

## Kepler - Bug #5571

### user request: show execution time in runtime window

02/02/2012 12:19 PM - Derik Barseghian

<b>Status:</b>	Resolved	<b>Start date:</b>	02/02/2012
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Christopher Brooks	<b>% Done:</b>	0%
<b>Category:</b>	interface	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2.4.0	<b>Spent time:</b>	0.00 hour
<b>Bugzilla-Id:</b>	5571		
<b>Description</b>			
User requests that workflow execution time be shown in Runtime Window. I suggest it also be shown at the bottom of each workflow window. <a href="http://lists.nceas.ucsb.edu/kepler/pipermail/kepler-users/2012-February/002131.html">http://lists.nceas.ucsb.edu/kepler/pipermail/kepler-users/2012-February/002131.html</a>			

### History

#### #1 - 02/02/2012 02:46 PM - Christopher Brooks

BTW - How Ptolemy II does reports the usage time is that execute() method in ptolemy.actor.Manager calls

```
// Make a record of the time execution starts.  
    long startTime = (new Date()).getTime();
```

and then calls

```
// Wrapup may throw an exception, so put the following  
    // statement inside the finally block.  
    if (_printTimeAndMemory) {  
        System.out.println(timeAndMemory(startTime));  
    }
```

timeAndMemory(long) is a method that prints out the elapsed time in milliseconds and the amount of memory.

In Vergil, ptolemy.gui.Top has a report() method that updates the status bar.

ptolemy/vergil/basic/RunnableGraphController.java has  
managerStateChanged(Manager manager)

which calls:  
getFrame().report(manager.getState().getDescription());

So, one way to do this would be to have one of the states, probably Manager.IDLE report statistics from the last run. Manager would also need to be modified to keep the statistics from the last run.

However, I'm not sure if it is a good thing to have the statistics appear in status bar.

The statistics appear in stdout by default.

If someone is really interested in the statistics, then it is better to run from a command line. Ptolemy II has ptolemy/actor/gui/MoMLSimpleStatisticalApplication.java that  
"An application that executes non-graphical models specified on the command line and prints out statistics."

Kepler's command line interface is documented at  
<https://kepler-project.org/developers/reference/executing-kepler-from-the-command-line>  
Presumably it reports run statistics to stdout.

ant run -Dworkflow=../outreach-2.2/workflows/demos/getting-started/01-SimpleAddition.xml

does report:  
[run] 34 ms. Memory: 116116K Free: 45970K (40%)

One other thing is that the first run usually takes longer than successive runs.

**#2 - 06/15/2012 02:23 PM - Christopher Brooks**

The status bar now displays the amount of time and memory consumed.  
The change is ptII 63760

**#3 - 03/27/2013 02:30 PM - Redmine Admin**

Original Bugzilla ID was 5571