Kepler - Bug #4002

RExpression2 - handle arbitrary R data structures

04/20/2009 05:06 PM - ben leinfelder

Status:	New	**Start date:**	04/20/2009
Priority:	Normal	**Due date:**	
Assignee:	ben leinfelder	**% Done:**	0%
Category:	actors	**Estimated time:**	0.00 hour
Target version:	3.X.Y	**Spent time:**	0.00 hour
Bugzilla-Id:	4002		

Description

Not everything in R fits into the Ptolemy types (nor the JRI types, for that matter).
The lm() method, for instance, returns something special.
It's been proposed (a few times) that there should be an RObjectToken to handle such cases so that at least R actors can communicate between each other with out loss/mutation of data.
The RExpression1 actor used file-based serialization to get around this limitation. We could attempt to use a hybrid approach for RExpression2 - mixing JRI with file-based serialization (best of both worlds?).

History

#1 - 04/20/2009 05:07 PM - ben leinfelder

Here is an example script that creates different data objects:
x <- 1:10
y <- x + rnorm(10)
f <- y ~ x
l <- lm(f)
s <- summary(l)

#2 - 06/14/2009 09:14 AM - ben leinfelder

added handling (from the old RExpression1 implementation) for [un]serializing complex R data objects to disk.
This is working for dataframes at the moment. More testing for complex types to come...

#3 - 08/18/2009 03:14 PM - ben leinfelder

in the example cases given, all but the structure produced by ~ were transferred from one R actor the the other.
This is the debug output:

```
f <- (y ~ x)
```

Result: nil

#4 - 08/18/2009 03:18 PM - ben leinfelder

tests the various structures are transferred by the JRI implementation.

#5 - 03/27/2013 02:25 PM - Redmine Admin

Original Bugzilla ID was 4002

Files

R2-arbitrary.xml	33.9 KB	08/18/2009	ben leinfelder