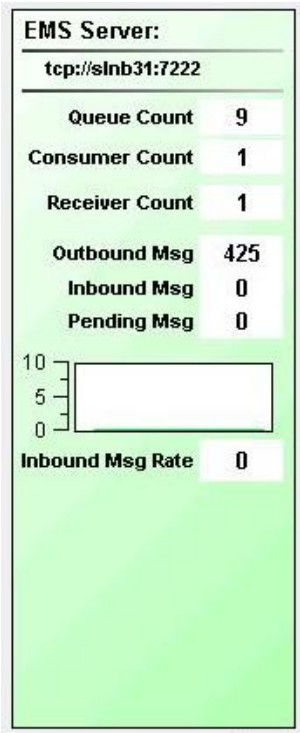
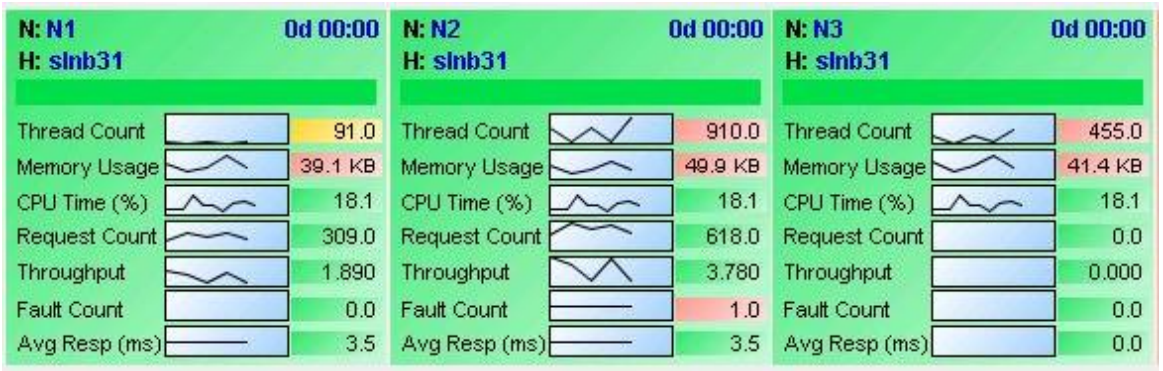
RTView Advanced Design Topics
- Composite Objects

Composite Objects

The composite object (class name: obj_composite) is a special graphic object class that allows you to embed a display (.rtv) file within itself. This is especially useful for creating groups of objects that you want to use multiple times, either directly in your displays, or in the object grid.





Composite Objects

Using the composite object is a straightforward process.

1. In the builder, create a display (composite display) that will be embedded into a composite object. Add any number of graphical objects (except for a composite object). Add functions, variables, etc, if required. Save display as a .rtv file.

2. Create a new display. Add a composite object. In the object property, select the property called **rtvName** and enter the name of the composite display from (1). An instance of the display (including its objects, functions, variables) will be included in the composite display.

3. Any variables used in (1) will show up as separate property fields in the Object Property Dialog. The custom properties can be attached to any data source.

4. Variables that are also declared as substitutions are exceptions to (3) – they will not show up as custom fields in the Object Property Dialog. To assign values to substitutions, use the **substitutions** field, e.g.,

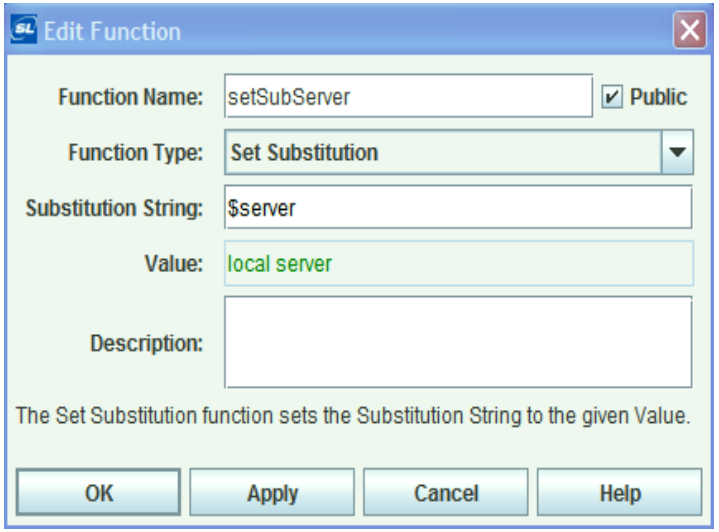
substitutions $subname:subvalue $subname2:subvalue2

Composite Objects – Exercise

Ex 1: Create composite display

1. In the Builder; File->New . Add a “Discrete Dynamic” object from Object Palettes-> General Tab
2. Tools->Variables.
   Add local variable: server
   Add substitution: $server
3. Add a function “setSubServer”
   (see graphic)
4. Object Properties:
   label: attach to $server
   value: (see graphic)

5. Add Drill DownTarget
   Apply Drill Down to : Current Window
   DrillDown Display Name: class_tables.rtv



Composite Objects – Exercise

Ex 1: Create composite display (continued)

6. Size the background rectangle to the
   "Discrete Dynamic Object":
   File->Background Properties_>
   Model Width
   Model Height
   Fit background to object by changing
   Model width and height.

7. File-> Save As sub_server.rtv
8. File->Open server_alert_summary.rtv
9. Add a composite object :
   Edit->Add->Object Palettes->Composite
   Choose any composite object and place in workspace
10. Set these Object Properties:
    rtv_name: sub_server.rtv
    server: john

Composite Objects – Exercise

Ex 1: Create composite display (continued)

11. File->Save

12. Test in the Builder's Preview, by picking the composite object. The drilldown target will be the name provided to the "server" Object Property.

Composite Objects – As Used in Object Grids

Composite objects can be used in object grids for maximum visual customization.

1. Create a composite display.
2. Create a separate display. Add an object grid.
3. Attach a data source (tabular data) to the object grid.
4. In the object grid properties, click on **iconProperties** to bring up the Icon Properties dialog.
5. In the dialog, choose “obj_composite” as the icon class name. The properties of the composite display will appear below.
6. For the rtvName property, type in the name of the composite display.
7. Select **Apply** to see the custom property fields show up.
8. Map other properties of the composite object, as needed, with the appropriate value, or column value.
9. Select **OK** to apply all changes and close the dialog.

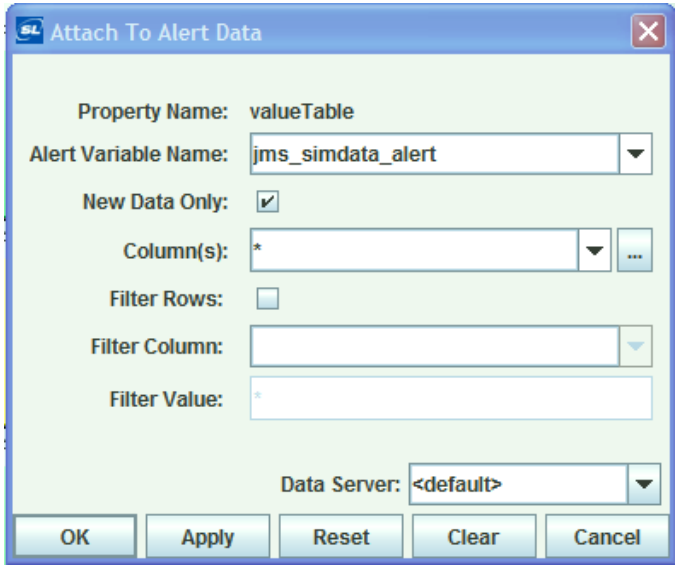
Your object grid should be populated with multiple instances of the composite object.

Composite Objects – Exercise

Ex 1: Create an object grid

1. File->Open server_alert_summary.rtv
2. From Object Palettes->Table , add an “Object Grid” to the work area
3. Set these Object Properties:

   value: (see graphic)



Composite Objects – Exercise

Ex 1: Create an object grid (continued)

4. Set these Object Properties:
   Icon->IconProperties, from the "Icon Properties" dialog set

   Icon Class Name: obj_composite
   rtvName: Value: sub_server.rtv
   server: Column: Alert Index
   (see graphic)

5. Save As server_alert_summary.rtv

6. Test in Builder's Preview mode. Notice

That the object grid populates with all the servers.