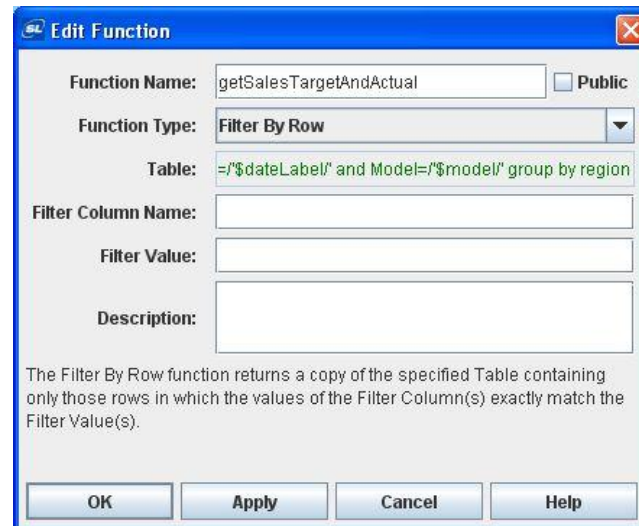


# Elements of Dashboard Design - Functions

## Dashboard Design - Functions

- A function enables you to perform calculations on data before it is attached to object in RTView displays.
- Select Tools>Functions>Add to see standard function dialog.
- As you select a particular function type, the number/types of argument fields will automatically change.
- Functions can be daisy-chained on top of each other.
- RTView supports custom java functions (discussed later)



**Edit Function**

Function Name:   Public

Function Type: **Filter By Row**

Table:

Filter Column Name:

Filter Value:

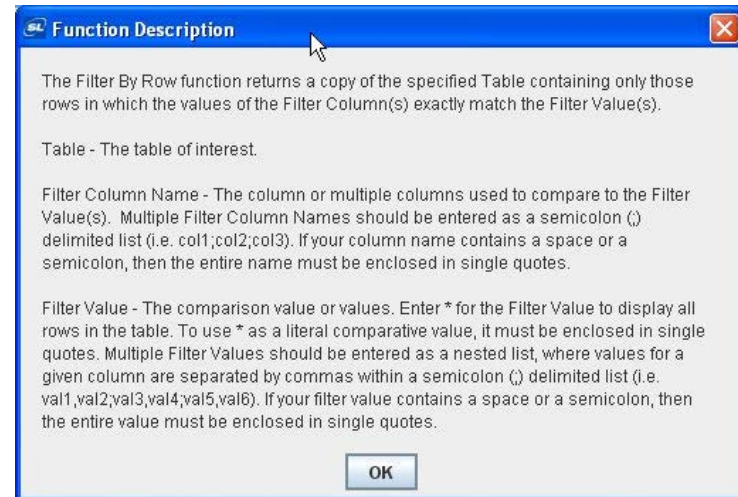
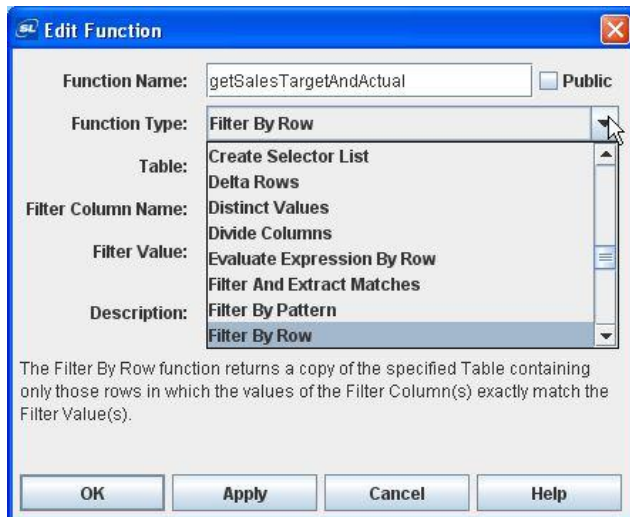
Description:

The Filter By Row function returns a copy of the specified Table containing only those rows in which the values of the Filter Column(s) exactly match the Filter Value(s).

OK Apply Cancel Help

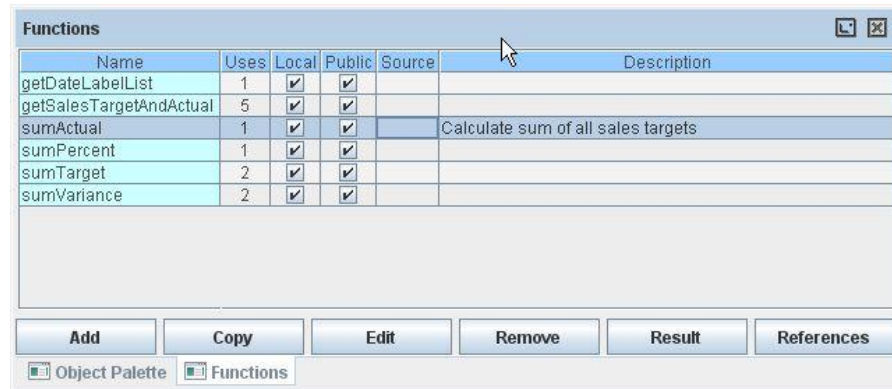
## Dashboard Design - Functions

- Functions are separated into two groups according to whether they act on Scalar or Tabular data. The order of functions listed in the Function Type dropdown are:
  - Standard Scalar
  - Standard Tabular
  - Custom
- Documentation on function usage can be found in the User Guide or from the Help button for each function.



## Dashboard Design - Functions

- The main function dialog shows a list of defined functions used by the display.



Name	Uses	Local	Public	Source	Description
getDateLabelList	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
getSalesTargetAndActual	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
sumActual	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Calculate sum of all sales targets
sumPercent	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
sumTarget	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
sumVariance	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

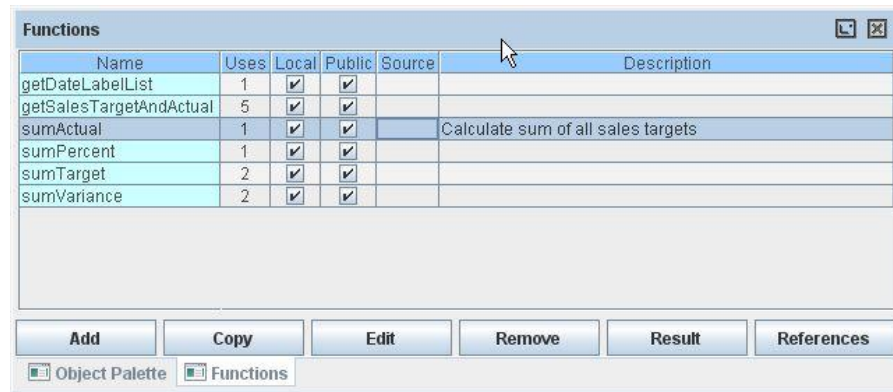
Buttons: Add, Copy, Edit, Remove, Result, References

Object Palette, Functions

- Buttons are defined as follows:
  - Add:** Add a new function. Opens up the Edit Function Dialog.
  - Copy:** Make a copy of an existing function.
  - Edit:** Edit an existing function (not allowed with global/include functions).
  - Remove:** Delete an existing function (not allowed with global/include functions).
  - Result:** Show result of selected function.
  - References:** Show a list of items (objects, functions) that reference the selected function.

## Dashboard Design - Functions

- The main function dialog also shows information about each defined function



Name	Uses	Local	Public	Source	Description
getDateLabelList	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
getSalesTargetAndActual	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
sumActual	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Calculate sum of all sales targets
sumPercent	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
sumTarget	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
sumVariance	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Buttons: Add, Copy, Edit, Remove, Result, References

Object Palette, Functions

- Fields are defined as follows:

**Name:** Function name. Must be unique within display. No spaces allowed.

**Uses:** Number of times function is used in current display.

**Local:** Selected if function is defined in current display.

**Public:** Selected if function is available (i.e., visible) in display files, other than display where it was defined.

**Source:** Name of file in which global function or included display file is defined.

**Description:** Description of function as entered in the Edit Function dialog.

## Exercises

### Ex 1: Add functions to output unique values for combo boxes

1. File>Open class\_tables.rtv
2. Add a function for “Server” combo box called “serverListAll”.
3. Tools>Functions>Add

From the “Edit Function” dialog box, select

Function Name: serverListAll

Function Type: Create Selector List

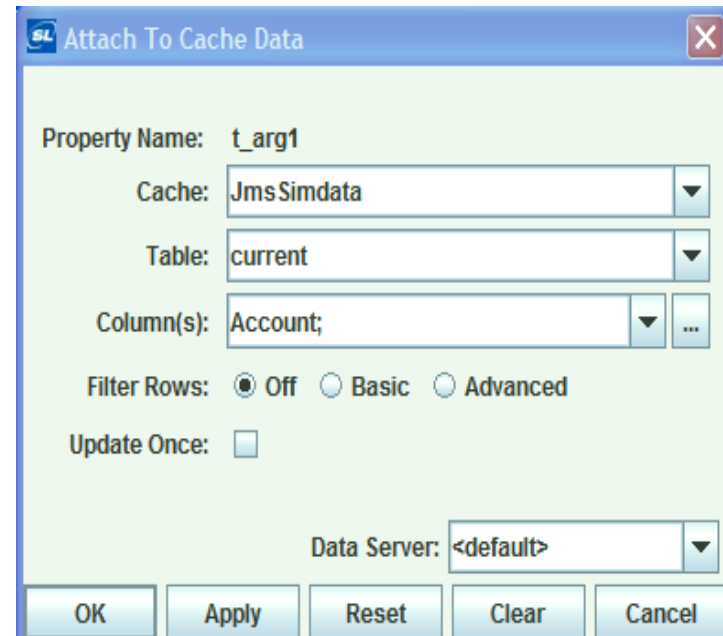
Selector Table: attach to cache data

All Selector Name: All Servers

Sort Values: 1

Sort Descending: 0

Apply OK



The image shows a dialog box titled "Attach To Cache Data" with a close button (X) in the top right corner. The dialog contains the following fields and options:

- Property Name: t\_arg1
- Cache: JmsSimdata (dropdown menu)
- Table: current (dropdown menu)
- Column(s): Account; (dropdown menu with a three-dot menu icon to its right)
- Filter Rows:  Off  Basic  Advanced
- Update Once:
- Data Server: <default> (dropdown menu)

At the bottom of the dialog are five buttons: OK, Apply, Reset, Clear, and Cancel.

## Exercises

### Ex 1: Add functions to output unique values for combo boxes (continued)

4. Add a function for “Component” combo box called “componentListAllForServer”.

Function Name: componentListAllForServer

Function Type: Create Selector List

Selector Table: attach to cache data

All Selector Name: All Components

Sort Values: 1

Sort Descending: 0

Apply OK

5. Function “componentListAllForServer”  
data attachment is filtered by \$server  
(continued)

Attach To Cache Data

Property Name: t\_arg1

Cache: JmsSimdata

Table: current

Column(s): Symbol

Filter Rows:  Off  Basic  Advanced

Filter Column: Account

Filter Value: \$server

Update Once:

Data Server: <default>

OK Apply Reset Clear Cancel

## Exercises

### Ex 1: Add functions to output unique values for combo boxes. (continued)

6. Attach functions to combo boxes. The “Server” combo box is attached to function serverListAll. The “Component” combo box is attached to

function componentListAllForServer. For “Server” combo box:

Object Properties->listValues

Function Name: serverListAll

Column(s): \*

7. Repeat step 6 for “Component” combo box with the correct function.

8. Filter data attachment to “Current” table by both \$server and \$component by creating a new function “dataCurrentForServerComponent”

Tools>Functions>Add

From the “Edit Function” dialog box, select

Function Name: dataCurrentForServerComponent

Function Type: Reference

Table: attach to cache data

Apply OK



## Exercises

### Ex 1: Add functions to output unique values for combo boxes (continued)

9. Attach function “dataCurrentForServerComponent” to “Current” table.
10. File->Save class\_tables.rtv
11. Test with run\_viewer. Select combinations of “Server” and “Component”.  
The “Current” table will reflect selections including “All Servers” and/or “All Components”. Note that combo boxes only contain distinct entries.  
Drill down to Drill Down target by selecting a table row.