User Interface - Feature #1806

implement UNLESS-HIDDEN

10/30/2012 12:00 PM - Greg Shah

Status:	Closed	**Start date:**	
Priority:	Normal	**Due date:**	
Assignee:	Eugenie Lyzenko	**% Done:**	100%
Category:		**Estimated time:**	32.00 hours
Target version:	GUI Support for a Complex ADM2 App		
billable:	No	**version:**	
vendor_id:	GCD		
Description			

History

#1 - 10/31/2012 02:49 PM - Greg Shah

- Target version set to Milestone 12

#2 - 05/21/2014 09:27 AM - Greg Shah

- Assignee set to Eugenie Lyzenko

The UNLESS-HIDDEN option should be fully implemented for the following language statements:

DISABLE
DISPLAY
ENABLE
PROMPT-FOR
SET
UPDATE

I believe that in all of these cases, when UNLESS-HIDDEN is specified, any widget that has its HIDDEN attribute set to TRUE is removed from the widget list being processed. I believe that this can probably be implemented completely on the server (assuming that the HIDDEN attribute state is correctly kept on the server). The idea is that any hidden widgets can be removed from the widget list before the client-side worker is called.

Please write some testcases to prove how this works (for each of the statements above). Then make sure we convert this properly. Finally, fix the runtime widget list preparation to support this option when specified.

#3 - 05/22/2014 10:16 AM - Eugenie Lyzenko

- File evl_testcases_20140522a.zip added

The testcases executed in 4GL under Linux and screenshots uploaded. Yes, you are right, the HIDDEN flag as TRUE excludes widgets from processing list. The exceptions/notes is the DISPLAY statement case. As you can see the widget itself is not displaying but the location reserved for hidden widget is anyway visible.

Also the statement ENABLE ALL WITH FRAME... sets the HIDDEN flag to FALSE for widget. So further processing will consider the widget as not hidden(the testcase uh_display_test2.p and uh_disable_not_enabled.jpg screen).

Continue testing with correct conversion.

#4 - 05/22/2014 12:00 PM - Eugenie Lyzenko

Currently only DISPLAY and ENABLE are supported with UNLESS-HIDDEN option on the conversion level. For other statements the usual disable(elementList), promptFor(elementList), set(elementList) and update(elementList) are generated while conversion.

#5 - 05/22/2014 01:13 PM - Eugenie Lyzenko

- File evl_upd20140522a.zip added

This fix for your review is conversion rule change that allow the UNLESS-HIDDEN option to be properly converted for:

```
DISABLE
PROMPT-FOR
SET
UPDATE
```

The runtime implementation is planned to be done in GenericFrame server side class by checking the HIDDEN flag of the widget, excluding the hidden widget from the list and calling respective display(), disable(), enable(), promptFor(), set() or update() method for modified widget list.

#6 - 05/22/2014 02:59 PM - Greg Shah

Code Review 0522a

The changes look good.

> Also the statement ENABLE ALL WITH FRAME... sets the HIDDEN flag to FALSE for widget. So further processing will consider the widget as not hidden(the testcase uh_display_test2.p and uh_disable_not_enabled.jpg screen).

Make sure to implement this too if we don't already support it.

#7 - 05/22/2014 07:01 PM - Eugenie Lyzenko

- File evl_upd20140522b.zip added

- File uh_display_p2j.jpg added

> Make sure to implement this too if we don't already support it.

OK. The second drop for today contains runtime modification to support UNLESS-HIDDEN for you to review. The idea is to have two helper methods to process the widget lists:

```
...
   private GenericWidget[] removeHiddenWidgets(GenericWidget[] inputList)
   private FrameElement[] removeHiddenWidgets(FrameElement[] inputList)
...
```

Different input and output types is from fact we have two possible input types: GenericWidget[] or FrameElement[] in *UnlessHidden() converted methods. Then call to displayUnlessHidden() for example will be implemented as just display(removeHiddenWidgets()).

Testing to compare with original 4GL. For now I can tell the DISPLAY UNLESS-HIDDEN has difference. The P2J shows the label for hidden widget(not widget value itself) while 4GL does not (ui_display_p2j.jpg).

#8 - 05/22/2014 07:03 PM - Eugenie Lyzenko

- File deleted (uh_display_p2j.jpg)

#9 - 05/22/2014 07:05 PM - Eugenie Lyzenko

- File uh_display_p2j.jpg added

Reattached the srceen shot for issue.

#10 - 05/23/2014 03:07 PM - Eugenie Lyzenko

- File evl_testcases_20140523a.zip added

- File evl_upd20140523a.zip added

Update for review with adding minimum level of safety checking. The modified widget list will be passed to the usual method if the list is not null and size > 0.

The handling of the ENABLE ALL WITH FRAME... works as expected for UNLESS-HIDDEN option. So this is not an issue.

The issue we have is the first time DISPLAY UNLESS-HIDDEN. You can see it in uh_display_test4.p and uh_display4_(4gl|p2j)_0.jpg to see the difference. The problematic area is in red. The 4GL engine does not display even label for hidden widget, while P2J still displays the label. So I'm going to debug and fix this mismatch.

#11 - 05/23/2014 04:32 PM - Eugenie Lyzenko

- File evl_testcases_20140523b.zip added

Updated testcases for DISPLAY statement. Looks like the problem with DISPLAY UNLESS-HIDDEN is not related to UNLESS-HIDDEN option. The same deviation can be seen with DISPLAY statement (without UNLESS-HIDDEN option) when hidden widget is not inside the list. The testcase is uh_display_test5.p.

So this is the general bug in DISPLAY statement handling and if there are no objections I'll debug it.

#12 - 05/27/2014 04:34 PM - Greg Shah

Code Review 0523a

The changes look good.

> So this is the general bug in DISPLAY statement handling and if there are no objections I'll debug it.

Yes, please fix this.

#13 - 05/28/2014 10:35 AM - Eugenie Lyzenko

- File evl_upd20140528a.zip added

The fix for hidden widgets has been added to the update.

The goal is to suppress label text drawing for hidden widgets that was never visible. And to draw the label for hidden widgets that was made visible at least once. The idea is to use the existing emptyMode flag in LabelImpl class to disable label text draw. To know when this mode should be turned on the another flag(storing in widget itself is used) - wasVisible. Initially this flag is false. When the layout is performing the ZeroColumnLayout checks if this flag is false and turn the emptyMode on. Respectively the AbstractContainer drawing code enumerates all widgets to draw in a frame and if the widget become visible the wasVisible become true and the emptyMode is turning off, so the label text become visible even for hidden widgets.

#14 - 05/28/2014 12:49 PM - Greg Shah

Code Review 0528a

I like the approach. My only questions:

1. The hidden() method of LabeledWidget is already present in the Widget interface. LabeledDataContainer extends FixedSizeContainer which is already a Widget, so hidden() should already be there. Unless there is some other reason, I'd like to remove hidden() from LabeledWidget.

2. Please change LabeledWidget.wasVisibleOn() to LabeledWidget.setWasVisible() to be clearer (and more consistent with our standards).

#15 - 05/28/2014 01:42 PM - Eugenie Lyzenko

> 1. The hidden() method of LabeledWidget is already present in the Widget interface. LabeledDataContainer extends FixedSizeContainer which is already a Widget, so hidden() should already be there. Unless there is some other reason, I'd like to remove hidden() from LabeledWidget.

I thought about this. This addition was made for following ZeroColumnLayout code:

```
      void handleLabeledWidget(int i, Container container)
      {
...
         LabeledWidget fin = null;

         if (c[i] instanceof LabeledWidget)
            fin = (LabeledWidget) c[i];

...
            // fix for UNLESS-HIDDEN option
            if (fin.hidden() && !fin.wasVisible())
            {
               label.setEmptyModeOn();
            }
...
```

If not add hidden() to LabeledWidget - we will need explicit casting fin to some class that have hidden() inside the if clause. That's why I added the method to interface. But we can change it. What do you think?

#16 - 05/28/2014 01:49 PM - Greg Shah

> If not add hidden() to LabeledWidget - we will need explicit casting fin to some class that have hidden() inside the if clause. That's why I added the method to interface. But we can change it. What do you think?

Yes, please do explicitly cast it. Otherwise it is confusing to future readers/maintainers of the code.

#17 - 05/28/2014 02:59 PM - Eugenie Lyzenko

- File evl_upd20140528b.zip added

> Yes, please do explicitly cast it. Otherwise it is confusing to future readers/maintainers of the code.

OK. The next update changing the LabelWidget removing hidden() method and renamed setter to setWasVisible(). Also minor Javadoc fixes for GenericFrame. Also I had to add new method implementation stubs in the following classes:

```
Button,
ComboBox,
LabeledBorderedPanel
```

These classes implement LabeledWidget and has different inheritance path comparing to FillIn <- LabeledDataContainer so need at least placeholders for wasVisible()/setWasVisible() to successfully build with ant all command.

#18 - 05/28/2014 03:29 PM - Greg Shah

Code Review 0528b

The changes are good, except that the hidden() method should be removed from LabeledWidget instead of being commented out. Please remove that, upload the result as ...0528c.zip.

If everything is working in your local tests, then you can go into regression testing (both conversion and runtime).

#19 - 05/28/2014 03:37 PM - Eugenie Lyzenko

- File evl_upd20140528c.zip added

> The changes are good, except that the hidden() method should be removed from LabeledWidget instead of being commented out. Please remove that, upload the result as ...0528c.zip.

Sorry, just not cleaned it up.

> If everything is working in your local tests, then you can go into regression testing (both conversion and runtime).

OK.

#20 - 05/28/2014 04:21 PM - Eugenie Lyzenko

> If everything is working in your local tests, then you can go into regression testing (both conversion and runtime).

Found the new issue with recent fix. Because we previously draw label unconditionally the sequence ENABLE ALL ... DISPLAY/SET/PROMPT-FOR/UPDATE/DISABLE UNLESS-HIDDEN ... worked as expected, simulating the label showing. Now in this case the widget become enabled but label is not drawing in the first display. So looking for bug/solution.

#21 - 05/29/2014 01:09 PM - Eugenie Lyzenko

- File evl_upd20140529a.zip added

Finally I have got all local tests passed. The new changes in update for review includes:
1. Removing LabelImpl class from update because in emptyMode the label text already generated as spaces/(empty string). This is the same as if we just does not display label text at all. So I think we can leave this file as is, let me know if you have objections.
2. In ZeroColumnLayout the label.setEmptyModeOff() is required after label.setEmptyModeOn() to ensure the empty mode will works only once. This fixes the regressions I struggled with previous update.
3. The GenericFrame needs special version of makeFrameVisible() method while handling ENABLE ALL statement because it should reset HIDDEN widget attribute. So the new method makeFrameEnable() is now used in this case.

Also some minor syntax errors in comment I made.

So if you do not have any objections after review I'll start the regression testing.

#22 - 05/29/2014 04:26 PM - Greg Shah

Code Review 0529a

The changes look good. Please get them regression tested.

#23 - 05/29/2014 05:54 PM - Eugenie Lyzenko

The conversion testing has been completed without any differences in converted Java code. Started the regression testing.

#24 - 05/30/2014 03:49 PM - Eugenie Lyzenko

The main part has been completed without regressions in two rounds. Continue with the CTRL-C part.

#25 - 05/30/2014 07:38 PM - Eugenie Lyzenko

- File evl_upd20140530a.zip added

This update merges UNLESS-HIDDEN changed with the recent code base. I think the tasks are pretty independent and merge is safe so it is not required to re-run the regression testing(which is still in progress). Let me know if any objections.

#26 - 05/30/2014 08:37 PM - Greg Shah

Code Review 0530a

I agree, the changes are safe. No additional testing is needed.

#27 - 06/02/2014 09:15 AM - Eugenie Lyzenko

The CTRL-C testing has been completed. There are no regressions found. Had to run 3-way tests in a separate session to pass. The results are in GCD share drive. So the update will be committed and distributed shortly.

#28 - 06/02/2014 09:20 AM - Eugenie Lyzenko

The regression tasting has been passed. The update ...0530a has been committed in bzr as 10540.

#29 - 06/02/2014 09:32 AM - Greg Shah

- % Done changed from 0 to 100

- Status changed from New to Closed

#30 - 11/16/2016 12:12 PM - Greg Shah

- Target version changed from Milestone 12 to GUI Support for a Complex ADM2 App

Files

evl_testcases_20140522a.zip	66.3 KB	05/22/2014	Eugenie Lyzenko
evl_upd20140522a.zip	20.2 KB	05/22/2014	Eugenie Lyzenko
evl_upd20140522b.zip	94.5 KB	05/22/2014	Eugenie Lyzenko
uh_display_p2j.jpg	10.9 KB	05/22/2014	Eugenie Lyzenko
evl_upd20140523a.zip	94.6 KB	05/23/2014	Eugenie Lyzenko
evl_testcases_20140523a.zip	145 KB	05/23/2014	Eugenie Lyzenko
evl_testcases_20140523b.zip	190 KB	05/23/2014	Eugenie Lyzenko
evl_upd20140528a.zip	120 KB	05/28/2014	Eugenie Lyzenko
evl_upd20140528b.zip	136 KB	05/28/2014	Eugenie Lyzenko
evl_upd20140528c.zip	136 KB	05/28/2014	Eugenie Lyzenko
evl_upd20140529a.zip	135 KB	05/29/2014	Eugenie Lyzenko
evl_upd20140530a.zip	135 KB	05/30/2014	Eugenie Lyzenko