

## Kepler - Bug #2344

### Duplicate Actors that read directories

01/26/2006 12:06 PM - Christopher Brooks

<b>Status:</b>	Resolved	<b>Start date:</b>	01/26/2006
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Dan Higgins	<b>% Done:</b>	0%
<b>Category:</b>	actors	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	1.0.0beta1	<b>Spent time:</b>	0.00 hour
<b>Bugzilla-Id:</b>	2344		

#### Description

Dan wrote:

Does anyone out there know if there is a difference in the basic functionality of the DirectoryListing actor (author Christopher Hylands, Edward A. Lee) and the FileArrayPrinter actor (author Wibke Sudholt). Both seem to do the same thing (extract file lists from a directory); the DirectoryListing actor seems more full featured (works with URLs). Does the FileArrayPrinter do anything the Directory Listing actors does not?

Ilkay then wrote:

AFAIK, they are the same in functionality. There might be some differences between the datatypes/structures they output, and it needs to be consolidated.

Christopher wrote:

Ptolemy II uses the DirectoryListing actor as part of the run all demos demo that runs in the display case.

This demo is ptolemy/demo/RunDemos.xml  
The actor is used in ptolemy/demo/RunDemosInNewProcess.xml  
It is also used in ptolemy/actor/lib/io/demo/FilePortParameter.xml  
and ptolemy/actor/lib/test/auto/ExecRunDemos.xml  
and ptolemy/domains/sdf/test/auto/filePortParameter.xml

I'm not particularly wedded to the DirectoryListing actor, we could modify it to better meet Kepler's needs and then either discard FileArrayPrinter or have it call DirectoryListing but not be listed in Kepler's ui. I'd prefer to discard FileArrayPrinter and move on.

It looks like FileArrayPrinter is used in the following models:  
/home/eecs/cxh/src/kepler/src/org/resurgence/moml/FileListSequencer.xml:  
<entity name="File Array Printer"  
class="org.resurgence.actor.FileArrayPrinter">  
/home/eecs/cxh/src/kepler/src/org/resurgence/moml/MoleculeSelector.xml:  
<entity name="File Array Printer"  
class="org.resurgence.actor.FileArrayPrinter">

Perhaps the authors of these models could use DirectoryListing or else tell me how DirectoryListing should change?

Seems like a bug should be filed for this one. I'm tempted to take it, but I'm slightly over committed.

Wibke wrote:

Sorry for not answering earlier, since I am the author.

I assume DirectoryListing and FileArrayPrinter probably do similar things (I think I came across their similarity earlier), though I would need to test in detail. There were, however, some reasons I had for doing a "duplicate" here:

- This was one of my very first actors in Kepler :-)) and so I potentially overlooked the other one (I am a domain scientist by training).
- In the workflows where FileArrayPrinter is used, actually I do not need the URL, but the path. The reason for this is that later there is a lot of command-line calls and processing. And I did not want to always do String processing before.
- For the Resurgence workflows it is very important to be able to transform arrays into sequences of tokens and vice-versa. If that is possible with DirectoryListing, there is probably not much sense to keep FileArrayPrinter. However, I remember another discussion about a Resurgence actor (it might have been about file copying/writing or similar) where it actually turned out that two actors do something similarly, but not identically. The reason for this has been that I always have to make sure that the Resurgence actors work in very particular ways with sequences of tokens.

Unfortunately, I am heavily loaded by a different project at the moment, so I will need a bit time to check this. But polishing the Resurgence work is anyhow somewhere on my personal to-do list ...

I propose that FileArrayPrinter not be available in the Kepler UI, but that the source code remain in the tree so that these models can continue to run.

If someone wants to modify DirectoryListing in a backward compatible manner, I'm all for it.

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## History

### #1 - 03/22/2006 04:37 PM - Dan Higgins

This bug has been fixed by removing the FileArrayPrinter from the Kepler actor tree, although the base java code has been left in the source (so that Wibke's existing workflows will continue to execute)  
Dan Higgins - March 22, 2006

### #2 - 03/27/2013 02:19 PM - Redmine Admin

Original Bugzilla ID was 2344