

Kepler - Bug #4827

RExpression does not handle matrix tokens correctly.

02/23/2010 12:38 PM - Tom Parris

Status:	New	Start date:	02/23/2010
Priority:	Normal	Due date:	
Assignee:	Chad Berkley	% Done:	0%
Category:	actors	Estimated time:	0.00 hour
Target version:	Unspecified	Spent time:	0.00 hour
Bugzilla-Id:	4827		

Description

I've attached a simple workflow that demonstrates a bug in the way the RExpression actor translates Kepler/Ptolemy matrices to R matrices. There seems to be a problem in the automatically generated "matrix" statement in R that is likely due to confusing row and column counts.

A simple 2 row x 5 column constant matrix ([1, 2, 3, 4, 5; 101, 102, 103, 104, 105]) is passed to Rexpression on the min port. The R script simply displays the matrix and passes it along to the mout port.

There are three displays.

1. min displays the matrix before it enters the RExpression actor. It is fine.
2. mout displays the matrix after it leaves the RExpression actor. It too is fine (indicating that the translation problem inverts itself when broadcasting to the output port).
3. The problem is in the Routput display.

min

```
[,1] [,2] [,3] [,4] [,5]
[1,] 1 3 5 102 104
[2,] 2 4 101 103 105
```

Note how the matrix is scrambled. The automatically generated R script line that reads:

```
`min` <- matrix(c(1, 2, 3, 4, 5, 101, 102, 103, 104, 105), nrow=2,ncol=5)
```

should read

```
`min` <- matrix(c(1, 101, 2, 102, 3, 103, 4, 104, 5, 105), nrow=2,ncol=5)
```

History

#1 - 06/24/2011 02:40 PM - Tom Parris

I just re-tested this with the latest trunk. The problem is still there.

#2 - 03/27/2013 02:28 PM - Redmine Admin

Original Bugzilla ID was 4827

Files

R_Matrix_Test.xml	35.8 KB	02/23/2010	Tom Parris
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