

Kepler - Bug #4254

wrapping up, never ending workflow! (PN inside PN)

07/20/2009 05:47 PM - Christopher Brooks

Status:	New	Start date:	07/20/2009
Priority:	Normal	Due date:	
Assignee:	Christopher Brooks	% Done:	0%
Category:	director	Estimated time:	0.00 hour
Target version:	3.X.Y	Spent time:	0.00 hour
Bugzilla-Id:	4254		
Description			
<p>[I'm going through my email logs looking for bugs that have not really been solved.]</p> <p>The problem is that a trivial example of PN inside PN results in a "wrapping up" message and never terminates.</p> <p>In January, 2009, Edward responded to email from Josep Maria Campanera.</p> <p>Edward wrote:</p> <p style="padding-left: 40px;">In theory, PN inside PN should behave exactly as if the inside PN director were not present. Why not just delete it?</p> <p style="padding-left: 40px;">It is arguably a bug that the PN director doesn't tolerate PN opaque actors. I think I tried to fix that once, but never got it fixed...</p> <p style="padding-left: 40px;">Edward</p> <p>Josep Maria Campanera Alsina wrote:</p> <p style="padding-left: 40px;">Dear all,</p> <p style="padding-left: 40px;">I've found out that the error comes from the fact of using a PN director as an opaque director inside a workflow managed by another PN director! Somehow this problem is related to "Director compatibility" issue.</p> <p style="padding-left: 40px;">So I've decided to simplify the workflow and use a model workflow just in order someone can find a trick to run it succesfully. The main idea is ¿How can we can continue the execution of a workflow after the execution of an opaque composite actors with PN director inside when the overall director is an PN one?</p> <p style="padding-left: 40px;">In the attached example (exampleCompositeActors.xml), I cannot get a "Execution finished" but the Kepler shows the "wrapping up" signal or alternatively a permanent "executing" signal although apparently nothing is running (only finished partly). No error message is displayed!</p> <p style="padding-left: 40px;">Which workflow design I should adopt? What Am I doing wrong? How Can I pursue my aim to execute PN composite actors sequentially?</p> <p style="padding-left: 40px;">All help appreciated!</p> <p style="padding-left: 40px;">Josep Maria Campanera,</p> <p style="padding-left: 40px;">PS1: I use Kepler Release 1.0.0 (May 2008) under Linux</p> <p style="padding-left: 40px;">PS2: Thanks Edward for your comments,</p> <p style="padding-left: 40px;">2009/1/14 Edward A. Lee <eal@eecs.berkeley.edu>:</p>			

This is not a situation where it is refusing to terminate because of unconsumed tokens. Typically, this is called by a deadlock. If you are running on a Windows machine from the command line, you can get a stack trace of all the executing threads by typing control-break. If you forward that to this list, we can (maybe) identify the culprit...

Edward

Josep Maria Campanera Alsina wrote:

Dear all,
I get a "wrapping up" message from an execution of a workflow that coordinates the submission of computational chemistry jobs in a cluster queue system. The workflow is based on the TestJobFullCycle-SGE.xml provided by kepler itself, with some variations. Find attached the mentioned workflows.

My workflow is a composite one. I'd like to execute sequentially several tasks: 1st) submit jobs to a cluster, 2nd) collect all outputs and save them locally and then 3rd) convert output files to other formats. Since some tasks are designed for PN director and some for SDF director the overall director is a PN director.

However, the task under the PN director (in charge of job submission) never finishes though the task is already completed and early shows the message "wrapping up", so the execution never finish step 1st and 2nd so the 3rd is never executed. Why PN director doesn't finish the task? How Can I stop the director and allow the workflow to continue?

I think the problem is related to the PN director that as said in the user manual "may refuse to automatically terminate because tokens are always generated and available to downstream actors"! Here it comments that "One can correct the problem by changing the firingCountLimit parameter of the Constant actor to some finite value". If done that but it continues with the same problem.

How can I overcome this? all comment will be appreciated!

Thanks in advance,

Josep Maria,

History

#1 - 07/20/2009 05:49 PM - Christopher Brooks

Model from Josep Maria Campanera Alsina. The model runs and then never terminates, it gets stuck on "wrapping up"

#2 - 03/27/2013 02:26 PM - Redmine Admin

Original Bugzilla ID was 4254

Files

exampleCompositeActors.xml	115 KB	07/21/2009	Christopher Brooks
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