Kepler - Bug #4197

Waterflow TPC demo - tracking bug

06/29/2009 01:01 PM - ben leinfelder

Status:	Resolved		**Start date:**	06/29/2009
Priority:	Normal		**Due date:**	
Assignee:	ben leinfelder		**% Done:**	0%
Category:	reporting		**Estimated time:**	0.00 hour
Target version:	wrp-modules-2.0.0		**Spent time:**	0.00 hour
Bugzilla-Id:	4197			

Description	
Will be using this as a demonstration of the TPC reporting system. Logging development here (might overlap with the trac system).	

Related issues:		
Blocks Kepler - Bug #4228: Not all tokens seem to be written when running WF ...	**Resolved**	**07/08/2009**
Blocked by Kepler - Bug #4164: Associated Data - wf_exec_id behavior	**Resolved**	**06/15/2009**
Blocks Kepler - Bug #4217: Report Viewer - "nil" not rendering consistently/c...	**Resolved**	**07/01/2009**
Blocks Kepler - Bug #4193: ActorMetadata - clone() error when opening workflo...	**Resolved**	**06/26/2009**
Blocks Kepler - Bug #4278: Changes to a reopened KAR are not saved to the new...	**Resolved**	**08/03/2009**

History

#1 - 06/29/2009 01:06 PM - ben leinfelder

Opening from the exported KAR is causing some problems - that's in another bug.
There are two files for this TPC (in the kruger SVN repo):
tpc02-water-flow-base.xml
tpc02-water-flow-high.xml

#2 - 06/30/2009 07:48 AM - ben leinfelder

In the tpc02-water-flow-base.xml workflow I have the table rendering in reporting not using the R data2html method nor the browser-launch (i've left that part of the workflow intact for comparison as I hone the reporting-based version).
TODO (workflow-side): finesse the data going into the report - "month" is an integer (1=Jan, 2=Feb, etc...) and the "avg" has 8 decimal places. Also want to use capitalization for the column headers?
TODO (reporting-side): Shade the header row. Lighten the borders around the cells.

#3 - 06/30/2009 04:07 PM - ben leinfelder

-column headers are capitalized.
-header rows are shaded
-overflowing cell contents are truncated
TODO: remove browser call
TODO: add status
TODO: round to more reasonable significant digits

#4 - 06/30/2009 06:24 PM - Derik Barseghian

I'm getting a lot of error messages on the console when I open this workflow. It seems to run ok though. (This is while using our current version of hsqldb). Are others seeing these errors?

```
[run] ERROR (org.ecoinformatics.seek.dataquery.DBTablesGenerator:generateDBTextTable:481) The error in generat
eDBTable is
    [run] java.sql.SQLException: Table already exists: T1941157596 in statement [CREATE TEXT TABLE T19411575
96]
    [run]    at org.hsqldb.jdbc.jdbcUtil.sqlException(Unknown Source)
    [run]    at org.hsqldb.jdbc.jdbcStatement.fetchResult(Unknown Source)
    [run]    at org.hsqldb.jdbc.jdbcStatement.execute(Unknown Source)
```

#5 - 06/30/2009 06:35 PM - Derik Barseghian

On my Eclipse build, which is using hsqldb 1.8, I get the same, and some additional errors. Provenance gives an "ERROR: RecordingException: Unable to insert into data table: out of memory", the workflow seems to work (web page comes up), but in the wrapping up phase I get a bunch of ejava.lang.OutOfMemoryError: Java heap space errors. So, I wonder is the overhead of Eclipse or my locally different version of hsql to blame. Any other Eclipse user seeing this too?

#6 - 07/01/2009 09:31 AM - ben leinfelder

The EML actors throw those exceptions - that is expected.
As for the newer HSQLDB - I will take a look.

#7 - 07/01/2009 12:53 PM - Derik Barseghian

I'm not seeing the memory errors today when using Eclipse with the currently checked in hsql, nor in Eclipse with hsql 1.8. Either I was just low on memory yesterday, or maybe I failed to kill .kepler between my tests and that caused some issue. r19734 upgrades kepler to hsqldb 1.8.0.10. Let me know if you notice any issues with this.

#8 - 07/01/2009 03:43 PM - ben leinfelder

-hsqldb 1.8 looks good.
-removed the browser call
-added naive "status" example - needs to be meaningful
Jim will do the rounding of the Average column. Oh - and maybe make the month a
string instead of a number?

#9 - 07/01/2009 04:35 PM - ben leinfelder

tpc02-water-flow-high.xml:
~~using record-based data table rendering~~
~~-including status actor~~
"nil" values are showing as a large number - need a bug fix for that.
-river and month are *both* integers - not sure where those are being looked up, but the values need to be in the dataframe before the RecordToken is created and "reported on"

#10 - 07/07/2009 09:21 AM - ben leinfelder

Changes made by Jim:
-month and river are now strings (rather than factors (ie. ints).
-rounding done to 4 places.

Changes made by me:
-"nil" values will be preserved for IntToken
-DoubleToken "nil" values will show as "NaN"
-boolean "nil", unfortunately, will show as "false"

#11 - 07/07/2009 09:29 AM - ben leinfelder

For the tutorial:
-we will use the "base" workflow with production data. Most slides and hands-on activities will use this workflow.
-the "high" workflow will be switched to use DEV for it's data so that we can illustrate how adding new data tables to an existing datapackage will be picked up automatically the next time the scheduled workflow executes.

#12 - 07/07/2009 12:58 PM - ben leinfelder

"nil" DoubleTokens will remain "nil" (rather than NaN)

#13 - 07/08/2009 11:21 AM - ben leinfelder

when running from the command line the "Plot base flow" R actor is not fired and no tokens are being recorded (as you'd expect.
When run in the gui, however, everything is normal.

#14 - 07/08/2009 11:23 AM - ben leinfelder

when I add another port named "trigger" to the "Plot base flow" actor and connect a similar output port from the upstream actor that should already be triggering the downstream actor to fire I get expected firing results!

#15 - 07/10/2009 09:48 AM - ben leinfelder

we were/are having intermittent problems rendering images created in kepler on the report - this is deep in FOP/xmlgraphics library and does not happen on the mac.
Choosing to use mac for the training demo execution engine

#16 - 07/10/2009 01:00 PM - ben leinfelder

added workflow for the HIGH base flow that points to DEV server so that we can demo the dynamic data loading.

#17 - 07/10/2009 02:28 PM - ben leinfelder

added KAR for the base workflow that includes a report layout

#18 - 08/06/2009 03:39 PM - ben leinfelder

I've gotten this working in the trunk now - after merging and patching up some new errors.
Ran the base workflow kar from my command line which automatically uploaded it to my local metacat where i could see the generated report (pdf).
There are still some blocking bugs, however (added).

#19 - 08/24/2009 11:27 AM - ben leinfelder

now using OrderedRecordTokens and OrderedRecordAssembler to do things "correctly" (no ptolemy overrides)

#20 - 11/18/2009 10:28 AM - ben leinfelder

The bovine TB TPC is also a good candidate for "testing" these features out. Just ran the KAR for that from the command line and it looked good.

#21 - 11/18/2009 10:47 AM - ben leinfelder

The water flow workflow is also looking successful from the command line

#22 - 03/27/2013 02:26 PM - Redmine Admin

Original Bugzilla ID was 4197