

# **Elements of Dashboard Design**

## **- Parameterization using Substitutions**

## Dashboard Design - Substitutions

### Substitutions

- The Substitutions feature allows you to build open-ended displays in which data attachments and commands depend on values defined at the time the display is run.
- When data attachments are created in the Display Builder, generic values are used instead of the actual value of any field in the Attach To Data and Define Command dialogs.
- These generic values are defined at runtime. Substitution values can either be defined for all displays or for a single drill down display.

### Initializing Substitution values

- Substitutions can be assigned initial values
- Go to Tools>Options>Substitutions to assign values

## Dashboard Design - Substitutions

### Automatic Substitutions

- Certain substitutions are automatically set on drill down displays if activated from a tabular object (i.e., a table, object grid, bar graph, or pie.)
- Which substitutions are set on the drill down display depends on the data attachment of the source object. For example:
  - TIBCO Hawk: \$agent, \$ma
  - TIBCO RV: \$subject, \$filtervalue, \$filtername
  - XML/SQL: \$Xrowname where X = 1,2...n
  - All: \$col1, \$celldata
- The name of the row which corresponds to the selected element in the source object (i.e.: cell, object, bar, or wedge) will be used to construct the substitution when the drill down is activated.
- Table Objects: drillDownColumnSubs property allow substitutions to be assigned to each column.

## Exercises

### Ex 1: Add and pass substitution variables to Drill Down displays.

1. From the Display Builder, File->Open class\_tables.rtv
2. Add 2 substitution variables using Tools->Variables.  
From the “Variables” dialog enter two new substitutions :

Variable Name: \$server

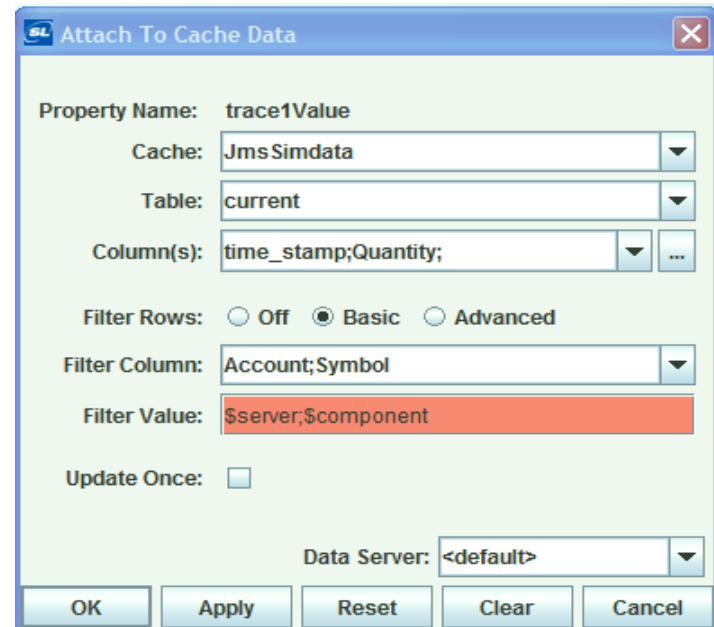
Add

Variable Name: \$component

Add

3. Save class\_tables.rtv.
4. File->Open class\_trend.rtv.
5. Add the \$server and \$component subs to this file as in step 2.
6. Now add \$server, \$component subs to the trend graph. From Object Properties->trace1Value, add subs by typing in the “Filter Column” names and “Filter Values”.

(continued)



Attach To Cache Data

Property Name: trace1Value

Cache: JmsSimdata

Table: current

Column(s): time\_stamp;Quantity;

Filter Rows:  Off  Basic  Advanced

Filter Column: Account;Symbol

Filter Value: \$server;\$component

Update Once:

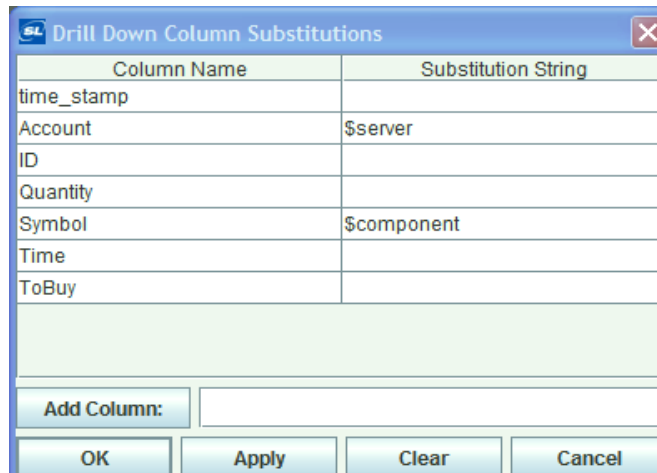
Data Server: <default>

OK Apply Reset Clear Cancel

## Exercises

### Ex 1: (continued)

7. Repeat this for trace1ValueTable attachment to the cache's history table
8. File->Save class\_trend.rtv
9. File->Open class\_tables.rtv and add substitutions to "Current Table"
10. Object Properties->drillDownColumnSubs, add subs.
11. File->Save class\_tables.rtv
12. Test using Preview and selecting a row from the "Current Table". The row selected will be passed to Drill Down Display.



Column Name	Substitution String
time_stamp	
Account	\$server
ID	
Quantity	
Symbol	\$component
Time	
ToBuy	

Add Column:

OK Apply Clear Cancel