

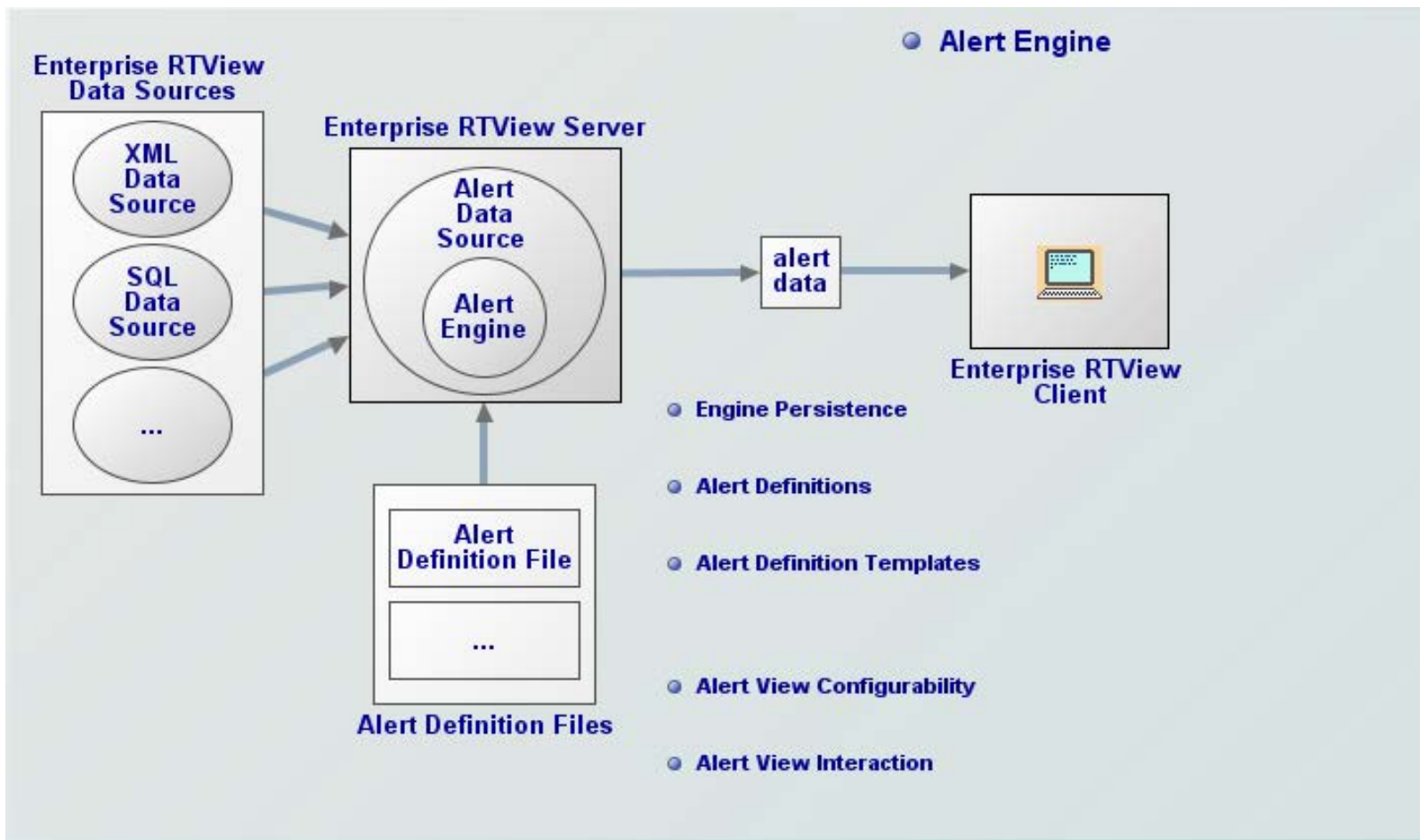
RTView Alerts

Alerts - Alert Engine

The RTView alert engine

- enables management and operational personnel to monitor the health and status of business operations 24/7 without requiring any RTView displays be visible.
- runs in the background without the need for an operator.
- monitors conditions and perform automated actions from any available RTView data source, including functions.
- allows users to create any number of alert definitions that include thresholds, severity, notification policies and automated actions, such as email, system commands, performing a SQL statement or sending JMS messages. The alert definitions themselves can be parameterized.
- allows users to create customized dashboards to view alert status, filter alerts, use alerts as drill down navigation for analysis and corrective action, or to interactively change alert status such as alert acknowledgement.

Alerts - Overview



Alerts – General Configuration Steps

Steps for creating and deploying alerts

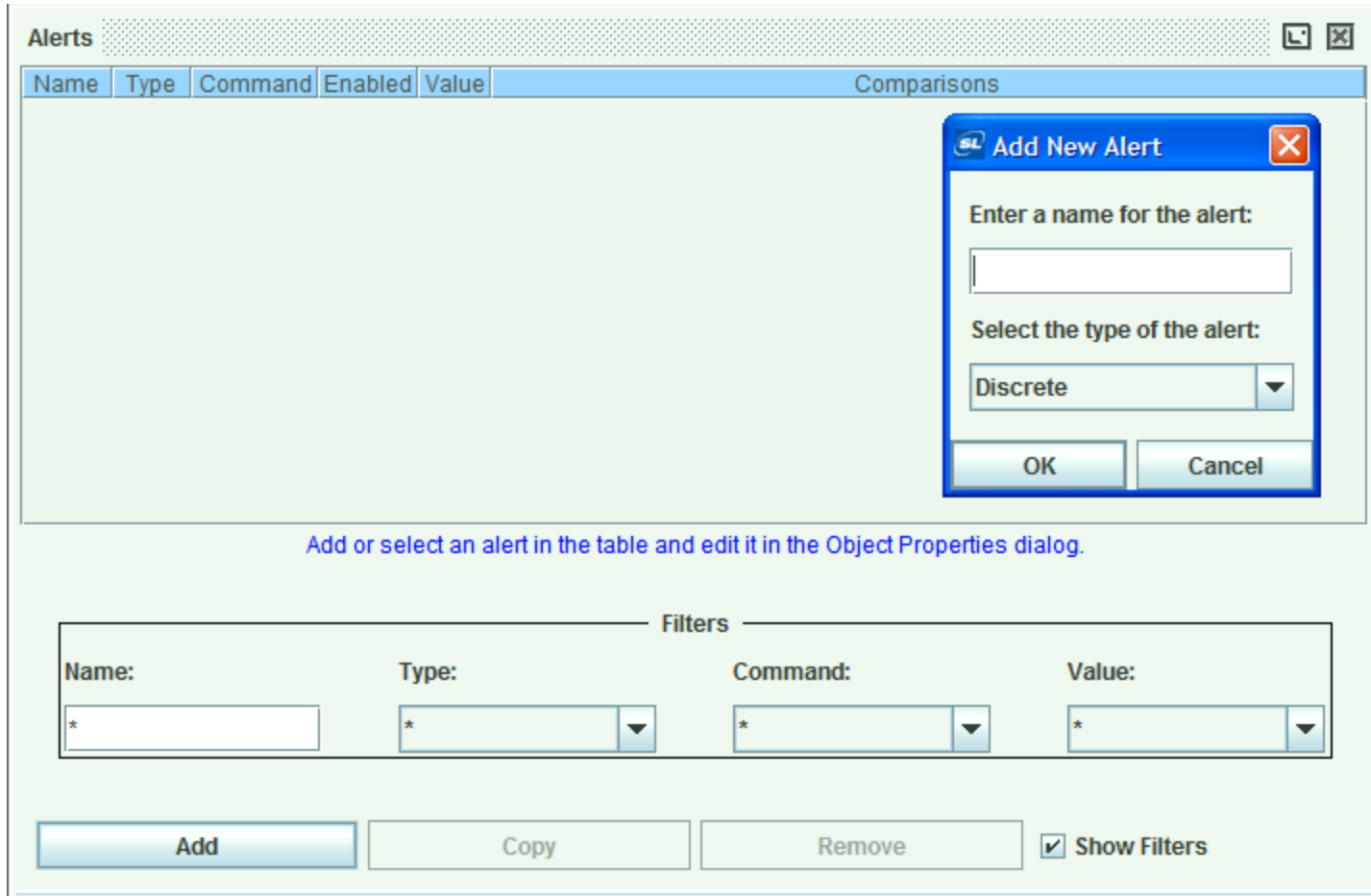
1. Create alerts in Display Builder
 - Select and add alert types
 - Configure alert properties
 - Use variables in data attachments (optional)
 - Save Alert Definition file

2. Configure alert engine to load alert definition files
 - Add variable parameters (optional)

3. Enable alert engine by starting Data Server, Display Server or Application

Alerts - Alert Definition Files

To add Alerts, use the Builder's Tools>Alerts Dialog



The screenshot shows the 'Alerts' dialog box with a table and an 'Add New Alert' sub-dialog. The table has columns for Name, Type, Command, Enabled, Value, and Comparisons. The 'Add New Alert' sub-dialog prompts for a name and type (currently set to 'Discrete'). Below the table, there are filter fields for Name, Type, Command, and Value, each with a '*' in the input field. At the bottom, there are 'Add', 'Copy', and 'Remove' buttons, and a 'Show Filters' checkbox which is checked.

Name	Type	Command	Enabled	Value	Comparisons
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Add New Alert

Enter a name for the alert:

Select the type of the alert:
Discrete

OK Cancel

Filters

Name: * Type: * Command: * Value: *

Add Copy Remove Show Filters

Alerts - Alert Definition Files

Alert definition Details

- Alert Types:
 - Discrete Alert: supports String, Number and Boolean
 - Limits Alert: supports 4 thresholds
 - Multi-State Alert: any number of alert states
- Alert Properties (common)
 - alertName: unique name for the alert object
 - alertCommand: execute command when alert is activated
 - alertDelayTime: time value must be in alert range before alert issued
 - nonRepetitionTime: minimize repeated alerts
 - reNotificationTime: renotify unacknowledged alert
 - valueDeadBand: modify when limits alert is cleared
- Multi-State Alert Properties
 - alertStateNCondition
 - alertStateNLowerRangeLimit / alertStateUpperRangeLimit
 - alertStateNComparison

Alerts - Alert Definition Files

- Scalar Alert Data Attachment
 - **value** property
- Tabular Alert Data Attachment
 - **valueTable** property
 - **useTabularDataFlag** property
 - Use two column tables with index and numeric value columns

- Alert Threshold values are of 3 test types:

- Scalar
- List

List types are index/comparison value pairs or comparison values

Example: (Chicago,80;Dallas,90;Detroit,100) (80;90;100)

- Tabular

Tabular types are either one or two column tables, one column of comparison values or two columns of index and comparison values.

Alerts – Parameterization

- Alert substitution variables:
\$alertName, \$alertID, \$alertText, \$alertSeverity, \$alertIndex ...
- Create reusable Alert Definition Files using substitutions
 - Example: \$region:North, South, East, West does this:
 - Parameterizes alertName suffix using substitutions
 - Specifies substitution values to Alert Data Source
 - Adds a file multiple times per region

Alerts – View and Management

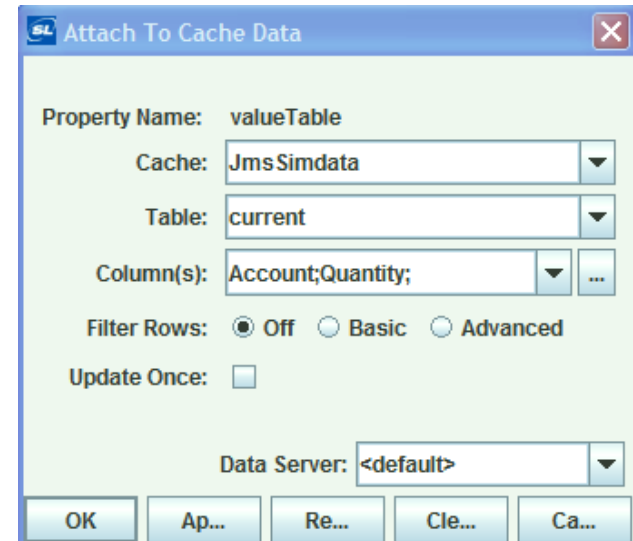
- Viewing Alerts
 - Attach to alert data with variables from Alert Variable Table
- Management of Alerts
 - Commands to manage Alerts include:
 - Add Alert Definition File
 - Remove Alert Definition File
 - Enable Alert Definition
 - Enable Alerts
 - Acknowledge Alerts

Alerts - Exercises

Ex1: Create an Alert Definition based on Cache Data

- In the Builder add an alert.
Tools->Alert. From the "Alerts" dialog: Add
Enter Name of Alert: jms_simdata_alert
Select the type of the Alert: Limits
- Set Object properties:

useTabularDataFlag:	checked	ON
valueTable:	(see graphic)	
valueHighAlertEnabledFlag:	ON	
valueHighAlert:		1100
valueLowWarningEnabledFlag:	ON	
valueLowWarning:		200
- File->Save file as alert_def.rtv
- Add alert_def.rtv to Tools>Options>Alerts>Alert Definitions
- File->Save alert_def.rtv

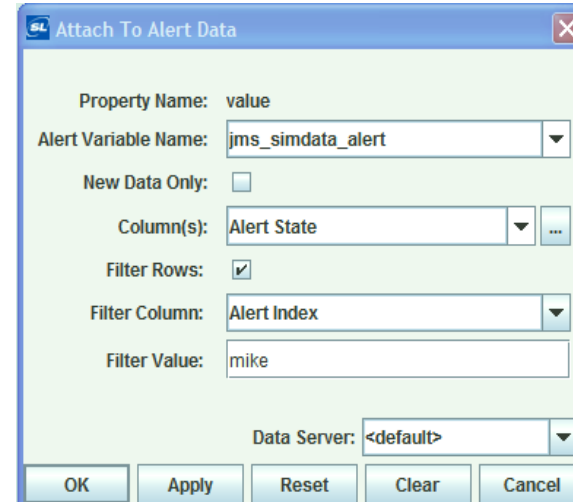


Alerts - Exercises

Ex2: Create an Alert Summary Display

1. Bring up the Builder. File > New.
2. Tools->Variables. Add \$server
3. Add 2 "Discrete Dynamic" objects from the Object Palettes->General Tab.
4. Object Properties on the first object:
 - value: Attach to Alert Data (see graphic)
 - valueMediumAlertEnabledFlag: ON
 - valueMediumAlert: 0
 - valueLowAlertEnabledFlag: ON
 - valueLowAlert: 1
 - valueHighAlertEnabledFlag: ON
 - valueHighAlert: 2
 - label: Server: mike
 - drillDownTarget: class_tables.rtv in Current Window;
 - Drill Down Substitutions:
 - String: \$server
 - Value: mike

(continued)



Alerts - Exercises

Ex2: Create an Alert Summary Display (continued)

5. For the second “Discrete Dynamic” object, set the Object Properties to allow for a different server. The “value” property will be filtered by another server. The drillDownTarget’s “Drill Down Substitutions” will be set to the other server.
6. File>Save server_alert_summary.rtv
7. Test server_alert_summary.rtv in the Builder’s Preview.

The “Discrete Dynamic” objects will change color as the “Alert State” changes value. Clicking on an object will drilldown to class_tables.rtv display setting the correct server in the drilldown display.