce NPE because frame == null. On the other hand the code:

```
...  
CREATE FILL-IN f.  
f:FRAME = FRAME fr0:HANDLE.  
f:SCREEN-VALUE = "ttt".  
...
```

works fine.

Consideration. If we need to support the code that will assign something important before frame handle is ready - we need to implement some feature that will collect the pending assignments and run them in postponed mode when frame handle has been assigned.

To fix this particular issue we can save the screen value in GenericWidget and make frame.setScreenValue(this, value); call later when frame member is assigned.

#4 - 10/15/2015 09:08 AM - Greg Shah

This is the same problem as noted in [#2754](#). The solution needs to be generic.

The screen-value may be a tricky one because we don't ever actually store the screen-value in the widget. We always store it in the frame's screen-buffer. Although we could cache the value and push it into the screen-buffer later, I suspect that in the 4GL you might be able to get some funky data conversion behavior by using screen-value. I saw an example of this in some code based on the ADM framework.

Anyway, don't work on this any further at this time. We will solve this at the same time as [#2754](#).

#5 - 03/23/2016 05:12 PM - Greg Shah

- Target version changed from Milestone 12 to Milestone 16

- Assignee deleted (Eugenie Lyzenko)

#6 - 11/16/2016 12:23 PM - Greg Shah

- Target version changed from Milestone 16 to Cleanup and Stabilization for GUI

Files

minimal_view_dynamic_widget_in_4gl_20150910.png	3.89 KB	09/10/2015	Greg Shah
---	---------	------------	-----------