

Kepler - Bug #2015

Provide more meaningful error messages

03/11/2005 10:57 AM - Dan Higgins

Status:	New	Start date:	03/11/2005
Priority:	Immediate	Due date:	
Assignee:	Laura Downey	% Done:	0%
Category:	interface	Estimated time:	0.00 hour
Target version:	3.X.Y	Spent time:	0.00 hour
Bugzilla-Id:	2015		
Description Suggested by Laura Downey User oriented error messages needed (rather than stack traces?)			
Related issues: Blocked by Kepler - Bug #2270: TRACKING: Localization and Improvement of User... In Progress 11/11/2005			

History

#1 - 03/16/2005 03:08 PM - Christopher Brooks

It would be nice if we provided a way to more effectively hide the stack traces. Usually, when there is an error, a dialog box with a meaningful message should come up. One of the buttons should bring up a window that shows the stack trace.

One problem is that because we use exception chaining, the exception is actually thrown does not always provide useful information about what caused the exception, instead there is an earlier exception that has the real cause.

Unfortunately, it is difficult to determine when to show just the top exception and when to show one or more cause exceptions.

I feel that it is a bug if:

- 1) I have to get out the debugger to figure out where the exception occurred. This happens when we rethrow exceptions without using a cause argument or when exceptions are ignore.
- 2) If the error message goes to stderr or stdout

I see the point of providing cleaner exceptions to users, but this should be balanced with the needs of developers who want to find out where the exception is occurring.

I suspect that the way to provide better error messages would be to track new users and see what errors they are seeing and clean those up. We could either observe users or else instrument the code and gather reports.

BTW - Edward and I discuss this issue quite a bit. I want useful messages that might have too much info because I fix lots of bugs and I provide end supports to users who usually do not supply enough info. Edward wants a clean interface.

Perhaps by using preferences to manage the output we can provide both. However, cleaning up the error messages one by one requires time.

_Christopher

#2 - 03/18/2005 09:12 AM - Laura Downey

Users (except very technical ones) don't usually care about the intricate technical details that they aren't going to understand anyway. One general design principle is to speak the user's language -- to speak in terms they understand. However, of course we want a way to help trace bugs and problems so that developers can fix things.

There are some various ways we could approach this problem. Here are my

recommendations in priority order:

1) provide user understandable error messages when problems occur but record in an error log the user understandable message and the stack trace or other important technical details so that there is a "couplet record" of problems

2) provide user understanddable error messages when problems occur, but provide a button (maybe "Details") on the error message dialog that when pressed will display the more technical aspects

3) provide a user understandable error message first in the error dialog, then below that provide the technical details helpful to the developer.

In each of these alternatives, the user is presented with an understandable message but the developer has the option in some manner of obtaining more information for trouble-shooting and debugging purposes.

#3 - 03/18/2005 09:18 AM - Christopher Brooks

If you provide me with some screenshots or user traces of overly complex error messages, I'll see what I can do. Perhaps you could attach a couple of screen shots to this bug?

One mistake I make is that I modify the system to suit my needs which does things like add complexity to error messages etc. Being reminded to keep the non-technical user in mind is a good thing. Professor Lee often makes this point as well.

#4 - 02/28/2006 11:01 PM - Matthew Brooke

reassigning to Laura, so we don't lose track of Christopher's request:

"If you provide me with some screenshots or user traces of overly complex error messages, I'll see what I can do. Perhaps you could attach a couple of screen shots to this bug?"

He or I need specific direction on this, if poss. Please feel free to reassign back when this info is available

#5 - 03/01/2006 02:27 PM - Matthew Brooke

implementation note to me:

When we implement this, need to put the user-visible text values in the ResourceBundle text file:

```
configs/ptolemy/configs/kepler/uiDisplayText_en_US.properties
```

and maybe access them using `ptolemy.kernel.utils.StaticResources.java`

Still need list of specific issues from Laura

#6 - 03/27/2013 02:18 PM - Redmine Admin

Original Bugzilla ID was 2015