# Kepler - Bug #5252

## Plotting bugs

12/07/2010 02:57 PM - Derik Barseghian

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| **Status:** | In Progress | | **Start date:** | 12/07/2010 |
| **Priority:** | Normal | | **Due date:** | |
| **Assignee:** | Derik Barseghian | | **% Done:** | 0% |
| **Category:** | sensor-view | | **Estimated time:** | 0.00 hour |
| **Target version:** | sensor-view-1.x.y | | **Spent time:** | 0.00 hour |
| **Bugzilla-Id:** | 5252 | | | |

### Description

Here are a few things Dan and I came across with plotting:
1) you can drag items into initial grayed-out, unusable plot
2) you have to click 'create new plot' to get first usable plot. Can this already be done?
3) Items of Interest tree keeps collapsing when running, making it difficult to grab ports
4) demo timeseries is still there in the Plot Viewer by default - can we get rid of it?
5) can only drag out 'plotter' port for a sensor - should non-draggable ports be filtered? I initially thought I should use the 'data' port.
6) make table, and Name and Y columns wider

### History

**#1 - 01/31/2011 04:07 PM - Sean Riddle**

I have fixed items 1-4. 5 is sort of fixed; ports of definitely the wrong type (ie. (double for timestamp, double for data) tuples) are not draggable, but some ports can't be determined, since type resolution is done at preinitialize().

**#2 - 02/11/2011 10:34 AM - Sean Riddle**

This can either be closed or can be held open to try and improve the port dragging behavior (maybe using a naming convention).

**#3 - 02/14/2011 01:45 PM - Derik Barseghian**

changing bugs from REAP to Kepler product

**#4 - 02/17/2011 02:00 PM - Derik Barseghian**

#4 is still an issue for me.
#6 would be good to fix, and should be pretty easy.
re #5, it would be nice if non-draggable ports simply weren't shown.

**#5 - 02/17/2011 06:37 PM - Derik Barseghian**

fix #4, no longer show demo data series, at r27158

**#6 - 03/01/2011 06:22 PM - Derik Barseghian**

7) Can the Add Row button be used successfully? I can't. If I add Add Row, and then paste in a valid Name, the Ylabel (which is not editable) stays blank, and no data appears in the plotter. Even if this worked, I really doubt anyone would want to add a row in this way. Maybe I misunderstand? If not, I'd say we just get rid of this button.

**#7 - 04/01/2011 04:34 PM - Derik Barseghian**

(In reply to comment #6)
removed Add Row button at r27411.

**#8 - 04/20/2011 03:30 PM - Derik Barseghian**

8) In the Plot Designer, if you click on the Color column, a color picker is launched. If you click on the Color column again without closing this new dialog, the picker disappears and the jtable locks up. This is an issue with Tag Manager's color picker too.

**#9 - 04/25/2011 03:55 PM - Derik Barseghian**

9) There are problems with the Plot Designer layout. If on the Plot Designer view you resize the Kepler window, or expand the bottom panel (blank - where the WRM is on the reporting view), the plot design panel can instantly resize to a tiny square, smaller than toolbar a button, and you can get in states where you cannot get this jpanel to 'un-shrink' by resizing the kepler window.

**#10 - 04/25/2011 07:20 PM - Derik Barseghian**

#6 and #9 fixed at r27549.

**#11 - 05/09/2012 05:42 PM - Derik Barseghian**

Many people hit #8 at the sensor training workshop, and I had to tell them to delete the plot they'd just set up to get around it. Should fix this.

10) The Plot Viewer has no scroll bars, essentially making it useless to add more than one plot for most monitor resolutions.

**#12 - 06/18/2012 01:10 PM - Derik Barseghian**

11) Another problem is that when you add an additional item to be plotted (drag a port into the Plot Designer creating a new row), the first (and only the first) item already being plotted changes color to some seemingly random new color in the Plot Viewer. This doesn't make sense. Also, the Plot Designer does not reflect the change (the color picker in the row does not change).

**#13 - 06/18/2012 03:46 PM - Derik Barseghian**

(In reply to comment #8)

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> launched. If you click on the Color column again without closing this new
> dialog, the picker disappears and the jtable locks up. This is an issue with
> Tag Manager's color picker too.

Fixed #8 at r29980 and r29982.
It's worth noting there are two versions of ColorTableCellEditor and ColorTableCellRenderer, one pair in Plotting, the other in Runtimemonitor. See bug#5630

**#14 - 06/18/2012 03:48 PM - Derik Barseghian**

(In reply to comment #12)

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> a port into the Plot Designer creating a new row), the first (and only the
> first) item already being plotted changes color to some seemingly random new
> color in the Plot Viewer. This doesn't make sense. Also, the Plot Designer does
> not reflect the change (the color picker in the row does not change).

Fixed #12 at r29981. The first item's color no longer changes when a new item is added.

**#15 - 06/18/2012 04:51 PM - Derik Barseghian**

(In reply to comment #11)

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> delete the plot they'd just set up to get around it. Should fix this.

> 10) The Plot Viewer has no scroll bars, essentially making it useless to add
> more than one plot for most monitor resolutions.

Fixed #10 missing Plot Viewer scroll bars issue at r29985.

**#16 - 06/18/2012 06:38 PM - Derik Barseghian**

Everything but #5 is done. #5 is: don't show ports you can't drag into the Plot Designer (although what most users expect to be able to do initially is to simply drag out sensorX). Right now you can see all ports, but only drag the one that's plottable, the data port. Interestingly, you also can't drag these other ports out in either the Outline or Reporting views, which is wrong -- e.g. it's conceivable someone schedules a workflow that contains a sensor actor, and wants to report on the sampling rate or on/off status at that time using these ports.

Since we should work towards making plotting capable of plotting other types of ports besides ArrayType(BaseType.INT, 2), I don't suggest not showing any ports and allowing the user to drag out the sensor itself. Instead only show draggable ports, or visually highlight those that are draggable. I can't quickly spot what's making these non-draggable, I see rejection code (DataTable.isPlottablePort()), but that's not the reason. Will revisit later.

**#17 - 06/19/2012 01:34 PM - Derik Barseghian**

(In reply to comment #16)

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> Designer (although what most users expect to be able to do initially is to
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using these ports.

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ports besides ArrayType(BaseType.INT, 2), I don't suggest not showing any ports
and allowing the user to drag out the sensor itself. Instead only show
draggable ports, or visually highlight those that are draggable. I can't
quickly spot what's making these non-draggable, I see rejection code
(DataTable.isPlottablePort()), but that's not the reason. Will revisit later.

The reason you can't drag out Sensor's isOn or samplingPeriod is they're PortParameters, and PortParameters aren't draggable from any of the
Outline/Items of Interest panes. After a lengthy search, I finally found out why: a hack at r57732 to ptolemy's ParameterPort to avoid bug#4915:
Parameter notDraggable = new Parameter(this, "_notDraggable");
notDraggable.setPersistent(false);

I'ved opened bug#5631 to remove the hack and fix dragging out PortParameters, targeted at sensor-view-1.x.y.

### #18 - 06/19/2012 02:02 PM - Derik Barseghian

So my thinking now for issue #5 is that the plotting Items of Interest tree should highlight those ports that can be properly plotted. Right now you can
drag some ports into the plot design that won't be plotted. Before execution, actors that have appropriately typed ports could be highlighted, and
ideally, highlighting could also be updated during execution time when other ports become known as plottable based on their type. The tree of course
should not collapse during such highlight changes. I'm retargeting this to sensor-1.x.y and changing to enhancement after discussing w/ Matt.

### #19 - 06/22/2012 02:58 PM - Derik Barseghian

#13) You can add a duplicate row to a Plot Design, and this duplicate is not plotted. If you delete the original row, the second copy that remains is still
not plotted. Duplicates should either be plotted or disallowed.

### #20 - 06/22/2012 04:31 PM - Derik Barseghian

14) This is minor, but you can change the title and x, and y labels by right-clicking on the plot in the Plot Viewer. The title and x, and y labels you've
set up in the Designer then become out of sync.

### #21 - 03/27/2013 02:29 PM - Redmine Admin

Original Bugzilla ID was 5252