



User Guide

QAD Demand Management Engine

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Chapter 1 Introduction

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Section 1: Overview

The Demand Management Engine (DME) is used for forecasting and planning.



1-1: Demand Mangement Engine (DME) Highlights

Some of the new features of the DME:

- Support localization for currency and numeric values
- Improved Batch Scheduler
- Retagging

1-2: Logging In

You log into the DME through the Viewer. Usernames and passwords are case-sensitive and assigned by your System Administrator.

1-3: Logging Out

If you would like to log out of the application, in the DME Viewer, click on File > Exit.

Section 2: Documentation Conventions

2-1: Text

The following table lists text conventions in this user guide.

Table 1-1: Text Convention Descriptions

Convention	Description
Text represented as a screen display.	This typeface represents displays that appear on your terminal screen, for example: <code>lom></code>
Text represented as menu or sub-menu names.	This typeface represents all menu and sub-menu names within procedures, for example: On the File menu, click New .

2-2: Screen Captures

The example screens in this guide may not represent what you see on your monitor; use them only as guidelines.

Section 3: Acronyms and Abbreviations

Table 1-2: Acronyms and Abbreviations used in this Manual

Term	Definition
ANOVA	ANalysis of VAriance
ARIMA	Auto-Regression Including Moving Average
BOM	Bill Of Materials
DF	Degrees of Freedom
PO	Purchase Order
DME	Demand Management Engine
FG	Finished Goods
MAPE	Mean Absolute Percentage Error
MOU	Mass Observation Update
MSU	Mass Series Update

Chapter 2 Viewer

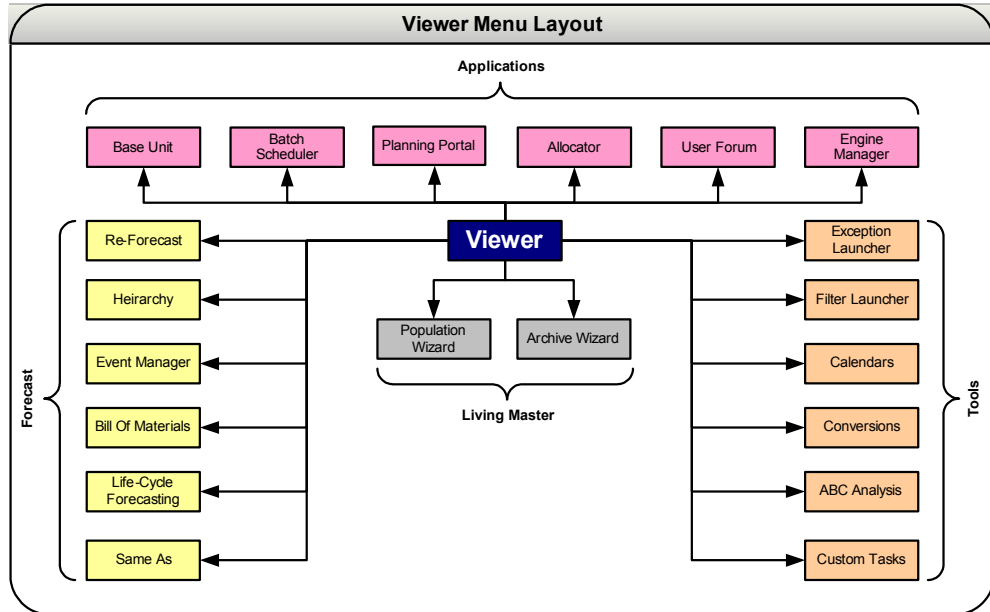
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Section 1: Overview

The Viewer controls and launches all the major features within the Demand Management Engine. The Viewer provides the central location to interact with the forecast.

The illustration below details the major features that are accessed from the Viewer.



The System Administrator is responsible for managing security to prevent users from accessing information or capabilities that they should not have access to. While all users have a similar interface, different aspects of the solution are activated depending on the role that they play within the forecasting process.

Users can performs the following tasks through the Viewer:

- View forecasts and associated data in several different forms.
- Transform or edit parts of the forecast using built-in tools.
- Launch the Engine Manager.
- Launch other applications from the Atlas Planning Suite including the Base Unit, Batch Scheduler, and Planning Portal.

Note: *Your System Administrator must grant you permissions to use these applications.*

The Viewer is the primary user interface for viewing a forecast's results. End users may provide input through adjustments and notes

so that changes are tracked and the consensus forecast is visible to all users who have privileges.

Section 2: Viewer Management

2-1: Login to the Viewer

1. Go to Start > Atlas Planning Suite > Viewer.

The Viewer Login window will display.

2. Enter your username and password.
3. Click OK.

The Scenario Selection window displays.

Property	Value
Data Source	C:\Program Files\John Galt Solutions\Atlas Planning Suite - Demand Manag...
Type	Microsoft Access
Locked	No
Table/Query Name	SHIPMENTS
Data Organization	Rows
Procast Date	9/27/2007 2:14:24 PM
Mode	Owned

Select a filter to use

(No filter)

Count

Add New Filter

Hierarchy Options

☒ No Hierarchy

☐ On-Fly

IM - Pg

☐ Recreate Base

Open Cancel

4. Select a Scenario from the **Scenario Selection** drop-down list.

Note: To view the content of a Scenario you first define it using the Base Unit. To learn more about defining a Scenario using the Base Unit, see [Chapter 4 Creating and Managing Scenarios](#).

5. Select an existing filter from the drop-down.
6. Press the Count button to show how many Series are returned by applying the selected filter to the selected scenario.
7. To create a new Filter type in a name for the filter and press the Add button. For additional information about adding a new filter,

please [See “Create a Filter” on page 126](#). If creating a filter directly from the Scenario Selection window go to Step 3 in the mentioned sub-section.

Note: *In order for a filter to be used to open a Scenario the filter must be created first.*

8. In the Hierarchy Options area, select either:

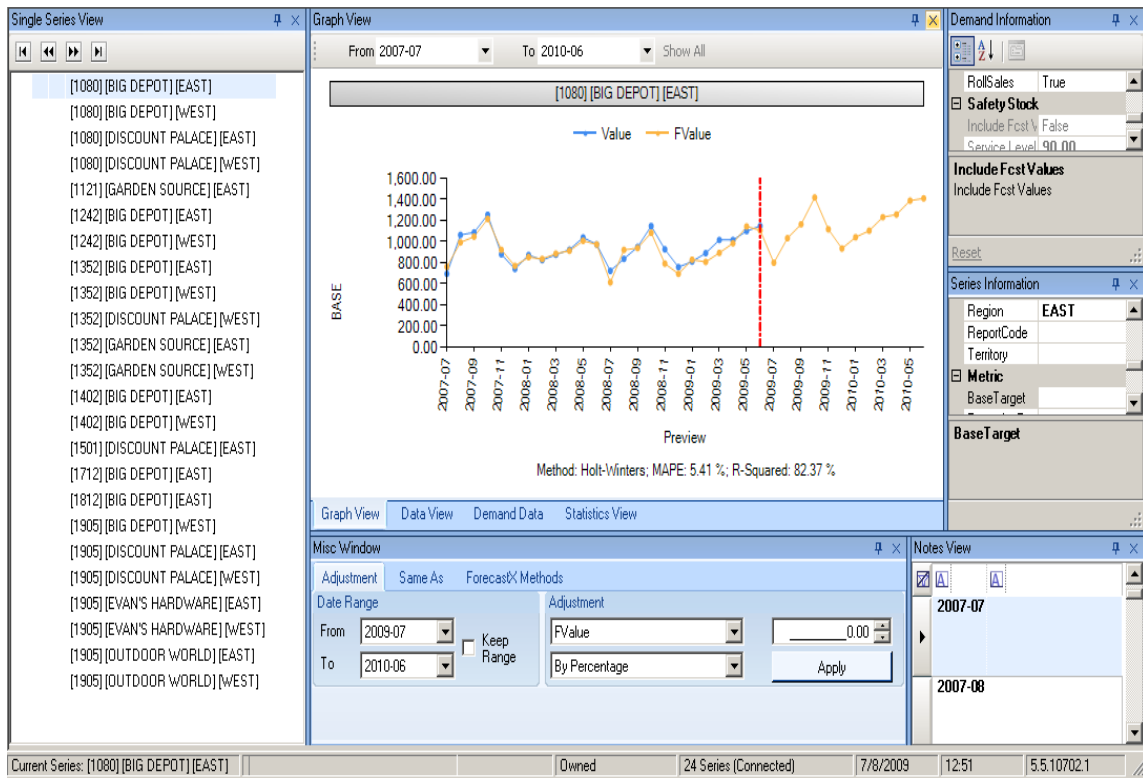
- No Hierarchy - open a scenario using the current state of the scenario.
- On-Fly - open the Scenario using a On-Fly Hierarchy. For additional information on On-Fly Hierarchy, please [See “On Fly Hierarchies” on page 248](#). This section describes how to make hierarchies available in this drop down list so you can use them to open up scenarios.

Note: *If a Static Hierarchy has been applied to the Scenario the first option in this section displays the name of the Static Hierarchy that is currently applied to the Scenario. To remove a Static Hierarchy from a Scenario, you must open the Scenario and remove it. For additional information, please [See “Static Hierarchy Management” on page 232](#).*

9. Click Open.

Note: *You can access other applications, including the Base Unit, Batch Scheduler, and Planning Portal by clicking on the appropriate icon on the toolbar or left panel.*

The Scenario you had selected is then displayed along with the various views available. You will learn more about each of the windows later in this chapter.



Once you have logged in you will see certain information at the bottom of the window in the Status bar. The first part display the currently selected series name, after that you can view the Mode of the Scenario, the Scenarios can have 3 Modes: Owned, Living Master or Shared. After that you can see the number of series in the Current scenario. The last three fields display the current date, time and the application version.

2-2: Scenario Modes

There are three different scenario modes, these different modes will be used when opening scenarios, you can see which mode applies to a scenario while logging into the Viewer and trying to open a scenario; the Mode property in the Scenario Selection window indicates what is the mode the scenario is going to be opened in.

Different user might see different modes for the same scenario.

- **Owned:** If a scenario displays this mode in the Scenario Selection window it means the user logged in created it, and that user can perform any operation on that scenario.

DTL Scenarios are owned by their respective users.

- **Living Master:** This mode is used only for living master scenarios when being access by a different user other than the owner. Unless a user owns a living master scenario, they need special permission to view these types of scenarios, see the User Permissions section of the Super User Guide for more information.

When user access a Living Master the data they have access to is limited by the Data Domain and Data Permission assigned to them, for more information on those two configurations please read the DME Super User Guide.

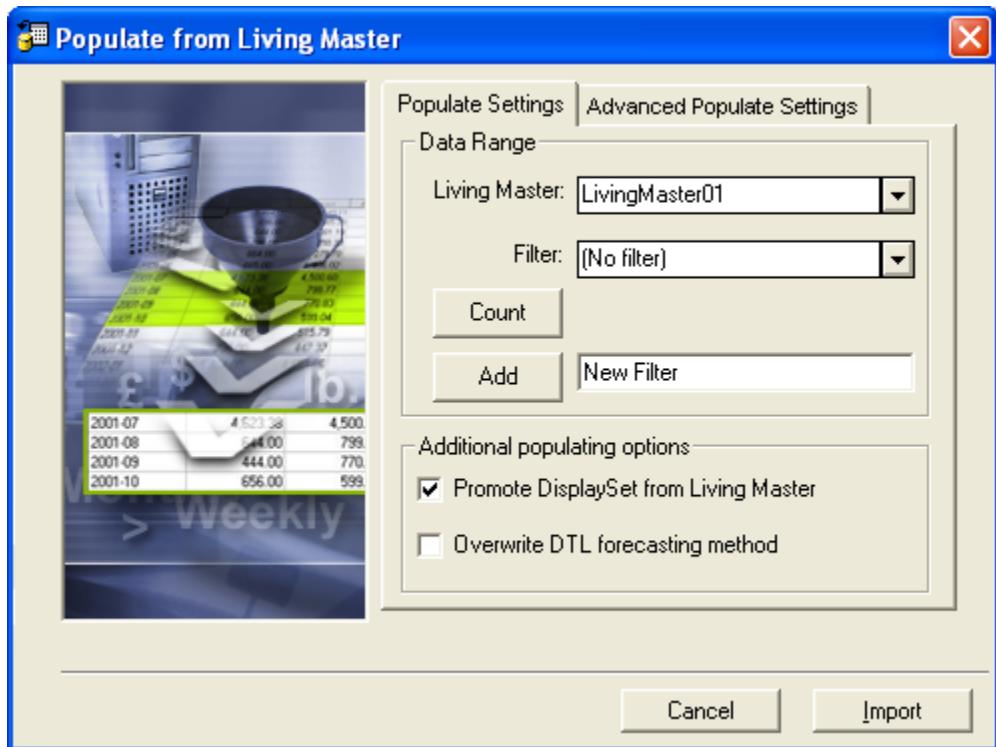
When accessing a scenario in Living Master mode, users cannot apply Static hierarchies to the scenario; if you need a hierarchy applied you must use an On-Fly hierarchy.

- **Shared:** These are scenarios that have been shared to a user, the operations allowed in these scenario depend on the permissions a user has been given on shared scenarios, the permissions are set in the Base Unit, see the Super User Guide for more information.

2-3: Populate a DTL Scenario

A DTL Scenario is created when a new user is added in the Base Unit. To retrieve data from a Living Master Scenario, a user must first open the DTL Scenario in the Viewer. When opening the DTL Scenario for the first time, the user is asked if they want to populate the DTL Scenario.

If you select Yes, the Population Wizard walks you through the population process. You can also access the Population Wizard from the Living Master menu.

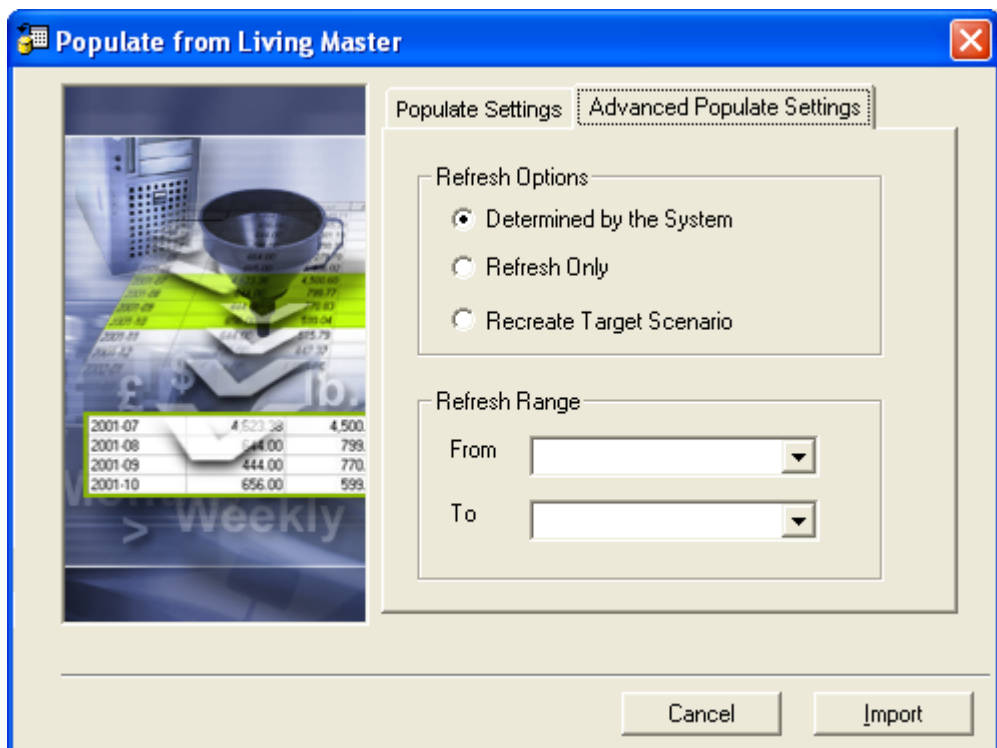


The Population Wizard provides some options when downloading data from a Living Master Scenario:

1. Select a **Living Master** from the drop-down list, this will populate your DTL Scenario with series from that Living Master. This field is not optional.
2. Select a **Filter** from the drop-down list; filters limit which series are downloaded from the Living Master Scenario to the DTL Scenario. The available filters are either created by or shared. You can create a new filter by typing a name in the text box next to the Add button and then click the **Add** button. For steps on how to use the filtering wizard see ["Create a Filter" on page 126](#)
3. You can click the **Count** button to get the number of series that would be returned for the currently selected Living Master and Filter combination. Take into account that the Data permissions

assigned to the user also come into play here; for more information talk to your administrator.

4. Select the option **Promote Display Set from LivingMaster** checkbox. With this option, the populated DTL Scenario is given the same Display Set that is applied to the Living Master Scenario. When this option is not used, the DTL Scenario is either not given a DisplaySet or uses a DisplaySet applied to the DTL Scenario by the user.
5. Select the option **Overwrite DTL forecasting method** checkbox. Checking the option replaces the forecasting method defined for the DTL Scenario using the settings under the Forecast Method tab in the Base Unit for the scenario. This option might not be available depending on your configuration in the Base unit for the Living Master scenario.
6. Click on the **Advanced Populate Settings** tab.



7. The Refresh Option allow you to **Recreate Target Scenario** which will build the scenario again losing any changes made to

the DTL Scenario; **Refresh Only** will only refresh the periods and series already in the DTL Scenario; and the **Determined by the System** option that will have the system define the best refresh option for you.

- 8. The **Refresh Range** is used to define the timeframe you wish to update in you DTL scenario, any periods outside this range will not be modified. The first time you populate the Refresh Range will not have any period available.
- 9. Click **Import**.

2-4: Commit Changes Back to the Living Master Scenario

To commit changes made to a DTL Scenario back to a Living Master Scenario, the user must use the Commit feature located in the Living Master menu. The Commit feature applies the changes from all the series with the series status of Forecast Complete to the Living Master Scenario.

Note: *Only the items that have been marked **Forecast Complete** will be moved back to the Living Master. If no items are marked Forecast Complete the user is prompted and notified.*

Section 3: Viewer Home Page

The main Viewer window has eight smaller windows that display different types of views. Each View represents the forecast data in a different manner. If necessary, you can manually change the data on any of the tabs. The following sections describe each tab in additional detail.

Window	Description
Single Series View	Lists all the series in the Scenario.
Graph View	Displays information in a graphical way. By default, the Actual Forecast and Adjusted History values are shown; however, this can be configured.

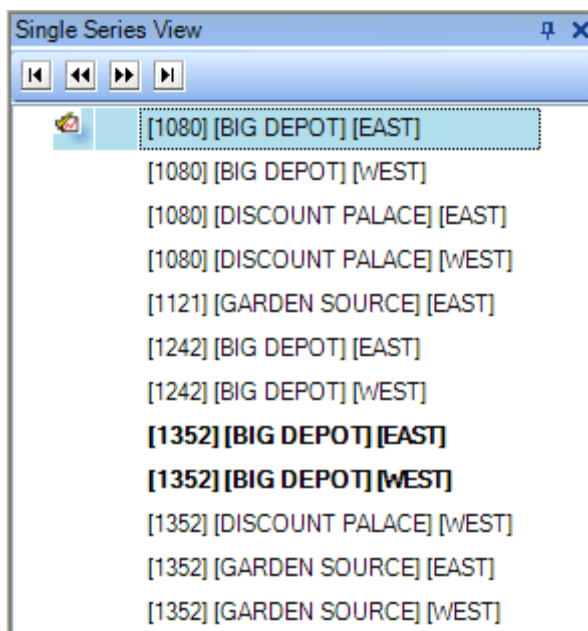
Window	Description
Data View	Displays information in a tabular way. By default, the Actual Forecast and Adjusted History values are shown; however, this can be configured.
Demand Data	Displays information in a tabular way, and includes information pertinent to Inventory Management.
Misc Window	Four tabs make up Misc View, which provide the ability to adjust your forecast among others: ■ Display - select the date range that is displayed in the Graph View. ■ Adjustment - select the Date Range for the series. You can also select the Keep Range checkbox. In the Adjustment area, select which Opinion Line you would like to adjust, as well as how to adjust it. ■ Same As - select the Method used, as well as which series to use. ■ ForecastX Methods – allows the user to change the method for one or more series.
Demand Information	Provides information for the Demand Data and Safety Stock.
Series Information	Displays fields that contain information on each Series such as Customer, General, Line, Metric, Product, Statistics, and Status.
Notes View	Enables you to add notes to a specific series or to a particular observation which would be associated to a particular point in time.

Section 4: Single Series View

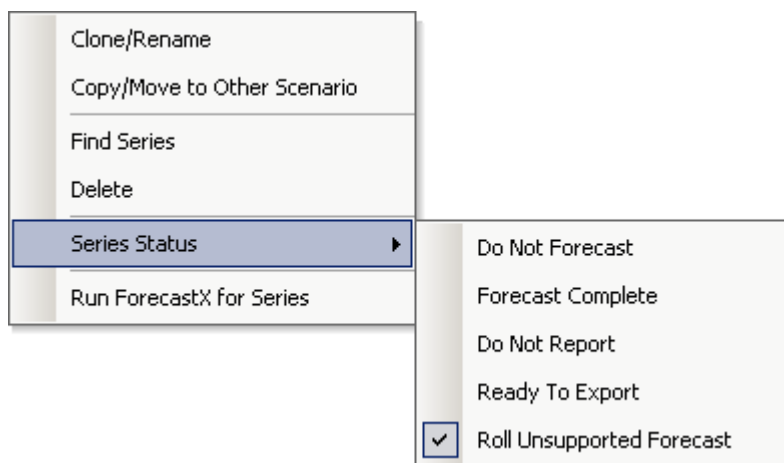
The Single Series View lists all series in the Scenario. You can click on the series in the left-hand pane to see its information. You can change the series' status by clicking on one of the icons in the toolbar. Hover your mouse over the toolbar icons to view the features for a series.



You can also scroll through all the series by clicking on the arrows underneath the column header.



You can select a specific series from the list and click on the  button to see additional options.



The following table details what each option means.

Option	Description
Clone/Rename	Clone or rename the series.
Copy/Move to Other Scenario	Copy or move this series to another Scenario.
Find Series	Search for a specific series.
Delete	Delete a specific series.
Series Status	View a specific series' status.

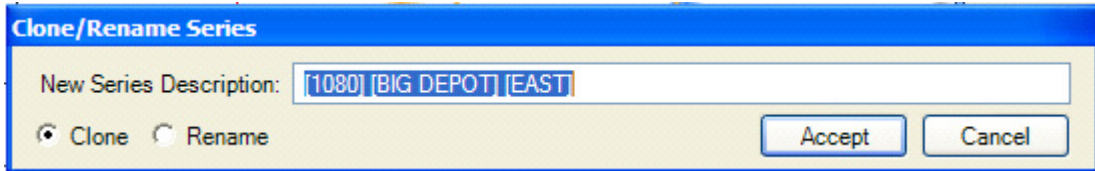
4-1: Clone/Rename

You can clone or rename a series from the Single Series View list.

1. In the Single Series View window, highlight a series from the list.

2. Right-click on the  button and click on Clone/Rename.

The Clone/Rename Series window displays.



3. Select either Clone or Rename to clone or rename the series.
4. If you want to rename the series, type in a new name for the series in the New Series Description textbox.
5. Click Accept when finished.

The series is copied and cloned in the list or renamed.

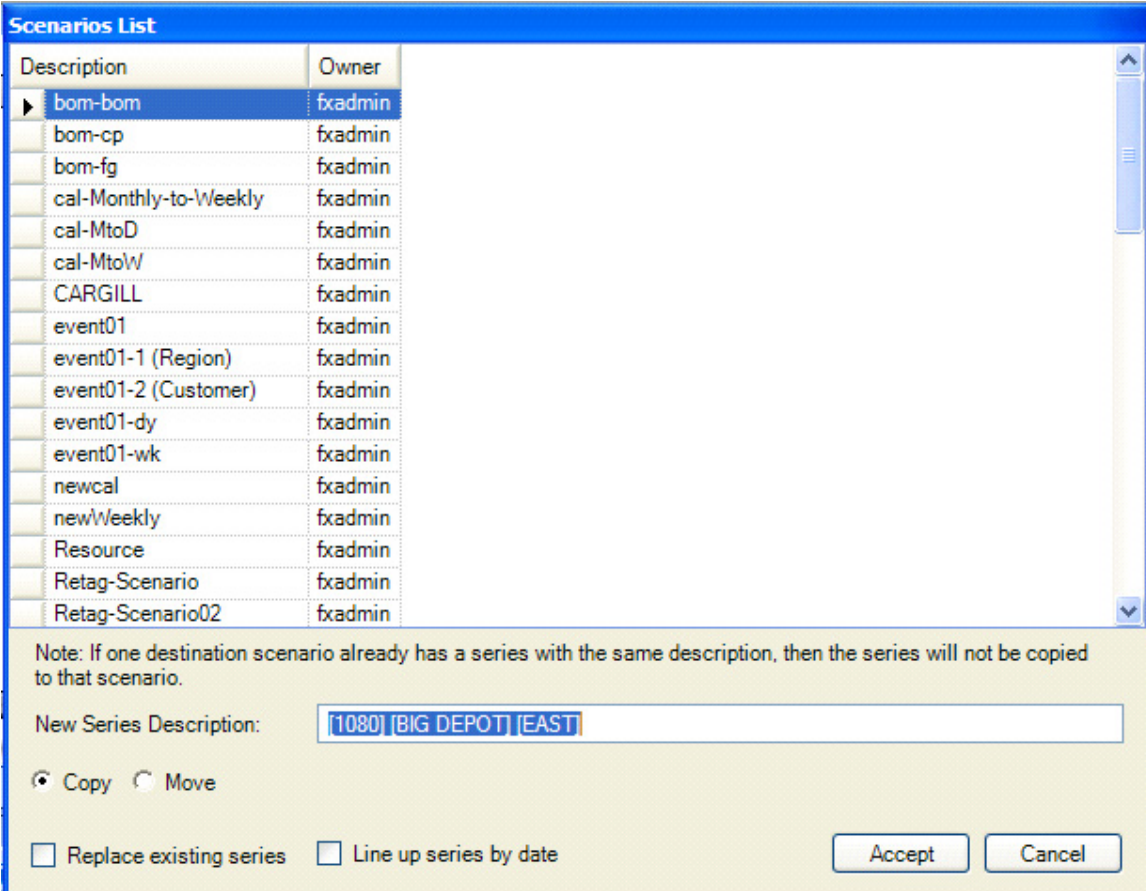
4-2: Copy/Move to Other Scenario

You can copy/move a series from the Single Series View list.

1. In the Single Series View window, highlight a series from the list.

2. Right-click on the  button and click on Copy/Move to Other Scenario.

The Scenarios List window displays.



The screenshot shows a window titled "Scenarios List" with a table of scenarios. The first scenario, "bom-bom", is selected. Below the table is a note about destination scenarios, a text field for the new series description containing "[1080] [BIG DEPOT] [EAST]", radio buttons for "Copy" and "Move", checkboxes for "Replace existing series" and "Line up series by date", and "Accept" and "Cancel" buttons.

Description	Owner
► bom-bom	fxadmin
bom-cp	fxadmin
bom-fg	fxadmin
cal-Monthly-to-Weekly	fxadmin
cal-MtoD	fxadmin
cal-MtoW	fxadmin
CARGILL	fxadmin
event01	fxadmin
event01-1 (Region)	fxadmin
event01-2 (Customer)	fxadmin
event01-dy	fxadmin
event01-wk	fxadmin
newcal	fxadmin
newWeekly	fxadmin
Resource	fxadmin
Retag-Scenario	fxadmin
Retag-Scenario02	fxadmin

Note: If one destination scenario already has a series with the same description, then the series will not be copied to that scenario.

New Series Description:

☒ Copy ☐ Move

☐ Replace existing series ☐ Line up series by date

Accept Cancel

3. Click on a Scenario from the list to which you would like the series to be copied or moved.

4. In the New Series Description textbox, the series you had selected from the Single Series View window is displayed. By default, the original name is in the textbox. You can edit the name of the series.
5. Select either Copy or Move. If you select Copy, the series will be listed in both the original Scenario and the one you select from the Scenarios List. If you select Move, the series will be removed from its original Scenario.
6. Select “Replace existing series” if there is another series in the Scenario with the same name.
7. Select “Line up series by date” to organize the series by its date.
8. Click Accept.

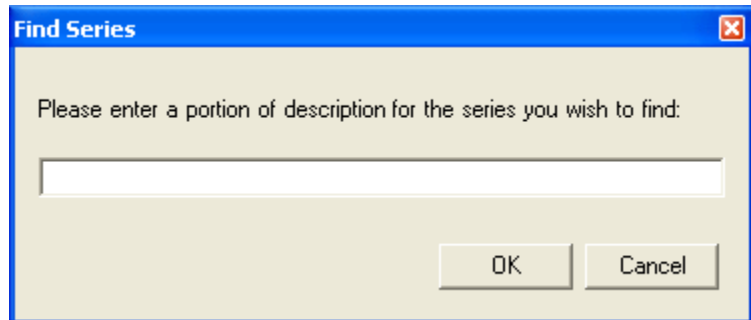
The series is then moved/copied to another Scenario.

4-3: Find Series

You can search for a series from the Single Series View list.

1. In the Single Series View window, highlight a series from the list.
2. Right-click on any series and click on Find Series option.

The Find Series window displays.



3. Type in keyword(s) for your search.
4. Click OK.

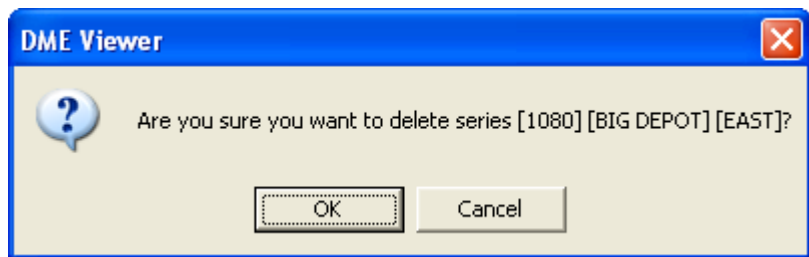
The Viewers search result is then displayed in the Graph View and Misc View, as well as highlighted in the Single Series View.

4-4: Delete

You can delete a series from the Single Series View list.

1. In the Single Series View window, highlight a series from the list.
2. Right-click on the series you wish to delete and click on Delete.

The DME Viewer window displays.



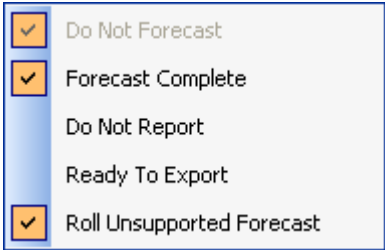
3. Click OK.

4-5: Series Status

You can view the status of a series from the Single Series View list.

1. In the Single Series View window, highlight a series from the list.
2. Right-click on the  button and click on Series Status.

A list of options is displayed.

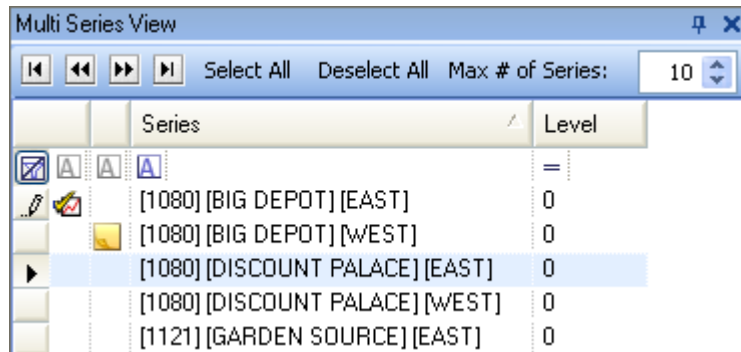


The following table describes what each option means.

Option	Description
Do Not Forecast	Used to tell the DME if a series should not be forecasted when the Reforecast operation is run.
Forecast Complete	Used in conjunction with the DTL Scenarios. Whenever you want to commit changes back to the Living Master, only series marked with this flag are sent back to the Living Master. For additional information, please see 2-3: Populate a DTL Scenario .
Do Not Report	Used when creating Pivot reports. For additional information, please See "Create Pivot Reports" on page 212.
Ready To Export	Used when creating Pivot reports. For additional information, please See "Create Pivot Reports" on page 212.
Roll Unsupported Forecast	Used with DRP. This flag toggles the "Roll Sales" option. It is used in the DRP process to include any unsupported forecast in the next period's recommended orders. For additional information, please refer to the Inventory Management User Guide.

Section 5: Multi Series View

The Multi Series View lists all series in the Scenario at the same time. You can click on the series in the left-hand pane to see its information. By default, when you open the Viewer, the Single Series View is shown. Go to View > Multi Series View to display a Multi Series View. You can also scroll through all the series by clicking on the arrows in the toolbar.



To select Multi Series View you can click on any series and without unclicking scroll up or down. To select non continuous series you can click on a series, press and hold the Ctrl key on your keyboard, and click to select other series.

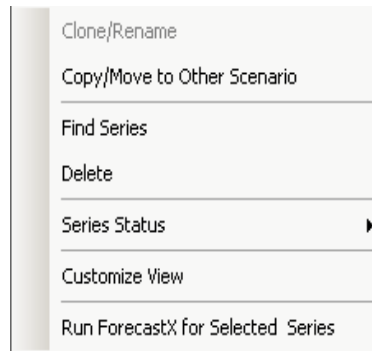
If the Data View pane is visible at the same time as the Multi Series View, you will notice that when selecting multiple series, each time you select a new series a new column will be added to the Data View grid, the columns name will be the series description. The column displays the data from the first opinion line selected in the Data View; in order to change the first opinion line in the list see [“Add or Remove Opinion Lines to views” on page 117](#).

The Max # of Series parameter, set to 10 in the above image, will determine up to how many extra columns will be added to the Data View grid when selecting multiple series at once. In the above example, selecting up to 10 series at the same time will include a column for each one, and any extra series click after that will not include a column.

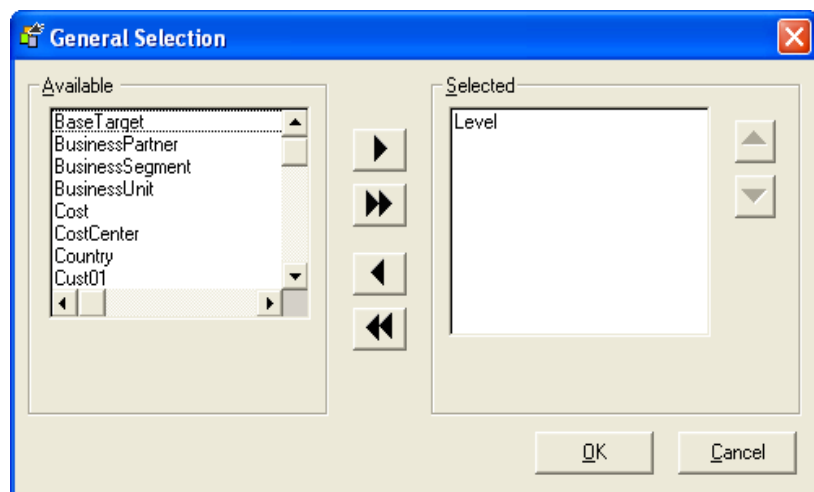
All the Icons in the series, like notes, events, and series status will be loaded incrementally for all the series automatically when the Multi Series View is loaded.

5-1: Customizing the Multi Series View

You can customize what data the Multi Series View displays by right clicking on any series and selecting the **Customize View** option.



This will open the General selection window:



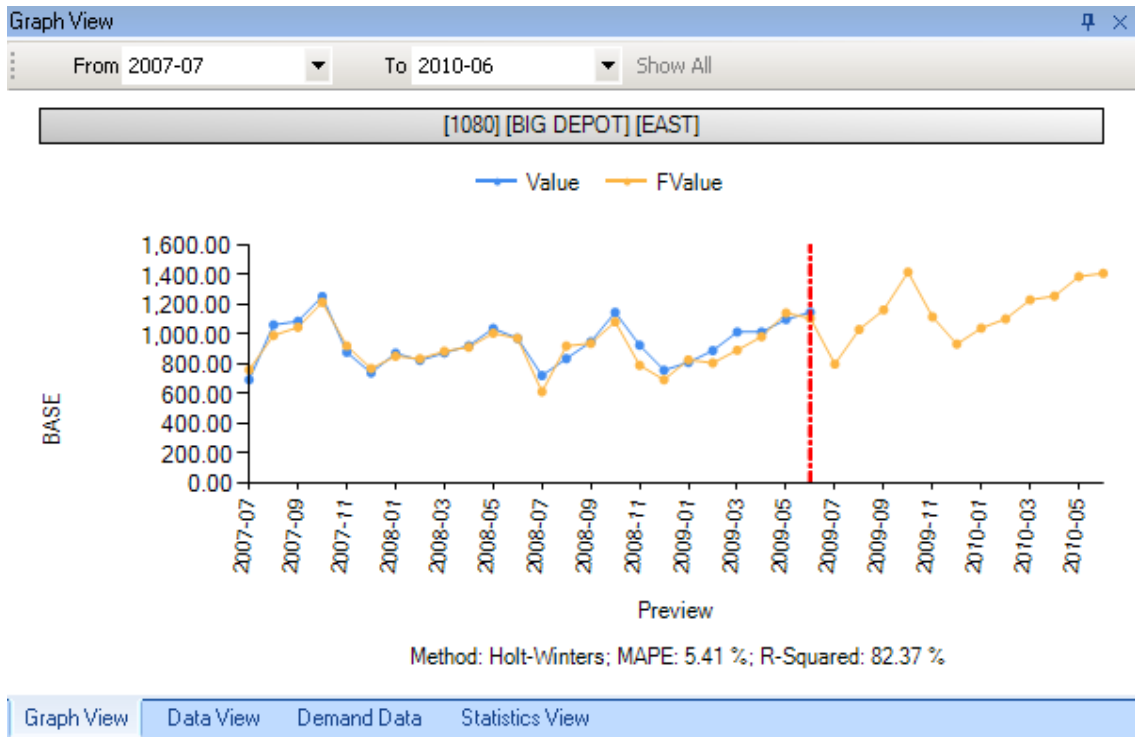
Here you can move Available Opinion lines or Attributes to the Selected list to display them in the Multi Series View by pressing the right arrow key and pressing OK.

Once the Opinion Lines or Attributes are added to the Multi-series View, they can be used to filter the series list.

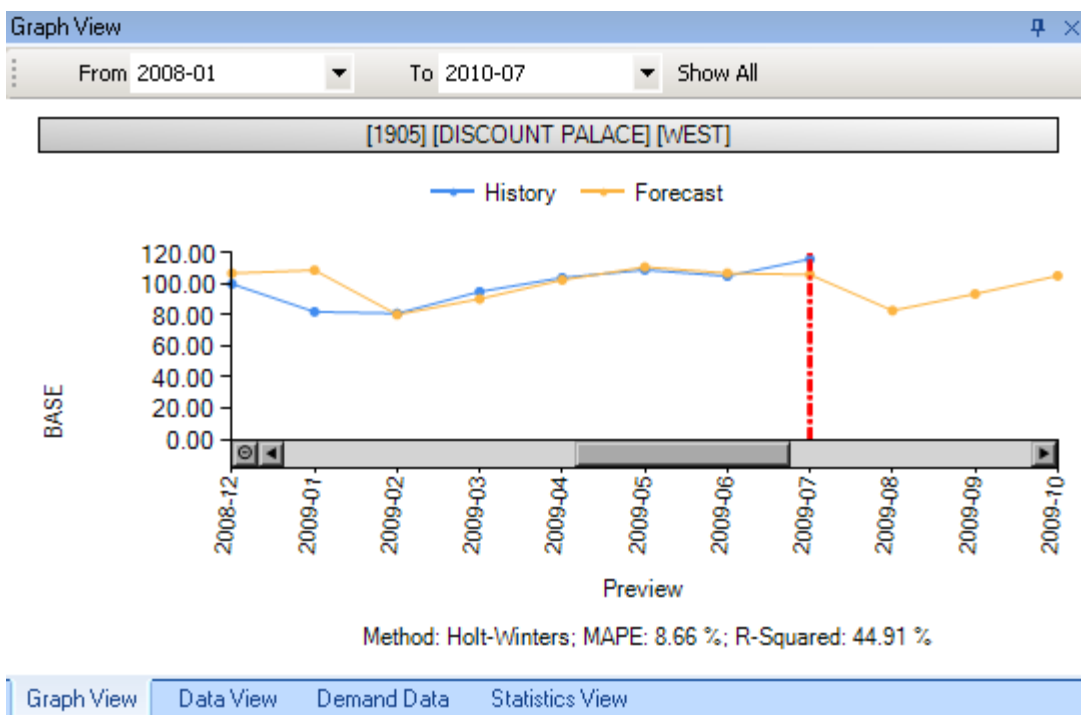
To remove a column, select the line in the Selected box and press the left arrow and click OK. The only column that cannot be removed and will not be displayed in the list is the Series column that indicates the name of the series.

Section 6: Graph View

The Graph View is the default view when you open a Scenario for the first time and displays the series in a line graph. Information is displayed by using graphics and two modes: Normal view and Year view.

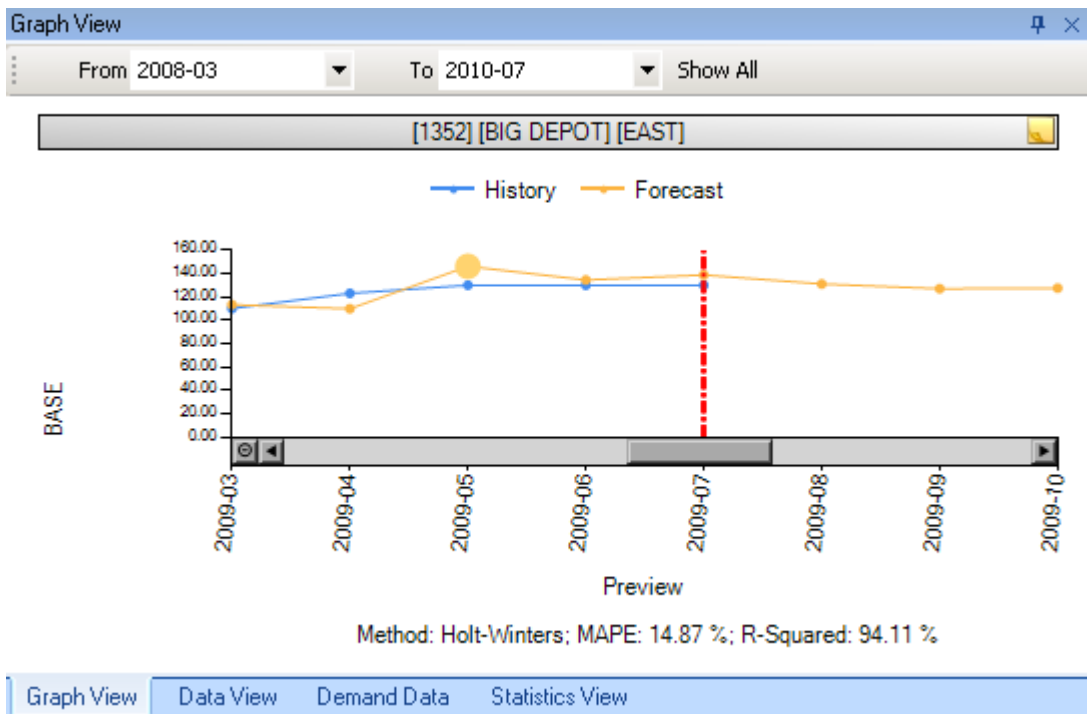


You can adjust the date range of the data displayed by holding the mouse button and moving the mouse to the right or left within the graph or you can change the **From** and **To** drop down lists above the graph. These two drop down list will determine the default data range that will be displayed in the graph. To reset the range and display all periods in the graph view press the **Show All** button.



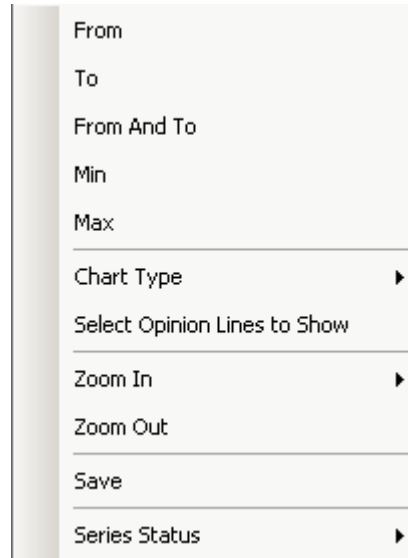
Use the scroll bar at the bottom of the graph to view entire date range of the data.

When a note is added to an observation point, the graph is changed and a larger point and a note icon will be displayed next to the series name in the header. For example, the next screenshot shows that there has been a note added for May of 2009 for the Forecast line.



6-1: Graph View Options

There are additional options from the Graph View window to adjust the view. Place your mouse anywhere on the graph and right-click to see the options.



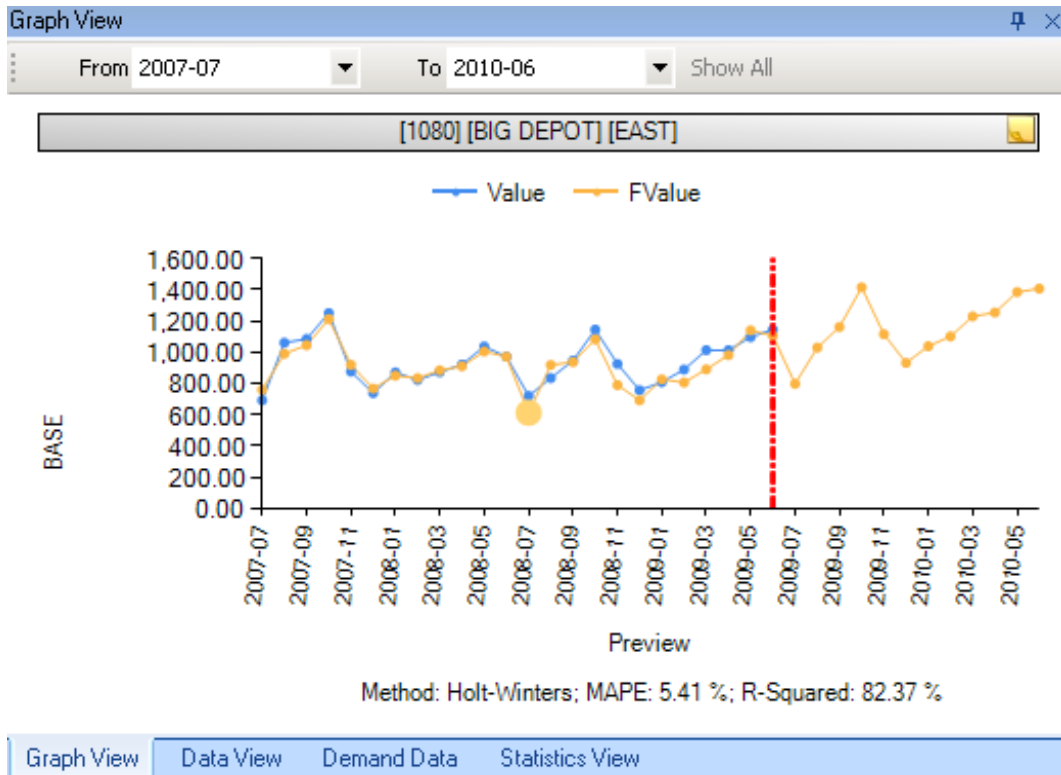
The following table details what each options means.

Option	Description
From	Used for the Adjustment section in the Misc Pane. When this option is selected, the period you right clicked over will be set as the "From" period in the Adjustment section.
To	Used for the Adjustment section in the Misc Pane. When this option is selected, the period you right clicked over will be set as the "To" period in the Adjustment section.
From and To	Used for the Adjustment section in the Misc Pane. When this option is selected, the period you right clicked over will be set as the "From" and "To" period in the Adjustment section.
Min	Used for the Adjustment section in the Misc Pane, specifically when using the New Product adjustment type. When this option is selected, the Min field for the New Product curve will be set to the value corresponding to the height where the mouse was clicked.

Option	Description
Max	Used for the Adjustment section in the Misc Pane, specifically when using the New Product adjustment type. When this option is selected, the Max field for the New Product curve will be set to the value corresponding to the height where the mouse was clicked.
Chart Type	Changes the type of chart displayed in the Graph view for all the series. Note: the changes are only applied to the Scenario in which the setting was changed, and it is not saved after closing the Scenario.
Select Opinion Lines to Show	Used to include new Opinion lines for viewing. Any Opinion Line added in the Graph is also displayed in the Data View. For additional information, please See “Add or Remove Opinion Lines to views” on page 117.
Zoom In	Used to zoom into the graph to focus on specific areas of it. You can also zoom into the graph by clicking and selecting a range, once you release the range selection the graph will zoom into that area.
Zoom Out	Used to zoom out when the graph has been zoomed in. The zoom out feature zooms the graphs in increments. Note: to see the entire graph at once you can zoom out to the graphs original size by clicking on the  icon if the graph has already been zoomed.
Save	Used to save an image file that contains the current graph.
Series Status	Used to change the Series status for the current series. For additional information, please see 4-5: Series Status.

6-2: Display Options

You can hover your mouse over one of the points on the line graph to view the specific range of data for the graph.



Section 7: Data View

Data View is a grid containing all the series, observations and additional indices used in the forecast, including event flags if event modeling is used.

By default the first observation displayed by the Data view is determined by the **History** option just above the grid. If the history option is set to "2", then there will be two historical periods displayed by default; you can scroll up to see more historical periods. The

Historical periods are displayed in regular font, and the future, or forecast periods are displayed in bold.

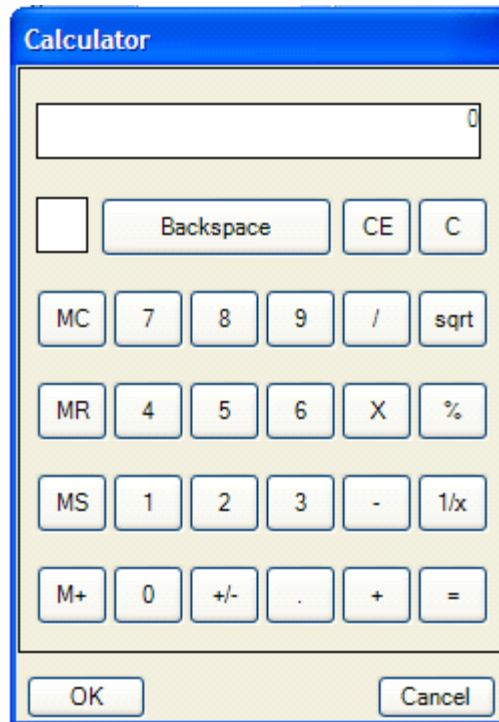
Any additional Opinion Lines that are added display for viewing and editing. You can customize this view, see [Chapter 3 Customizing the Viewer](#) for additional information.

Description	FValue	Value
2009-05	1,139.00	1,096.00
2009-06	1,104.00	1,144.00
2009-07	797.00	
2009-08	1,029.00	
2009-09	1,160.00	
2009-10	1,414.00	
2009-11	1,114.00	
2009-12	931.00	
2010-01	1,038.00	
2010-02	1,100.00	
2010-03	1,228.00	
2010-04	1,253.00	
2010-05	1,384.00	
2010-06	1,406.00	

The following table details what each column means.

Column	Description
Description	The year of the Series for the forecast.
Adj Hist	Adjusted History. The Adjusted History of the forecast. You can adjust the history from the History textbox.
Act Fcst	Actual Forecast.

You can set cells to specific values, or if you have a cell in edit mode (double click on a cell to enter edit mode) if you double click on it again the cell will display a calculator; you can perform any operation with the calculator and when you are done if you click on the OK button the last result of the calculator will be saved into the cell.



Section 8: Demand Data

Demand Data enables you to perform customized calculations. Generally, you use these calculations to obtain the suggested times and quantities of re-orders so that you can develop an inventory replenishment schedule that satisfies your forecasted demand.

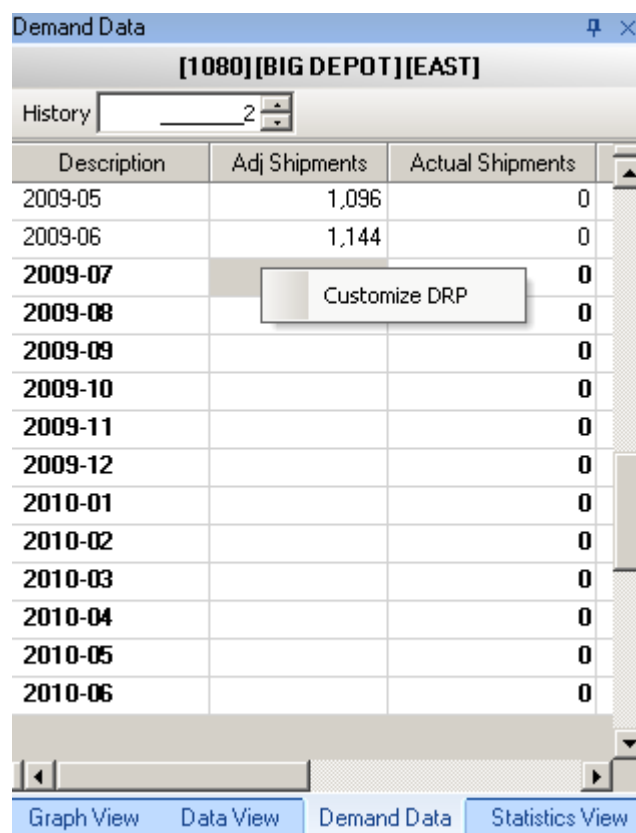
Note: You can customize this view, for additional information see [4-3: Add or Remove Opinion Lines to views](#).

Demand Data				
[1080][BIG DEPOT][EAST]				
History	2			
Description	Adj Shipments	Actual Shipments	Original Stat Fcst	Retail Inventory
2009-05	1,096	0	1,139	
2009-06	1,144	0	1,104	
2009-07		0	797	
2009-08		0	1,029	
2009-09		0	1,160	
2009-10		0	1,414	
2009-11		0	1,114	
2009-12		0	931	
2010-01		0	1,038	
2010-02		0	1,100	
2010-03		0	1,228	
2010-04		0	1,253	
2010-05		0	1,384	
2010-06		0	1,406	
Graph View Data View Demand Data Statistics View				

The Viewer enables you customize the Demand Data View. You can add Opinion Lines and specify the order of those lines.

1. Click the **Demand Data** tab in the Viewer.

2. Right-click anywhere in the view and select **Customize DRP**.



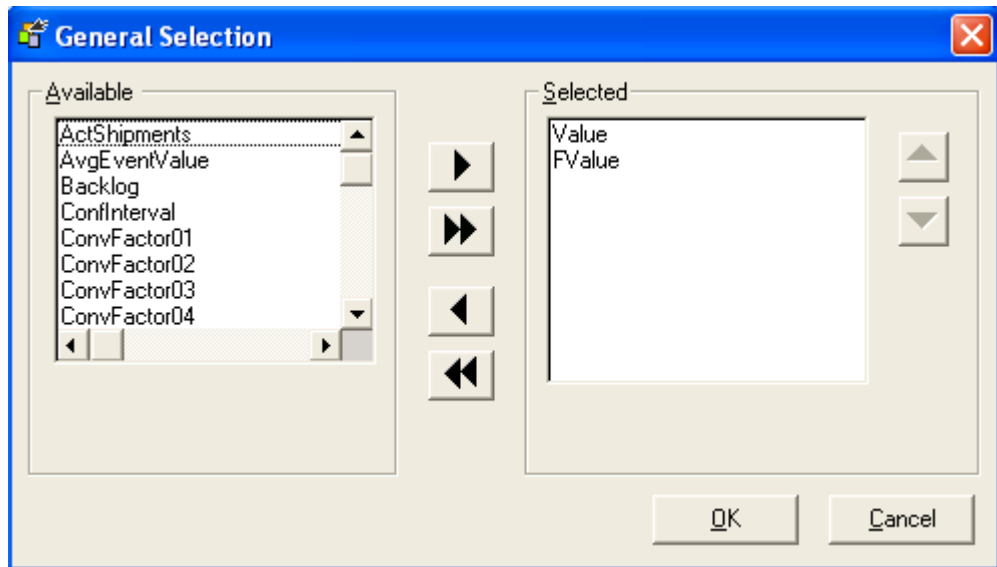
Demand Data [1080][BIG DEPOT][EAST]

History 2

Description	Adj Shipments	Actual Shipments
2009-05	1,096	0
2009-06	1,144	0
2009-07		0
2009-08		0
2009-09		0
2009-10		0
2009-11		0
2009-12		0
2010-01		0
2010-02		0
2010-03		0
2010-04		0
2010-05		0
2010-06		0

Graph View Data View Demand Data Statistics View

The General Selection window displays.



3. Select the **field** from the **Available** textbox and click ► to move to the **Selected** textbox and click **OK**. Be sure to select the fields in the order you want the Opinion Lines to display.

Your selections are then displayed in the Demand Data window.

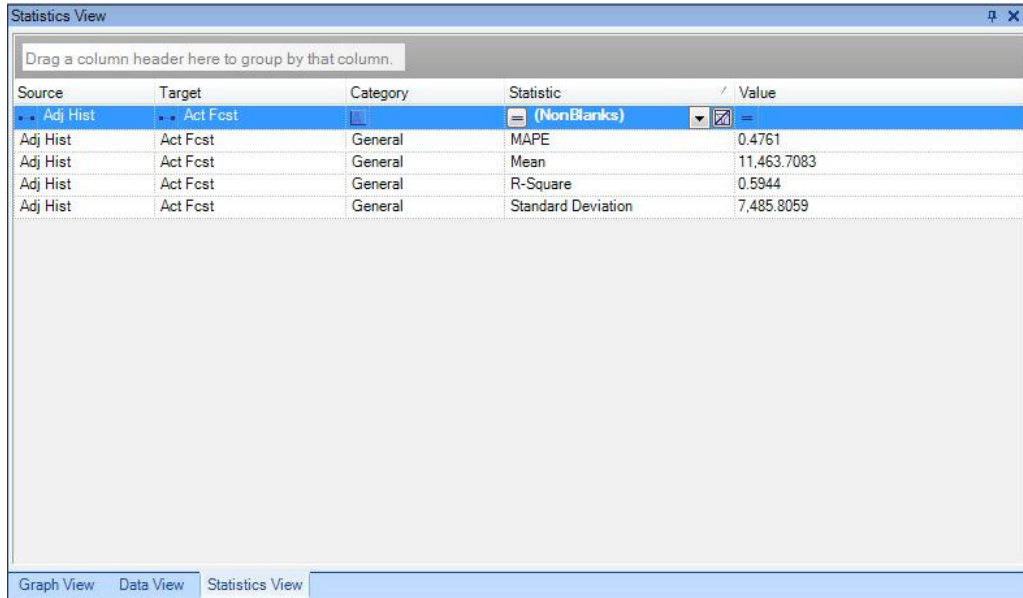
Section 9: Statistics View

The Statistics View allows you to view more detailed information regarding a forecast and allows you to select which statistics are displayed. You can also change how you view the statistics by grouping them together based on any column in the Statistics View.

Note: *Please note that after upgrading from older versions of the DME, your statistics view will not show any statistics until your forecast settings are executed from the DME Viewer*

1. In the Series View, select the Statistics View tab at the bottom of the main window.

2. The Statistics View displays data relating to the statistics selected for this series.



Statistics View

Drag a column header here to group by that column.

Source	Target	Category	Statistic	Value
Adj Hist	Act Fcst		(NonBlanks)	
Adj Hist	Act Fcst	General	MAPE	0.4761
Adj Hist	Act Fcst	General	Mean	11,463.7083
Adj Hist	Act Fcst	General	R-Square	0.5944
Adj Hist	Act Fcst	General	Standard Deviation	7,485.8059

Graph View Data View Statistics View

3. To view statistics for multiple forecasts within this series, clear your filter criteria from the top row of the table.

By default the Statistics view filters the data it displays by matching the Source and Target fields to the selected Forecast Setting in the ForecastX Method pane; if you wish to see all the statistics for all the existing Forecast Settings you can click the  icon to remove filters from any or all columns.

Grouping in the Statistics View

You can sort the Statistics View by any column by clicking on the title. Clicking again will reverse the sort order.

Above the statistics is an area that says “Drag a column header here to group by that column.” This allows you to group your statistics by any column from the statistics view. You can drag additional columns to this area to further group and sort your statistics.

Statistics View			
Target /			
Source	Categ /	Statistic	Value
☒ Adj Hist	A	A	=
Target : Act Fcst (4 items)			
Adj Hist	General	MAPE	1.3801
Adj Hist	General	R-Square	0.5032
Adj Hist	General	Mean	17,009.5000
Adj Hist	General	Standard Deviation	18,501.2101
Target : Com Ord Arr (4 items)			
Adj Hist	General	MAPE	1.3801
Adj Hist	General	R-Square	0.5032
Adj Hist	General	Mean	17,009.5000
Adj Hist	General	Standard Deviation	18,501.2101
Target : Dep Dmd (4 items)			
Adj Hist	General	MAPE	5.3392
Adj Hist	General	R-Square	0.0000
Adj Hist	General	Mean	17,009.5000
Adj Hist	General	Standard Deviation	18,501.2101
Graph View Data View Statistics View			

You can drag the statistics boxes back to the list view to remove this level of grouping and restore the column to the list view.

Section 10: Advanced Statistics View

The Advanced Statistics View is used to display additional statistics for complex methods such as Event Model and Regression models.

Note: *The Advanced Statistics View will only be available when complex forecast methods such as: Event Model, Multiple Regression, Polynomial regression, Erlang C, Census X-11, Trend Linear Regression or Stepwise are used and a forecast has been successfully run.*

Advanced Statistics View

Opinion LinesConvFactor01-MulStatisticsCoefficientExport to Excel File

Anova

Source of variation	SS	df	MS	SEE
Regression	28,147.58	1.00	28,147.58	
Error	16,844.38	22.00	765.65	27.67
Total	44,991.96	23.00		

Coefficient

Series Description	Included in model	Coefficient	Standard error	T-test	P-value	F-test	Elasticity	Overall F-test
[1905][OUTDOOR WORLD][WEST]	Dependent	15.48	22.18	0.70	0.49	0.49		36.76
Forecast	Yes	0.89	0.15	6.06	0.00	36.76	0.89	

Graph ViewData ViewDemand DataStatistics ViewAdvanced Statistics View

At the top in this window you will have certain fields and buttons:

- **Opinion Lines** - This field will display the opinion line name that holds forecast and the method used.
- **Statistics** - This drop down will display all the available statistics for the selected opinion line.
- **Export** - By clicking the Export to Excel File you can create an Excel file that contains all the current selected statistics.

Section 11: Misc Window

Misc Window consists of three different tabs:

- Adjustment
- Same As
- ForecastX Methods

11-1: Adjustment Tab

You can change the display of any Opinion Line that you are viewing through the Adjustments tab; this enables you to change the data of the appropriate observation(s).

1. In the Misc Window, click on the Adjustment tab.

2. Type in the dates in the Date Range text boxes to specify the date range.

Date Range	Description
From	The first period on the graph for the change to take effect.
To	The last period on the graph for the change to take effect.

3. Select which Opinion Line in the Adjustment text boxes requires changing. The following table details each option.

Adjustment	Description
By Percentage	Increases or decreases the data by a percentage amount. Use a positive percentage to increase the values and a negative percentage to decrease the values.
By Amount	Increase or decrease the data by a specific amount. Use a positive percentage to increase the values and a negative percentage to decrease the values.

Adjustment	Description
To Exact Value	Changes the data to a specific value.
New Product	Use this option to introduce or retire a product in the forecast. Indicate whether the product is new or should be retired.

4. If you selected New Product, the New Product window displays.

Misc Window

Adjustment Same As Forecast Methods

Date Range

From 2009-07 To 2010-06

☐ Keep Range

Adjustment

FValue 0.00

New Product

Apply

New Product

Curve Type Linear Direction Introduction Min 797.00 Max 1,414.00

5. In the New Product area, provide additional information to detail the forecast. The following table details these options.

Options	Description
Curve Type	Specify the curve type for the new or retired product. The curve types are default values.
Direction	Indicate whether you are introducing or retiring a product. Introduction will cause the curve direction to rise. Retirement causes the curve to fall.
Min/Max	Enter the minimum and maximum values for the selected curve type and direction.
Delete	Used to delete the data you selected in the Data Range.
Range Total	Used to specify a total between the dates in the Date Range fields. DME totals the values in the data range, determines the percentage that each value represents of the total and changes the values by that percentage

6. Click Apply.

You can also make the same changes on a graph manually.

1. Right-click the point on the line where you want the change to begin and from the drop down box, select From.
2. Right-click on the point of the same line where you want the change to end and select To.
3. Select the **type of adjustment** from the **Adjust** drop-down list and click **Apply**.

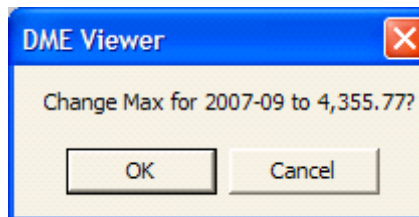
DME applies the specified changes to the graph. Alternatively, click and drag your cursor over the line you want to move.

A dot displays on the line indicating an adjustment has been made.

Note: *To accurately differentiate what line the cursor is on, the dot displays as a different color when it is over each different type of line.*

4. Hold down your left mouse button and move the line to the new point on the graph.

A confirmation message displays the Observation and the value change made.



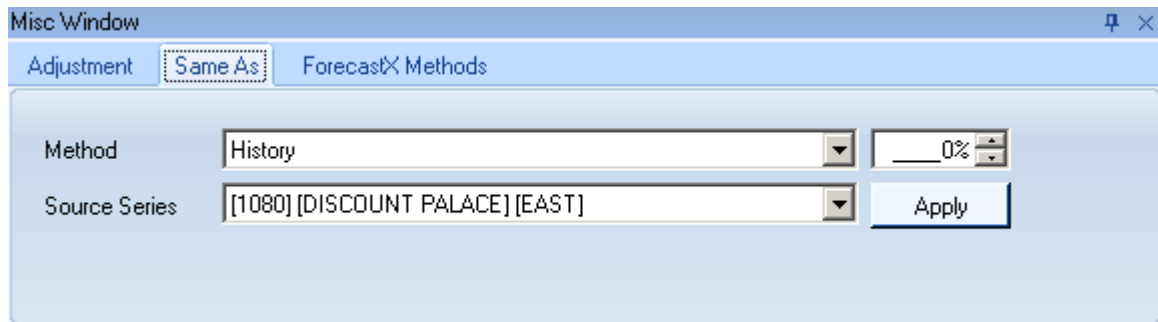
5. Click **OK** to confirm that you want to make the change.
6. To remove the change you made, select the Undo icon on the top toolbar. If you want to return to the original forecast value after making many adjustments, you can click the Original icon on the top toolbar.

11-2: Same As Tab

The Same As tab allows you to change a series' forecast to resemble another series' forecast. This is done by looking at the source series History, Seasonality, or both.

Note: *If a scenario has a static hierarchy applied and the “On-fly rebalance” option was enabled in the Hierarchy definition, changing the forecast with the Same As feature will trigger a rebalance.*

1. In the Misc Window, click on the Same As tab.



The screenshot shows a software window titled "Misc Window" with a blue header bar. Below the header are three tabs: "Adjustment", "Same As" (which is selected and highlighted with a dotted border), and "Forecast Methods". The main area of the window contains two rows of controls. The first row is labeled "Method" and has a dropdown menu set to "History" and a percentage spinner set to "0%". The second row is labeled "Source Series" and has a dropdown menu set to "[1080] [DISCOUNT PALACE] [EAST]". To the right of these controls is a blue "Apply" button.

2. In the Method dropdown, select either History, Seasonality, or Both options. Type in a percentage.
3. In the Source Series dropdown, select a series from the list.
4. Click Apply.

11-3: ForecastX Methods Tab

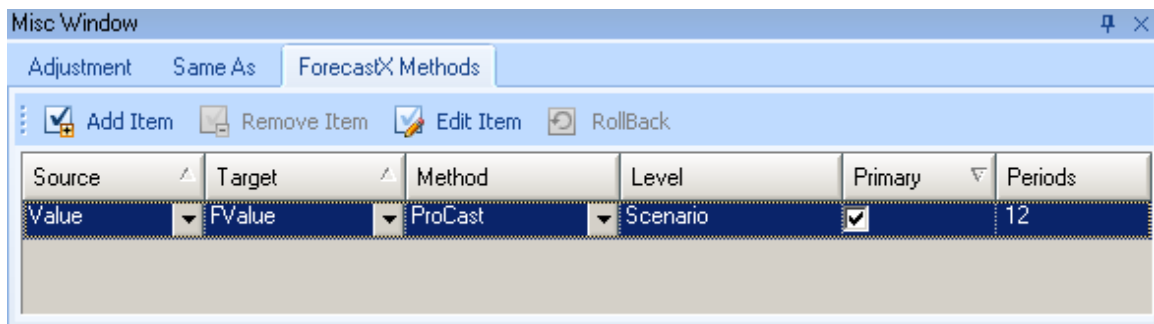
DME has the ability to configure and run multiple forecast configurations; these can be set for all the series in a scenario or they can be customized for each series or group of series. Each one of these configurations is known as a Forecast Setting. The ForecastX Method tab gives you the ability edit existing forecast settings or add new ones.

You can also run all forecast settings for a Series or even multiple Series by selecting them in the Multi Series View panel at the left and selecting “Run ForecastX for Selected Series”. This will re-run all forecasts within these series.

To run only selected forecasts from multiple series, you must select them in the Multi Series View and use the Reforecast screen to select which forecasts to run.

If either the Source or Target opinion lines are not currently being displayed in the Data View or Demand Data View any forecast settings that use those opinion lines will not be displayed.

Note: *Depending on the permissions your user account has been given you might not have access to all of the features in this tab.*



Column	Description
Source	This column will show you what the Source opinion line is for each forecast setting. The opinion line configured here will be the historical data used to generate the forecast.
Target	This column will show you what the Target opinion line is for each forecast setting. The opinion line configured here will be where the forecast data is stored after generating a forecast.
Method	This column will display the forecast method selected for that particular forecast Source and Target.
Level	This column indicates if a forecast setting is set for all series in a scenario or if it is customized for the series. There are two possible options: ■ Scenario - Indicates this forecast setting is shared will all the other series in the scenario; the configuration for this forecast setting will be the same for all series. ■ Series - Indicates this forecast setting has been customized for a particular series; the configuration for this forecast setting could change from series to series which could affect the resulting forecast.
Primary	This setting will show you if the forecast line is the Primary forecast setting for the scenario. The primary forecast setting is the one that has been configured in the Base Unit. This forecast setting cannot be deleted. If you edit the primary forecast setting in the Viewer it will be updated but it will not be synchronized with the Base Unit.
Periods	This column displays the amount of forecast periods the forecast setting will populate.

With the ForecastX Methods tab you can perform one of the following tasks:

11-3-1: Add a Forecast Setting

Use this option to add a new forecast setting into your scenario. In order to add a new forecast setting you must make sure you have the source and target opinion lines included in the Data View or Demand Data View.

1. Click on the  **Add Item** button. Remember you must have available opinion lines in your current view in order to add new forecast settings.

A new forecast setting will be displayed inside the ForecastX Method tab. You must select a **Source** and **Target** opinion lines, make sure to do so before you save your forecast setting because after it is saved these two fields will be read only.

2. Now you can click the  **Edit Item** button to make changes to your forecast setting such as Method and periods.
3. Click the  **Save** button to save your changes

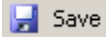
Note: *When a new forecast setting is created it will stay at the Scenario Level unless it is customized by a user. After the forecast setting is modified it will change to Series Level.*

11-3-2: Remove a Forecast Setting

To remove a forecast setting, follow these steps. Please note that the Primary forecast cannot be removed. The Primary forecast is denoted by the check mark in the Primary column. The Primary is selected at the Base Unit and is based primarily on the Source, Target Value, and FValue.

Note: *Only Scenario level forecast settings can be removed, if a forecast setting has been customized and is displayed as a Series Level forecast setting then it must be rolled back before it is deleted. See [Rollback a Forecast Setting](#).*

Note: *When you delete a forecast setting from any of the series in a scenario it will be removed for all series in the scenario without exception.*

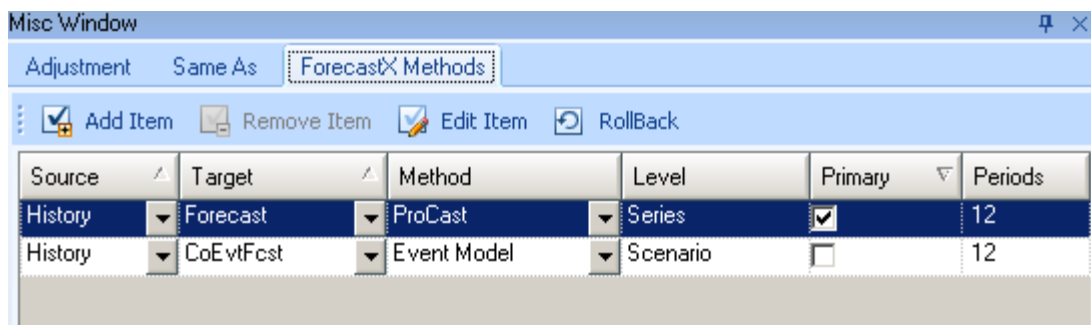
1. Now you can click the  button to remove the currently selected forecast setting.
2. Click the  button to save your changes

11-3-3: Edit a Forecast Setting

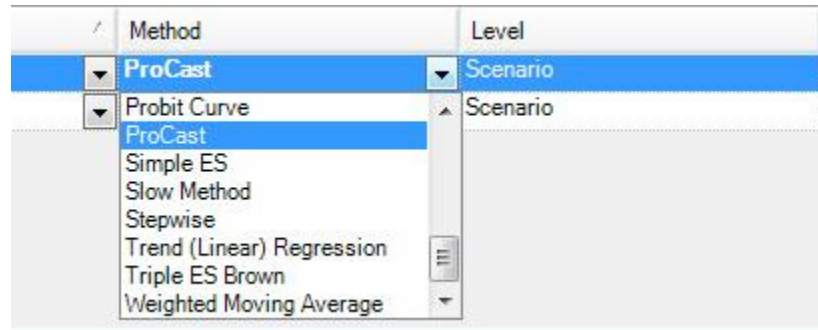
These are the steps you will have to go through to edit an existing forecast setting.

Making changes to these forecasts will also change the Level to “Series” indicating that it is specific to the selected series. You will also not be able to update the Source or Target of a Series Level forecast setting.

1. In the Series View, select the “ForecastX Methods” tab in the Misc Window at the bottom of the screen. If you do not see the Misc Window you can select it from the View menu or you can reset the layout by using the “Reset UI Layout” option located under the View menu.



2. Use the Method drop-down to select the new method. This is the quickest way to edit a forecast setting. Some forecast methods do not require further configuration; for example, Procast.



3. If you need to edit any of the parameters supplied to the forecast method or if you need to configure complex methods such as Event Model or Multiple regression you can select the forecast setting to edit and click on the  Edit Item button:
4. Edit any of settings as necessary. For more information on each of the sections see [link](#).
5. Click the  Save button to save your changes.

11-3-4: Forecast Settings

The Forecast Settings window is used to edit several configurations available for each of your Forecasts.

For more information on General, Safety Stock, Confidence Limits, Accuracy and Descriptive Statistics as well Regression Table Statistics please refer to Chapter 14 of the DME Super User Guide.

When using this window to edit multiple series there will be certain rules:

- The ForecastX Method Parameter section will only be enabled if the Forecast Method field is changed; this ensures that all selected series will use the same method.

- All check box items will display the following icon: ☒ . This icon indicates the current setting will be honored when saving multiple items. If you wish to enable a certain setting for all selected series the icon should look like this ☒ ; and if you are trying to disable a setting for all series the icon should look like this ☐ .

Settings

This section contains general settings for Forecast configuration you are currently editing.

Field	Description
Source Opinion Line	This is the opinion line from which the history will be used to create the forecast. This opinion line cannot be changed in this window, it is a read only settings. You must select the Source opinion line before you get to this screen, you can do so in the ForecastX Method tab just after you add a new Forecast Setting.
Target Opinion Line	This is the opinion line where the resulting forecast will be saved. Any data already in the Opinion line will be overwritten. This opinion line cannot be changed in this window; it is a read only setting. You must select the Target opinion line before you get to this screen. You can do so in the ForecastX Method tab just after you add a new Forecast Setting.
Forecast Method	This field is used to select the Forecast Method you wish to use to create your statistical forecast. Changing this method will display different elements in the ForecastX Method Parameter section.
Overwrite History	This setting specifies if historical periods can be overwritten when running the forecast.

Field	Description
Automatic Forecast	This setting is used to specify if the current forecast setting should be executed when the scenario level forecast is executed. When running a series level forecast this setting is ignored. But when a forecast for the whole scenario is specified and if a particular Forecast Setting has this flag disabled then it will not be executed and no forecast will be produced.

ForecastX Method Parameters

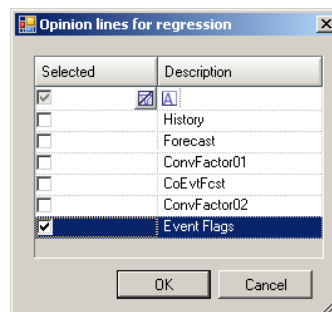
This section holds the specific parameters that can be configured for each Forecast Method. The parameters available in this section will change depending on the Forecast Method selected in the Forecast Settings section.

For more information on each parameter of a particular Forecast Method please see [Chapter 14 - Section 5 of the DME Super User Guide](#).

For complex Forecast Methods such as Census X-11, Event Model, Multiple Regression, Polynomial Regression and Stepwise, additional lines of data may be required for independent variables or event flags. You are now able to choose your independent variables or Event Flags directly from other opinion lines. For example, for Event Model, to setup your event flags you can do so by filling the Opinion

Lines field  

When you click on the  icon, you will get a window that will display your available opinion lines:



History Range

This section holds information regarding how many historical periods will be considered to generate the resulting forecast.

Field	Description
Fixed Periods	With this type of history selection you can set a forecast setting that will use fixed periods that will be specified in the Fixed Start Period and Fixed End Period fields.
Floating Periods	With this type of history selection you can configure a forecast setting that will always use X number of historical periods. For example, if your series have 12 months of history, you can use the last 6 months for a forecast setting by setting the Floating Start Period to 6 and the Floating End Period to 12.

Forecast Range

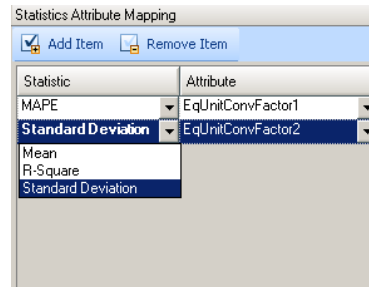
This section is used to specify how many **Forecast Periods** will be calculated when the forecast is run. This field cannot exceed the number of existing forecast periods for the current series.

Statistics Attribute Mapping

Each forecast you run in the application will generate the statistics you selected for it. The statistics such as MAPE, Mean and Standard Deviation for the Primary Forecast method will be displayed in the Series Information pane and also under the graph in the Graph View pane.

For all other user forecast settings created you can specify if you would like to map a resulting statistic from into a Series Attribute.

Once you do this, if the forecast setting is executed, the Series Attribute will display your statistic on the Series Information Pane.



11-3-5: Rollback a Forecast Setting

When Forecast Settings are originally created they are set at a Scenario Level which means that the forecast setting has not been customized yet. Once a forecast setting is customized it will be displayed as a Series Level forecast.

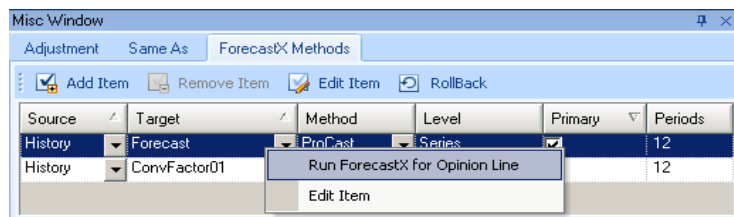
For a Series Level Forecast Setting you can revert all customizations by using the RollBack feature.

1. Click the  RollBack button to restore the original forecast setting configuration and make the selected forecast setting a Scenario Level. This change will only affect the selected series.

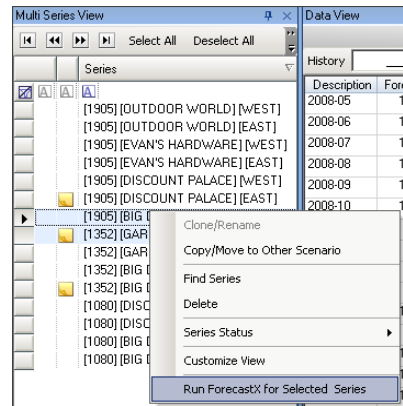
11-3-6: Running a Forecast Setting

After you have configured your forecast setting you can run a forecast from different places.

If you right click on any row in the ForecastX Method tab you will be able to run the selected forecast setting, this will only run the selected forecast for the selected series and opinion line:



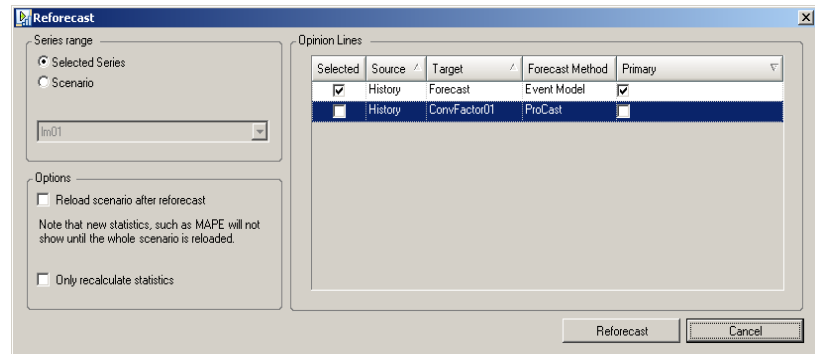
You can also run all the existing forecast settings for one or more series by selecting them and right clicking them on the Single Series or Multi Series View:



Finally, you can run certain forecast settings for one or more series by selecting them on the Single Series or Multi Series View and using the Reforecast option under the Forecast menu or clicking on the



icon. In this screen you will be able to pick if you want to forecast all existing forecast settings or just some of them:



Section 12: Demand Information

On the right-side of the Viewer screen, the Demand Information is shown. This section contains some series attribute that are generally used for DRP calculations or Safety Stock.

The Safety Stock section in the Demand Information pane will only be enabled if the Safety Stock option properties have been activated in the Base Unit for that particular scenario. See the Super User Guide for more details.

The screenshot shows a window titled "Demand Information" with a toolbar containing icons for undo, redo, and a dropdown menu. The window is divided into two main sections: "Demand Data" and "Safety Stock".

Demand Data	
InitBackLog	1.00
InitOnHand	200.00
LeadTime	2
MaxOrder	1,000.00
MinOrder	100.00
OrderMultiple	100.00
RollSales	True

Safety Stock	
Include Fcst V	False
Service Level	90.00
SS LeadTime	1.20

Include Fcst Values
Include Fcst Values

[Reset](#)

Unless other values are specified on the Data Demand window, the following default values are used for the custom calculation.

Textbox	Default Value
Lead Time	Same as the Safety Stock calculation - 2
Maximum Order	1000

Textbox	Default Value
Minimum Order	1000
On Hand	200
Order Frequency	0
Order Multiple	100
Include Forecast Values	False

Section 13: Series Information

Series Information displays series attributes for data in rows and fields that were mapped (i.e., price, cost, customer) using the Series Properties. If your source data is in columns, you cannot import data to these fields; however, you can still make changes.

The Series Information window contains a group of dropdown lists. Each dropdown enables you to change various data values. To make changes in the Series Properties, click on the appropriate field, and enter the updated value.

The fields can be renamed and displayed according to customer requirements. See [Chapter 3 Customizing and Using the Viewer](#) for additional information.

The screenshot shows a window titled "Series Information" with a standard Windows-style title bar (minimize, maximize, close buttons). The window contains a table with the following data:

StdDev	147.90
RSqr	82.33 %
MAPE	5.43 %
Mean	936.42

Below the table is a section titled "Status" with a small icon to its left. This section contains two rows, each with a label and a dropdown menu:

Do Not Forecast	True
Do Not Report	False

At the bottom of the window is a large text area with the heading "Do Not Forecast" and the text "Do Not Forecast" below it.

The following table details what each group means.

Feature	Description
Customer	Holds series attributes for customer information.
General	Holds series attributes of general information about the item, as well as customizable text and numeric fields.
Item Link	Holds series attributes used for linking data for different processes.
Line	Holds series attributes regarding the item itself.
Metric	Holds series attributes that have to do with metrics and other parameters.
Product	Holds product attributes.
Statistics	Contains different statistics calculated for each different series. These values are always Read-Only.

13-1: Series Status

The series flags in the Status dropdown list enable you to identify particular records that should not be included in the next forecast or are ready to export to a report or another system. The table below details the available flag options.

You can change a series status using these buttons from the Viewer toolbar.



Option	Description
Do Not Forecast	Use this option to exclude the series from the forecast calculation. If a check appears in the check box, the series will not be included in future forecast runs. If grouping is active with the Before Forecast option selected, or if Regression is the selected forecast method, this option is not available.
Forecast Complete	Use this option to indicate that the forecast for this series is complete. It will not be included in any further forecast calculations. The “Do Not Forecast” flag is automatically selected if the “Forecast Complete” flag is activated. If grouping is active with the Before Forecast option selected, or if Regression is the selected forecast method, this option is not available.
Ready to Export	Use this option to indicate that there will be no more changes made to the series and it is ready to be exported to another destination.
Do Not Include in Reports	Select this option to exclude this series from any generated reports. If a check appears in this check box, the series will not appear in any reports generated through the “Reports” tab in the Base Unit.

13-2: New Series

The New Series feature is used to add a new series into your data. The following configurations need to be set for this feature to work properly:

- The Scenario must have a Display Set applied to it.

- The applied Display Set must have at least one Series Attribute configured in the Label Column. This new label column is used to determine what series attributes are used, and in which order, to form the Description fields for your series. Generally, you would want the fields configured as labels to be the same ones as those you configured in the labels section of the Base Unit.

Note: *The New series feature is disabled when a scenario has a hierarchy applied.*

1. From the main toolbar in the DME, go into Edit > New Series.

The Create New Series window displays.

Create New Series

Fields

Sku

Customer

Region

New Series Options

☒ Copy Obs from Series

☐ Initial Obs to 0

Historical Periods: 36

Check Unique Create Cancel

2. Provide information in the fields to define a new unique series. You can populate the dropdown list with the different values from all the other existing series by pressing on the "...". When finished you can confirm that the series is not a duplicate by pressing the "Check Unique" button.

3. Select which observations will be used for the new series to be created. There are two options:

Observation	Description
Copy obs from series	You can select another existing series from the scenario and the system will copy the observations from that existing series to the new one.
Initial Obs to 0	The new series observations are initialized to zero. You just need to provide the amount of historical periods you want to create for the new series.

4. Click Create.

Section 14: Notes View

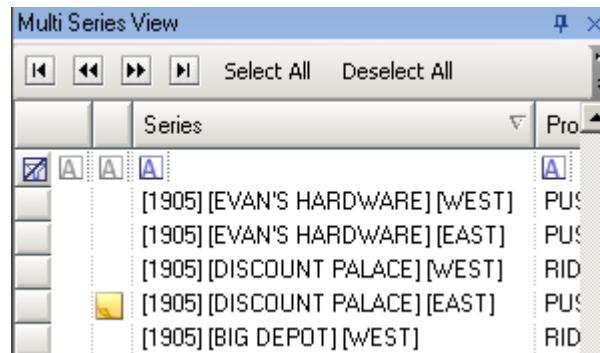
DME allows you to add customized notes to a specific series at either the Series Level or the Observation Level. Notes added at the Series Level will be stored on the hierarchy, which allows you to retain these notes even if the hierarchy is removed. Notes entered at the Observation Level will not be saved if the series is removed.

Note: *Please note that you will not be able to edit or delete a note once it has been saved.*

There are two types of notes:

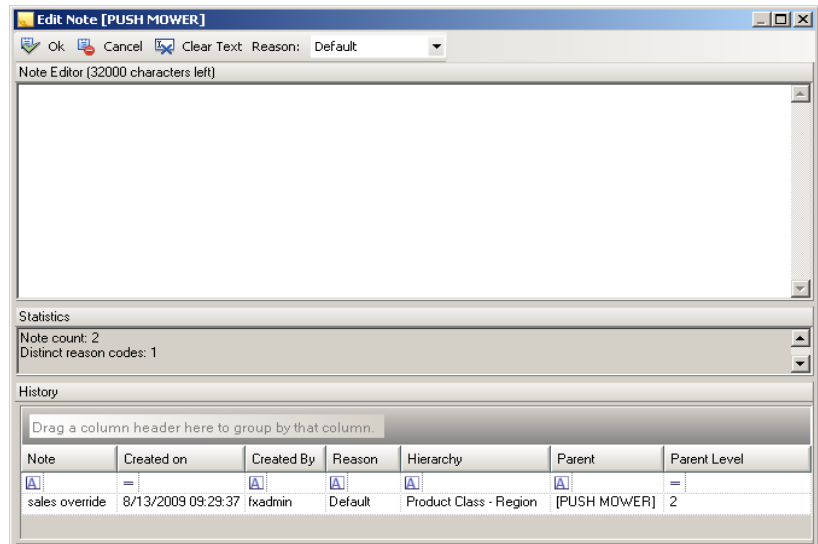
- Notes at series level. This is a note that applies to a whole item.
- Notes at observation level. These are notes that apply to an item in a particular period, for example, a note for SKU 123 for January of 2008.

The Multi Series View panel displays an icon next to any series containing a note. This allows you to see which series contain notes and makes it easier to find specific notes within your scenario.



The notes view and the data grids (Data View and Demand Data) are synchronized so that when an observation is selected in the grid, the notes view will display any existing notes for the selected observation.

You can view an existing note by double-clicking on the note in the Notes View to open the Edit Note screen. Double-click on the Note in the History panel to read the full contents.



For Series Level notes, the Edit Note window also shows the history of any note entered for this series, such as the creation date and who created it. For Observation Level notes, there is no History panel and all notes are entered and stored in the same window.

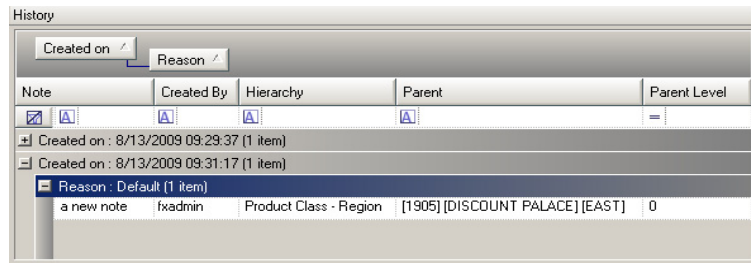
The following table shows the columns that are available in this view:

Column	Description
Note	This field contains the note that was entered.
Created on	This is the date and time the note was added.
Created By	This is the user account where the note was created.
Reason	This is the reason code that was assigned to the note when it was created.
Hierarchy	Indicates the hierarchy name applied to the scenario where the note was entered. This field is blank for series in the lowest level of detail or if the scenario does not have a hierarchy applied.
Parent	Notes added at the Series Level are copied down and saved to lower levels. This field shows the series description of the higher level series to which the note was added before being copied down. If this field matches the description of the current series, this means the note was added at this level.
Parent Level	This field shows the hierarchy level of the parent series where this note was added and then copied down to this level. If this field is "0", it means the note was added at this level. If this field is "2", it was added two levels above the current level in the hierarchy.

For Series Level notes, the History panel also allows you to sort the notes by any column or enter filter criteria to limit the number of notes displayed. For example, you could click on the Created On column to sort by the date the note was entered or select a name from the Created By drop-down to only view notes created by that person.

You will also notice an area that says "Drag a column header here to group by that column." This allows you to group your notes by any column of the history view. You can drag additional columns to this

area to further group and sort your notes.



You can drag the notes column boxes back to the list view to remove this level of grouping and restore the column to the list view.

14-1: Add a Series Level Note

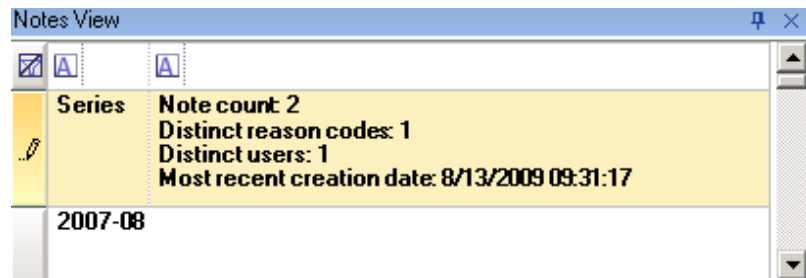
Inserting a note at the Series level allows you to apply this note across the series. Notes entered at this level are disseminated to the lowest level of the series, but not to the levels in between. These notes are saved as part of the hierarchy and will be stored even if the hierarchy is removed.

Note: *If changes are made to the Series Attributes or Hierarchy, notes entered at the aggregate level will not be saved. However, notes at the lower levels will remain and display the original series attributes.*

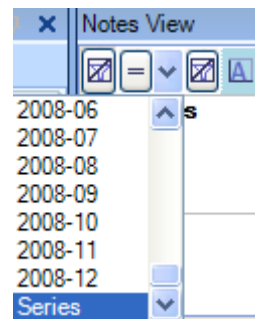
The Series field is located at the top of the Notes View, above the individual Observation Levels. If no hierarchy is applied to this series, then the most recent note will display. If a hierarchy is applied, the Series field in the Notes view will display the following statistics:

Statistic	Description
Note count	Displays the number of distinct notes for all the notes entered in all the series below the selected series.
Distinct reason codes	Total number of distinct reason codes used for all notes entered in all the series below the selected series.
Distinct users	Shows the number of distinct users who have entered notes in all the series below the selected series.

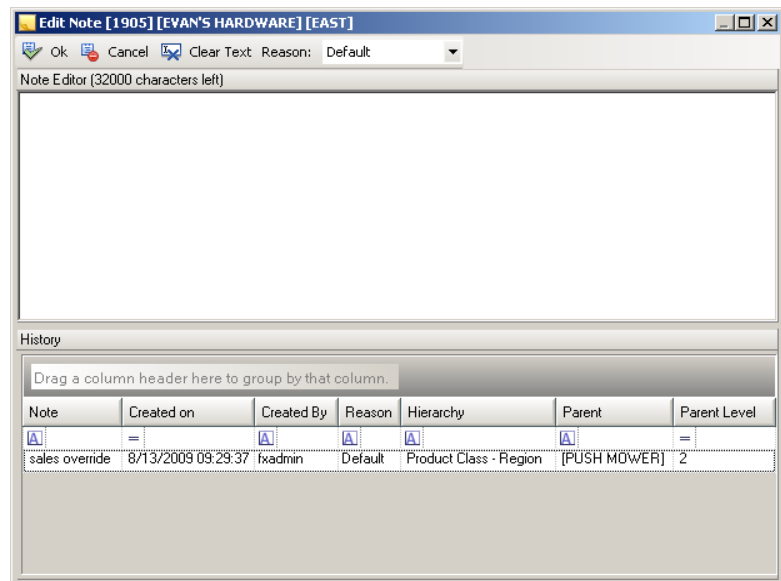
Statistic	Description
Most recent creation date	Shows the time and date when the last note was entered.



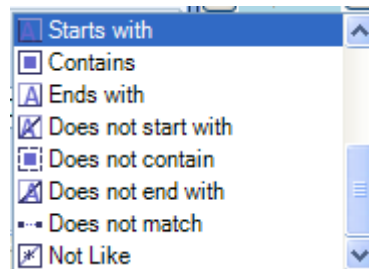
1. In the Notes View window, click on the  button, scroll down the list and select “Series”.



2. Double-click on the series textbox to open the Edit Note window.



3. Enter the body of the note in the Note Editor window.
4. Select the Reason for this note from the drop-down list. Reason codes are customizable and can be set to any value you wish.
5. Click **Ok** to save this note and exit the Edit Note window.
6. A note icon now appears next to the selected series.
7. Click on the  button to display the dropdown list and select one of the options, if necessary.

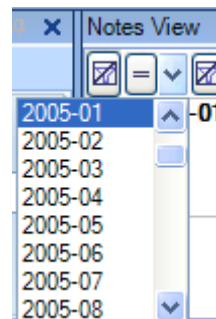


8. Click on the  button to filter or not filter the note.

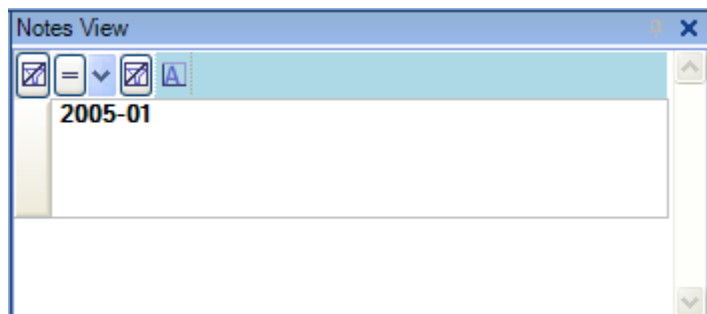
9. Save the changes by switching to another series or click the  Save User Changes icon from the File tab on the toolbar.

14-2: Insert a Note at Observation Level

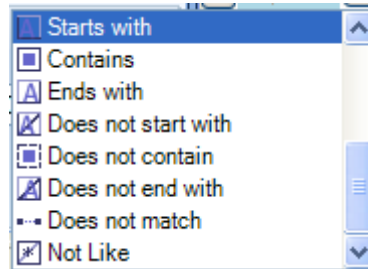
1. In the Notes View window, click on the  button and scroll down the list and select one of the dates.



2. Enter a **note for this period** of the series.



3. Click on the  button to display the dropdown list and select one of the options, if necessary.



4. Click on the  button to filter or not filter the note.
5. Save the changes by switching to another series or click the  Save User Changes icon from the File tab on the toolbar.

14-3: Insert a Note at the Observation Level in Graph View

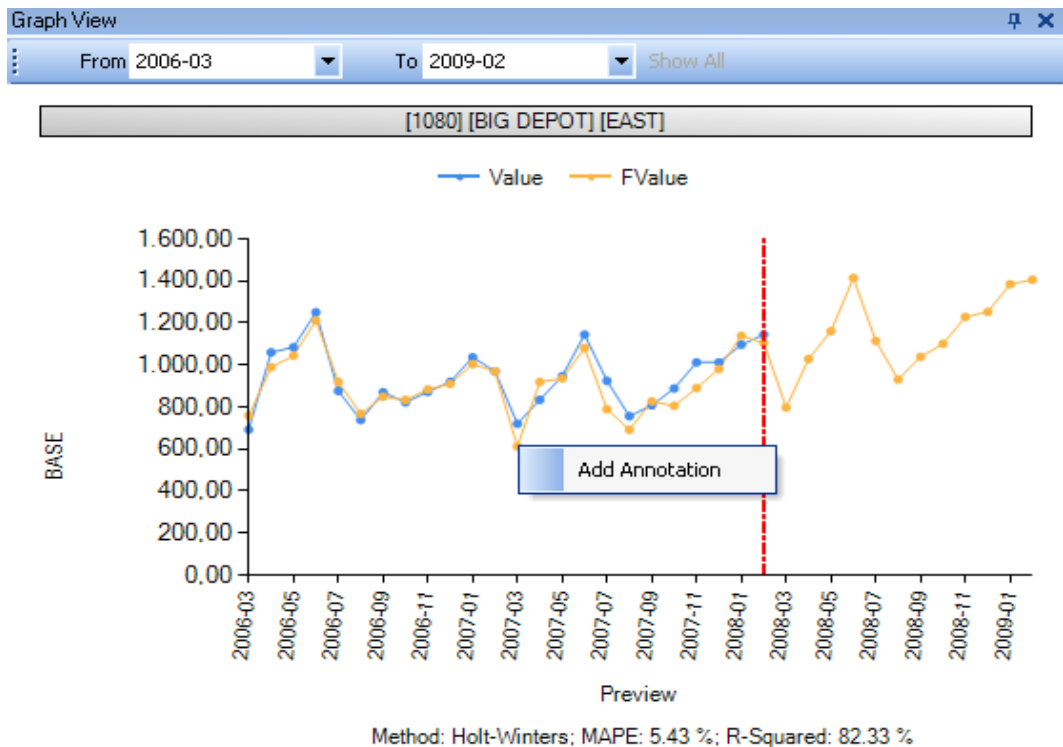
You can add notes to the first Opinion Line that is displayed in the Graph View by right clicking in an observation.

To Add new notes from the graph view, find the period you wish to add the observation to and right click on that observation point.

In order to get the “Add Annotation” menu option, you need to right click on the line for the first opinion line in the list of opinion lines shown; see [6-1: Graph View Options](#) to check the list of opinion lines. Verify this because the first opinion line in the list is not the first one in the graph.

Note: *The only case in which the first opinion line in the list is not used is when the first opinion line in the list is ConflInterval. If this opinion line is selected as the first one, the notes can be added by right clicking*

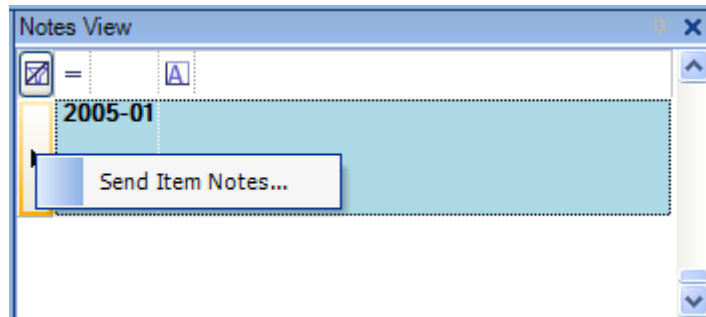
on the second opinion line in the list.



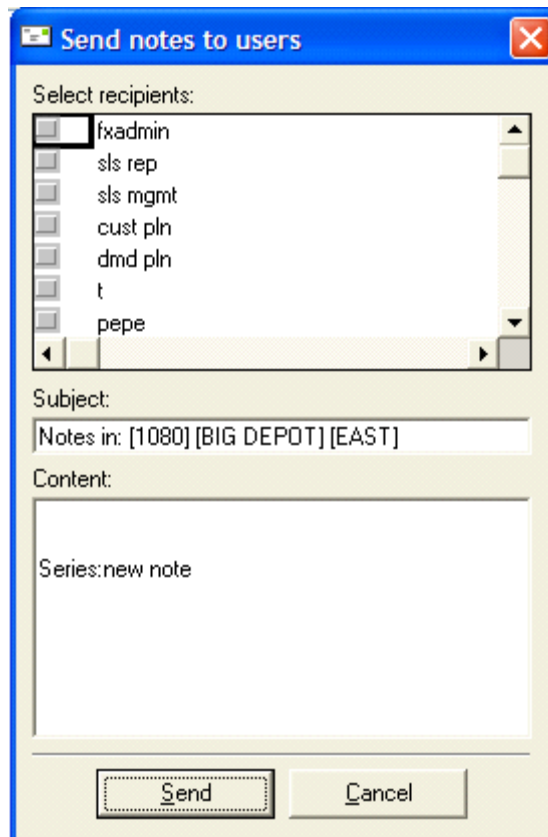
14-4: Send Notes to DME User

To enable other users to track notes over a series, you can send a note directly from the Viewer using the DME Email Service.

1. Right-click over one of the Notes tabs and select **Send Item Notes...**



The Send notes to users window displays.



2. Select the users you want to send the email to in the **Select recipients** textbox.

The Viewer automatically populates the textbox with the series information in the **Subject** textbox. In the **Content** textbox, the Viewer automatically populates the textbox with the note information in that series.

3. Edit the Email Subject and Content, as necessary.
4. Click **Send**.

Note: *Email notification must be configured to use this function. See [Chapter 15 Email Service](#) for additional information.*

14-5: Filtering Notes

You can filter notes by clicking on the arrow dropdown in Notes View.



Section 15: Toolbar menus

This section describes the toolbar in the Viewer and the different operations that can be performed from it.

15-1: File

This menu option is used to

Option	Description
Disconnect/ Reconnect...	This option is not available in DME v.5.0.
New...	This option is used to open the Scenario Selection window which allows you to open a new scenario.

Option	Description
Save Changes	This option is used to deactivate a filter or exception if any or both have been applied to the scenario, for more information see “Remove a Filter” on page 139
Save Graph As...	This option is used to apply a calendar a calendar to a scenario in order to convert it to another time scale, for example if your scenario’s data is monthly you could use this feature to change it to weekly information. For more information see “Using the Calendar” on page 183
Close	This option is used to close the currently selected scenario.
Print	This option is used to print out the
Logout	This option is used to logout of the current session, all scenario will be closed and a username and password will be required to log back in.
Exit	This option closes the application as well as any open scenarios.

15-2: Edit

This menu option gives you options to edit the Status of the series in your scenario as well as some basic operation like Undo, Copy, Find, etc.

Option	Description
Undo	This option is used to undo your last changes; there are some operations that cannot be undone: Reforecast, Adjustments to forecast using the Adjust feature, Status changes for multiple series and Copy/Rename/Clone/New Series Operations. Note: When this option is used, all the changes made before the last time you saved or changed to a different series will be undone.
Original	This option is used to revert the Forecast opinion line (FValue) to the values in the Original value which is stored the Original opinion line.
Recalculate Safety Stock	This option will recalculate Safety Stock.
Overwrite Adjusted Forecast	This option is used together with hierarchies, whenever this option is enabled any changes to the forecast will be overridden by a Rebalance operation; if it is disabled observations that have been adjusted will not be changed by rebalancing the tree.
New Series	This option is used to create new series in a scenario.
Clone/Rename	This option is used to make a clone of a series or to rename an existing series.

Option	Description
Copy/Move to other scenario...	This option is used to Copy or Move a series or group of series to another scenario. When copying only a single series you can select the new series description. You can use the Replace existing series option to overwrite any series with the same description in the target scenario. If the Line up series by date option is used the observations from the series will be aligned according to the observations dates for the series in the target scenario.
Find...	This option is used to find series in the currently selected scenario. The search is case sensitive.
Delete...	This option is used to delete the currently selected series.
Do not Forecast	This option is used to set a flag that indicates that the series should not be forecasted.
Ready to Export	This option is used to set a flag that will indicate to the system that a series is ready to be exported for reports.
Forecast Complete	This option is used to set a flag that will indicate to the system that the forecast for that series is finished, only series that have this flag enabled will be committed back to the Living Master scenario when using the Commit option.
Do not Report	This option is used to set a flag that will indicate to the system that a series must not be included in the reports.
Roll Unsupported Forecast	This flag is used for the DRP. This flag toggles the "Roll Sales" option. It is used in the DRP process to include any unsupported forecast into the next periods recommended orders. For additional information, please refer to the Inventory Management User Guide.

15-3: View

This menu option is used to customize the viewer and the way your data is viewed and organized. For more information on this menu option see [“View Feature in the Viewer” on page 111](#).

15-4: Forecast

This menu option includes options to adjust or modify the forecast and group items by creating hierarchy definitions.

Option	Description
Reforecast.	This option is used to re calculate the forecast for an item of group of items based on the changes made to the history. The Whole Tree option will only be available when the scenario has a Static Hierarchy applied to it. Note: When a scenario has a static hierarchy applied to it and the user reforecasts, the scenario needs to be rebalances to see the changes in other levels; regardless if the “On-fly rebalance” option was selected in the hierarchy definition.
Hierarchy Manager...	This option is used to manage hierarchy structures which are used both for Static and On-Fly hierarchies; you can also apply Static hierarchies from this menu option. For more information see “Grouping” on page 231

Option	Description
Rebalance	This option is used to redistribute changes made in a hierarchy to the other levels. There are two available option: ■ Based on selected Series; when this option is selected all the changes made in that series Level will be pushed to upper and lower levels. ■ Based on a whole level, when this option is selected all the changes made in the selected level will be pushed to the upper and lower levels starting from that level. Note: When rebalancing a scenario that has a On-Fly hierarchy applied to it, if the scenario has a filter applied to it, the Rebalance operation will only be amongst the filter
Remove Hierarchy	This option is used to remove a Static hierarchy from a Scenario. If a scenario has been opened with an On-fly hierarchy this option will not remove it, to remove ti close the scenario and open it again.
Retagging...	This option call the Retagging module from the Viewer. For more information on how to configure and use retagging see “Using Retagging” on page 261.
Event Manager	This option can be used to call the Event Manager window from which you can create new events to follow promotions and other events. For more information see “Overview” on page 167.
Bill of Material	This option can be used to setup a Bill of Materials to create forecasts for items that depend on other items. For more information see “Overview” on page 204.

Option	Description
Life Cycle Forecast	This option can be used to create a forecast for an item based on a predefined profile. For more information see “Overview” on page 252 .

15-5: Tools

This menu contains feature that allow you to restrict the number of items displayed in the Viewer or affect the attributes displayed in them. The following table describes each option:

Option	Description
Exception Launcher	This option is used to launch exceptions. For more information see “Using Filters and Exceptions” on page 122
Filter Launcher	This option is used to launch a filter, for more information see “Launch a Filter” on page 132 .
Deactivate Exception/Filter	This option is used to deactivate a filter or exception if any or both have been applied to the scenario, for more information see “Remove a Filter” on page 139
Apply Calendar	This option is used to apply a calendar a calendar to a scenario in order to convert it to another time scale, for example if your scenario's data is monthly you could use this feature to change it to weekly information. For more information see “Using the Calendar” on page 183
Conversion Factor Settings	This option is used to Configure Conversion Factors for the application, this configuration will determine which opinion lines will be affected and how when the View is changed to conversion factor. For more information see “Conversion Management” on page 179 .

Option	Description
ABC Analysis	This option is used to run any defined ABC templates. For more information on ABC creating ABC templates see “ABC Template Management” on page 158. The Whole Tree option will only be available when the scenario has a Static Hierarchy applied to it.
Custom Tasks	This option is used to run any defined custom tasks, for more information see “Custom Tasks Management” on page 100.
Reset Current User Session	This option is only available when no scenario is opened in the Viewer, it is used to reset some user settings from a internal table.
Reset All User Sessions	This option is only available when no scenario is opened in the Viewer and when the currently logged in is the fxadmin user; it is used to reset all of the users settings from an internal table; if your DME Database is too big this could reduce the space used by the database.

15-6: Inventory

This menu option will only be available when the Inventory module is installed, for more information on the options available in this menu read the Inventory Management User Guide.

15-7: Living Master

This menu contains features that allow you to work with DTL scenarios and how they interact with Living Master Scenarios

Option	Description
Population Wizard...	This option is available when using a DTL Scenarios, it is used when users want to bring data from a Living Master to their DTL Scenario. For more information see “Populate a DTL Scenario” on page 21.
Commit	This option is available when using a DTL Scenarios, it is used when user want to upload the changes made to their DTL scenarios into the Living Master. For mor information see “Commit Changes Back to the Living Master Scenario” on page 24.
Archive Forecast	
Reset DTL Scenario...	This option is used to reset the DTL scenario in case it got corrupted for any reason; this option will only be available when there are no open scenarios.

15-8: Reports

This menu contains features that allow you to create new reports from your data using a different methods as well as opening existing reports.

Option	Description
Open Pivot Report...	This option is used to open a Pivot report that has already been created.

Option	Description
Pivot Report from Template...	This option is used to create a Pivot report using an existing template, for more information see “Use an Existing Template” on page 214 .
Pivot Report using Wizard...	This option can be used to create a new pivot report using a Report Wizard, for more information see “Using the Pivot Table Wizard” on page 216 .

15-9: Applications

This menu contains features that allow you open other applications from the Demand Management Engine suite and other customized applications.

Option	Description
Base Unit...	This option will open the DME Base Unit, your user might not have rights to use this application depending on your permission. To learn more about the Base Unit please see the DME Super User Guide.
Batch Scheduler...	This option will open the DME Batch Scheduler, your user might not have rights to use this application depending on your permissions. To learn more about the Base Unit please see the DME Super User Guide.
Engine Manager...	This application is used to configure certain aspects of the Viewer and also create templates for filters, exceptions and ABC reports.

Option	Description
Customized Applications	This menu option can be used to configure up to five (5) customized applications to run from this menu option. To configure a new application just set a name for it, the path to the executable file and any additional parameters. If the Require password & user option is enabled, the application will require the user to provide authentication.

15-10: Window

This menu contains features that allow you to organize windows in different layouts or go directly to specific opened scenario windows.

Option	Description
New Window	This option can be used to open a new scenario window, invoking it will display the Scenario Selection window.
Cascade	This option arranges all the currently open scenario windows in a cascade.
Tile Horizontal	This option arranges all the currently open scenarios horizontally so they all fit in the Viewer's main window.
Tile Vertical	This option arranges all the currently open scenarios vertically so they all fit in the Viewer's main window.
Arrange Icons	This option arranges the icons.
Scenario Names	All the currently opened scenario will be displayed in a section here, you can change from one to the other by clicking on the corresponding scenario name.

Section 16: Keyboard Shortcuts

The table below details the shortcuts that can be used for features in the Viewer.

Shortcut	Description
Ctrl+Z	Undo
Alt-N	Next Series
Alt-P	Previous Series

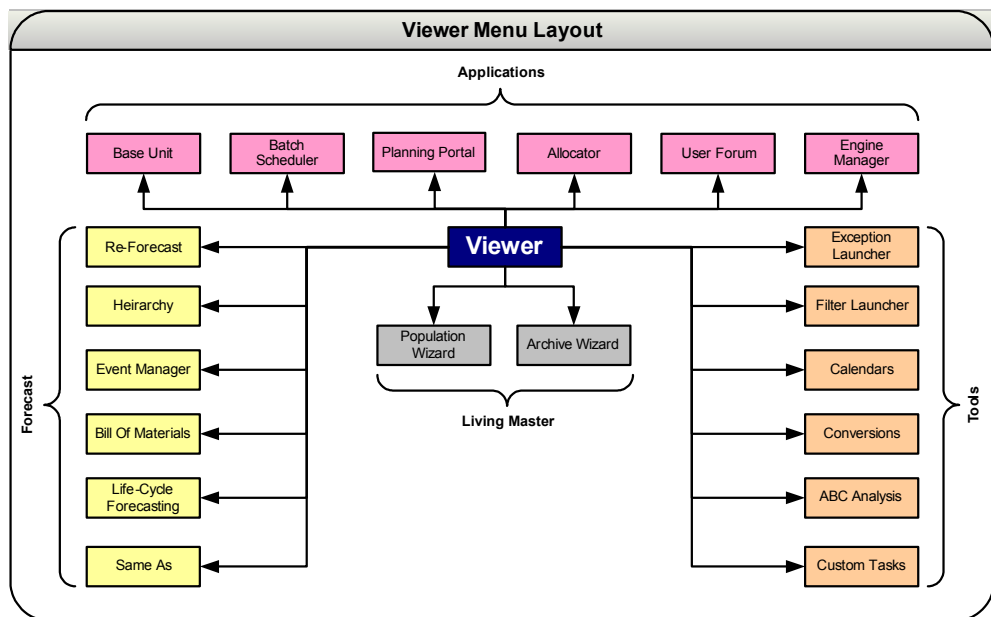
Chapter 3 Customizing and Using the Viewer

This chapter includes:

Section 1: Overview	89
Section 2: DisplaySet Management	90
Section 3: Custom Tasks Management	100
Section 4: View Feature in the Viewer	111

Section 1: Overview

A key benefit for a forecasting process enables you to see information using familiar terms and displaying information on-demand. The Viewer provides the vehicle for making adjustments and interacting with the forecast. A key element in this process is the customization of the labels and field descriptions within the tool. The following illustration details the major options that are available within the Viewer:



This chapter details the customization options available in the Engine Manager through Display Sets and file selection within each of the data analysis views in the tool.

This chapter also details how to customize the Viewer. The Viewer supports high-levels of customization that match a user's needs.

Section 2: DisplaySet Management

Using the DisplaySet function you can customize the following:

- Specify a name (alias) for each Opinion Line or series field.
- Hide an Opinion Line.
- Specify the number of decimal positions.

A DisplaySet enables you to rename the defined series and Observation Field names. It is an Engine Manager feature that you share and apply to a Scenario or group of Scenarios. When you open a Scenario affected by a DisplaySet, the Viewer displays the aliases instead of the default names.

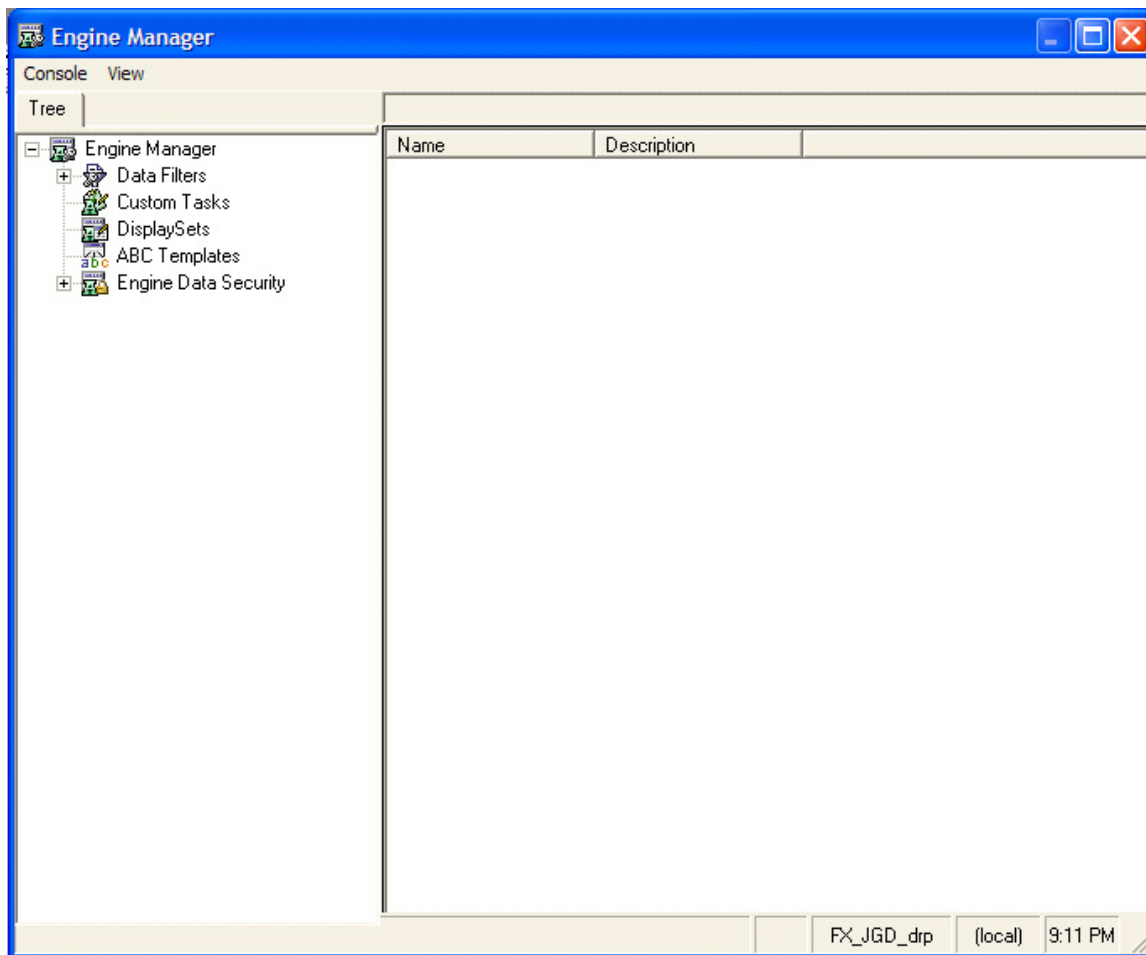
A DisplaySet is composed of the following:

Component	Description
Name	Name of the current DisplaySet.
Description	Description of the current DisplaySet.
Scenarios affected list	Names of the Scenarios that are affected by the current DisplaySet.
Series Fields definition	Defines the number of decimal points, visibility of the fields at series level, and the alias of each series field.
Observations Fields definition	Defines the number of decimal points, visibility of the fields at Observations level, and the alias of each observation field (Opinion Line).

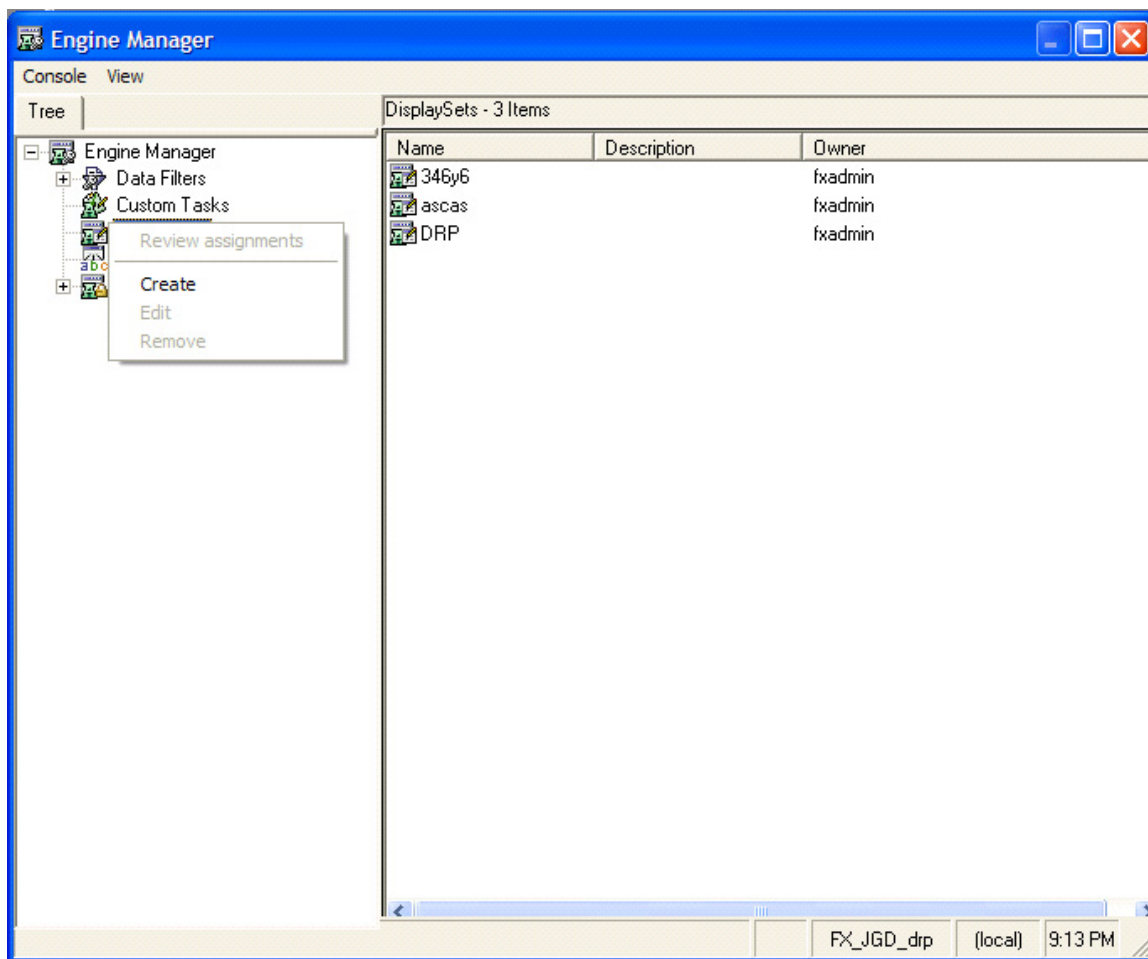
2-1: Create a DisplaySet

1. Select **Applications > Engine Manager** from the Viewer menu.

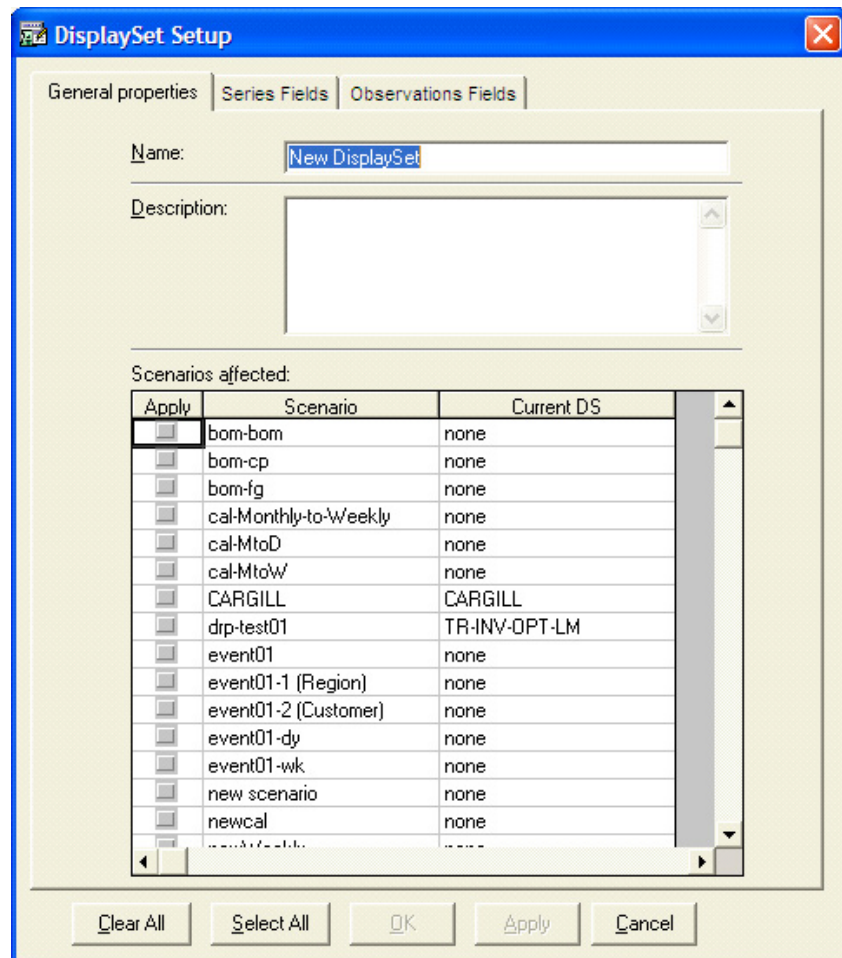
The Engine Manager window displays.



2. Right-click the **DisplaySets** resource and select **Create**.



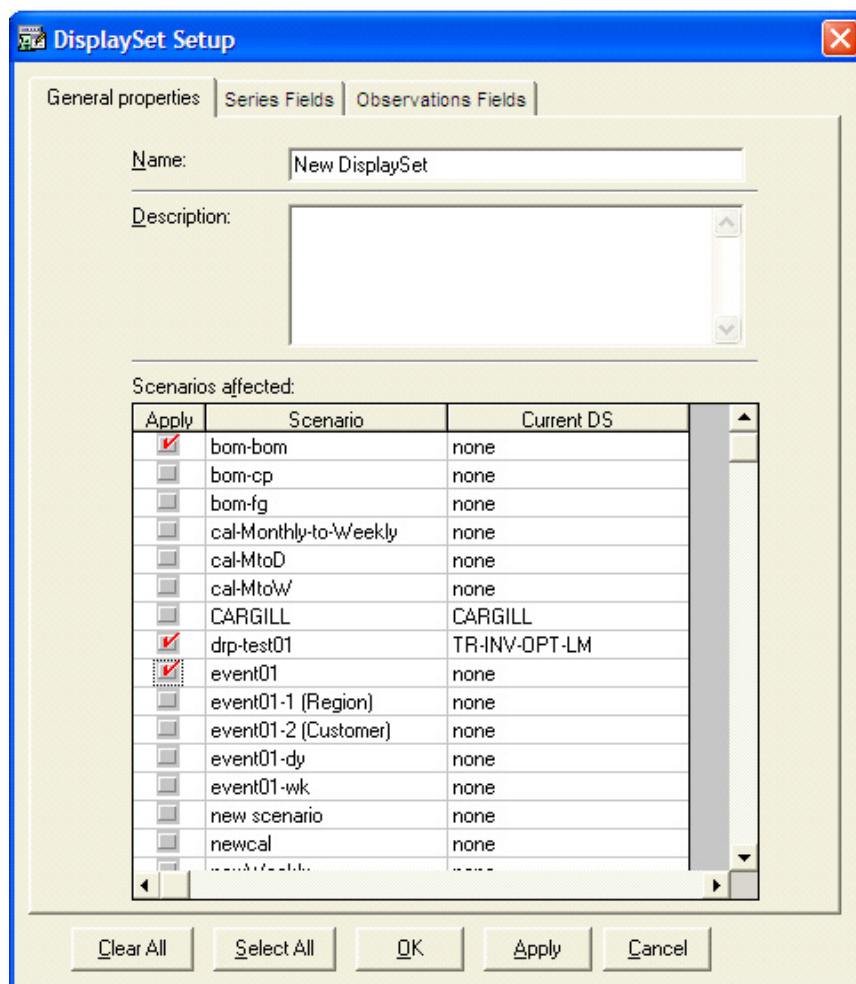
The DisplaySet Setup window displays.



There are three tabs on this window:

- General properties
 - Series Fields
 - Observation Fields.
3. Enter a **name** for the DisplaySet in the Name textbox.
 4. Enter a description for the DisplaySet in the **Description** textbox.

5. Click the checkbox in the Apply column that corresponds to the Scenario you want to select.



6. Click the **Series Fields** tab.

The following window displays.

DisplaySet Setup

General properties | **Series Fields** | Observations Fields

Fields:

	Physical Name	Alias	Active	Dec. Points	Label
1	BaseTarget	BaseTarget	☒	N/A	
2	BusinessPartner	BusinessPartner	☒	N/A	
3	BusinessSegment	BusinessSegment	☒	N/A	
4	BusinessUnit	BusinessUnit	☒	N/A	
5	Cost	Cost	☒	2	
6	CostCenter	CostCenter	☒	N/A	
7	Country	Country	☒	N/A	
8	Cust01	Cust01	☒	N/A	
9	Cust02	Cust02	☒	N/A	
10	Customer	Customer	☒	N/A	
11	CustomerRank	CustomerRank	☒	N/A	
12	CustomerType	CustomerType	☒	N/A	
13	DataType	DataType	☒	N/A	
14	DemandCategory	DemandCategory	☒	N/A	
15	DemandPlanner	DemandPlanner	☒	N/A	
16	Description	Description	☒	N/A	
17	Division	Division	☒	N/A	
18	EqUnitConvFactor1	EqUnitConvFactor1	☒	N/A	
19	EqUnitConvFactor2	EqUnitConvFactor2	☒	N/A	
20	ExceptionType	ExceptionType	☒	N/A	
21	ForecastDesignator	ForecastDesignator	☒	N/A	
22	ForecastReporting	ForecastReporting	☒	N/A	
23	ForecastTimescale	ForecastTimescale	☒	N/A	
24	FundClass	FundClass	☒	N/A	

Clear All Select All OK Apply Cancel

- Place the cursor in the **Alias** column and enter a new name.
- Click one of the fields in the **Active** column to de-select the fields. Select any other fields one at a time.
- Locate a field with a number in the Dec. Points column. Click the drop-down list and select the number decimal positions required. Note that the Decimal Points option is not applicable to string fields.
- The Label column must be configured to use the "New Series..." feature. From this column, specify which Series Attributes and in which order they are used to define a new Series description. The

Series Attributes defined here are generally the same as those in the Labels section of the Base Unit when loading data.

The DisplaySet Setup window now displays the following.

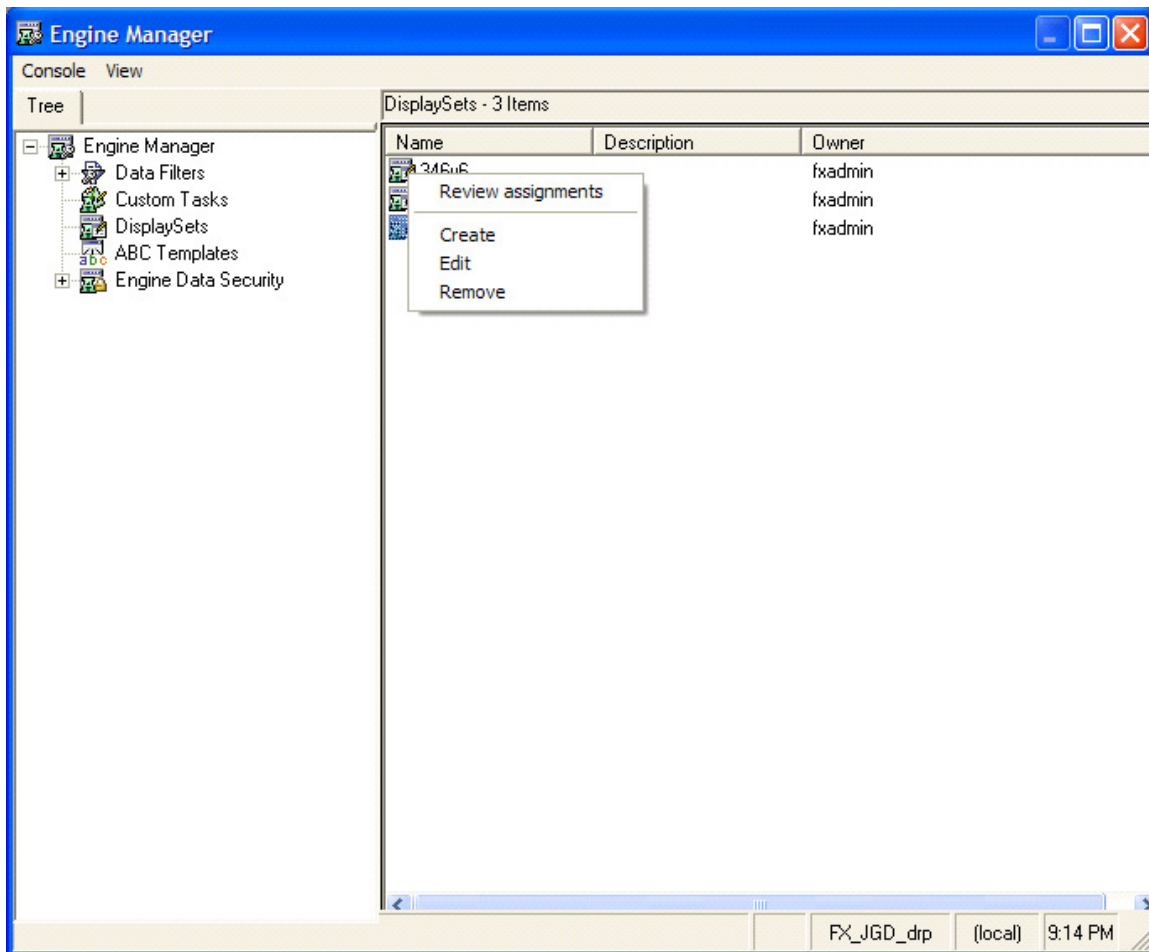
	Physical Name	Alias	Active	Dec. Points	Label
1	BaseTarget	BaseTarget	☐	N/A	
2	BusinessPartner	BusinessPartner	☐	N/A	
3	BusinessSegment	BusinessSegment	☒	N/A	
4	BusinessUnit	BusinessUnit	☒	N/A	
5	Cost	Cost	☒	2	
6	CostCenter	CostCenter	☒	N/A	
7	Country	Country	☒	N/A	
8	Cust01	Cust01	☒	N/A	
9	Cust02	Cust02	☒	N/A	
10	Customer	Customer	☒	N/A	
11	CustomerRank	CustomerRank	☒	N/A	
12	CustomerType	CustomerType	☒	N/A	
13	DataType	DataType	☒	N/A	
14	DemandCategory	DemandCategory	☐	N/A	
15	DemandPlanner	DemandPlanner	☒	N/A	
16	Description	Description	☒	N/A	
17	Division	Division	☒	N/A	
18	EqUnitConvFactor1	EqUnitConvFactor1	☒	N/A	
19	EqUnitConvFactor2	EqUnitConvFactor2	☒	N/A	
20	ExceptionType	ExceptionType	☒	N/A	
21	ForecastDesignator	ForecastDesignator	☒	N/A	
22	ForecastReporting	ForecastReporting	☒	N/A	
23	ForecastTimescale	ForecastTimescale	☒	N/A	
24	FundClass	FundClass	☒	N/A	

11. Click **OK** to save the DisplaySet.

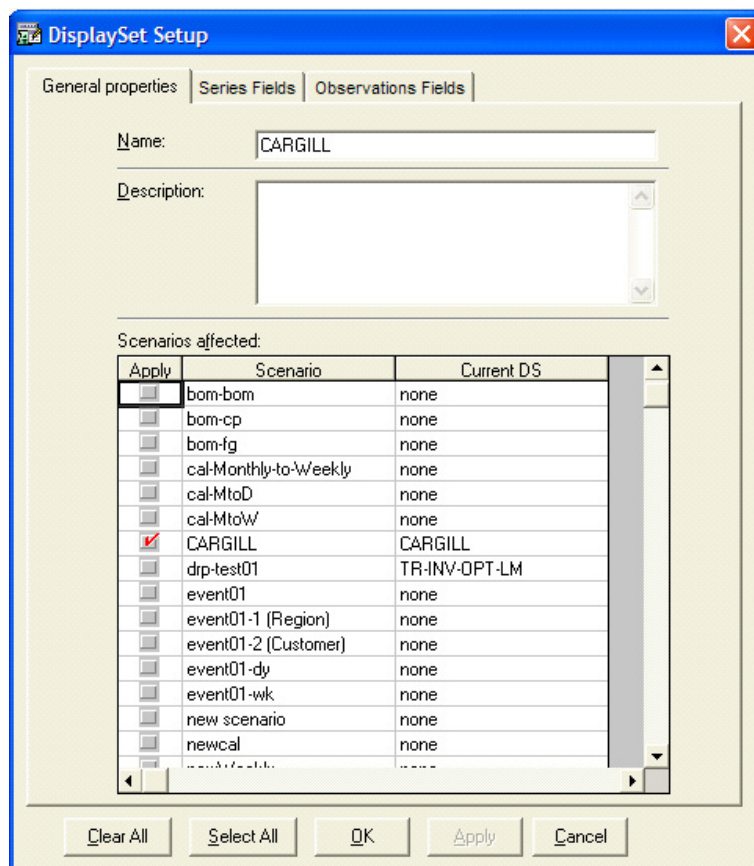
The next time that you open an affected Scenario, you will see that it locks the DisplaySet as it was defined.

2-2: Edit a Display Set

1. From the Engine Manager, select the DisplaySet you want to edit, right click and select **Edit**.



The DisplaySet Setup window displays.



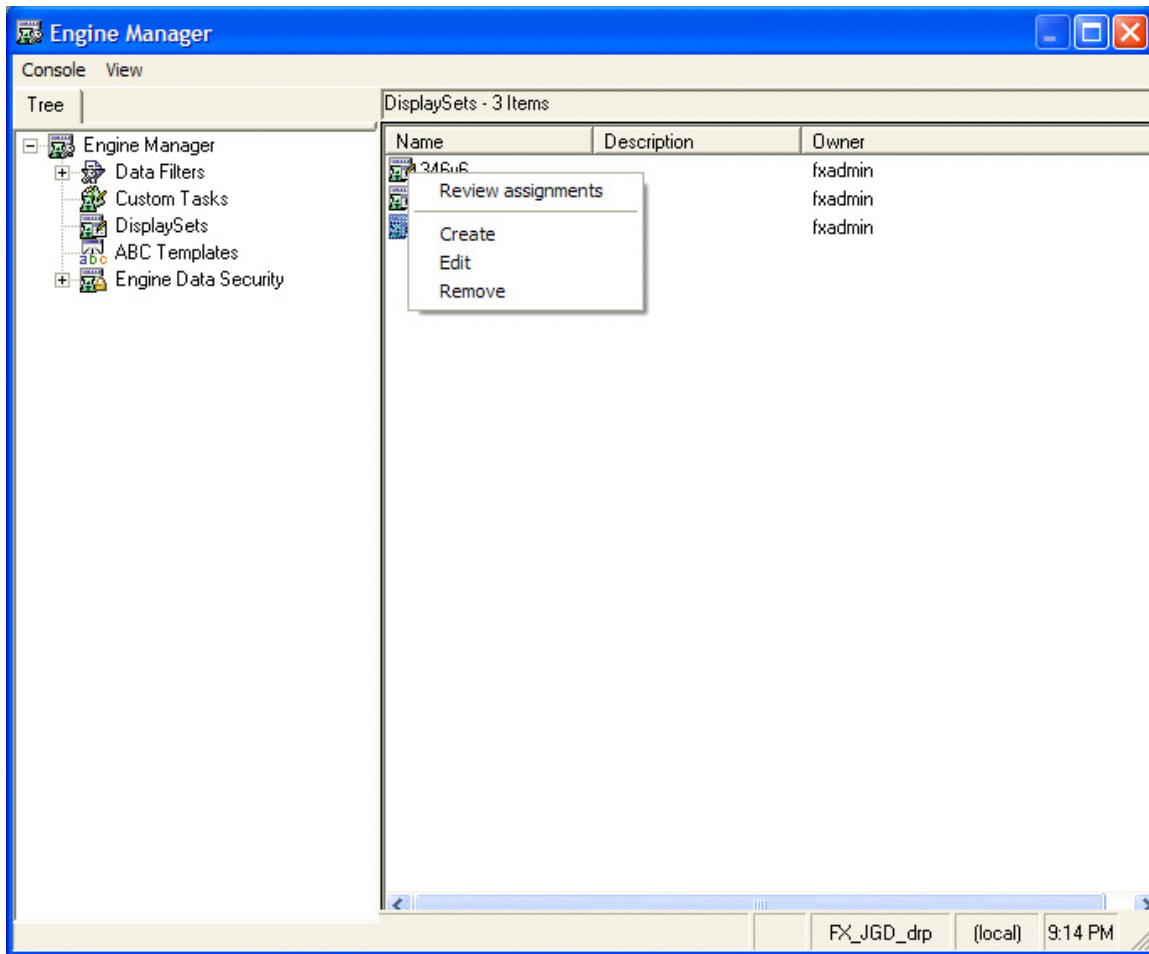
2. Make the changes to the DisplaySet and click OK.

2-3: Share a DisplaySet

You can share a Display Set with other users. Once it is shared, other users apply it to their Scenario. However, other users cannot modify the Display Set.

Note: *If a user is populating data from the Living Master Scenario, by default the Display Set from the Living Master is applied to the DTL Scenario and the display set is shared with the user.*

1. Right-click the DisplaySet that you want to share and select **Review assignments**.

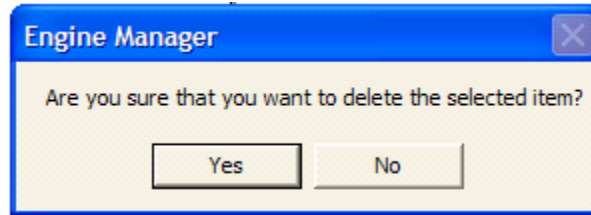


2. Select the user from the **Current users** textbox and move to the **Assigned users** textbox and click **Save**.

2-4: Remove a DisplaySet

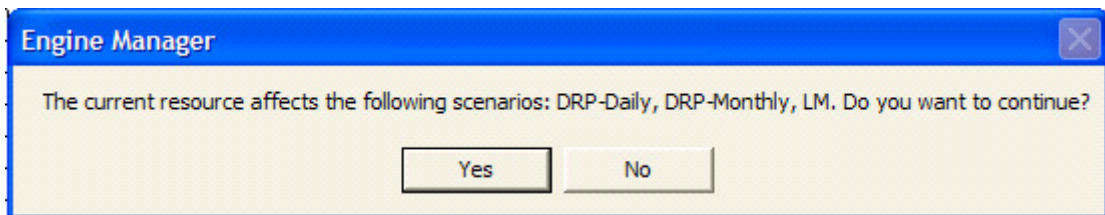
1. Right-click the Display Set you want to remove and select **Remove**.

The following message displays.



2. Click **Yes** to delete the Display Set.

If the DisplaySet currently affects Scenarios, the following message displays.



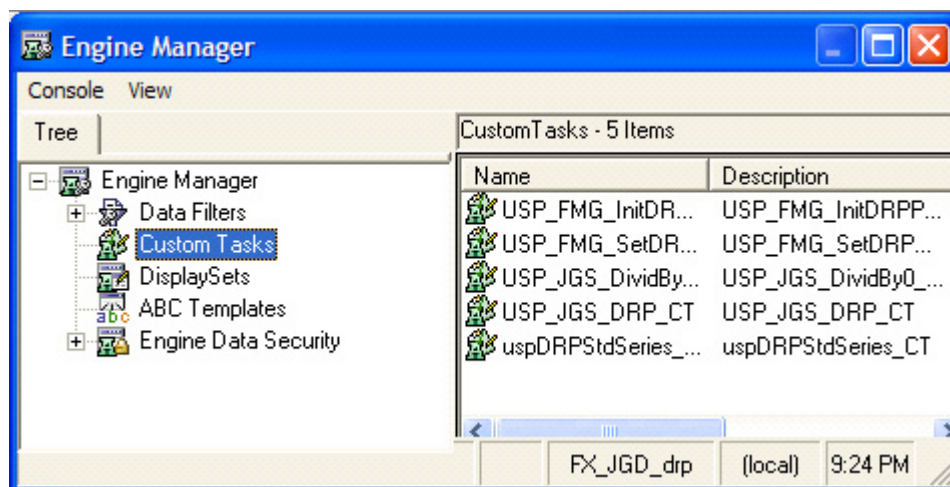
Section 3: Custom Tasks Management

Custom Tasks are special calculations such as an Order Replenishment Calculation. Custom Tasks are activated from the Viewer. Using the Custom Tasks function in the Engine Manager, you can create, delete, edit and share custom tasks.

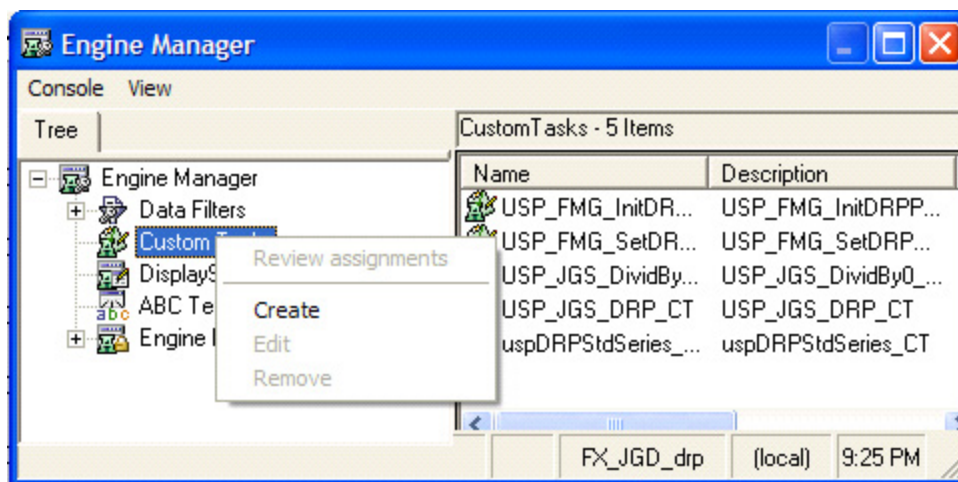
3-1: Create a Custom Task

1. Select **Applications > Engine Manager** from the Viewer menu.

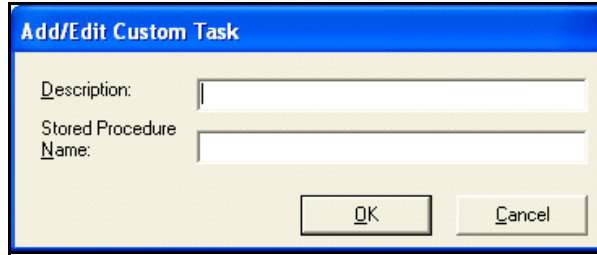
The Engine Manager window displays.



2. Right-click the **Custom Tasks** resource and select **Create**.



The Add/Edit Custom Task window displays.



3. Type the description and the stored procedure name in the respective textboxes and click **OK**.

If the stored procedure does not exist in the DME database, an error message displays.

To use a stored procedure in a Custom Task the following rules apply, all the parameter names are case sensitive:

- The first parameter must be “@ScnID” with Integer type. The DME passes the Scenario ID to this parameter automatically when you run the custom task.
- The second parameter must be “@UserID” with Integer type. The DME passes the user ID to this parameter automatically when you run the custom task.
- If you want the DME to pass the series ID of the selected series, add the parameter “@SeriesID” with type Integer to your stored procedure. This parameter can be anywhere except the first and the second position in the definition of the stored procedure.
- If you needed a custom task to only affect the data that is currently displayed in the Viewer, for example, the resulting series from running a filter or an exception; then you can use the “@UserSessionID” parameter, this parameter does require some logic to be included in your Custom task, you must use this new parameter to limit the series used in your custom task to the ones in the dme5SeriesViewer table. An example would be performing a JOIN between the Series table and the dme5SeriesViewer table with a WHERE clause of UserID equals @UserSessionID.

4. If there are additional parameters in the stored procedure besides @ScnID and @UserID, then you must provide the default values for those parameters.

Please Provide the Parameters for Custom Task

	Name	Type	Description/Comment	Value	Value Type	
1	@ScnID	Numeric				
2	@UserID	Numeric				
3	@par1	Numeric			LIST	Edit List
4	@SeriesID	Numeric		0	INPUT	
5	@par2	String			QUERY	Edit Query

☒ Save For Current Scenario

☒ Save As Default

Accept Cancel

For parameters other than “@ScnID”, “@UserID”, “@SeriesID” and “@UserSessionID”, you can enter a description to explain the parameters, and set initial values and value lists for these parameters. The Value Type affects how to enter values for parameters when you run the custom task. When you run the custom task, if Value Type is INPUT, you need to type in the value. If the Value Type is LIST or QUERY, you select a value from a drop down list.

If you select INPUT as the Value Type for a parameter, you need to enter the initial value to the Value column for that parameter.

5. If you select LIST as the Value Type for a parameter, click the Edit List button next to it. "Task Parameter Value List" window displays.

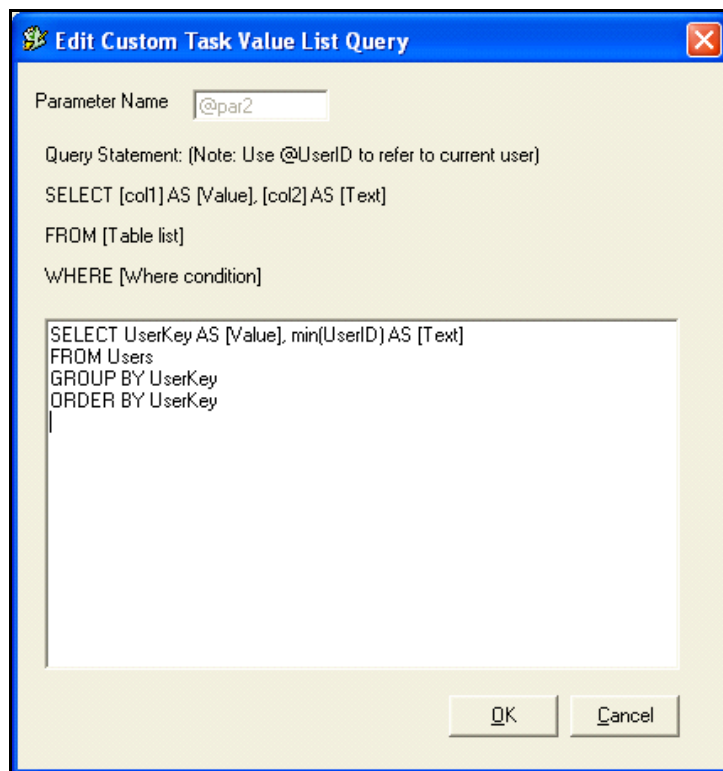
	Value	Text
1	1	value 1
2	2	value 2
3	3	value 3
4		
5		
6		
7		
8		
9		
10		

6. Enter a list of values and text in the Value and Text column.

The Value column contains the values used to pass to the stored procedure when the custom task runs. The Text column contains the labels for their corresponding values, which are then displayed in the dropdown list when you run the custom task.

7. Click OK.
8. If you select QUERY as the Value Type for a parameter, click the Edit List button of the parameter.

The Edit Custom Task Value List Query window displays.



9. Enter a query that returns the list of pairs of value and text. Make sure [Value] is unique in the query results.

10. Click OK..

Please Provide the Parameters for Custom Task

	Name	Type	Description/Comment	Value	Value Type	
1	@ScnID	Numeric				
2	@USerID	Numeric				
3	@par1	Numeric		value 2	LIST	Edit List
4	@SeriesID	Numeric		0	INPUT	
5	@par2	String		user3	QUERY	Edit Query

Accept Cancel

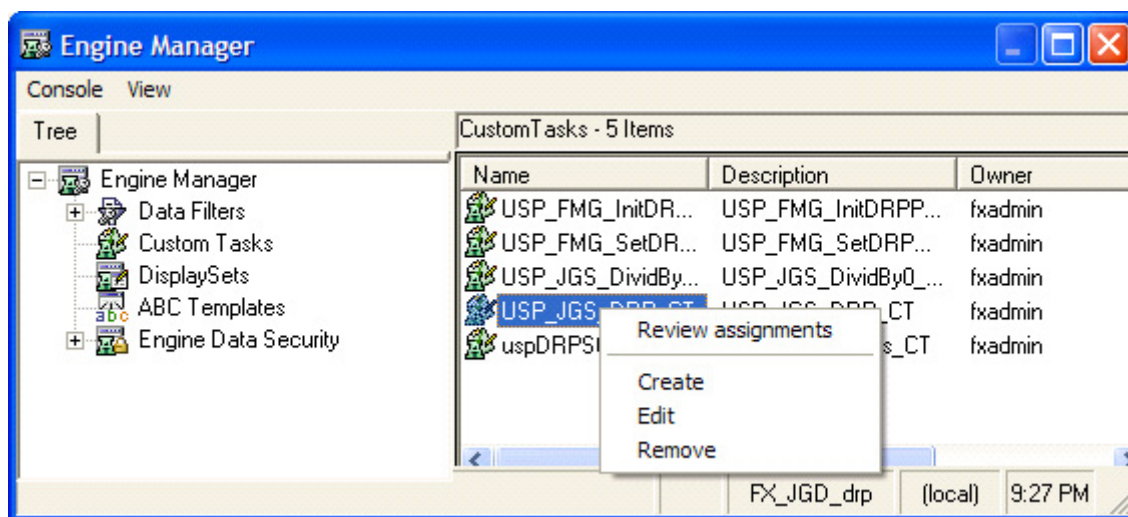
11. Select a value from the drop down list or enter a value as the initial value for each parameter except “@ScnID”, “@UserID”, and “@SeriesID”.

12. Click “Accept”.

3-2: Delete a Custom Task

1. Select **Applications > Engine Manager** from the Viewer menu.
2. Double-click **Custom Tasks**.

The Custom Task List displays.



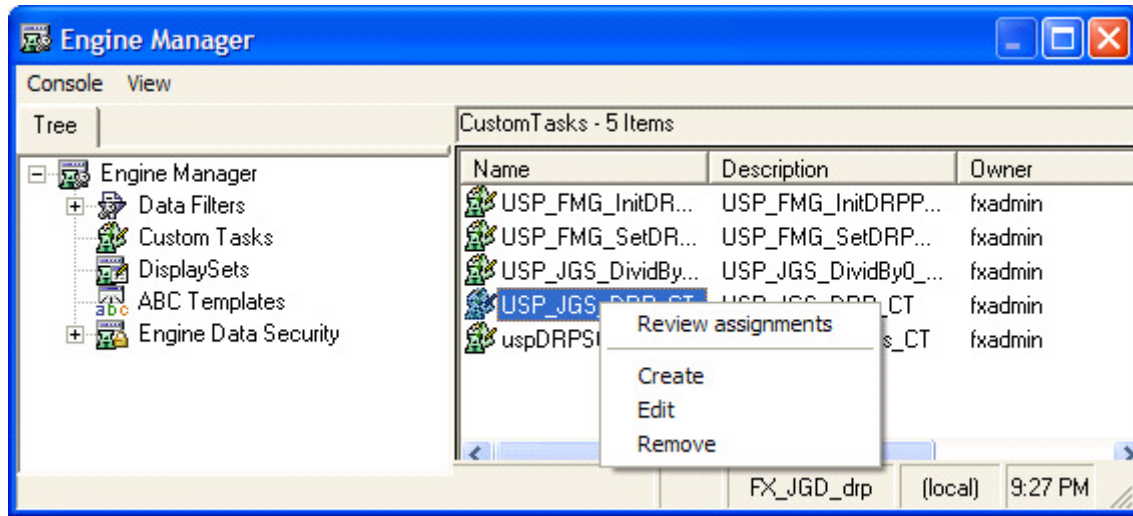
3. Select the custom task you want to delete.
4. Right-click and select **Remove**.

A confirmation window displays.

5. Click Yes.

3-3: Edit a Custom Task

1. Select **Applications > Engine Manager** from the Viewer menu.



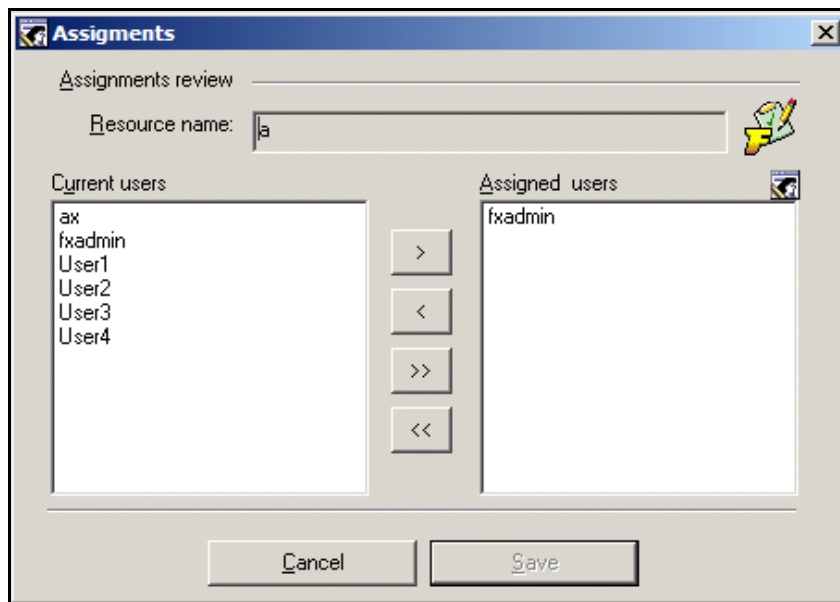
2. Double-click the Custom Tasks.
3. Right-click the Custom Task and select Edit.
4. Modify the Custom Task and click OK.

3-4: Share a Custom Task

You can share a Custom Task that you own with other users. Once it is shared, others can run it in their own Scenario, but they cannot modify the custom task.

1. Right-click the custom task that you want to share and select Review Assignments.

The Assignments window displays.

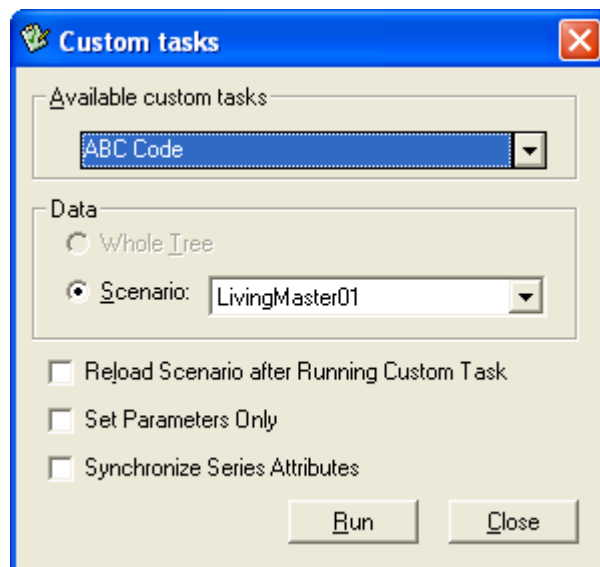


2. Select the user from the Current users textbox and move to the Assigned users textbox and click Save.

3-5: Run Custom Tasks

1. Select **Tools > Custom Task...** from the Viewer menu.

The Custom tasks window displays.



2. Select a custom task from the Available custom tasks drop-down list.
3. Ensure that the Set Parameters Only is checked.
4. If you custom task updates any series attributes for the series, you want to check the Synchronize Series Attributes option to see the changes in those attributes reflected immediately. If the custom task updates series attributes and this option is not selected, the scenario must be re opened in order to see the changes.
5. Click Run.

The Parameters window displays.

Please Provide the Parameters for Custom Task

	Name	Type	Description/Comment	Value
1	@ScnID	Numeric		
2	@UserID	Numeric		
3	@par1	Numeric		value 2 ▼
4	@SeriesID	Numeric		312276
5	@par2	String		user3 ▼

☒ Save For Current Scenario
☐ Save As Default

Accept Cancel

6. Enter the value or click inside the Value textbox and select the value from the drop down list for each possible parameter.

Note: *If you want to use the values for other Scenarios, check the Save as Default checkbox.*

7. Click **Accept**.

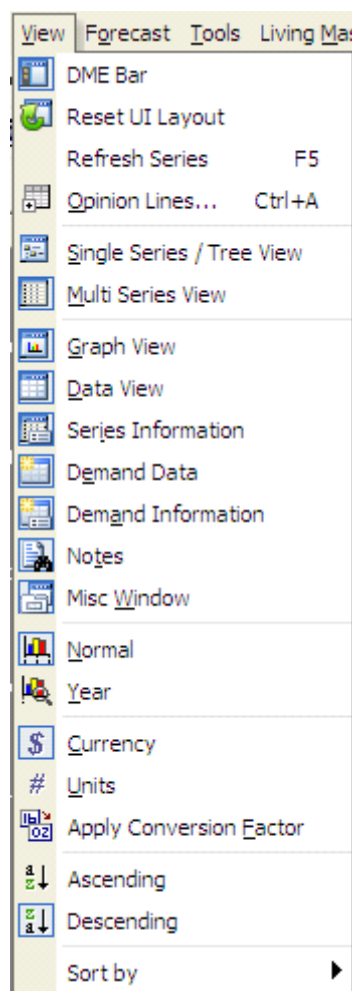
Section 4: View Feature in the Viewer

On the Viewer toolbar, the View menu option provides additional options for how to customize your information. You can configure the Viewer user interface to have specific information readily viewable and available.

Here you can select to display the different panes available to view information.

Note: *Take into account that the panes in the DME Viewer are all completely dockable. This means you can configure them in any way helps you view your data better; you can even have some of the panes hover in the screen or even move panes into diffente monitors when using a dual monitor setup.*

From the Viewer toolbar, click on View. The dropdown list displays a list of options.



The table below provides detail information for each feature. Some of these features are further explained in this section.

Feature	Description
DME Bar	Shows/hides the DME bar in the left-hand pane.

Feature	Description
Reset UI Layout	Resets user interface to its default display if you have customized the user interface. See “Customizing the Layout” on page 120. for additional information.
Refresh Series	Refreshes series
Add or Remove Opinion Lines to views	Opens “Opinion Lines to Show” window.
Single Series/ Tree View	Displays either Single Series or Tree View of series. Replaces Multi Series View on the left-hand side of the user interface.
Multi Series View	Displays Multi Series View. Replaces Single Series View on the left-hand side of the user interface.
Graph View	Displays Graph View window.
Data View	Displays Data View window.
Series Information	Displays Series Information window.
Demand Data	Displays Demand Data window.
Data Information	Displays Data Information window.
Notes	Displays Notes View window.
Misc Window	Displays the Misc View window.
Normal	Displays Normal View.
Year	Displays Year View in the Graph View, Data View, and Demand Data windows.

Feature	Description
Currency	This is option is used to change all the Opinion lines to a Currency view; when this option is selecte all the opinion lines will be multiplied to by the value contained in the Price series attribute. Values changed while in this view will be saved according to the current price when they are saved to the database. If the scenario has a static hierarchy applied to it, when the View is changed to currency the scenario will be changed to Read-Only mode.
Units	This option changes the view back to Units, the values will be in regular units and will display the values stored in the database.
Apply Conversion Factor	When this option is selected, the Conversions set in the Conversion Factor Settings will be applied. Any values changed while in this view will be saved according to the current values for the Opinion lines used as Conversion factors. If the scenario has a static hierarchy applied to it, when the View is changed to Conversion Factor the scenario will be changed to Read-Only mode. Applying conversion factors does not save the converted values into the database. For more information on setting up Conversion Factore see “Using Conversion Factors” on page 178
Ascending	Select this option to to use an ascendig sort for the the Series; this affects both the Single Series View and Multi Series View regardless if a hierarchy has been applied.
Descending	Select this option to to use an descending sort for the the Series; this affects both the Single Series View and Multi Series View regardless if a hierarchy has been applied.
Sort by	This option is used in the Multi Series View, it is used to sort by any specific column.

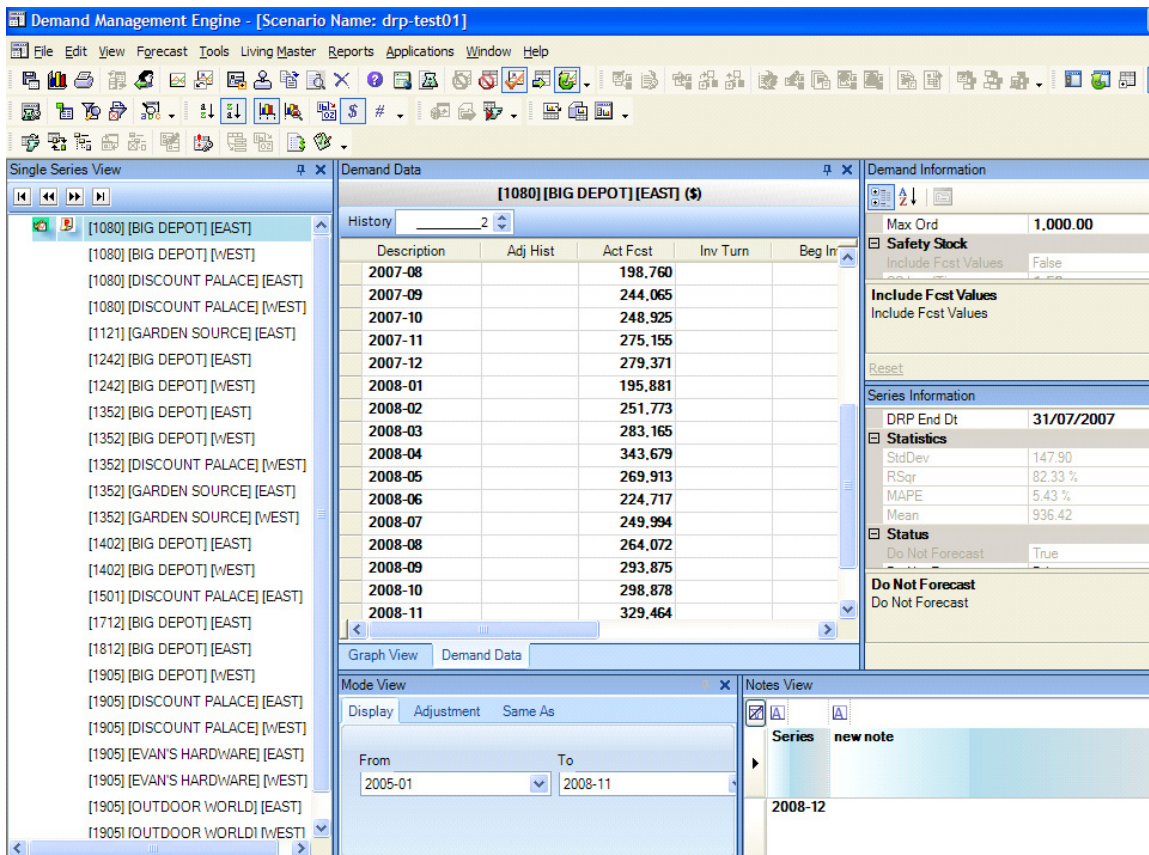
4-1: DME Bar

You can display or hide the Atlas Planning Suite applications in the left-hand pane of the Viewer's user interface.

1. Select **View > DME Bar** from the Viewer menu. Alternatively, you

can click the  icon on the toolbar.

The left-hand pane is hidden from the user interface.



Demand Management Engine - [Scenario Name: drp-test01]

File Edit View Forecast Tools Living Master Reports Applications Window Help

Single Series View

[1080] [BIG DEPOT] [EAST]

[1080] [BIG DEPOT] [WEST]

[1080] [DISCOUNT PALACE] [EAST]

[1080] [DISCOUNT PALACE] [WEST]

[1121] [GARDEN SOURCE] [EAST]

[1242] [BIG DEPOT] [EAST]

[1242] [BIG DEPOT] [WEST]

[1352] [BIG DEPOT] [EAST]

[1352] [BIG DEPOT] [WEST]

[1352] [DISCOUNT PALACE] [WEST]

[1352] [GARDEN SOURCE] [EAST]

[1352] [GARDEN SOURCE] [WEST]

[1402] [BIG DEPOT] [EAST]

[1402] [BIG DEPOT] [WEST]

[1501] [DISCOUNT PALACE] [EAST]

[1712] [BIG DEPOT] [EAST]

[1812] [BIG DEPOT] [EAST]

[1905] [BIG DEPOT] [WEST]

[1905] [DISCOUNT PALACE] [EAST]

[1905] [DISCOUNT PALACE] [WEST]

[1905] [EVAN'S HARDWARE] [EAST]

[1905] [EVAN'S HARDWARE] [WEST]

[1905] [OUTDOOR WORLD] [EAST]

[1905] [OUTDOOR WORLD] [WEST]

Demand Data

[1080] [BIG DEPOT] [EAST] (\$)

History 2

Description	Adj Hist	Act Fcst	Inv Turn	Beg In
2007-08		198,760		
2007-09		244,065		
2007-10		248,925		
2007-11		275,155		
2007-12		279,371		
2008-01		195,881		
2008-02		251,773		
2008-03		283,165		
2008-04		343,679		
2008-05		269,913		
2008-06		224,717		
2008-07		249,994		
2008-08		264,072		
2008-09		293,875		
2008-10		298,878		
2008-11		329,464		

Demand Information

Max Ord 1,000.00

Safety Stock

Include Fcst Values False

Include Fcst Values

Include Fcst Values

Reset

Series Information

DRP End Dt 31/07/2007

Statistics

StdDev 147.90

RSqr 82.33 %

MAPE 5.43 %

Mean 936.42

Status

Do Not Forecast True

Do Not Forecast

Do Not Forecast

Mode View

Display Adjustment Same As

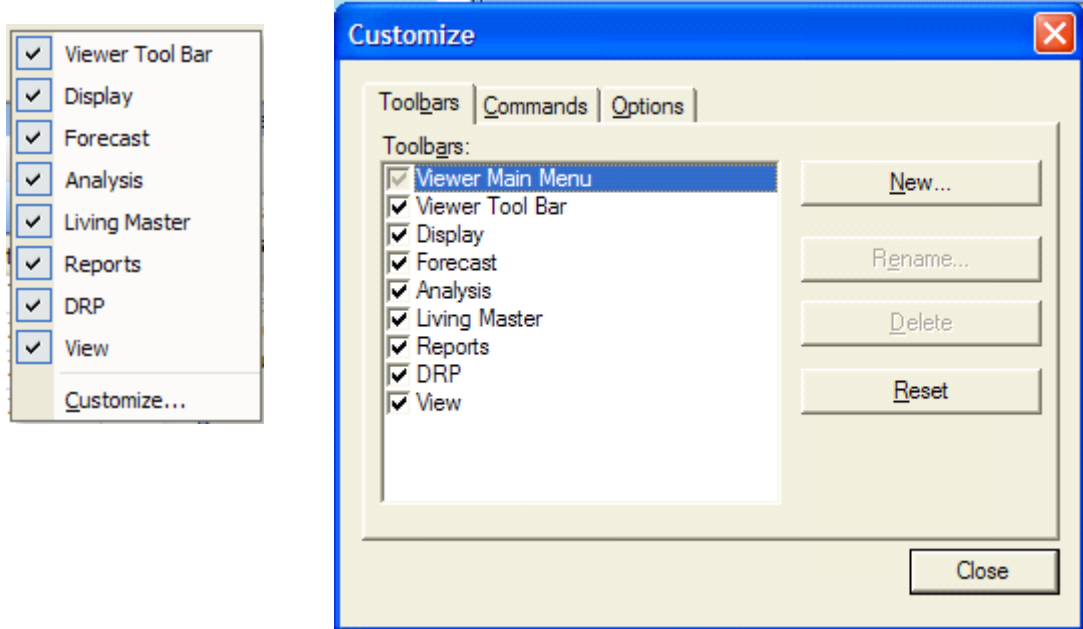
From 2005-01 To 2008-11

Notes View

Series new note

2008-12

2. You can also right-click in on gray space on the top toolbar and customize the toolbar with only the icons you wish to view.



3. Click Close when finished.

4-2: Refresh Series

If you wish to refresh the data because you have ran a process, for example DRP or a custom task, you can refresh the data the application is displaying. This will refresh any observations, series attributes and Series status as well.

1. Select **View > Refresh Series** from the Viewer menu.

Alternatively, you can press the F5 key on the keyboard.

The data displayed in the panes is refresh without selecting another series.

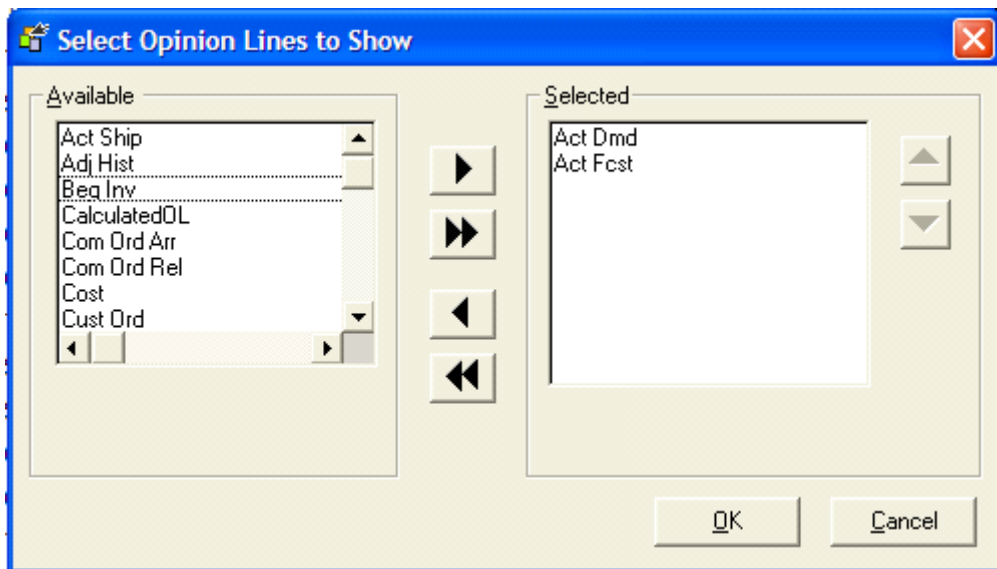
4-3: Add or Remove Opinion Lines to views

There could be up to 24 different types of Opinion Lines on a graph. Each line represents a different data series. You can add or remove Opinion Lines in either the Graph View or Data View.

To select Opinion Lines to display in the Graph View or Data View:

1. On any of the two views, right-click on the graph or grid and select "Select Opinion Lines to Show". Alternatively, you can click the  icon or go to View > Opinion Lines from the Viewer toolbar.

The Select Opinion Lines window displays.



2. From the Available textbox, select which Opinion Lines you would like to display on the graph and click the  button. If you would like to select all of them, click on the  button. You can remove the Opinion Lines from the graph by clicking on the   arrows.

3. Click OK.

The table below details what each Opinion Line means for the data series.

Line	Description
Blue	History of the series (default).
Pink	Represents manual adjustments (measurements) made to the graph and displays previous values when changes are made.
Yellow	Forecast of the series (default).
Dotted Red	Represents where the history ends and the forecast starts (default).
Cyan	Represents the upper confidence limit.
Aqua	Represents the lower confidence limit.
Green	Represents safety stock.
Orange	Represents the level of error.
Tan	Represents the original forecast before any changes are made.

4-4: Year

You can view the series data by year. Click the Year View button on the Data View to view the data by year.

The column labels will be the Year (2003, 2004, 2005 to 2006) and the row labels depend on the cycle configurations that were set previously. To configure the cycle, use the Advanced Options on the main DME menu. The cycle must be set prior to loading the data for a forecast in order to take effect. If the dates are not set, the DME defaults to the Year View with cycle set to monthly.

To view Year-to-Year Data:

1. Navigate to the **Data View** tab and click the **Year View** button.

2. Click the **cell of Historical data** to make changes.

[1080][BIG DEPOT][WEST]						
Historical	Value	Forecast	FValue	Start Period	January	Growth Cycle
	2001	2002	2003	Growth	Min	Max
January		360.00	1,028.95	185.82	360.00	1,028.95
February		417.00	1,060.35	154.28	417.00	1,060.35
March		473.00	1,076.57	127.60	473.00	1,076.57
April		915.00	1,361.79	48.83	915.00	1,361.79
May		739.00	1,322.06	78.90	739.00	1,322.06
June		605.00	1,377.39	127.67	605.00	1,377.39
July		646.00	1,309.71	102.74	646.00	1,309.71
August	82.00	710.00	1,337.09	88.32	82.00	1,337.09
September	85.57	911.00	1,345.83	47.73	85.57	1,345.83
October	276.00	961.00	1,688.76	75.73	276.00	1,688.76
November	311.00	1,041.00	1,627.28	56.32	311.00	1,627.28
December	485.00	1,087.00	1,683.61	54.89	485.00	1,683.61
Total	1,239.57	8,865.00	16,219.38	1,148.83	1,239.57	16,219.38

The following table details the data for this window.

Feature	Description
Historical	Select which opinion line is used for past periods. These buckets will be read only.
Forecast	Select which opinion line is used for future periods. These buckets are editable in the list, they are displayed with a yellow background.
Start Period	From the dropdown arrow on the right-hand side, select Start Period then select a month from the dropdown list.
Growth Cycle	From the dropdown arrow on the right-hand side, set number of cycles back to compare growth to the current forecast.

Feature	Description
Growth	Compare the previous forecast year with the current forecast year.
Min & Max	Minimum and maximum values between all years.
Total	Total value for the current year; you can edit the total value and they will be allocated accordingly to the different periods.

Section 5: Customizing the Layout

You can move around the view windows in the Viewer; this is done to rearrange the windows. The panes can be moved and configured in any way. A layout is only saved when the Scenario is closed.

1. Click and hold a view's header with your mouse.
2. Move the window slightly.

Manuever arrows display on screen.

The screenshot displays the 'Single Series View' window. On the left is a list of series names, such as '[1080] [BIG DEPOT] [EAST]'. The central 'Data View' table lists historical data for '[1080] [BIG DEPOT] [EAST] (\$)' from 2007-03 to 2008-06, showing 'Act Dmd' and 'Act Fcst' values. On the right, the 'Demand Information' panel includes fields for 'Ord Freq' (0.00), 'LeadTime' (2), and 'Max Ord' (1,000.00). Below it, the 'Series Information' panel shows details like 'DRP St Dt' (01/01/2007), 'Product Class' (GASS GRILLE), 'Sales Group' (B), 'Drug Name', 'Product Group' (GRILLS), 'Product Family' (SURE CHEF), and 'DRP End Dt' (31/07/2007). At the bottom right, the 'Notes View' panel shows a 'new note' button and a list of series including '2008-12'.

3. Move the window to where you would like to place it in the Viewer's user interface.
4. As you move the window, the four arrow buttons turn blue and move with the direction you move the window.
5. Drop the window to where you would like it displayed in the user interface.

The window is now located to where you dropped it in the Viewer

user interface. Click the  icon to reset the user interface to the default view. Alternatively, go to View > Reset UI Layout on the Viewer toolbar.

Chapter 4 Using Filters and Exceptions

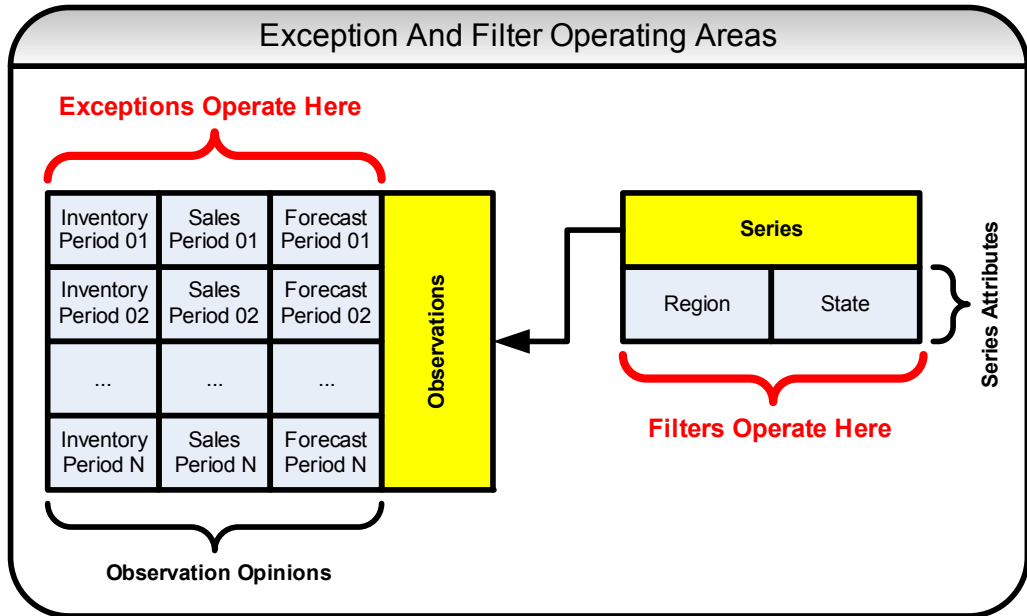
This chapter includes:

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Section 2: Filter Management.....	124
Section 3: Exception Management.....	140

Section 1: Overview

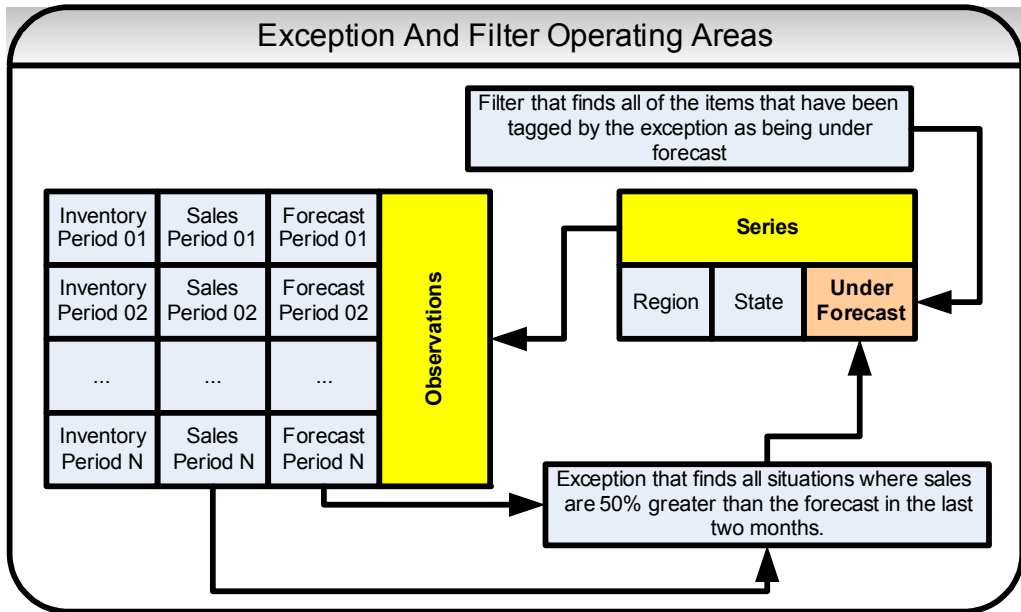
Filters and Exceptions provide users the ability to manage, control and identify forecasts. Filters and Exceptions improve the accuracy of the forecast by focusing on the items that have the greatest impact on the overall results. Filters provide the ability to select items based on series attributes. Exceptions provide the ability to select items based on the numerical information that is stored in observations. By using these two features within the DME, you can manage the forecast in a very effective manner.

The illustration below details the way in which Filters and Exceptions interact.



It is important to note that Exceptions have an additional feature that enable you to update attributes within the series. In this way, when an Exception is run, the results of the Exception can be stored so that

they can be accessed later using a filter. The illustration below details the interaction between Exceptions and Filters.



In this case, the Exception flags the items by setting the series attributes. Once the attribute has been set by the Exception, a filter is then used to select the series at any point in time. If the attribute is made editable, then users are able to replace the flag with a space, which then removes it from the filter so that the item no longer is visible; this allows the System Administrator to set Exceptions and users can clear them.

Section 2: Filter Management

You can specify particular groups or sections of the data table that the DME uses in the forecast with Filters. Filters enable you to perform quick analysis on specific pieces of data. To use a Filter you must have the following completed:

- Create a filter
- Launch a filter

A Filter contains a Filter Expression. Prior to creating a filter, you must understand the concept of how the DME defines a Filter Expression.

When ever the filter Wizard window is displayed, remember that a users Data Permissions are taken into account; if users don't have acces to certain data, that data will not be returned by a filter even if the filter expression should return them.

2-1: Filter Expression

A Filter Expression is a combination of fields, operators and value fields which indicate to the DME specific data to use in the Viewer.

A Filter Expression has the format of:

Field Name Logical Operator Data Value

2-1-1: Example 1

In my source data, I want to display only the items that BIG MART purchases in the Midwest.

This filter expression would look like this:

Customer="BIG MART" AND Region="Midwest"

In this example, the Field Name is Customer, the operator is = and the Data Value is BIG MART.

2-1-2: Example 2

Your source data lists all employees, their departments, and start dates. You want to know how many people started in the Marketing and Sales departments in the year of 1999. You can build a filter expression that tells the DME to look at dates in 1999 and employees in the Sales or Marketing departments.

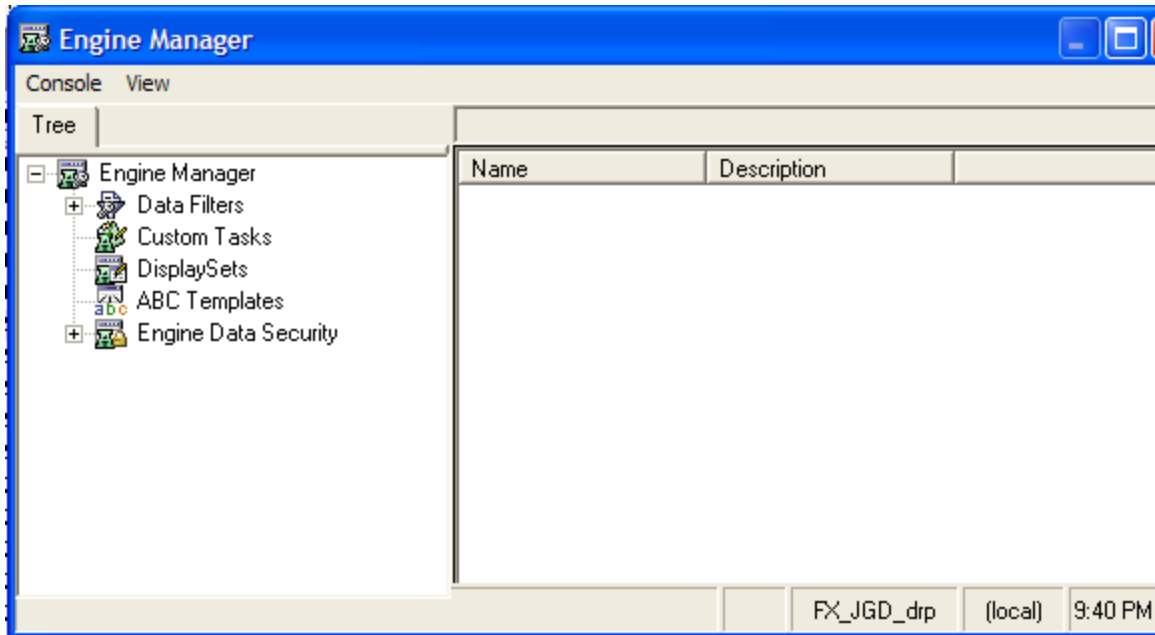
This filter expression would look like this:

Start Date >= '%1/1/99%' AND Start Date <= '%12/31/ 1999%' AND (Dept = Sales OR Dept = Market)

2-2: Create a Filter

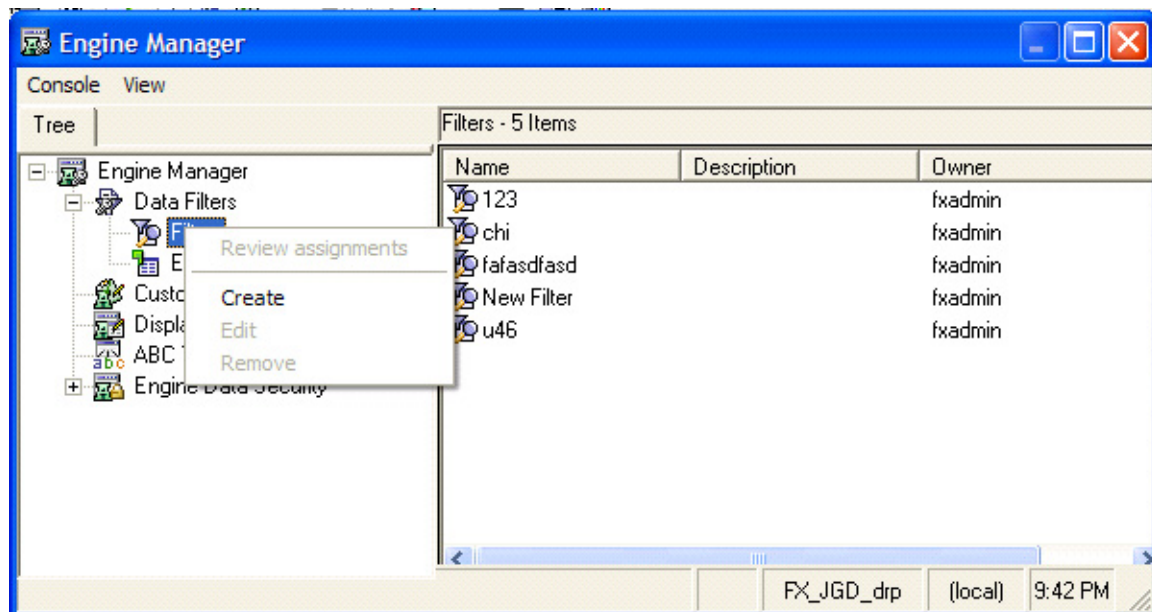
1. Select **Applications > Engine Manager** from the Viewer window with an open Scenario.

The Engine Manager window displays.



2. Click Data Filters to expand the list.

3. Right-click on the Filters resource and select Create.



The Filtering Wizard displays.

The screenshot shows the 'Filtering Wizard' dialog box. It has a blue title bar with a wizard icon and standard window controls. The main area is divided into several sections:

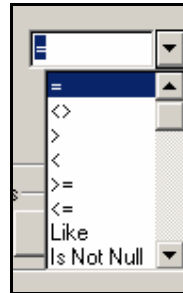
- Expression Builder:** Contains a 'Field List' dropdown menu with 'BaseTarget' selected, an equals sign operator dropdown, and a 'Values' dropdown menu. Below these is a 'Field Type' label showing 'String'. To the right are 'Show Values' and 'Add Expression' buttons.
- Logic Operators and parenthesis:** A section with buttons for 'AND', 'OR', '(', and ')'.
- Filter expression:** A large text area for constructing the filter expression.
- Action Buttons:** A row of four buttons: 'Show Results', 'Parse Expression', 'Clear Filter', and 'Count'.
- Footer:** Two buttons at the bottom: 'Save and Close' and 'Cancel'.

When you check the Apply Filter to All Scenarios checkbox, the option pulls data from all Scenarios that the user can access.

4. Select the name of the field from the Field List drop-down list for the first part of the expression.

Note: *The values available depend on the data source loaded by the Base Unit.*

5. Click the Operator (unlabeled in the Filtering Wizard window) drop-down list and select the operator. Notice the (=) equal sign in the next field.



The operators are:

- = Equal to
 - <> Not equal to
 - > Greater than
 - < Less than
 - >= Greater than or Equal to
 - <= Less than or Equal to
 - Like
(Means similar)
 - Is not Null
(Contains data)
 - Is Null
(Means nothing)
6. Click the Show Values button.

All the values that coincide with the property selected populate the Values drop-down list.
 7. Locate and select the appropriate value from the Values drop-down list.
 8. Click the Add Expression button.

The filter expression you created appears in the Filter expression textbox.

- 9.** Press the Count button to show how many Series are returned by applying the selected filter to the selected scenario.
- 10.** Click the appropriate AND OR buttons from the Logic Operators and parenthesis section. Use the parentheses where appropriate in the filter expression or when the filter expression requires multiple parameters.
- 11.** Click the Parse Expression button to ensure that the filter expression is valid. If the filter expression is not valid, an error message appears.
- 12.** Click the Show Results button when you are finished building the expression.

The values specified display in the results area of the window.

Filtering Wizard

Expression Builder

Field List: BaseTarget = Values:

Field Type: String

BaseTarget

Show Values Add Expression

Logic Operators and parenthesis

AND OR ()

Filter expression

[BaseTarget] = "

Show Results Parse Expression Clear Filter Count

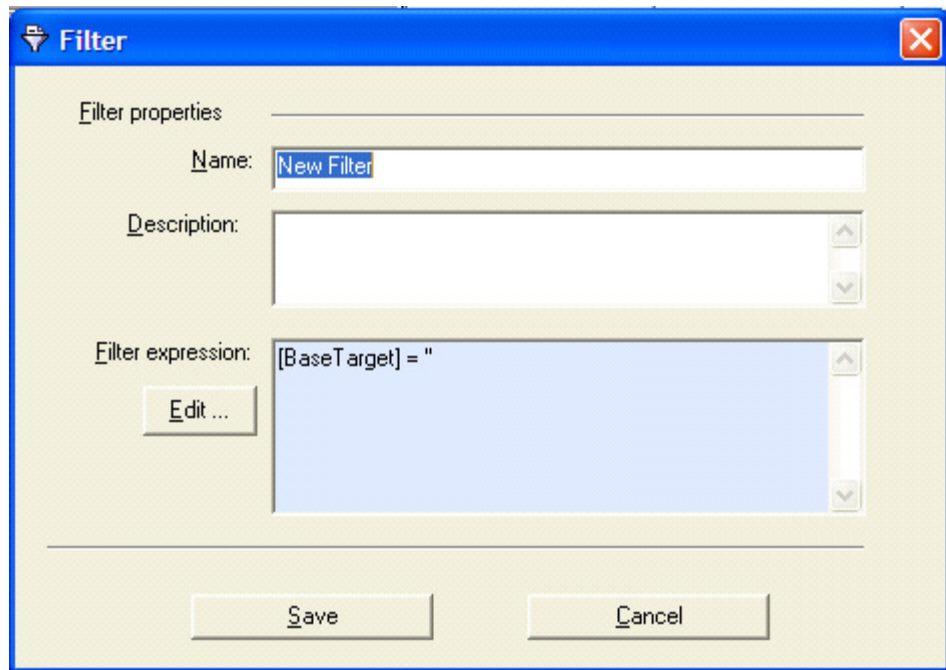
Label	UserField01	UserField02	UserField03	UserField04
[1080] [BIG DEP...				
[1080] [BIG DEP...				
[1080] [DISCOU...				
[1080] [DISCOU...				
[1121] [GARDE...				
[1242] [BIG DEP...				
[1242] [BIG DEP...				
[1352] [BIG DEP...				
[1352] [BIG DEP...				
[1352] [DISCOU...				
[1352] [GARDE...				
[1352] [GARDE...				

Total Records: 24

Save and Close Cancel

13. Click the Save and Close button or edit the results, if necessary.

14. Type a name for the new filter in the Name text box.

The image shows a 'Filter' dialog box with a blue title bar and a close button in the top right. The dialog is divided into sections. The 'Filter properties' section at the top contains a 'Name:' text box with 'New Filter' entered and a 'Description:' text box which is empty. Below these is a 'Filter expression:' text box containing '[BaseTarget] = ' and an 'Edit ...' button to its left. At the bottom of the dialog are 'Save' and 'Cancel' buttons.

15. Type in a description in the Description textbox.

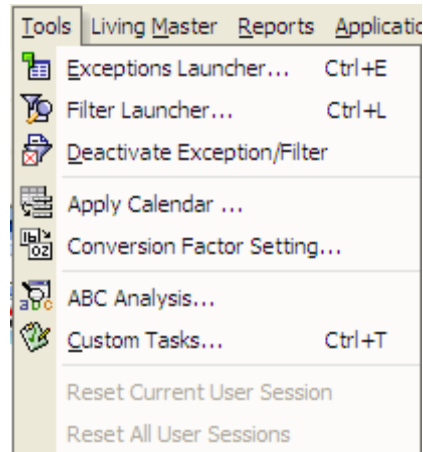
16. Click Save.

A new filter is added.

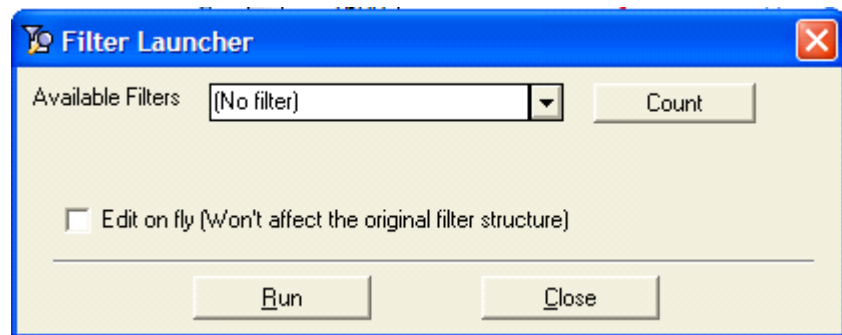
2-3: Launch a Filter

You can use a Filter for any Scenario. The Filter Launcher executes the filter you have chosen by matching the data to the criteria defined in the Expression. After the filter executes, the DME displays the results of the Filter Expression.

1. Select **Tools > Filter Launcher** from the Viewer menu.



The Filter Launcher window displays.

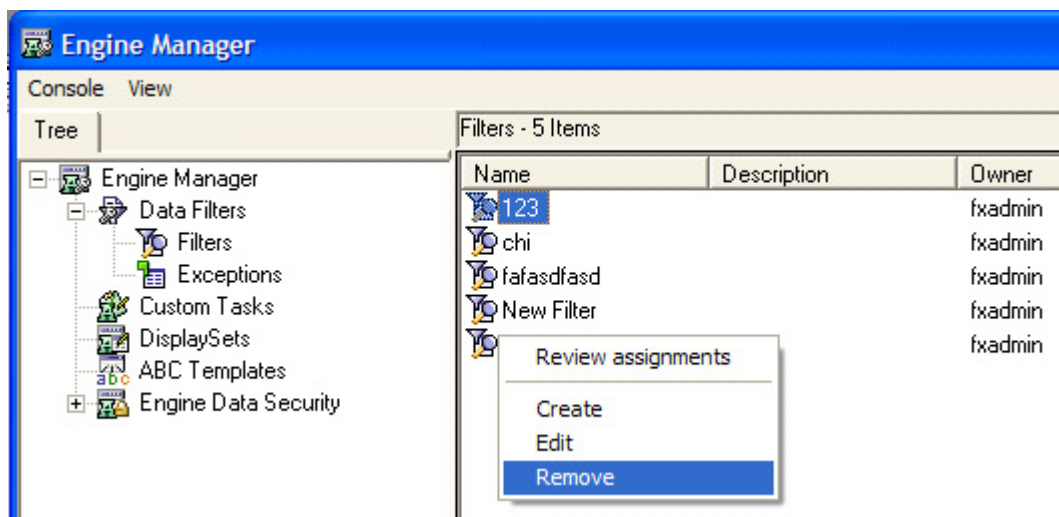


2. Select the filter from the Available Filters drop-down list. The results display in the current open Scenario.
3. Press the Count button to show how many Series are returned by applying the selected filter to the selected scenario.

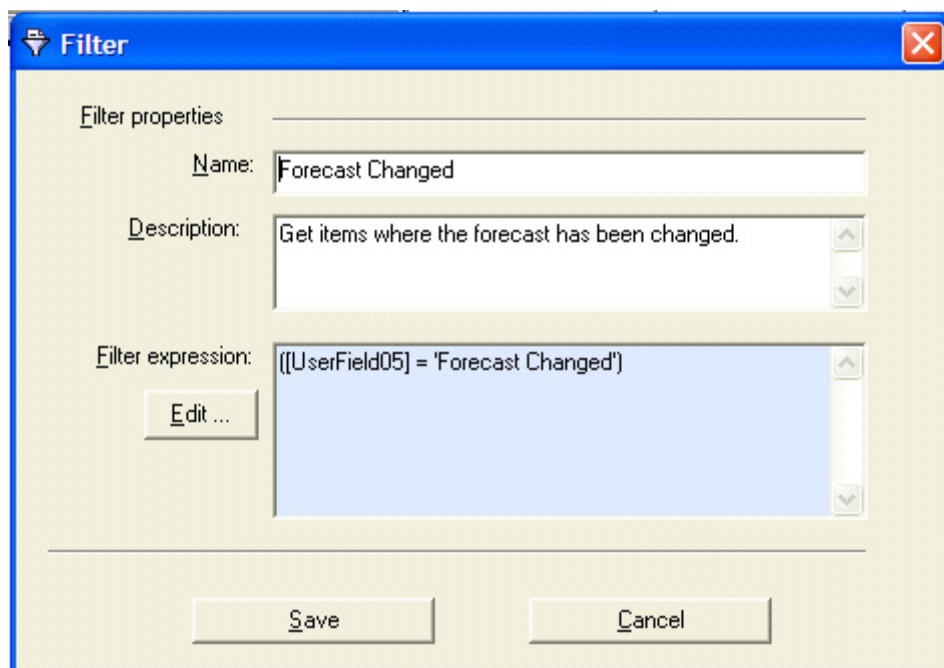
2-4: Edit a Filter

1. Open a Scenario in the Viewer.
2. Select Applications > Engine Manager from the menu.
3. Expand the Filters resource.

4. Right-click the Filters resource and click Edit.



5. Click the Edit button.
6. Make edits to the Filter Expression.



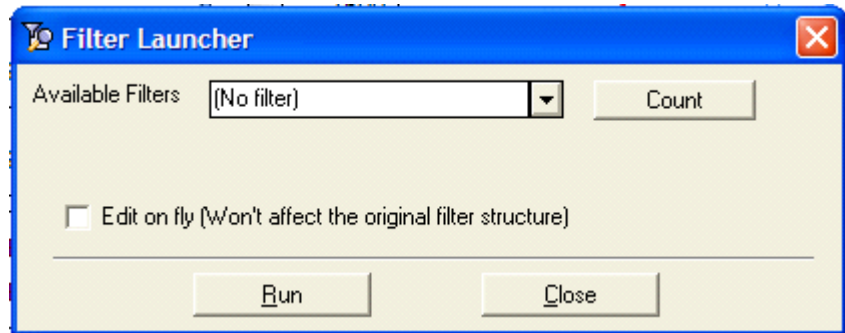
7. Click Parse Expression to make sure the filter expression is valid.
8. Click **Save** to update the filter.

2-5: Edit the Filter on Fly

For quick changes, the Filter Expression can be changed on the fly. A user has the option of editing the filter just before it is run in the Viewer. Use Edit on the Fly for quick changes without modifying the original Filter Expression.

1. From the Viewer, click on Tools > Filter Launcher.

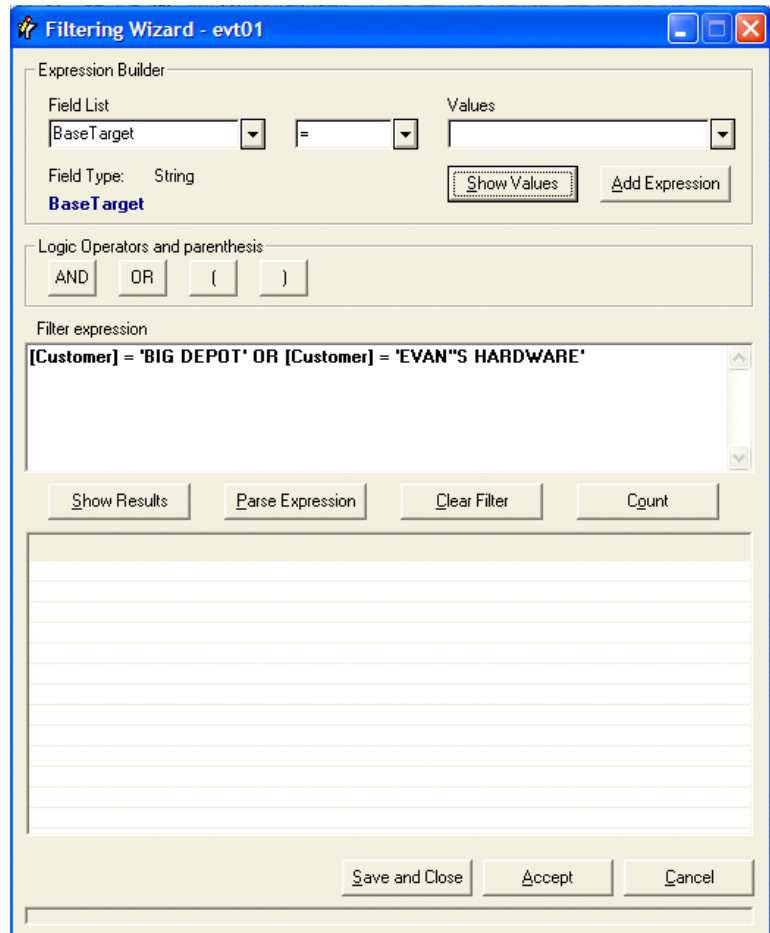
The Filter Launcher dialog box displays.



2. Select the filter from the Available Filters drop-down list.
3. Check the Edit on fly checkbox.
4. Click Run.

Note: *These changes are not saved. The updated Filter Expression is only used for this execution at this point in time. You have to make changes and save them in the original Filter Expression is saved in the Viewer.*

The Filtering Wizard window displays.



5. Modify the filter expression and click Accept.

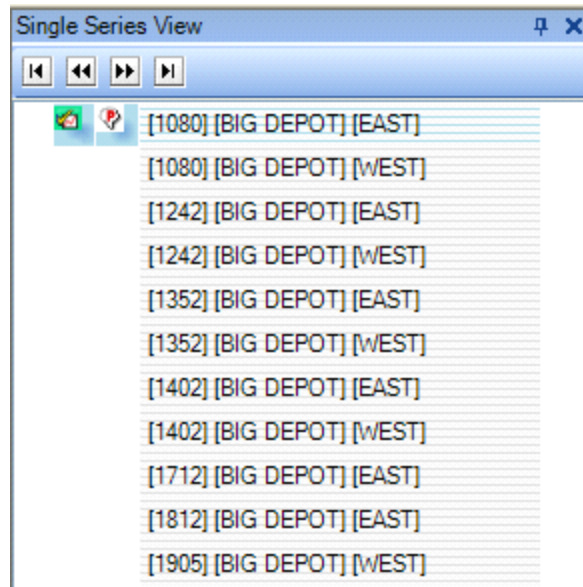
The filter is applied to the Scenario.

Note: *If you did not select Edit on fly and click Run, the filter is executed immediately.*

When the execution is finished, the Viewer displays only the items that match the criteria.

2-5-1: Example

Assume that you have a filter that displays the items only where the customer is BIG DEPOT. The following window displays an example of the filter in the Single Series View window.

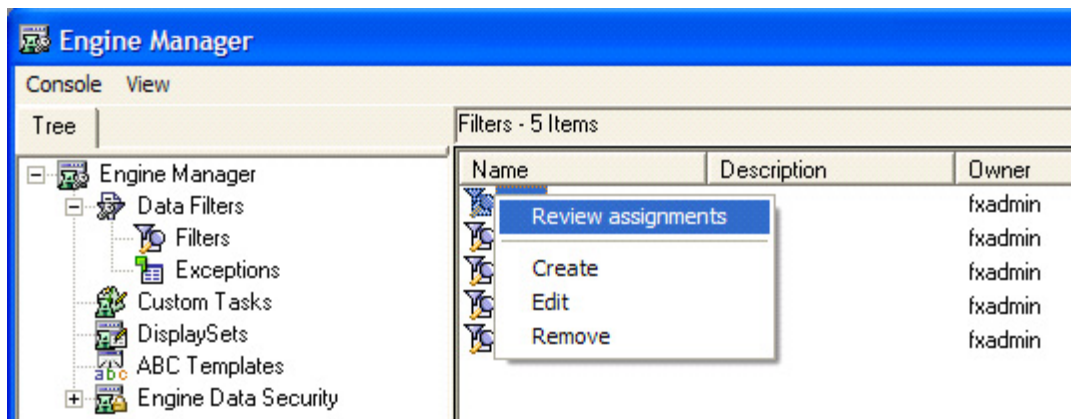


2-6: Share a Filter

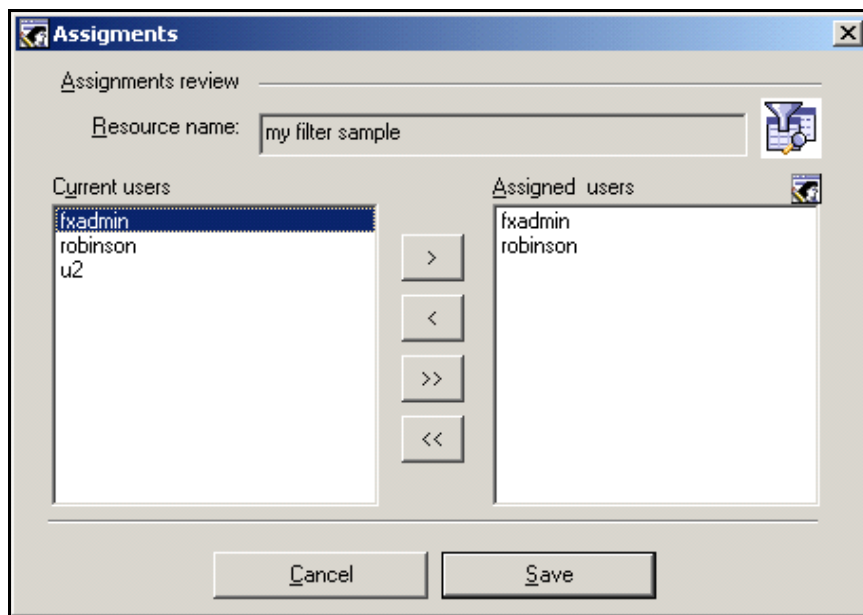
Others may want to use the filter. The System Administrator grants access rights to a user in order to share Scenarios. A user also must have rights to access a previously created filter.

1. Select **Applications > Engine Manager** from the Viewer menu.
2. Click on the "+" icon to expand the **Data Filters** resource.

3. Right-click the **Filters** and select **Review Assignments**.



4. Select the users from the Current users textbox and move them to the Assigned users textbox. This enables other users share the filter.

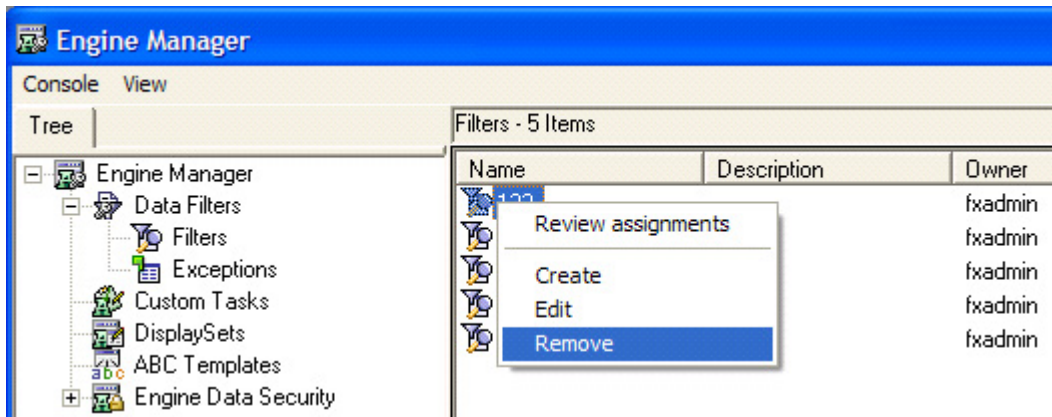


5. Click Save.

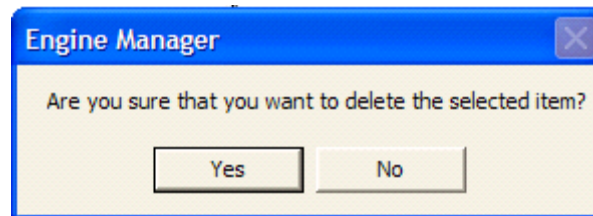
Now the selected users can view and use your filter against their Scenarios.

2-7: Remove a Filter

1. Right-click the Filters resource and select Remove.



The following message displays.



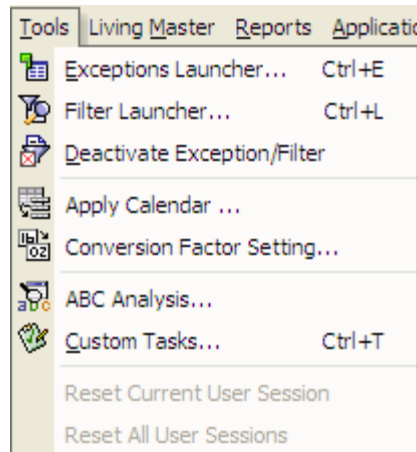
2. Click Yes.

2-8: Deactivate a Filter

A Scenario is only affected by one filter at a time. To apply another filter, the original filter must be deactivated in order to return the Scenario to the original state.

Note: *You can use one filter with many Scenarios. However, a Scenario may only have one filter.*

1. Select **Tools > Deactivate Exception/Filter** from the Viewer toolbar.



2. Click Yes in the window dialog.

Section 3: Exception Management

The term Exception means applying a business rule that filters out items that meet certain criteria.

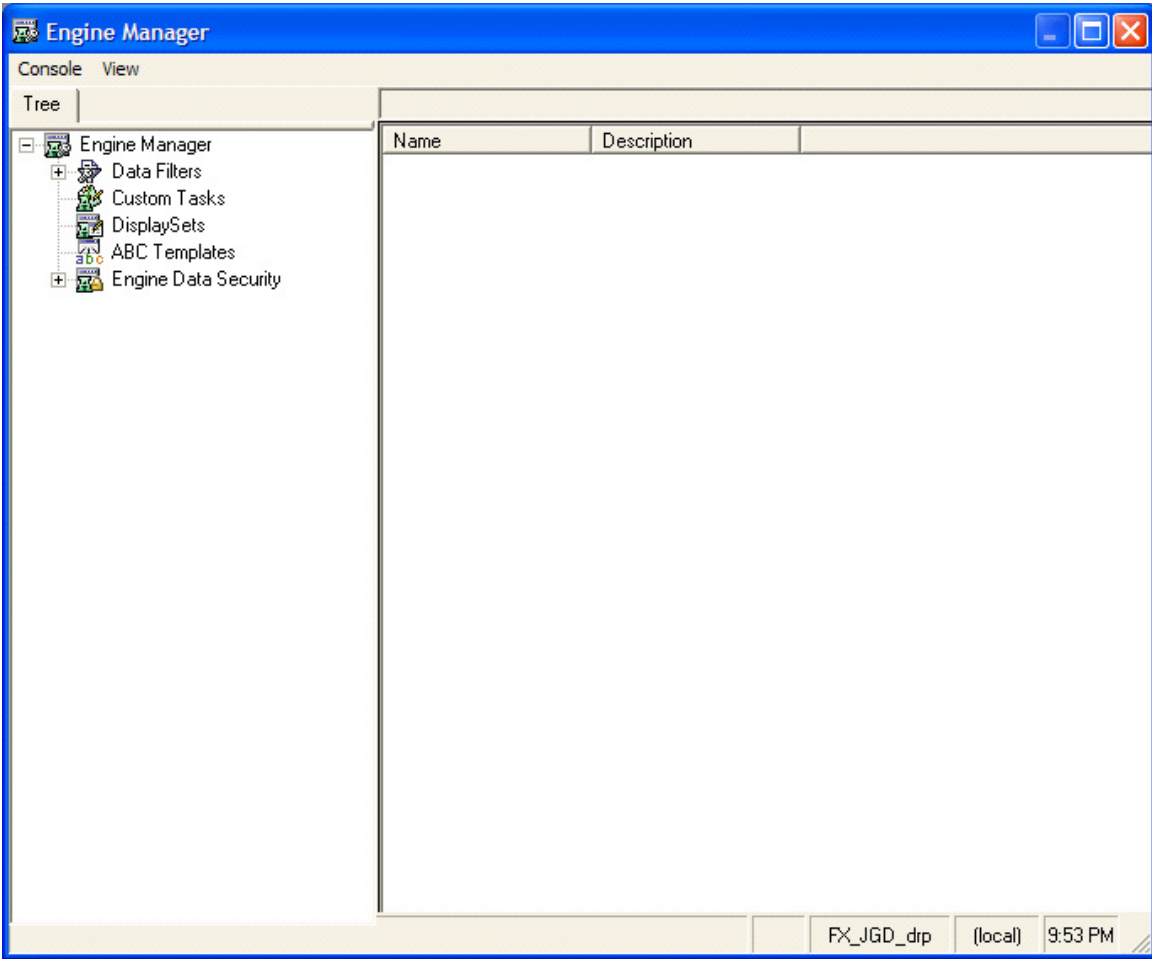
Exceptions capture abnormal items before the data values reach a certain threshold. You must define Exceptions before each forecast cycle. Identifying and removing exceptions enables you to focus your attention on this specific forecast area.

3-1: Create an Exception Template

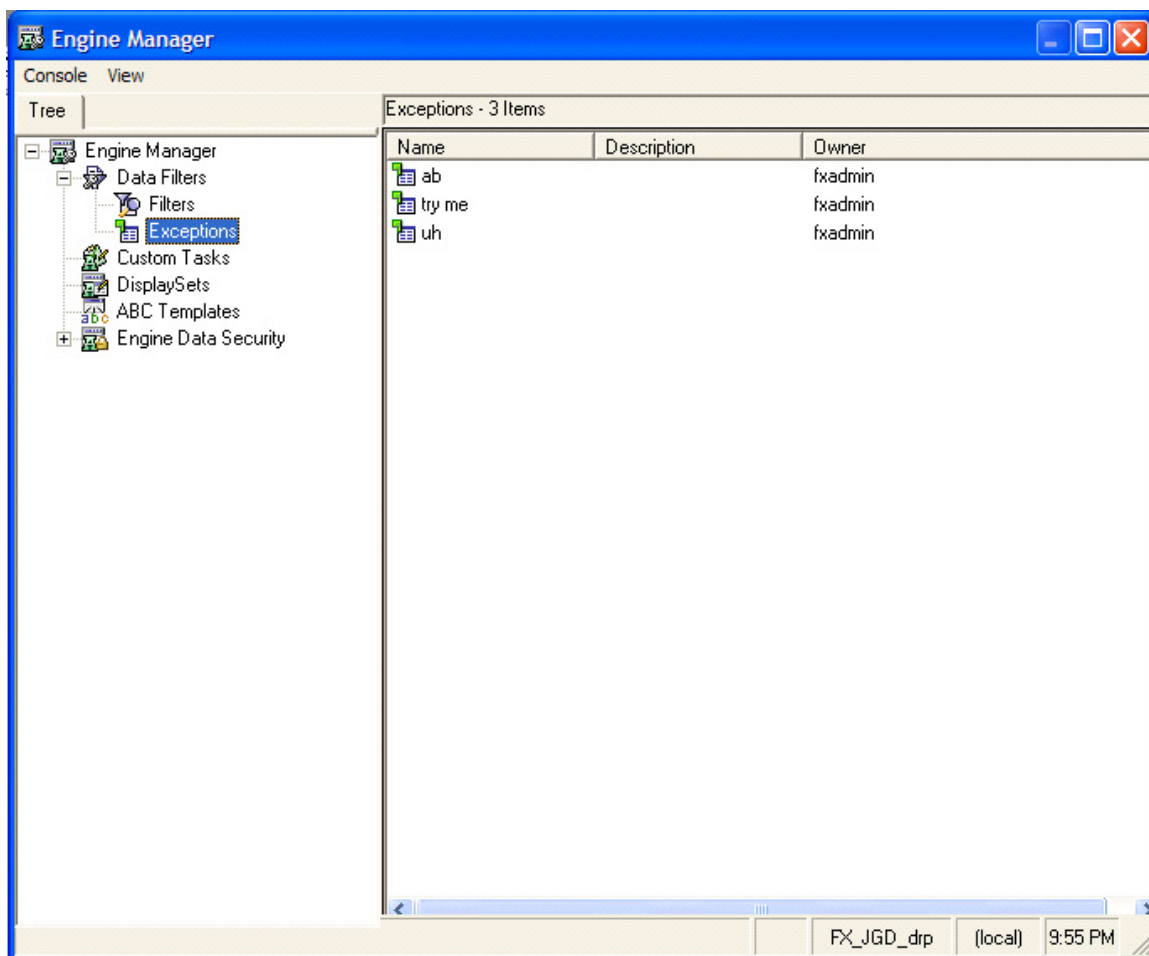
Before processing exceptions, create an exception template.

1. Select **Applications > Engine Manager** from the Viewer menu.

The Engine Manager window displays.



2. Expand the **Data Filters** resource.



3. Right-click Exceptions and select Create.

The Select source Opinion Line window displays.

Select source opinion line

The Exception Wizard will help you to edit/create the exception

Select the opinion to use as base opinion line

ActShipments

Select the date range to be used for the exception test

☒ Dynamic: Date Range ☐ Fixed: Specific dates

The range has 12 historical periods

The range has 12 forecast periods

Cancel < Back Next > Finish

4. Click the “Select the opinion to use as base Opinion Line” from the drop-down list. You can select only one base Opinion Line. This is the data that the Exception calculation compares to the criteria.
5. The Dynamic Date Range option automatically selects the Historical and forecast dates based on the range specified. The example above shows how the window looks with this option selected.

6. The Fixed Date Range option enables you to specify a fixed date range using From- and To- dates..

Select source opinion line

The Exception Wizard will help you to edit/create the exception

Select the opinion to use as base opinion line

ActShipments

Select the date range to be used for the exception test

☐ Dynamic: Date Range ☒ Fixed: Specific dates

From: 2008-01

To: 2008-12

Cancel < Back Next > Finish

7. Click Next.

The following window displays if you selected the “Fixed: specific dates” option

Select the target opinion line

With what do you want to compare?

☐ I want to compare with a specific value

☒ I want to compare with other opinion line

Opinion Line

Act Dmd

Select the period offset for target line

First period in base line

0

From: 1825-02 To: 1825-02

Cancel < Back Next > Finish

There are two ways to do the comparison:

- **Specific Value:** the specific value option compares the values to a specific threshold. Use this option if you want to compare the base opinion against the value in the Actual Value textbox. Compare a specific value to the selected base Opinion Line.

If you chose “I want to compare with a specific value”, the window changes to that of below.

Select the target opinion line

With what do you want to compare?

☒ I want to compare with a specific value

☐ I want to compare with other opinion line

Actual Value

Cancel < Back Next > Finish

Date	Value	Forecast
2001-01	4,543.11	4,543.11
2001-02	1,265.80	1,265.80
2001-03	381.19	381.19
2001-04	545.00	290.30
2001-05	664.00	279.70
2001-06	665.00	406.02
2001-07	4,623.38	4,500.80
2001-08	644.00	799.77
2001-09	444.00	770.83
2001-10	656.00	599.80
2001-11	644.00	
2001-12	786.00	
2002-01	5,464.00	

8. Enter the **Actual Value** in the textbox and click Next.

The Opinion Line option compares one Opinion Line against another Opinion Line. The following window displays when this option is selected. This option allows the user to compare for

example Historical data against forecast data. Compare an Opinion Line against another Opinion Line.

Select the target opinion line

With what do you want to compare?

☐ I want to compare with a specific value

☒ I want to compare with other opinion line

Opinion Line

ActShipments

Select the period offset for target line

First period in base line

0

From: 2008-01 To: 2008-12

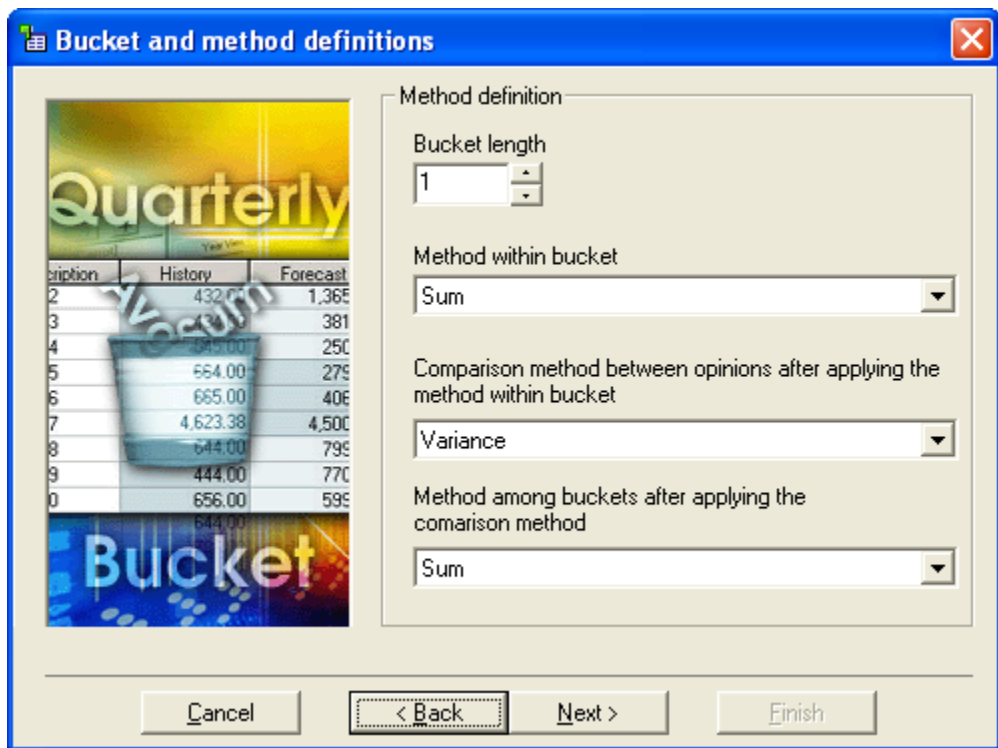
Cancel < Back Next > Finish

9. Select Opinion Line from the drop-down list.

You can adjust the starting period by dragging the sliding bar to the left or right, notice that you cannot change the From and To drop-down list values; these two lists are for information only. If you slide the First period in base line to 3 and compare the Historical data to the forecast data, the time period moves forward 3 periods.

10. Click Next.

The Bucket and method definitions window displays. You can create a filter expression by comparing one of the Comparison Methods to a filter expression.



11. Type in the Bucket length.
12. In the “Method within bucket” and “Method among buckets after applying the comparison method” dropdown, select the method that you would like to use.

A bucket is a logical unit which groups periods together. For example, if the data is monthly, and you specify the bucket length to be 3, you are grouping your data into three quarters and doing a quarter by quarter comparison. There are four aggregate methods for grouping the buckets:

Method	Description
Sum	Add the values
Average	Average of the values

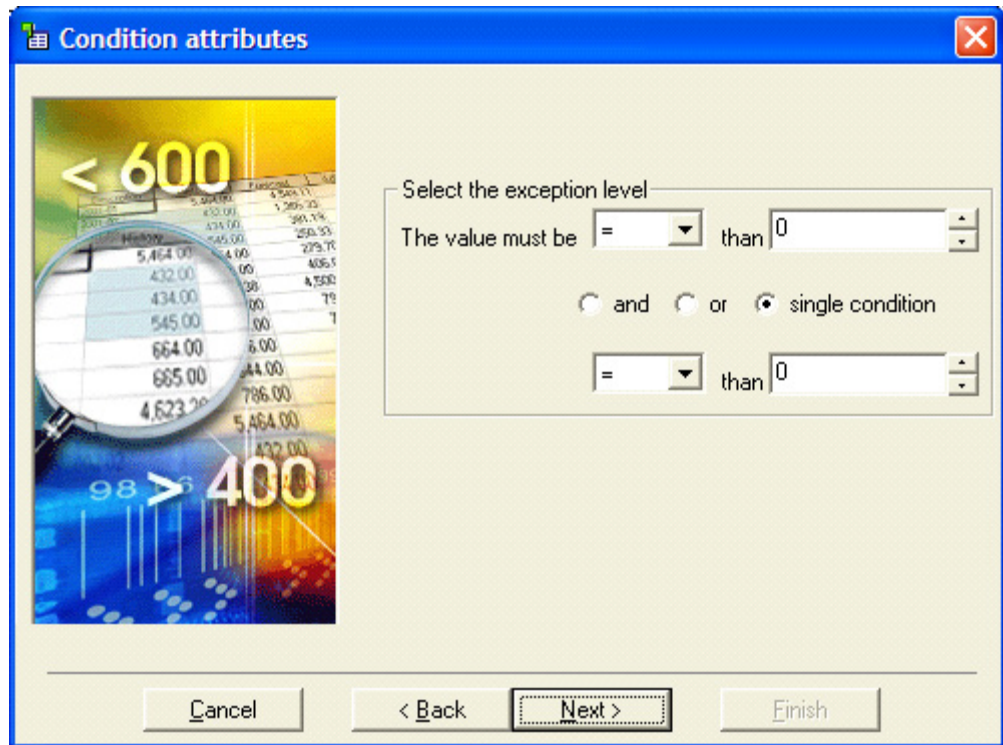
Method	Description
Min	Minimum value
Max	Maximum value

- 13.** From the “Comparison method between opinions after applying the method within bucket” dropdown, select one of the following methods. There are four different comparison methods available:

Comparison Method	Definition
Variance Absolute %	The difference between the values and the thresholds or another Opinion Line. That difference may be positive or negative.
Absolute Variance	The absolute difference between the values and the thresholds or another Opinion Line. That difference is always positive
% Variance	The percentage of the difference between the values and the threshold or another Opinion Line. The equation is: $(a - b)/b \times 100\%$ Where a is the threshold and b is the value of the base line.
Variance	The absolute percentage of the difference between the values and the threshold or another Opinion Line.

- 14.** Click Next.

The Condition attributes window displays. This window is used to define a Filter Expression in which you can compare the Comparison Method against the expression..



Condition attributes

Select the exception level

The value must be = than 0

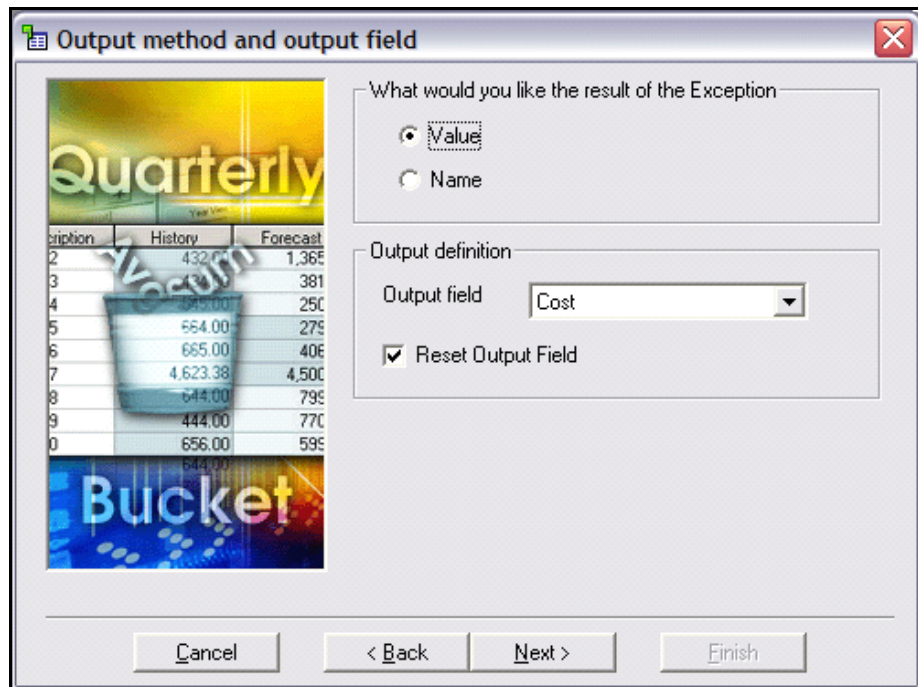
☐ and ☐ or ☒ single condition

= than 0

Cancel < Back Next > Finish

15. Click Next.

The Output method and output field window displays.

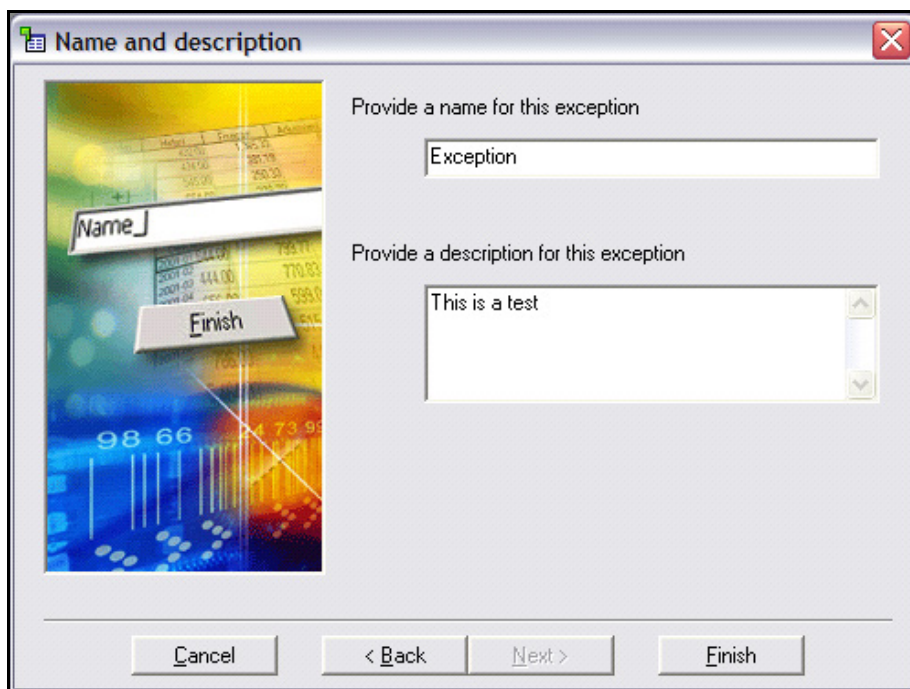


16. Select whether you would like a Value or Name for the Exception's result.

You can store either the exception value or the name of the exception in the Output Field. After processing the exceptions, the DME automatically creates and executes the filter that retrieves the items that fulfill the exception criteria.

17. Check the "Reset Output Field" option to clear your output field when running the exception multiple times.
18. Click Next.

The Name and description window displays.



Name and description

Provide a name for this exception

Exception

Provide a description for this exception

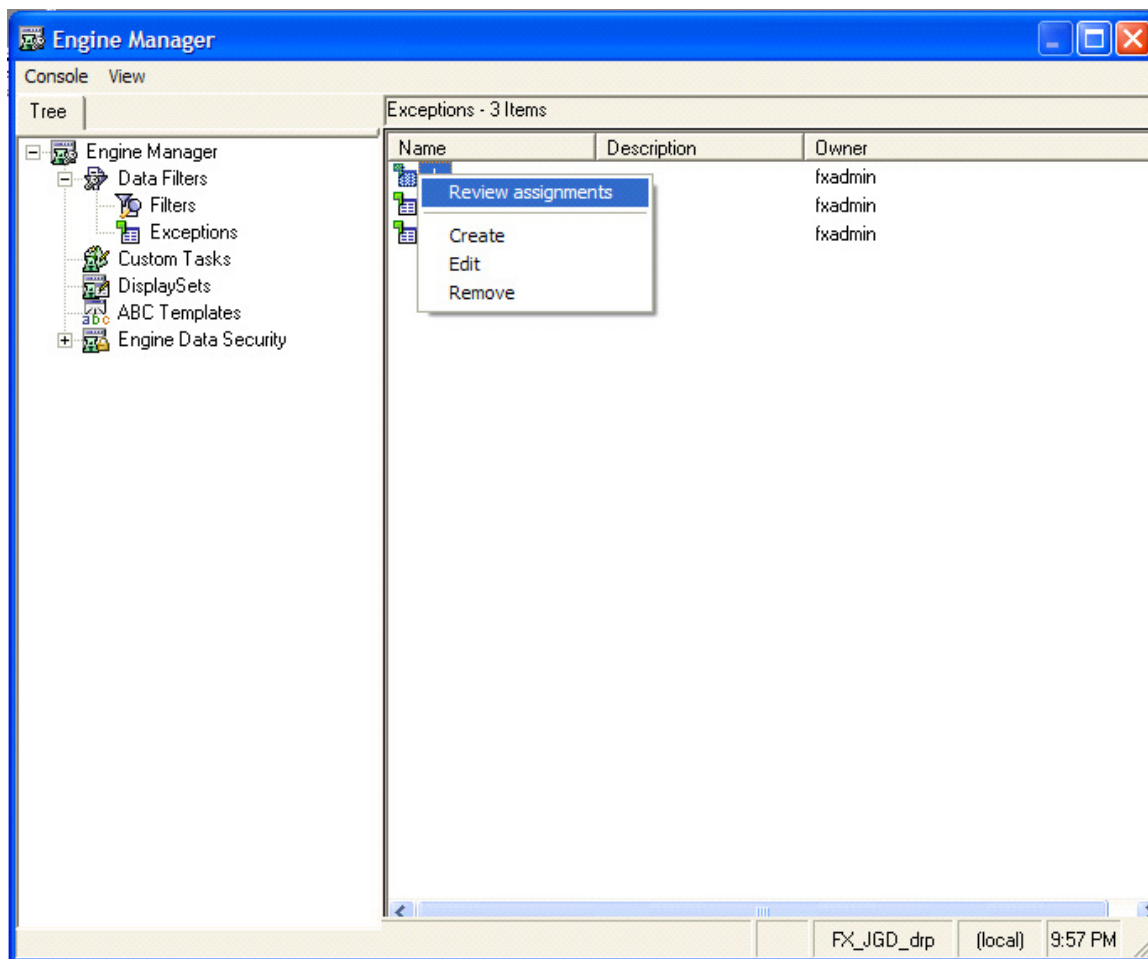
This is a test

Cancel < Back Next > Finish

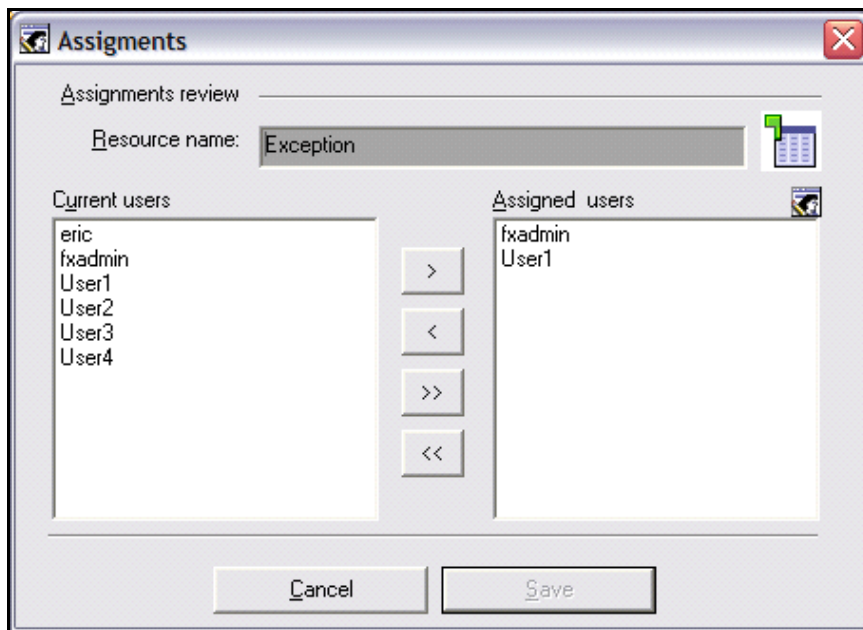
19. Type the name and description (optional) in the appropriate textboxes and click Finish.

3-1-1: Share the Exception

1. Right-click the **Exceptions** resource and select **Review Assignments**.



The Assignments window displays.



2. Select the Current users and click the ► button to move the users to the Assigned users textbox.
3. Click Save.

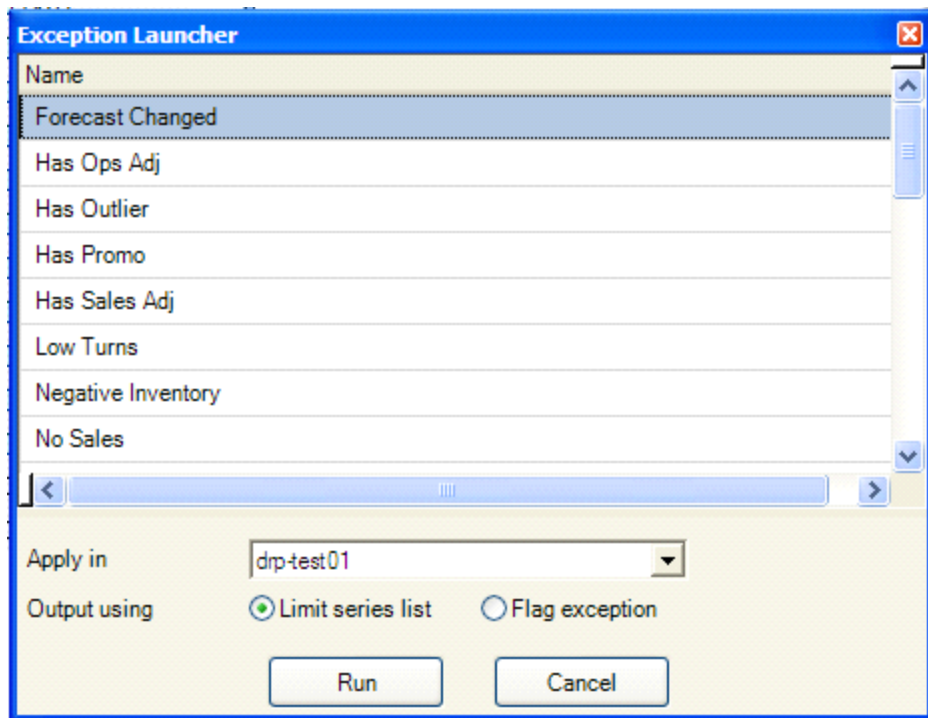
3-1-2: Delete an Exception

Right-click on the Exceptions resource and select Delete.

3-1-3: Process Exception

1. Select **Tools > Exceptions Launcher** from the Viewer menu.

The Exception Launcher window displays..



2. Highlight one of the Exceptions from the list.
3. From the Apply in dropdown list, select the Scenario for the Exception.
4. Select either “Limit series list” or “Flag exception” from the Output using area.
 - Limit Series List - only display the items which meet exception criteria.
 - Flag Exception - display all the items but place a flag on the items which meet exception criteria.
5. Click Run.

The results of the exception calculation in the Series panel and the selected output field display.

Chapter 5 ABC Analysis

This chapter includes:

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Section 2: ABC Template Management	158

Section 1: Overview

ABC Analysis enables you to group a set of data into buckets based on the value of the Forecasted items. After the items are tagged and coded, you can filter on the items to focus on those that have the largest impact on the business. The following diagram depicts the methodology for ABC coding items based on Forecast error.

Date	Shirts		Pants		Shoes	
	Actual	Forecast	Actual	Forecast	Actual	Forecast
2003-01	40	44	51	49	1,743	1,764
2003-02	60	62	91	89	1,863	1,868
2003-03	20	21	39	39	1,394	1,447
2003-04	10	10	10	10	14	14
2003-05	10	11	17	16	65	67
2003-06	40	42	64	58	3,695	3,849
2003-07	50	54	69	68	390	396
2003-08	70	75	94	89	1,859	1,884
2003-09	80	95	96	87	6,721	6,752
2003-10	80	84	115	104	1,531	1,552
2003-11	120	127	124	115	2,907	2,960
2003-12	50	59	78	78	6,065	6,085
Total	630	684	849	802	28,247	28,639
Error		(54)		47		(391)
Abs Pct Error		8.53%		5.53%		1.39%
Ranking On Error		B		C		A
Ranking On Abs Pct Error		A		B		C

As depicted in this example, the method by which the ABC Analysis assigns its values impacts the items that would receive the largest amount of review.

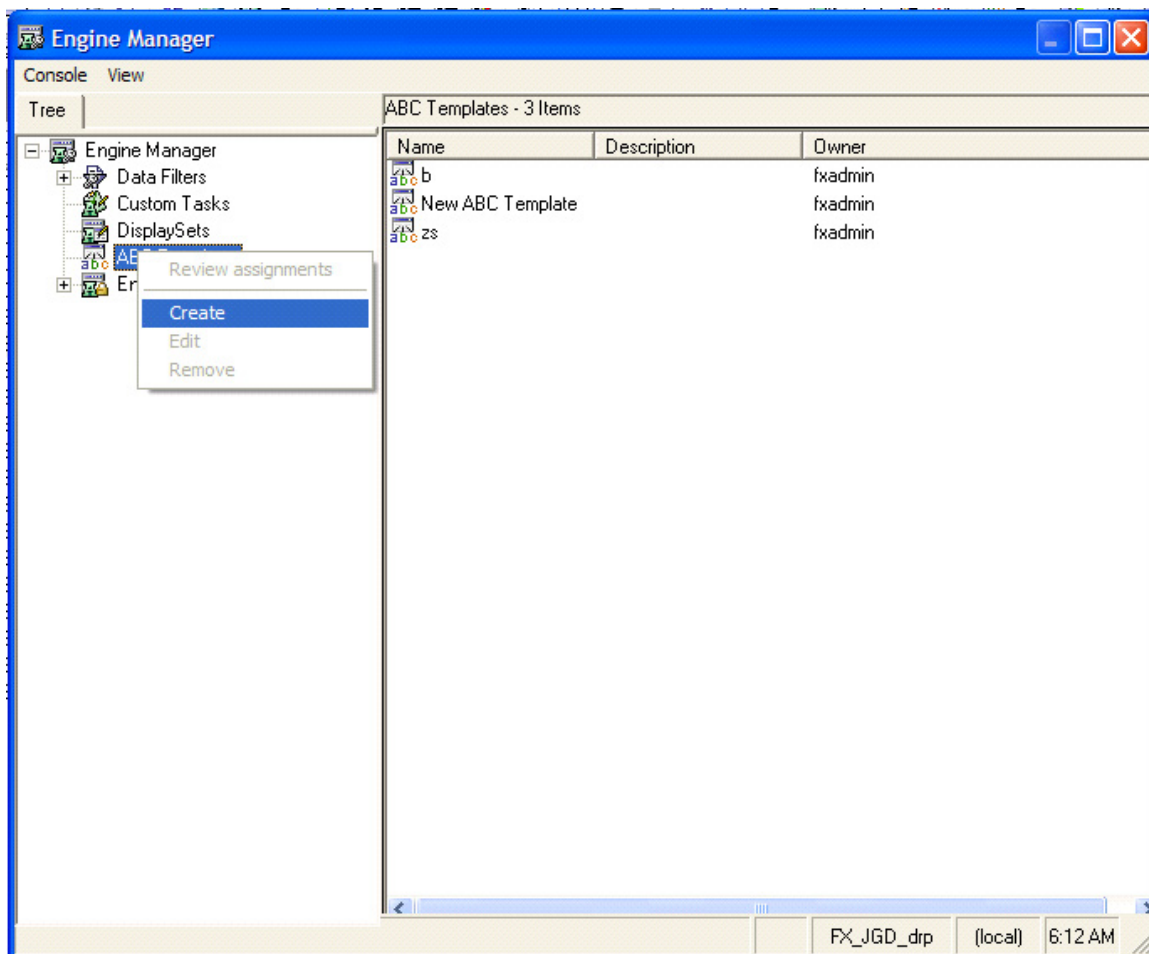
You can view the categorized data by total value and percentage of the total value over a specified time. For example, the items can be categorized as the top percentage of products or A-items, the second percentage of items or B-items, the third percentage of items or C-items, or the bottom-dollar percentage.

The result of the ABC calculation is a field populated with the appropriate ranking; the user may create a filter in order to focus on a particular group of ranked products that require the most attention.

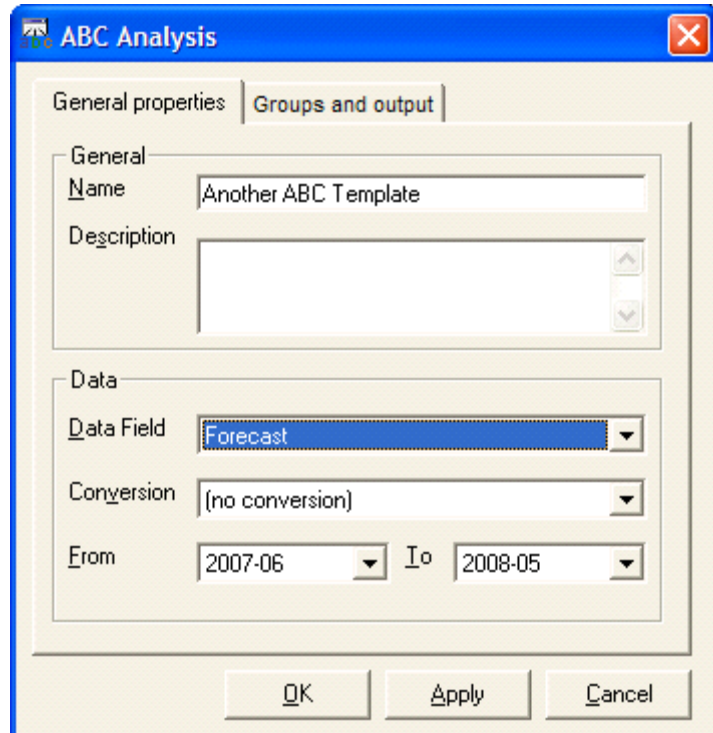
Section 2: ABC Template Management

2-1: Create an ABC Template

1. Select **Applications > Engine Manager** from the Viewer menu.



2. Right-click the **ABC Templates** resource and select **Create**.



The screenshot shows a dialog box titled "ABC Analysis" with a blue header bar and a red close button. It has two tabs: "General properties" and "Groups and output". The "Groups and output" tab is selected. Inside the dialog, there are two main sections: "General" and "Data". The "General" section contains a "Name" text box with the value "Another ABC Template" and a "Description" text box. The "Data" section contains a "Data Field" drop-down menu with "Forecast" selected, a "Conversion" drop-down menu with "(no conversion)" selected, and two date drop-down menus labeled "From" (with "2007-06" selected) and "To" (with "2008-05" selected). At the bottom of the dialog are three buttons: "OK", "Apply", and "Cancel".

3. Type a **Name** and **Description** in the respective textboxes. The description is optional.
4. Select the data field from the **Data Field** drop-down list. This field is the basis of the ABC calculation.
5. Select a conversion (or no conversion) from the **Conversion** drop-down list. If conversion factors are loaded (i.e., price, units, tons, pallets or others), select the appropriate Opinion Line.

Note: *If you select a conversion factor other than (no conversion), the ABC template uses the value (Data Field * Conversion) to do the ABC calculation instead of the value in Data Field.*

6. Select the **from- and to-date** from the respective drop-down lists for the time horizon.

2-1-1: Groups and Output

1. From ABC Analysis, click the **Groups and output** tab.

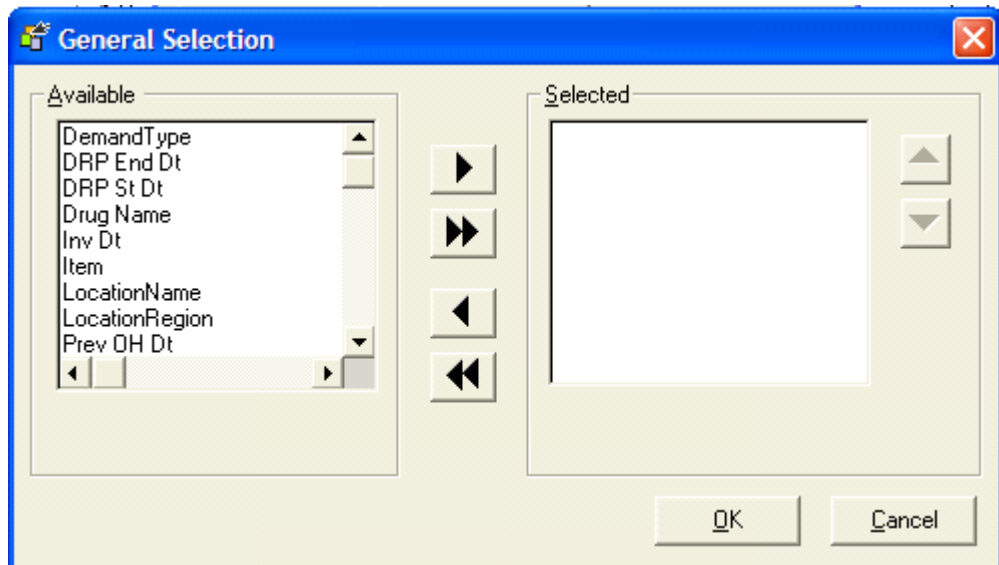
The screenshot shows the 'ABC Analysis' dialog box with the 'Groups and output' tab selected. The 'Group By' section contains a list box with 'UserField1' and 'UserField2'. To the right is a table with three rows and three columns: 'Rank', 'ABC Desc', and 'Perc.'. The first row has values '1', 'A', and '70'. The second row has '2', 'B', and '20'. The third row has '3', 'C', and '10'. Below the table are 'Add' and 'Delete' buttons. Below the 'Group By' list box is a 'Change' button. The 'Output' section has an 'Output Field' dropdown menu set to 'Rank'. At the bottom are 'OK', 'Apply', and 'Cancel' buttons.

	ABC Desc	Perc.
1	A	70
2	B	20
3	C	10

The Output Field text box stores the result of the calculation.

The fields specified in the Group By Fields textbox determine what level for the items or what Opinion Line the analysis uses.

- Click the **Change** button to select grouping fields.



- Select the fields from the **Available** textbox and click ► to move them to the **Selected** textbox for a group and click **OK**.

The DME uses these fields as a group, and uses each group as a unit in the analysis. All the series belonging to the same group will have the same ABC analysis category. For example, if the fields selected in the Group By textbox are Region and Customer, each Region-Customer combination is given a ranking.

- Click the **Add** button.

Another line is added to a new group and percentage.

- Enter the **group letter** or **name** in the **ABC Desc** textbox.
- Enter a percentage for the group in the **Perc** textbox.

Note: *Modify the ABC descriptions and percentages to anything you require.*

- Place the cursor **on one of the category lines** and click the **Delete** button.

Note: *Whatever description you select for the categories, line 1 corresponds to the top percentage category, line 2 corresponds to the*

second percentage category to the end of the defined categories. The sum of all the percentages must be 100. Also make sure there are no blank or undefined lines for the ABC Desc and Perc rows.

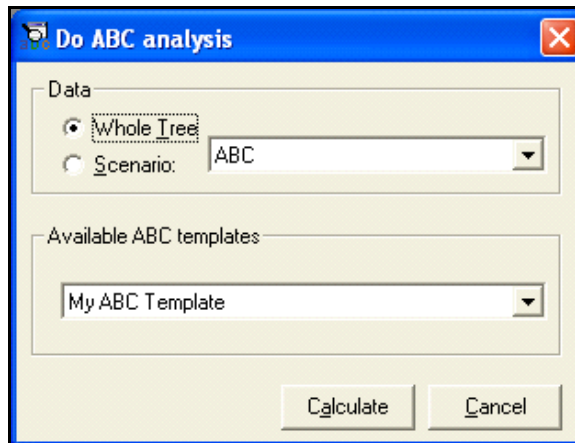
8. Select the **output parameter** from the **Output Field** drop-down list.

If you select Rank, the ABC description can only be one character in length.

9. Click **OK** and close the DME.

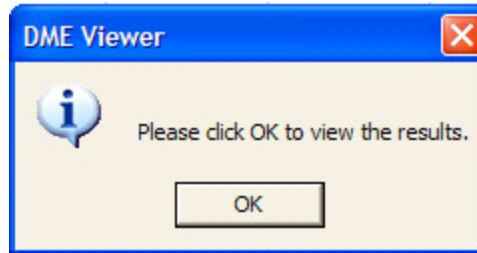
2-2: Run ABC Template

1. Select **Tools > ABC Analysis...** from the Viewer menu.



2. Select the **Whole Tree** option if you want to do the ABC analysis on all the Scenarios (levels) of the applied hierarchy tree. This option is disabled if there is not hierarchy applied to current Scenario. or if the Scenario has a On-Fly hierarchy applied.
3. Select the **Scenario** option and select the name of the **Scenario** from the drop-down list if you want to do the ABC analysis on one Scenario in the hierarchy tree.
4. Select the **ABC template** from the **Available ABC templates** drop-down list and click **Calculate**.

When the ABC analysis finishes, the following message displays.

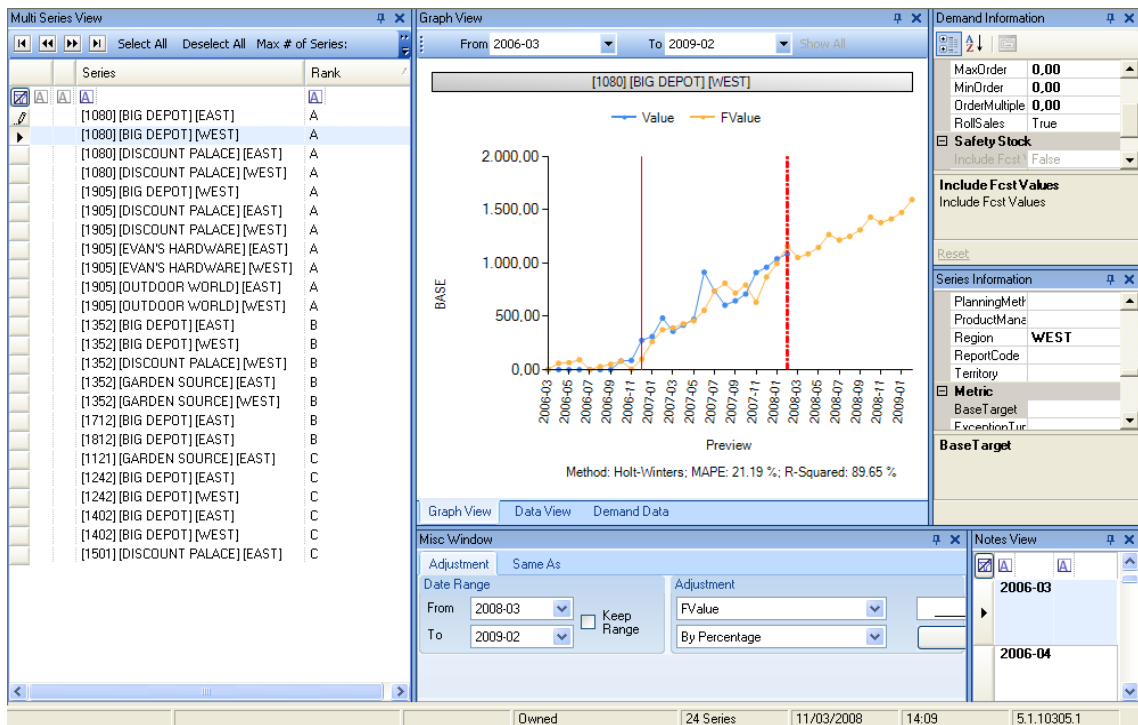


5. Click **OK**.

Note: *When an ABC analysis is ran, the current Data Permissions and applied filters are taken into consideration.*

2-3: Analyze the Results

1. Click the **View --> Multi Series View** menu option.
2. Right click on any series and click **Customize View**.
3. Move the Rank column to the selected list and select ok. Now you can sort your series by the Rank column to see which are your most significant items.

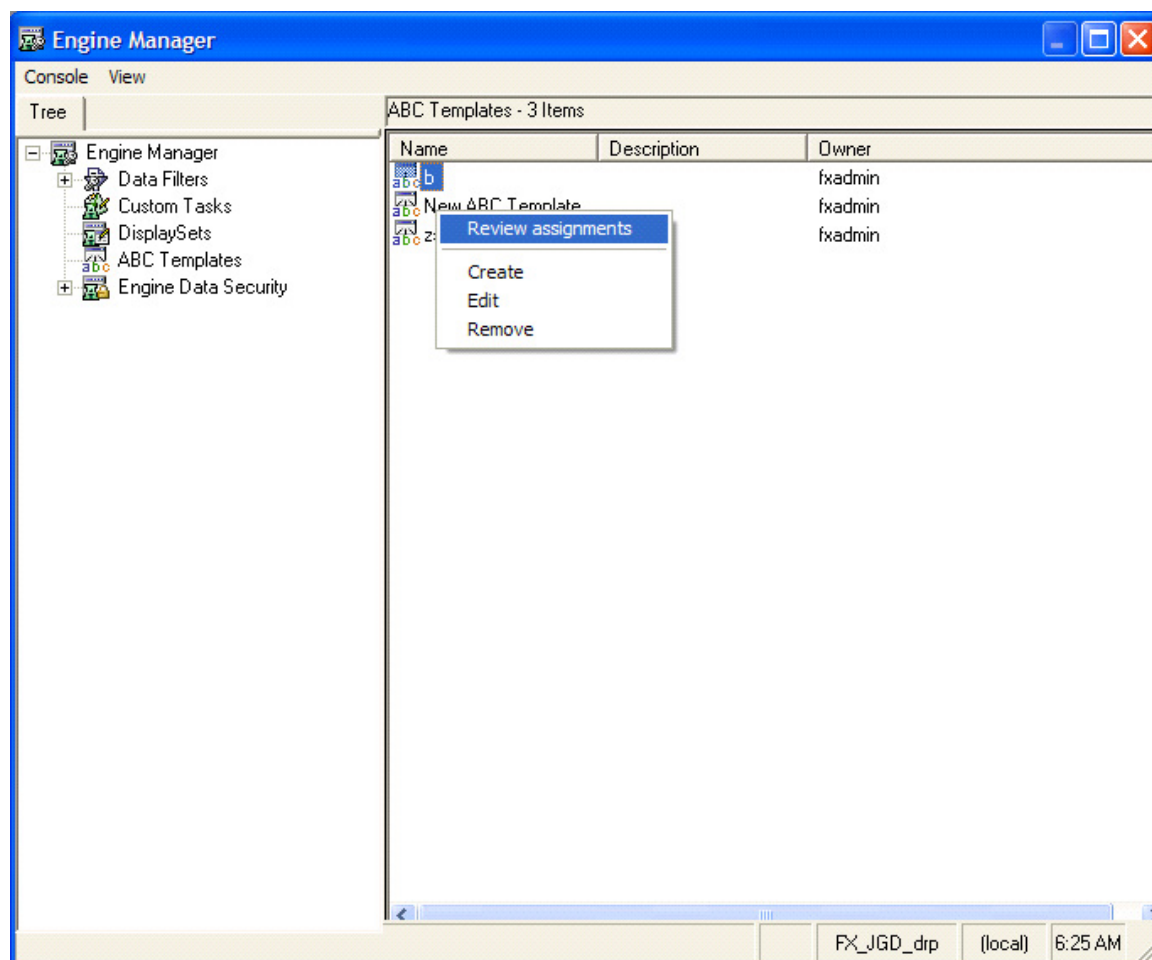


2-4: Share an ABC Template

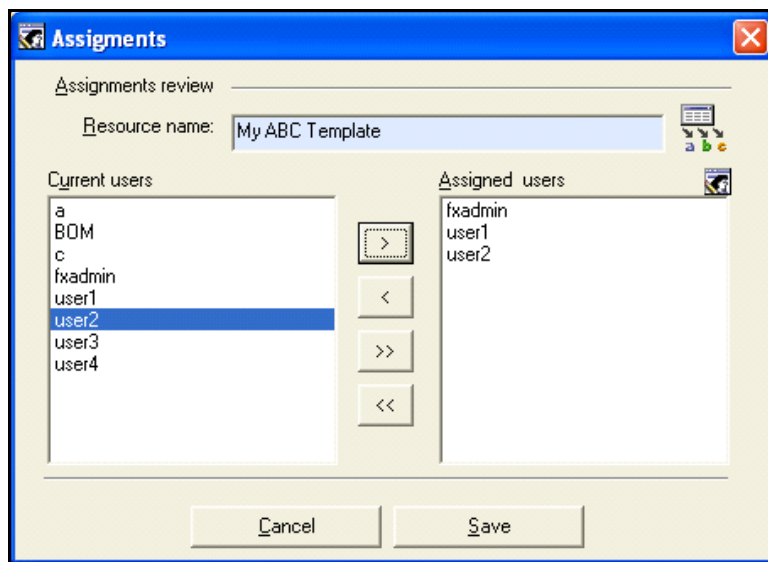
After a template is created, you can share it with others, so each user can apply a similar ranking to their own data.

1. Select **Applications > Engine Manager** from the View menu.
2. Select the **template** from the **ABC Templates** list that you want to share.

3. Right-click on the **template** and select **Review assignments**.



The Assignments window displays.



4. Select the users from the **Current users** textbox and click ► button to move the users to the **Assigned users** textbox and click **Save**.

Chapter 6 Using the Event Manager

This chapter includes:

Section 1: Overview	167
Section 2: Event Management	170

Section 1: Overview

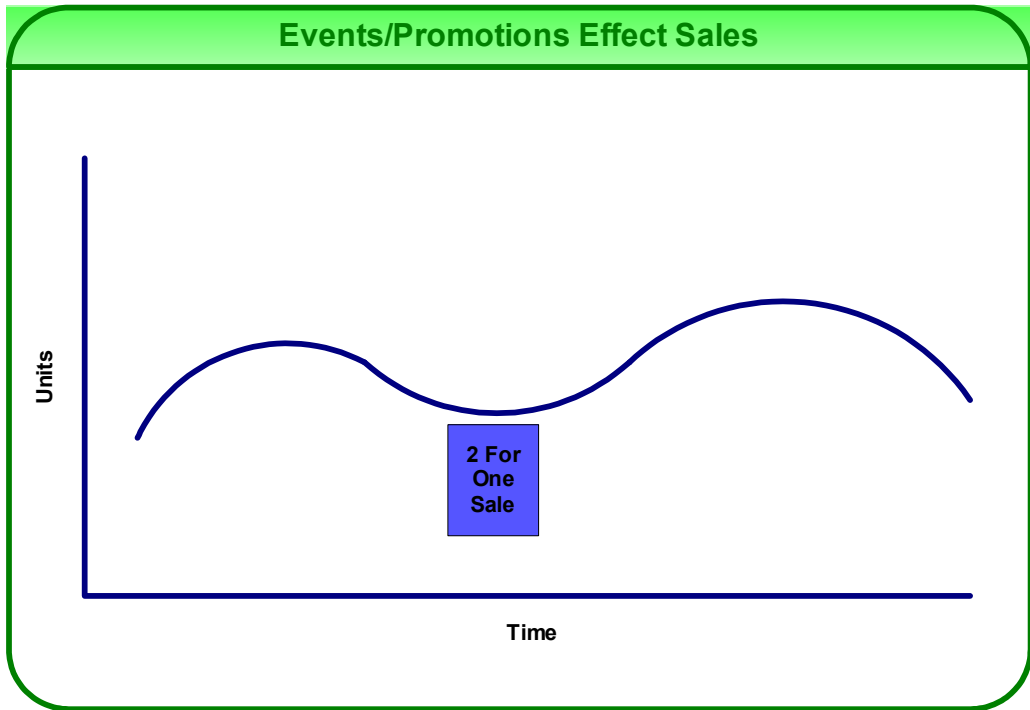
Events are special situations or actions that can change forecasting behavior. An event may be applied to any series. And a series may be applied to any number of events at the same time.

It is important to track Assumptions made during the forecasting process. The Event Manager can track Assumptions made and applied to the Forecast, so that each time the forecast is run, the same assumptions can be tracked. Events are first defined and then applied to the forecast. Each record is flagged and noted with the appropriate event.

The Event Manager enables users to apply their business knowledge concerning the impact of outside events on the Forecast data. By using the Event Manager, you can define, track and publish outside events.

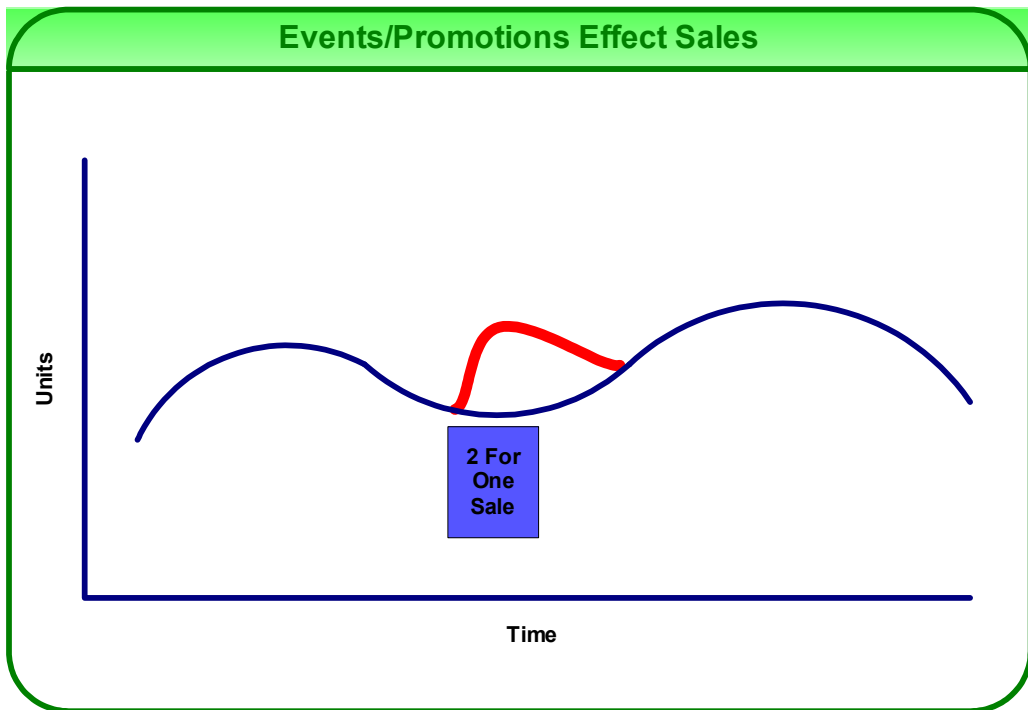
The following figure depicts the Forecast prior to the event is applied. This is a typical situation where a Promotion is run during a time where there are slow sales. The Event Manager enables you to

document the assumptions and the effect of the promotion on the forecast.



In both of these figures that event has directly changed the calculated forecast. Once the location and timing of the event is placed, then the details of the event must be worked out to quantify the effect and the duration. The Event Manager enables this to take place. When the event is put in place the adjustment to the forecast can be noted and tracked.

The following figure depicts the effect of the 2-For-One sale on the Forecast.



By tracking and managing the promotion, the Forecasting process begins to track the assumptions and impacts of marketing and business factors to the forecast.

Before moving on, some basic terminology requires definition.

Term	Description
Lift	The absolute percentage that represents the change between the Fvalue before and after applying the event. This value can also be an amount.
Promotion	A particular set of events that one uses to increase sales over the current sales.
Forecast Layers	The effect of several events.

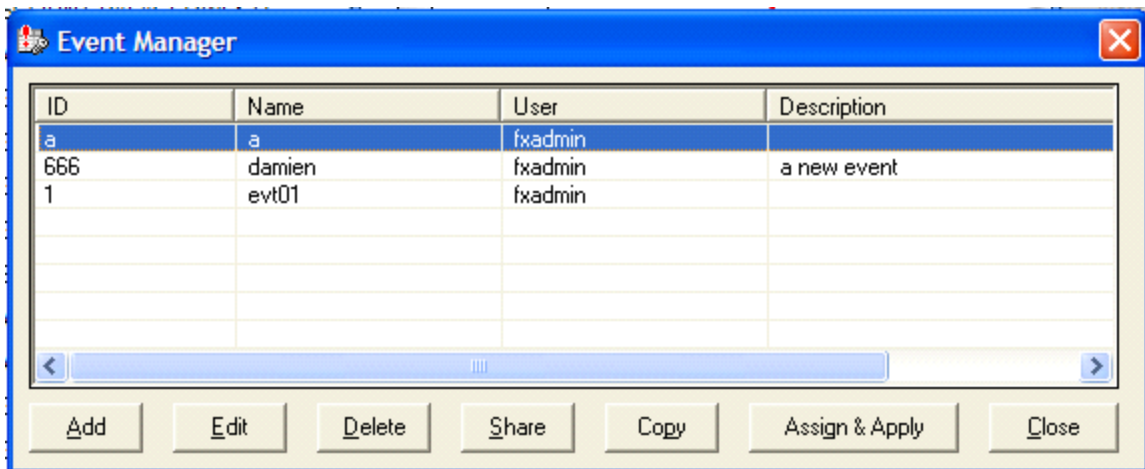
Section 2: Event Management

The Event Manager, a component of the DME is the primary function for defining and launching forecasts with events. Using the Event Manager, you can create, remove, display, copy and edit events.

Events are assigned to series. Only the owner whom creates the event can delete or update it.

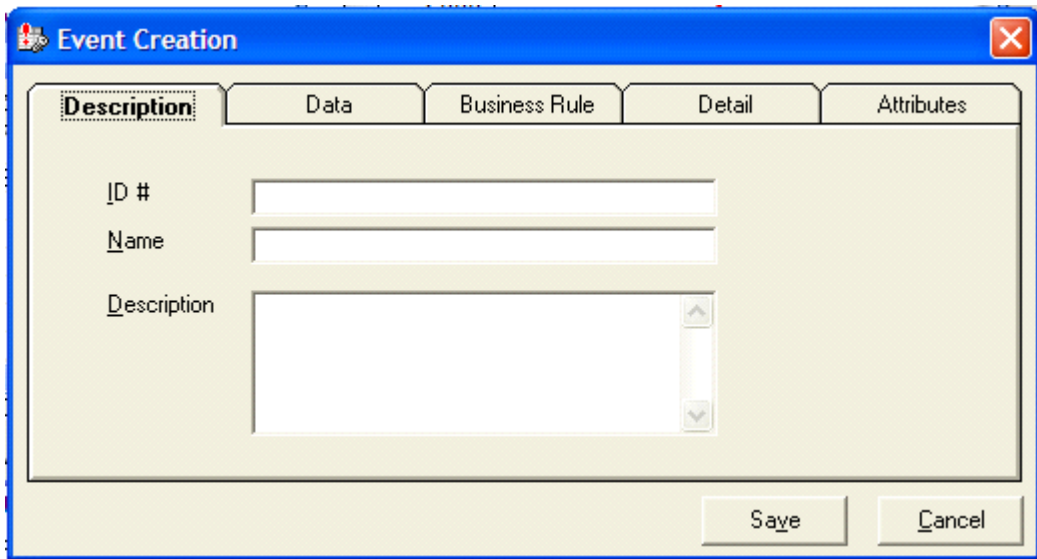
1. Select **Forecast > Event Manager** from the Viewer menu.

The Event Manager window displays.



2. Click the **Add** button.

The Event Creation window displays.



3. Enter the **ID#**, **name** and **description** in the appropriate textboxes and click **Save**. The **ID#** is optional.

The Event Manager window displays.

Note: *The user sets the ID#, name and description of the event. The name must be unique for all the events created by this user. The name is a required field. The ID# is used for customer reference when there is more than one event assigned to a series. The order of the ID# specifies the order of how events are applied.*

4. Select the **Event** from the Event Manager list and click **Edit**.

5. Click the **Data** tab.

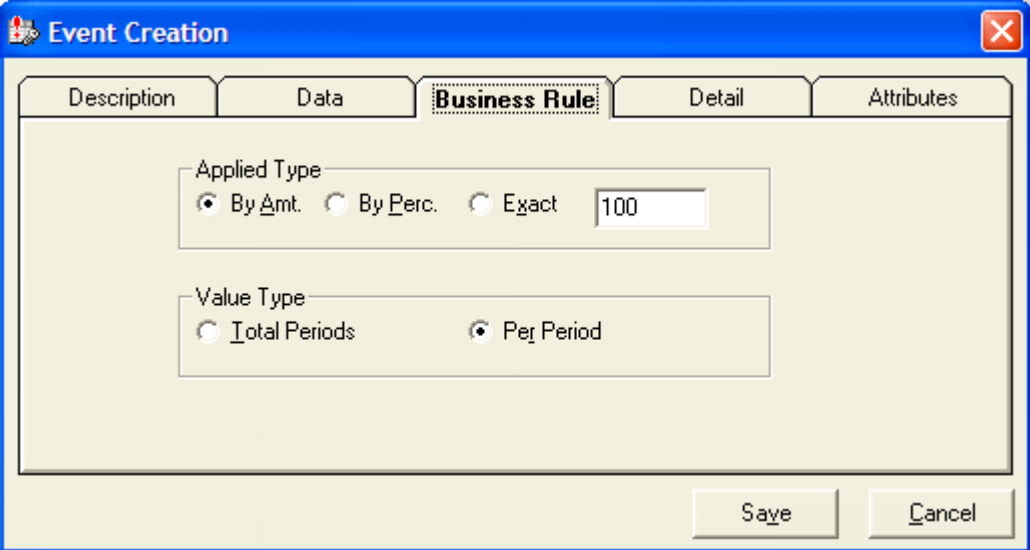
The screenshot shows the 'Event Creation' dialog box with the 'Data' tab selected. The dialog has five tabs: Description, Data, Business Rule, Detail, and Attributes. The 'Data' tab contains the following fields and controls:

- Start Period:** A dropdown menu showing '2005-01'.
- End Period:** A dropdown menu showing '2008-12'.
- Ref. Dates:** Two empty text boxes.
- Table:** A table with two columns: 'Base Line' and 'Result Line'. The first row contains the value '1' in the first column, 'Act Fcst' in the 'Base Line' column, and 'Act Fcst' in the 'Result Line' column. Below this row is a greyed-out area for additional entries.
- Buttons:** 'Add' and 'Remove' buttons are located to the right of the table.
- Bottom Buttons:** 'Save' and 'Cancel' buttons are at the bottom right of the dialog.

6. Enter a start period in the **Start Period** textbox. This date must include the event date range.
7. Enter an end period in the **End Period** textbox.
8. Enter reference dates for these two periods in the **Ref Dates** textboxes.
9. Click the **Base Line** drop-down list and select the observation field where the event calculation is based.
10. Click the **Result Line** drop-down list and select the observation field where the event calculation is saved.

Note: *The baseline and result line drop-down lists follow the settings in the DisplaySet.*

11. Click the **Business Rule** tab.



The screenshot shows the 'Event Creation' dialog box with the 'Business Rule' tab selected. The dialog has five tabs: 'Description', 'Data', 'Business Rule', 'Detail', and 'Attributes'. The 'Business Rule' tab is active and contains two sections. The 'Applied Type' section has three radio buttons: 'By Amt.' (selected), 'By Perc.', and 'Exact'. To the right of these is a text box containing the value '100'. The 'Value Type' section has two radio buttons: 'Total Periods' and 'Per Period' (selected). At the bottom right of the dialog are 'Save' and 'Cancel' buttons.

The Business Rule window consists of two sections, Applied Type and Value Type.

2-1: Applied Type

The following describe the options for Applied Type.

- **By Amt** - add the amount to the existing value.
- **By Perc** - add the percentage of the existing value.
- **Exact** - change the value using the assigned value.

The default for Applied Type is the By Perc.

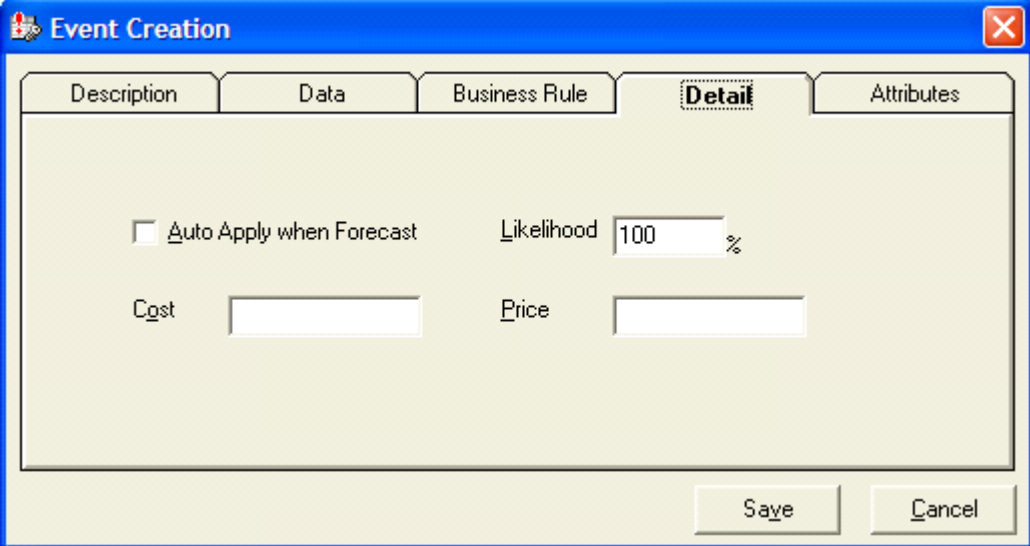
2-2: Value Type

The following describe the options for Value Type.

- **Total Periods** - the amount in the Applied Type is the total amount of all the periods in which this event applies.
- **Per Period** - the amount is for each period.

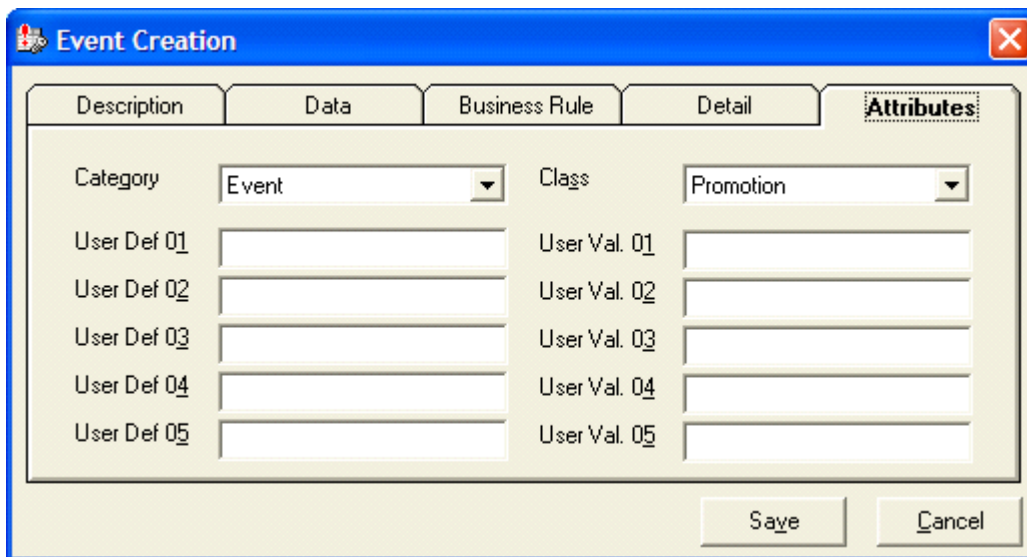
Note: When *By Perc* from the *Applied Type* is selected, the *Value* type is disabled. The default for *Value* type is *Per Period*.

12. Click the **Detail** tab.

The screenshot shows a software window titled "Event Creation" with a blue title bar and a red close button. It contains five tabs: "Description", "Data", "Business Rule", "Detail" (which is selected and has a dotted border), and "Attributes". The "Detail" tab is active, showing a light beige background with the following controls: a checkbox labeled "Auto Apply when Forecast" (unchecked), a text field labeled "Likelihood" containing the value "100" followed by a percentage symbol "%", and two empty text fields labeled "Cost" and "Price". At the bottom right of the window are two buttons: "Save" and "Cancel".

The following options are available on the Detail window.

- **Auto Apply when forecast** - the event applies to the series automatically when the series is forecasted.
- **Likelihood** - is the possibility of the event. When an event saves the results, a trigger is evoked that calculates the **ApplyPercentage**. The value used for the event is calculated as **Value * ApplyPercentage**.
- **Cost** – reference field.
- **Price** - reference field.

13. Click the **Attributes tab.**

The screenshot shows the 'Event Creation' dialog box with the 'Attributes' tab selected. The dialog has a blue title bar with a close button. Below the title bar are five tabs: 'Description', 'Data', 'Business Rule', 'Detail', and 'Attributes' (which is highlighted with a dashed border). The 'Attributes' tab contains two columns of fields. The first column has a 'Category' dropdown menu set to 'Event', followed by five 'User Def' fields (01 through 05). The second column has a 'Class' dropdown menu set to 'Promotion', followed by five 'User Val' fields (01 through 05). At the bottom right of the dialog are 'Save' and 'Cancel' buttons.

Attributes	
Category	Event
Class	Promotion
User Def 01	
User Def 02	
User Def 03	
User Def 04	
User Def 05	

Save Cancel

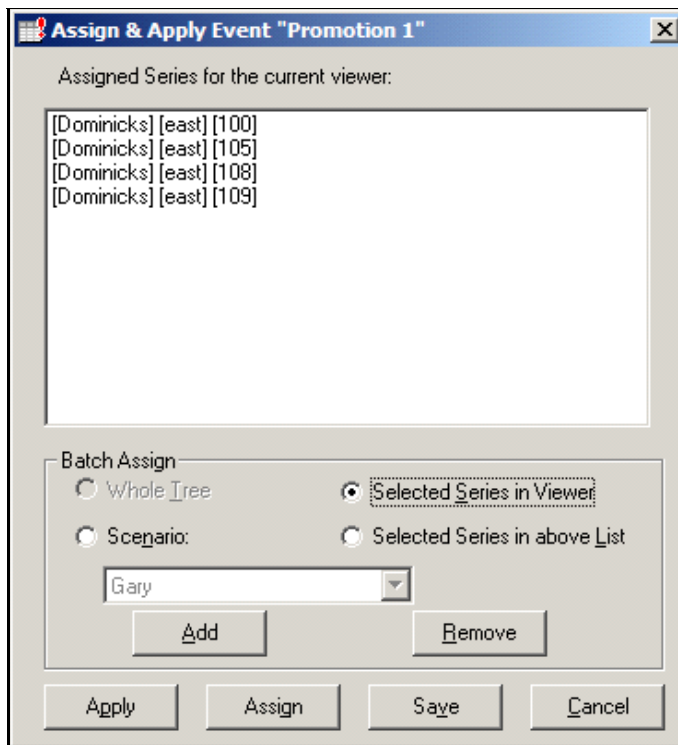
Use the Attributes tab to assign the category and class for the forecast. The default values are Event and Promotion, respectively.

To change the default values and predefined values, the Admin User can modify the corresponding records in the table, TBL_ModuleClassValue in the DME database.

14. Click **Save to complete the event definition and begin assigning the event impact to the forecast.**

15. Click the **Assign & Apply button on the Event Manager window.**

The following window displays.

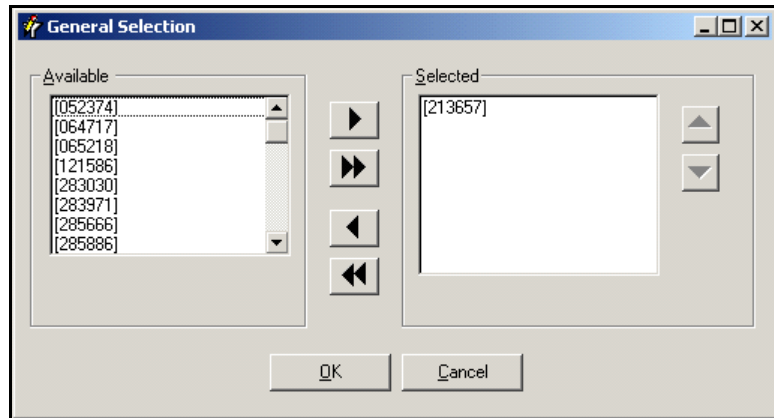


Using this window, you can apply an event at any time. Use this section to apply an event to a:

- Whole Tree. This option is only enabled when the scenario is opened with a Static Hierarchy.
- Scenario
- Selected Series in Viewer
- Selected Series in above List.

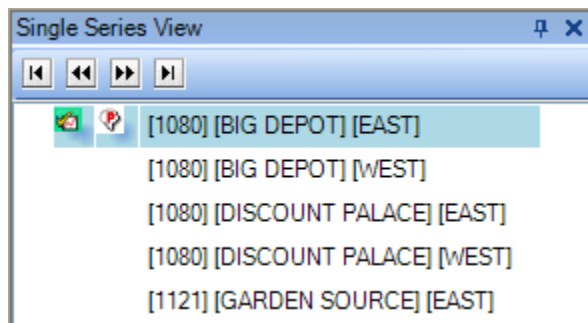
16. Click the **Selected Series in above List** option radio button.

17. Click the **Assign** button.



18. Select the **series** from the **Available** textbox and move the **series** into the **Selected** textbox and click **OK**.

When a series is assigned an event/promotion, a special symbol **P** displays next to the series in the Viewer. The following figure displays the **Promotion** symbol. In this way a user may run a filter to select only the promoted items. For additional information, see [Chapter 4 Using Filters and Exceptions](#).



After an event applies to a series, a series note is added to that series to indicate the event has been applied.

19. Click the **Apply** button to apply the event to the series on the fly.

20. Click **Save**.

The Event Manager allows users to track and manage the external impacts that affect the forecast. By using this capability it is possible to more effectively track and manage the forecast.

Chapter 7 Using Conversion Factors

This chapter includes:

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Section 2: Conversion Management	179

Section 1: Overview

The DME provides a DisplaySets function that converts the current data into different units of measurement (i.e., from pounds to kilograms or liters to gallons). In addition, it is possible to create factors that change the total unit sales to average daily sales. This is important because in many instances, the number of sales days in a month dramatically affects the sales volume; by “normalizing” the raw data to account for the number of sales days will significantly improve the accuracy of the Forecast. Conversion factors are not saved in the database.

Conversion factors have a very powerful capability in the sense that they are bi-directional. For example, if you are selling 100 units at \$10 to achieve \$1,000 in revenue and you anticipate revenue to increase to \$1,200, you could adjust either units or price to achieve this result. With conversion factors, it is possible to adjust the revenue and have it affect either the units or the price. The results are determined by the way in which the conversion factor is applied. The following table depicts the ways that conversion factors can be used.

Revenue Increase Achieved Through Unit Volume Increase					
Base Number	Conversion Factor	Result	Change	Return To Base	Result
Units	Price	Units * Price	Revenue	(Revenue / Price)	Price
100	\$10	\$1,000	\$1,200	120	\$10

Revenue Increase Achieved Through Pricing Increase					
Base Number	Conversion Factor	Result	Change	Return To Base	Result
Price	Units	Price * Units	Revenue	(Revenue / Units)	Units
\$10	100	\$1,000	\$1,200	\$12	100

In all cases the number on the left side of the equation serves as the base that is converted by the factor. It is possible to achieve the

desired revenue growth through both pricing and unit volume changes.

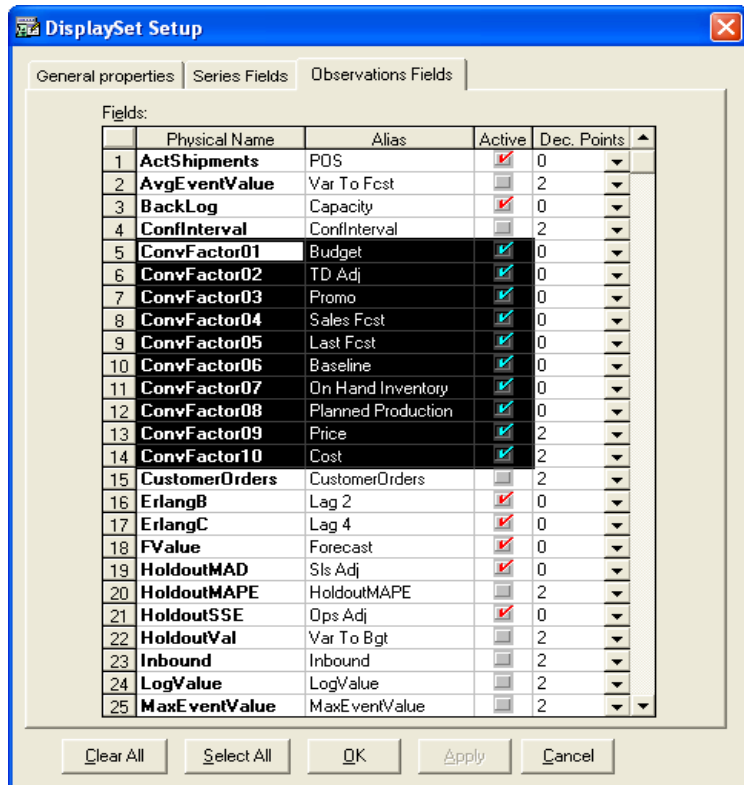
Section 2: Conversion Management

Once the Opinion lines containing the conversion factors have been filed you can are ready to configure it and run the conversion factor.. In most cases, users want to see the name of the conversion factor. This is done by using the DisplaySet capability within the DME.

2-1: Rename the Conversion Factor Opinion Lines

1. Select **Applications > Engine Manager** from the Viewer drop-down list.
2. Right-click the **Display Sets** resource and select **Create**.

The following window displays.



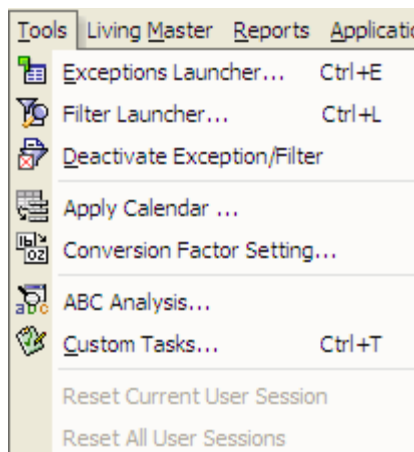
Using the Fields tab allows the System Administrator to set the name of the conversion factor that displays when a user opens the Viewer.

Note: *Conversion factors are like any other observation fields. Conversion factors contain data. Typically the conversion factor data is loaded from another Scenario using the Batch Scheduler. Once the conversion factor is added to the Scenario, it is used and adjusted like any other data that is part of a Scenario using the Adjustments features.*

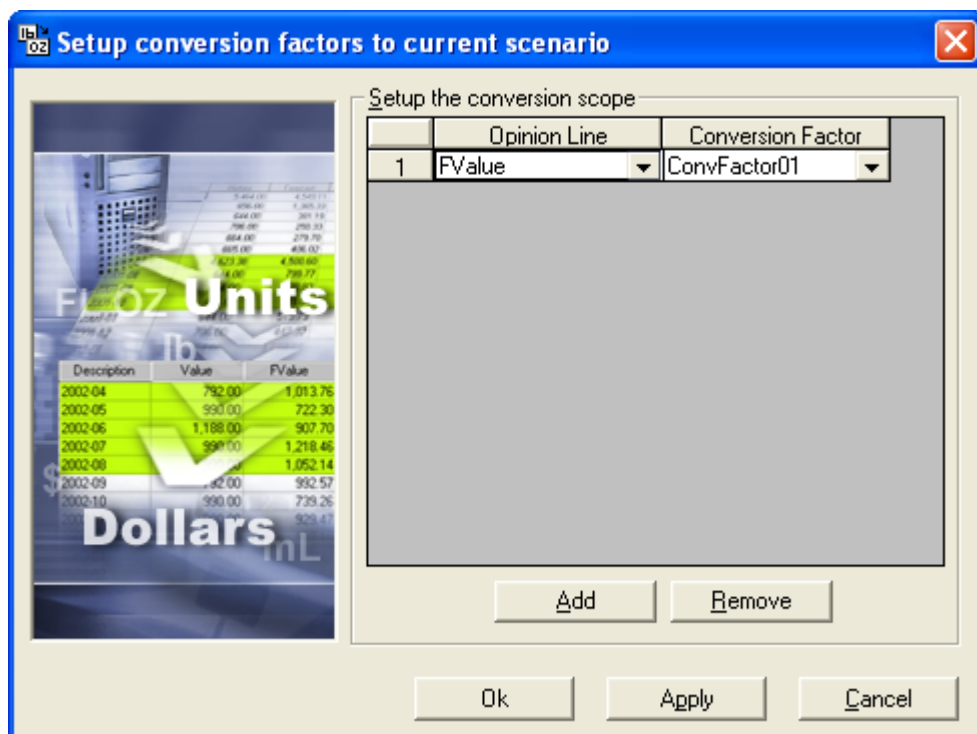
2-2: Configuring the Conversion Factor Settings

This section is used to describe how to configure Conversion Factors to get the desired results the View inside the DME Viewer is changed to Conversion Factor.

1. Select **Tools > Conversion Factor Setting...** from the Viewer menu.



The following window displays.



2. This Window displays all the Conversion that will be performed; All the Opinion Lines under the “Opinion Line” column will hold the converted values and the opinion line selected in the “Conversion Factor” column is the factor used to calculated. You can define as many conversion as you want, but the “Opinion line” column cannot hold the same opinion line for two different conversions.
3. Click the **Add** button and select the appropriate opinion line for the **opinion line colum** and the opinion line for the **conversion factor column** from the lists.
4. When you have configured the conversion you needed just click **OK**.

2-3: Applying Conversion Factor

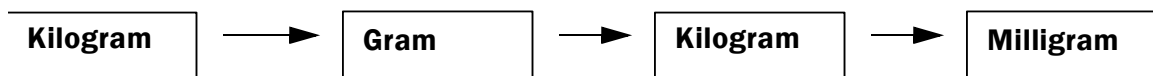
Once the Conversion Factor settings have been configured you can apply the conversion factor by going into the View > Apply Conversion Factor

2-4: Limitations

When you apply conversion factors you will be able to see your converted data but it is only a change in the UI, your opinion line values in the database will not be changed. Because of this Custom Tasks will not be able to access the converted data.

The DME only supports one level of conversion in other words, if you apply a conversion factor multiple times, the DME always converts the data back to base unit first before doing the conversion again.

For example, if you want to convert your data from kilograms to grams and then to milligrams, the DME does the following::



Note: *Make sure to convert the database to the Base Unit before committing it to the Living Master Scenario.*

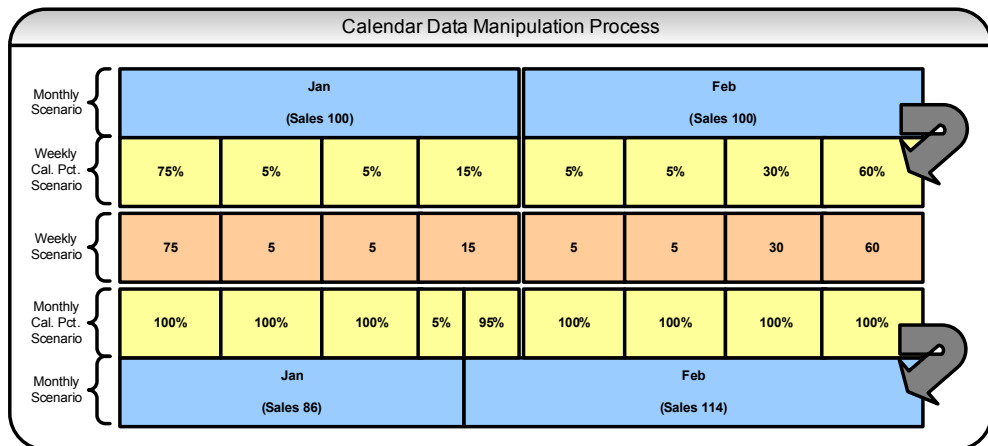
Chapter 8 Using the Calendar

This chapter includes:

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Section 2: Calendar Management	187

Section 1: Overview

Calendars provide the ability to view information from any time scale and make updates, if necessary. It is possible to collect data at multiple levels of time detail, convert them all to a common base so that the information can be merged together to form a consistent whole. The following diagram depicts the relationships that can be established using a calendar moving from one time scale to another.



In this example, you are placing demand in the appropriate period based on percentage-based and calendar-based profiles.

The Calendar feature enables users to convert data into different time periods. The DME supports any calendar transformation. The four default time levels are:

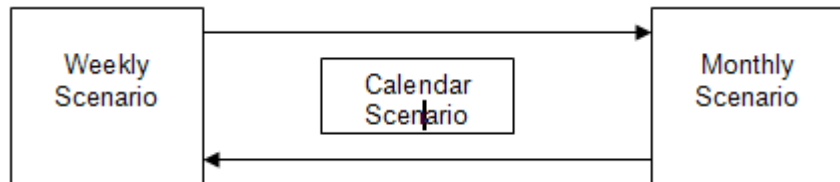
- Monthly
- Weekly

- Quarterly
- Daily

The analysis of the same data at different times exists in many Demand Planning processes. For example, Promotion is usually weekly-based. However, the most accurate Forecasting level is monthly, and the financial Forecasting level is quarterly.

In the DME, each Scenario is set at a specific time level (i.e., weekly or monthly). In order to view the data at different time-levels, the Calendar feature transforms the specific time-level from one Scenario to another Scenario with the desired time level. In addition to the source and target Scenarios, a Calendar Scenario is used to hold the mapping information between the two time levels. The following figure depicts the relationship among the three Scenarios using weekly and monthly Scenarios as an example.

Note: *The same Calendar Scenario may be used in two transformation directions; weekly to monthly and monthly to weekly.*



The time level information is defined in the Scenario attribute. There are two attributes for the time level information: Time Level 1 and Time Level 2.

For a non-calendar Scenario, these two attributes have the same values: the time level of that Scenario. For a Calendar Scenario, these two attributes indicate this Scenario can map between two time levels. For table the Scenarios in the above example have the following settings:

Scenario Attribute	Time Level 1	Time Level 2	User Field 1
Weekly Scenario	Weekly	Weekly	Normal
Calendar Scenario	Monthly	Weekly	Calendar
Monthly Scenario	Monthly	Monthly	Normal

1-1: Special Format for the Source Data of Calendar Scenario

The Source Data of a Calendar Scenario can be any type (i.e., SQL table, Excel, Access table, etc.). However, since the Calendar Scenario holds the transformation information, it requires a special data format. The following must be true:

- Data should be organized by **Column**, not by **Row**.
- Data must include one description column for **Date Mapping** information. The Date Mapping information defines which dates in the two different time-levels match.
- Data must include two value columns for each Profile.

A profile defines the value to map one date to another date. The table on the next page provides a sample of source data in Excel spreadsheet format. Use this spreadsheet as an example of the detail format requirement. The Viewer installation provides a sample Excel calendar data source in the DME directory.

Once a calendar Scenario is loaded, the DME parses the mapping information and saves the information to an internal table before applying it in a calendar transformation. As a result, if you change the profile values in a calendar Scenario directly, it does not affect the transformation result. To change the profile, the source data should be changed first, and then reload the calendar Scenario.

The table below illustrates the format of the data source. The “Date Calculation” column is essential because it defines the dates mapping information. This column will be loaded to DME as “Dates” Field. The

“C_F”, “C_T”, “D_F”, and “D_T” columns define the mapping profile. They are loaded to the DME as “Observation Value” Fields.

Level 2 Date	Level 1 Date	Julian Date	Level 2 Periods	Level 1 Periods	Date Calculation	C_F	C_T	D_F	D_T
2001-01	2001-01	N/A	52	12	2001-01~2001-01~52~12	23.076923	100	15.384615	66.666667
2001-02	2001-01	N/A	52	12	2001-01~2001-02~52~12	23.076923	100	23.076923	100
2001-03	2001-01	N/A	52	12	2001-01~2001-03~52~12	23.076923	100	23.076923	100
2001-04	2001-01	N/A	52	12	2001-01~2001-04~52~12	23.076923	100	23.076923	100
2001-05	2001-01	N/A	52	12	2001-01~2001-05~52~12	7.6923077	33.333333	15.384615	66.666667
2001-05	2001-02	N/A	52	12	2001-02~2001-05~52~12	15.384615	66.666667	7.6923077	33.333333
2001-06	2001-02	N/A	52	12	2001-02~2001-06~52~12	23.076923	100	23.076923	100
2001-07	2001-02	N/A	52	12	2001-02~2001-07~52~12	23.076923	100	23.076923	100
2001-08	2001-02	N/A	52	12	2001-02~2001-08~52~12	23.076923	100	23.076923	100
2001-09	2001-02	N/A	52	12	2001-02~2001-09~52~12	15.384615	66.666667	23.076923	100
2001-09	2001-03	N/A	52	12	2001-03~2001-09~52~12	7.6923077	33.333333	0	0
2001-10	2001-03	N/A	52	12	2001-03~2001-10~52~12	23.076923	100	23.076923	100
2001-11	2001-03	N/A	52	12	2001-03~2001-11~52~12	23.076923	100	23.076923	100
2001-12	2001-03	N/A	52	12	2001-03~2001-12~52~12	23.076923	100	23.076923	100
2001-13	2001-03	N/A	52	12	2001-03~2001-13~52~12	23.076923	100	23.076923	100
2001-14	2001-03	N/A	52	12	2001-03~2001-14~52~12	0	0	7.6923077	33.333333
2001-14	2001-04	N/A	52	12	2001-04~2001-14~52~12	23.076923	100	15.384615	66.666667

The following table defines each column from this data source.

Term	Definition
Level 2 Date	Date information for Time Level 2 (Weekly)
Level 1 Date	Date information for Time Level 1 (Monthly). Notice that week 1 to week 5 belongs to month 1.
Julian Date	Reserved for future use.
Level 2 Periods	Defines how many periods of Time Level 2 (per year). In this example, there are 52 because there are 52 weeks.
Level 1 Periods	Defines how many periods of Time Level 1 (per year). In this example, the value is 12 because there are 12 months.
Date Calculation	Combines the first 4 columns; you have to use ‘~’ as separator: “Level 1 Date”~“Level 2 Date”~“Level 2 Periods”~“Level 1 Periods”.

Term	Definition
C_F	Defines the percentage of Time Level 1 to Time Level 2. For example, in first line, 23.07% of January will be grouped to week 2001-01.
C_T	Defines the percentage of Time Level 2 to Time Level 1. For example, the first line, 100% of week 1 (2001-01) is grouped to January.

C_F and C_T define one profile. It is possible to define more than one profile. In the above Excel file, there is another profile, D_F and D_T. When you apply a calendar, each series may have a different profile.

In order to use the Calendar function, first create and load a calendar into the DME Database. Thereafter, create as many calendars as necessary; the amount of Calendars is unlimited.

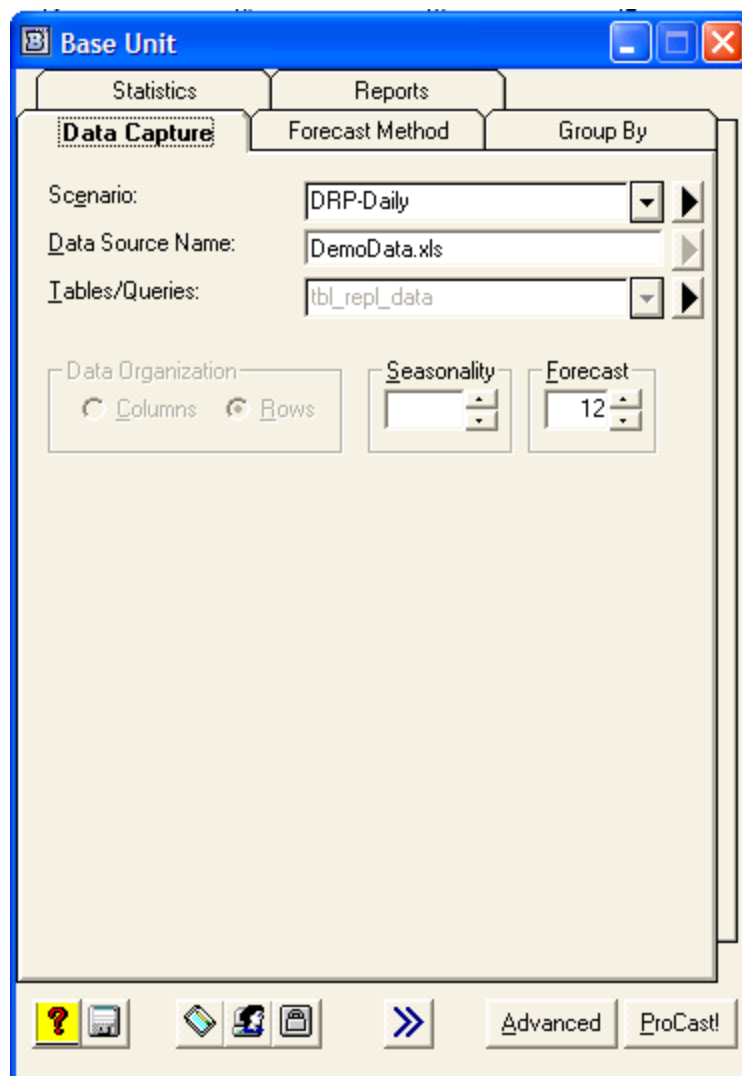
Section 2: Calendar Management

2-1: Create a Calendar

Note: *You must have user permissions to access the Base Unit. Please contact your System Administrator to see if you have permission.*

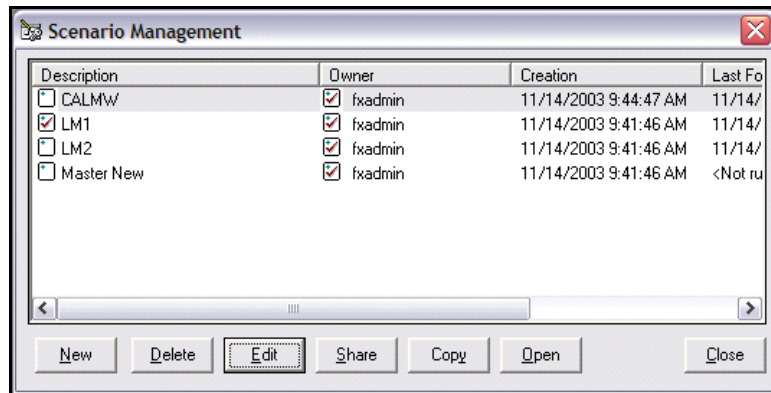
1. Click the **Base Unit** icon.

The following window displays.



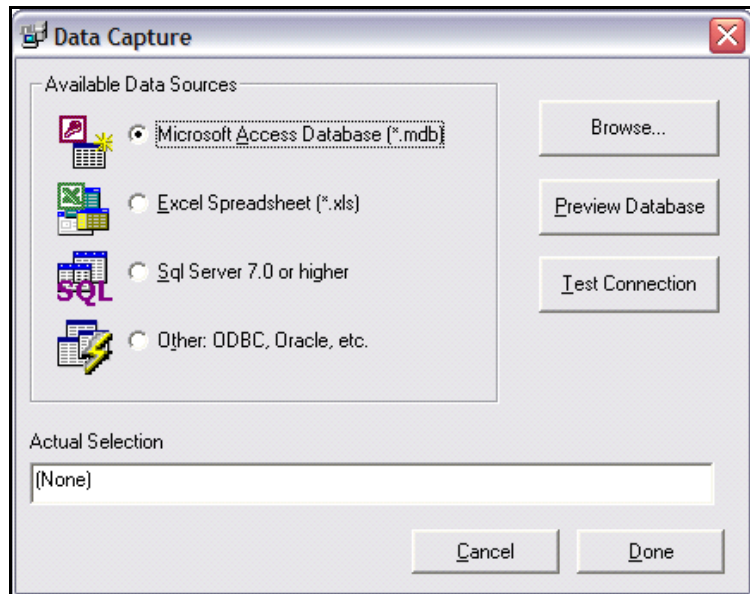
2. Click the right arrow ► button to access Scenario Management.
3. Click the **New** button. Enter the **Scenario name** and click **OK**.

- Click **Edit** to open a Scenario for the Calendar.



- Select **Calendar** from the **User Field 1** drop-down list.
- Select **Monthly** or the first source (From Calendar) from the **Time Level 1** drop-down list.
- Select **Weekly** or the target calendar (To Calendar) from the **Time Level 2** drop-down list.
- Click **OK** and close the dialog box.
- Click the ► Data Source Name Management button.

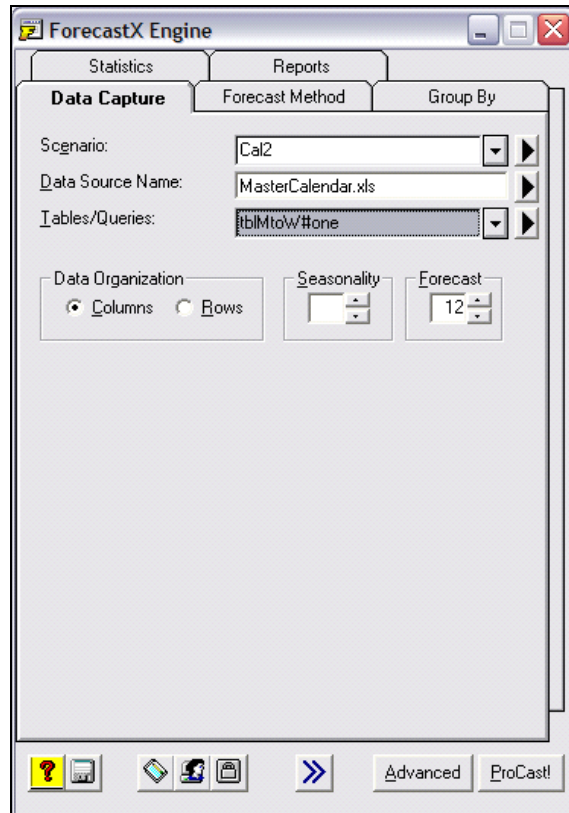
The following window displays.



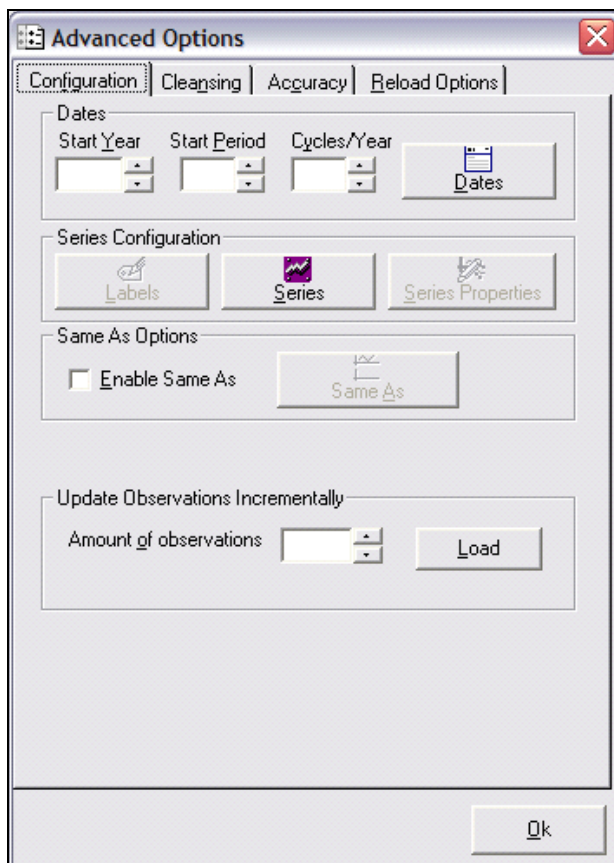
10. Select the **data source** and click **Done**.

Note: *This document uses an Excel file as the data source.*

11. Check the **Column** radio button and enter 0 in **Forecast** textbox.

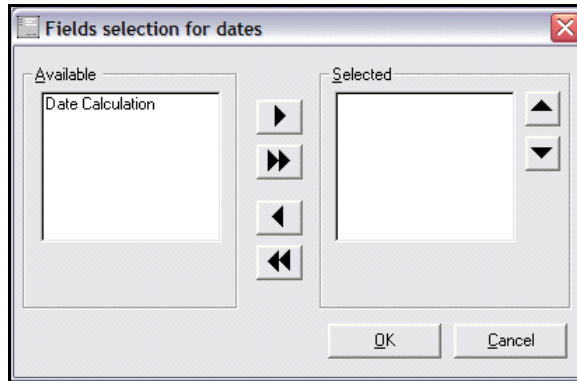


12. Click the **Advanced** button.



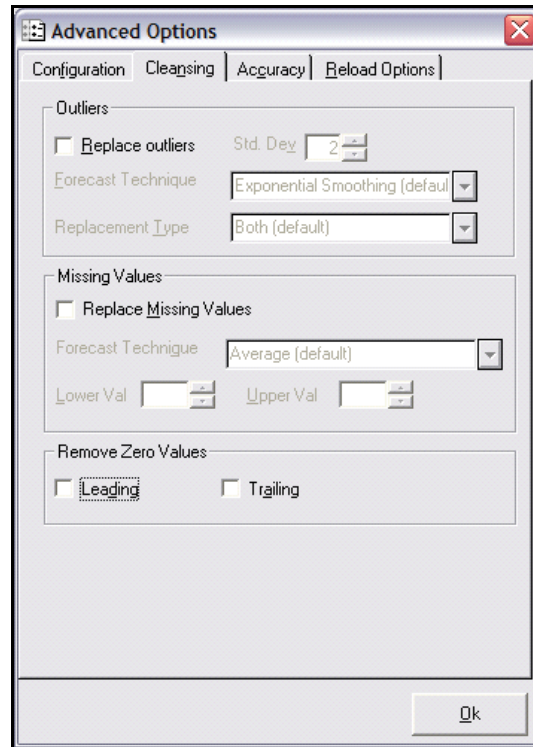
13. Click the **Dates** button.

The following window displays.



14. Select **Date Calculation** from the **Available** textbox and click ► to move it to the Selected textbox.
15. Click **OK**. There is only one Date Calculation.
16. Click the **Cleansing** tab.

17. Make sure none of the checkboxes in the **Removing Zero Values** section are checked.



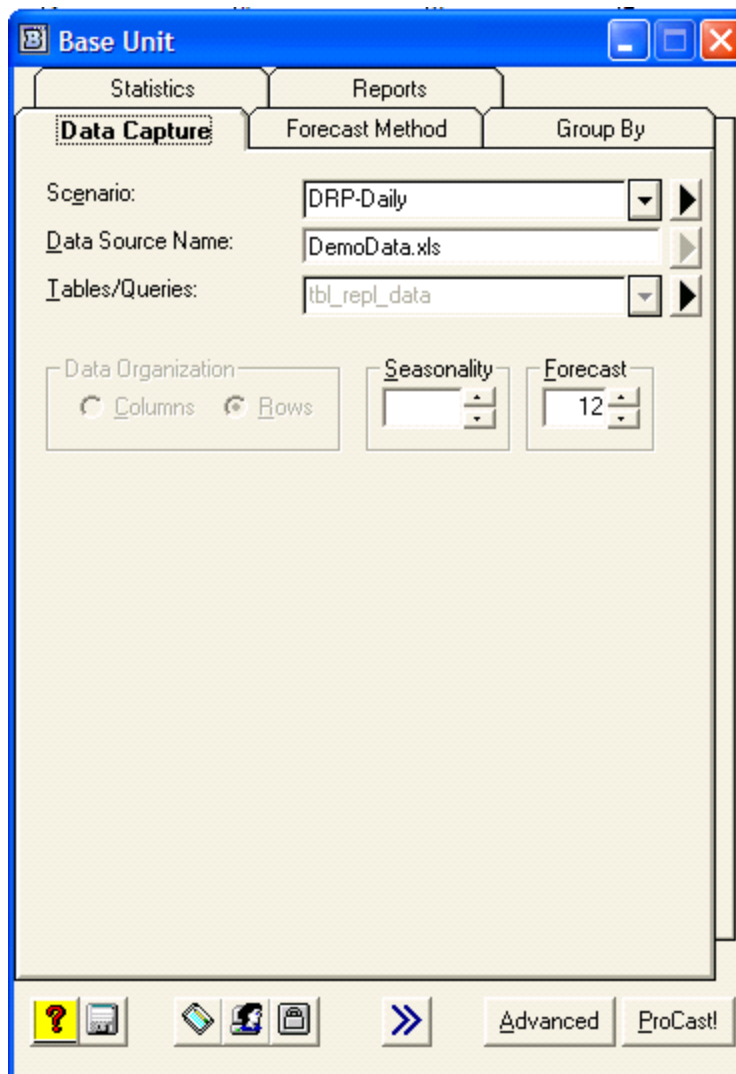
18. Click **OK** to close the Advanced Option dialog box and click **ProCast!** to load the data.

2-2: Use a Calendar

Before applying a Calendar, ensure that the source Scenario is compatible with the existing calendars in the DME environment. For example, to ensure that you are using a Scenario with quarterly results, the calendar must have a quarterly calendar to process the Scenario data.

To Check for Compatibility:

1. Select the **Base Unit** in the panel in the Viewer.



2. Click the ► right-arrow button to open **Scenario Management**.

3. Select the **Scenario** and click **Edit** button.

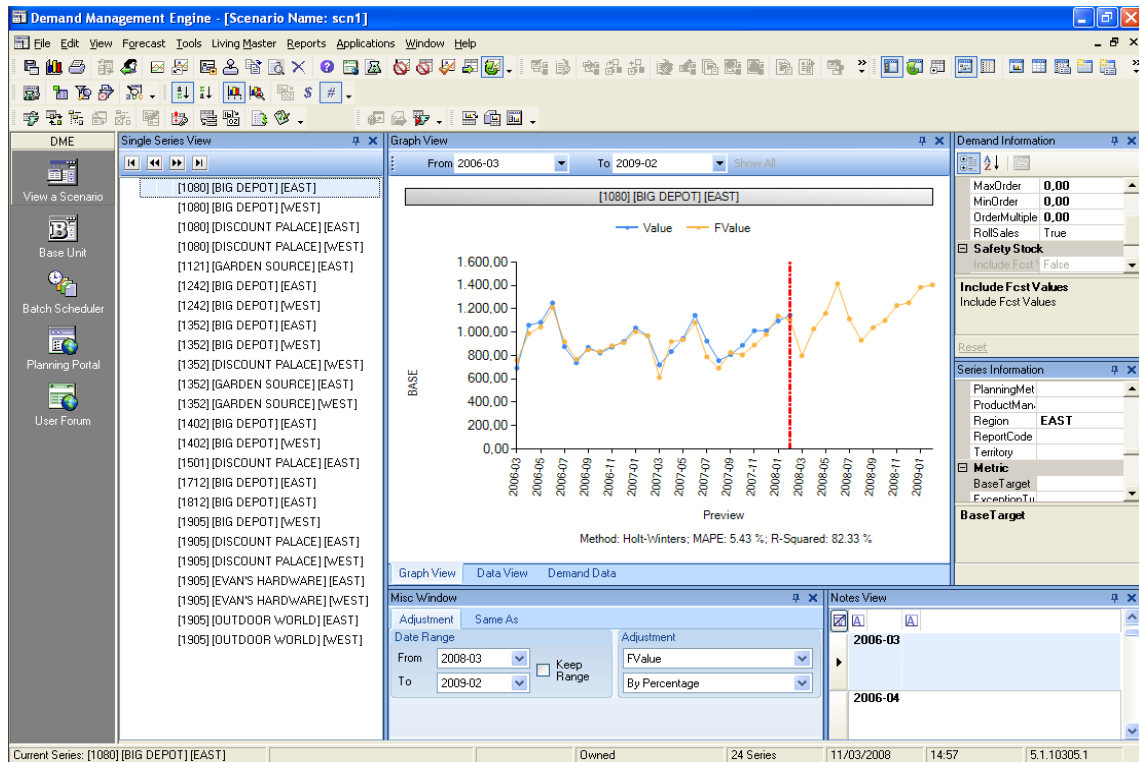
Edit Scenario

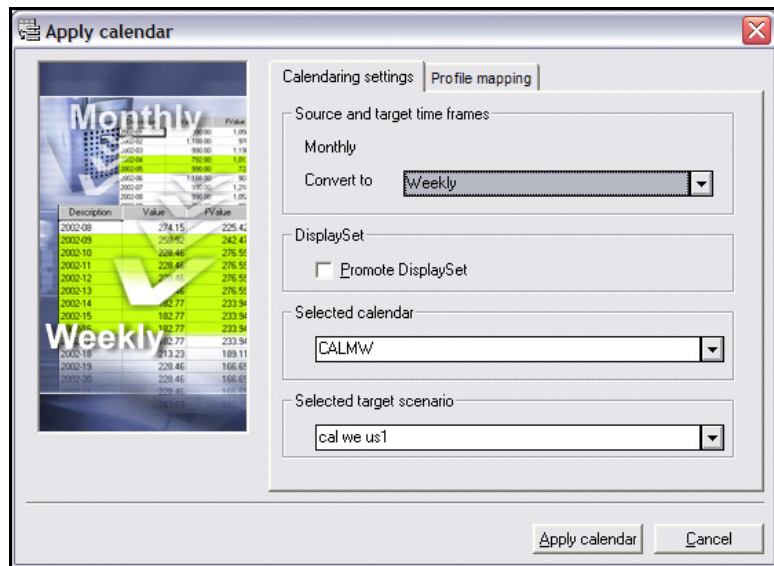
Name	Eric - DTL		
Type		Class	
Use		Status	
Time Level 1	Monthly	Time Level 2	Monthly
Time Level 3		Time Level 4	
User Field 1	Normal	User Field 2	
User Field 3		User Field 4	
User Field 5		User Field 6	

OK Cancel

4. If your source Scenario is monthly-based, then set both **Time Level 1** and **Time Level 2** fields to be Monthly. If the Scenario is weekly-based, set both fields to Weekly. The system default is Monthly.
5. Click **OK** to close Scenario Management dialog box.
6. **Close** the DME and return to the Viewer.

7. Open the source Scenario.



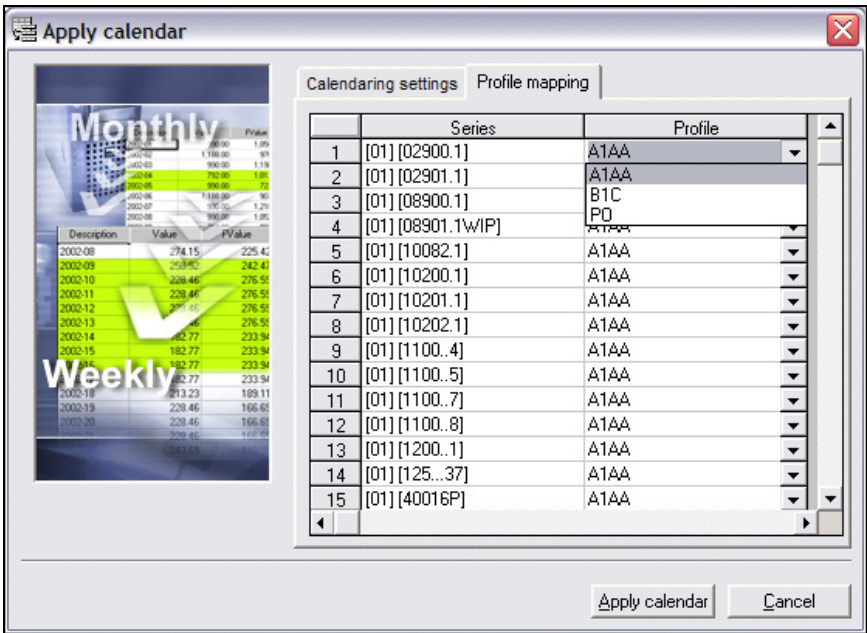
8. Select **Tools > Apply Calendar** from the Viewer menu.

9. Review the following definitions:

Definition	Description
Source and target time frames	Lists all the conversion time periods that can be applied to the source Scenario.
DisplaySet	Check it if you want to promote the Display Set from your source Scenario down to target Scenario.
Selected calendar	Lists all the calendars that are compatible with the source Scenario.
Target Scenario	Lists all the target Scenarios that are compatible with the selected Calendar. Unlike the Conversion Factor, you cannot apply a Calendar and put the result back to the source Scenario; you have to create a compatible target Scenario. Also, if the target Scenario is used by other users, you cannot apply the calendar against that Scenario.

10. Click the **Profile mapping** tab.

Use this tab to specify which profile each individual item uses.



11. Click the **Apply calendar** button.

2-3: Limitation

If you have a period that is shared between two different time periods (i.e., Week 9 is shared by both the month of February and March), the forecast or Historical periods may shift by one period. The following table provides an example of this occurrence.

From (month)	To (week)	% (from monthly to weekly)	% (from weekly back to monthly)
2000-02	2000-05	20%	100%
2000-02	2000-06	20%	100%
2000-02	2000-07	20%	100%
2000-02	2000-08	20%	100%

From (month)	To (week)	% (from monthly to weekly)	% (from weekly back to monthly)
2000-02	2000-09	20%	50%
2000-03	2000-09	20%	50%
2000-03	2000-10	20%	100%
2000-03	2000-11	20%	100%
2000-03	2000-12	20%	100%
2000-03	2000-13	20%	100%

This example is simplified and is only used to depict this concept. The actual Calendar is slightly more complex than this. Refer to the [2-1: Create a Calendar](#) for additional information.

Notice that Week 9 is shared between the month of February and March. Assume that the value is 100 for both February and March.

Period	Value
February (Historical)	100
March (forecast)	100

After applying the Calendar, the target Scenario has the following results:

Period	Value
2000-05 (Historical)	20
2000-06 (Historical)	20
2000-07 (Historical)	20

Period	Value
2000-08 (Historical)	20
2000-09 (forecast)	40
2000-10 (forecast)	20
2000-11 (forecast)	20
2000-12 (forecast)	20
2000-13 (forecast)	20

Notice that Week 9 is forecasted; this is because for Week 9, part of the data comes from a Historical source and part of the data comes from a Forecast source. In this situation, the DME sets the value to Forecast.

Convert the weekly Scenario back to monthly, after the conversion, the monthly results are:

Period	Value
2000-02 (forecast)	100
2000-03 (forecast)	100

Notice that February now becomes the Forecast. Again, like Week 9, part of its data comes from a Historical source and the other part from the Forecast source (Week 9). By default, the DME sets the February result to Forecast.

Under some conditions, the DME adds periods to the target Scenario. Assume that you have the same Calendar as the previous example.

From (month)	To (week)	% (from monthly to weekly)	% (from weekly back to monthly)
2000-02	2000-05	20%	100%
2000-02	2000-06	20%	100%
2000-02	2000-07	20%	100%
2000-02	2000-08	20%	100%
2000-02	2000-09	20%	50%
2000-03	2000-09	20%	50%
2000-03	2000-10	20%	100%
2000-03	2000-11	20%	100%
2000-03	2000-12	20%	100%
2000-03	2000-13	20%	100%

However, only data for February exists, but not March.

Period	Value
February (Historical)	100

After the monthly-to-weekly conversion, the data looks like this:

Period	Value
2000-05 (Historical)	20
2000-06 (Historical)	20

Period	Value
2000-07 (Historical)	20
2000-08 (Historical)	20
2000-09 (Historical)	20

Notice that 2000-09 is created, but this is normal because in your calendar, February does have Week 9. Now, if you convert it back to monthly, it will become:

Period	Value
2000-02 (Historical)	90
2000-03 (Historical)	10

Notice that March is created and it takes 10 from February; this happens because Calendar Week 9 is shared between February and March.

These are the limitations for the current DME Calendar transformation implementation, and they only occur when a Target period is shared by two different Source periods.

Chapter 9 Using Bill of Material

This chapter includes:

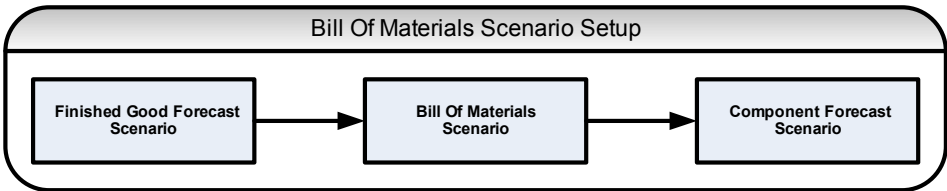
Section 1: Overview 204

Section 2: Bill of Material Management 205

Section 1: Overview

The Bill of Material feature enables you to convert Primary Demand to Component Demand. You can forecast finished goods items and, thereafter, component requirements are computed using the Planning Bill.

The DME supports any number of planning bill levels by loading each level and, thereafter, running through an expansion process either in real time or in batch with linked tasks. The following diagram depicts the Scenario configuration required to support the Bill of Materials process.



In the Bill of Material process, it is possible to have the same scenario for the Finished Goods and Component forecast. The Bill of Material can determine the number of components required to produce the items. The process creates new information that is stored in the main scenario for analysis and review.

The Bill of Material feature uses the Forecasts of a Scenario of finished goods to calculate Forecasts of components for those finished goods. The feature accomplishes the task using a third Bill of Materials (BOM) Scenario. This Scenario defines the relationship between a product and the type and number of components it contains. The DME extends the feature by generating forecasted

values for the BOM, as well as any other Opinion Lines used in the BOM calculation.

Section 2: Bill of Material Management

2-1: Create a Bill of Material

1. Select **Forecast > Bill of Material** from the Viewer menu.

The following window displays.

Bill of Materials Transfer

Finished Goods
Scenario: CalMw
Connection Fields: [Empty Box] Change...
Data Fields: [Empty Box] Change...
☐ Forecasted Periods Only

Components
Scenario: CalMw
Connection Fields: [Empty Box] Change...
Data Fields: [Empty Box] Change...
☐ Reset Values before Transfer

BOM
Scenario: CalMw
Connection Fields to Finished Good: [Empty Box] Change...
Connection Fields to Components: [Empty Box] Change...
BOM Factors: [Empty Box] Change...
Apply Cancel

2. Review the following options:

Textbox	Description
Scenario	Defines the Scenario for finished goods, components and BOM.
Connection Fields	Defines how to match the series between Finished Goods and BOM and BOM and the Components. Additional information is provided in the following steps.
Data Fields	Define which Opinion Lines (data fields) are used for the BOM calculations. Usually, they are the Value and FValue fields. Additional information is provided in the following steps.
Forecast Periods Only	BOM calculation only affects the Forecasted periods. Use this option if the Historical values of the components needs to be calculated from the finished goods. The default is unchecked.
Reset Values before Transfer	BOM calculation will reset the Opinion Lines (data fields) in the component Scenario before the calculation occurs. In the above example, the components have their own retail sales forecast and this option should not be used. The default is unchecked.
Apply Button	Apply the BOM to the component Scenario with the current settings.
Cancel Button	Cancel the BOM operation.

- Click the **Change** button in the **Connection Fields** of the Finished Goods (FG) section.
- Select the appropriate **connection fields** from the **Connections Fields** textbox in the FG section. These fields connect series from the FG Scenario to the conversion series in the BOM Scenario.
- Click the **Change** button in the **Data Fields** of the FG section.

6. Select the appropriate **data fields** from the **Data Fields** textbox in the Finished Goods section. These data fields are the Opinion Lines used as values converted into component Opinion Line values.
7. Click the **Change** button in the **Connection Fields** of the Components section.
8. Select the appropriate **connection fields** from the **Connections Fields** textbox in the Components section. These fields connect series from the Components Scenario to the conversion series in the BOM Scenario.
9. Click the **Change** button in the **Data Fields** of the Components section.
10. Select the appropriate **data fields** from the **Data Fields** textbox in the Components section.

These data fields are the Opinion Lines that receive the converted values from the FG Opinion Lines. The number of Opinion Lines entered must match the number of Opinion Lines entered for finish goods. The order of the lines entered is important as the first Finished Good data field (Opinion Line) is used for the first Components Opinion Line, with each additional line matching in the same order.

11. Click the **Change** button in the **Connection Fields** to Finished Good in the BOM section.
12. Select the appropriate **connection fields** that hold the data that will match the data defined in the **Finished Goods connection fields**.

The number of connection fields must equal the number of connection fields defined for the Finished Goods connection fields. The order in which the the fields are listed is significant because each field corresponds to each Finished Good connection field listed in that order.

13. Click the **Change** button for the **Connection Fields to Components** in the BOM section.
14. Select the **connection fields** that hold the data that match with the data defined in the **Components connection fields**. The number of connection fields must equal the number of connection fields defined for the Components connection fields. The order in

which the fields are listed is significant because each field listed corresponds to each Components connection field listed in that order.

15. Click the **Change** button for **BOM Factors** in the BOM section.
16. Select the observation line(s) that define the conversion between the finished goods and the components. When multiple data fields are defined for Finished Goods and Components, there are two options:
 - Enter a single BOM Factor that is used for all conversions.
 - Enter multiple lines that must equal the number of observation lines entered in the Finished Goods or Components Scenario.

The depiction below displays an example of a completed Bill of Materials Transfer window.

The screenshot shows the "Bill of Materials Transfer" window with three main sections: Finished Good, Components, and BOM.

Finished Good Section:

- Scenario: SKU Level
- Connection Fields: Customer, SKU
- Data Fields: FValue, UserValue01, UserValue02
- Buttons: Change... (for Connection Fields), Change... (for Data Fields)

Components Section:

- Scenario: Parts Fcst
- Connection Fields: Other, UserDef1, UserDef2
- Data Fields: Stat Forecast, Sales Forecast, Finance Forecast
- Buttons: Change... (for Connection Fields), Change... (for Data Fields)
- Checkbox: ☐ Reset Values before Transfer

BOM Section:

- Scenario: BOM Explosion
- Connection Fields to Finished Good: Customer, SKU
- Connection Fields to Components: ItemLinkPart01, ItemLinkPart02, Location
- BOM Factors: Price
- Buttons: Change... (for Connection Fields to Finished Good), Change... (for Connection Fields to Components), Change... (for BOM Factors)

At the bottom right are the **Apply** and **Cancel** buttons.

17. Click Apply.**2-2: Bill of Material Example**

Assume an electronic store sells TVs and accessories. Each type of TV comes with a different type of remote control and cables. For example, a Sony HDTV comes with 3 video cables and 2 audio cables. A standard Sony TV comes with 1 video cable and 2 audio cables. In addition to the cables sold with a TV, cables are also sold separately. As a store manager, you are in charge of forecasting the total sales of TVs and cables. The Bill of Material feature can accomplish this task.

The input data is:

2-2-1: Finished Goods

Sales Forecast	2004-01	2004-02	2004-03
Sony HDTV	100	150	200
Standard TV	100	90	80

2-2-2: Components

Retail Sales Forecast	2004-01	2004-02	2004-03
Video Cable	80	80	80
Audio Cable	120	150	160

2-2-3: Bill of Material

Finish Goods	Components	BOM Factor 2004-01	BOM Factor 2004-02	BOM Factor 2004-03
Sony HDTV	Video Cable	3	3	3
Sony HDTV	Audio Cable	2	2	2
Standard TV	Video Cable	1	1	1
Standard TV	Audio Cable	2	2	2

The output data for the Bill of Material is:

2-2-4: Components

Total Sales Forecast	2004-01	2004-02	2004-03
Video Cable	480	620	760
Audio Cable	520	630	740

For example, the total Sales Forecast of video cable on 2004-02 = $80 + 150 * 3 + 90 * 1 = 80 + 450 + 90 = 620$.

Note: *The BOM factor is based upon date. In the example above, the factors are the same for all months, but they could differentiate from period to period.*

Note: *The BOM factor can be a predefined factor or any other quantity relationship. For example, 80% of HDTV buyers purchase universal remote control, while 20% of HDTV buyers purchase standard remote control. The 80% and 20% can be the BOM factors between the HDTV and remote controls.*

Chapter 10 Demand Management Reports

This chapter includes:

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Section 4: Report Types	221
Section 5: Crystal Reports	223
Section 6: Display Report Data	228
Section 7: Run the Report	229
Section 8: View the Report	229

Section 1: Overview

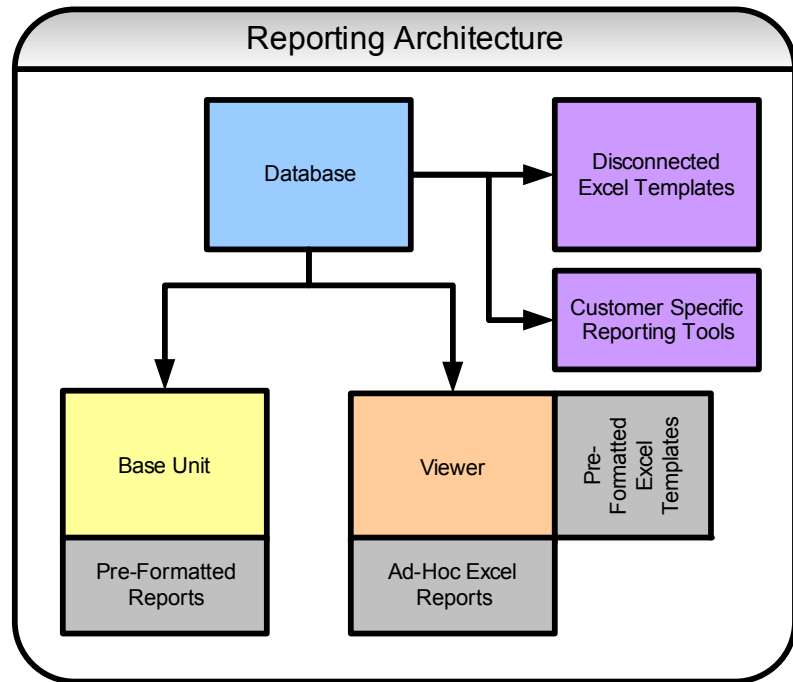
There two different ways the DME runs the Reporting feature:

- A series of Report Templates or pre-defined reports.
- Free-form pivot tables and Excel.

The Predefined Reports are accessed using predefined templates that output data. You can use the Batch Scheduler to run the reports or the Base Unit to run the reports interactively.

When using the Excel based pivot reports, the DME provides wizards that enable you to define reports on the fly or use pre-defined

templates that are created by the System Administrator. The following diagram illustrates the reporting architecture within the DME:



The DME also supports customer-specific reporting solutions such as Cognos, Brio, Business Objects or Proclarity. These reporting solutions connect directly to the DME's database and provide additional reporting capabilities.

Section 2: Create Pivot Reports

To create a Pivot Report, you must have Excel 2000® or later installed.

Use one of the following procedures to create a Pivot Report:

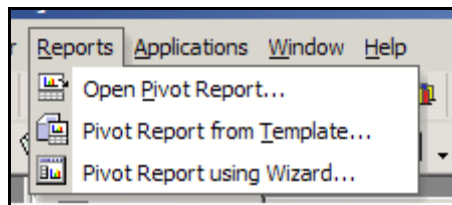
- Open an existing report. You can refresh the report with the current data.

- Create a new report from an existing template in the Template Directory. The current data is used to create the new Scenario.
- Create a new report via Report using the Wizard. The current data is used to create the new Scenario.

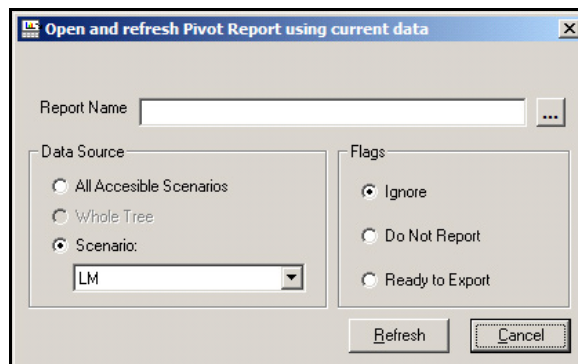
The report is created in the DME; this makes the Data Range more manageable. In addition, some security can be applied to the report. Using the assigned permissions, a user can select the data from one of the following:

- Current Scenario.
- All Scenarios visible to the user.
- Specify to ignore, Do Not Report or Ready to Export flag.

1. Go to **Report > Open Pivot Report...**



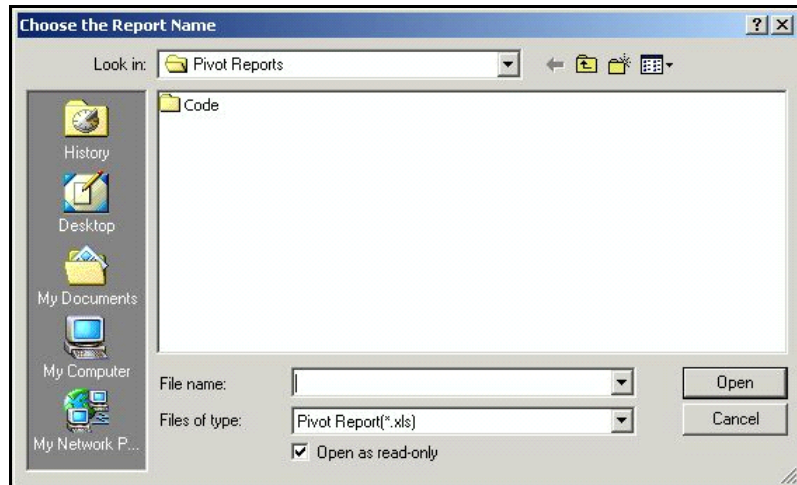
The following window displays.



Note: When the "Do Not Report" is selected in the Flags area, the all the series with the Do Not Report series status field set to True are not included in the report.

2. Click the  button.

The following window displays.



3. Select the report and click **Open**.

Once the report is selected, the user has the capability to:

- Refresh existing components.
- Adjust parameter page and data range.

Note: *You can always refresh a report created from a template or Wizard. The Application Data is a hidden folder by default so if you can't find it in the Windows explorer go to Tools > Folder Options, in the View tab enable the option that says "Show hidden files and folders."*

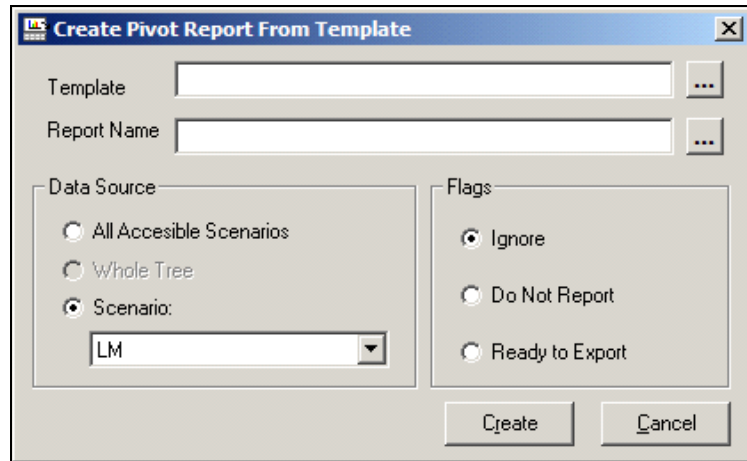
2-1: Use an Existing Template

If you copy an existing template to create a new report, a source filename, target filename, and a data source are required from the user. When you press the Create button, the template file is copied to

the source file, then the new data source is used for the pivot report in the new file and the data is refreshed.

1. Go to **Reports > Pivot Report from Template**.

The following window displays.



2. Click the  button and select the template.
3. Click the  button and select the **report name** or enter a **report name** and click **Open**. The report name cannot be the same as the template name.
4. Select the **Data Source**.
5. Select the appropriate **Flag**.
6. Click the **Create** button.

A special hidden worksheet, Report Parameters, stores the parameters for each report in the workbook. The table below details the parameters.

Parameter	Description
Report Name	The name of the report
Report Type	Pivot report or external table.

Parameter	Description
Data Source	A Select statement to retrieve data, which should include SeriesID in the selected fields.
Where clause	A changeable range that is used to refresh the data.

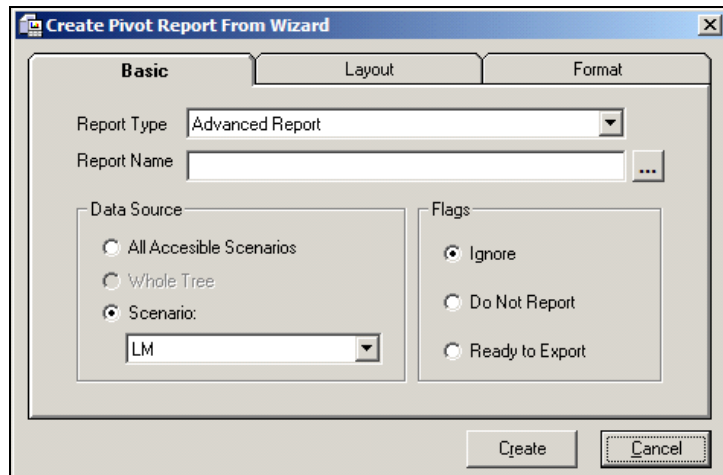
2-2: Using the Pivot Table Wizard

The Pivot Table Wizard requires the following:

- File Name/Path
- Data Source
- Report Type

1. Go to **Reports > Pivot Table using the Wizard**.

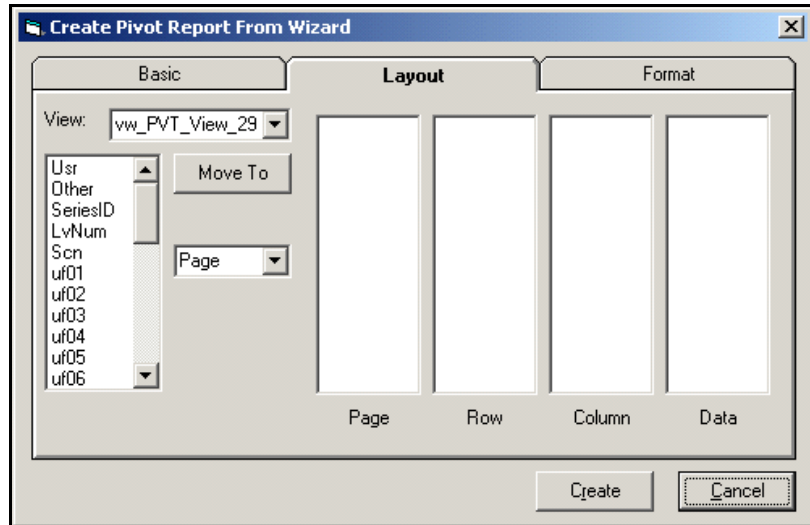
The following window displays.



2. Click the **Basic** tab.
3. Select the **Report Type** from the drop-down list.
4. Click the  button and select the **Report Name**.

5. Select the **Data Source**.
6. Select the **Flags** if appropriate.
7. Click the **Layout** tab.

The following window displays.



The layout uses the same user interface as the pivot table field list user interface. If the following conditions are met, there are entries in the View drop-down list.

- Starts with vw_PVT.
- Has a numeric field SeriesID.

A new view is used to support the Advanced Pivot Report. The view includes the following:

- All description fields
- MAPE
- RSqr in the view vw_PVT_VIEW_V29

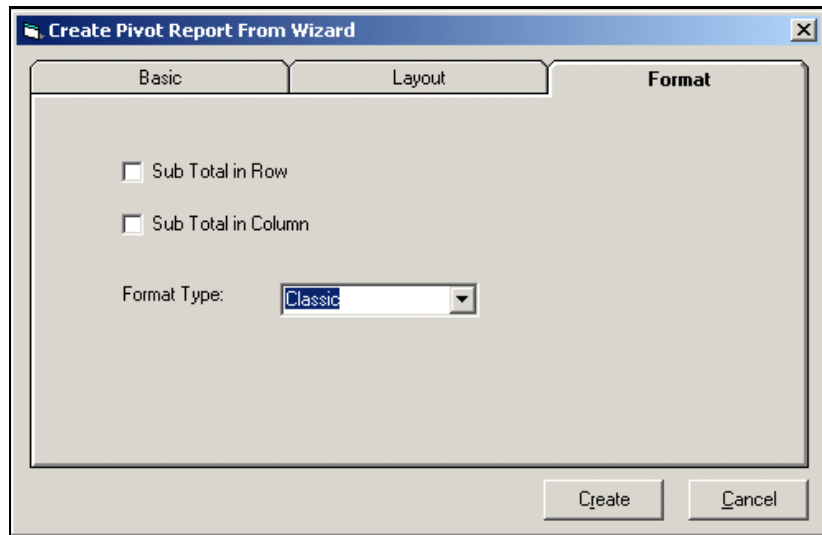
For data fields, the view includes the following:

- Hist

- Original
- FValue
- UserValue01 to UserValue10

The view also includes the Error and Abs Error between Hist and other data fields.

8. Click the **Format** tab.



9. After you select the reporting options, click Create.

The report is generated within Excel.

UserField1	UserField2	UserField3	Data	MON	TUE	WED	THU	FRI	SAT	SUN
EAST	DISCOUNT PA	1080	Sum of HIST_DMD	116.8	116.8	116.8	116.9	116.9	116.9	116.9
			Sum of MDL_DMD	244.7543381	251.0820812	254.8744447	257.0982695	253.0496151	231.9160089	332.2705622
			Sum of HIST_DMD	275.8	277.4	277.4	278.1	278.7	280.2	282.9
			Sum of MDL_DMD	420.0476795	420.9572732	422.572645	423.4336081	423.4089584	425.1316983	426.5770661
			Sum of HIST_DMD	200.9	223.7	223.2	205.9	191.9	228.3	228.1
			Sum of MDL_DMD	298.2908936	339.5122235	332.1265748	323.8613007	296.369796	335.4024409	330.6356998
			Sum of HIST_DMD	274.04	280.37	300.32	316.58	295.91	301.72	333.77
			Sum of MDL_DMD	462.3740169	458.1050167	504.1689487	534.8529229	493.6685893	491.0117743	535.6991725
			Sum of HIST_DMD	77.9	105.2	105.9	120.8	105.1	180.9	170.2
			Sum of MDL_DMD	176.3434453	208.1688969	241.4208579	241.0702937	234.7653577	260.7907617	209.978014
			Sum of HIST_DMD	59.19	63.66	63.06	62.13	62.52	64.02	63.75
			Sum of MDL_DMD	123.5678564	142.4882718	134.8671062	133.1740874	127.8466041	150.5423331	141.3220969
			Sum of HIST_DMD	139.05	109.8	139.5	158.55	127.2	117.75	160.65
			Sum of MDL_DMD	325.7910691	273.4867185	335.5090454	371.8279745	332.592691	279.0259658	353.6774027
			Sum of HIST_DMD	368.85	369.3	369.15	369.6	369.6	369.6	369.6
			Sum of MDL_DMD	558.9415406	559.8393838	560.5807383	560.6969523	561.439549	561.7132613	561.9878079
			Sum of HIST_DMD	268.2	153.6	357.6	409.9	384.2	223.8	255.6
			Sum of MDL_DMD	429.942404	299.4992434	573.5201287	657.7380197	505.7922707	390.2282801	435.5055975
			Sum of HIST_DMD	1412	1894	2030	2394	1800	1454	1678
			Sum of MDL_DMD	2168.388889	2935.916322	3140.45662	3705.835594	2821.74463	2389.391608	2713.863384
			Sum of HIST_DMD	1289.8	1044	2174.8	2032.8	2478	1827.2	1524.6
			Sum of MDL_DMD	1841.241589	1623.393453	3237.961565	3119.353134	3864.676094	2834.391352	2405.880129
			Sum of HIST_DMD	95.4	119.2	127.6	146.6	111.2	83.6	92.6
			Sum of MDL_DMD	137.9676044	179.4350707	198.5443313	229.0051926	177.4095853	134.7386429	149.8222748
			Sum of HIST_DMD	64.6	87.3	93.1	110.8	81.8	67	76.2
			Sum of MDL_DMD	99.63001153	135.7918309	145.6336564	173.6809205	129.9368355	108.2112247	123.8419247
			Sum of HIST_DMD	214	221	221.6	208	186	198	197.6
			Sum of MDL_DMD	321.1959213	333.8476025	335.9295373	314.4322049	281.7124142	303.0593936	304.0742951
			Sum of HIST_DMD	322.02031	293.1790545	333.0283535	331.2478016	335.951667		

2-3: Benefits of Pivot Reports

The benefits of this Pivot Reports include the following:

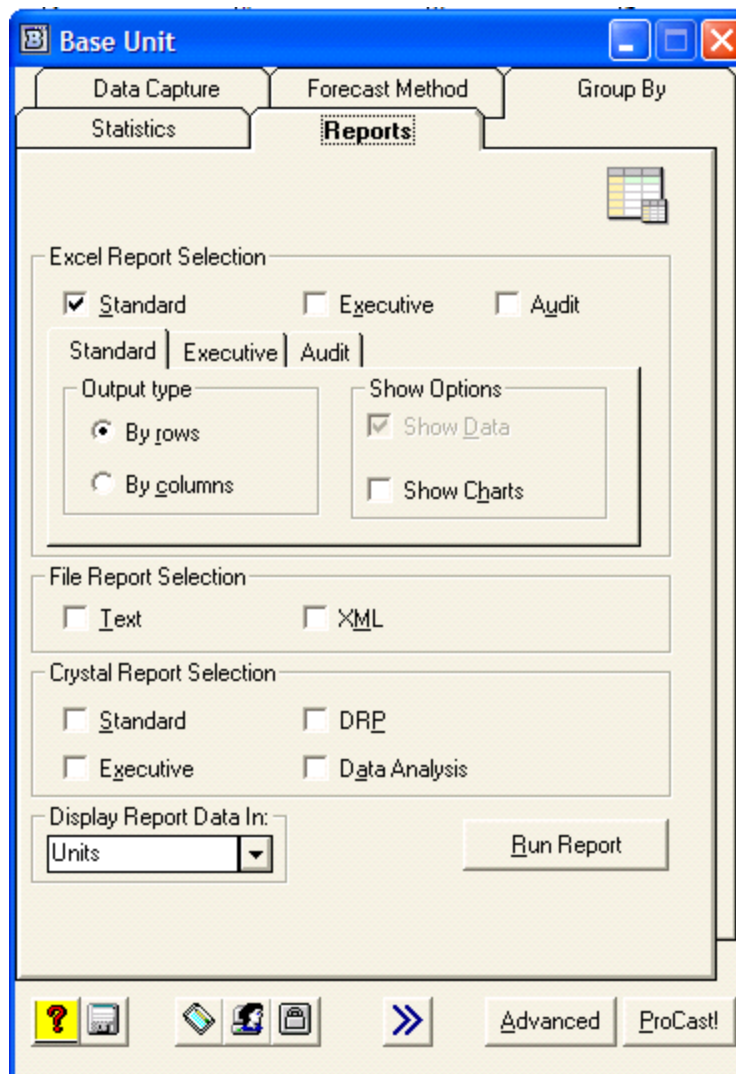
- Built-in pivot table and other reports.
- Reduces the time required to create a Pivot Report. The Wizard only loads the data necessary for the report.

Section 3: Generate Reports

Use the Reports tab to select the Report options for your Forecast.

1. Click the **Reports** tab on the Base Unit.

The following window displays.



Note: Before you view any reports, run Procast.

2. On the Report tab, select the type of report you want to generate.
3. Click Run Report when finished.

Section 4: Report Types

The table below details reports available in the DME.

Type	Description
Standard	The Standard Report handles large volumes of data quickly when applying Mean Absolute Percentage Error (MAPE), R-Squared Value and Standard Deviation statistics. The Standard Report produces a Comparison Report that lists the actual and forecasted values side by side, and shows all the selected statistics. ■ Output Type - Select whether you want to view the data in the report in rows or columns. This value defaults to rows. ■ Show Data - This option is always selected and disabled to show you that the reports will show your data. ■ Show Charts - Select this option if you want to view charts in the Standard report.

Type	Description
Executive	The Executive Report is designed to answer the question, What is the risk of accepting this forecast? It visually represents the answer in easy-to-read graphs, charts, and tables. It also applies the common statistics MAPE and R-Squared values. The Executive Report includes complete listings of monthly, quarterly, and annual forecast values, and attaches fields for additional comments and notes. Select the appropriate options for the Executive Report: ■ History - Select this option to include the Historical values for your data. ■ Fitted - Select this option to include a plot of the Fitted forecast values on the graph. ■ Show Charts - Select this option to have each series represented with a chart. ■ Forecast - Include the Forecasted values for your data. ■ Errors - Select this option to include a plot of the forecast Error values on the graph. ■ Lower/Upper Limit -- Select this option to include a plot of the Upper and Lower limits on the graph. ■ Safety Stock - Select this option to include a plot of the Safety Stock values on the graph.
Audit	The Audit Trail Report is the most detailed analysis option for the Forecast. It displays everything contained within the Executive Report on top of all of the statistics chosen by the user, as well as some optional tables. Use the Audit Trail report to justify a forecast with statistics. Select the appropriate values for the Audit Report: ■ Forecast Results - Select this option to be able to view forecasted values in the report. ■ Include Executive - Select this option to include all results in the Executive report. ■ Fitted Values Sample - Select this option to include a table of the forecast fitted values in the report. ■ Out of Sample Table - Select this option to include a table of Holdback analysis.

4-1: Excel and File Report Selection

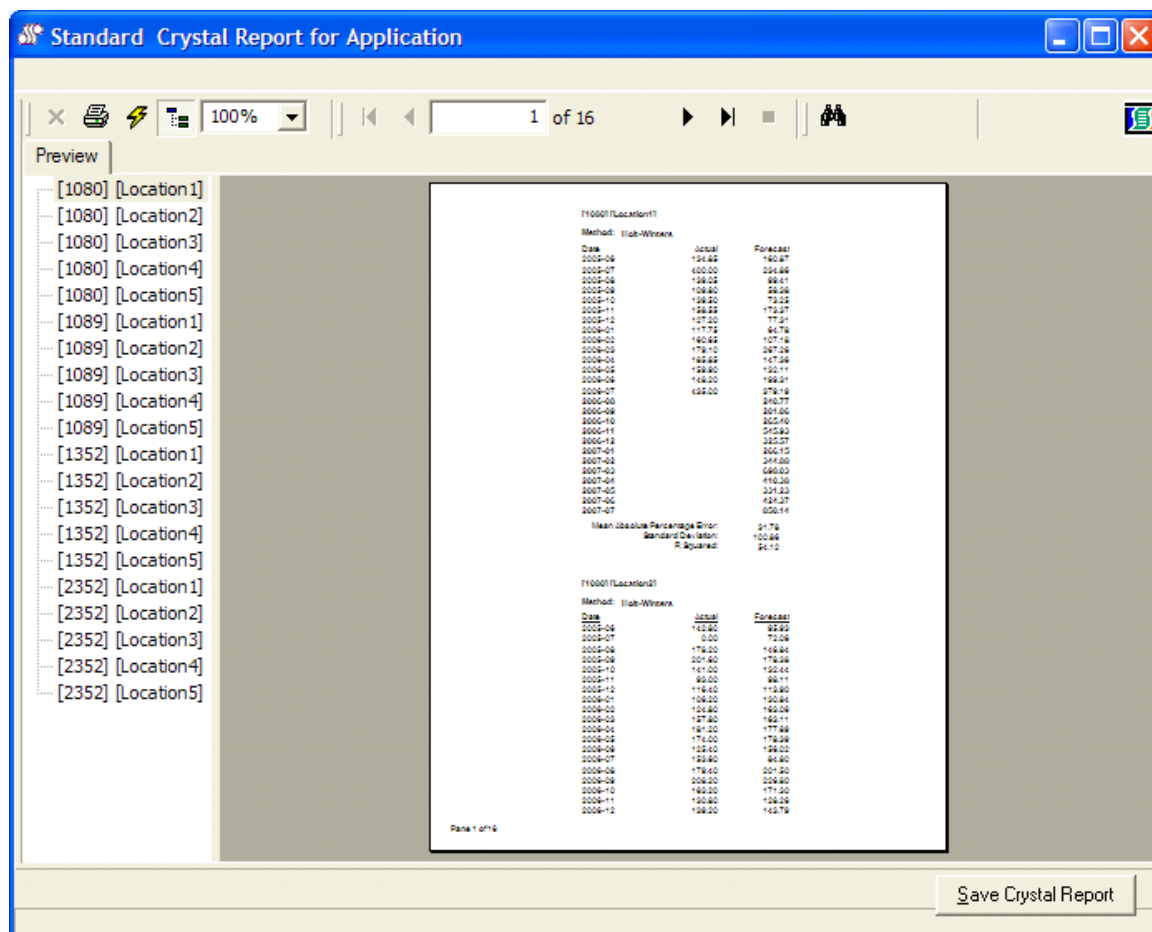
After you select the type of report you want to generate, indicate the tools with which you want the reports displayed.

Type	Description
Standard	Select this option to display the Standard report in an Excel spreadsheet.
Audit	Select this option to display the Audit report in an Excel spreadsheet.
Executive	Select this option to display the Executive report in an Excel spreadsheet.
Text	Select this option to display the selected report also in a .txt file. If a text report is open in Excel, it can be regarded as an Excel Standard report with rows options. The delimited symbol in this text report is .
XML	Select this option to display the selected reports also in XML file format. The structure of the report is following: ■ Scenario information, which include some general information, the configuration of the Scenario, and the dates for each observation. ■ There is a section for each group. When there is no group configuration, all Series in the Scenario is one group. ■ There is an item for each series in one group. In each item, there are three sub-items: the Historical Values, the Forecasted Values and the Statistics.

Section 5: Crystal Reports

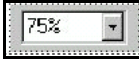
The Crystal Report produces very detailed and comprehensive visual representations of the Forecast run. Crystal Reports run faster than the other reporting methods and do not require Excel or other reporting tools to be installed on your system.

The following figure is an example of a window in which the Standard Crystal Report displays.



The table below details the buttons on the screen and their functionality.

Icon	Description
	Close. Click this button to close the window.

Icon	Description
	Print Report. Click this button to print the report.
	Refresh. Click this button to Refresh the screen. You will be returned to the first series.
	Toggle Group Tree. Click the button to view or not view the group tree on the left.
	Percentage. This window controls the size of the report view.
	Go to First Page. Click the button to view the first page of the report.
	Go to Previous. Click this button to view the previous page of the report.
	This window displays the page number of the report you are currently viewing.
	Go to Next. Click this button to view the next page of the report.
	Go to Last. Click this button to view the last page of the report.

Icon	Description
------	-------------



Stop Loading. Click this button to stop the loading the data of a new report.



Search Text. Click this button to search for a particular word or phrase in the report. When you click this button, a Search dialog displays where you enter the text or phrase for which you are searching.

There are four types of Crystal Reports you can generate:

Type	Description
Standard Crystal Report	The Standard Crystal Report displays the history and forecast of each series.
Executive Crystal Report	The Executive Report offers less detail as other Crystal reports. However, it does provide very easy to follow graphical views of the data and a summary with forecast information. The graphical views make reporting and presentation to non-forecasting stakeholders within an enterprise easy.
Data Analysis Crystal Report	The Data Analysis Crystal Report shows dates, history, and fitted values and the following: ■ Error - The difference between history and fitted values. ■ Series percentage change - The percentage of variation between one observation and the previous one. ■ Forecast Percentage Change - The percentage of variation between one fitted value and the previous one. ■ Cumulative Error and Cumulative MAPE - These values show the stability of the error. ■ Average, Maximum, Minimum, Standard Deviation, Variance, and Median for each column.

Type	Description
DRP Crystal Report	The results of the DRP Crystal report display on the Demand Data tab, on the Series Preview and Transformations screen. For more information about the report, see Section 8: Demand Data .

Section 6: Display Report Data

1. Select either **units** or **dollars** from the **Display Report Data** from drop-down list.

The screenshot shows the 'Base Unit' dialog box with the 'Reports' tab selected. The dialog has three tabs at the top: 'Data Capture', 'Forecast Method', and 'Group By'. Below these are 'Statistics' and 'Reports' tabs. The 'Reports' tab contains the following sections:

- Excel Report Selection:**
 - Checkboxes: ☒ Standard, ☐ Executive, ☐ Audit.
 - Output type: ☒ By rows, ☐ By columns.
 - Show Options: ☒ Show Data, ☐ Show Charts.
- File Report Selection:**
 - Checkboxes: ☐ Text, ☐ XML.
- Crystal Report Selection:**
 - Checkboxes: ☐ Standard, ☐ Executive, ☐ DRP, ☐ Data Analysis.
- Display Report Data In:**
 - Drop-down menu: Units.
 - Run Report button.

At the bottom of the dialog are icons for help, data, and reports, followed by a double arrow button and buttons for 'Advanced' and 'ProCast!'.

Section 7: Run the Report

1. Click the **Run Report** button.

The report is generated and displays when it is complete.

Note: *Install the default printer before running the Excel reports.*

Section 8: View the Report

When the report displays, it is in the format you specified. If you selected more than one type of report, each report is created within its own Excel workbook.

Text and XML reports display in a Notebook file.

Below are examples of two reports that appear in Excel format. For an example of a Crystal Report, see [Section 5: Crystal Reports](#).

8-1: Standard Report– Excel Example

	A	B	C	D	E	F	G	H	I
1	Series	1999-6	1999-7	1999-8	1999-9	1999-10	1999-11	1999-12	2000-1
2	[S1] - Actual	82,005.00	57,792.00	10,000.00	10,141.42	30,000.00	160.00	9,178.00	0.00
3	[S1] - Forecast(Holt-Winters)	78,182.74	79,307.40	48,292.13	7,697.98	11,666.73	15,069.31	4,681.91	0.00
4	[S2] - Actual	131,257.00	15,414.00	13,621.00	7,834.00	925.00	15,005.00	17,266.00	0.00
5	[S2] - Forecast(Holt-Winters)	115,046.95	96,365.29	36,029.00	13,629.45	1,474.16	0.00	33,578.32	0.00
6	[S3] - Actual	151,535.00	22,017.00	16,052.00	10,417.00	2,208.00	16,708.00	22,129.00	0.00
7	[S3] - Forecast(Holt-Winters)	146,685.86	114,595.09	33,626.88	12,741.57	0.00	0.00	38,356.53	0.00
8	[S4] - Actual	172,434.00	27,827.00	12,459.00	14,822.00	3,420.00	27,789.00	32,222.00	0.00
9	[S4] - Forecast(Holt-Winters)	167,436.02	126,898.63	38,891.84	13,455.80	1,444.36	0.00	56,824.00	0.00
10	[S5] - Actual	90,274.00	17,792.00	12,828.00	6,759.00	2,274.00	10,122.00	12,648.00	0.00
11	[S5] - Forecast(Holt-Winters)	87,013.10	70,708.12	22,606.38	9,231.56	872.01	0.00	20,409.51	0.00
12	[S6] - Actual	8,240.00	3,033.00	1,482.00	1,560.00	709.00	1,341.00	1,290.00	0.00
13	[S6] - Forecast(Holt-Winters)	7,791.12	7,268.30	2,751.85	1,166.85	493.76	112.66	1,026.42	730.59
14	[S7] - Actual	0.00	509.00	404.00	229.00	213.00	473.00	260.00	0.00
15	[S7] - Forecast(Holt-Winters)	161.07	415.08	324.94	159.61	60.16	394.19	305.24	134.36
16	[S8] - Actual	193.00	0.00	0.00	0.00	14.00	60.00	23.00	0.00
17	[S8] - Forecast(Holt-Winters)	49.70	0.00	14.15	9.94	3.61	15.45	257.63	86.60
18	[S9] - Actual	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	[S9] - Forecast(Croston)	20.00	27.05	25.91	24.86	23.89	23.00	22.17	21.39
20	[S10] - Actual	1,869.00	233.00	0.00	4.00	0.00	0.00	0.00	0.00
21	[S10] - Forecast(Double Expo)	1,802.45	1,804.84	112.57	0.00	0.00	0.00	0.00	0.00
22	[S11] - Actual	8,041.00	763.00	519.00	343.00	0.00	0.00	0.00	0.00
23	[S11] - Forecast(Double Expo)	7,774.64	7,783.52	271.41	35.67	0.00	0.00	0.00	0.00

8-2: Audit Trail and Executive Reports

	A	B	C	D	E	F	G	H	I
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Chapter 11 Grouping

This chapter includes:

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Section 1: Overview

Grouping is sometimes referred to as 'Multi-level Forecasting' because it provides a powerful mechanism for Forecasting and planning. The process provides the ability to group information that is by itself unstable, but when combined it becomes stable and, therefore, forecastable. This is often seen in seasonal products where individual items appear erratic, but when all of the items at a customer site are taken together, a forecastable pattern can be seen.

Hierarchy Management is a powerful component of the DME that is used for allocating forecast changes among different, aggregating levels. For example, if you have a detailed level for your demand planners and a product family level for your service teams. The demand planners could take the changes that were made at the product family level and group the changes to the detailed level.

In the DME there are three ways to do grouping.

Grouping	Description
Bottom-Up Aggregation	Aggregates the detailed series to higher levels within a business hierarchy.

Grouping	Description
Top-Down Grouping	Provides the mechanism for rolling detail information up to a higher level to allow the pattern to emerge and then provides the ability to push the results back down on a percentage basis so that the lowest level of detail is properly forecast. When higher level information is pushed down into the detail the forecast is said to be developed top down.
Middle-Out Grouping	is used when at the top level there is not enough differentiation from they may appear to be flat. But when you look at the division level there might be enough differentiation to build a strong seasonal pattern. In this case, forecasting at the top level would not yield the most accurate results.

The Hierarchy Manager enables you to look at your data at a higher level or even across levels, make changes to the data and submit the changes down to the detail data. The Hierarchy Manager is available in the Viewer so Users can dynamically create aggregates and roll up, down or across.

The Group by Tab in the Base Unit is primarily used for pivoting data as it is loaded into the DME database. For example data that originally stored in columns will be loaded into the DME and stored into row or “series”.

Section 2: Static Hierarchy Management

2-1: Create a Static Hierarchy

1. Open the Viewer.

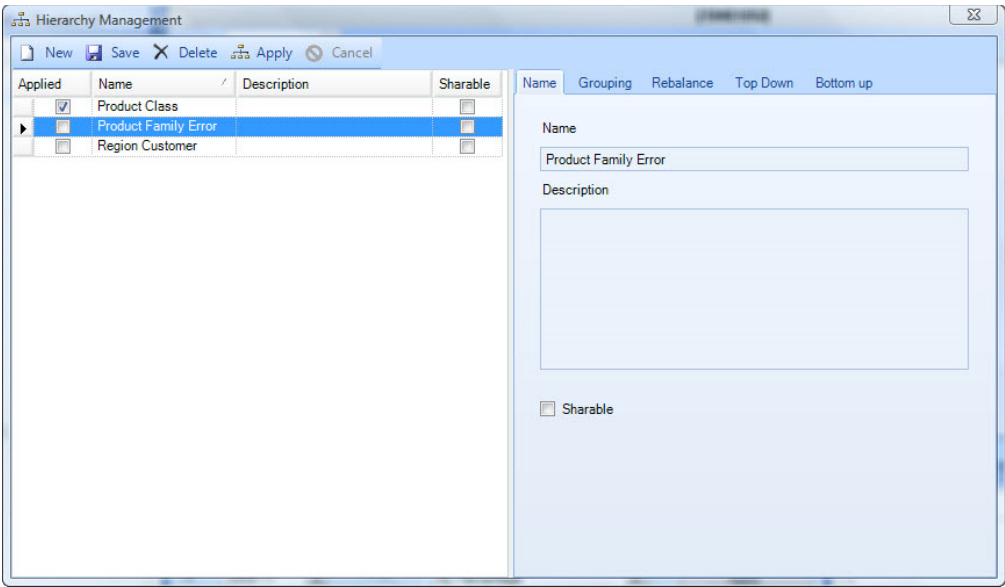
The Scenario Selection window displays.

2. Select a **Scenario** to create the hierarchy and click **OK**.

The Scenario displays.

3. Select **Forecast > Hierarchy Manager** from the Viewer menu.

Hierarchy Management window displays.



The following table details how each button is used.

Button	Description
New	Create a new static hierarchy.
Save	Save changes to the current static hierarchy.
Delete	Erase a static hierarchy.
Apply	Activate the defined static hierarchy.

4. Click the **New** button. The fields in the right-hand panel are cleared.

2-1-1: Name Tab

1. Type a name for the hierarchy in the **Name** textbox.

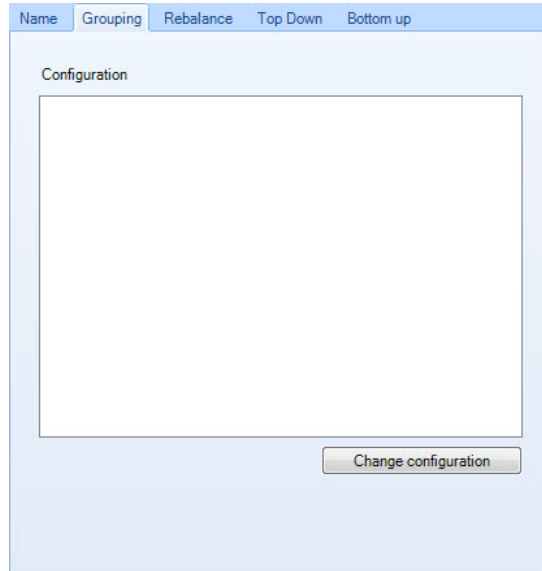
The screenshot shows a web form with five tabs: "Name", "Grouping", "Rebalance", "Top Down", and "Bottom up". The "Name" tab is currently selected. Below the tabs, there is a "Name" label followed by a single-line text input field. Below that is a "Description" label followed by a multi-line text area. At the bottom of the form, there is a checkbox labeled "Sharable".

2. Enter a brief description of the hierarchy in the text field.
3. Check the **Sharable** checkbox if you would like others to be able use this hierarchy.
4. Click the **Save** button.

2-1-2: Grouping Tab

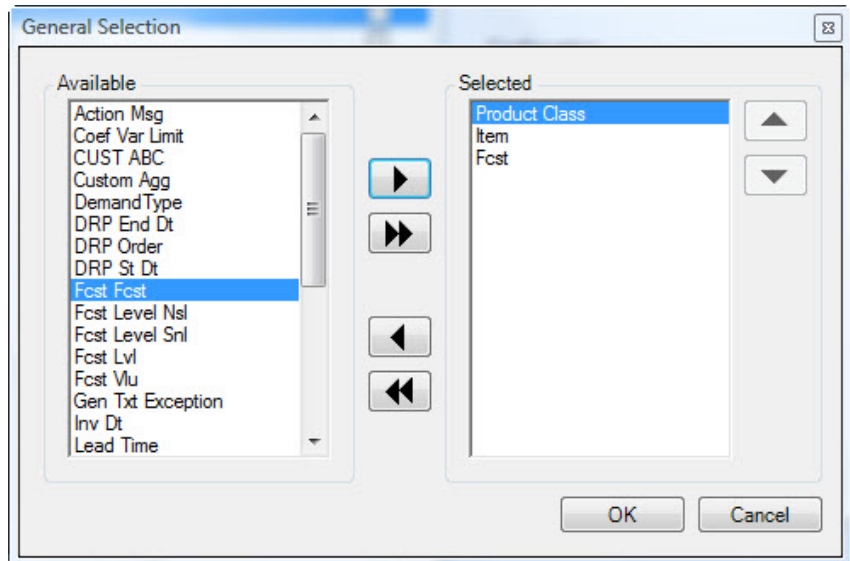
1. Click the **Grouping** tab.

The Grouping tab window displays.



2. Click the **Change Configuration** button.

The General Selection window displays.

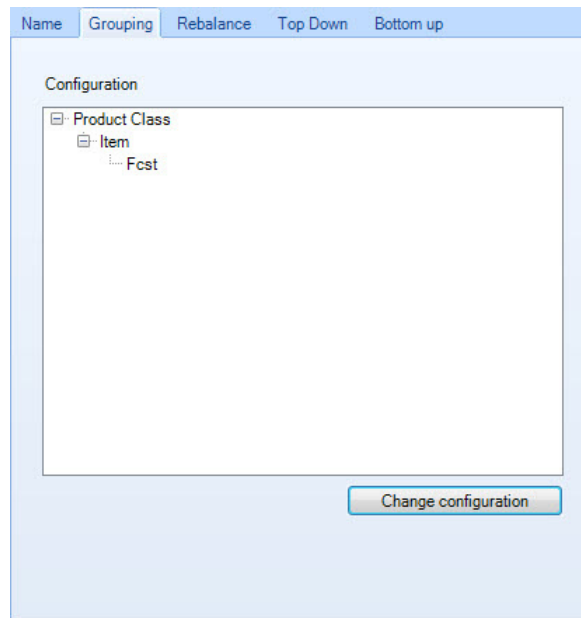


3. Select the **Available fields** in the static hierarchy order that the user requires and click the ► button.

Note: *Hold the Ctrl key to make multiple selections. To deselect a Selected field, select the field in the Selected textbox and click the ► button. The double arrows buttons move all the Available to the Selected textbox and vice versa.*

4. Click **OK**.

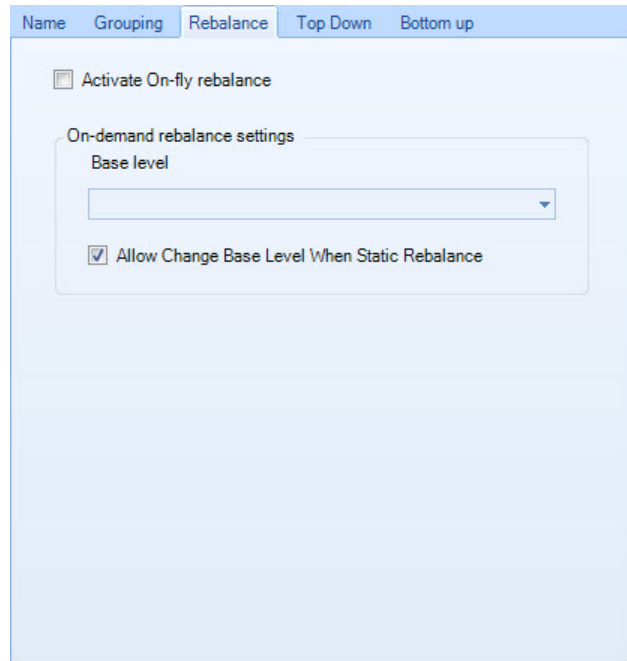
The Hierarchy Grouping displays.



5. Click the **Save** button.

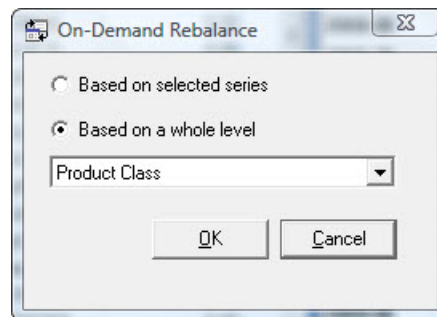
2-1-3: Rebalance Tab

1. Click the **Rebalance** tab.



The DME supports two rebalancing methods:

- **On-Fly** – immediately following any adjustments rebalancing will occur. Selecting this option will disable the On Demand fields.
- **On-Demand** – the user can rebalance on command by clicking the rebalance icon. You can select this option from **Forecast > Rebalance** from the Viewer toolbar. The On-Demand Rebalance window displays.



For more information on rebalancing on demand please view the following section which has more information: [15-4: Forecast](#).

2. Click the **Base Level** drop-down list.
3. Checking the Allow Change Base Level When Rebalance textbox causes the Viewer to rebalance with the lowest level of detail.
4. Click the **Save** button.

2-1-4: Top Down Tab

1. Click the **Top Down** tab.

The screenshot shows a software interface with five tabs: Name, Grouping, Rebalance, Top Down (selected), and Bottom up. The Top Down tab contains the following sections:

- General settings:** Three checkboxes: "Update negative to zero" (unchecked), "Update historical data" (unchecked), and "Overwrite adjusted forecast" (checked).
- Allocation type:** Three radio buttons: "Use advanced settings" (selected), "Historical", and "Forecast".
- Allocation basic settings:** Two radio buttons: "Flat" (unchecked) and "Seasonal" (checked). A "Buckets" text box is to the right.
- Allocation advanced settings:**
 - Other opinion line allocate by:** Two radio buttons: "Itself" (unchecked) and "Fixed field" (checked). Below them is a dropdown menu showing "Act Fcst".
 - Top down fields:** A list box containing "Act Fcst". Below it is a "Change" button.

2. Configure the General settings.

Update Negative to Zero, Update Historical Data, and Overwrite Adjusted Forecast are advanced features and have the following effects on the forecast.

Checkbox	Description
Update Negative to Zero	Any negative values in the Top Down Fields on the TD (Advanced) tab are set to zero.
Update Historical Data	Only future values are updated.
Overwrite Adjusted Forecast	If checked, any manual adjustments made to the forecast are effected. If unchecked, the manual adjustments remain.

3. Select the **Allocation Type** to be used, these are the available options:

Option	Description
Use Advanced Settings	Selecting this option will use the configuration from the TD(Advanced) tab for the allocation, so the allocation will be based on the opinion line configured in that tab. When this option is selected, the Seasonal Options will be disabled.
Historical	This option uses historical data to allocate values throughout the hierarchy. If this option is selected you can choose between two seasonal options to allocate values: ■ Flat: This option uses a specific number of Periods of data for the allocation. ■ Seasonal: This option uses a specific number of Buckets of data for the allocation.

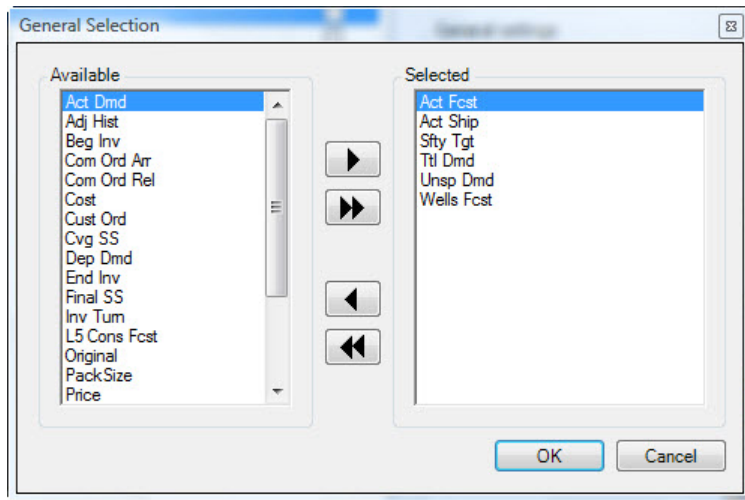
Option	Description
Forecast	This option uses future data to allocate values throughout the hierarchy. If this option is selected you can also choose between the two Seasonal options available.

4. Use the Other Opinion Line Allocate By section for all other fields except Value and FValue.

Other Opinion Line	Effect	Example
Itself is checked	The weight for the additional fields, except Value and Fvalue, utilizes their own weights.	For example if UserValue01 is added to the list. The weight for UserValue01 uses UserValue01 as opposed to the fixed fields (Value and Fvalue) weights.
Fixed Field is checked	The weight for fields except Value and FValue utilizes the field selected in the drop-down list.	

5. In the Top Down section, click the **Change** button to make changes to the list.

The General Selection window displays.



6. Select the fields from the **Available** textbox and click the ► button to add the fields to the **Selected** textbox and click **OK**.
7. Click the **Save** button.

2-1-5: Bottom-Up Tab

1. Click the **Bottom-Up** tab.

Bottom up

☒ Same settings as top down

General settings

☐ Update negative to zero

☐ Update historical data

☐ Overwrite adjusted forecast

Bottom up fields

WAVG	Target Opinion	Base Opinion
☐	Act Fcst	
☐	Adj Hist	

Change

The Bottom Up Fields textbox identifies the fields that are updated during rebalancing.

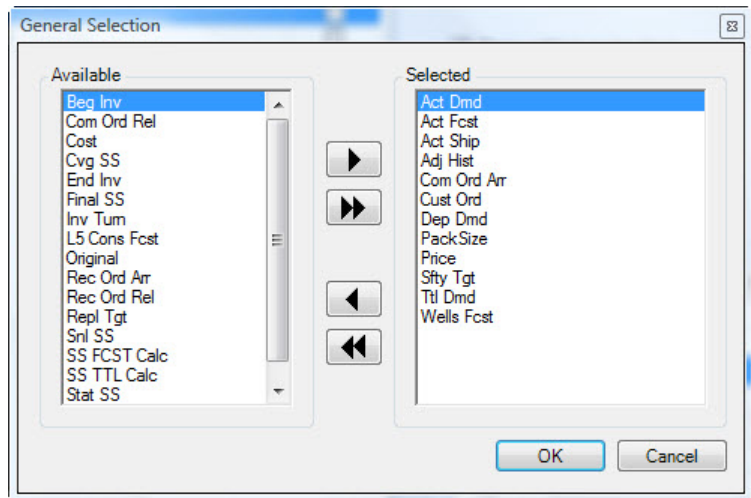
2. Check **Same Settings as Top Down** textbox.

When this setting is checked, the DME uses the settings of Top Down for Update Negative to Zero, Update Historical Data, and Overwrite Adjusted Forecast for Bottom Up.

In addition, series marked as Do not Forecast, or Forecast Completed are not updated.

Uncheck the **Same Settings as Top Down** textbox to select different settings than in Top Down.

3. Click the **Change** button to select any additional fields.



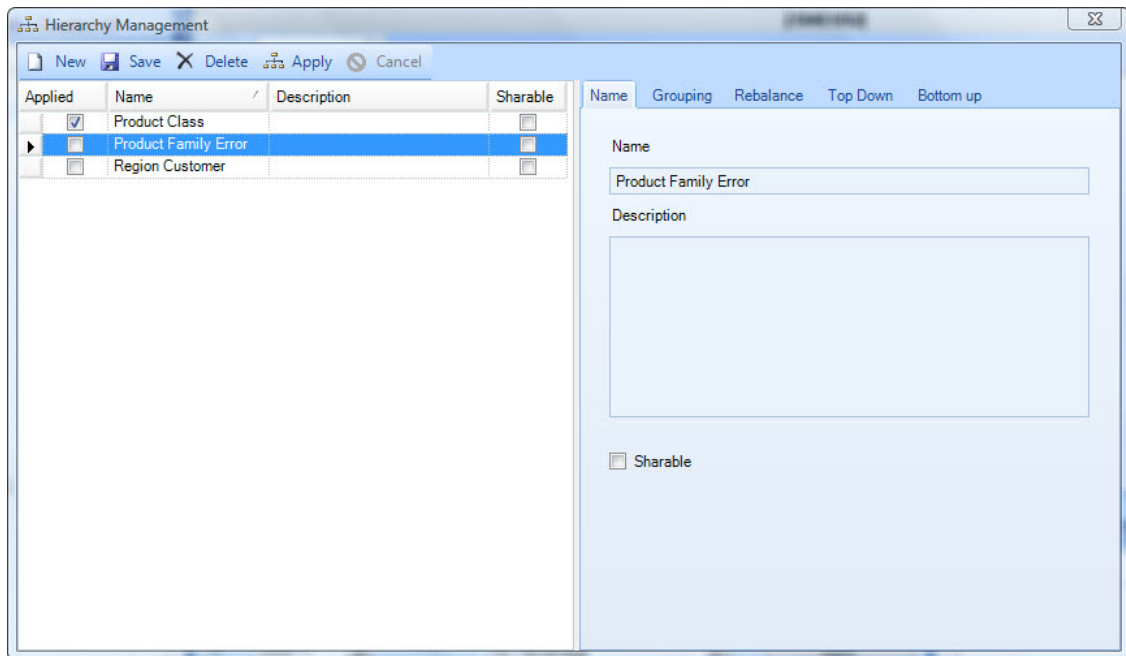
4. Click the **Save** button.

2-2: Edit a Hierarchy

You can edit a hierarchy at any time.

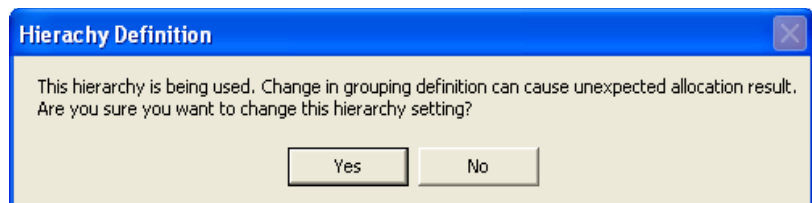
1. From the Forecast menu, select Hierarchy Manager.

The Hierarchy Definition window displays.



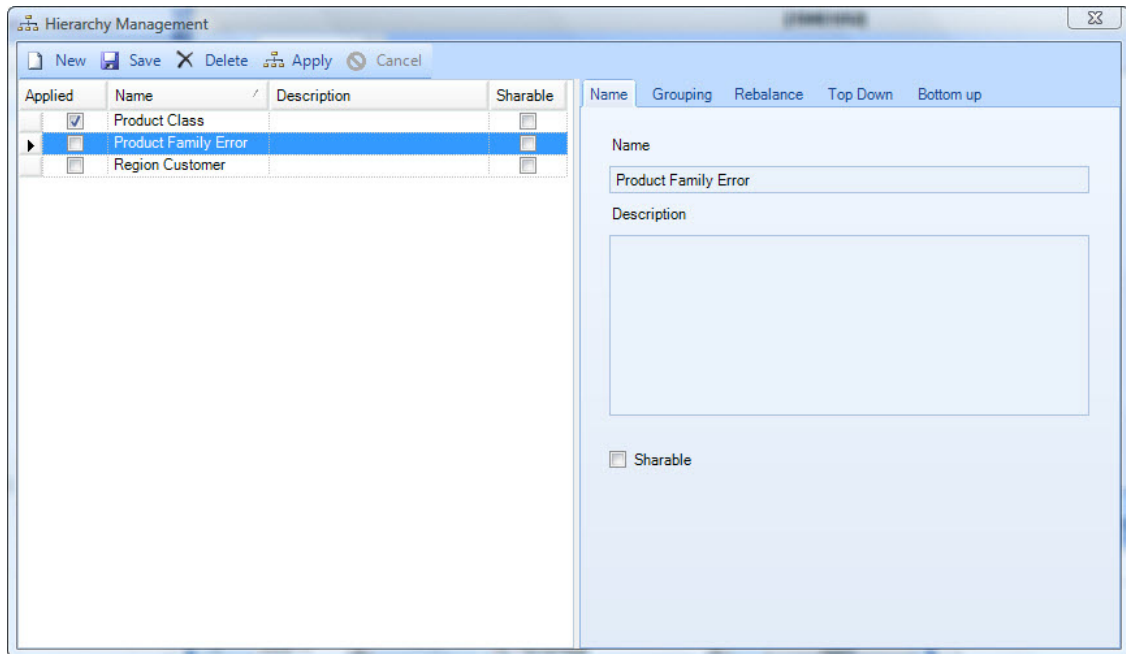
2. Select the Hierarchy to update.
3. Click the **tab for the part of the hierarchy definition** that requires editing. Make the changes and click **Accept**.

If the hierarchy has been applied to a Scenario, and you change the Grouping, a confirmation window displays.

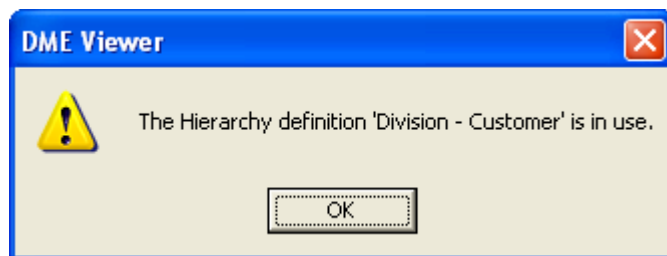


2-3: Delete a Hierarchy

1. Select the **hierarchy** you want to delete and click **Delete**.



If the hierarchy was applied to a Scenario, the following message displays.

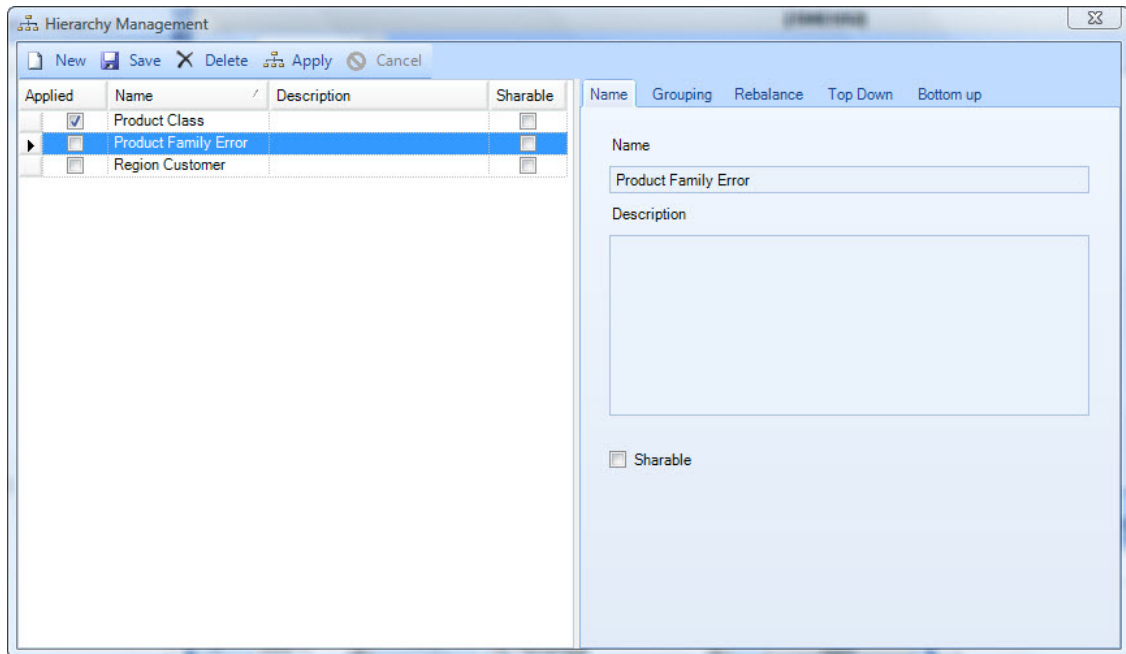


2. Click **OK**. The hierarchy is not deleted from the hierarchy list.

Note: To delete a hierarchy in use, you must remove it first. See [2-5: Remove a Hierarchy](#) for information on how to remove a hierarchy.

2-4: Apply a Hierarchy to a Scenario

1. Select the hierarchy you want to apply and click **Apply**.



After the Viewer applies the hierarchy to the Scenario, the following message displays:



2. Click **OK**.

The tree structure is displayed in the Viewer. After applying the hierarchy, new Scenarios are created automatically to hold aggregated series.

There is one Scenario for each level except for the detail level. The new Scenario names are the name of the Scenario appended by “ – ”, then appended by the level number.

For example, the name of the detail Scenario is ABC. The applied hierarchy has three levels, detail level, level 1, and level 2 (its grouping has two fields).

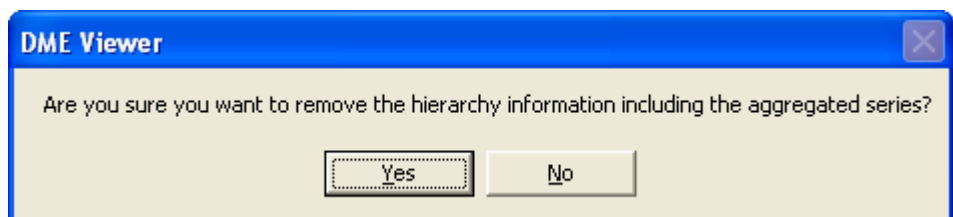
After applying the hierarchy, the Scenario names are the following:

- Scenario ABC is the detail level
 - Level 1 Scenario is ABC – 1.
 - Level 2 Scenario is ABC -2.
3. Close the **Hierarchy Manager**.

2-5: Remove a Hierarchy

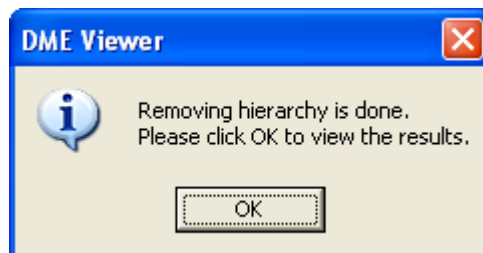
1. Select **Forecast > Remove Hierarchy** from the menu.

The following message displays.



2. Click **Yes** and wait.

The message displays indicating that the operation is done.



3. Click OK.

The tree structure is removed. After removing the hierarchy, the created Scenarios are deleted, and the detail Scenario remains.

2-6: Make Adjustments to the Forecast

Following any adjustments, if the hierarchy applied to the Scenario has “Activate On-Fly Rebalance” checked, the new values of the series are grouped to series at other levels when the series is saved (explicitly or by moving to other series), and the base level is the level the series belongs to. Otherwise, the new values will not be grouped until you rebalance the tree explicitly.

2-6-1: Rebalance a Hierarchy

1. Open the **DME Viewer** with the Scenario that has a hierarchy applied.

2. Select **Forecast > Rebalance** from the menu.

If the hierarchy has Allow Change Base Level When Rebalance checked, the following window displays:

3. Click **OK** to close Advanced Option dialog box and click **ProCast!** to load the data.

Section 3: On Fly Hierarchies

On Fly Hierarchies are different from Static Hierarchies, but a couple of advantages of On-Fly hierarchies are:

- Improved performance when applying the hierarchy to a Scenario. Opening a Scenario with an On-Fly hierarchy is much faster than applying a Static Hierarchy.
- Ability to apply different On-Fly hierarchies to the same Scenario without having to remove the previous hierarchy, which involves opening a Scenario more than once.

3-1: Using On Fly Hierarchies

On-Fly hierarchies use the same structure as Static hierarchies. To open a Scenario with an On-Fly hierarchy, you must first create a new Static Hierarchy structure using the Hierarchy Manager. To learn how to create a hierarchy, please see [Section 2: Static Hierarchy Management](#). After creating the hierarchy structure, in order for this new hierarchy to be available to other users the owner of the hierarchy must open a scenario with the On-Fly hierarchy at least 1 time, after this the hierarchy will be available to other users.

After the hierarchy has been created, the next time you log in and open the Scenario Selection window, the hierarchies created are listed in the dropdown list under the “On-Fly option”. You can also view Shared Hierarchies. Please see [2-1-1: Name Tab](#) to learn how to share hierarchies.

When using an on-fly hierarchy, the aggregated series are only saved temporarily by the system because the user has requested the On-Fly hierarchy, in the same way, the date for those aggregated series is only retrieved once a user clicks on the series description. You can tell which series have been calculated because the Description for the series will be displayed with a bold font.

The only other setting regarding On-Fly hierarchies is the Recreate Base option. The first time a On-Fly hierarchy is opened, this option is used regardless if it has been selected or not. This option is used by the DME to go through the items in a Scenario and classify the items based on the hierarchy. The Recreate Base option can only be used by

For example, if you created new items in a Scenario, when opening the Scenario with a On-Fly hierarchy, those new items might not be included in the tree structure of the Scenario until you reopen it using the Recreate Base option. The same applies if you have changed items’ Attributes that are used in the hierarchy definition.

The Recreate Base option should be enabled whenever the following operation have been performed on the scenario on which the On-Fly hierarchy is going to be applied:

- If the Series in a scenario have been reloaded. This is sometimes the case when running a Reforecast from either the Base Unit or Batch Scheduler.

When using an on-fly hierarchy, the aggregated series are only saved temporarily by the system because the user has requested the On-Fly hierarchy, in the same way, the date for those aggregated series is only retrieved once a user clicks on the series description. You can tell which series have been calculated because the Description for the series will be displayed with a bold font.

3-2: Using On-Fly Hierarchies without on-fly rebalance

When a hierarchy definition does not use the “On-Fly rebalance” option, this means the user must rebalance the changes they make on the hierarchy; since aggregated series are not saved to the Database changes in the aggregated levels will be lost if you don't save them and rebalance your hierarchy manually.

Another way to do this is to make your changes to the desired level of the hierarchy and press the refresh key (F5), if there are unsaved changes you will be prompted with a message to let you know there are changes in aggregated levels and that give you a quick way to rebalance you hierarchy so you don't loose those changes. This message will also be displayed when you try to close a scenario and there are changes in the observations for aggregate level series.

3-3: Limitations with On-Fly hierarchies

On-Fly hierarchies are available only if your DME database was installed in a SQL 2005 DB engine, if your database is created in any version prior to that one then this option will be disabled.

While using On-Fly hierarchies inside the Viewer there are certain limitations on aggregated series, all operations can be performed on the detail level series, but aggregated series are not saved into the database so the following operations cannot be performed:

- Run DRP
- Run Rettagging.
- Apply events
- run Exceptions
- apply a lifecycle profile

- run and ABC analysis or custom tasks
- Apply a conversion factor.
- When a scenario is opened with a hierarchy, and the View is any other than Units, the scenario is changed to a Read Only mode.
- The “Allow base level when rebalance” option is ignored in On-Fly hierarchies; you will always be prompted to select the level at which to rebalance.
- The following options are ignored regardless what was selected in the hierarchy definition:
 - **Bottom Down** – Update Historical Data; the system will assume it is always unchecked.
 - **Bottom Down** – Overwrite Adjusted Forecast; the system will assume it is checked.
 - **Top Down** – Allocation Type; the system always uses the “Same as TD” option, which means all seasonal options are ignored.
 - **Top Down** – Overwrite Adjusted Forecast; the system will always assume this as checked, so adjusted forecast will always be overwritten.
- Since aggregated series are not saved to the database, they cannot be cloned, renamed, copied or moved.

Chapter 12 Lifecycle Forecasting

This chapter includes:

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Section 1: Overview

The DME Lifecycle Forecast feature enables users to predefine the lifecycle pattern. With this feature, a product's lifecycle information is loaded into a Scenario. The Scenario is defined as a "Profile" Scenario. Each Series in this Scenario is a Profile, which defines the lifecycle pattern. Different types of Profiles (i.e., introduction, seasonal patterns, and retirement) can be in the same "Profile" Scenario. When applying a lifecycle Forecast, a user can use different Profiles for different Forecasting periods. A user can define as many as "Profile" Scenarios as needed.

Section 2: Create a Profile Scenario

1. Click the Base Unit icon.

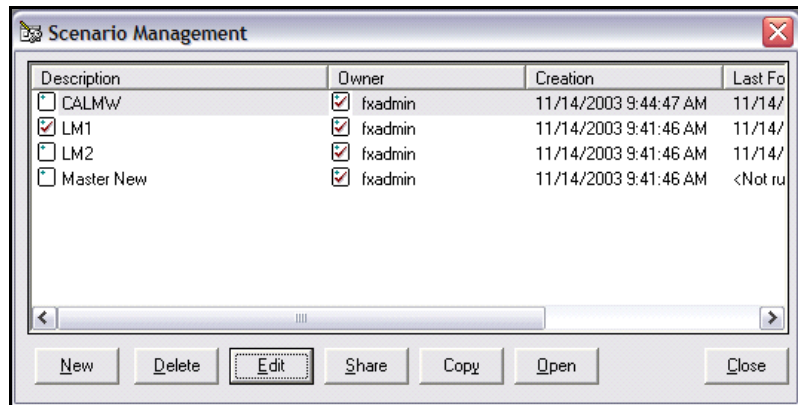
The screenshot shows the 'Base Unit' dialog box with the following details:

- Scenario:** a
- Data Source Name:** ENGINE_TRAINING_2000.mdb
- Tables/Queries:** AOPGOAL
- Data Organization:** Columns (selected), Rows
- Seasonality:** [empty]
- Forecast:** 12

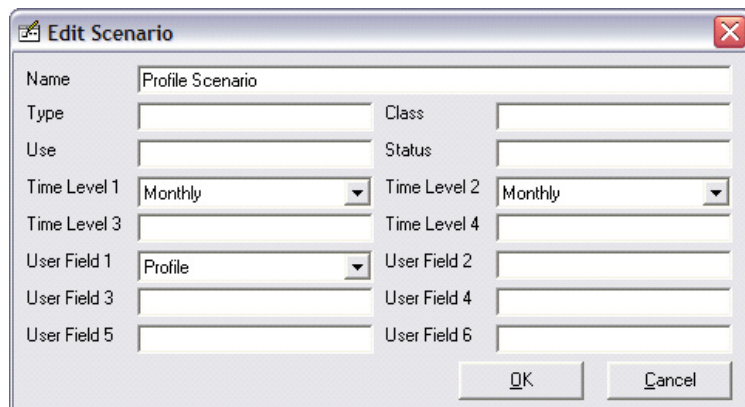
At the bottom of the dialog, there are icons for help, data source, user, and save, followed by 'Advanced' and 'ProCast!' buttons.

Note: You must have user permissions to access the Base Unit. Please contact your System Administrator for permissions.

- Click the right arrow ► button to access Scenario Management.



- Click the New button.
- Enter the Scenario name and click OK.
- Click the Edit button to open a Scenario for the Profile Scenario.



- In the User Field 1 drop-down list, select Profile for the appropriate Scenario Attribute.
- Click OK and close the dialog box.
- Click the ► the Data Source Name Management button and load the data source and selected corresponding table/query information.

9. Enter 0 in Forecast textbox.

The screenshot shows the 'Base Unit' dialog box with the 'Data Capture' tab selected. The 'Scenario' dropdown is set to 'a'. The 'Data Source Name' is 'ENGINE_TRAINING_2000.mdb'. The 'Tables/Queries' dropdown is set to 'AOPGOAL'. Under 'Data Organization', the 'Rows' radio button is selected. The 'Seasonality' spinner is at 1, and the 'Forecast' spinner is at 0. The bottom of the dialog has a toolbar with icons for help, data source, user, save, and a double arrow button, followed by 'Advanced' and 'ProCast!' buttons.

Statistics	Reports
Data Capture	Forecast Method Group By

Scenario:

Data Source Name:

Tables/Queries:

Data Organization: ☐ Columns ☒ Rows

Seasonality:

Forecast:

Advanced ProCast!

10. Click the Advanced button.

11. Click the Cleansing tab. Ensure none of the checkboxes in the Removing Zero Values section are checked.

The screenshot shows the 'Advanced Options' dialog box with the 'Cleansing' tab selected. The dialog has four tabs: 'Configuration', 'Cleansing', 'Accuracy', and 'Reload Options'. The 'Cleansing' tab contains three sections: 'Outliers', 'Missing Values', and 'Remove Zero Values'. In the 'Outliers' section, the 'Replace outliers' checkbox is unchecked, 'Std. Dev' is set to 2, 'Forecast Technique' is 'Exponential Smoothing (default)', and 'Replacement Type' is 'Both (default)'. In the 'Missing Values' section, the 'Replace Missing Values' checkbox is unchecked, 'Forecast Technique' is 'Average (default)', and 'Lower Val' and 'Upper Val' are both empty. In the 'Remove Zero Values' section, both 'Leading' and 'Trailing' checkboxes are unchecked. An 'Ok' button is at the bottom right.

Advanced Options

Configuration | **Cleansing** | Accuracy | Reload Options

Outliers

☐ Replace outliers Std. Dev: 2

Forecast Technique: Exponential Smoothing (default)

Replacement Type: Both (default)

Missing Values

☐ Replace Missing Values

Forecast Technique: Average (default)

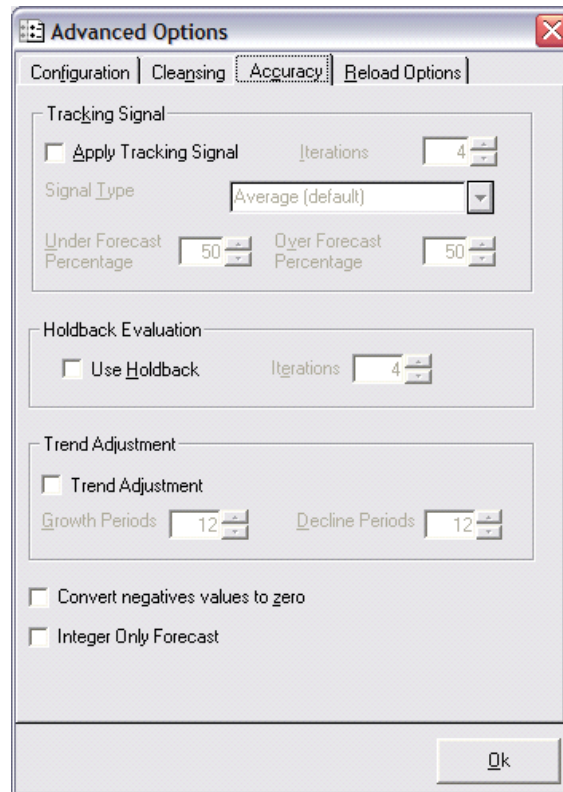
Lower Val: Upper Val:

Remove Zero Values

☐ Leading ☐ Trailing

Ok

12. Click the Accuracy tab. Ensure the Convert negative values to zero selection is unchecked.

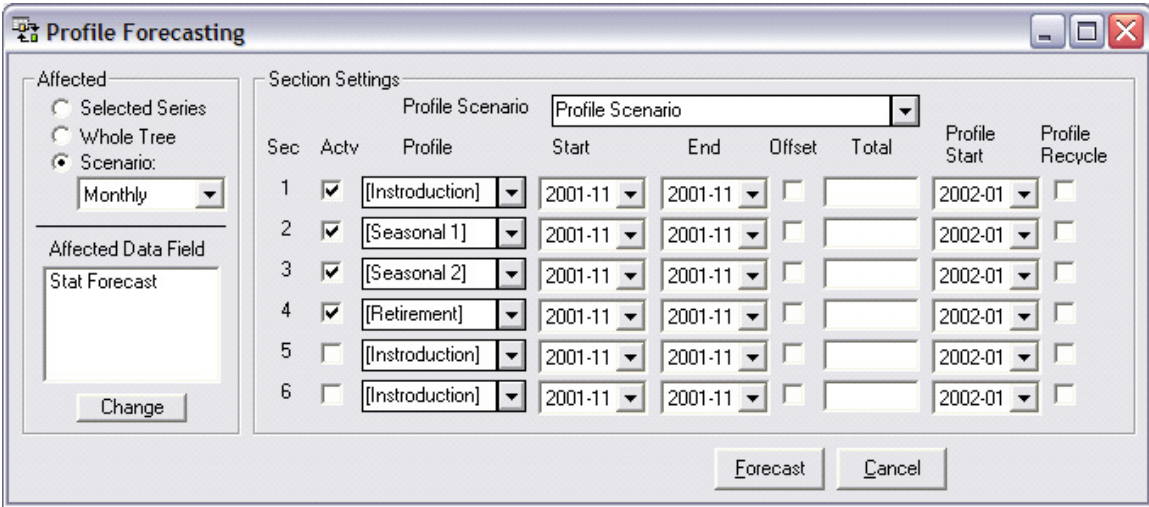


13. Click OK to close the Advanced Option dialog box.
14. Click ProCast! to load the data.

2-1: Setting up a Profile

1. Login to the DME Viewer. Open the Scenario that will use "Life Cycle Forecast".
2. From the Forecast menu, select "Life Cycle Forecast".

The “Profile Forecasting” window displays.



3. From the Affected area, choose which Series will be affected by the Life Cycle Curve. The table below details what each option means.

Option	Description
Selected Series	Profile affects the selected Series only.
Whole Tree	Forecast affects the whole tree (i.e., all the Series in the hierarchy tree). This option is enabled only when a Static Hierarchy is applied in the currently open scenario.
Scenario	Forecast affects the Series in one Scenario in the hierarchy tree only.

4. Click the Change button to update which data fields are to be affected that are listed in the Affected Data Field area.
5. From the Profile Scenario drop-down, select Profile Scenario.

If there is nothing in the drop-down list, the UserField1 Attribute of the Profile Scenario is not set to “Profile”.

6. Select all the types of Profiles you would like to apply from the “Profile” drop-down list.
7. Check the “Actv” checkbox for each selected Profile Series. If you do not check the “Actv” checkbox, the curve in that line will not be applied.

Note: *A maximum of six curves can be applied.*

8. Select the “Start” and “End” period of the Series that will be Forecasted. The start period and the end period determine the period range where the shape will be applied.

Note: *Users have the ability to apply multiple Profiles to a single Series by selecting start and stop dates that do not overlap one another.*

9. From the Profile Start column, select the start date of the Profile from which the profile data is be used. In most cases, the start period for Profile Series match the start period for the Series.
10. Check or uncheck the “Offset” option. The table below details what each option means.

Option	Description
Checked	All the values within the start and end period for the Series are used for lifecycle Forecasting.
Unchecked	The value in the start period for the Series is used for lifecycle Forecasting

Date	2004-01	2004-02	2004-03	2004-04
Observation Value (before applying Life Cycle)	100	200	150	250
Profile Value	1	0.9	0.8	0.7

Date	2004-01	2004-02	2004-03	2004-04
Observation Value when uncheck "Offset"	$100 = (100 * 1)$	$90 = (100 * 0.9)$	$80 = (100 * 0.8)$	$70 = (100 * 0.7)$
Observation Value when check "Offset"	$100 = (100 * 1)$	$180 = (200 * 0.9)$	$120 = (150 * 0.8)$	$175 = (250 * 0.7)$

- 11.** Check or uncheck the Profile Recycle option for each Profile. This option affects the behavior of the lifecycle Forecast when there is not enough data point in the Profile Series. For example, the data range is two years, but the Profile only has one year of data for the Seasonal pattern.

If the Profile Recycle checkbox is unchecked, the value for the last period for the remaining periods is reused.

If the checkbox is checked, the values starting from the beginning of the profile series (recycle) are used.

- 12.** Click the Forecast button to apply the Lifecycle Forecast.

Note: *If the scenario the has a static hierarchy applied and the "On-fly rebalance" option was enabled in the Hierarchy definition, changing the forecast with this feature feature will trigger a rebalance*

Chapter 13 Retagging

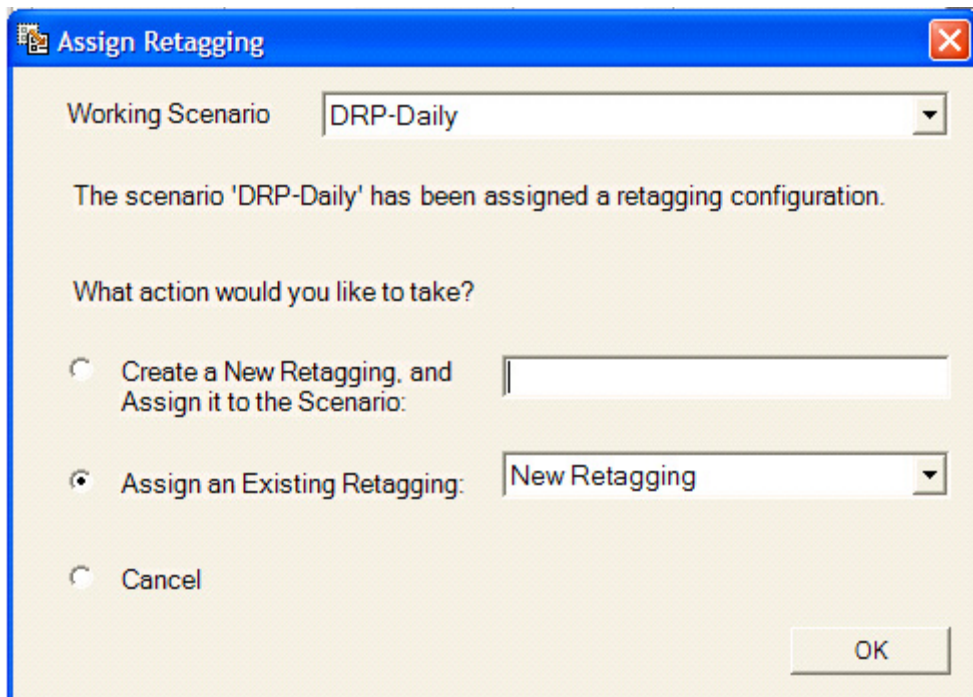
This chapter includes:

Section 1: Using Retagging 261

Section 1: Using Retagging

1. From the Viewer, go to Forecast > Retagging.

The Assign Retagging window displays.

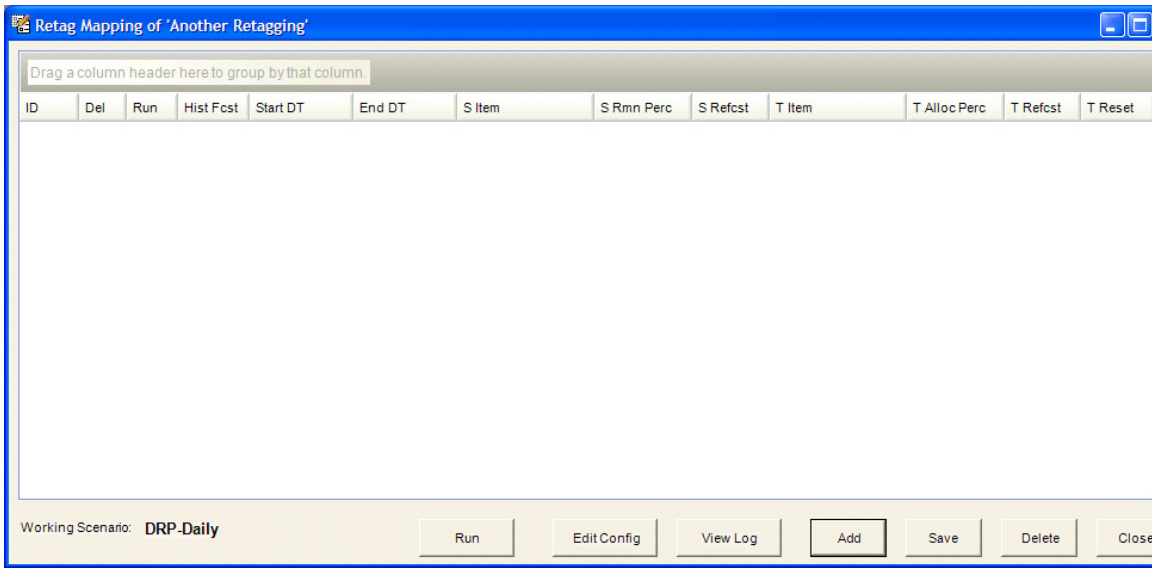
The image shows a Windows-style dialog box titled "Assign Retagging" with a blue title bar and a close button (X) in the top right corner. The dialog has a light beige background. At the top, there is a label "Working Scenario" followed by a dropdown menu showing "DRP-Daily". Below this, a message states: "The scenario 'DRP-Daily' has been assigned a retagging configuration." Underneath the message is the question "What action would you like to take?". There are three radio button options: "Create a New Retagging, and Assign it to the Scenario:" (unselected), "Assign an Existing Retagging:" (selected), and "Cancel" (unselected). The "Assign an Existing Retagging:" option has a dropdown menu next to it showing "New Retagging". To the right of the "Create a New Retagging..." option is an empty text input field. At the bottom right of the dialog is an "OK" button.

2. Select to create a new retagging or assign an existing retagging to the Scenario in the “What action would you like to take?” area. Select Cancel to close the window.

1-1: Create a New Retagging, and Assign it to the Scenario

- 1. If you selected “Create a New Retagging, and Assign it to the Scenario” type in the name of the new retagging.
- 2. Click OK.

The Retag Mapping of “Another Retagging” window displays.



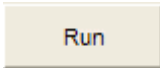
The table below details what each column means.

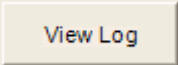
Column	Description
ID	Automatically generated ID to identify each mapping contained in a Retag configuration.
Del	Select in order to delete a mapping created for a Retag configuration. All the mappings with this check box enabled will delete after pressing the Delete button.

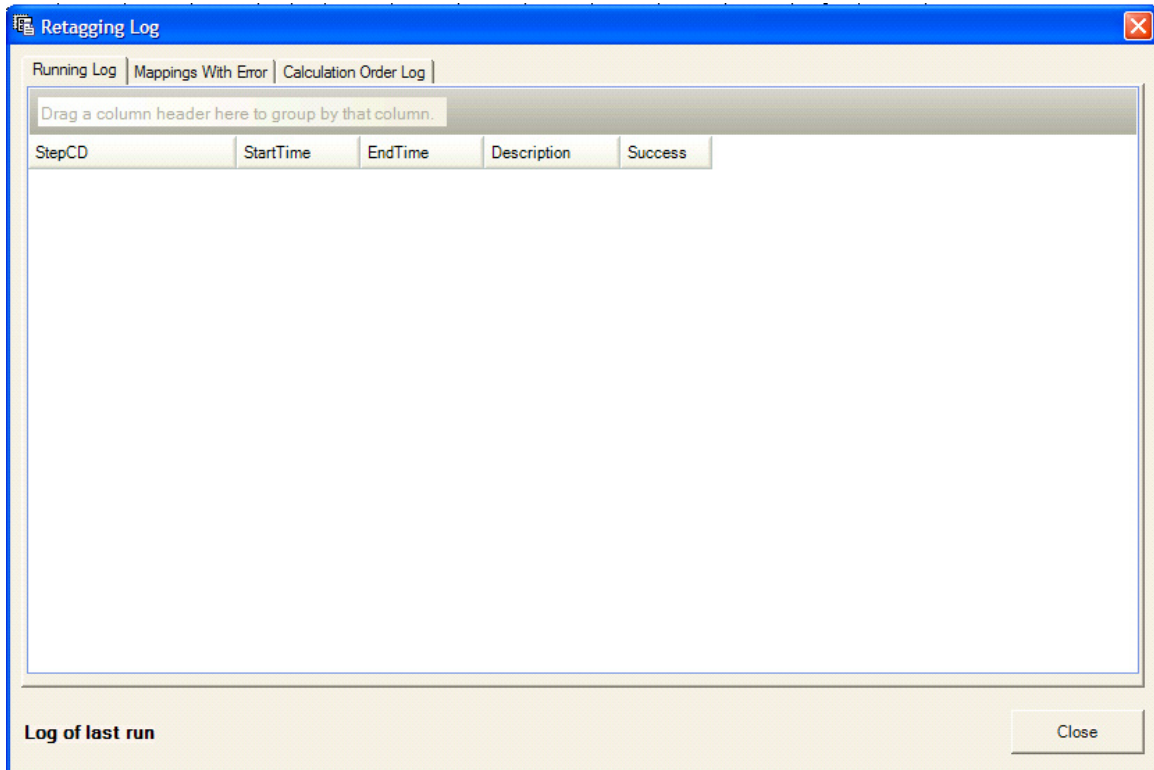
Column	Description
Run	Select in order to run a mapping. All the mappings with this checkbox enabled will be executed when the Run button is pressed. Note: Prior to running a retag, you must enable the run checkbox for the mappings you would like to execute.
Hist Fcst	Determines which types of periods in a Scenario will be affected by a mapping. There are three available options: ■ History - Mapping only affects Historical periods in the Scenario. ■ Future - Mapping only affects Forecast periods in the Scenario. ■ Both - Mapping affects both Historical and Forecast periods in the Scenario.
Start DT	Start date from which the mapping will have effect. Note: All periods before this date will not be affected by the mapping. Note: If a period after this date and was not affected by a mapping, double check the "Hist Fcst" option and see if the period is included in it.
End DT	Start date from until which the mapping will have effect. Note: All periods after this date will not be affected by a mapping . Note: If a period is before this date and was not affected by a mapping, double check the "Hist Fcst" option and see if the period is included in it.
S Sku	Retrieves the observations and puts them in the Target Series. This is the only source field configured by default. Note: The amount of source fields can be configured for each retag. (See step 5).

Column	Description
S Item	Source mapping fields. Multiple series can be retagged with one mapping. You can match any two series.
S Rmn Perc	Tells the system what percentage of the original value to leave in the source.
S Refcst	Specifies whether the Source Series should be reforecasted after the mapping has run.
T Sku	Identifies the Target sSeries that will take the information from the Source Series. This is the only target field configured by default. Note: The amount of source fields can be configured for each retag (See step 5).
T Item	Target mapping fields. Multiple series can be retagged with one mapping. You can match any two series.
T Alloc Perc	Specifies what percentage of the Source Series should be inserted into the Target Series.
T Refcst	Specifies whether the Target Series should be reforecasted after the mapping has run.
T Reset	Specifies whether the system should reset the observations in the Target Series before taking the information from the Source Series and saving it. If unchecked, then the existing values in the Target Series are added to the ones from the Source Series.

Note: *End-users do not have access to the Edit Config button.*

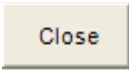
3. Click the  button to run the retag mapping.

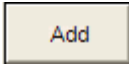
4. Click the  button to open the Retagging Log window.

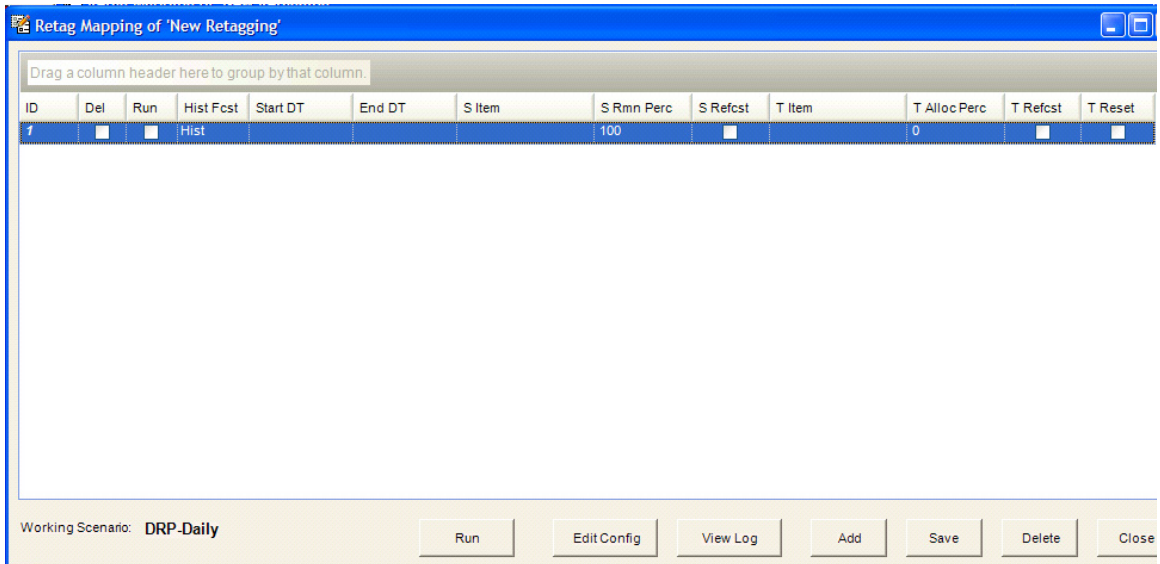


5. The following table details what each tab means.

Tab	Description
Running Log	Displays description of what is performed during the Retag.
Mappings With Error	Displays the mappings that failed in the execution.
Calculation Order Log	Displays which Series was retagged to which series.

6. Click the  button when finished.

7. Click the  button to add another retag mapping row.



Retag Mapping of 'New Retagging'

Drag a column header here to group by that column.

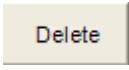
ID	Del	Run	Hist Fcst	Start DT	End DT	S Item	S Rmn Perc	S Refcst	T Item	T Alloc Perc	T Refcst	T Reset
1	☐	☐	Hist				100	☐		0	☐	☐

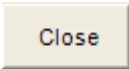
Working Scenario: **DRP-Daily**

Run Edit Config View Log Add Save Delete Close

8. Click the  button to save your changes.

9. To delete a retag mapping, highlight the retag mapping and click

the  button.

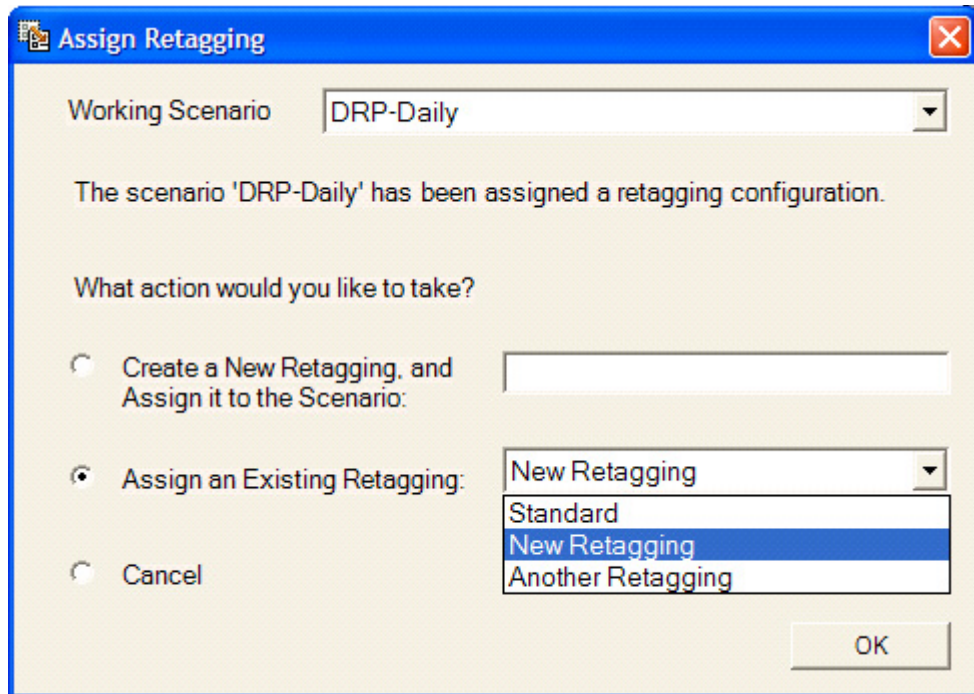
10. Click the  button to close the window.

Note: You can click on the columns' headings to arrange the retags in decremental or incremental order.

Note: You can drag a heading to the grey area to display only that column. You can also add more columns to group the columns in hierarchal order.

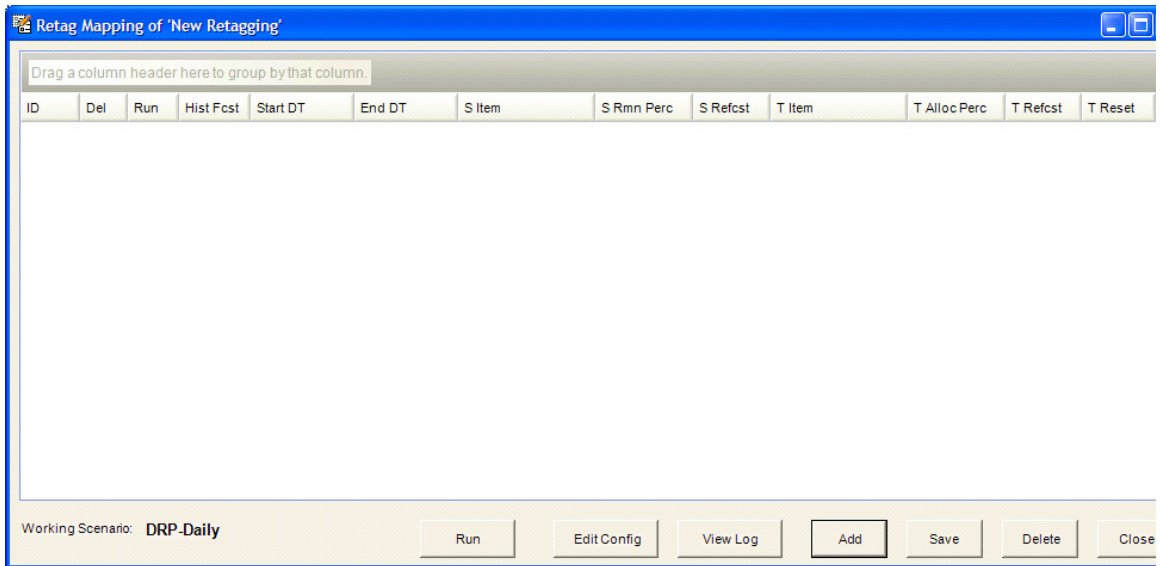
1-2: Assign an Existing Retagging

1. If you selected “Assign an Existing Retagging”, select one of the retaggings from the drop-down list.



2. Click OK.

The Retag Mapping of 'New Retagging' displays.



See [1-1: Create a New Retagging, and Assign it to the Scenario](#) for additional information on each of the features available in the Retag Mapping window.

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