



QAD Enterprise Applications

Training Guide Demand Management 6.1 User Training

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DemandManagementUserTraining_TG_v6.1/m3w/mdf

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Change Summary

The following table summarizes significant differences between this document and the last published version.

[illegible]

About This Course

Course Description

QAD designed this course to cover the basics of preparing to set up and use the QAD Demand Management (DM) program. The course includes hands-on activities and exercises that allow students to practice key concepts and processes in DM.

Course Objectives

By the end of this class, students will:

- Understand the importance of Demand Management in a business enterprise
- Recognize the impact of forecast errors on inventory levels and customer service
- Analyze some key business decisions before setting up DM
- Determine business requirements for setting up and using DM
- Understand the relationships of components in the DM program & Planning Portal
- Set up DM to best match the business rules of an organization

Audience

- DM technical support
- Appropriate business managers
- Implementation consultants and members of implementation teams
- Key end users

Prerequisites

- Demand Management User Learning Path
- Practical Guide to Business Forecasting (available April 15, 2012)

Course Credit and Scheduling

QAD designed this course to take 32 hours.

System Requirements

This course uses the QAD Enterprise Applications Enterprise Edition database. See the title page for the exact database title. Whether you are studying this material in a classroom or as a self-study exercise, this is launched in a virtual environment management system. QAD instructors will prepare classroom environments. If you encounter questions or problems on QAD software that are not addressed in this book, several resources are available.

Virtual Environment Information

Enterprise Edition 2011 Add-Ons r02, 10USACO

QAD Resources

If you encounter questions or problems on QAD software that are not addressed in this book, several resources are available.

Product Help

All QAD products ship with integrated help systems. A properly installed QAD application will display help when you press the Help key (F1), or access it through the menu. The help covers the normal use of the product.

QAD Web Resources

The QAD website provides product and company overviews. The Print Solution option on the opening page provides a means of compiling desired content into a document specialized to your industry, business implementation, and needs.

<http://www.qad.com/>

From QAD's main site, you can access QAD's Learning or Support sites.

QAD Learning Portal for Training Opportunities

To view available training courses, locations, and materials, use the QAD Learning Portal. Choose Learning under the Global Services tab to access this resource.

QAD Support for Product Documentation and the QAD Knowledgebase

To access release notes, user guides, installation and conversion guides by product and release, visit the Support website. Support also offers an array of tools depending on your company's maintenance agreement with QAD. These include the Knowledgebase and direct links to QAD Support experts.

Choose Support under the Global Services tab.

Any QAD customer can register for a QAD web account by accessing the Support web site and clicking the Accounts link at the top of the screen. Your customer ID number is required. Access to certain areas is dependent on the type of agreement you have with QAD.

Chapter 1

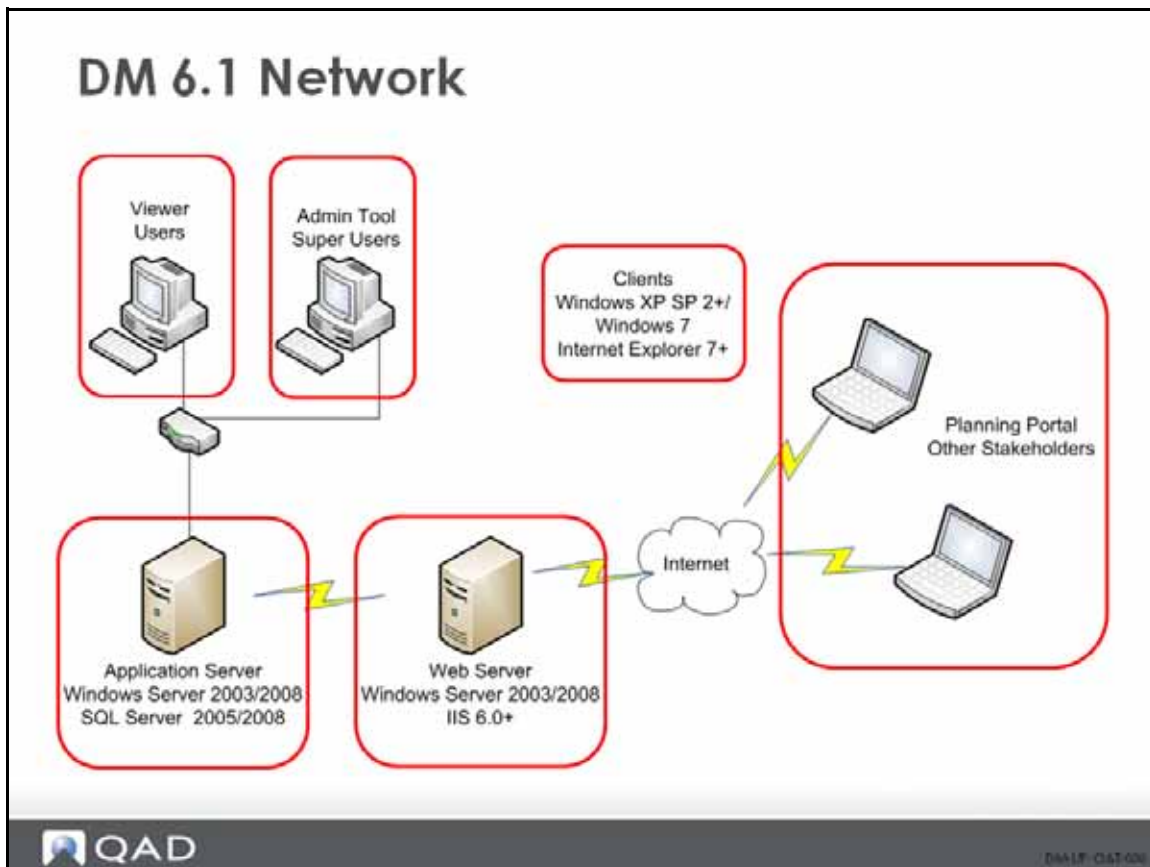
Overview and Terms

Agenda

Agenda

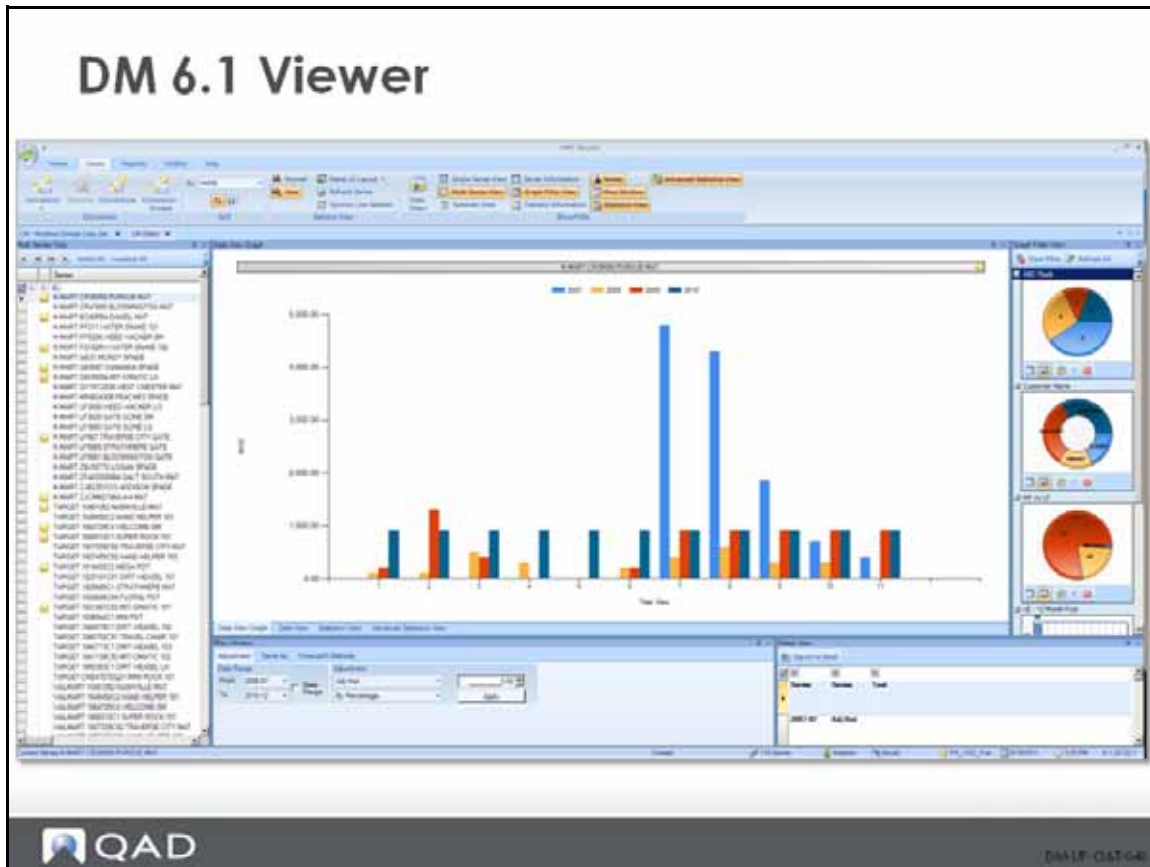
- DM 6.1 Overview
 - Demand Management Viewer
 - Admin Tool
 - Batch Scheduler
 - Planning Portal
- Key Functionality Upgrades from DM 5.4
 - New user interface
 - Double byte
 - Report capabilities
 - Improved performance
 - Improved Planning Portal

DM 6.1 Network



- 1 Application Server
- 2 Viewer – Users
- 3 Admin Tool – Super Users
- 4 Web Server for Planning Portal
- 5 Planning Portal Clients – Other Stakeholders such as Sales, Marketing, Customers

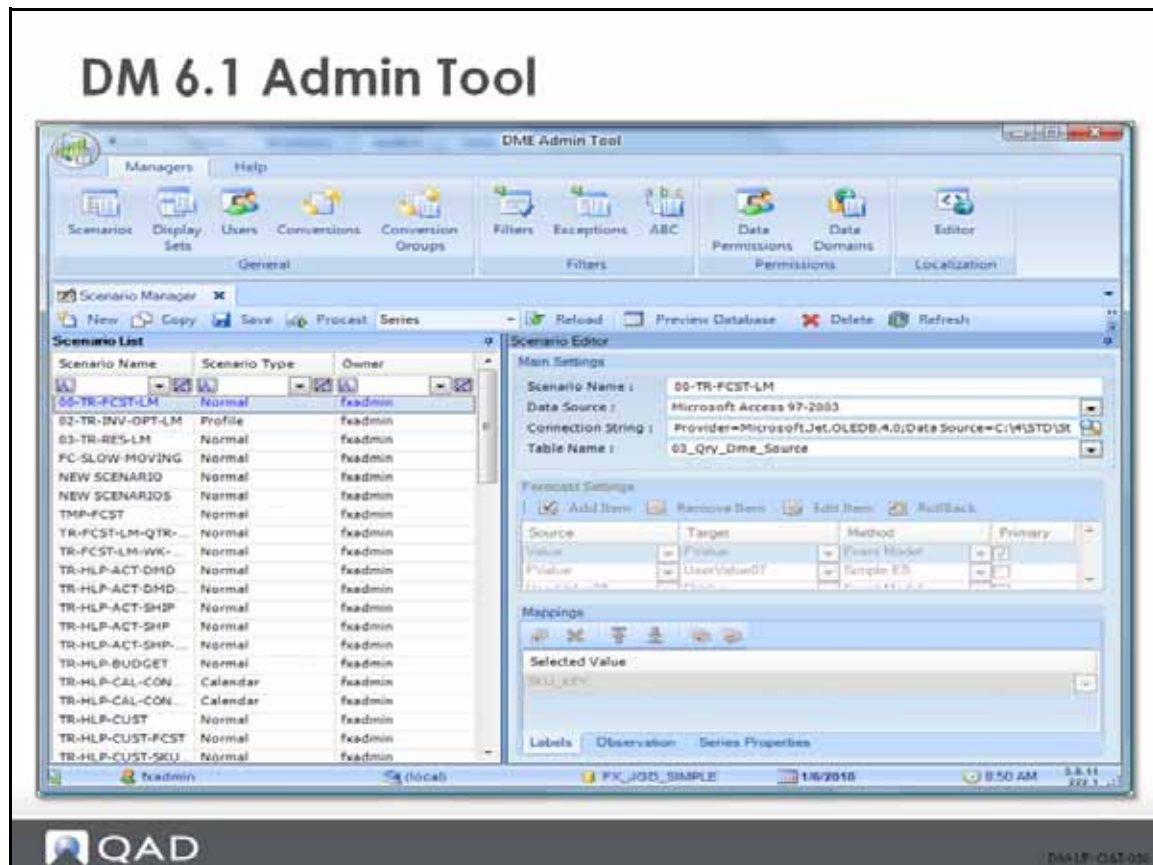
DM 6.1 Viewer



– With the new Microsoft Office-type ribbon interface, this is where authorized users can view the forecast results and interact with the DM 6.1 by making adjustments to the forecast. The viewer is where the interaction with the statistical forecast takes place, allowing you to generate a demand plan. The viewer can be used solely by the demand planner or it can be used by other stakeholders to get their feedback on the forecast. This is also where you can add your business knowledge into the process.

The DM Viewer is used by super users, demand planners, inventory planners, and forecasters.

DM 6.1 Admin Tool



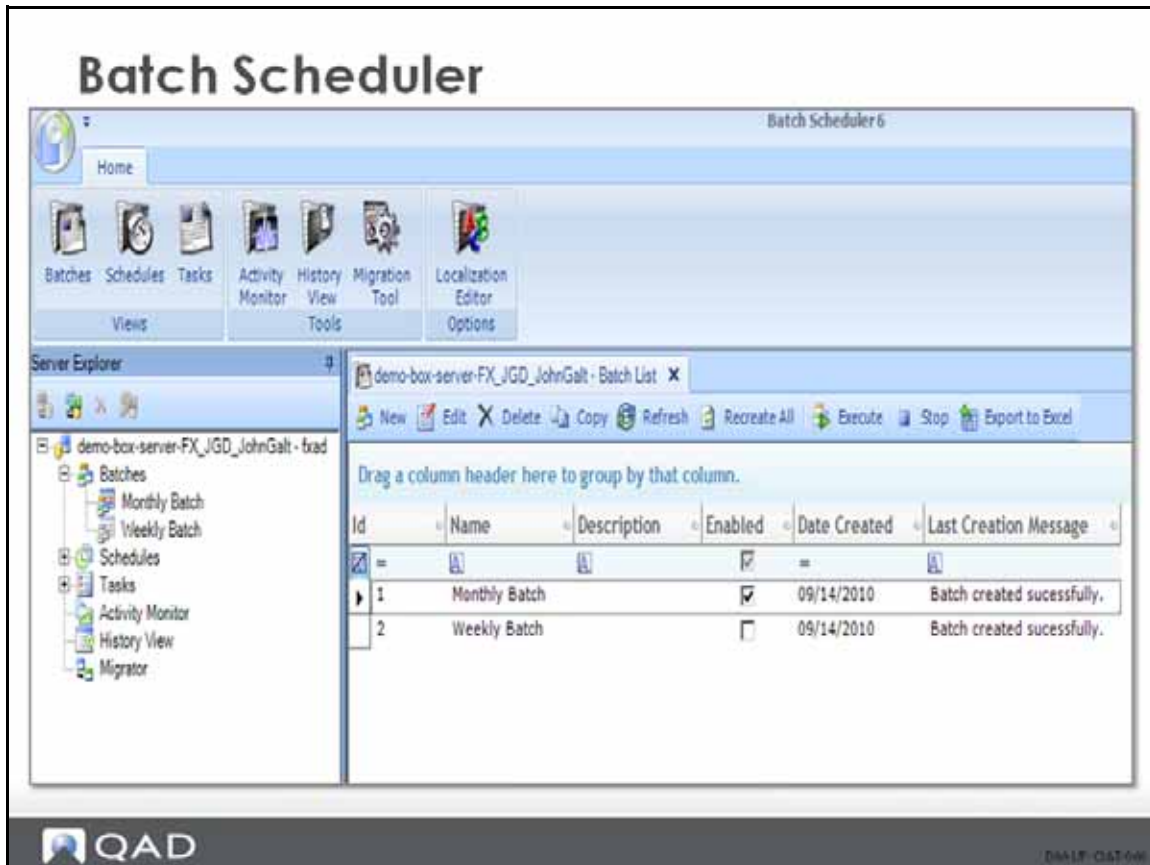
In order to manage the statistical forecasting process, the DM 6.1 program contains two components that are used by Administrators (Super Users)

The DM 6.1 Admin tool is where:

- The baseline forecasts are generated and managed
- You map all of your other business systems to the DM Engine to get a complete picture of your demand
- You can point and click to include your data sources
- You set up parameters for forecasting
- You determine who in the organization can review a forecast
 - who has the right to change it.

This is used by the Super Users to manage the statistical forecasting process.

Batch Scheduler



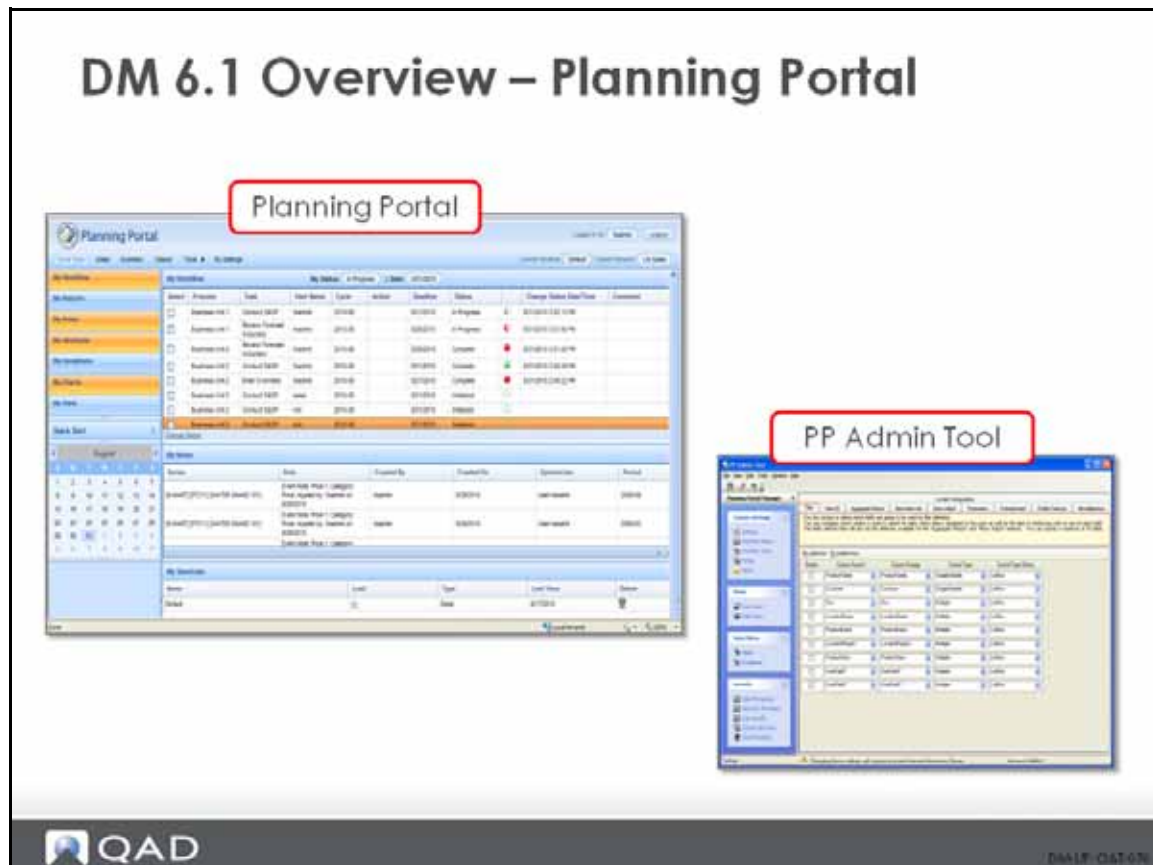
The Batch Scheduler allows you to automate routine tasks in your statistical forecasting process.

It can be used to update your forecast with actual sales results after month-end or it can be used to generate the forecasts, create the demand plan and build reports for you as required.

Many customers use the batch scheduler when they have a large number of products to forecast.

They schedule the DM 6.1 to run over the weekend or at night when it won't be disrupted.

DM 6.1 Overview - Planning Portal



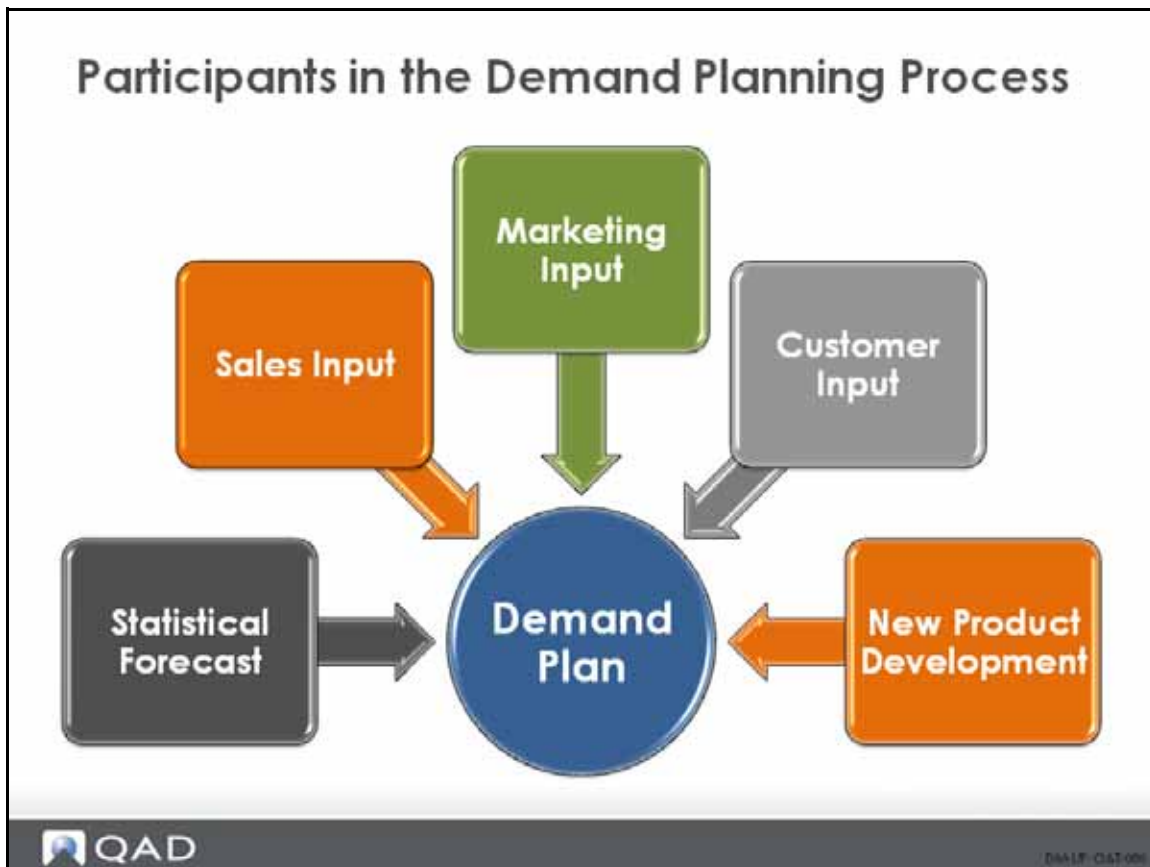
The Planning Portal

In order to make it easy to accept input from the various stake holders in the demand planning process, we developed the Planning Portal. Sales people can visit customers, and using the Planning Portal, communicate with the DM 6.1 over the internet. They can show customers updated sales and forecast information by product, product group or their entire business. They can then update forecasts based on customer input and feedback. Stakeholders such as Marketing, New Product Development and Customers can enhance the accuracy of the forecast by inputting up-to-date information.

Web Form

The Web Form is the newest component of the DM 6.1 and allows you to publish forecasts, demand plans, and data views out to the Internet so that you begin to collaborate with other stakeholders in your organization. Those who use the web form have the ability to make adjustments and notes as to their changes, all of the information is brought back to the demand plan and our central repository. Gather input from other departments or stakeholders that have more input into the plans.

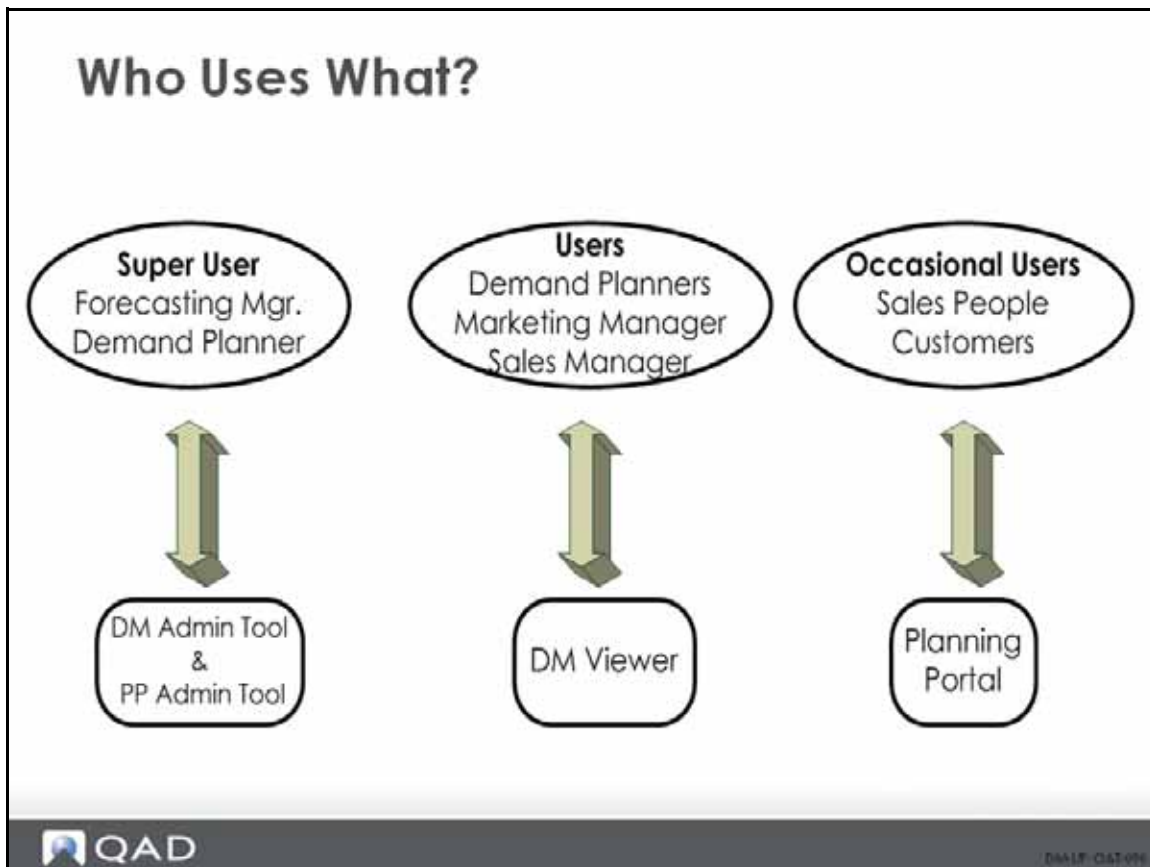
Participants in the Demand Planning Process



A successful demand planning process depends on input from multiple sources:

- Customers: the best source of demand input, because it is changes in their business that will cause changes in supplier demand
- Sales: talking – and listening – to customers allows the sales force to provide insight into the plans customers and competitors
- Marketing: normally the source of promotional information and strategies
- New Product Development: product introduction dates and growth expectations
- Statistical forecast: using past sales to predict the future

Who Uses What



DM & PP Admin Tools

One or more Super Users, possibly a Forecasting Manager or Director, a Demand Planner or someone in Information Technology will normally manage the system using the DM Admin tool

DM Viewer

Most users who are responsible for forecasting, such as Marketing Managers, Sales Managers, Demand Planning Managers and Demand Planners will use the Viewer

DM Portal

Occasional users such as Sales People or Customers will use the DM Portal

Scenarios

Scenarios

- Group of data created in DM Admin Tool from a data source
 - Data from an Excel Spreadsheet or SQL Database
 - Opened and used for analysis in the Viewer
- Types of Scenarios
 - Living Master Scenario (LM)
 - Detail Scenario (DTL)
 - Helper Scenario



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Types of Scenarios

- Living Master Scenario (LM)
 - Master scenario that serves as a central repository of data
 - Used instead of many scenarios retrieving data from outside source(s)
- Detail Scenario (DTL)
 - User specific scenario – often tied to a users area of responsibility
 - Retrieves and modifies data from the Living Master
- Helper Scenario
 - Staging area for additional data to load into Living Master

Opinion Line

Opinion Line

- Stream of data in the Viewer
- Typically used for data review (i.e. historical data) data entry (i.e. customer forecast), calculations and analysis
 - **Examples:** History, Forecasts and Shipments



Observation

- Numerical point in time
- Example: Sales for July, 2011



Series

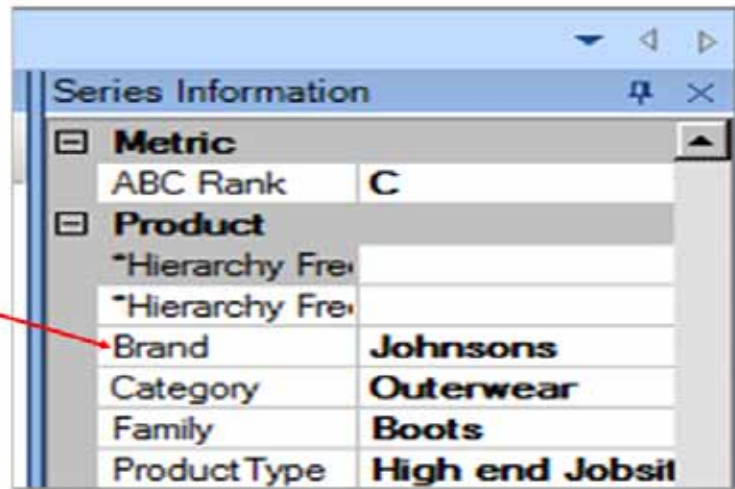
Series

- Line item containing related data
- Example: This store location has multiple model numbers (SKU's) and each combination is a series



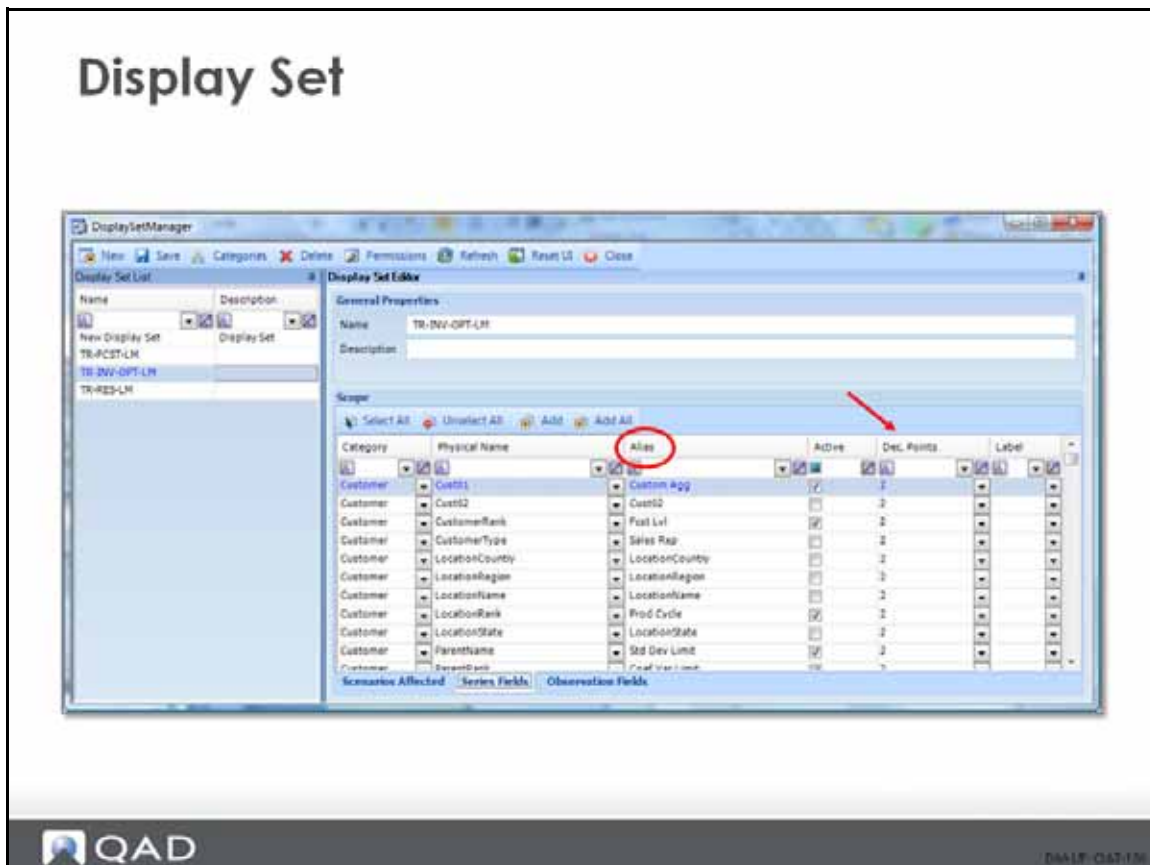
Series Properties

- "Facts" about the data,
 - Examples: Customer name, region, division, product name, brand etc.



Series Information	
Metric	
ABC Rank	C
Product	
*Hierarchy Fre	
*Hierarchy Fre	
Brand	Johnson
Category	Outerwear
Family	Boots
Product Type	High end Jobsit

Display Set



- A tool in the Viewer and DME Admin used to set labels to fit business descriptions and terminology (Alias)
 - Also defines numerical formatting (i.e., decimals, etc.)

Filters

Filters

- Limits the displayed series to items that meet a defined criteria such as: specific customer(s) or product type(s)
- Can be created in the **DM Viewer** or **DM Admin Tool** for general use



Exceptions

Exceptions

- Used in the **DM Viewer** to limit the series displayed
- Selects series with observation data that meets a defined criteria
 - Example: Find SKU's with unusual growth, identify SKU's with no sales for 6 months, identify large user adjustments
- Created in the **DM Admin Tool** or the **DM Viewer**, typically by a Super User

ABC Templates

ABC Templates

- Define user-defined settings to perform ranking calculations
 - Example: Use to determine which SKUs, product groups or customers represent the majority of your business
- Conversion factor options allow calculation of rank in terms of different measures such as cost or revenue
- Ranking can be determined based on actual data or forecast

Overview - Hierarchies

Overview – Hierarchies

- **Hierarchies** are used to:
 - View data based on series attributes at aggregate levels such as Product Class, Sales Region, Customer.
 - Reconcile changes made at various levels by using the **Re-balance** feature.
 - Provide history to create statistical forecasts at aggregate level.
- Users may create their own **Hierarchies** in the **Hierarchy Manager** or use **Hierarchies** that have been shared by the owner.

Hierarchy Manager

Hierarchy Manager

- Roll forecast changes from a bottom (item) level to top (product group or company) level

-or-

- Allocate forecast changes from a top level to a bottom level
- Provides statistical forecasting capability at an aggregate level
- Groups and organizes data based on any attribute loaded in DM 6.1

Data Permission

Data Permission

- A **Filter** functionality created and assigned in the **DM Admin Tool** to a user or group of users to limit or control the data viewed
 - Sales reps for Customer X could be limited to only view the historical sales and forecasts for their customer
 - Regional Marketing Managers could be limited to view and adjust promotional information in their regions only

Events

Events

- **Events** are special situations or actions that can change forecasting behavior
- They can be a one time event or expected to reoccur on some frequency
- Examples of **Events**
 - Sales promotion expected to drive volume up 20% for a month
 - Store closing for remodeling will result in selling 20,000 less units over a two month range
 - New contract ensures the sale of 10,000 units over the next four months

NOTE: Events do not change the forecast.

NOTE: They put the event value in a separate opinion line.



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Data Domain

Data Domain

- A **Filter** functionality created and assigned in the **DM Admin Tool** to a user or group of users to determine which opinion lines a user can view or edit
 - Sales Reps may not be allowed to see net price, while Sales Managers can
- Separate data domains would be created and the appropriate user ids assigned to each

Procast

Procast

- Method used to select best time series forecasting techniques
- Judged to be one of the most accurate in the world
- There are over 30 other forecasting methods are available for selection IN DM Admin Tool and the DM Viewer, such as:
 - Moving Average
 - Slow Moving Item
 - Exponential Smoothing
 - Regression
 - New Product

Chapter 2

The Living Master and Detail Scenarios

The Living Master Scenario

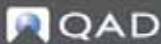
The Living Master Scenario

- The **Living Master Scenario** is the central location for all data: series attributes, historical data and data to be forecasted
- The **Living Master** allows users to view and edit their slice of the data in forms of their choosing
- The system is easier to administer, by providing one location to add data and generate reports
- The **Living Master** removes the problem of multiple users needing to coordinate access to a single scenario or group of scenarios

Living Master Overview

Living Master Overview

- During Implementation, the **Living Master** Scenario is created through the **Admin Tool**
- During setup, information is defined and mapped for loading such as:
 - **Labels**
 - **Observational data**
 - **Series Attributes**
- Additional data can be brought into the **Living Master** from other sources through the use of **Helper Scenarios**
- The **Living Master** Scenario can be updated or reloaded on a defined schedule in the **Batch Scheduler**



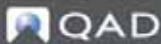
DIA-1403-020

- Labels allow users to select fields from the Data Source to represent unique products or items
- Observation data is used to select fields from the Data Source to represent the Historical information used to create the Forecast
- Series Attributes allow users to map individual system fields to fields in the Data Source for this Scenario
- The Helper Scenario is a scenario that provides for staging the data before loading into the Living Master
- The Batch Scheduler is a tool to automate DME tasks that would normally have to be performed manually

Accessing The Living Master Scenario

Accessing The Living Master Scenario

- Users with access to the **Living Master Scenario** are assigned through **permissions** in the Admin Tool
- **Each user will have access** to view and/or edit the **Living Master** through one of two methods
 - **Direct access** – A user will be able to work directly in the Living Master and make changes
 - **Indirect access** – A user will be able to access a portion of the **Living Master** with a **DTL (Detail) Scenario**. A user will be able to make changes in the **DTL Scenario**. These changes **will not** be applied to the Living Master until the user **commits (saves)** them back to the **Living Master**

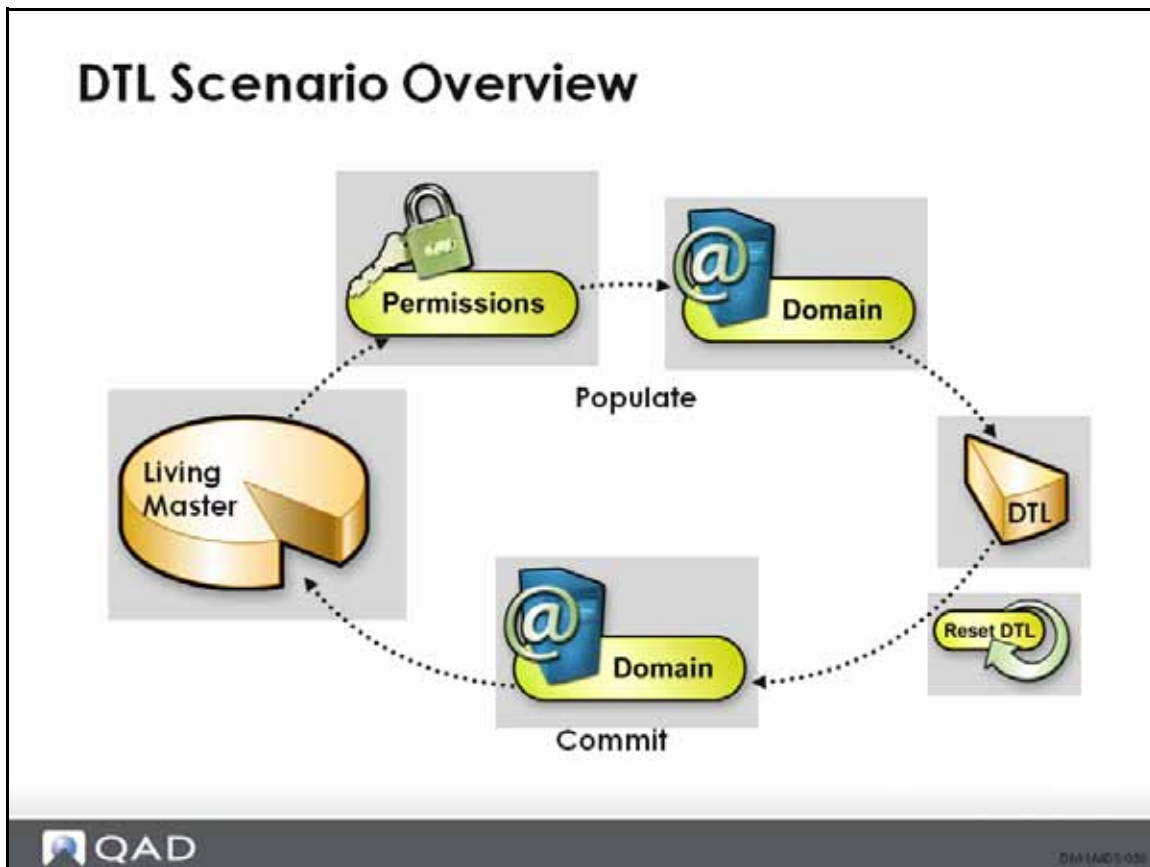


DAM101-04

Each user with Detail Scenario (DTL) access can access a defined “piece” of the Living Master, typically based on their job responsibilities.

- Allows users to view and edit their slice of the data
- Users can Populate (copy) and make changes in their DTL Scenario then Commit (save) the information back to the Living Master when their analysis / review is complete
- The Detail scenario can also be used as a simulation or modeling environment that will not impact the primary data in the Living Master unless purposely committed back to the Living Master

DTL Scenario Overview



Living Master Scenario (LM)

- Master scenario that serves as a central repository of data
- Used instead of many scenarios for retrieving data from outside source(s)

Permissions

- Permissions are filters that are created and assigned in the DM Admin Tool to a user or group of users to limit or control the data viewed

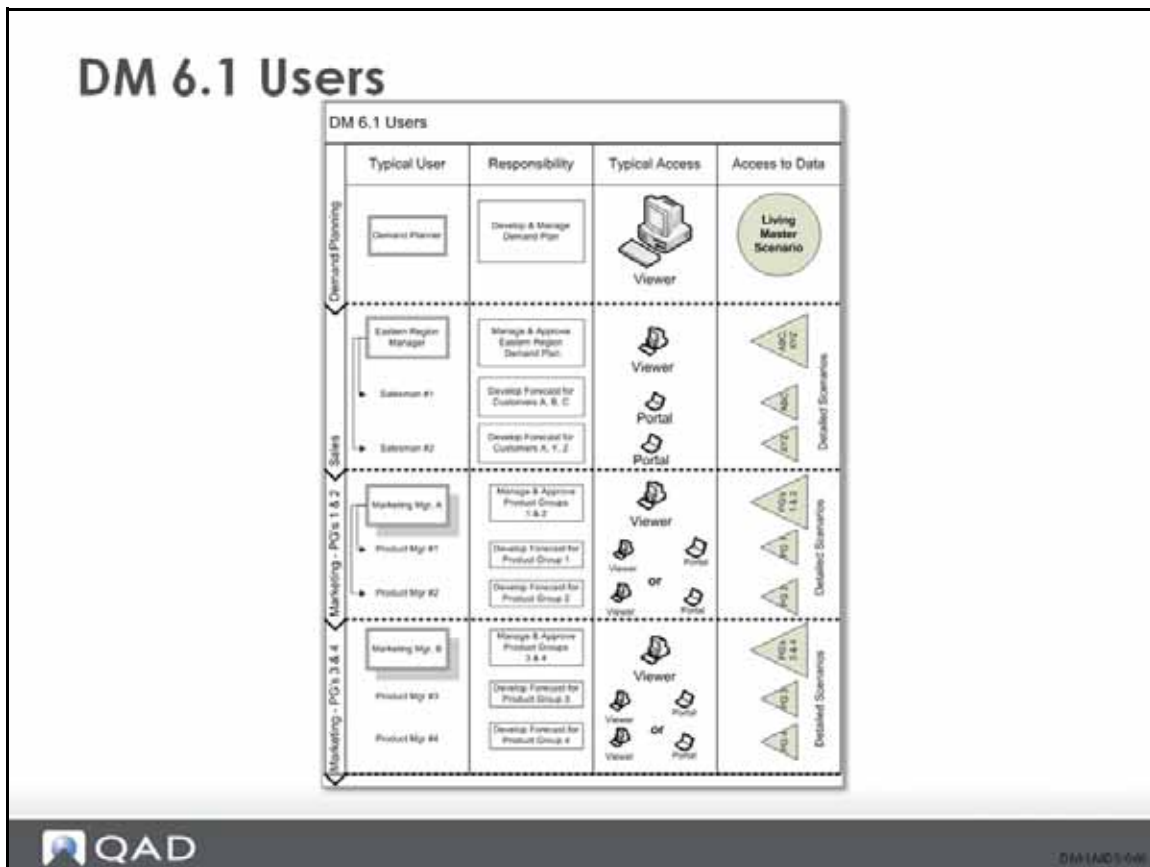
Data Domains

- Data Domains are filters created and assigned in the DM Admin Tool to a user or group of users to determine which opinion lines a user can view or edit
- Sales Reps may not be allowed to see net price, while Sales Managers can

Detail Scenario (DTL)

- User specific scenario – often tied to a users area of responsibility
- Retrieves and modifies data from the Living Master

DM 6.1 Users



Typical Users – Demand Planners, Sales Forecasters, Materials Managers, Supply Chain Managers

- Responsibility – prepare & manage forecasts and forecasting process
- Typical System Access – Viewer
- Data Access – Living Master

Typical Users – Sales Managers, Marketing Managers, Regional Sales & Marketing Managers, Key Account Managers

- Responsibility – manage and approve forecasts for their areas of responsibility
- Typical System Access – Viewer
- Data Access – Detailed Scenarios of their areas of responsibility

Typical Users – Field Sales, Product Managers, New Product Managers

- Responsibility – input business intelligence including customer forecasts, promotional calendar, new product introduction schedule for their areas of responsibility
- Typical System Access – Portal or Viewer
- Data Access – Detailed Scenarios of their areas of responsibility

Typical Users – Customers

- Responsibility – input collaborative customer forecasts

- Typical System Access – Portal
- Data Access – Detailed Scenarios of their company

Living Master and Detail Scenario - Recap

Living Master and Detail Scenario - Recap

- The **Living Master** serves as the central repository for all data
- The **Living Master** removes the problem of multiple users needing to coordinate access to a single scenario or group of scenarios
- The (DTL) **Detail Scenario** allows users to view and edit their slice of the data in forms of their choosing

Chapter 3

Introduction to the Viewer

Viewer - Introduction

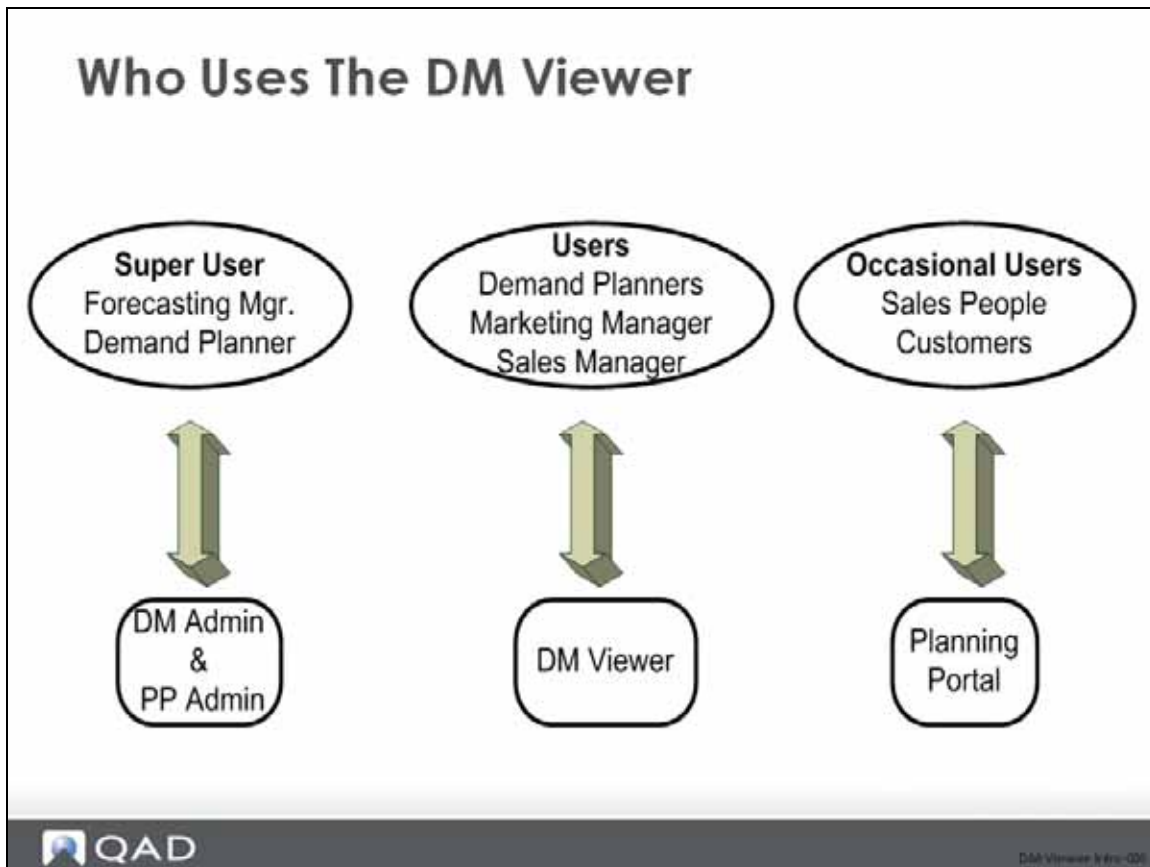
Viewer - Introduction

- The Viewer is the main program used in researching and manipulating a forecast
- It allows users to collaboratively manage the forecasting process to account for
 - Sales Objectives
 - New Customers
 - New Products
 - Product Cannibalization
 - Product Retirements
 - Price Changes
 - Promotions



D&M Viewer Intro-001

Who Uses the DM Viewer



DM Admin

One or more Super Users, possibly a Forecasting Manager or Director, a Demand Planner or someone in Information Technology will normally manage the system using the DM Admin tool.

DM Viewer

Most users who are responsible for forecasting, such as Marketing Managers, Sales Managers, Demand Planning Managers and Demand Planners will use the Viewer

DM Portal

Occasional users such as Sales People or Customers will use the Planning Portal

Launching the Viewer

Launching the Viewer

- The Viewer can be accessed from the Start Menu via: Programs > QAD – Demand Management> Demand Management Engine > DME Viewer
- You may drag the shortcut from the Start Menu to the Desktop or the Quick Launch Bar



DME Viewer 6.1.0.0-040

Logging into the Viewer

Logging into the Viewer

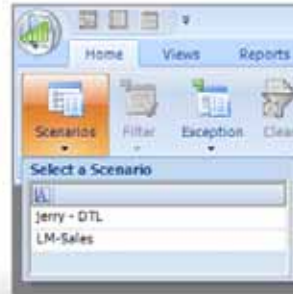
- The QAD Demand Management administrator is responsible for the creation of all users and their security
- Once the application has been launched, the **DME Viewer - Login** screen displays
- Enter your assigned **Login** and **Password**
- Use the **Language** drop-down to select the language used in the Viewer



Open Scenario

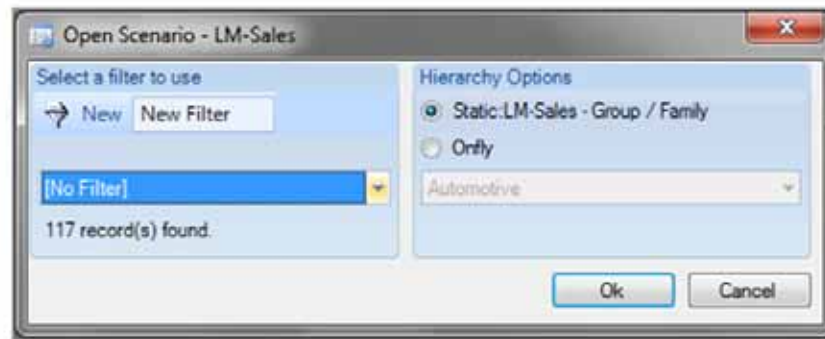
Open Scenario

- The main scenarios to choose from will be the **Living Master** and the **DTL (Detail) Scenario**
- Users may have the ability to access the Living Master directly to make changes
- The scenario “<user>- DTL” refers to the your “**Detail**” scenario.
 - The DTL scenario is used to retrieve, view, and edit data from the Living Master that a person is restricted to
 - Any changes made in the DTL scenario will needed to be committed (saved) back to the Living Master



Open Scenario

- Once you have logged into the application, click the **Scenario** button to open the drop-down list of available scenarios
- Select the scenario to open from the list. The Open Scenario window displays



Note If the Value column is Empty, displaying “0” record(s) found, there is an issue, such as the data didn’t load or a connectivity problem.

Select a Filter (Optional)

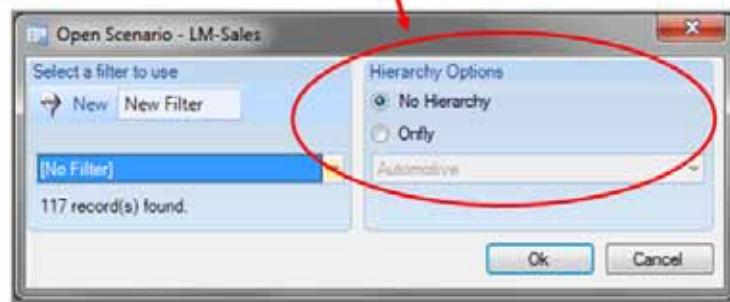
Select a Filter (optional)

- For previously saved filters, use the drop-down list to select a desired filter. Default value is "No Filter"
- The Record Count below the drop-down indicates the number of series that would be returned from applying the selected filter to this Scenario
- To add a new filter, enter a name into the text box and click the New button
 - The Filter Editor will display allowing you to enter the filter criteria



Hierarchy Options

- To open the scenario without a Hierarchy, leave the default selection of No Hierarchy
- To apply a Hierarchy while opening the Scenario, select On-Fly and choose an existing Hierarchy from the drop-down list
- Click Ok



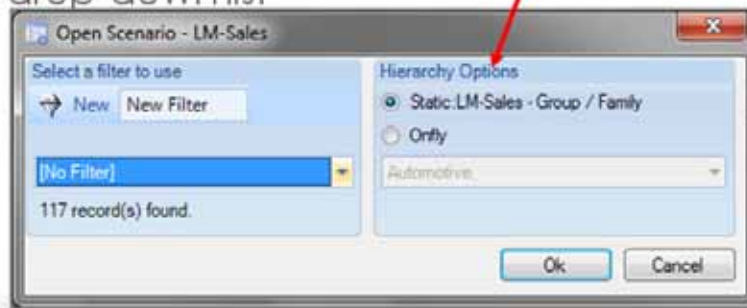
Hierarchy Options

- If the Hierarchy Options shows:

Static: <Hierarchy Name>

as an option, this indicates that the Hierarchy is already applied to the Scenario

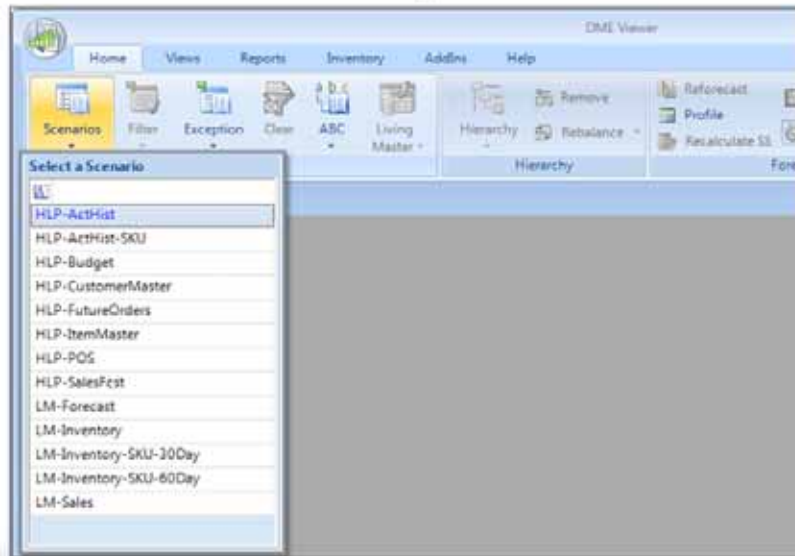
- Another Hierarchy can be applied by selecting On-Fly and choosing an existing Hierarchy from the drop-down list



Select a Scenario

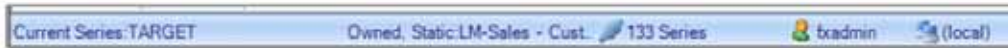
Select A Scenarios

- Select Scenario to open
- Scenarios can be designated for each user



Information Bar

- Current Series – selected item on the series list
- Scenario status – Owned or Shared, impacts behavior and access
- Hierarchy - None, Static, or On-fly with hierarchy name
- Series Count – Full scenario count, changes with hierarchies, filters, or exceptions applied
- Data Source – local or server name



Current Series: TARGET Owned, Static: LM-Sales - Cust. 133 Series txadmin (local)

Viewer Introduction - Recap

- The **Viewer** provides a single interface for users to collaborate and interact with their forecasts
- The **Viewer login** has options for applying **filters** and **hierarchies**
- Data can be viewed through **Scenarios** based on **Data Permissions** given by the **Administrator**
- Users may have access to the **Living Master** or a **DTL (Detail) Scenario**

Chapter 4

Views Available In The DM 6.1 Viewer

Overview - Views Available

Overview – Views Available

- **Data Views** – Customized Data and Graph views made by users
- **Statistics View** – Displays series attribute statistics
- **Advanced Statistics View** – Displays statistics fields generated from forecasting using Regression
- **Notes View** - Displays notes for selected series
- **Misc Window** - Tools for adjustments and ForecastX settings
- **Demand Information View** - Displays series attribute information related to inventory management, such as Lead Time



DMS_V6_01_Memo-070

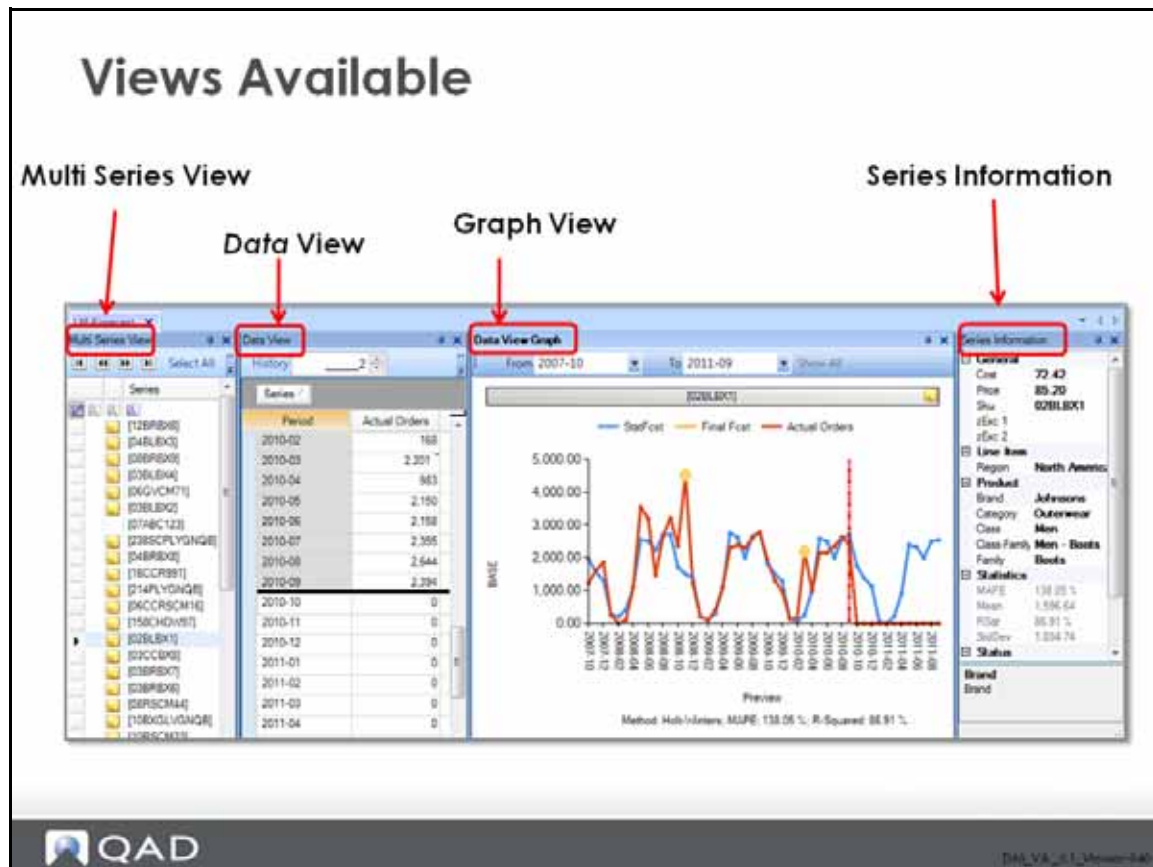
Configuring Views

Customizing Views



- The Viewer allows users to customize the information displayed at a given time
- View options are available in the Show/Hide section of the Views Tab
- Select the desired Views from this menu to toggle on and off
- Multiple Views may be open at a time
- The size of the View windows are adjustable
- Your settings will be saved when you exit the Viewer

Views Available



- Multi Series View - List of available series. Allows the review of multiple series in Data View.
- Single Series View – List of available series. Only allows the view of one series at a time in Data View.
- Graph View - Graphical display of selected information such as historical demand, fitted forecast, future forecast.
- Data View - Numerical columns of data, same data as displayed in Graph View.
- Series Information - Displays series attribute information

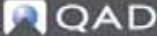
Single Series View

Single Series View



Period	Act Hist	Adj Hist	Stat Fcast Main	05-Final Fcast
2007-07	2,000	2,000	2,212	2,000
2007-08	3,200	3,200	1,928	3,200
2007-09	2,000	2,000	2,495	2,000
2007-10	800	800	2,497	800
2007-11	2,400	2,400	2,400	2,400
2007-12	2,200	2,200	1,705	2,200
2008-01	3,100	3,100	3,718	3,100
2008-02	1,000	1,000	1,071	1,000
2008-03	600	600	1,236	600
2008-04	1,200	1,200	705	1,200
2008-05	1,600	1,600	681	1,600
2008-06	1,800	1,800	881	1,800
2008-07	2,300	2,300	2,150	2,300
2008-08	1,400	1,400	2,301	1,400
2008-09	2,700	2,700	2,350	2,700
2008-10	3,200	3,200	1,999	3,200
2008-11	2,400	2,400	2,400	2,400
2008-12	1,500	1,500	1,890	1,500
2009-01	4,800	3,975	3,537	4,800
2009-02	1,100	1,100	1,050	1,100
2009-03	1,500	1,500	1,050	1,500
2009-04	500	500	850	500
2009-05	300	300	950	300

- View one series at a time in **Data View**
- In **Data Graph View** only a Single Series View is displayed


DAS_V6_6.1_Memo-935

Data View

Data View

Controls the number of historical periods displayed.

Selected Series

Period	Actual Orders	Orders Adjusted	StatFcast	Event Base Demand
2010-02	168	168	40	168
2010-03	2,201	410	254	911
2010-04	983	983	1,010	983
2010-05	2,150	2,150	2,590	2,150
2010-06	2,158	2,158	2,506	2,158
2010-07	2,365	2,365	1,997	2,365
2010-08	2,644	2,644	2,578	2,644
2010-09	2,394	2,394	2,712	2,394
2010-10	0		1,763	
2010-11	0		1,377	
2010-12	0		1,133	
2011-01	0		63	
2011-02	0		0	
2011-03	0		199	
2011-04	0		0/0	

Historic data displays with gray label above the bold line

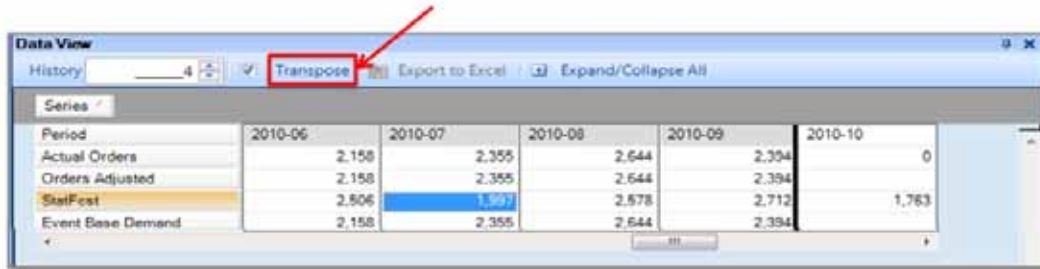
QAD

DA6_V6_2.1.3_Memo-000

In the Data View, information for the selected series is viewed as numerical columns of data.

Transposing Data in Data View

- In the **Data View**, opinion lines can be transposed by selecting the Transpose box



The screenshot shows the 'Data View' window with a table of data. A red arrow points to the 'Transpose' button in the toolbar. The table has columns for 'Period' (2010-06, 2010-07, 2010-08, 2010-09, 2010-10) and rows for 'Actual Orders', 'Orders Adjusted', 'StatFest', and 'Event Base Demand'. The 'StatFest' row is highlighted in blue.

Period	2010-06	2010-07	2010-08	2010-09	2010-10
Actual Orders	2,158	2,355	2,644	2,394	0
Orders Adjusted	2,158	2,355	2,644	2,394	
StatFest	2,506	1,997	2,578	2,712	1,763
Event Base Demand	2,158	2,355	2,644	2,394	

Multi- Series View

Multi- Series View

Series: K-MART CR35058 PURDUE MAT (42 items)

Period	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12
Act Hist	4,800	4,300	1,100	700	400	300
Adj Hist	4,800	4,300	1,858	700	400	300
Stat Fcst Main	903	903	903	903	903	903
05-Final Fcst	4,800	4,300	1,100	700	400	300
04-Override	0	0	0	0	0	0
Stat Fcst 2	4,800	4,800	4,300	1,858	700	400
01-Judgement	0	0	0	0	0	0

Series: K-MART CR47692 BLOOMINGTON MAT (42 items)

Period	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12
Act Hist	2,000	3,200	2,000	800	2,400	2,200
Adj Hist	2,000	3,200	2,000	800	2,400	2,200
Stat Fcst Main	2,212	1,928	2,495	2,497	2,400	1,705
05-Final Fcst	2,000	3,200	2,000	800	2,400	2,200
04-Override	0	0	0	0	0	0
Stat Fcst 2	2,000	2,000	2,000	2,000	2,000	2,000
01-Judgement	0	0	0	0	0	0

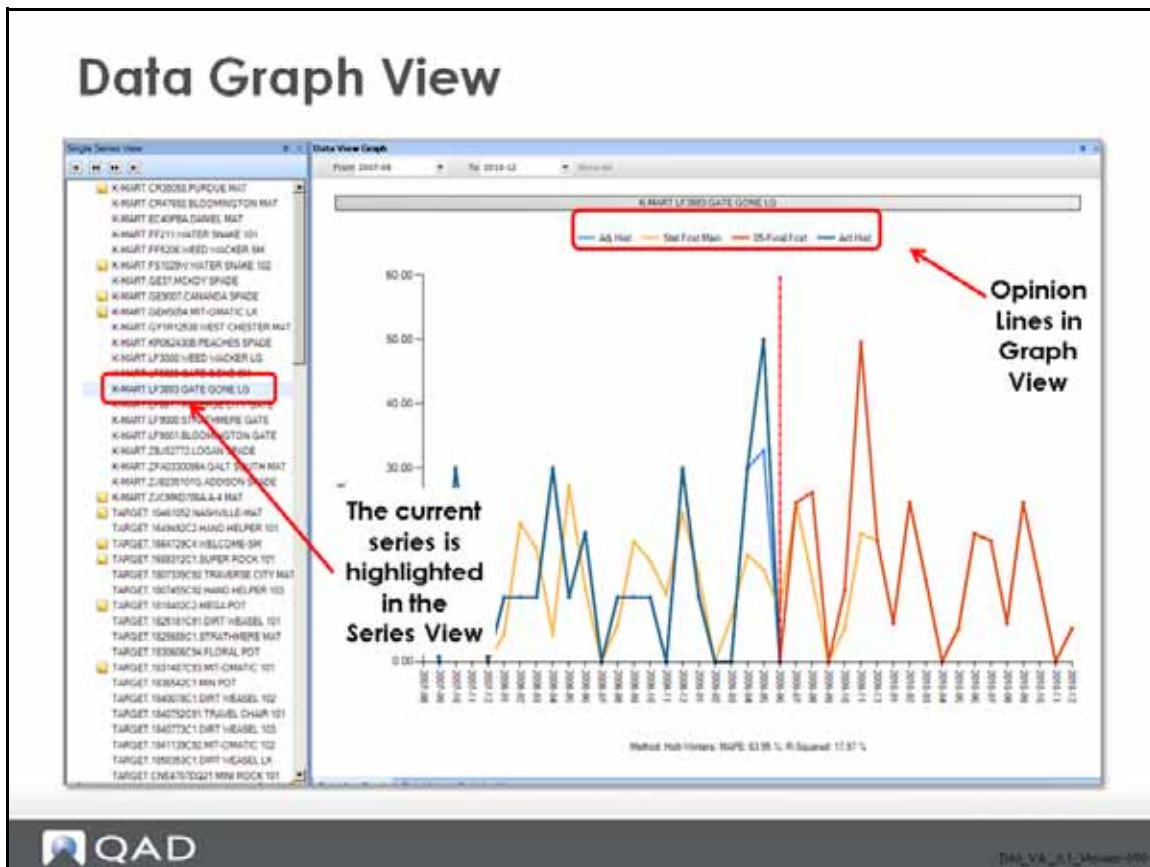
Series: TARGET 10451052 NASHVILLE MAT (42 items)

Period	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12
Act Hist	1,524	1,013	1,311	1,363	1,521	1,564
Adj Hist	1,524	1,013	1,311	1,363	1,521	1,564
Stat Fcst Main	1,514	1,061	1,736	1,216	1,712	1,882
05-Final Fcst	1,524	1,013	1,311	1,363	1,521	1,564
04-Override	n	n	n	n	n	n

- View data from multiple objects in **Data View**
- Does not work in **Data Graph View**
- In **Data Graph View** only a Single Series View is displayed

DMS_VA_2.1.3-Rev-100

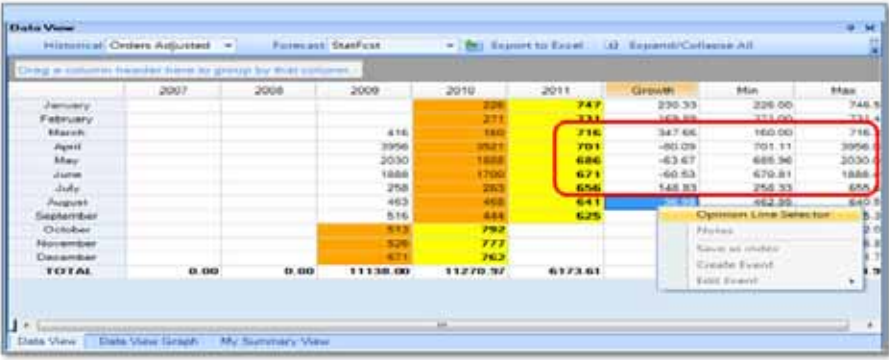
Data Graph View



The Data Graph View displays the historical data, baseline forecasts and other selected Opinion Lines for the selected series. The Data Graph View will only display a single series at a time.

Changing Opinion Lines

1)



2)



QAD

DMS_V6_6.1_Memo-100

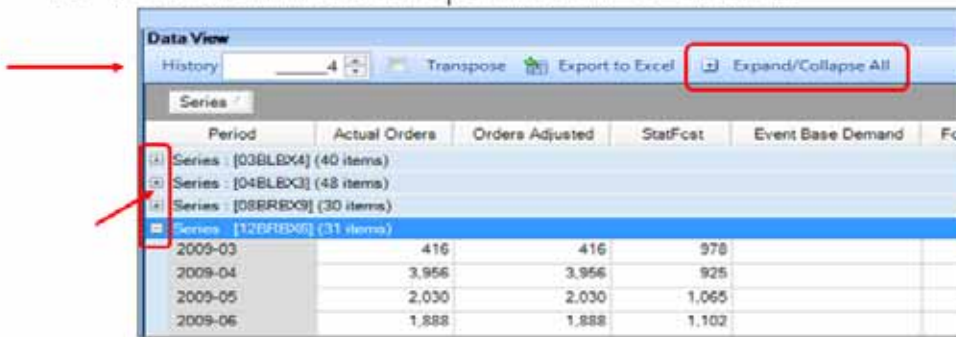
To change the Opinion Lines displayed on the Graph or in the Data View:

- 1 Right-click on the View and click “Select Opinion Lines to Show”.
- 2 Or on the Data View Manager screen, pick the lines to display and use the arrow buttons to move them to the Selected List.
- 3 Click Save.

Expand/Collapse All in Data View

Expand/Collapse All in Data View

- When multiple series are selected, the list can be collapsed and re-expanded by using the **Expand / Collapse All** button.
- Individual series drop boxes (+) can be used to see individual opinion line data.

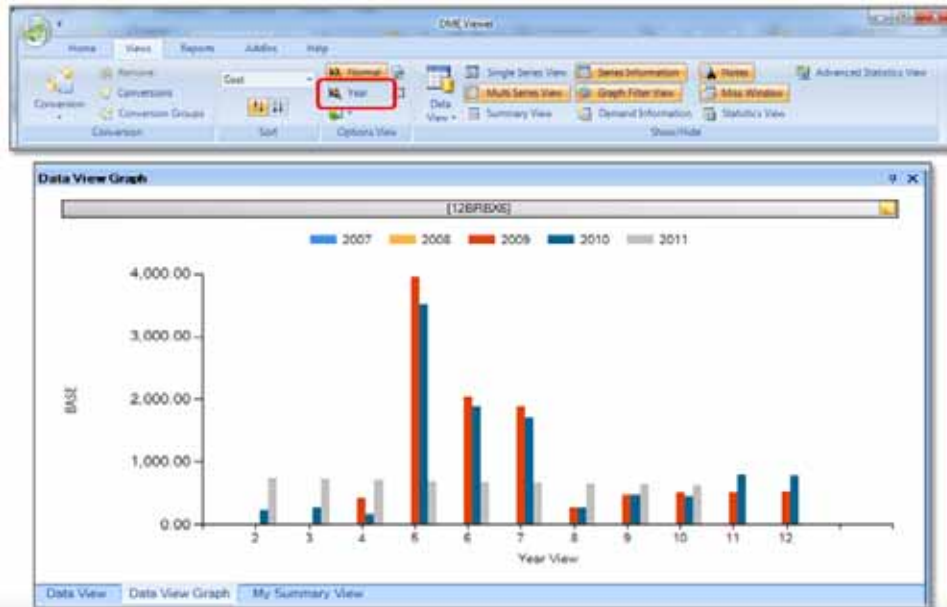


Note: This multiple selection is available in the Multi Series view only and the list is limited by the Max # of Series setting.

Year View

Year View

- Switch to **Year View** for annual comparisons



- The Graph View and Data View can switch from Normal View to a Year View by using the buttons in the Options View section of the Views tab.
- The graph changes scale to allow for year over year comparisons.

Series Information View

Series Information View

- The **Series Information View** displays series attributes
- Expand the categories to display information such as:
 - Customer
 - SKU
 - Price
 - Product Class
 - Product Family
 - Salesperson
 - Warehouse
 - MAPE
 - Mean
 - Forecast Status



DMS_V6.1.1_Memo-126

Categories are configured in the DME Admin Tool.

Notes View

Notes View

The screenshot displays the QAD LM Forecast application interface. The 'Multi Series View' pane on the left lists various series, with '[12BRBX3]' selected. The 'Data View' pane on the right shows a table of historical data for the selected series. The 'Notes View' pane at the bottom displays notes for the selected series and periods.

Data View Table:

Period	Actual Orders	Orders Adjusted	StatFcast	Event Base Demand	Forecast
Series: [12BRBX3] (31 items)					
2009-03	416	416	978		
2009-04	3,956	3,956	925		
2009-05	2,030	2,030	1,055		

Notes View Table:

Period	Opinion Line	Note
Series	Series	This produce is planned to be phased out after July, 2011
2009-03	Actual Orders	Supply disruption due to fire

- In the Notes View, saved notes for selected series are displayed
- Notes may be at the series level or by period and opinion line
- Notes View sections display the last note added
- To list all notes, double-click on the series or period field

Statistics View

Statistics View

Statistics View

Export to Excel

Drag a column header here to group by that column

Source	Target	Category	Statistic	Value
Adj Hist	Stat Fcast Main	General	MAPE	0.4649
Adj Hist	Stat Fcast Main	General	Mean	193.6095
Adj Hist	Stat Fcast Main	General	R-Square	0.5365
Adj Hist	Stat Fcast Main	General	Standard Deviation	131.0916

QAD

DM 6.1 Viewer 1.00

Statistics View displays the statistics generated by the forecast. Advanced Statistics View displays the statistics generated when using Regression models.

Export to Excel

Export to Excel



- In the Data View, information from the window can be exported to Excel
 - Select the **Export to Excel** Button
 - Name the File
 - The opinion line data displayed in the Data View window is available in Excel

The screenshot shows an Excel spreadsheet titled 'Series example.xls (Compatibility Mode)'. The data is organized into columns: Period, Actual Orders, Orders Adjusted, StatFest, and Event Base Demand. The rows represent time periods from 2007-10 to 2008-10.

	Period	Actual Orders	Orders Adjusted	StatFest	Event Base Demand
1	2007-10	1232	1232	1969.967688	1232
2	2007-11	1629	1629	1554.401663	1629
3	2007-12	1858	1858	1316.087118	1858
4	2008-01	260	260	276.1570984	260
5	2008-02	5	5	206.511837	5
6	2008-03	96	96	413.4890715	96
7	2008-04	1100	1100	1095.131091	1100
8	2008-05	3553.9	3553.9	2556.272427	3553.9
9	2008-06	3206.56	3206.56	2512.601027	3206.56
10	2008-07	1474.704	1474.704	2228.535245	1474.704
11	2008-08	2673.44	2673.44	2708.694246	2673.44
12	2008-09	3218.712	3218.712	2707.781252	3218.712
13	2008-10	2372	2372	1711.726842	2372

Misc Window

- In the Misc Window there are options for
 - Adjustments to the Opinion Line values
 - **Same As** functionality for forecasting
 - QAD DM Methods for Series Forecasting

The screenshot shows the 'Misc Window' dialog box with the 'Adjustment' tab selected. The 'Date Range' section on the left includes 'From' (2008-07) and 'To' (2009-11) dropdowns, and an unchecked 'Keep Range' checkbox. The 'Adjustment' section on the right features a 'Cvg SS' dropdown, a 'By Percentage' dropdown, a numeric input field set to '0.00', and an 'Apply' button. The 'ForecastX Methods' tab is also visible but not selected.

Overview Of Views Available – Recap

Overview Of Views Available – Recap

- Viewer users can view series information in various available formats, including: **Graph View, Data View, Series Information, Statistics View, Data Information, Notes View, and Misc Window**
- View options are available in the Show/Hide section of the Views Tab
- Select the desired Views from this menu to toggle on and off
- Multiple Views may be open at a time

Chapter 5

Configuring the Viewer

Overview

Overview

- Users can customize the display of **opinion lines** or **series information fields** in the **Graph View, Data View, user created views and the Summary View**
- Users can hide data that is not relevant to the current task
- Users can display additional data to compare and utilize when making forecast decisions

Organizing the Viewer Workspace

Organizing the Viewer Workspace

- Each pane can be **"pinned"** to the side so they will shrink when not in use
 - Click the thumbtack icon in the upper right corner of the window

The screenshot displays the QAD DAA Cost Viewer-SDS application interface. It features two main panes: 'Series View' on the left and 'Data View' on the right. The 'Series View' pane lists various product series with their corresponding costs. The 'Data View' pane shows a detailed table of data for a selected series, including columns for Period, Cost, Actual Orders, Orders Adjusted, StdCost, and Event Base. A red arrow points to the thumbtack icon in the upper right corner of the Data View pane, indicating how to pin the pane. The QAD logo is visible in the bottom left corner, and the text 'DAA Cost Viewer-SDS' is in the bottom right corner.

Period	Cost	Actual Orders	Orders Adjusted	StdCost	Event Base
2010-02	74.42	168		40	
2010-03	74.42	2,201	410	254	
2010-04	74.42	983	983	1,010	
2010-05	74.42	2,180	2,180	2,580	
2010-06	74.42	2,158	2,158	2,506	
2010-07	74.42	2,385	2,385	1,997	
2010-08	74.42	2,644	2,644	2,570	
2010-09	74.42	2,354	2,354	2,712	
2010-10	74.42	0		1,783	
2010-11	74.42	0		1,377	
2010-12	74.42	0		1,133	
2011-01	74.42	0		63	
2011-02	74.42	0		0	
2011-03	74.42	0		199	
2011-04	74.42	0		0	

Organizing the Workspace

Organizing the Workspace

The screenshot shows the QAD Demand Management 6.1 workspace. The title bar reads 'QAD - Forecast'. The workspace is divided into three main panes:

- Multi Series View (Left):** A list of series with columns for 'Series', 'Cost', and 'Price'. It contains a tree view of series like [126R8X], [148L8X], etc.
- Data View (Center):** A table with columns: 'Period', 'Cost', 'Actual Orders', 'Orders Adjusted', 'Staff Post', and 'Event Base'. It shows data for various periods from 2010-02 to 2011-03.
- Series Info (Right):** A pane showing details for the selected series, including 'General', 'Line Item', 'Product', 'Status', and 'Brand'.

Red arrows labeled 1, 2, and 3 point to the Multi Series View, Data View, and Series Info panes respectively. A blue dashed arrow points from the Data View header to the Series Info pane.

QAD
DAM Cost Viewer-640

- The panes can be moved freely and/or anchored to the sides
- Double-click the window header to explode the window out
- Drag the window header to move it around
- Arrow buttons will indicate where to drop the pane and anchor it

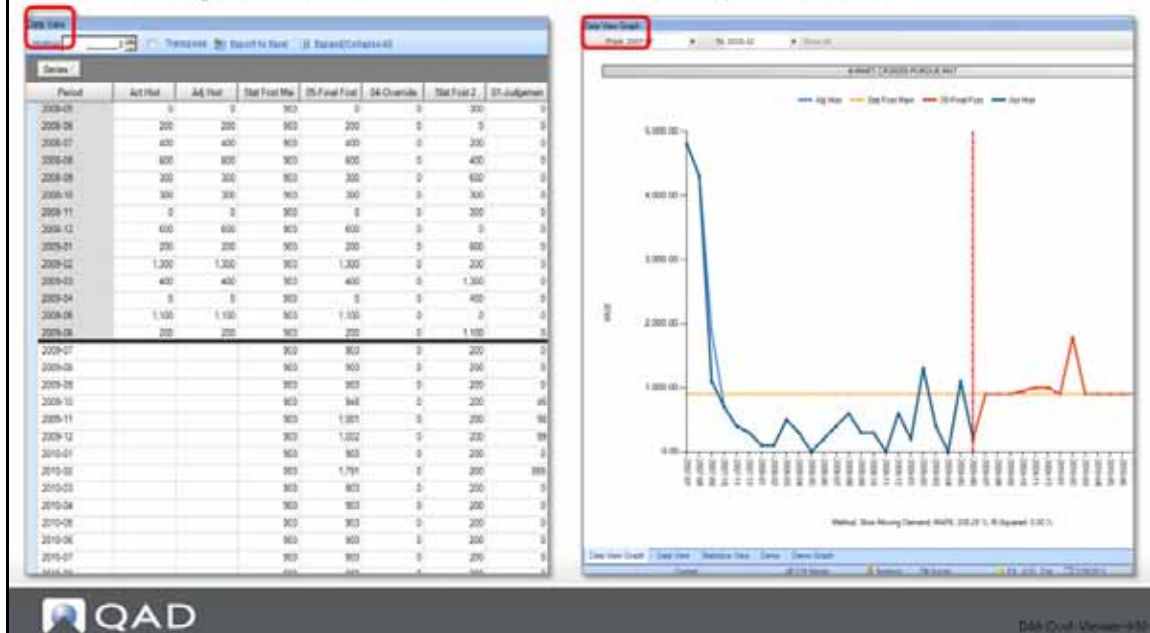
-OR-

- Hold the left mouse button down on the window header and drag the window to the arrow buttons

Default Views

Default Views

- In the Viewer the **Data View** and **Data Graph View** are available by default



User Defined Views

User Defined Views

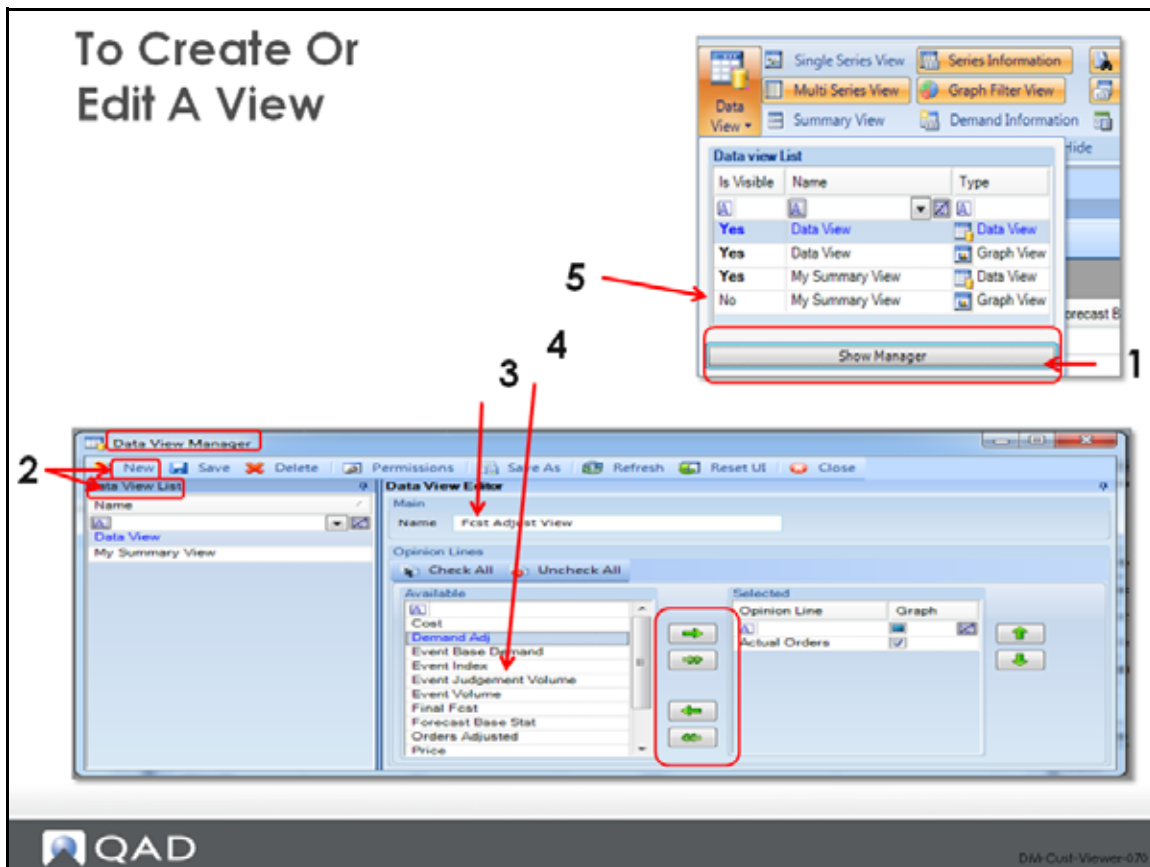
- In addition to the Data and Data Graph Views users can create and save their own Views
- These views can be created and modified in the Data View Manager



- Clicking on a currently Visible view will hide it in the Viewer

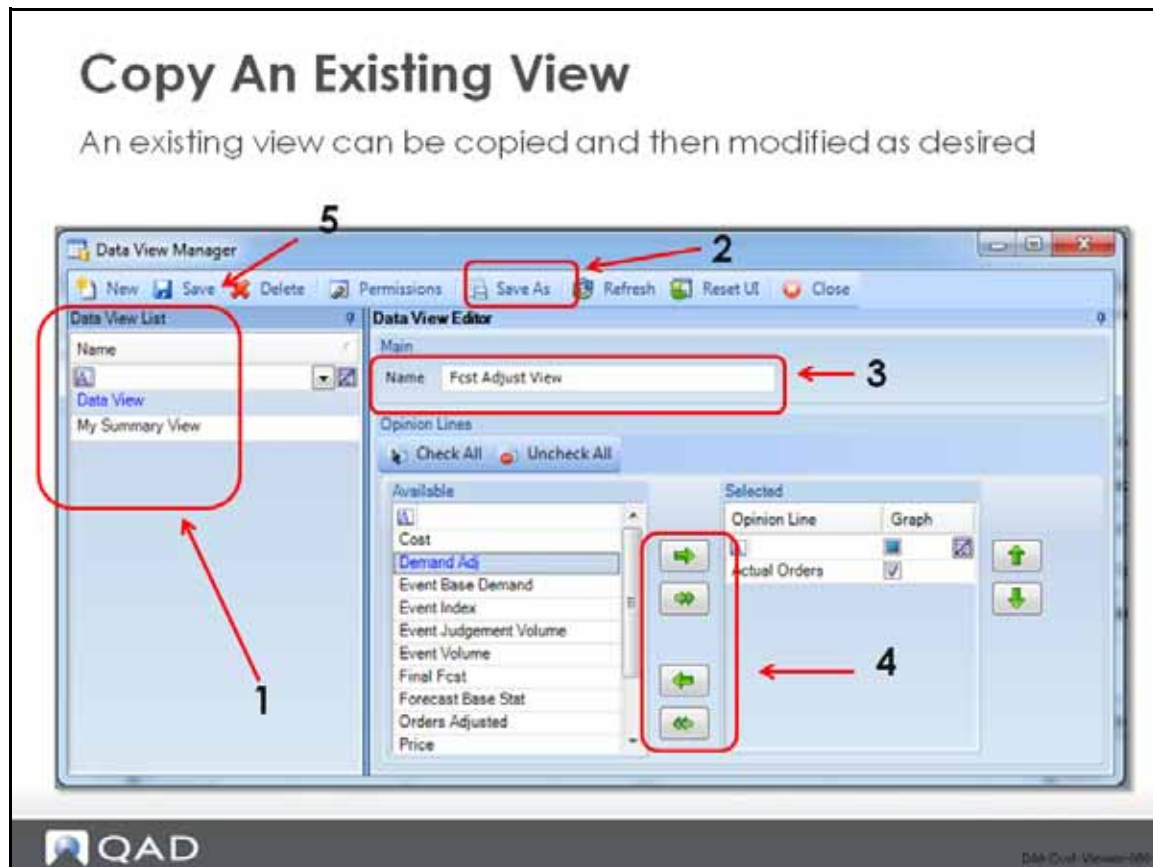
- 1 Under Data View the existing views are displayed and can be selected.
- 2 Click on the view and change to “YES” to make it Visible in the Data View.

To Create or Edit a View



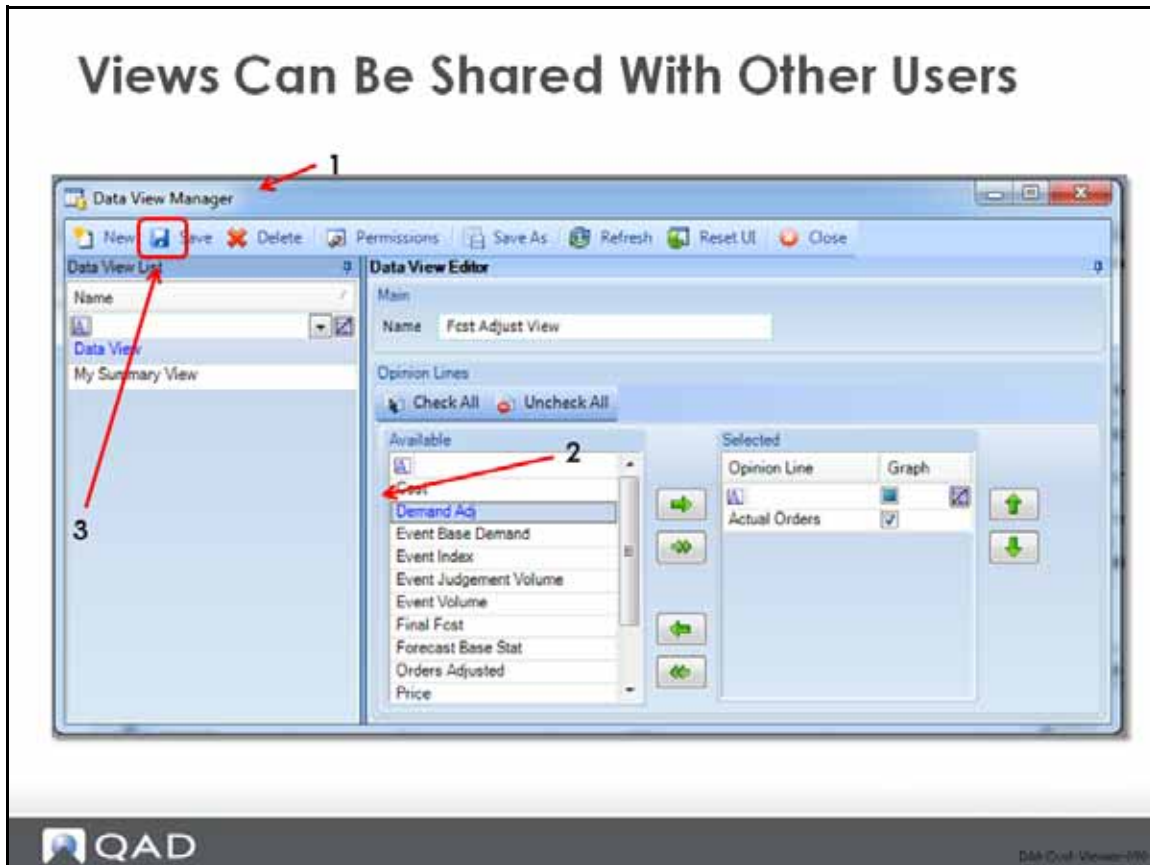
- 1 Select the Show Manager from the Data View List.
- 2 In the Data View Manager, select the view to edit from the Data View List or select New.
- 3 Give the View a Name.
- 4 Select Available the lines to display and use the arrow buttons to move them to the Selected List.
- 5 Check the box in the Graph column if the opinion line should display there.
- 6 Save.

Copy an Existing View



- 1 In the Data View Manager, select the view to copy from the Data View List.
- 2 Select Save As.
- 3 Give the new View a Name.
- 4 Change the view as desired.
- 5 Save.

Views Can Be Shared With Other Users



- 1 In the Data View Manager , select the Permissions button.
- 2 Check the user(s) that should have access to the desired View.
- 3 Save.

Configuring the Viewer – Recap

Customizing the Viewer – Recap

- Users can customize the display of **opinion lines** or **series information fields** in the **Graph View, Data View, user created views and the Summary View**
- Users can hide data that is not relevant to the current task
- Users can display additional data to compare and utilize when making forecast decisions

Chapter 6

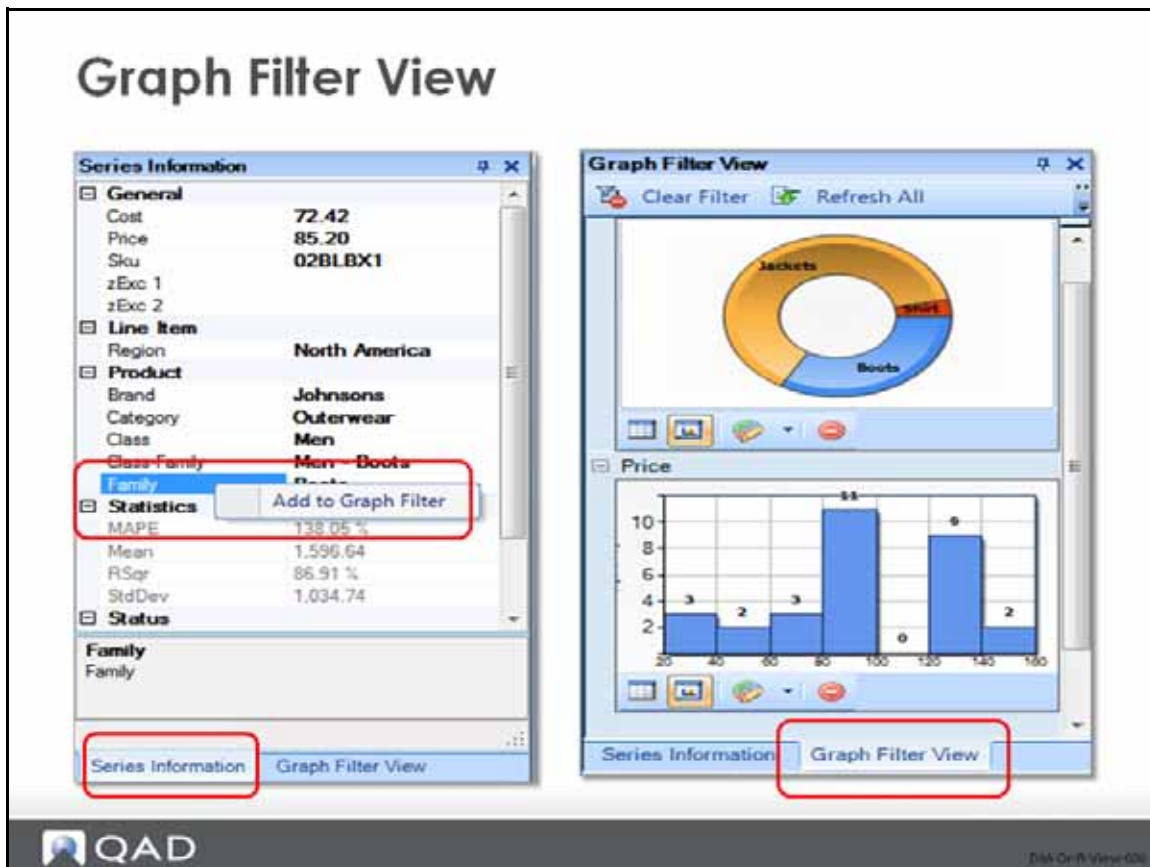
Graph Filter View

Graph Filter View – Overview

Graph Filter View – Overview

- **Graph Filter View** functionality allows users to create graphical displays of series attribute data as histogram distributions, pie charts and others
- Graph Filters can be used as filters by double clicking the graphical portion desired in the Graph Filter View window

Graph Filter View



Graph Filter View functionality allows users to create graphical displays of series attribute data as histogram distributions, pie charts and others.

- In the Series Information window, right click on the desired attribute
- Select Add to Graph Filter
- Select the Graph Filter View
- If the Graph Filter View is not visible, select it from the Ribbon Menu

Change the Graph type In Graph Filter View

Graph Filter View

Clear Filter Refresh All

Price

10 8 6 4 2 0

20 40 60 80 100 120 140 160

3 2 3 11 0 9 2

1

2

Bar
Line
Spline
Pie
Doughnut
Histogram

Graph Filter View

Clear Filter Refresh All

Family

Value	Count
Roots	10
Jackets	19
Shirt	1

3

Grid

QAD

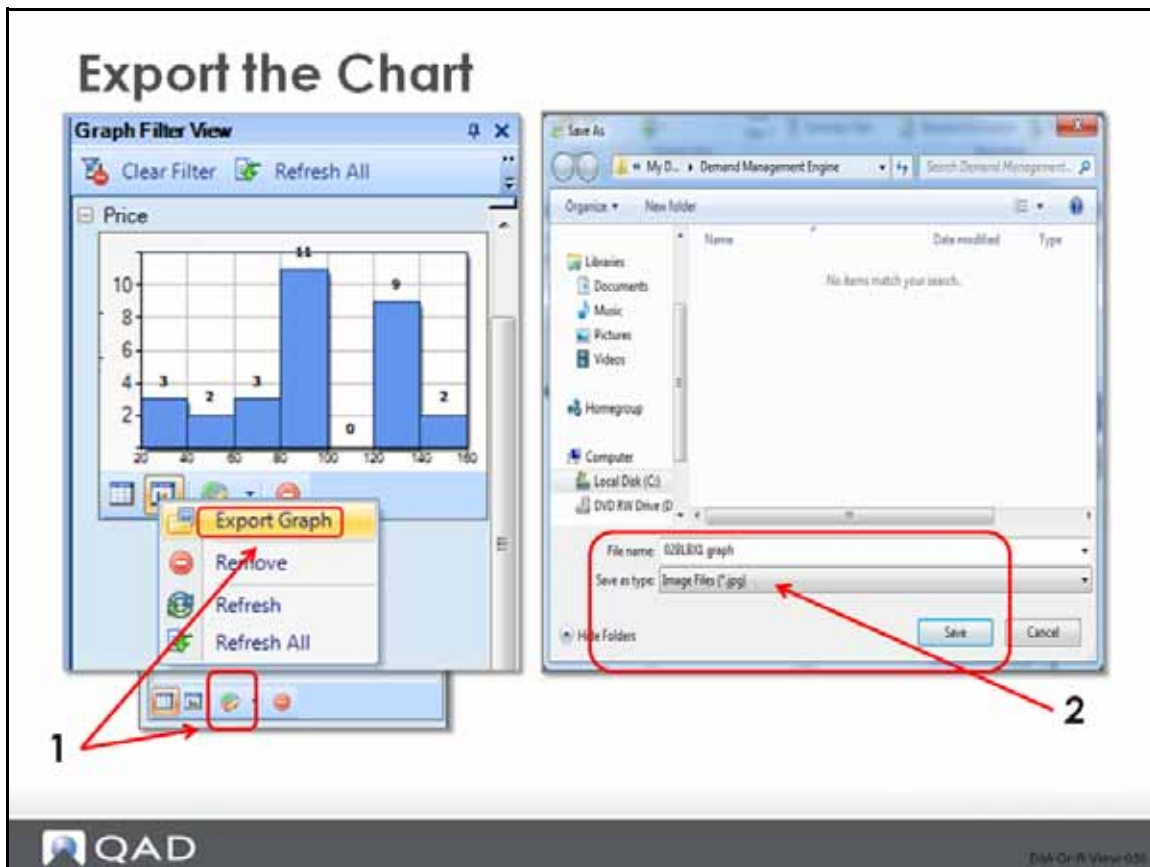
Task On-P View-Call

Attribute (character) data will default to a Pie Chart Numerically formatted fields will default to a Histogram.

To change graph type:

- 1 Left click on the graph icon
- 2 Select the desired graph type from the drop down list
- 3 Click the spreadsheet symbol or the graph symbol to switch between a numerical display and graph display

Export the Chart



- 1 Right Click on the Graph icon and Select Export Graph.
- 2 Save the file.

Note The Graph Filter View window configuration is saved per user and is always available for selection.

Remove The Chart From The Window

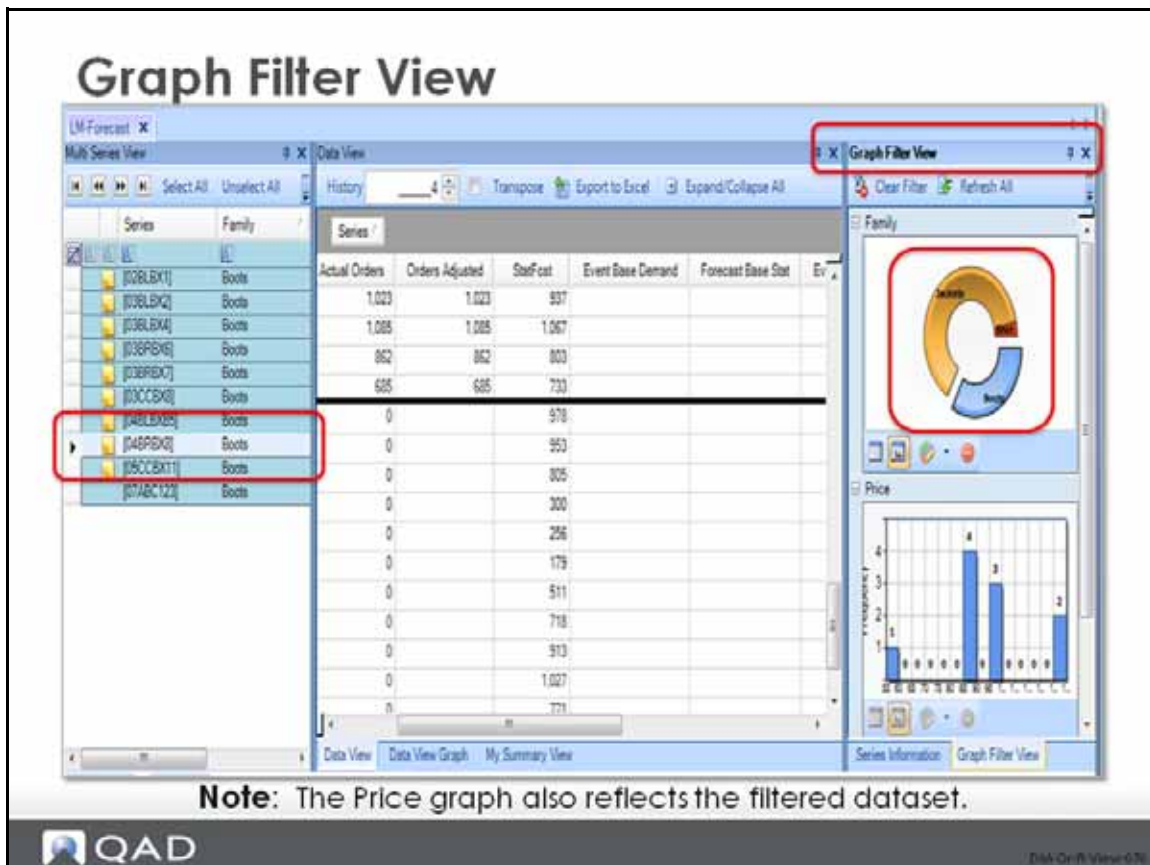
Remove The Chart From The Window



Click the Delete icon

Note: The *Graph Filter View* window configuration is saved per user and is always available for selection.

Graph Filter View



The chart within the Graph Filter View can be used as a filter for both the Single and Multi Series Views by double clicking the graphical portion desired in the Graph Filter View window.

- Double click on the portion of the graph desired for display
- Notice the dataset is now filtered for the Family “Boots”
- Select Clear Filter to remove the filter

Graph Filter View – Recap

Graph Filter View – Recap

- **Graph Filter View** functionality allows users to create graphical displays of series attribute data as histogram distributions, pie charts and others
- Graph Filters can be used as filters by double clicking the graphical portion desired in the Graph Filter View window

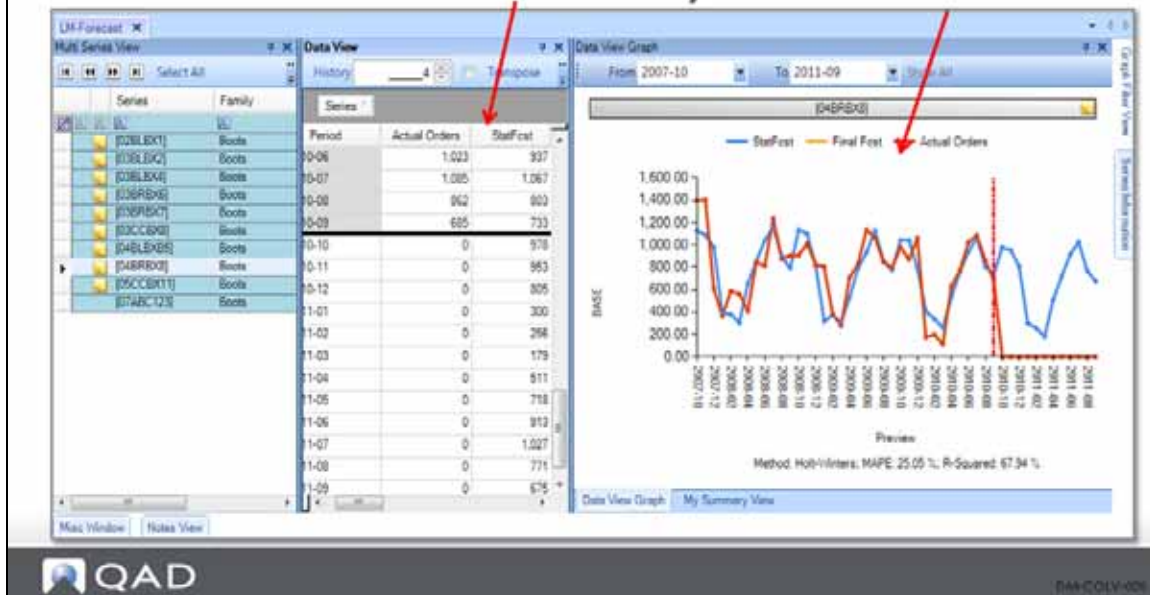
Chapter 7

Changing Opinion Line Views

Opinion Lines

Opinion Lines

- **Opinion lines** are times series streams of data viewable in the **Graph View, Data View, User Created Views** and **Summary View**.



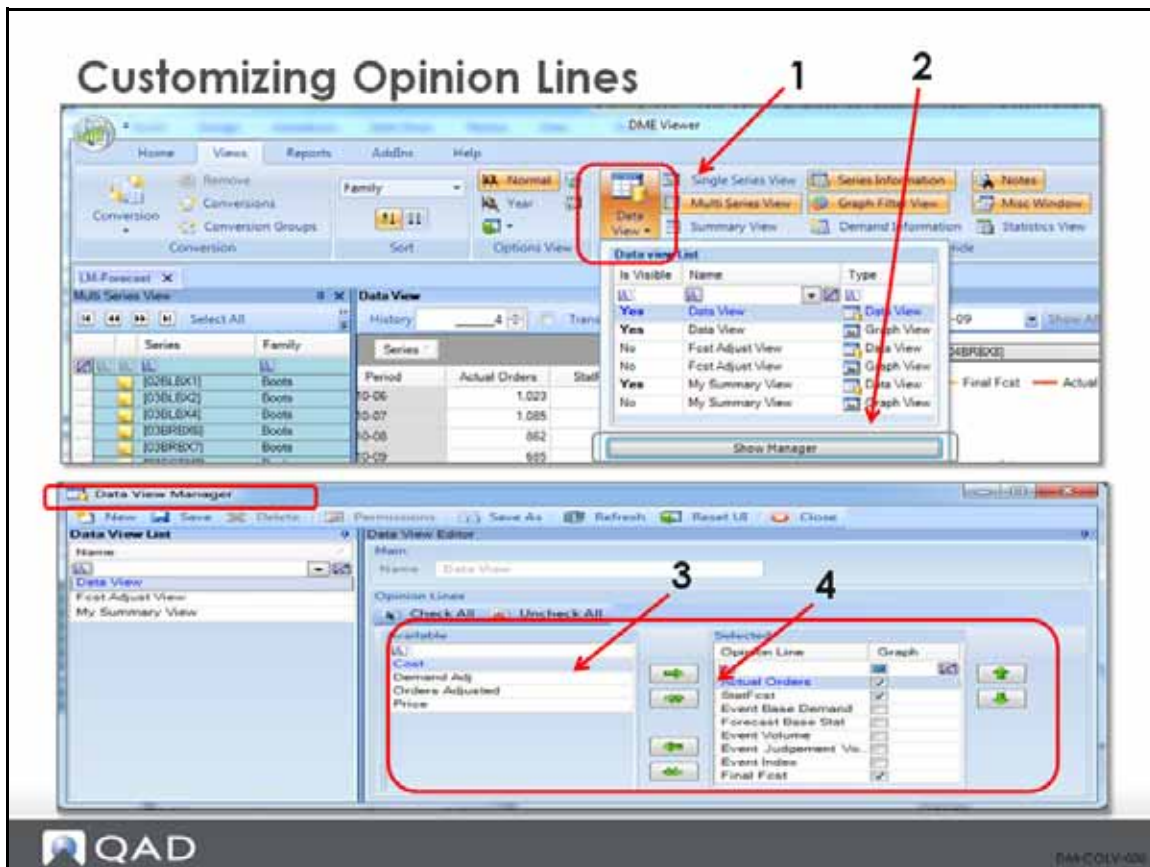
Examples of Opinion Lines:

- Actual Orders
- Budget
- Sales Forecast
- Statistical Forecast
- Promo Data

Users can configure the data displayed in the view or create multiple views to:

- Display additional data to compare and utilize when making forecast decisions.
- Hide data that is not relevant to the current task

Configuring Opinion Lines



Modify a View or create a new View as defined in training module User Create Views and Graph Filters

- 1 Select the Data View drop down button.
- 2 Select Show Manager, within the Data View menu.
- 3 In the Data View Manager, select Available Opinion Lines.
- 4 Move to Selected by using the Arrows.

Changing Displayed Opinion Lines

Changing Displayed Opinion Lines

My Summary View

Period	2010-06	2010-07	2010-08	2010-09	2010-10	2010-11	2010-12
Actual Orders	1,023	1,085	862	685	0	0	20
StatFcast	937	1,067	803	733	978	953	
Demand Adj							
Final Fcast							

Data View Manager

Data View List

- Data View
- First Adjust View
- My Summary View

Data View Editor

Opinion Lines

Available

- Cost
- Demand Adj
- Orders Adjusted
- Price

Selected

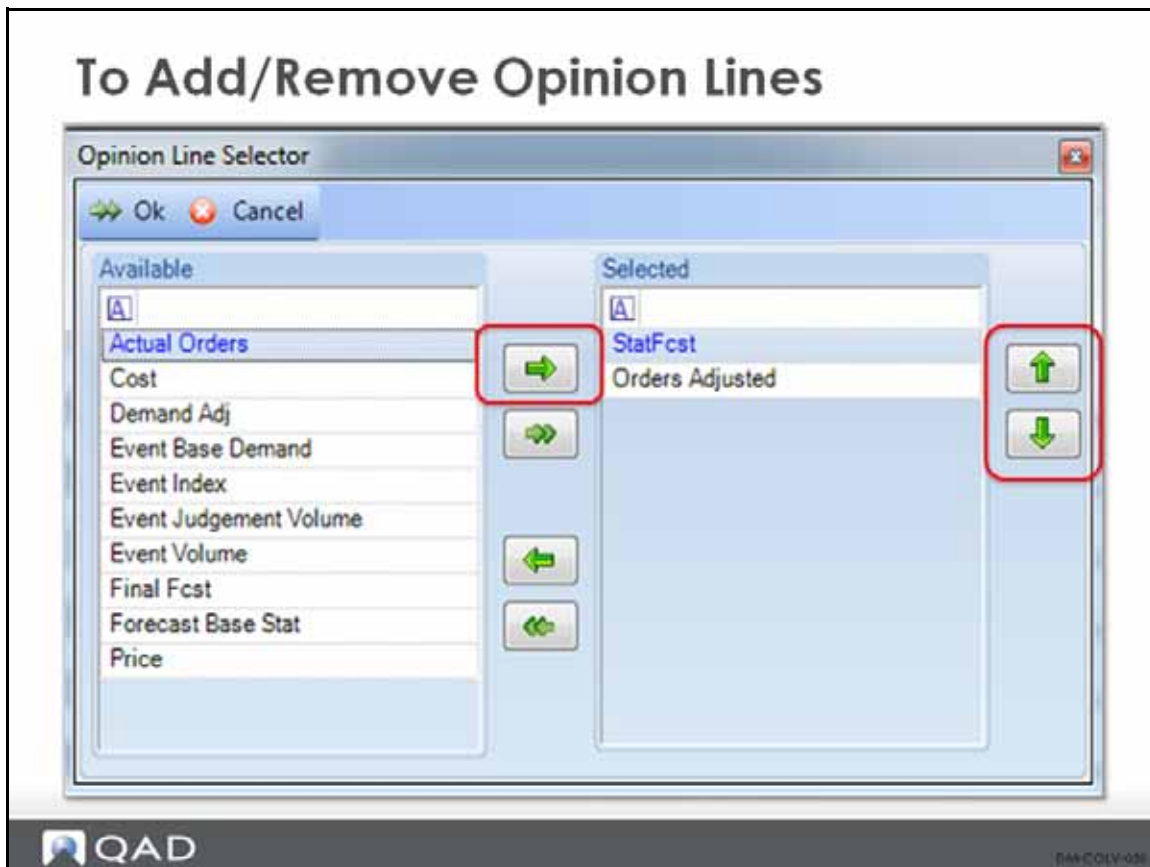
- Opinion Line
- Actual Orders
- StatFcast
- Event Base Demand
- Forecast Base Stat
- Event Volume
- Event Judgment Vo
- Event Index
- Final Fcast

Graph

QAD

- 1 Right-click in the Data View, Graph View or other user created view.
- 2 Select Opinion Lines Selector to open the Data View Manager.
- 3 The selected View is highlighted, modify as desired.
- 4 Save.

To Add/Remove Opinion Lines



To add Opinion Lines:

- Select Opinion Lines from Available list
- Use the first two arrow buttons in the middle of the window to move to the Selected

To remove Opinion Lines:

- Select Opinion Lines from Selected
- Use the last two arrow buttons to move to Available

To sort the lines into the correct display order:

- Use the up and down arrows to the right of the Selected list.

Note The double arrow buttons in the middle are used to add or remove all lines to/from the Selected List.

Chapter 8

Using the Multi Series View

Using the Multi Series View

Using the Multi Series View

- The **Multi Series View** allows multiple series to be selected for comparison of the values in the Data View and User created Views

The screenshot displays the 'Multi Series View' in QAD, showing three data series for comparison across various periods. The series are:

- Series 1: K-MART CIL35098 PURDUE MAT (42 items)**
- Series 2: TARGET 1807339C92 TRAVERSE CITY MAT (42 items)**
- Series 3: WALMART 1807339C92 TRAVERSE CITY MAT (42 items)**

Each series is represented by a table with columns for Period (2007-07 to 2008-02) and rows for different data points (Act Hist, Adj Hist, Stat First Main, OS Final First, OS Override, Stat First 2, OT Judgement).

Period	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12	2008-01	2008-02
Act Hist	4,800	4,300	1,100	700	400	300	100	100
Adj Hist	4,800	4,300	1,888	700	400	300	100	100
Stat First Main	903	903	903	903	903	903	903	903
OS Final First	4,800	4,300	1,100	700	400	300	100	100
OS Override	0	0	0	0	0	0	0	0
Stat First 2	4,800	4,800	4,300	1,888	700	400	500	100
OT Judgement	0	0	0	0	0	0	0	0

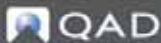
Period	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12	2008-01	2008-02
Act Hist	5,268	0	0	4,792	4,809	5,472	0	0
Adj Hist	5,268	0	0	4,792	4,809	5,472	0	0
Stat First Main	4,447	1,972	0	4,501	4,578	1,506	0	4,548
OS Final First	5,268	0	0	4,792	4,809	5,472	0	0
OS Override	0	0	0	0	0	0	0	0
Stat First 2	3,280	3,393	3,201	3,520	3,120	3,216	3,343	3,154
OT Judgement	0	0	0	0	0	0	0	0

Period	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12	2008-01	2008-02
Act Hist	834	48	33	35	118	93	17	617
Adj Hist	834	48	33	35	118	93	17	617
Stat First Main	687	794	214	74	44	101	96	34
OS Final First	834	48	33	35	118	93	17	617
OS Override	0	0	0	0	0	0	0	0
Stat First 2	687	794	214	74	44	101	96	34
OT Judgement	0	0	0	0	0	0	0	0

- Graph view does not display multi series selections at this time
- Data View and user created Data Views are limited to 10 series by default but this can be modified using the Max # of Series drop down

Using The Multi Series View

- Users can change the display and filter the display of series information fields within the Multi Series view
- Reasons to Change the Display
 - Hide data that is not relevant to the current task
 - Display additional data to compare and utilize when making forecast decisions
 - Quickly identify series with common properties
 - Allowing dynamic display and quick sorting on series information
 - Use in conjunction with **Exceptions** to quickly determine which forecasts need attention



DWI Using-MSV-020

Exceptions allow a user to select series that meet a defined criteria, such as:

- Find SKU's with unusual growth
- Identify SKU's with no sales for 6 months
- Identify large user adjustments

Configuring the Multi Series View

Customizing the Multi Series View

The screenshot shows the DME Viewer interface. The top window is the 'DME Viewer' with tabs for Home, Views, Reports, Admins, and Help. The 'Views' tab is active, showing a 'Show/Hide' section with buttons for Single Series View, Multi Series View, Series Information, Graph Filter View, Notes, Misc Window, Summary View, Demand Information, and Statistics View. A red arrow labeled '1' points to the 'Multi Series View' button.

The bottom window is the 'Multi Series View' table. It has columns for Series, Family, Price, and Cost. The table lists several series, all of which are 'Boots'. A red arrow labeled '2' points to the data area of the table. A right-click context menu is open over the table, showing options like Clone/Rename, Copy/Move to Other Scenario, Find Series, Delete, Series Status, Attribute Selector, Run ForecastX for Selected Series, and Notes. A red arrow labeled '3' points to the 'Attribute Selector' option.

Multi Series View Table Data:

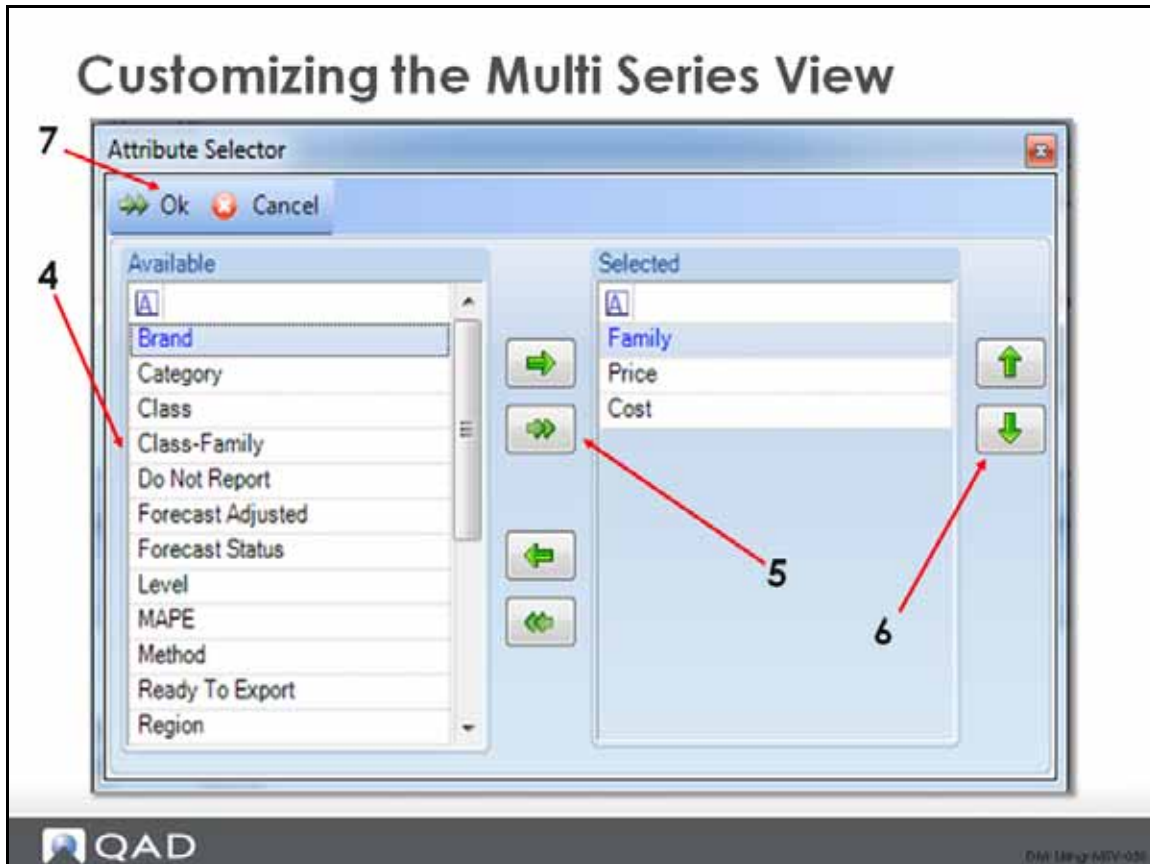
Series	Family	Price	Cost
[02BLBX1]	Boots	\$85.20	\$72.42
[03BLBX2]	Boots	\$85.20	
[03BLBX4]	Boots	\$59.90	
[03BLBX6]	Boots	\$99.85	
[03BLBX7]	Boots	\$99.85	
[03CBX8]	Boots	\$85.20	
[04BLBX5]	Boots	\$120.20	
[04BLBX8]	Boots	\$99.85	

At the bottom of the Multi Series View window, it shows 'Current Series [02BLBX1]' and 'Owned'.

QAD DM User NAV-G4

The fields shown in the Multi Series View can be configured, allowing dynamic display and quick sorting on series information.

- 1 Click the Multi Series View button in the Show/Hide section of the Views tab.
- 2 Right-click in the data area.
- 3 Select Attribute Selector screen from the menu.

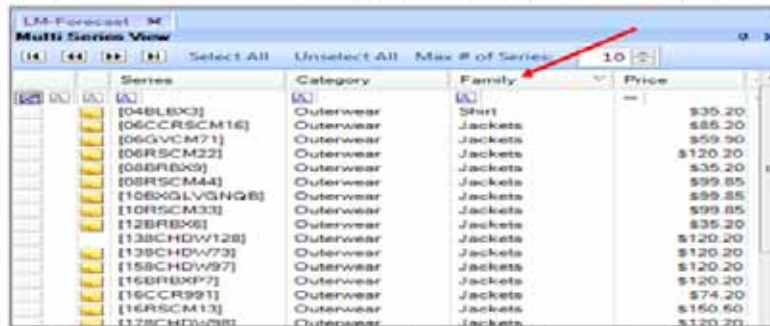


- 4 Use the fields in the Available section to choose the fields to display. Double-click on a field to move it to the Selected list or remove it (or use the green arrows between the two field displays). Press the Ctrl key while clicking to select and move multiple items at once.
- 5 Double arrows move all opinion lines.
- 6 Use the Up and Down arrow buttons to change the order in which the selected fields display.
- 7 Click OK.

Changing Display Order In Multi Series View

Changing Display Order In Multi Series View

- Order the displayed data by sort ascending or descending by clicking on the column header



LM Forecast - M
Multi Series View
Select All Unselect All Max # of Series: 10

Series	Category	Family	Price
[04BLBX3]	Outerwear	Shirt	\$35.20
[06CCRSCM16]	Outerwear	Jackets	\$85.20
[06GVCM71]	Outerwear	Jackets	\$59.90
[06RSCM22]	Outerwear	Jackets	\$120.20
[08RBX9]	Outerwear	Jackets	\$35.20
[08RSCM44]	Outerwear	Jackets	\$99.85
[10BQGLVGNGB]	Outerwear	Jackets	\$89.85
[10RSCM33]	Outerwear	Jackets	\$99.85
[12BRBX6]	Outerwear	Jackets	\$35.20
[13BCHDW128]	Outerwear	Jackets	\$120.20
[13BCHDW73]	Outerwear	Jackets	\$120.20
[15BCHDW97]	Outerwear	Jackets	\$120.20
[16RBXP7]	Outerwear	Jackets	\$120.20
[16CCR991]	Outerwear	Jackets	\$74.20
[16RSCM13]	Outerwear	Jackets	\$150.60
[17BCHDW98]	Outerwear	Jackets	\$120.20

- Notice the small indicator noting sort order

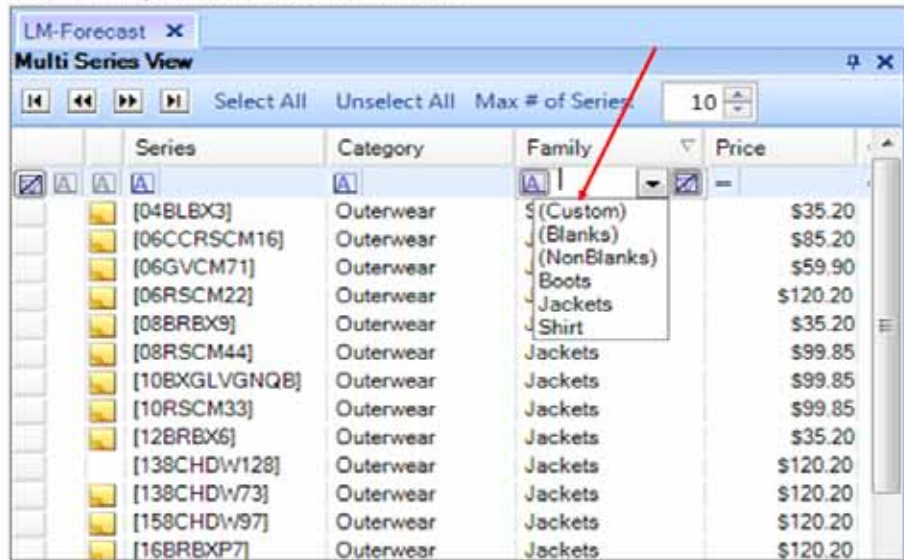


Multi Series View
Select All Unselect All Max # of Series: 10

Series	Category	Family	Price
[04BLBX3]	Outerwear	Shirt	\$35.20

Applying a Filter In Multi Series View

- Filter a column by using the drop-down list on the right to select a specific value to view

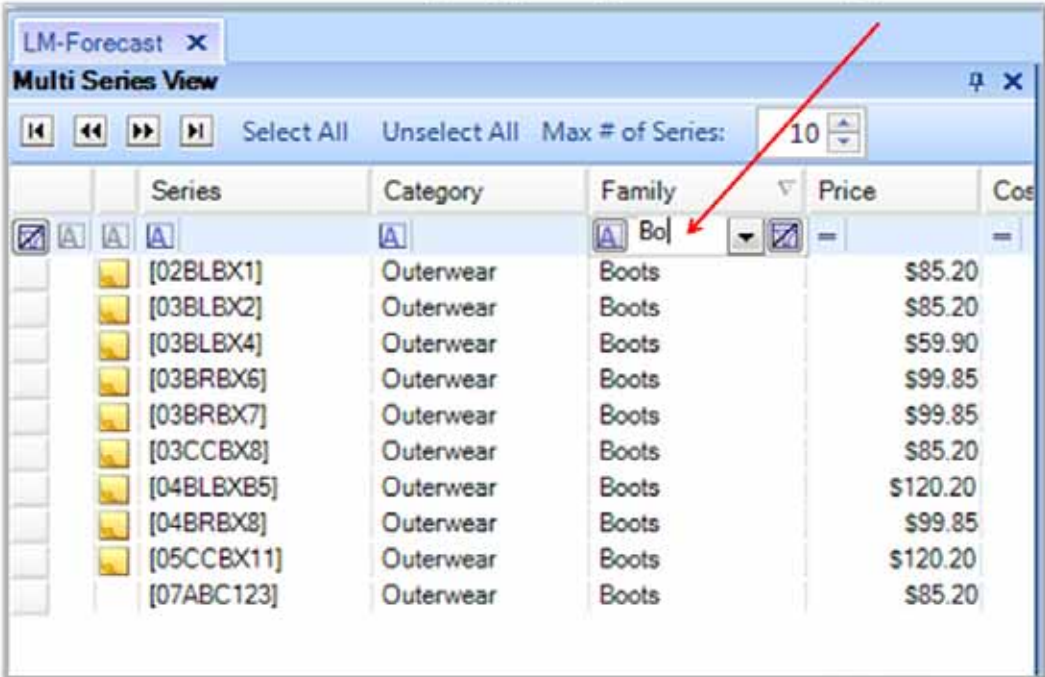


The screenshot shows the 'Multi Series View' window in QAD. The window has a title bar 'LM-Forecast' and a subtitle 'Multi Series View'. Below the subtitle are navigation buttons (back, forward, etc.) and a 'Max # of Series' dropdown set to 10. The main area is a table with columns: Series, Category, Family, and Price. The 'Family' column has a dropdown filter menu open, showing options: \$(Custom), (Blanks), (NonBlanks), Boots, Jackets, and Shirt. A red arrow points to the 'Jackets' option in the dropdown. The table lists 16 series, all categorized as 'Outerwear'. The 'Price' column shows values ranging from \$35.20 to \$120.20.

Series	Category	Family	Price
[04BLBX3]	Outerwear	\$(Custom)	\$35.20
[06CCRSCM16]	Outerwear	(Blanks)	\$85.20
[06GVCM71]	Outerwear	(NonBlanks)	\$59.90
[06RSCM22]	Outerwear	Boots	\$120.20
[08BRBX9]	Outerwear	Jackets	\$35.20
[08RSCM44]	Outerwear	Jackets	\$99.85
[10BXGLVGNQB]	Outerwear	Jackets	\$99.85
[10RSCM33]	Outerwear	Jackets	\$99.85
[12BRBX6]	Outerwear	Jackets	\$35.20
[138CHDW128]	Outerwear	Jackets	\$120.20
[138CHDW73]	Outerwear	Jackets	\$120.20
[158CHDW97]	Outerwear	Jackets	\$120.20
[16BRBXP7]	Outerwear	Jackets	\$120.20

Filter a column by typing in a string

Filter a column by typing in a string



The screenshot shows the 'LM-Forecast' application window in 'Multi Series View'. The window has a toolbar with navigation buttons and a 'Max # of Series' dropdown set to 10. Below the toolbar is a table with the following columns: Series, Category, Family, Price, and Cost. The 'Family' column is currently filtered to show only 'Boots'. A red arrow points to the 'Bo' text in the 'Family' column header, indicating the filter string. The table contains 10 rows of data, all with 'Outerwear' as the category and 'Boots' as the family.

Series	Category	Family	Price	Cost
[02BLBX1]	Outerwear	Boots	\$85.20	
[03BLBX2]	Outerwear	Boots	\$85.20	
[03BLBX4]	Outerwear	Boots	\$59.90	
[03BRBX6]	Outerwear	Boots	\$99.85	
[03BRBX7]	Outerwear	Boots	\$99.85	
[03CCBX8]	Outerwear	Boots	\$85.20	
[04BLBX5]	Outerwear	Boots	\$120.20	
[04BRBX8]	Outerwear	Boots	\$99.85	
[05CCBX11]	Outerwear	Boots	\$120.20	
[07ABC123]	Outerwear	Boots	\$85.20	

QAD

DM User NAV-001

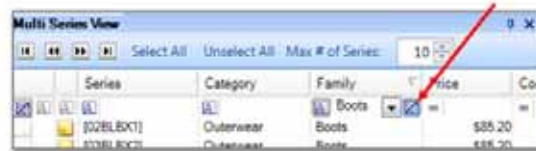
Using the Multi Series View

Using the Multi Series View

- The drop-down on the left has additional filtering options, including the ability to search for key words in the series.

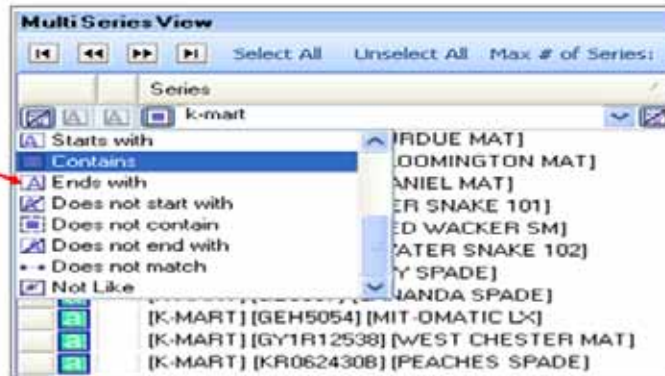


- Click the right button to remove the Filter

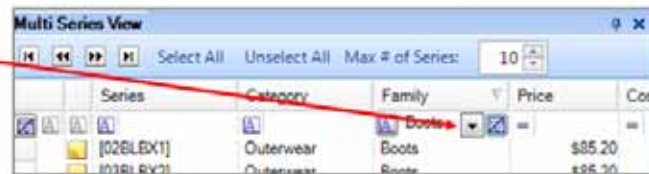


Using the Multi Series View

The drop-down on the left has additional filtering options, including the ability to search for key words in the series.



Click the right button to remove the Filter



Making A Mass Adjustment

Making A Mass Adjustment

- You can also adjust series attributes for multiple series simultaneously

1

The screenshot shows the QAD software interface. On the left, the 'Multi Series View' window displays a list of series under the 'Outerwear' category. A red arrow labeled '1' points to the 'Select All' button. In the center, the 'Data View Graph' window shows a line chart with three series: 'StatFest', 'Final Fest', and 'Actual Orders'. On the right, the 'Series Information' window is open, showing various attributes for the selected series. A red arrow labeled '2' points to the 'Forecast Complete' dropdown menu, which is currently set to 'True'.

2

For example, this is useful for setting a group of series to “Forecast Complete”.

- 1 Select multiple series by pressing Shift or Control while selecting Series or use the Select All button.
- 2 In the Series Information window, type the desired value in the series property field, or select from the columns, then Save.

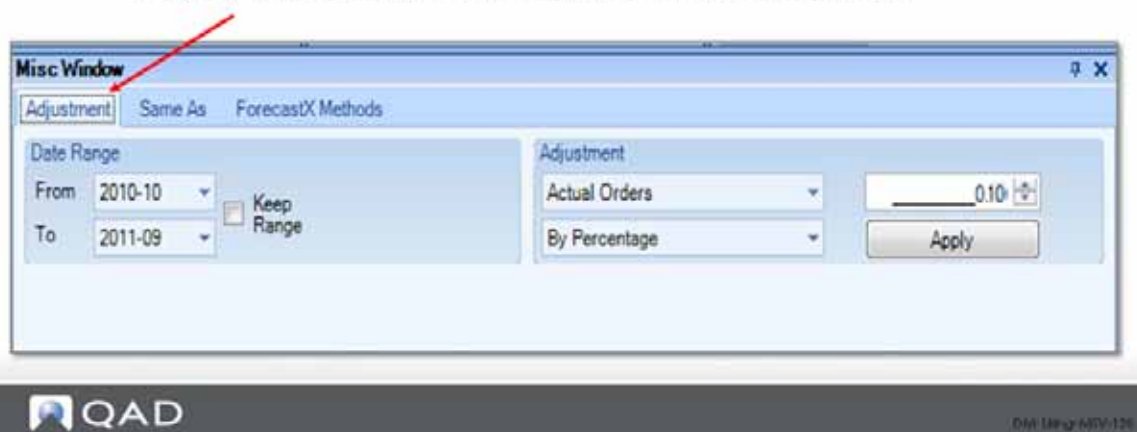
Note While you can right click and go to Series Status, the options here are not available when multiple series are selected.

Mass Adjustment In The Misc Window

Mass Adjustment In The Misc Window

-When the **Multi Series View** is enabled, the user can make adjustments to the forecast and/or other opinion lines for multiple series at the same time.

1. Select multiple series by pressing Shift or Control while selecting Series or use the **Select All** button.
2. In the **Misc Window**, use the **Adjustment** tab to make adjustments to opinion lines for all included series:



Using the Multi Series View - Recap

Using the Multi Series View - Recap

- Customizing the Multi Series View allows the User to:
 - Hide data that is not relevant to the current task
 - Display additional data to compare and utilize when making forecast decisions
 - Quickly identify series with common properties
 - Allowing dynamic display and quick sorting and filtering on series information
 - Modify groups of series at a time
- Use in conjunction with Exceptions to quickly determine which forecasts need attention.

Chapter 9

Summary View

Summary View - Overview

Summary View – Overview

The screenshot displays the QAD Summary View interface. At the top, there's a navigation bar with 'Summary View' selected. Below it, a filter bar shows 'Save History', 'Save History As...', 'Prints Changed', 'Page', '2009-07', 'To 2010-12', 'Max # of Series', '10', and a 'Refresh' button. The main area is a table with columns for various time periods (2009-01 to 2010-12) and a 'Total By Opinion Lines' row at the bottom. The table lists items like CHAIR, CRUSH, EDGE, GATE, GLOVE, HOSE, MAT, POT, SPACK, and SPACKS. The data is organized into rows for each item, with columns for different time periods and a final column for the total. The 'Total By Opinion Lines' row is highlighted in blue.

Family	Group	Opinion Lines	2009-01	2009-02	2009-03	2009-04	2009-05	2009-06	2009-07	2009-08	2009-09	2009-10	2009-11	2009-12	2010-01	2010-02	2010-03	2010-04	2010-05	2010-06	2010-07	2010-08	2010-09	2010-10	2010-11	2010-12	Total
CHAIR	Adj Hist																										
CRUSH	Star First Main		2,083	2,270	2,139	6,302	1,774	1,761	6,145	9,680	2,126	4,713	5,092	11,932	4,119	3,281	3,187	10,596									
EDGE	Adj Hist																										
EDGE	Star First Main		9,361	9,145	10,271	28,777	9,429	10,212	7,545	27,001	6,713	7,434	16,830	31,096	7,413	5,730	6,297	18,440									
GATE	Adj Hist																										
GATE	Star First Main		31,381	29,790	32,063	93,193	36,148	35,585	28,564	180,293	26,396	31,164	60,801	118,872	25,109	25,567	23,223	73,918									
GLOVE	Adj Hist																										
GLOVE	Star First Main		3,743	3,277	3,264	10,294	2,607	2,273	7,873	12,753	2,113	3,288	4,443	9,544	2,195	1,653	970	4,813									
HOSE	Adj Hist																										
HOSE	Star First Main		4,727	4,276	4,619	13,623	4,315	5,181	4,352	14,048	4,407	5,436	7,417	17,289	5,222	4,919	4,736	14,878									
MAT	Adj Hist																										
MAT	Star First Main		19,093	19,822	12,447	47,463	13,682	12,235	10,000	36,806	7,730	11,596	16,129	37,406	9,073	8,325	11,379	27,377									
POT	Adj Hist																										
POT	Star First Main		41	137	203	387	261	115	43	479	23	119	193	226	243	47	24	309									
SPACK	Adj Hist																										
SPACK	Star First Main		19,279	9,368	7,271	32,017	7,403	7,893	63,987	19,162	10,422	8,911	9,300	29,282	9,474	7,649	8,103	29,226									
Total By Opinion Lines																											
	Adj Hist																										
	Star First Main		38,816	73,945	73,277	232,545	76,427	76,683	128,879	290,399	43,438	74,722	120,966	266,747	61,543	58,796	67,829	176,587									

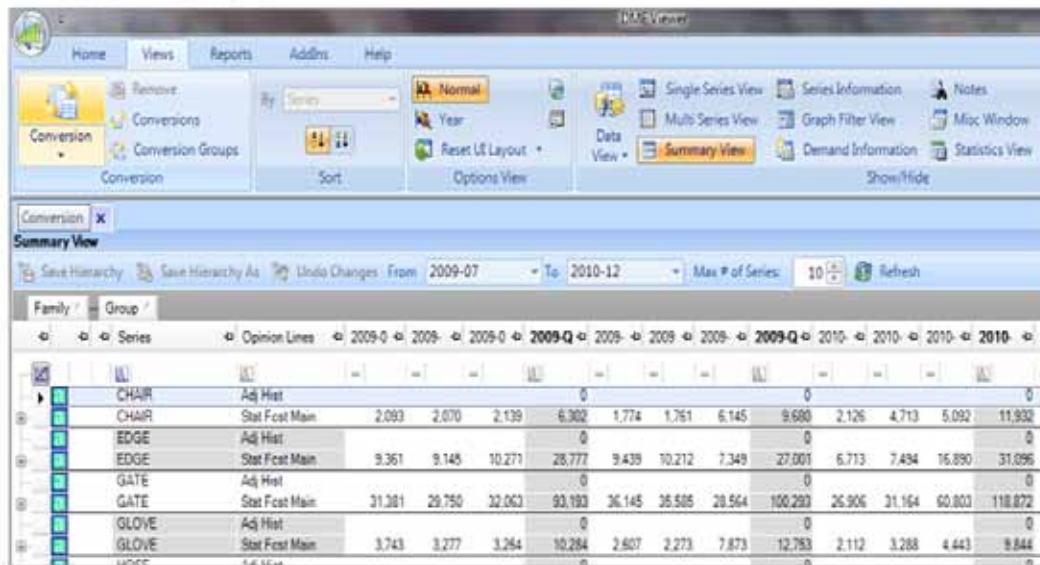
Summary View looks like a report but it is interactive.

- The series list is on the left with periods across the top
 - Users can make changes to the data and enter notes as they would in the Data Views
- Summary View can be configured with opinion lines, series attributes and time periods
- If a hierarchy is applied the upper levels show with aggregations where overrides can be entered
- This view also contains opinion line period totals, quarter totals and grand totals

Displaying the Summary View

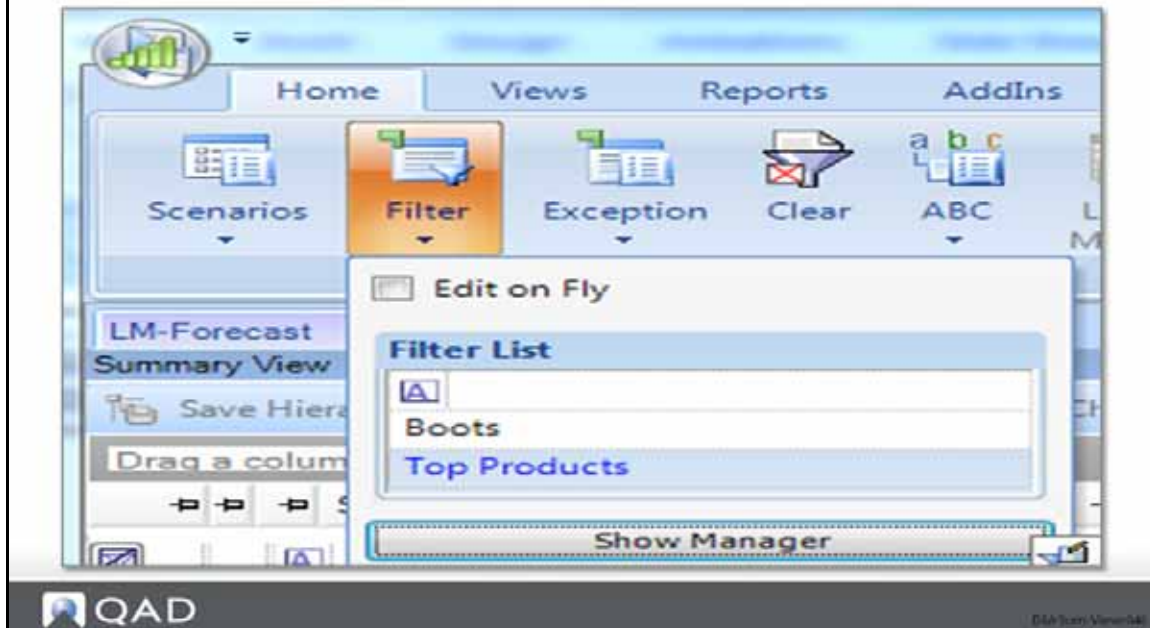
Displaying The Summary View

- Select the **Summary View** button to view the window



Displaying The Summary View

- Use a **Filter** to limit the **Summary View** to the desired series



Select the Summary View button to view the window.

Applying a Hierarchy In Summary View

Applying a Hierarchy In Summary View

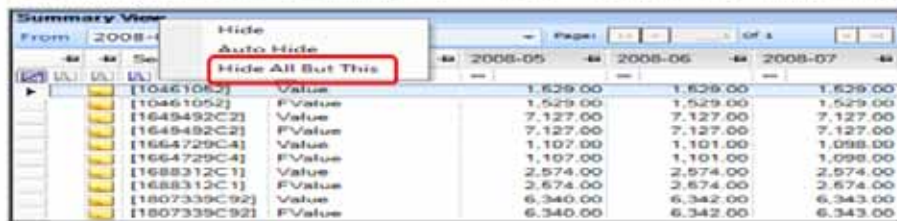
- Users must first select a hierarchy to apply to the data in the Summary View by using the **Hierarchy** drop-down on **Home** tab



Using the Summary View

Using The Summary View

- To display Summary View in full screen mode:
- Right-click on the Summary View title bar
- Select Hide All But This, to close other open panels



The screenshot shows the 'Summary View' window with a context menu open. The menu options are 'Hide', 'Auto Hide', and 'Hide All But This'. The 'Hide All But This' option is highlighted with a red rectangle. The background shows a table with columns for dates (2008-05, 2008-06, 2008-07) and values.

	2008-05	2008-06	2008-07
[10461052]	Value	1,629.00	1,629.00
[10461052]	FValue	1,529.00	1,529.00
[1649492C2]	Value	7,127.00	7,127.00
[1649492C2]	FValue	7,127.00	7,127.00
[1664729C4]	Value	1,107.00	1,101.00
[1664729C4]	FValue	1,107.00	1,098.00
[1688312C1]	Value	2,574.00	2,574.00
[1688312C1]	FValue	2,574.00	2,574.00
[1807339C92]	Value	6,340.00	6,342.00
[1807339C92]	FValue	6,340.00	6,343.00

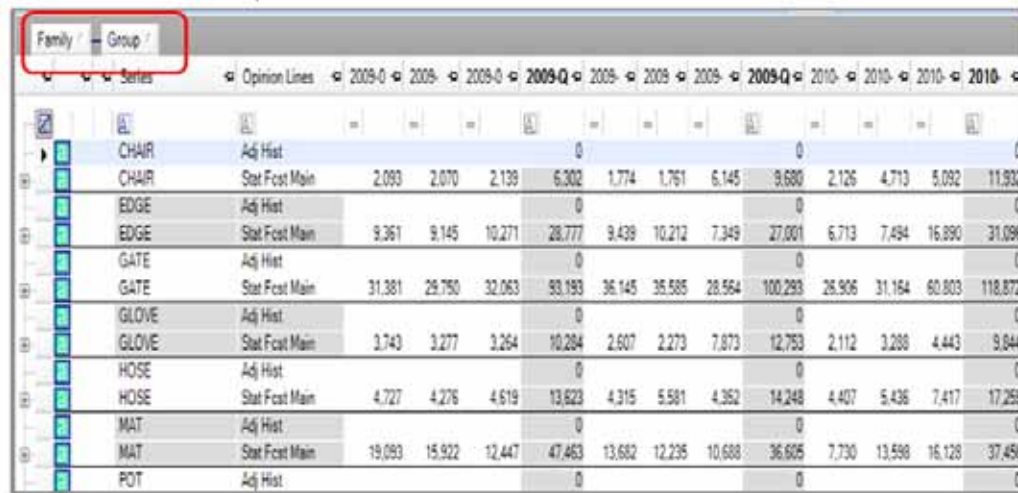
- Use buttons in Show/Hide section of the Views tab to re-open other panels



Summary View

Summary View

- Data will display sorted by levels of the hierarchy, such as "Family" and "Group" in the example below



	Family	Group	2009-0	2009-0	2009-0	2009-Q	2009-0	2009-0	2009-0	2009-Q	2010-0	2010-0	2010-0	2010-0
CHAIR	Adj Hist					0				0				0
CHAIR	Stat Foot Main		2,093	2,070	2,139	6,302	1,774	1,761	6,145	9,680	2,126	4,713	5,092	11,932
EDGE	Adj Hist					0				0				0
EDGE	Stat Foot Main		9,361	9,145	10,271	28,777	9,439	10,212	7,349	27,001	6,713	7,494	16,890	31,096
GATE	Adj Hist					0				0				0
GATE	Stat Foot Main		31,381	29,750	32,063	93,193	36,145	35,585	28,564	100,293	26,906	31,164	60,803	118,872
GLOVE	Adj Hist					0				0				0
GLOVE	Stat Foot Main		3,743	3,277	3,264	10,284	2,607	2,273	7,873	12,753	2,112	3,288	4,443	9,844
HOSE	Adj Hist					0				0				0
HOSE	Stat Foot Main		4,727	4,276	4,619	13,823	4,315	5,581	4,352	14,248	4,407	5,436	7,417	17,259
MAT	Adj Hist					0				0				0
MAT	Stat Foot Main		19,093	15,922	12,447	47,463	13,682	12,235	10,608	36,605	7,730	13,598	16,128	37,456
POT	Adj Hist					0				0				0

Summary View

- Click on an Opinion Line to see an expanded view of the data by series

Summary View

From: 2009-07 To: 2010-12

Refresh

Series	Opinion Lines	2009-0	2009-1	2009-2	2009-Q	2009-3	2009-4	2009-5	2009-Q	2010-1	2010-2	2010-3	2010-4	2010-5	2010-6
BU	Adj Prod														
CHURN	Std Prod Mean	2,383	2,076	2,139	6,302	1,774	1,761	6,148	9,680	2,126	4,713	5,092	11,902		
EDGE	Std Prod Mean	9,361	9,149	10,371	28,777	9,436	10,313	7,349	27,001	6,713	7,494	16,190	31,090		
EDGE-DEM	Adj Prod														
EDGE-DEM	Std Prod Mean	2,734	2,749	2,957	9,419	9,146	9,249	9,574	9,885	2,122	2,858	9,052	9,815		
EDGE-PROFESSIO	Adj Prod														
EDGE-PROFESSIO	Std Prod Mean	9,606	9,387	7,314	20,388	6,283	6,967	4,676	17,896	4,997	4,306	11,857	27,283		
GATE	Adj Prod														
GATE	Std Prod Mean	31,381	29,790	32,063	93,193	36,145	35,585	28,564	100,839	28,906	31,164	85,803	118,873		
ISOLINE	Adj Prod														
ISOLINE	Std Prod Mean	9,743	9,277	9,264	19,384	3,607	2,373	1,873	12,783	3,172	5,388	4,443	9,944		
MOORE	Adj Prod														
MOORE	Std Prod Mean	4,727	4,276	4,819	13,623	4,719	5,991	4,393	14,349	4,407	5,436	7,417	17,276		
MOAT	Adj Prod														

- Use From and To fields to change the range of periods displayed
- Click Refresh to update the view after making changes
 - Note:** The Summary View Refresh button will blink when there are changes that have not been applied. This button can be hidden depending on the screen width.

Updating a Hierarchy

Updating a Hierarchy

Summary View

Save Hierarchy Save Hierarchy As Undo Changes From 2009-01 To 2009-12 Max # of Series: 10 Refresh

Family / Group / Class

Series	Class	Opinion Lines	2009-01	2009-02	2009-03	2009-Q1	2009-04	2009
CHAIR	Adj Hist		11,961	17,191	15,302	44,454	15,115	
CHAIR	Stat Fcst Main		12,928	15,363	16,901	45,192	15,036	
CHAIR.CONSUMER	Adj Hist		3,762	4,726	4,335	12,823	5,437	
CHAIR.CONSUMER	Stat Fcst Main		4,822	4,398	4,276	13,496	5,734	
CHAIR.PROFESSIONAL	Adj Hist		8,199	12,465	10,967	31,631	9,678	
CHAIR.PROFESSIONAL	Stat Fcst Main		8,106	10,965	12,625	31,696	9,303	
EDGE	Adj Hist		16,244	19,790	24,198	60,232	18,075	
EDGE	Stat Fcst Main		22,570	21,142	24,245	67,956	17,909	

QAD

- Click on a hierarchy level and drag it into the data column label area to remove that level from the hierarchy
- If changes are made to the hierarchy, they can be saved as a new hierarchy by clicking the Save Hierarchy As button
- Click Save Hierarchy to save the changes to the currently applied hierarchy

Note Undo Changes removes hierarchy changes made before saving.

Editing Opinion Lines In Summary View

- Users can edit opinion line data based on their permissions

EM-Forecast x

Summary View

Save Hierarchy Save Hierarchy As Undo Changes From 2011-01 To 2011-06 Page 1 of 1

Drag a column header here to group by that column

Series	Opinion Lines	2011-01	2011-02	2011-03	2011-04	2011-05	2011-06	Total
[04BLEX3]	StatFcast	4,498	4,613	7,575	3,707	7,796	5,674	33,863.59
[04BLEX3]	Demand Adj		100					100.00
[04BLEX3]	Final Fcast	4,498	4,713	7,575	3,707	7,796	5,674	33,963.00
[138CHDW128]	StatFcast	2,003	5,047	8,309	13,411	19,149	33,726	77,644.82
[138CHDW128]	Demand Adj		5,000					5,000.00
[138CHDW128]	Final Fcast	2,003	5,047	8,309	13,411	19,149	33,726	82,645.00
[178CHDW98]	StatFcast	3,876	4,286	9,840	6,194	10,805	8,509	43,510.15
[178CHDW98]	Demand Adj							0.00
[178CHDW98]	Final Fcast	3,876	4,286	9,840	6,194	10,805	8,509	43,510.00
Total By Opinion Lines								
	StatFcast	10,376	9,946	25,725	23,312	37,751	47,909	155,019
	Demand Adj	0	100	0	0	0	0	100
	Final Fcast	10,377	10,046	25,724	23,312	37,750	47,909	155,118

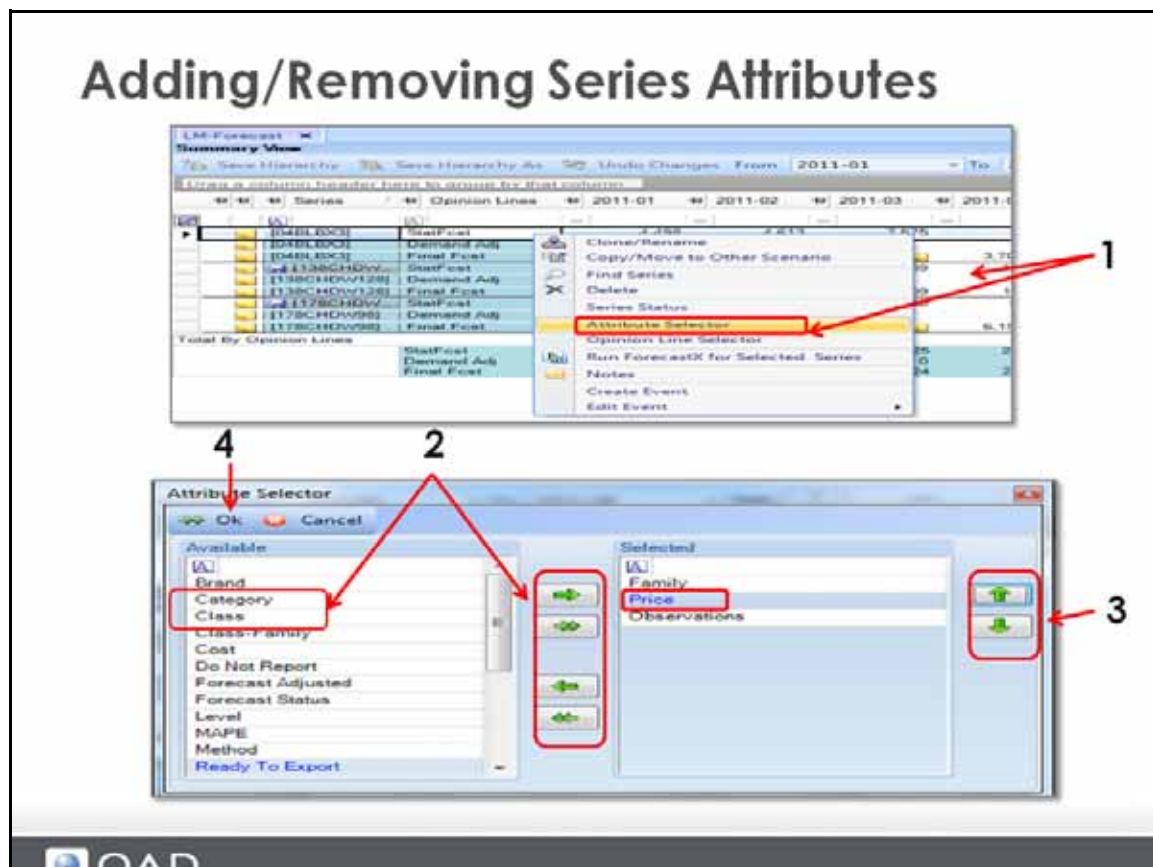
Configure the Summary View

Customize the Summary View

The screenshot shows the 'Summary View' window. At the top, there are four numbered callouts: 1 points to the 'From' and 'To' date range dropdowns (set to 2008-05 and 2011-12); 2 points to the 'Select All' and 'Unselect All' buttons; 3 points to the 'Max # of Series' field (set to 10); and 4 points to the 'Refresh' button. Below these controls is a table with columns for months from 2008-05 to 2009-01. The table contains data for four series: '[10461052] Value', '[10461052] FValue', '[1649492C2] Value', and '[1649492C2] FValue'. The 'Value' series show values of 1,529.00 and 7,127.00, while the 'FValue' series show values of 1,529.00 and 7,127.00.

- 1 From and To drop-downs are used to indicate which periods are displayed while in Summary View.
- 2 Use Select All and Unselect All buttons to select or de-select all series currently displayed in the Summary View.
- 3 Max # of Series field is used to limit the number of series that can be displayed on a page if you are over 1,000 series.
- 4 Click Refresh to update the view after making any changes.

Adding/Removing Series Attributes



Series attributes can be added or removed from Summary View.

- 1 Right-click in the data area on Summary View and select Attribute Selector.
- 2 In Attribute Selector, move the series attributes you want to display to Selected column.
- 3 Use the up/down arrows to order them.
- 4 Click OK when finished.

Note Series properties not in the hierarchy level will not display data. Hierarchy level grouping fields can be added for sorting and filtering

Adding/Removing Series Attributes (cont)

- Refresh the window and note Attributes added to the left of observations based on order selection

Summary View

Save Hierarchy Save Hierarchy As Undo Changes From 2009-07 To 2010-12 Max # of Series 10 Refresh

Family Group

Series Opinion Lines 2009-0 2009-0 2009-0 2009-Q 2009-0 2009-0 2009-0 2009-Q 2010-0 2010-0 2010-0 2010-0

CHAIR	Adj Hist				0													
CHAIR	Stat Foot Main	2,093	2,070	2,139	6,302	1,774	1,761	6,145	9,600	2,126	4,713	5,092	11,932					
EDGE	Adj Hist				0													
EDGE	Stat Foot Main	9,361	9,145	10,271	28,777	9,439	10,212	7,349	27,001	6,713	7,454	16,890	31,096					
EDGE OEM	Adj Hist				0													
EDGE OEM	Stat Foot Main	2,714	2,748	2,957	8,419	3,146	3,245	2,674	9,065	2,122	2,658	5,032	9,813					
EDGE PROFESSIO	Adj Hist				0													
EDGE PROFESSIO	Stat Foot Main	6,648	6,387	7,314	20,358	6,293	6,967	4,676	17,836	4,591	4,835	11,857	21,283					
GATE	Adj Hist				0													
GATE	Stat Foot Main	31,381	29,750	32,063	93,193	36,145	35,585	28,564	100,293	26,906	31,164	60,803	118,872					
GLOVE	Adj Hist				0													
GLOVE	Stat Foot Main	3,743	3,277	3,264	10,284	2,607	2,273	7,873	12,763	2,112	3,288	4,443	9,844					
HOSE	Adj Hist				0													
HOSE	Stat Foot Main	4,727	4,276	4,619	13,623	4,315	5,581	4,362	14,248	4,407	5,436	7,417	17,255					
MAT	Adj Hist				0													

Adding/Removing Opinion Lines

Adding/Removing Opinion Lines

Changing Opinion Lines

The screenshot illustrates the process of managing opinion lines in the QAD software. The main window, 'Summary View', displays a table of opinion lines. A right-click context menu is open, and the 'Opinion Line Selector' option is highlighted, indicated by a red arrow labeled '1'. To the right, the 'Opinion Line Selector' dialog box is shown. It features two columns: 'Available' and 'Selected'. The 'Available' column is highlighted with a red box labeled '2-4'. The 'Selected' column contains three items: 'StatFcast', 'Demand Adj', and 'Final Fcast'. A red arrow labeled '1' points to the 'Opinion Line Selector' button in the context menu.

In Summary View a user can add or remove displayed Opinion Lines

- 1 Right-click in data area on Summary View and select Opinion Line Selector.
- 2 In Opinion Lines Selector, move the lines you want to display to Selected side.
- 3 Move an Opinion Line from the Selected back to Available to remove it from view.
- 4 Click OK when finished.
- 5 Click Refresh on the Summary view window to display the changes.

Updating a Hierarchy In Summary View

Updating a Hierarchy In Summary View

The screenshot displays the DME Viewer interface. The top toolbar includes sections for Scenarios, Hierarchy, and Forecast. In the Hierarchy section, the 'Hierarchy' and 'Rebalance' buttons are highlighted with red boxes. Below the toolbar, the 'Summary View' window is shown, displaying a data table with columns for Series, Opinion Lines, and dates (2008-05, 2008-06, 2008-07). A right-click context menu is open over the data, with the 'Run ForecastX for Selected Series' option highlighted by a red box.

Series	Opinion Lines	2008-05	2008-06	2008-07
[10461082]	FValue	1,529.00	1,529.00	1,529.00
[1648492C2]	FValue	7,127.00	7,127.00	7,127.00
[1648492C2]	FValue	7,127.00	7,127.00	7,127.00
[1664729C4]	FValue	1,098.00	1,098.00	1,098.00
[1664729C4]	FValue	1,098.00	1,098.00	1,098.00
[1688312C1]	FValue	2,574.00	2,574.00	2,574.00
[1688312C1]	FValue	2,574.00	2,574.00	2,574.00
[1807339C92]	FValue	6,343.00	6,343.00	6,343.00
[1807339C92]	FValue	6,343.00	6,343.00	6,343.00
[1807455C92]	FValue	1,931.00	1,931.00	1,931.00
[1807455C92]	FValue	1,931.00	1,931.00	1,931.00
[1818402C2]	FValue	23,764.00	23,764.00	23,764.00
[1818402C2]	FValue	23,764.00	23,764.00	23,764.00
[1825181C91]	FValue	2,461.00	2,461.00	2,461.00
[1825181C91]	FValue	2,461.00	2,461.00	2,461.00

- You can make changes to the data by clicking on a field and manually updating while a hierarchy is applied
- Once you finish making changes, you can Rebalance the series using the Rebalance button in the Hierarchy section of the toolbar
- To re-run the forecast, right-click on the data and select “Run ForecastX for Selected Series”

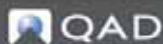
Summary View

Summary View

- Applying a Conversion

- If you apply a conversion, it will also impact the Summary View
- In the example below the conversion was applied to StatFestMain

Summary View					
Select Item(s) [F12]		Select Item(s) for All [F12]		Undo Changes [F12]	
From 2009-01		To 2009-12		Select All [F12]	
Unselect All [F12]					
Group	Family	Opinion Lines	2009-01	2009-02	2009-03
[C]	[CONSUMER]	Ad Hist	132,842	122,958	156,532
	[CONSUMER]	Stat Fest Main (CvRev)(\$)	\$1,500,525	\$1,729,795	\$2,133,337
	[CONSUMER][CHAIR]	Ad Hist	3,762	4,726	4,552
	[CONSUMER][CHAIR]	Stat Fest Main (CvRev)(\$)	\$20,570	\$19,115	\$20,393
	[CONSUMER][GATE]	Ad Hist	30,619	36,066	65,293
	[CONSUMER][GATE]	Stat Fest Main (CvRev)(\$)	\$58,466	\$54,112	\$63,640
	[CONSUMER][GLOVE]	Ad Hist	3,326	3,299	2,945
	[CONSUMER][GLOVE]	Stat Fest Main (CvRev)(\$)	\$66,865	\$81,518	\$69,379
	[CONSUMER][MAT]	Ad Hist	30,758	46,718	45,869
	[CONSUMER][MAT]	Stat Fest Main (CvRev)(\$)	\$700,775	\$555,913	\$340,636
[K]	[K-MART][CP35058][PURDUE MAT]	Ad Hist	200	1,300	400
	[K-MART][CP35058][PURDUE MAT]	Stat Fest Main (CvRev)(\$)	\$8,364	\$600	\$22,210
	[K-MART][CPA03300864][GALT SOUTH MAT]	Ad Hist	200	933	400
	[K-MART][CPA03300864][GALT SOUTH MAT]	Stat Fest Main (CvRev)(\$)	\$13,344	\$23,846	\$23,405
	[K-MART][CJCM90706A][A-4 MAT]	Ad Hist	4,750	4,700	4,750
[K]	[K-MART][CJCM90706A][A-4 MAT]	Stat Fest Main (CvRev)(\$)	\$294,914	\$322,156	\$298,119



QAD Summary View 1.00

Note For more information on using Conversion refer to training module Conversion Factors.

Recap – Summary View

Recap – Summary View

- Customizing the Summary View allows the User to:
 - Display the Summary View in full screen mode
 - Set the date range of periods that display
 - Change the Opinion Lines and Series Attributes that are displayed
- Make changes to the existing hierarchy
- In Summary View, you can also make modifications such as overrides, running a forecast or rebalancing

Chapter 10

Methods for Making Forecast Adjustments

Forecast Adjustments - Introduction

Forecast Adjustments - Introduction

- The *Viewer* has three ways to adjust the forecast data:
 1. Directly on the Graph
 2. On the Data View grid
 3. Using the Adjustment tab of the Misc. window
- Undo can be used to remove a change until the series is saved

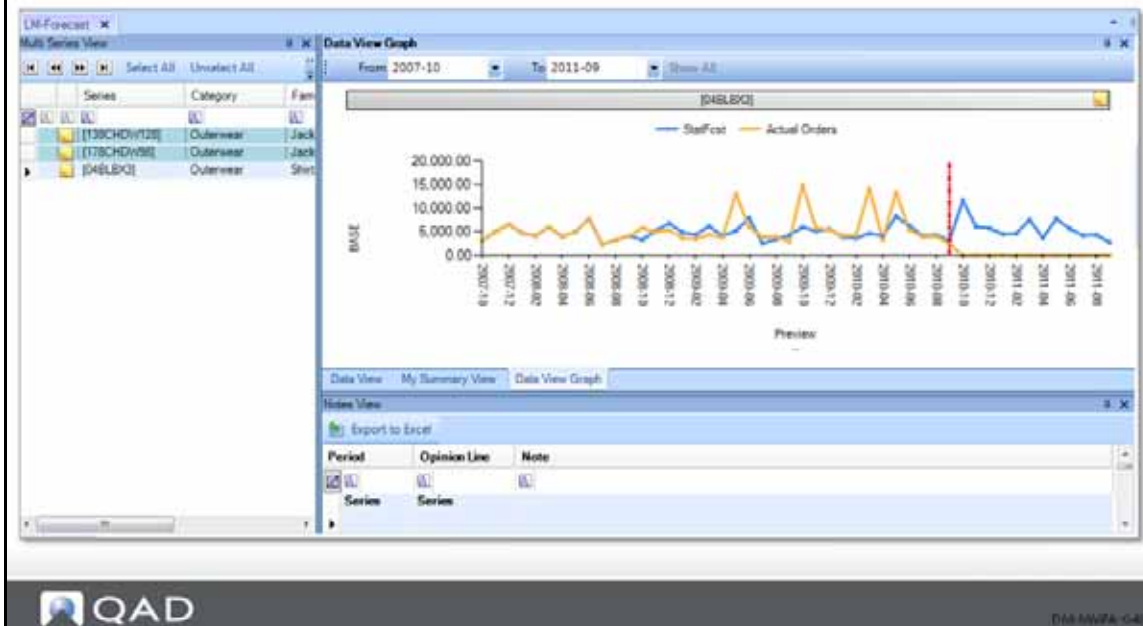
Forecast Adjustments - Introduction

- Once adjustments have been made and the forecast review process is complete, series can be marked "Forecast Complete" to prevent further changes from Hierarchy Rebalance allocation
- Adjustments and opinion line edits made in the users DTL scenario are marked "Forecast Complete" as the indicator to move the changes back into the Living Master

Forecast Adjustments - Graph View

Forecast Adjustments - Graph View

- The **Viewer** displays the historical data and baseline forecast for each forecasted series



Forecast Adjustment – Graph View

- Adjustments are made by simply dragging and dropping an observation on an opinion line



Note The user can undo a change by clicking the Undo button in the Edit section of the Home tab or by pressing “Ctrl-Z”.

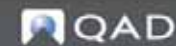
After making a change, the program will ask for confirmation before keeping the change.

Forecast Adjustment – Data View

Forecast Adjustment – Data View

- In the Data View and user created Data Views adjustments can be made directly into the spreadsheet window

Period	Adj Hist	Stat Fcast Main	02-Override	04-Consensus Fcast
2009-05	337	202		337
2009-06	0	124		0
2009-07		353		353
2009-08		161		161
2009-09		211		211
2009-10		125		125
2009-11		11	100	111
2009-12		115		115
2010-01		106		106
2010-02		857		857
2010-03		1,147		1,147
2010-04		399		399
2010-05		290		290
2010-06		67		67
2010-07		353		353
2010-08		161		161
2010-09		211		211
2010-10		125		125
2010-11		11		11



DM 6.1.1-101

- The Data View is ideal for making exact adjustments to individual periods
- Simply key in the new forecast for a period in the appropriate cell
- Use Ctrl-C and Ctrl-V to Copy and Paste data from Excel into the desired opinion line

Forecast Adjustment Tab

Forecast Adjustment Tab

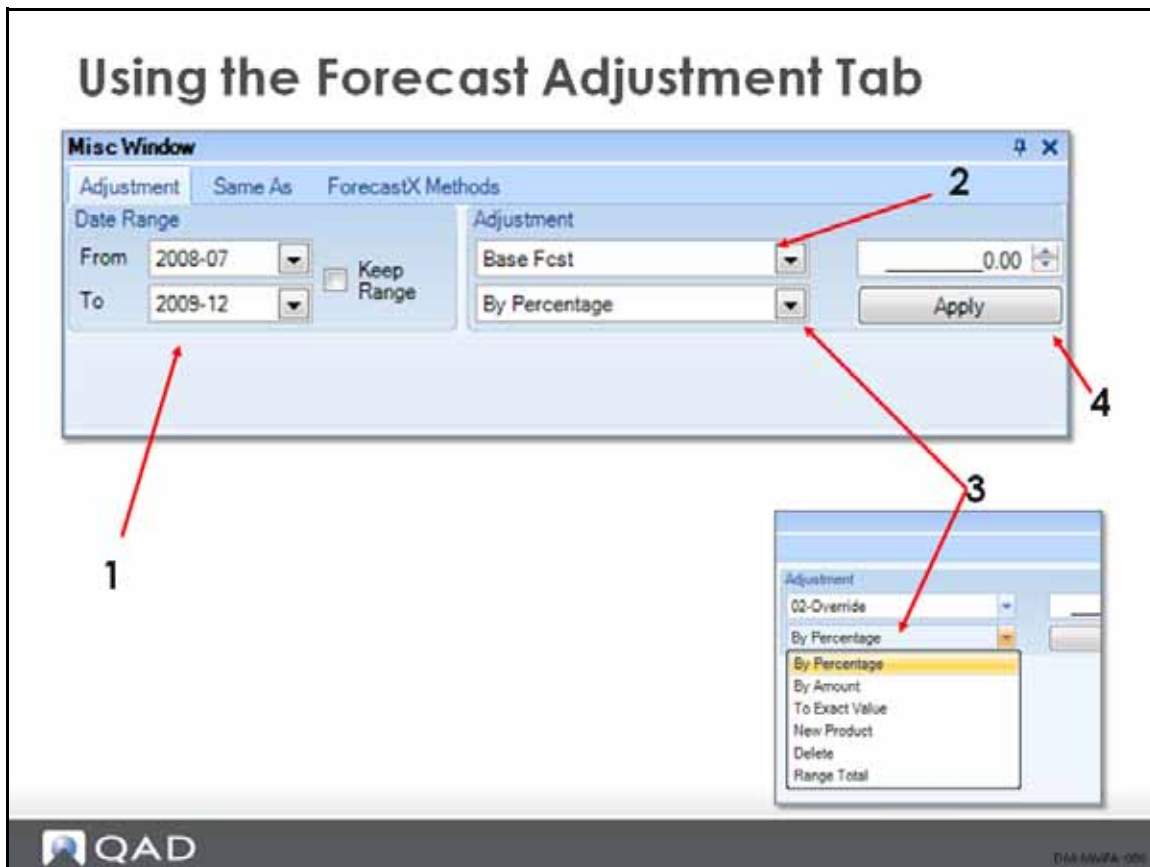
- In the **Misc Window** use the **Adjustment tab** to set a range of one or more historical or forecasted periods
 - Adjust the specified range by using the adjustment features
 - Click **Apply** to set the adjustment

The screenshot shows the 'Misc Window' with the 'Adjustment' tab selected. The 'Date Range' section is circled in red, indicating the period from 2008-07 to 2009-11. The 'Adjustment' section shows a dropdown menu with 'Adj Hist' selected, a value of 0.00, and an 'Apply' button. A red arrow points to the 'Apply' button.

The Adjustment functionality is ideal for:

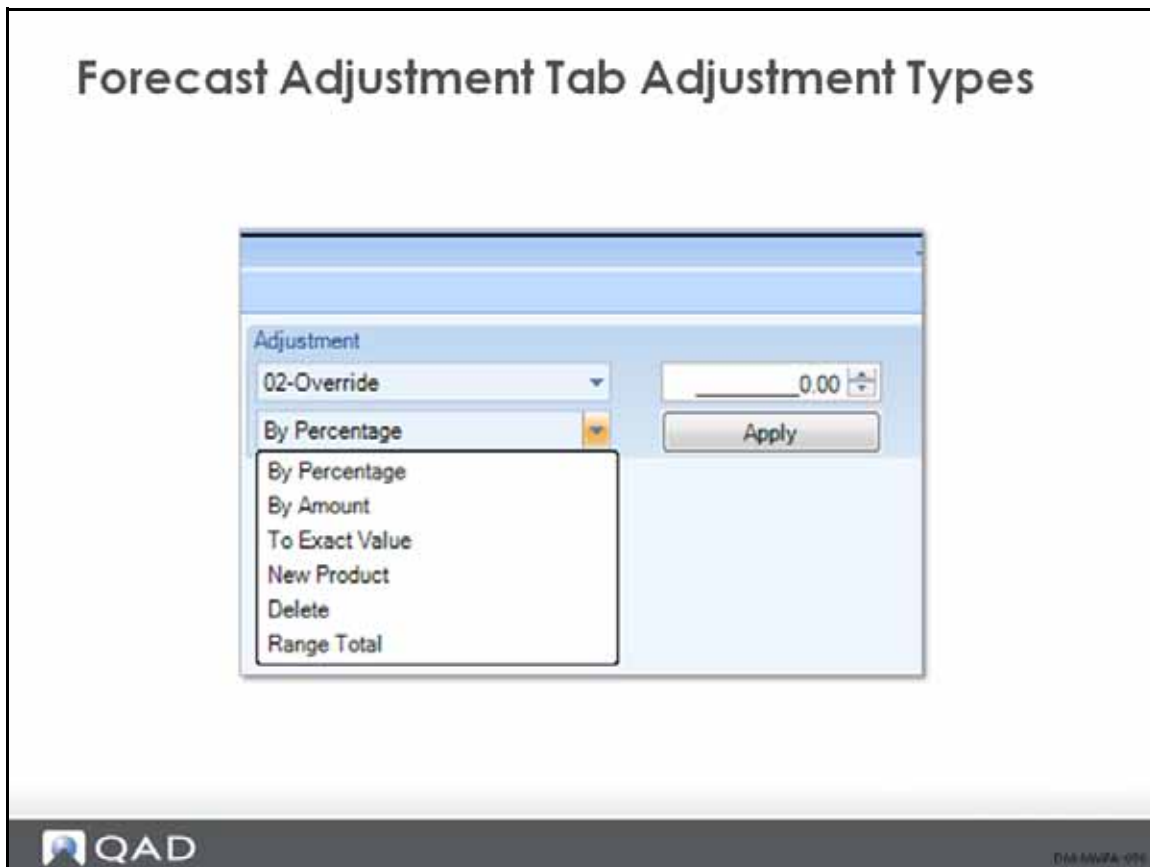
- Adjustments made at an aggregate level in the hierarchy that should be allocated to the detail level
- Forecast adjustments over a range of periods
- Adjusting the baseline forecast to achieve a specific unit/dollar goal for the forecast
- Fitting a New Product/Retirement curve to a series
- Adjust by percentage or specific amount

Using the Forecast Adjustment Tab



- 1 On the Adjustment tab in the Misc Window, select the Date Range for the adjustment. Checking Keep Range will retrain the selected date ranges through multiple adjustments, otherwise changes in value will reset to the defaults after selecting Apply.
- 2 Select the opinion line to modify from the drop down box.
- 3 Set your adjustment type from the drop down box.
- 4 Click Apply.

Forecast Adjustment Tab Adjustment Types



By Percentage

Will increase the existing value by a percentage. For example enter 20 to increase an existing value in the selected opinion line by 20%.

By Amount

Will increase the existing value by the entered amount. For example enter 100 to add 100 to the existing value.

To Exact Value

Replace the existing value with the entered amount. For example enter 100, the existing value will be 100.

New Product

(See next slide)

Delete

Can be used to remove historical periods only.

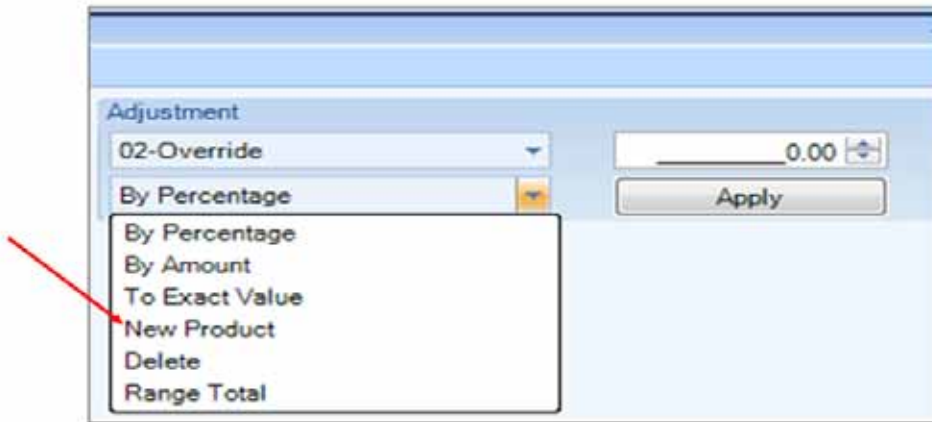
Range Total

Used the total value entered and spreads the value over the selected Data Range so the total value equals that entered; however the original pattern (or percentages) per period are retained..

Forecast Adjustment Tab – New Product

Forecast Adjustment Tab – New Product

- Selecting **New Product** gives additional options of known product curves to apply for both Introduction and Retirement



- Continued on next page

Forecast Adjustment – New Product (cont)

- Enter a **min** and **max range value** expected for the product and values will be fit across the selected **Date Range** with the selected curve

Misc Window

Adjustment Same As ForecastX Methods

Date Range

From 2009-11 To 2009-11

Keep Range

Adjustment

02-Override 0.00

New Product

Apply

New Product

Curve Type: Linear

Direction: Introduction

Min: 100.00 Max: 1,000.00

Linear

S-Curve

Logarithm

Exponential

Direction Retirement

Introduction

Retirement

Using Undo

- In the **Viewer** you can make temporary adjustments and return the values to their original by using the Undo button which is located in the Edit section of the Home tab

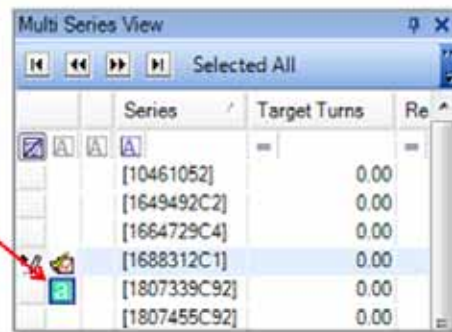


Note Changes can be undone or rolled back to their original status as long as the user has not saved, clicked away from the current series or changed to another View.

Marking a Series as Forecast Complete

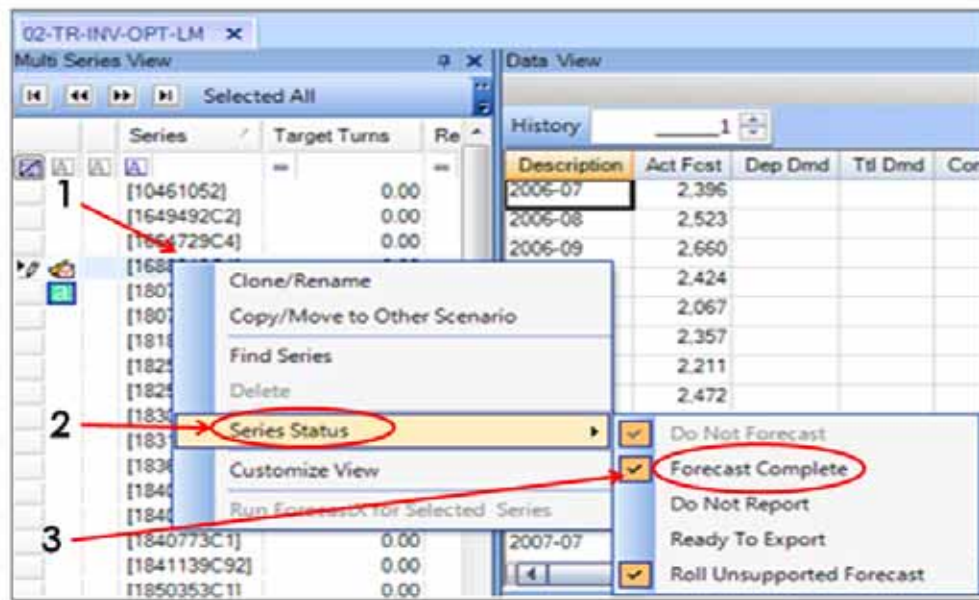
Marking a Series as Forecast Complete

- Once a forecast has been modified or adjustments to a series are complete the user can flag the series as **Forecast Complete** to prevent further changes
- Series flagged as **Forecast Complete** are denoted in the **Series View** with a **check icon**



Series flagged as Forecast Complete are not affected when the user rebalances a hierarchy or re-forecasts the scenario.

Marking a Series As Forecast Complete



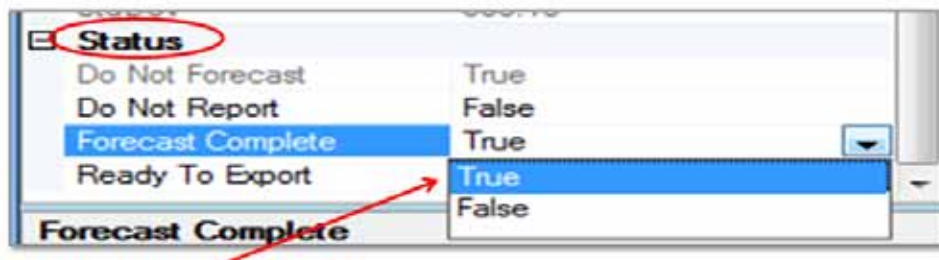
Continued on next page

- 1 Right-click on the series in the Series View.
- 2 Select Series Status from the pop-up menu.
- 3 Select Forecast Complete from the sub-menu.

Marking a Series As Forecast Complete

Another option for marking a Series as Forecast Complete:

- In the **Status** section, select the drop down for **Forecast Complete** and change to **True**, then Save

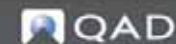


Note: To mark multiple series at once, In the Multi Series View, highlight the desired series and change the as described

Forecast Complete & the Detail Scenario

Forecast Complete & the Detail Scenario

- When in the **Detail (DTL) Scenario** only series flagged as **Forecast Complete** will have changes committed back to the **Living Master Scenario**
- Click the **Commit** button on the **Living Master** menu in the **Scenarios** section of the **Home** tab



DM MW4 1/16

- The system will ask for Confirmation to commit or not the historical periods. It is not necessary to commit historical periods if changes have not been made in history
- Only series that exist in both the DTL scenario and the Living Master scenario are committed
- If a Hierarchy is still applied, only the base level series are committed to the Living Master Scenario

Forecast Adjustments – Recap

Forecast Adjustments – Recap

- The *Viewer* has three ways to adjust the forecast data:
 1. Directly on the Graph
 2. On the Data View grid
 3. Using the Adjustment tab of the Misc. window
- Undo can be used to remove a change until the series is saved

Forecast Adjustments – Recap

- Once adjustments have been made and the forecast review process is complete, series can be marked "Forecast Complete" to prevent further changes from Hierarchy Rebalance allocation
- Adjustments and opinion line edits made in the users DTL scenario are marked "Forecast Complete" as the indicator to move the changes back into the Living Master

Chapter 11

Hierarchy Overview

Overview – Hierarchies

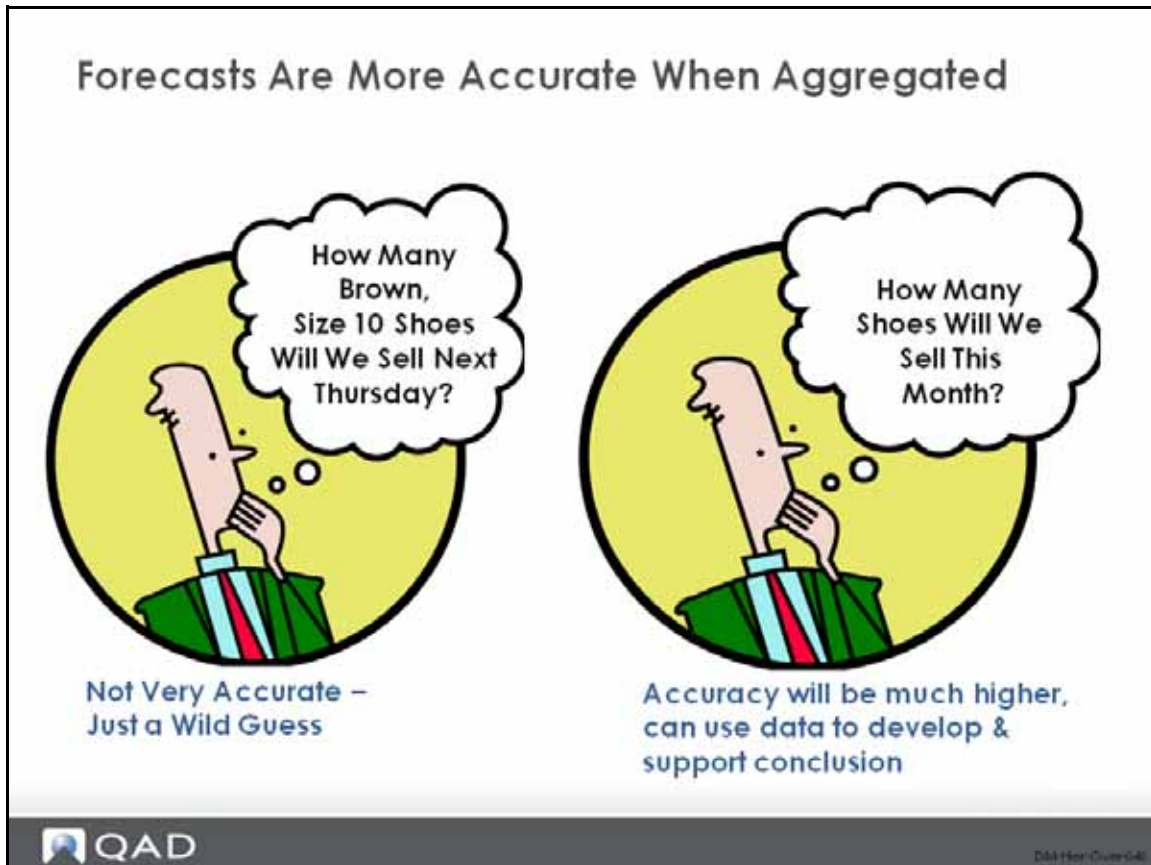
Overview – Hierarchies

- **Hierarchies** are used to allow users to interact with historical data and forecasts in a way that is most useful to them
 - Marketing can view and adjust a forecast for their brands only
 - Sales can view and adjust a forecast for their customers only
- When combined with **Permissions**, hierarchies can restrict what a user can see by job title
 - A sales person may not have access to the standard cost of an item, but the Sales Manager could

Overview – Hierarchies

- **Hierarchies** allow users to forecast at an aggregate level
 - When forecasting for thousands of products, forecasting at an aggregate product group level will often produce a more accurate forecast
 - DM 6.1 will analyze history and create statistical forecasts at various aggregate levels
 - DM 6.1 can take an aggregate (i.e. product group or customer) forecast and push it down to the item level, using statistical algorithms to allocate forecast changes

Forecasts Are More Accurate When Aggregated



Overview – Creating a Hierarchy

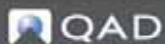
Overview – Creating a Hierarchy

- When creating a **Hierarchy**, there are a number of areas for consideration:
 - **Groupings** – that are relevant for various stakeholders
 - **Re-balance** configuration – how to allocate forecasts at a product group level to the item level
 - **Permissions** – sharing **hierarchies** with other users
 - Sales can be granted permission to view and update the forecast for only their customers
 - Marketing can be granted permission to view and update the forecast for only their brands

Groupings

Groupings

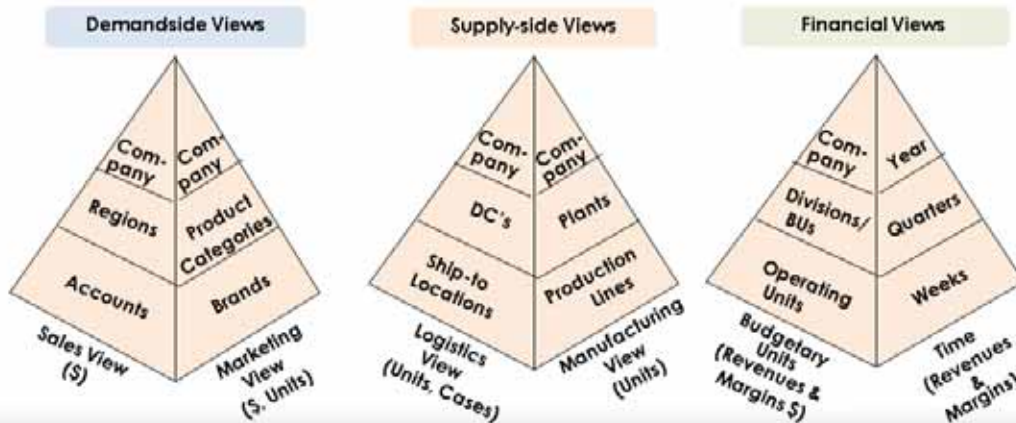
- When creating **Hierarchy Groupings**, the key is to understand the levels needed for adjustments to the forecast or other opinion lines
- **Multiple Hierarchies** can be created based on available series attributes to accommodate the needs of various Users
 - Sales may make adjustments at the customer level
 - Marketing may make adjustments at the Brand level
 - Planners may make adjustments at the SKU level
- **Hierarchies** created in DME can also be shared with **Planning Portal** users



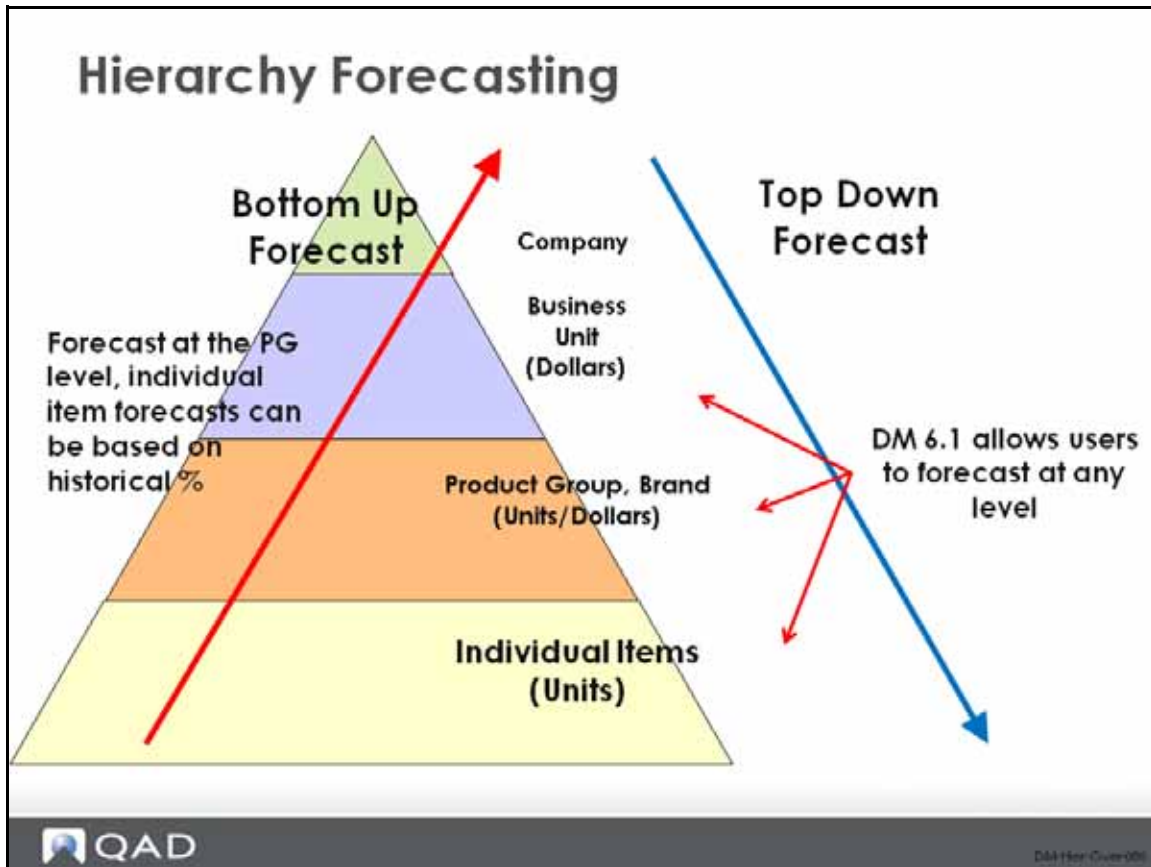
DME User Guide 6.1

Hierarchy Examples

- These are examples of hierarchies, covering Demand views for Sales and Marketing, Supply views for Logistics and Manufacturing and Financial views for Budgets
 - All are potential **groupings**



Hierarchy Forecasting



Typical Hierarchy Forecasting

Typical Hierarchy Forecasting

- Forecast at the item level in units
- Aggregate to product group/brand
- Convert to Dollars (or local currency) in necessary
- Determine totals for:
 - Product Groups
 - Brands
 - Business Units
 - Total Company
- Adjust the forecast at the appropriate level (Product Group, Brand, Business Unit, Total Company)
- Apply percentage difference

Typical Hierarchy Forecasting Example

Typical Hierarchy Forecasting Example

Item	Forecast (Units)	Cost	Dollar Forecast
XR-24	2,876	\$ 2.98	\$ 8,570.48
XR-34	4,578	\$ 4.98	\$ 22,798.44
...			
...			
Total XR PG	91,684		\$ 1,127,715.66
Total BH PG	276,908		\$ 3,465,098.00
Total TW PG	39,489		\$ 1,975,843.00
Total Business Unit 1			\$ 6,568,657
Total Business Unit 2			\$ 3,972,805
Total Company			\$ 10,541,462
Corporate Sales Forecast			\$ 12,000,000
Percent Difference			13.84%



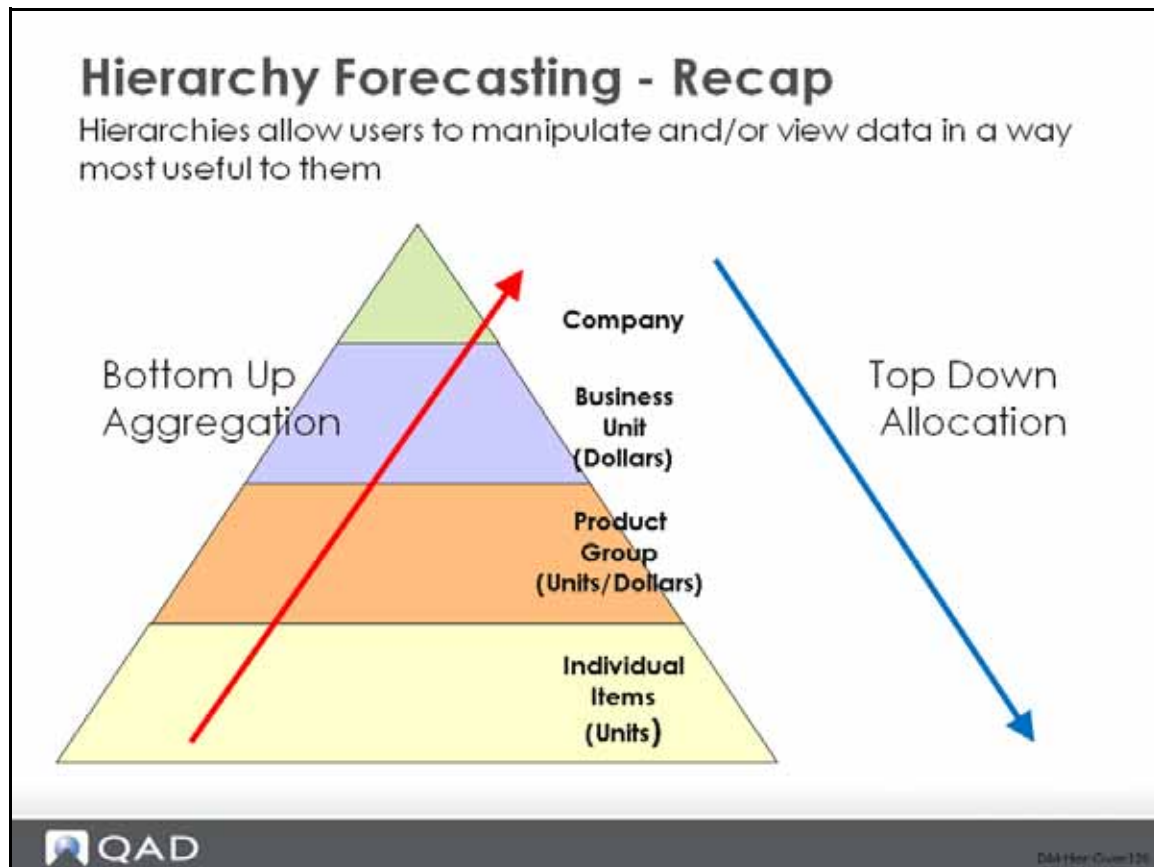
DDM User Guide 100

Revised Forecast

Revised Forecast

Item	Forecast (Units)	Original Forecast	Revised Forecast
XR-24	2,876	\$ 8,570.48	\$ 9,756.31
XR-34	4,578	\$ 22,798.44	\$ 25,952.88
::			
::			
::			
Total XR PG	91,684	\$ 1,127,716	\$ 1,283,749
Total BH PG	276,908	\$ 3,465,098	\$ 3,944,536
Total TW PG	39,489	\$ 1,975,843	\$ 2,249,225
Total Business Unit 1		\$ 6,568,657	\$ 7,477,510
Total Business Unit 2		\$ 3,972,805	\$ 4,522,490
Total Company		\$ 10,541,462	\$ 12,000,000

Hierarchy Forecasting - Recap



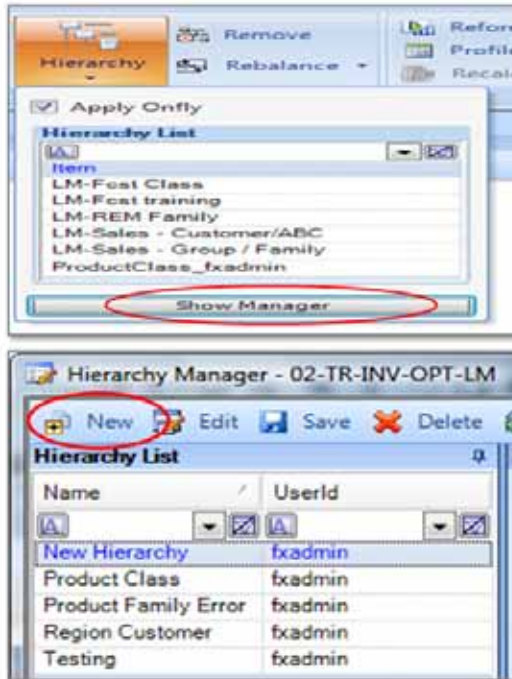
Chapter 12

Creating a Hierarchy

To Create a Hierarchy

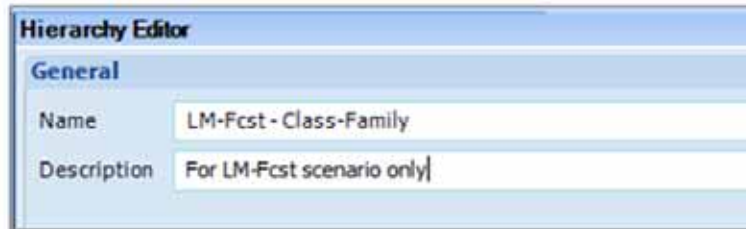
To Create a Hierarchy

- On the **Home** tab in the **Viewer**, click the **Hierarchy** icon to open the **drop-down list** and click the **Show Manager** button
- In the **DME Admin Tool**, select the **Managers** tab and the **Hierarchy Manager** icon
- On the **Hierarchy Manager** screen, click **New** to create a **Hierarchy**



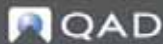
To Create a Hierarchy – General Section

- Enter a Name and Description



The screenshot shows a software window titled "Hierarchy Editor" with a "General" tab selected. Inside the tab, there are two input fields: "Name" with the text "LM-Fcst - Class-Family" and "Description" with the text "For LM-Fcst scenario only".

- Recommendation: For systems with multiple Living Masters, it is recommended the Hierarchy have a naming convention and contain the grouping levels:
 - LM-Fcst – Forecast by Product
 - LM-Sales – Forecast by Customer



ERP Create Hier-02

Note Multiple Living Master scenarios can have the same series attribute fields used for different purposes. Hierarchies are assigned across scenarios so a hierarchy could be misused in a scenario in which the top down field has a different purpose.

Example The Uservalue01 may be the Dmd Plnr Override field in LM-Forecast, but used for the Safety Stock in LM-Inventory.

To Create a Hierarchy – Grouping

To Create a Hierarchy – Grouping

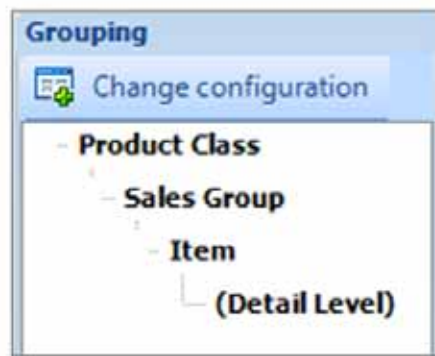
- Click the **Change Configuration** button. On the **General Selection** window, use the **arrow buttons** in the middle to move each selected series property, such as "Class" or "Group", from the **Available** list to the **Selected** list
 - The **Selected** list will create the aggregate levels for the Hierarchy, and will display in the **Grouping** panel



Grouping Configuration

Grouping Configuration

- The Grouping section shows how the data will be displayed in the Viewer
- The Grouping shows the aggregate level attributes and always includes the lowest level of the Hierarchy which is the detail level series



Note Never put all key fields in the Grouping levels; by default the lowest level contains all of them. For example, if the unique series combination (key fields) are Product Class, Sales Group, Item, Customer, only put three of these four fields in the Grouping configuration (as shown above).

Top Down Settings

Top Down Settings

- Update options used for data cleansing, re-balancing, and locking fields
- Allocation options. The update options are also available under Bottom Up Settings; allocation options only apply to Top Down.

Update options →

Allocation options →

Top Down Settings	
Update negative to Zero	☐
Update historical data	☐
Overwrite adjusted forecast	☒
Allocation Type	Use advanced settings
Seasonal Type	Seasonal
Buckets	
Other opinion line allocated by	Fixed field
Field	Stat Fcst

Top Down Settings – Update Options

Top Down Settings – Update Options

- Update Negative to Zero**
 Resets negative values to zero before allocating to ensure affected series are not assigned negative values. Useful for a business with significant returns
- Update Historical Data**
 Allows top down allocation to occur to historical periods for the opinion lines. Useful for re-balancing a prior budget
- Overwrite Adjusted Forecast**
 Allows lower level forecasts that have been manually modified by the user to be overwritten with values being pushed up or down through allocation



Top Down Settings

Update negative to Zero ☒

Update historical data ☒

Overwrite adjusted forecast ☒

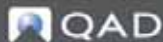
Allocation Type: Use advanced settings

Seasonal Type: Seasonal

Buckets:

Other opinion line allocated by: Fixed field

Field: Stat Fcst



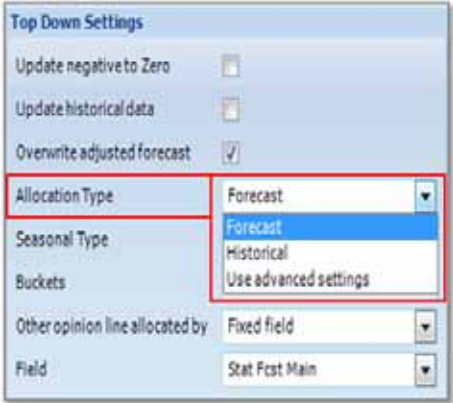
DAI Create Mar-07

Note Overwrite Adjusted Forecast only applies to the FVALUE Opinion Line (typically the Stat Fcst)

Top Down Settings - Allocation

Top Down Settings - Allocation

Select an **Allocation Type** to determine which values are used to calculate the percentage used for the opinion lines in each series. This allocation only applies to the Value (History) and FValue (Forecast) opinion lines.



Top Down Settings

- Update negative to Zero ☐
- Update historical data ☐
- Overwrite adjusted forecast ☒
- Allocation Type** Forecast
- Seasonal Type Forecast
- Buckets Historical
- Other opinion line allocated by Use advanced settings
- Field Fixed field
- Field Stat Fcst Main

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Allocation Type

- Forecast
 - Calculates the percentage using the forecast values of each series
 - Use this where newer products drive revenue.
- Historical
 - Calculates the percentage using the historical values of each series
 - Use this where mature products drive revenue
- Use advanced settings
 - Calculates the percentage using the selections in the “Other opinion line allocated by” and “Field” settings. (Details follow.)
- Seasonal Type – Select Seasonal or Flat

This setting is only used if “Forecast” or “Historical” is selected as the Allocation Type and are only used for the FValue.

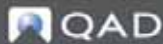
- Seasonal
 - Allocates based on existing patterns in the data, determined by the weight of each individual data point
 - Use this option for data with consistent sales or clear seasonality

- Buckets
 - This field displays when “Seasonal” is selected
 - Used to indicate the specific number of Buckets of data to use for the allocation
 - If the Buckets field is blank each period is considered its own bucket.
- Flat
 - Uses the same percentage across time, if you have a stable product mix
 - Use the Flat option for sporadic and slow moving data, especially for data with many historical periods with no sales and no apparent seasonality
- Periods
 - This field displays when “Flat” is selected
 - Used to indicate the specific number of Periods of data to use for the allocation

Other Opinion Line Allocated By

Other Opinion Line Allocated By

- These fields are only used if "**Use Advanced Settings**" is selected as the **Allocation Type**. Select one of the following options for the percentages to use for allocation during **Re-balancing**:
 - **Fixed Field**: The percentage is based on the opinion line selected in the "Field" drop-down list.
 - **Itself**: The percentage is based on each opinion line and its contribution to the total.
 - **Note**: It is common to use the Fixed Field with a Forecast setting for re-balancing. In this way the changes made at the aggregate level are allocated based on forward-looking trends.

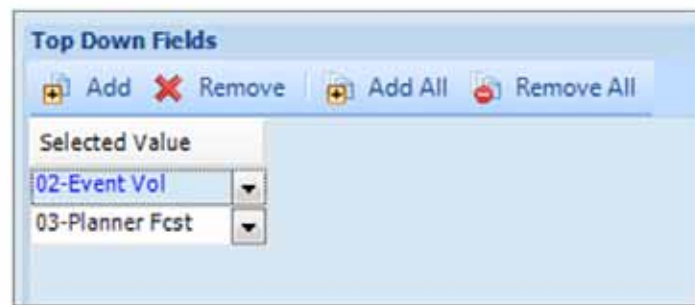


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Top Down Fields

Top Down Fields

- **Top Down Fields** specify which opinion lines can be adjusted or changed and allocated to lower levels
 - Opinion lines not added to this list will not Rebalance when changes are made



Example A company forecasts at the SKU level with a Planner Fcst opinion line representing the Demand Planner's forecast

Using the Top Down allocation settings, adjustments can be made at an aggregate Product Family the Planner Fcst allocated to the lower levels.

Top Down Settings

Top Down Settings

- In the **Top Down Settings** section, you can configure the following settings

Top Down Settings	
Update negative to Zero	☐
Update historical data	☐
Overwrite adjusted forecast	☒
Allocation Type	Use advanced settings
Seasonal Type	Seasonal
Buckets	
Other opinion line allocated by	Fixed field
Field	Forecast



D44 Create New 1.1

Checkbox

- Update Negative to Zero
 - Any negative values in the Top Down Fields are set to zero

Update Historical Data

- Only future values are updated

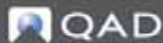
Overwrite Adjusted Forecast

- If checked, any manual adjustments made to the forecast are affected
 - If unchecked the manual adjustments remain

Top Down Settings (continued)

- In the **Top Down Settings** section you can configure the following settings in the Allocation Type field

Top Down Settings	
Update negative to Zero	☐
Update historical data	☐
Overwrite adjusted forecast	☒
Allocation Type	Use advanced settings
Seasonal Type	Seasonal
Buckets	
Other opinion line allocated by	Fixed field
Field	Forecast



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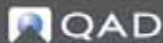
Option

- 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
- Historical
 - This option uses historical data to allocate values throughout the hierarchy
 - If this option is selected choose between tow 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
- Use Advanced Settings
 - This option will use the configuration from the remaining Top Down fields for the allocation
 - When this option is selected the Allocation Basic Settings field will be disabled

Top Down Settings (continued)

- Use the **Other Opinion Line Allocated By** field to select one of the following

Top Down Settings	
Update negative to Zero	☐
Update historical data	☐
Overwrite adjusted forecast	☒
Allocation Type	Use advanced settings
Seasonal Type	Seasonal
Buckets	
Other opinion line allocated by	Fixed field
Field	Forecast



DM-Create-New-126

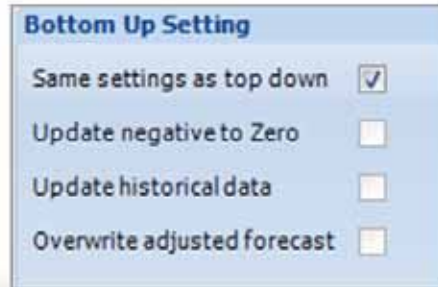
Option

- Fixed Field
 - The weight for fields other than Value and FValue utilizes the field selected in the drop-down list
- Itself
 - Additional fields other than Value and FValue will utilize their own weights
 - For example if UserValue01 is added to the list the weight for UserValue01 - UserValue01 uses UserValue01 as opposed to the fixed fields (Value and FValue) weights

Bottom Up Settings

Bottom Up Settings

- The **Bottom Up** approach rolls up data from the lowest level
- The same parameters can be applied to **Bottom Up** as **Top Down**
- **Same Settings as Top Down** – Check this box to use the same settings as the Top Down section for the Update Negative to Zero, Update Historical Data, and Overwrite Adjusted Forecast fields



Bottom Up Setting	
Same settings as top down	☒
Update negative to Zero	☐
Update historical data	☐
Overwrite adjusted forecast	☐

Bottom Up Settings includes opinion line data that is desired only to sum up and viewed at a higher level as well as opinion line data that may be adjusted at the lowest level and viewed at a higher/ aggregated level.

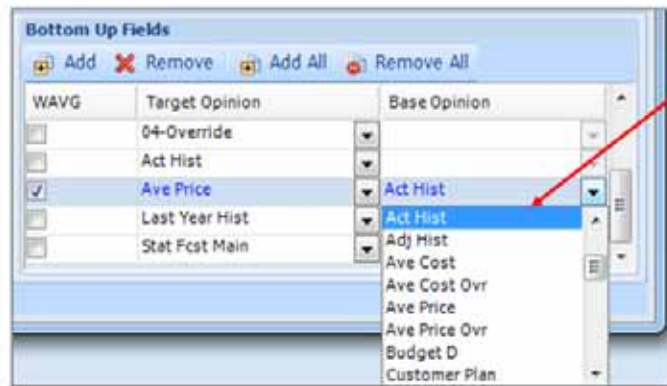
Checkbox

- Update Negative to Zero
 - Any negative values in the Top Down Fields 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 affected
 - If unchecked the manual adjustments remain

Bottom Up Fields

Bottom Up Fields

- The **Bottom Up Fields** list specifies which **Opinion Lines** are summed up to the higher levels
 - Values not included in this list will display as zeroes at the higher levels of the **Hierarchy**



DM-Creation-Main-1/2

If the WAVG option is checked for an opinion line, a weighted average will be calculated at higher aggregate levels for that opinion line.

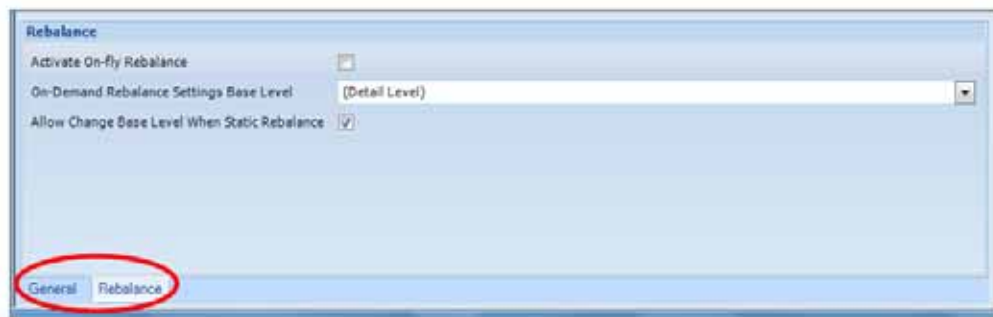
Example If a price is desired at an aggregate level, a weighted average value must be defined.

Select the Base Opinion drop-down to select the line to calculate the weighted average value.

Rebalance Tab

Rebalance Tab

- At the bottom of the **Hierarchy Manager** screen there are two tabs that control the bottom pane of the screen
 - **General** and **Rebalance**
 - The **Rebalance** tab defines whether adjustments will allocate immediately or only on demand by User selection in the **Rebalance** menu



Rebalance tab

- **Activate On-Fly Rebalance** - This option will automatically rebalance the hierarchy after the user changes any top down value in the hierarchy.
 - Select this option to reduce steps necessary by the user and when changes do not require review before rebalancing.
 - For hierarchies used in the **Planning Portal**, **Activate On-Fly Rebalance** is required for changes to be rebalanced.
- The alternative to **On-Fly Rebalance** is to run **Rebalance** using the button on the ribbon menu
 - Use this option when there are a large number of series and multiple hierarchies which can slow the rebalance process

On-Demand Rebalance Settings

- **Base Level**

- It is recommended that the field is left blank so that the entire grouping level (tree) is allocated

- **Allow Change Base Level When Rebalance**

- The default setting is "not selected," so the specified level in the dropdown list is the base level
- When this option is selected the user is prompted to choose the level to use as the base level when the Rebalance feature is run from the menu or toolbar



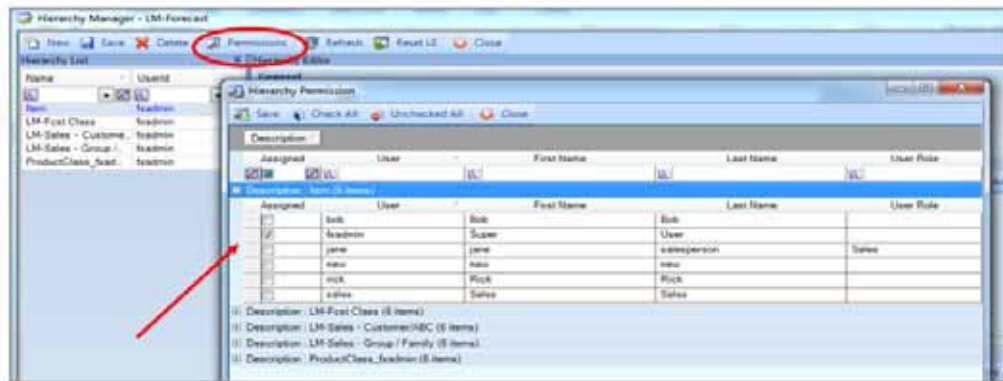
Creating a Hierarchy - Permissions



Assign the Hierarchy to User(s)

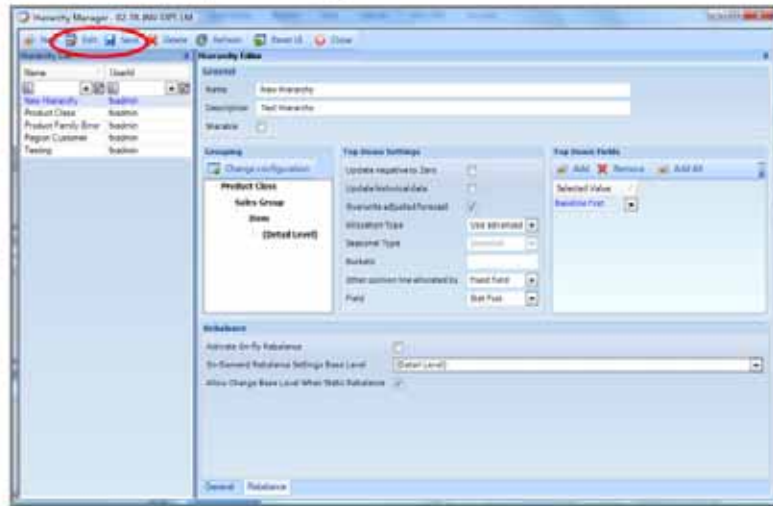
Assign the Hierarchy to User(s)

- In the **Hierarchy Manager**, select **Permissions** to give user(s) permission to use the **Hierarchy** or **hierarchies**
- Check the **Assigned** box for the User(s) that should be able to use the **Hierarchy**



Editing an Existing Hierarchy

- In the **Hierarchy Manager** screen, select the hierarchy to modify from the **Hierarchy List** and **Edit**
- Make any necessary changes and click **Save** when finished



Recap – Hierarchies

Recap – Hierarchies

- **Hierarchies** are used to:
 - Reconcile data across multiple levels
 - Provide statistical forecasts at aggregate level
 - View and override data based on any attribute
- When defining the **Hierarchy** the key is understanding the level at which adjustments to an opinion line will be made

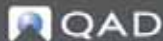
Chapter 13

Applying Hierarchies and Rebalancing

Overview - Using Hierarchies

Overview - Using Hierarchies

- **Hierarchies** are used to:
 - View data based on series attributes at aggregate levels such as Product Class, Sales Region, Customer
 - Make changes to a forecast at an aggregate level
 - Reconcile changes made at various levels by using the **Re-balance** feature
 - Provide history to create statistical forecasts at aggregate level.
 - Users may create their own **Hierarchies** in the **Hierarchy Manager** or use **Hierarchies** that have been shared by the owner



DM App-Hier-Seq-001

Hierarchies can be applied:

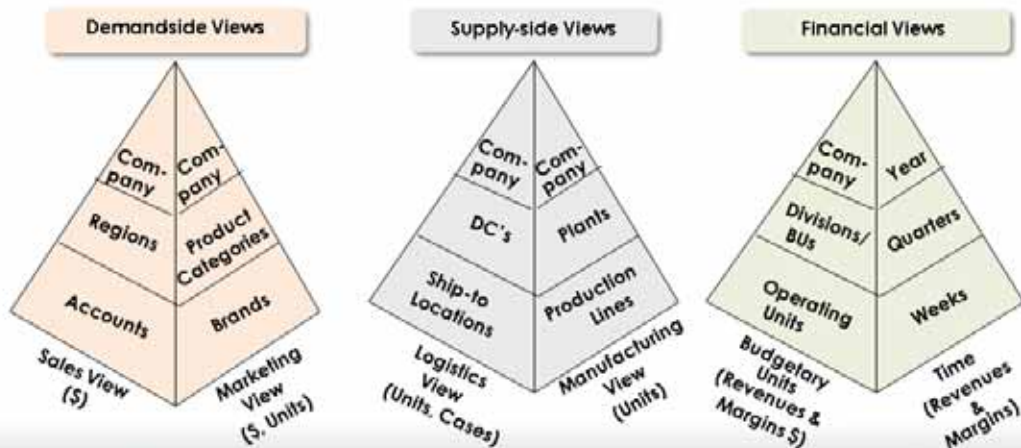
- When logging in to the Viewer
- While in the Viewer
- Through the batch process

Hierarchies can be removed within the Viewer or in the batch process.

Users can Rebalance changes automatically or on-demand with a hierarchy applied.

Hierarchy Examples

- These are examples of hierarchies, covering Demand views for Sales and Marketing, Supply views for Logistics and Manufacturing and Financial views for Budgets.



Static and On Fly Hierarchies

Static and On Fly Hierarchies

- There are two types of hierarchies in the Viewer:
 - **Static** – aggregated information remains in the database until the hierarchy is removed
 - Static hierarchies remain on the scenario until removed in the Viewer
 - If the scenario is closed and reopened, the Static Hierarchy is still applied and will show in the login window
 - **On Fly** – aggregated information displays only while the scenario is open. On-fly hierarchy is removed when the scenario is closed



DM App - Hier 2015-04

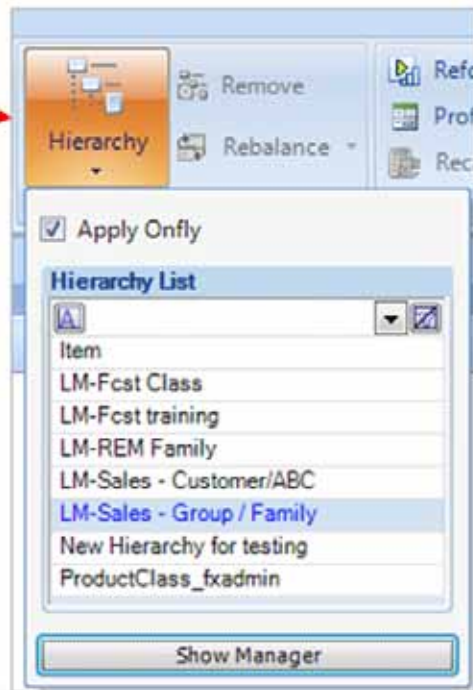
Rebalancing adjustments can be completed at all levels with Static or On Fly hierarchies.

Some functionality is not available at the On Fly Aggregated levels, such as Events, Retagging, Clone/Rename and LifeCycle

Applying a Hierarchy in the Viewer

Applying a Hierarchy in the Viewer

- From the **Home** tab, select the **Hierarchy** icon and choose the desired Hierarchy from the list to apply an **OnFly** hierarchy
- To apply a **Static** hierarchy, first uncheck the **Apply Onfly** box and then select the desired Hierarchy from the list



Recreate Base is a feature which works with the on-fly hierarchy. It should re-create the structure of the dynamic tree. It would be useful when you execute some changes to a scenario without the Viewer, including the Batch Scheduler or from SQL.

Note If you are in the Living Master as a user other than fxadmin, the Apply Onfly box will be protected. This means that a static hierarchy cannot be applied.

Re-balancing Concepts

Re-balancing Concepts

- **Top Down** - Forecasts or adjustments at the aggregate level are allocated to the detailed level series based on percentages
- **Bottom Up** - Forecasts or adjustments at the detailed level series are summed to the aggregated levels of the hierarchy. There is also an option for using a weighted average where a sum is not appropriate



DM App - New 2013-03

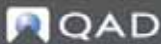
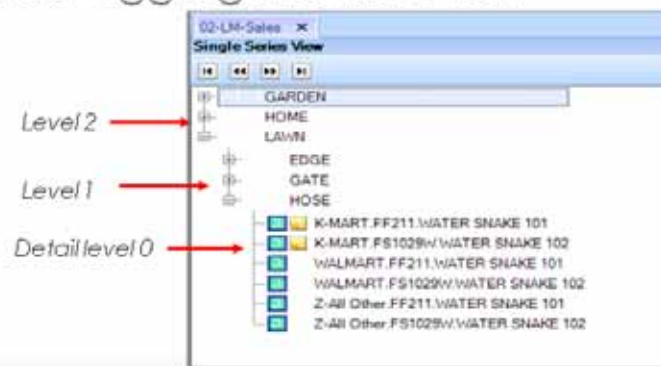
Examples of Re-balancing:

- Actual History is typically Bottom Up
- Budget might be Top Down
- Consensus forecast (Fcst) is often both Top Down and Bottom Up
- Selling Price is Bottom Up with weighted average

Re-balancing Concepts for Adjustments

Re-balancing Concepts for Adjustments

- When making an Adjustment at an aggregate level of the **Hierarchy**, the type of rebalancing will depend upon the number of Levels within the aggregate or Grouping level of the **Hierarchy**
- The lowest level of a **Hierarchy** is Level 0, the next highest aggregation is Level 1



DME App - Nov 2013 - 57

If the hierarchy contains only two levels, then the Top Down allocation will only effect the lower level.

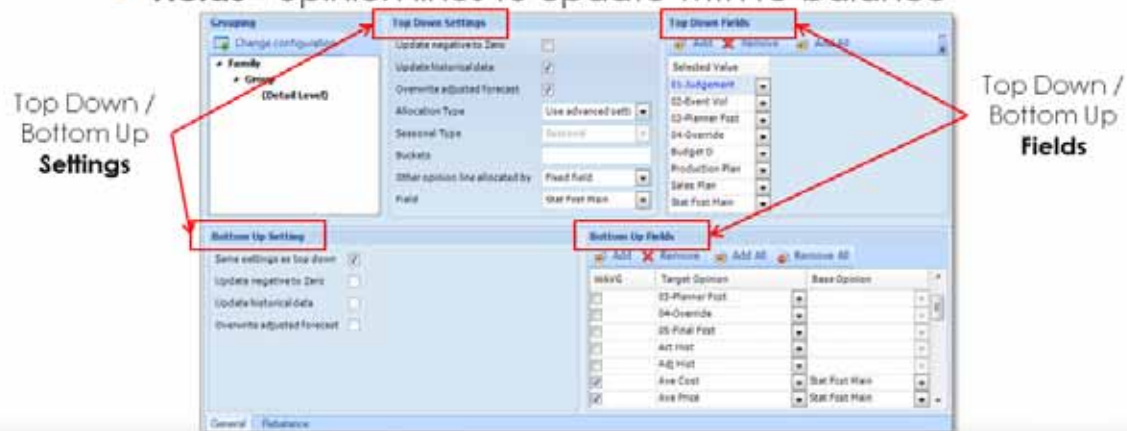
If the hierarchy contains three or more levels and the adjustment is made at the middle level (middle-out), the lower levels will be affected by the Top Down settings, and the upper levels will be affected by the Bottom Up settings.

Rebalancing is the DME feature used to allocate these changes.

Re-balance Configuration

Re-balance Configuration

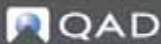
- Many of the settings on the **Hierarchy Manager** apply to rebalancing across the hierarchy levels defined in the **Grouping** section
 - Settings** – update and allocation options
 - Fields** - opinion lines to update with re-balance



Grouping and Allocation Concepts

Grouping and Allocation Concepts

- When defining the **grouping** for statistical forecasts and where adjustments can be made, use the following rules of thumb for best results
 - **Top Down** – items are too numerous to forecast
 - **Bottom Up** – forecasting at the detailed item level is practical
 - **Bottom Up** – items that need special treatment (new item, promotional item) in a product group that would normally be handled by Top Down forecasting



DM Apps - New 2015-16

Top Down

Forecast at an aggregate level and use Top Down allocation when the number of detailed level series are likely to be too numerous to permit individual item forecasting.

Bottom Up

Forecast at a lower level and use Bottom Up aggregation when the detailed level does not contain too many items for practical forecasting to occur. Also use Bottom Up forecasting if you normally forecast at an aggregate level, but have special information regarding one item (on promotion, being discontinued).

Re-balancing Adjustments

Re-balancing Adjustments

- After changes are made to a forecast or other opinion line, Rebalance may run automatically or it can be run on demand
 - This setting is configured in the Hierarchy Manager
- The Rebalance function reconciles values entered with the other levels in the hierarchy



DM App-Hier-2015-106

Note Refer to the Creating Hierarchies training module for more detail.

Re-balancing Adjustments

Single Series View

Demo

History 1 Transpose Export to Excel

Series /

Period	Adj Hist	Stat Fcst Mai	04-Override
2009-07		5.584	10.000
2009-08		5.519	2.647

CHAIR

CONSUMER

TARGET.1688312C1.SUPER ROCK 101

WALMART.1688312C1.SUPER ROCK 101

Z-All Other.1688312C1.SUPER ROCK 101

CHAIR

CONSUMER

TARGET.1688312C1.SUPER ROCK 101

WALMART.1688312C1.SUPER ROCK 101

Z-All Other.1688312C1.SUPER ROCK 101

CHAIR

CONSUMER

TARGET.1688312C1.SUPER ROCK 101

WALMART.1688312C1.SUPER ROCK 101

Z-All Other.1688312C1.SUPER ROCK 101

CHAIR

CONSUMER

TARGET.1688312C1.SUPER ROCK 101

WALMART.1688312C1.SUPER ROCK 101

Z-All Other.1688312C1.SUPER ROCK 101

Series /

Period	Adj Hist	Stat Fcst Mai	04-Override
2009-07		2.169	3.884
2009-08		2.294	1.018

Series /

Period	Adj Hist	Stat Fcst Mai	04-Override
2009-07		1.000	1.791
2009-08		1.000	162

Series /

Period	Adj Hist	Stat Fcst Mai	04-Override
2009-07		2.415	4.325
2009-08		2.224	1.468

Rebalance On Demand From The Menu

Rebalance On Demand From The Menu

- Click the Rebalance button in the Hierarchy section of the Home tab.
 - Click Selected Series to apply the changes to the current series OR
 - By Level, select the level to which you want to apply the changes. This will apply the changes to all series in that group



Removing an Applied Hierarchy

Removing an Applied Hierarchy

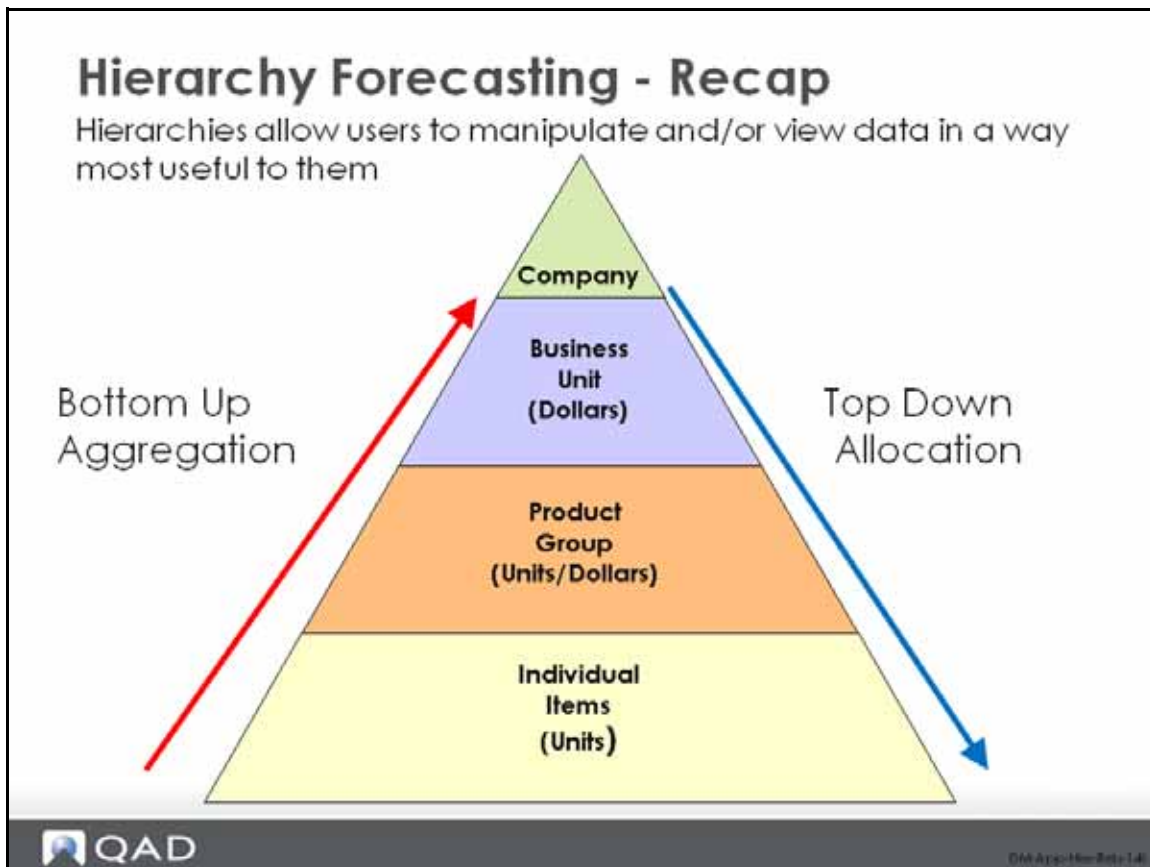
- It is not necessary to remove a Static Hierarchy in order to apply an On-fly Hierarchy
- To remove a Hierarchy that has been applied, click the Remove Hierarchy button in the Hierarchy section of the Home tab



DM App - Home 128

Note Users can view the settings using the Hierarchy Manager.

Hierarchy Forecasting - Recap



Hierarchies are used to:

- View data based on series attributes at aggregate levels such as Product Class, Sales Region, Customer
- Reconcile changes made at various levels by using the Re-balance feature
- Provide history to create statistical forecasts at aggregate level

Chapter 14

Creating & Using Filters

Creating Filters – Overview

Creating Filters – Overview

- **Filters** are used to **select the series to display** in the Viewer which permits the user to focus
- **Filters** can be created on **any Series attribute** available in the scenario
- There are **two types of filters**: **basic filters** which have a simple structure, and **advanced filters** that can use **complex SQL expressions**
- Filters can be created by any user and shared
- Filters can be created in three different places:
 - **DME Admin Tool**
 - **DME Viewer**, from both the **Filter Manager** & in **Multi-Series View**
 - **DME Viewer**, when opening a scenario

Example of a Basic Filter

Example of a Basic Filter

- This filter will return all series that have Product Group equals "CONSUMER" or Product Class equals "GARDEN"

Filter Criteria

 Add Criteria  Remove Criteria

Category	Field	Operator	Value	Valid
Series	Product Group	=	CONSUMER	
Series	Product Class	=	GARDEN	

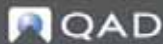
Creating Filters In the DME Admin Tool

Creating Filters In the DME Admin Tool

- In the **DME Admin Tool**, click the **Filter** button to open the **Filter Manager**



- In the **DME Viewer**, click the **Filter** button to select the **Filter Manager**



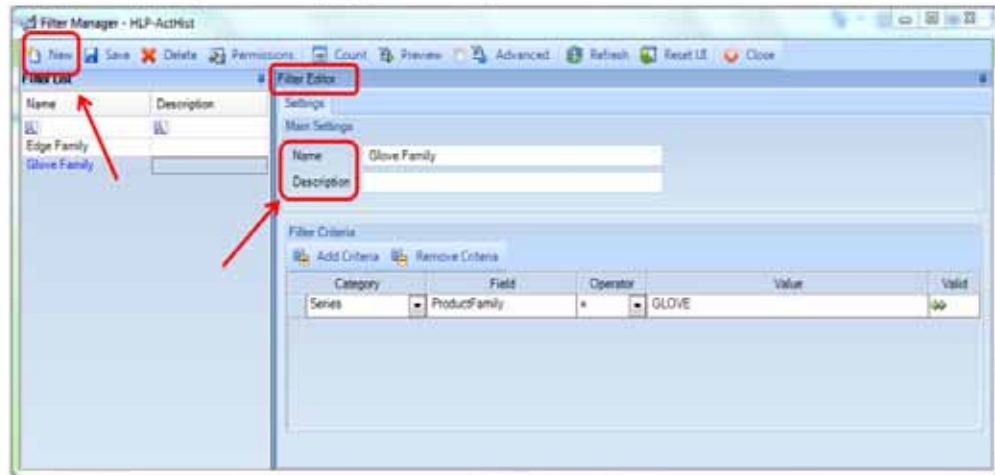
DM-CA-70-04

Note When using the Admin Tool, make sure you have a Base Scenario selected so the Display Set aliases are visible.

Creating A Basic Filter

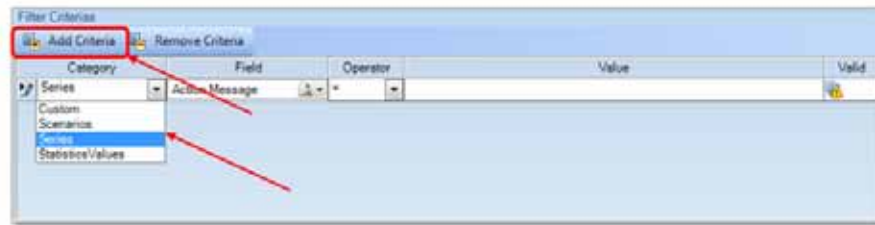
Creating A Basic Filter

- Click the **New** button
- In the **Filter Editor**, enter a **Name** and a **Description** (optional)



Creating A Basic Filter (cont)

- In the **Filter Criteria section** click the **Add Criteria button** to add a criteria to the **filter**
 - A filter must have at least one Criteria

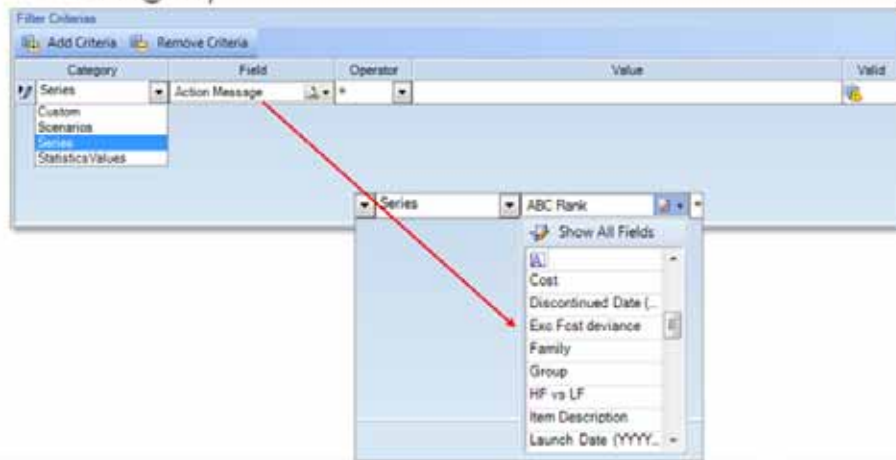


Select a Category from the drop-down list. This area allows attribute selections from:

- The Series table, which contains all of the Series attributes
- The Scenarios table, which contains Scenario information or
- The StatisticsValues table which has MAPE, RSqr, etc.

Creating A Basic Filter (cont)

- Use the **Field** drop-down list to **select the desired attribute field**
 - The values in this **drop-down** vary based on the Category



Note If you are in the Admin Tool and these values do not match your Display Set, make sure you have the correct Base Scenario applied.

Creating A Basic Filter (cont)

- Select an **Operator** from the drop-down list.
- Check desired field value(s) from the **Value** drop-down list. Select the accept icon when finished selecting values.
- **Save** when you are finished

Category	Field	Operator	Value	Valid
Series	Product Group	CONTAINS		
Series	Product Class	GARDEN		

Value

GARDEN

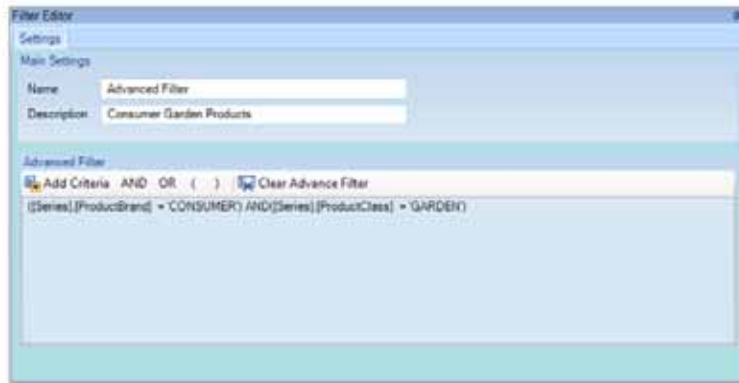
Select	Class
☐	☐
☒	GARDEN
☐	HOME
☐	LAWN
☐	strings

Note: If the filter is improperly defined, an "invalid" icon () will appear in the Valid column.

Advanced filters

Advanced filters

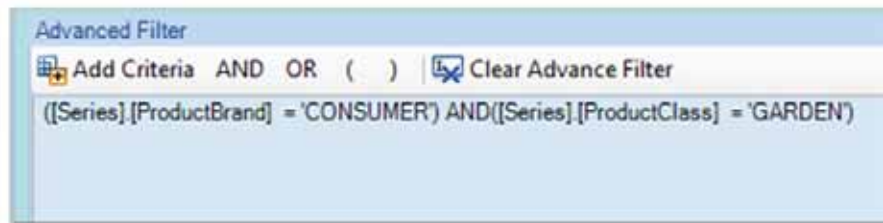
- Additional **Filter** expressions can be added directly into the **SQL** by using the Logic Operator buttons: “**AND**”, “**OR**”, “(”, and “)”
 - Click the Logic Operator buttons to insert the symbol .



Advanced Filter – Example

Advanced Filter – Example

- This filter will return series that have Product Brand equals "CONSUMER" and Product Class equals "GARDEN"



Advanced Filter – SQL example

Advanced Filter – SQL example

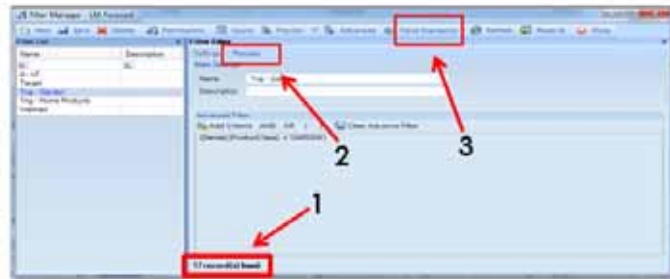
- In Advanced Filtering, you are not restricted to using the syntax buttons provided
 - If you are familiar with the DME table structure you can simply type in the desired filter logic
- This filter will return all series where Uservalue02 is greater than Uservalue03

```
(Series.[UserValue02] > Series.[UserValue03])
```


Advanced Filter

Advanced Filter

1. Click the **Count** button to see how many records would be returned by this Filter.



2. Click the **Preview** button to preview the data that will be returned by the expression on a new tab.
3. Click the **Parse Expression** button to ensure the Filter logic is valid.

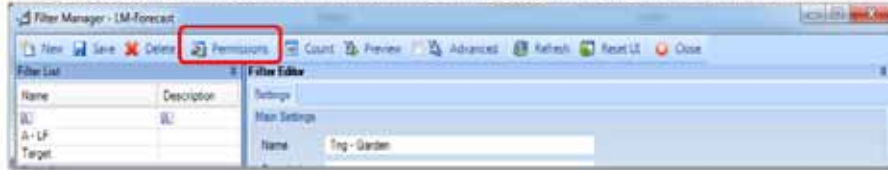
Note: This option only displays when Advanced is selected.

Filter Permissions

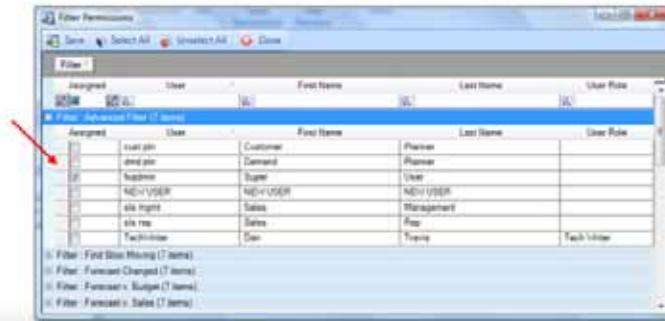
Filter Permissions

You can assign a **Filter** to additional users:

- Select the Filter from the Filter List and click **Permissions**



- On the **Filter Permissions** screen, select the check boxes of the users you want to have access to this Filter and click **Save**



Creating Filters - Recap

Creating Filters - Recap

- **Filters** are used to select the series to display in the Viewer
- **Filters** can be created on any **Series attribute** available in the scenario
- There are two types of filters: **basic filters** which have a simple structure, and **advanced filters** that can use **complex SQL expressions**
- Filters can be created by any user and shared

Chapter 15

Using Conversions

Conversions – Overview

Conversions – Overview

- **Conversions** allow users to convert their history and forecasts into different units of measurement
- Conversion factors allow users to view and adjust the forecast using financial factors
- Conversion factors allow users to review and predict revenue over time from the forecast
- Conversions can be applied in Single Series, Multi-Series or Summary Views
- Conversions can be applied in a Hierarchy

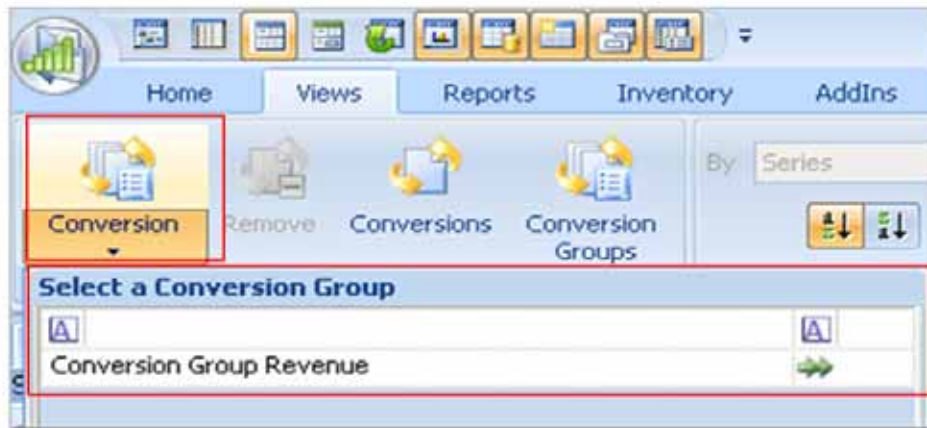


DMA-Dem-Concept-001

Applying Conversions

Applying Conversions

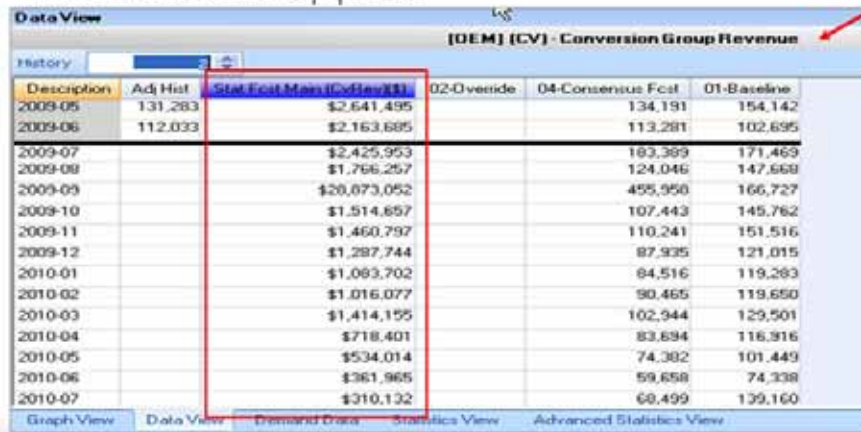
- With the desired **Scenario** open, click the **Conversion button** on the **Views** tab and select the desired **Conversion Group** from the **Conversion Group List**



These Conversion Groups have been previously configured in the Admin Tool.

Applying Conversions

- The defined opinion lines in the **Conversion Group** have a symbol and column header color based on the configuration of the Group
 - Also notice the **label designation** indicating the conversion is applied

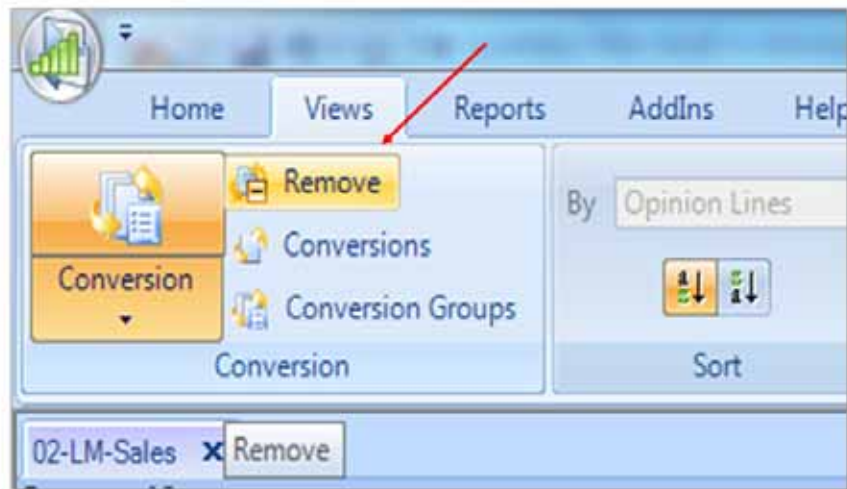


The screenshot shows a software window titled 'DataView' with a subtitle '[DEM] (CV) - Conversion Group Revenue'. The window contains a table with the following columns: Description, Adj Hist, Stat Est Mgr (Code 33), 02-Override, 04-Consensus Fcst, and 01-Baseline. The 'Stat Est Mgr (Code 33)' column is highlighted with a red box, and the '01-Baseline' column header is pointed to by a red arrow. The table lists data for various years from 2009 to 2010.

Description	Adj Hist	Stat Est Mgr (Code 33)	02-Override	04-Consensus Fcst	01-Baseline
2009-05	131,283	\$2,641,495		134,191	154,142
2009-06	112,033	\$2,163,695		113,281	102,695
2009-07		\$2,425,953		183,389	171,469
2009-08		\$1,766,257		124,046	147,668
2009-09		\$26,073,052		455,950	166,727
2009-10		\$1,514,657		107,443	145,762
2009-11		\$1,460,797		110,241	151,516
2009-12		\$1,287,744		87,935	121,015
2010-01		\$1,083,702		84,516	119,283
2010-02		\$1,016,077		90,465	119,650
2010-03		\$1,414,155		102,944	129,501
2010-04		\$718,401		83,694	116,916
2010-05		\$534,014		74,382	101,449
2010-06		\$361,965		59,658	74,338
2010-07		\$310,132		60,499	139,160

Removing Conversions

- To remove the currently applied Conversion, select **Remove**



Conversions Facts

Conversions Facts

- **Conversions** and **Conversion Groups** can be created from any active series property and opinion line
 - If the user does not have access to the data used in the conversion, the **Conversion Group** will not be available for use in the Viewer
- Users cannot commit **DTL scenarios** with applied conversion factors
 - The data must be stored in a consistent unit of measure in the **Living Master scenario**



DM-DM-Conversion

Conversions - Recap

Conversions

- **Conversions** allow users to convert their opinion lines into different units of measurement
 - **Conversions** may include price, cost, margin, or units to cases
- Typical benefits of using **Conversions**
 - Conversion factors allow users to view and adjust the forecast for series in different units of measurement
 - Conversion factors allow users to review and predict revenue over time from the forecast

Chapter 16

Notes Configuration

Notes Configuration - Overview

Notes Configuration - Overview

- The **Configuration tab** in the **DME Admin Tool** allows the Administrator to configure settings available on the **Notes Editor** and to **require notes** for data changes

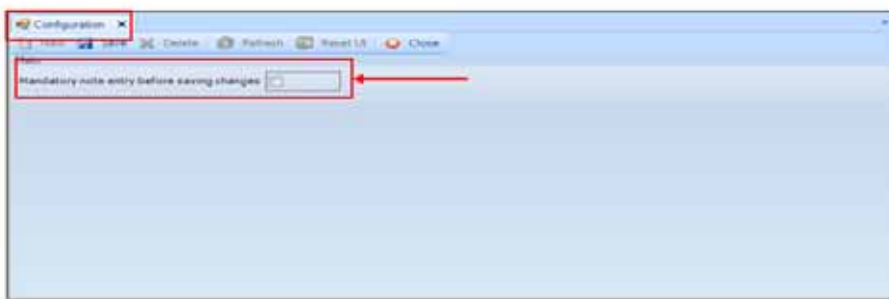


- The **Reason Notes option** allows for the configuration and addition of the **Reason Codes** available to select for notes on the **Notes Editor window**
- The **Configuration option** allows for setting the requirement for the entry of a note when saving changes made in the Data View

Notes Configuration Tab

Notes Configuration Tab

- The **Configuration tab** in the **Admin tool** consists of **one check box** that will **require users to create a note** when saving any changes to the opinion line data



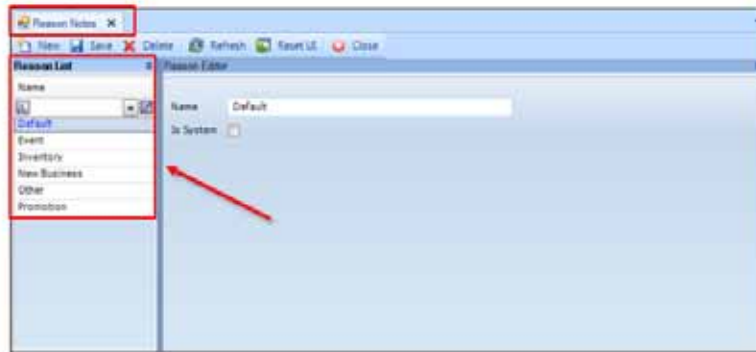
- If this option is checked, the **Viewer** will **automatically display the Notes editor** any time the user saves changes to the data
 - **Changes to the data will not be saved if a note is not created**

The system will allow the user to enter note text and enter the Reason Code as “Adjustment”

Reason Notes Tab

Reason Notes Tab

- The **Reason Notes tab** allows for the addition of a **new reason code**, edit of an existing reason code or deletion of a reason code used to classify notes

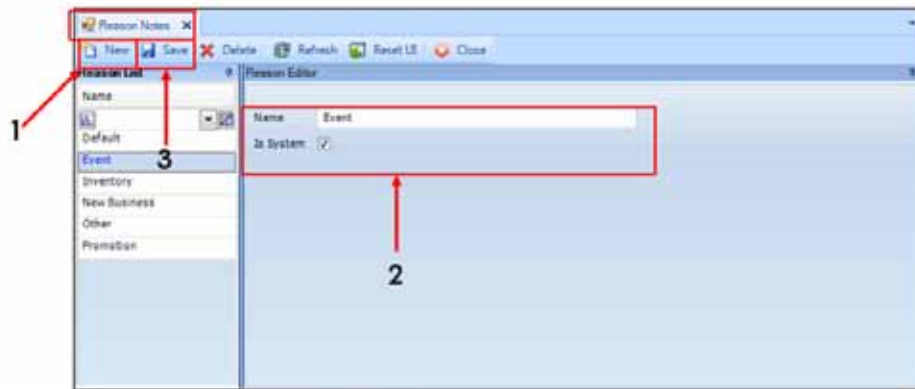


- The **Reason List** displays **all existing reason codes** that are available for selection when creating a note

Create A New Reason Code

Create A New Reason Code

1. Click the New button
 2. Enter a Name field in the Reason Editor
 3. Click Save
- Note: The Is System check box is not editable and is use for Events and Adjustments.



Notes Configuration

Notes Configuration

- Now in the **Viewer**, the codes from the **Reason list** can now be selected from the **Reason drop-down** on the **Notes Editor**



Chapter 17

Creating and Viewing Notes

Overview - Notes

Overview – Notes

- **Notes** allow the user to track changes to a forecast or provide information on assumptions
- **Notes** in DME can be entered at either the **Observation** level, **Series** level or **Hierarchy** level
- **Notes** that are entered in **DME** or the **Planning Portal** can be viewed in the other application immediately.
- The **Notes Editor** tracks a history of notes by user and level and can be sorted by attributes and reason codes
- **Notes** can also be viewed in **Reporting**



DME Overview/View Notes-001

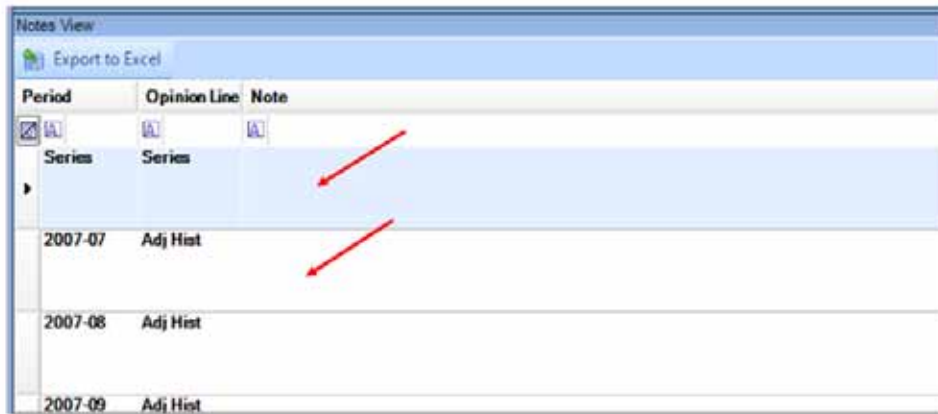
Overview – Notes

- Notes are entered using the Notes Editor
- There are several ways to open the Notes Editor in the Viewer.
 - Notes View – double-click
 - Data View – right click on cell
 - Graph View – right click on node
 - Summary View – right click on series
 - Series View – right click on series

To Enter a Note

To Enter a note

- Double click in Notes View for a series level note or in a specific period and opinion line for an observation level note

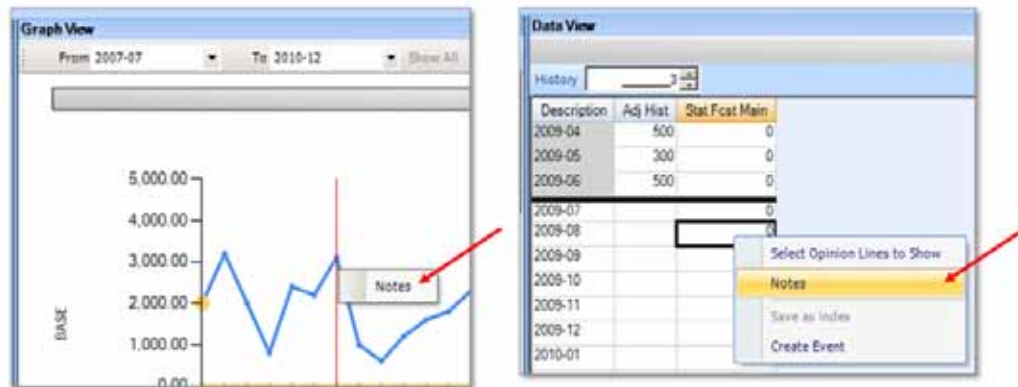


Period	Opinion Line	Note
Series	Series	
2007-07	Adj Hist	
2007-08	Adj Hist	
2007-09	Adj Hist	

- The Notes Editor window will appear

To Enter a note

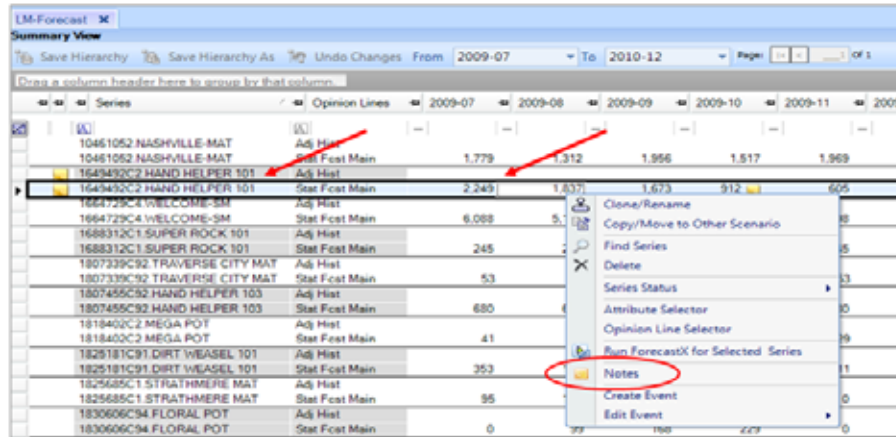
- Or right click on a Graph View or a Data View, including user created views



- Select Notes to display the Notes Editor window

To Enter a note

- Or right click in the Summary View on the desired series, opinion line and period for an observation level note
- Right click on the series label for a series level note

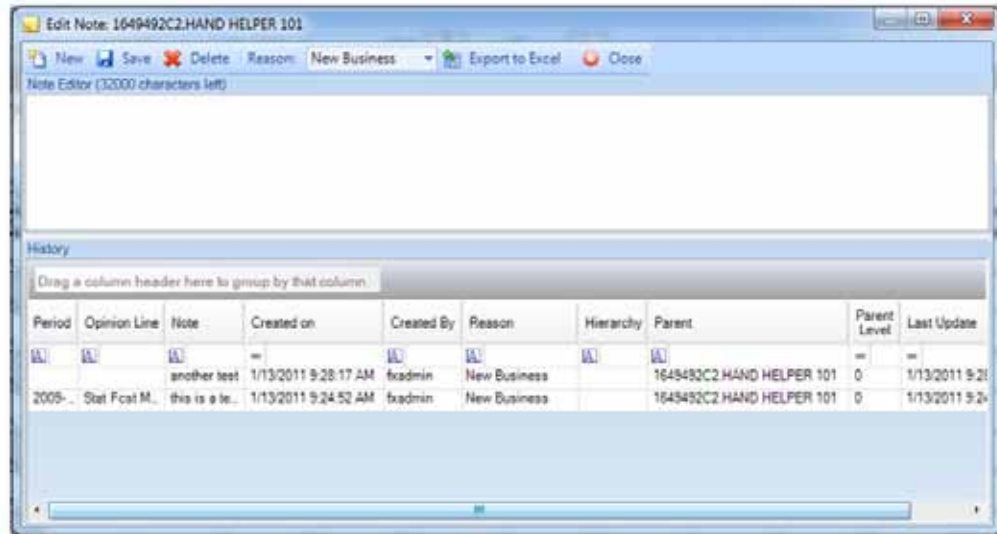


- Select Notes to display the Notes Editor window

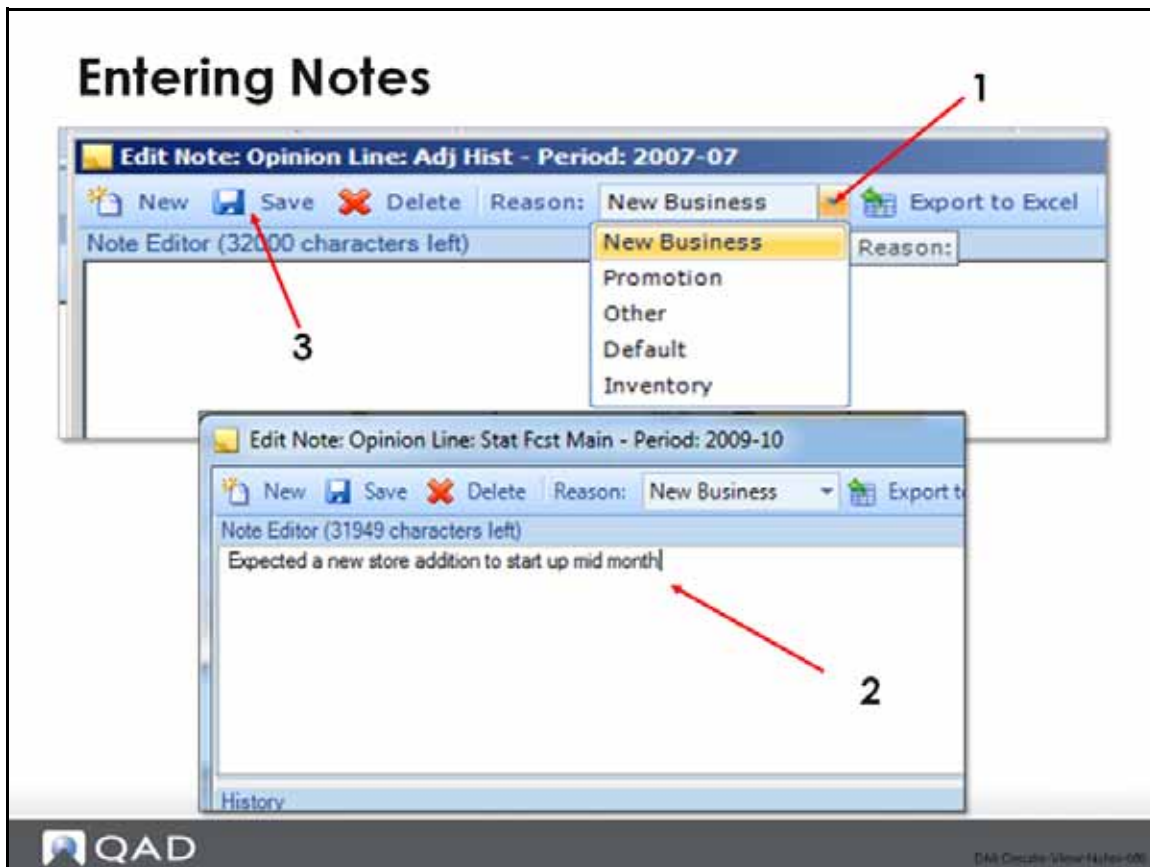
Notes Editor

Notes Editor

- All notes are entered in the Notes Editor



Entering Notes



Entering Notes in the Notes Editor:

- 1 In the open Notes Editor, select a Reason. All notes must have a reason code and will default to the first in the list when not otherwise selected.
- 2 Type the note in the Note Editor area up to 32,000 characters.
- 3 Save.

Note Reason codes are created in the Admin Tool.

Hierarchy Notes

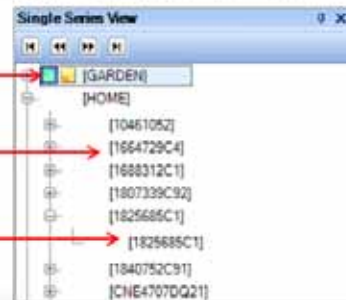
Hierarchy Notes

- Notes entered in hierarchy levels are saved at the level where they were entered and also in the lowest level series in that group
- Notes entered at any level will be saved and viewable in the Notes Editor even if the hierarchy is removed
- The Notes indicator is visible only at the level where the note was entered

Top level of hierarchy

Middle hierarchy level

Lowest hierarchy level



Entering Notes for Hierarchies

Entering Notes for Hierarchies

- Access Notes View
- Double click on the area to launch the Notes Editor window

Series	Series	note
2007-07	Adj Hist	
2007-08	Adj Hist	



D:\QAD\Create View\Notes 100

Note When Notes are entered for a specific period, the background changes color to notify the user.

Entering Notes for Hierarchies (Continued)

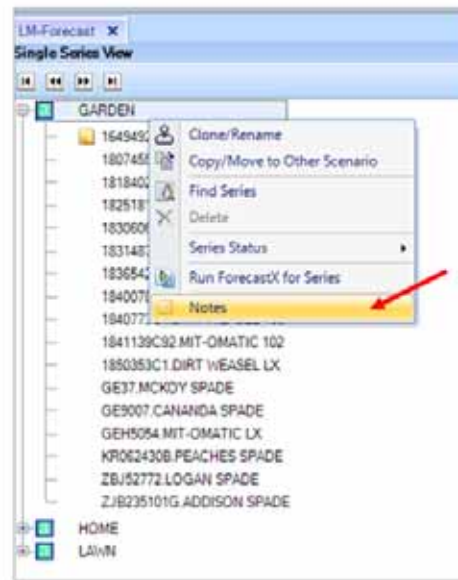
- For aggregate level series, after notes are entered a summary of notes characteristics that includes the lower levels is available
- This includes the note count, number of distinct reason codes that were used, number of users that entered notes and the most recent note date

Period	Opinion Line	Note
Series	Series	Note count: 2 Distinct reason codes: 1 Distinct users: 1 Most recent creation date: 9/13/2010 4:59:22 PM
2007-07	01-Baseline	

Entering Notes In Data and Graph Views

Entering Notes In Data and Graph Views

- Notes can be entered at any level of the hierarchy in the Data Views, Graph Views and Summary Views as previously indicated
- Right click on the series label or observation period, select Notes to launch the Notes Editor window



Automatically Entered Notes

Automatically Entered Notes

- Notes may be automatically entered for specific opinion lines when adjustments are made

Summary View

Save Hierarchy Save Hierarchy As Undo Changes From / 2009-07 To / 2010-12 Page 1 of 1

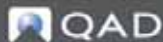
Click a column header here to group by that column.

Series	Opinion Lines	2009-07	2009-08	2009-09	2009-10	2009-11
10461052 NASHVILLE-MAT	Adj Hist					
10461052 NASHVILLE-MAT	Stat First Main	1,779	1,312	1,386	1,517	1,969
10461052 NASHVILLE-MAT	02-Override					
1648492C2 HAND HELPER 101	Adj Hist					
1648492C2 HAND HELPER 101	Stat First Main	2,249	1,837	1,673	912	505
1648492C2 HAND HELPER 101	02-Override					
1648492C2 HAND HELPER 101	Adj Hist					

History

Drag a column header here to group by that column.

Period	Opinion Line	Note	Created on	Created By	Reason	Hierarchy
		Series has 2 observation level notes in period 2009-09	1/13/2011 9:58:22 AM	fxadmin	New Business	
2009-...	Stat First M...	Expected a new store addition to start up mid month	1/13/2011 9:54:34 AM	fxadmin	New Business	
2009-...	Stat First M...	Stock up new store	1/13/2011 10:02:04	fxadmin	New Business	
2009-...	02-Override	Adjustment	1/13/2011 10:07:52	fxadmin	Adjustment	

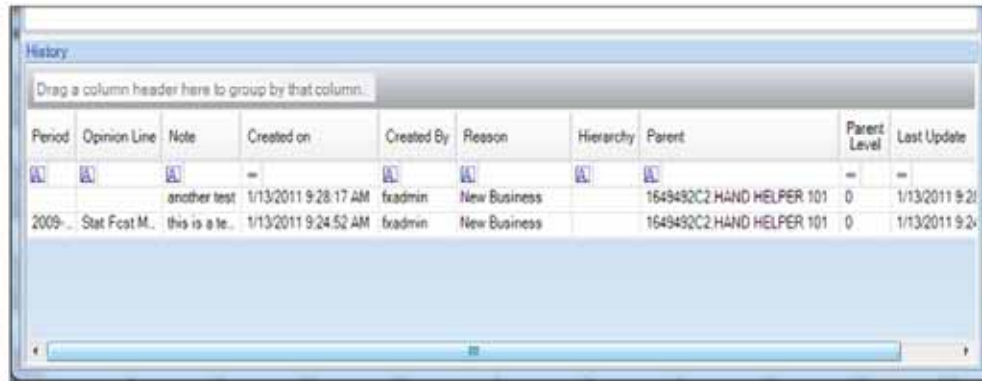


QAD Creating and Viewing Notes 128

There is an option in the Admin Tool that will determine if a Note will be required for every adjustment. If the requirement for a Note to be entered for all adjustments has been confirmed in the Admin Tool, you will not be able to save an adjustment until a Note is entered.

View the Notes In the Notes Editor

- Selecting Notes at the series level will display all series and observation level notes entered for the selected series



The screenshot shows a window titled "History" with a sub-header "Drag a column header here to group by that column:". Below this is a table with the following columns: Period, Opinion Line, Note, Created on, Created By, Reason, Hierarchy, Parent, Parent Level, and Last Update. The table contains two rows of data.

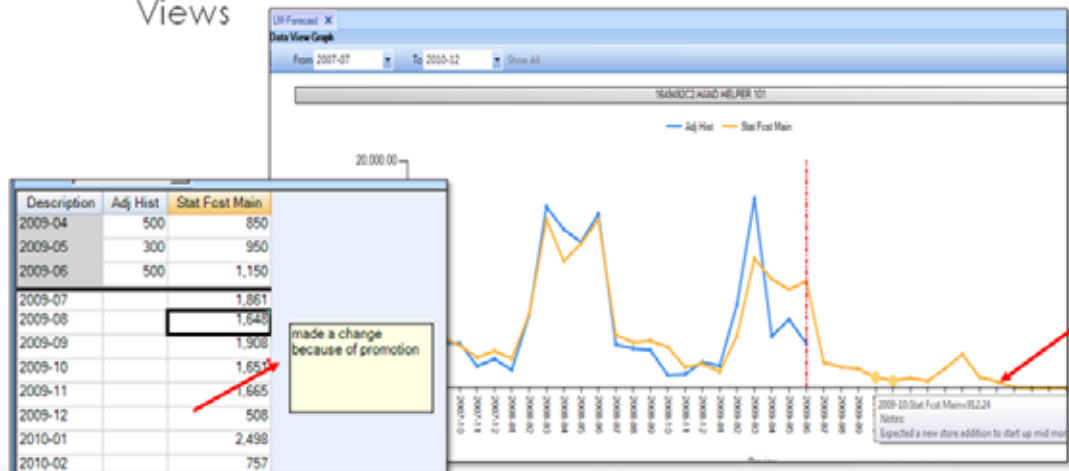
Period	Opinion Line	Note	Created on	Created By	Reason	Hierarchy	Parent	Parent Level	Last Update
		another test	1/13/2011 9:28:17 AM	fxadmin	New Business		1649492C2.HAND HELPER 101	0	1/13/2011 9:28:17 AM
2009-...	Stat Foot M.	this is a te...	1/13/2011 9:24:52 AM	fxadmin	New Business		1649492C2.HAND HELPER 101	0	1/13/2011 9:24:52 AM

Selecting notes at the observation level will display only notes for the selected series, opinion line and period.

View the Notes On the Graph or Data View

View the Notes On the Graph or Data View

- An Indicator and Comment will appear in cell that note was added
 - Move the mouse over the note symbol to view note in a Graph view or Data View, including user created Views



Notes Editor Retained Information

Notes Editor Retained Information

- The History of a Note will contain the userid the Note was Created By, and date it was Created on

History

Drag a column header here to group by that column.

Period	Opinion Line	Note	Created on	Created By	Reason	Hierarchy	Parent	Parent Level	Last Update
			1/13/2011 11:34:46 AM	fxadmin	New Business	LM-Foot Class	GARDEN	1	1/13/2011 11:34:46 AM
		All Garden Products will have new packaging after 8/2/11	1/13/2011 9:50:22 AM	fxadmin	New Business		1649492C2.HAND HELPER 101	0	1/13/2011 9:50:22 AM
		Series has 2 observation level notes in period 2009-09	1/13/2011 9:28:17 AM	fxadmin	New Business		1649492C2.HAND HELPER 101	0	1/13/2011 9:28:17 AM
		another test	1/13/2011 9:54:34 AM	fxadmin	New Business		1649492C2.HAND HELPER 101	0	1/13/2011 9:54:34 AM
2009-...	Stat Fcast M...	Expected a new store addition to start up mid month	1/13/2011 10:02:04 AM	fxadmin	New Business		1649492C2.HAND HELPER 101	0	1/13/2011 10:02:04 AM
2009-...	Stat Fcast M...	Stock up new store	1/13/2011 10:07:52 AM	fxadmin	Adjustment		1649492C2.HAND HELPER 101	0	1/13/2011 10:07:52 AM
2009-...	02-Override	Adjustment	1/13/2011 10:18:40 AM	fxadmin	Adjustment		1649492C2.HAND HELPER 101	0	1/13/2011 10:18:40 AM

QAD

D:\QAD\Create View\New 1.0

Also displayed are the Hierarchy and the attribute grouping fields, Parent, and the attribute grouping as Parent level.

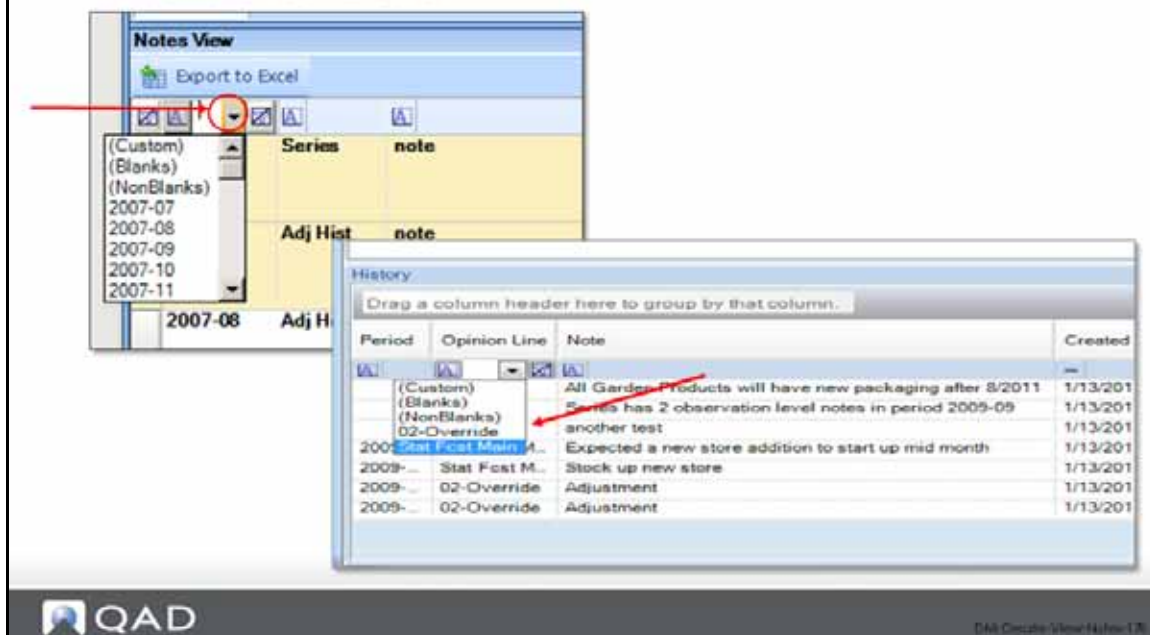
For example a Hierarchy containing two group fields with Garden as the first, has 1 as the Parent level. Notes entered at the detail level are Parent level 0.

Notes can be edited by the person who entered it, which will update the Last Update field.

Filtering In Notes View and Notes Editor

Filtering In Notes View and Notes Editor

- Notes can be Filtered in the Notes View and the Notes Editor



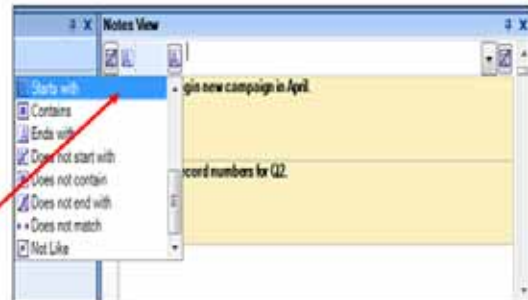
To find a specific period, move the mouse to the first Blue “A” icon and a drop-down list will display. Select the desired period from the drop-down list and the Notes View is filtered to the selected period.

Note Click the clear button to the right of the drop down arrow to remove the filter and display all periods.

Filtering Notes Based On Content

Filtering Notes Based On Content

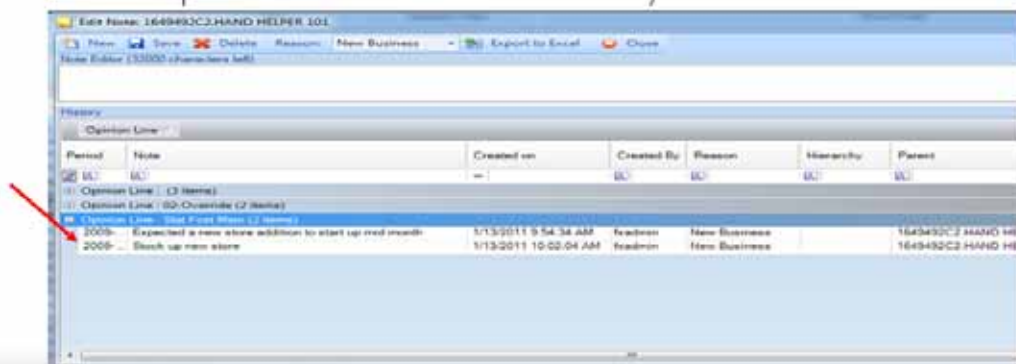
- Notes can be filtered based on content
- Click here to activate Note filtering
 - Select the filter operator and enter the desired criteria in the textbox to the right
- Select the "Custom" option to open the "Enter filter criteria for Note" screen
 - This screen allows the user to select multiple criteria when filtering notes



Sorting Notes

Sorting Notes

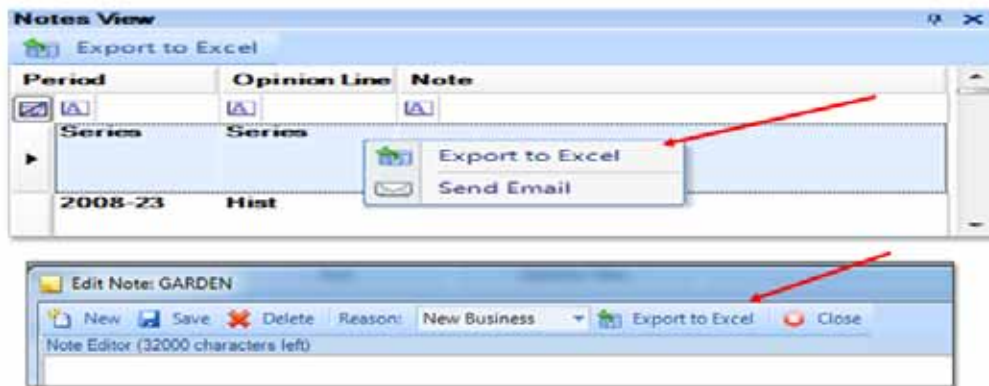
- Columns can be sorted ascending or descending by clicking on the column header
- Group on a column attribute by dragging above the column headers row
- In this example, all notes entered on the Stat Fcst opinion line can be easily viewed



Export Notes To Excel

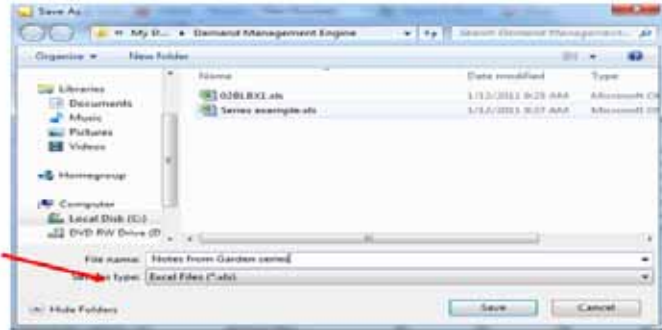
Export Notes To Excel

- Notes can be exported from the Notes View or Notes Editor
- Right-click on the desired series or observation level and select Export to Excel



Export Notes To Excel (Continued)

- Name and save the file

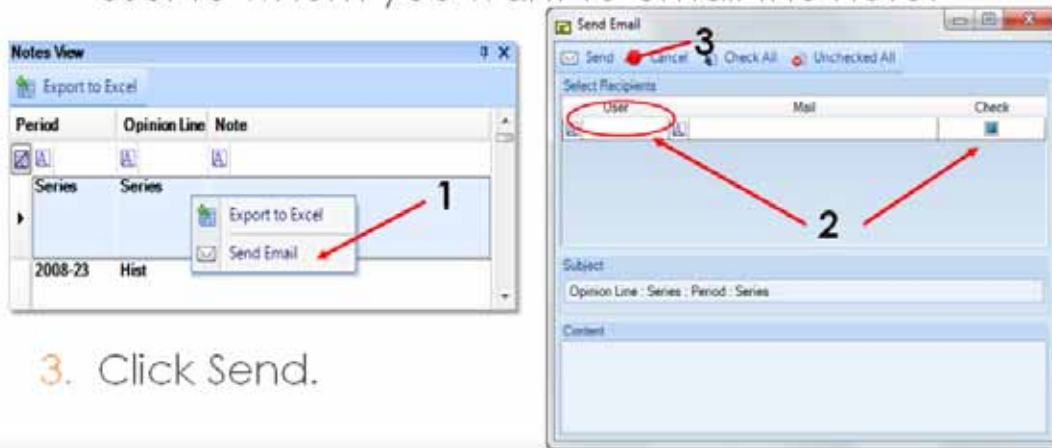


Notes from Garden series.xls (Compatibility Mode)							
	A	B	C	D	E	F	G
	Period	Option Line	Note	Created on	Created By	Reason	Hierarchy
1							
2			another test	1/13/2011 9:28:17 AM	hadron	New Business	
3	2009-10	Stat Foot Man	Expected a new store addition to start up mid month	1/13/2011 9:54:34 AM	hadron	New Business	
4			Series has 2 observation level notes in period 2009-09	1/13/2011 9:58:22 AM	hadron	New Business	
5	2009-11	Stat Foot Man	Stock up new store	1/13/2011 10:02:04 AM	hadron	New Business	
6	2009-11	02 Override	Adjustment	1/13/2011 10:07:52 AM	hadron	Adjustment	
7	2009-12	03 Override	Adjustment	1/13/2011 10:18:40 AM	hadron	Adjustment	
8			All Garden Products will have new packaging after 8/2011	1/13/2011 11:34:46 AM	hadron	New Business	LM Foot Class
9							GARDEN
10							
11							

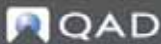
Emailing Notes in the Notes View

Emailing Notes in the Notes View

1. **Right-click** on the desired series or observation level and select **Send Email** to email notes to a specified recipient.
2. Select the checkbox next to the name of the user to whom you want to email the note.



3. Click Send.



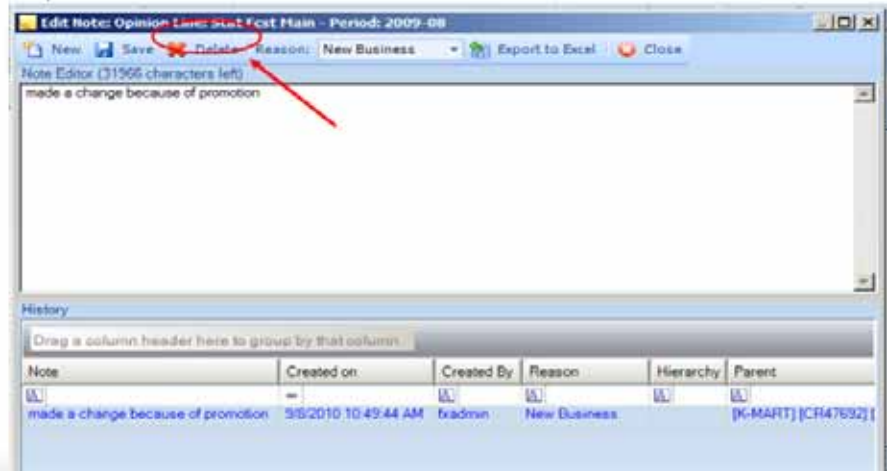
D:\QAD\Create\Notes\Notes 201

Note Email options must be set up for each user to use this functionality.

Edit or Delete Notes

Edit or Delete Notes

- To edit a note, right click to bring up Notes Editor and select note to edit or delete
- Any note in history can be edited or deleted by the person who created it



Recap Notes

Recap Notes

- **Notes** in the **Viewer** can be applied at either the **Observation** for a desired opinion line or **Series** level
- When using a hierarchy, **Notes** entered at the **Series** level are copied to the lowest level series
- In the **Notes View**, the **Series** displays high level information
- Each period (historical and forecast) contains a text area for users to capture additional information concerning specific periods
- When **Notes** are entered the background changes color to notify the user



DAM Create View Notes 548

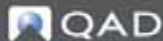
Chapter 18

Generating & Using Reports

Overview - Reporting

Overview - Reporting

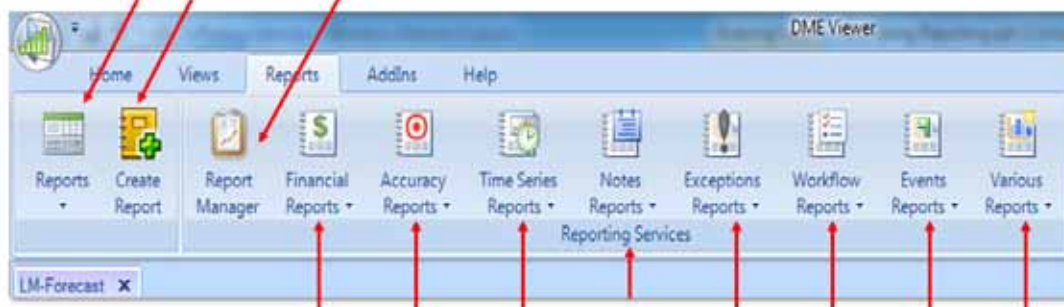
- User created **Pivot** reports, **Report Templates** and **user defined reports** are available in the DME
- The **Report Templates** and **user defined reports** are categorized into logical groups
- A QAD Services Consultant configures the **Report Templates** during implementation to match client attributes and opinion line data.
- The Administrator(s) can change or add additional reports
- Report views can be exported into Excel, Word and other file formats
- Reports are interactive and can be filtered to permit the user to zero in on areas of concern



DAA User Reports-001

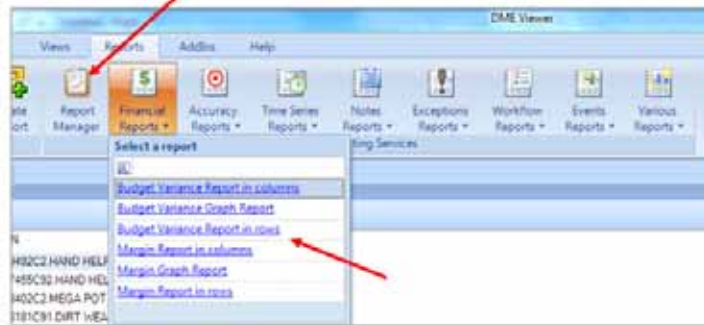
Report Categories

- View available reports in the Reports tab in designated category buttons as defined in the Report Manager by the Administrator



Report Templates and user defined reports

Report Categories



- Report Manager – used to assign reports to users and assign reports to Categories
- Each category button will have individually defined templates or client specific reports as created and assigned by the QAD Services Consultant, Client IT and/or the Super User

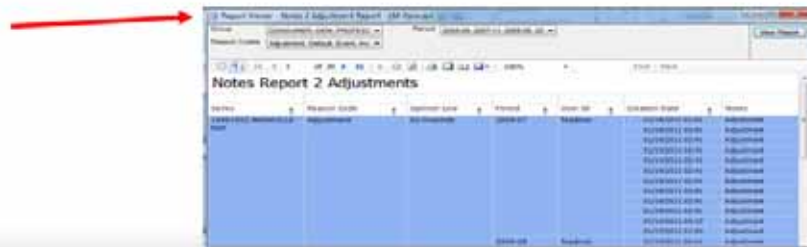
Report Use

Report Use

- With the desired scenario open, access the reports by selecting the desired category button and report from the list



- This selection will generate the Report View



Report Use – Basic functionality

Report Use – Basic functionality

- Some reports are configured with drill down ability
- Clicking on the drop downs give lower level reporting information

Report Viewer - History vs Forecast Report - IM Forecast

Year: 2007, 2008, 2009, 2010 Origin: Hist, Fore View Report

Group: CONSUMER_OEM_PROFESS Customer Name: (Select All)

Time Series - History and Forecast Report

Class	Family	Item Description	Option	History	Forecast	Total
GARDEN		Act Hist		840,349		840,349
		Ave Price		8,273	8,802	15,075
		Ave Cost		6,556	4,940	11,496
		TTL Revenue		6,147,060	2,263,440	8,410,500
HOME		TTL Cost		3,888,882	1,316,558	5,205,440
		Act Hist		1,023,133		1,023,133
		Ave Price		16,128	13,793	29,921
		Ave Cost		13,286	10,310	23,596
LAWN		TTL Revenue		41,167,833	40,896,440	82,064,273
		TTL Cost		21,138,940	18,314,618	39,453,558
		Act Hist		1,118,134		1,118,134
		Ave Price		3,463	3,586	7,049
		Ave Cost		2,405	1,804	4,209

Report Use – Basic functionality

- Drill down examples

Report Viewer - History vs Forecast Report - LM-Forecast

Year2007, 2008, 2009, 2010OriginHist, ForeView Report

GroupCONSUMER, OEM, PROFESSCustomer Name(Select All)

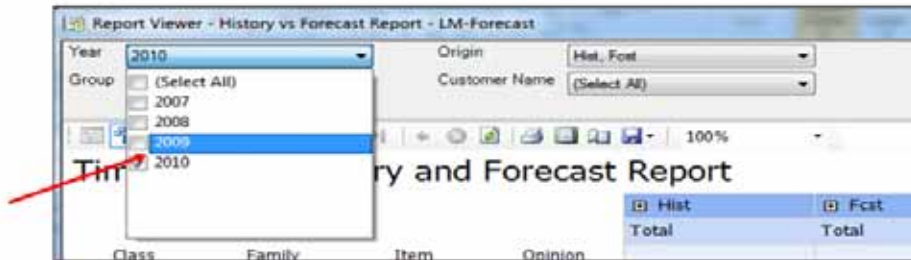
Time Series - History and Forecast Report

Class		Family	Item Description	Opinion	Hist			
					2007			
					01			
					02			
					03			
GARDEN	GLOVE	HAND HELPER 101	Act Hist		19,834	1,578	6,382	
			Ave Price		7	1	1	
			Ave Cost		4	1	1	
			TTL Revenue		23,801	1,894	7,698	
		HAND HELPER 103	TTL Cost		11,900	947	3,829	
			Act Hist					
			Ave Price					
			Ave Cost					
		MIT-OMATIC 101	TTL Revenue					
			TTL Cost					
			Act Hist		1,502	128	880	
			Ave Price		900	150	150	

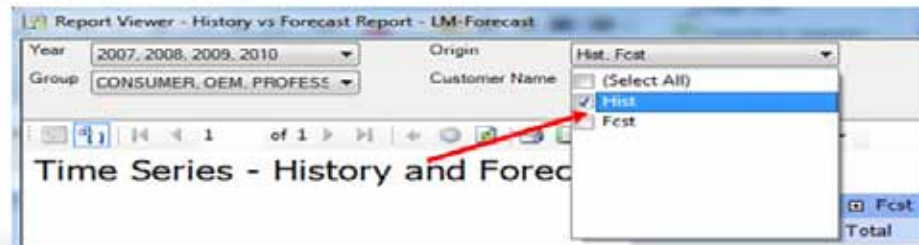
Report Use – Parameter Filters

Report Use – Parameter Filters

- By Year



- By Origin (historical periods or forecast periods only)

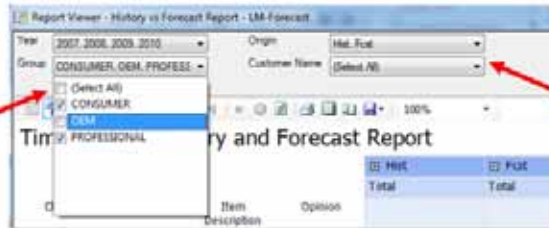


Parameter Filters – use the preconfigured drop down selections to filter or restrict the data displayed in the reports. Check the box(es) for the desired display

Report Use – Parameter Filters (continued)

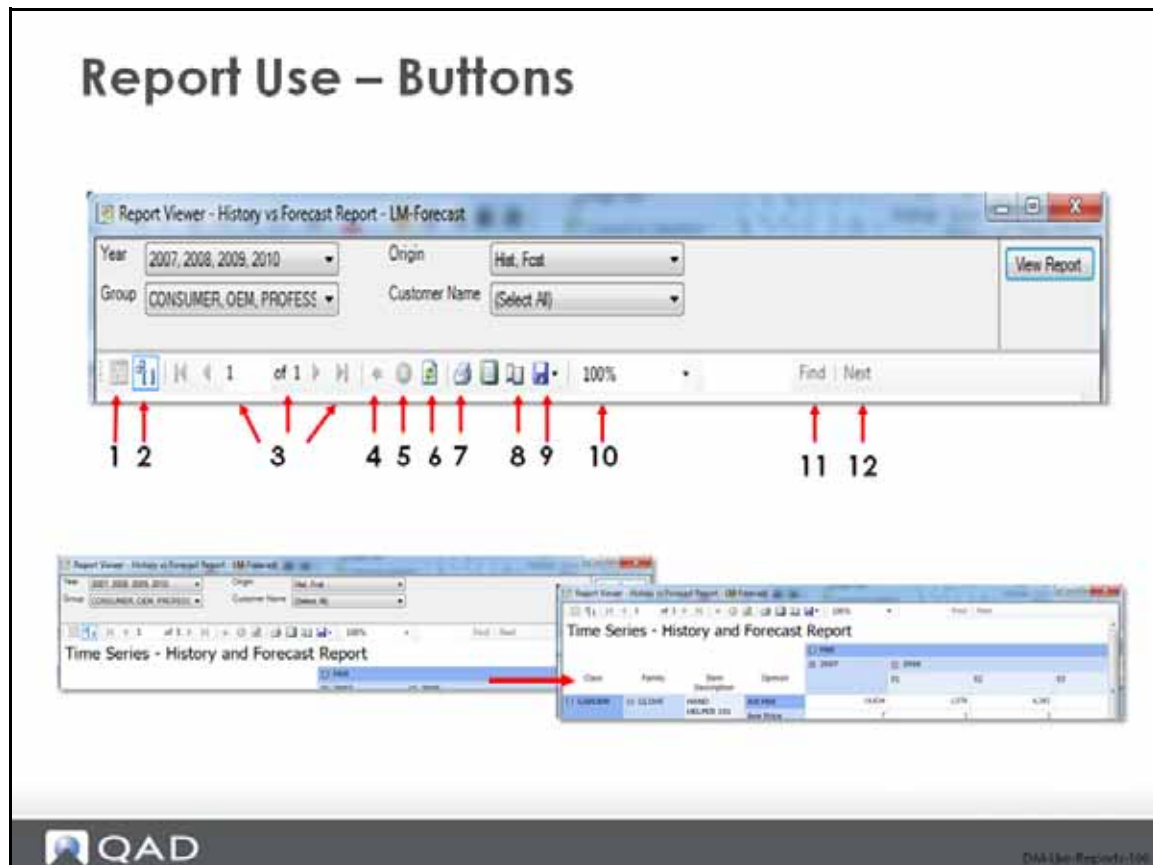
- By **Group**

- By **Customer**



- After changing a filter select **Refresh** or **View Report** to update the Report

Report Use – Buttons



- 1 Show or Hide Document Map – not active at this time.
- 2 Show or Hide Parameter area – removes filtering from top portion.
- 3 Paging – when more than one page exists:
 - the number of pages will be displayed
 - the page number of the current page
 - Use the single arrows to move forward or backward one page
 - Use the double arrows to move the beginning or end of the report
- 4 Back to Parent Report – not active at this time.
- 5 Stop Rendering- Stops a report that is still loading.
- 6 Refresh- Same as View Report button - refreshes the report for any changes that may have occurred since report generation.
- 7 Print – gives installed printer selection.
- 8 Print Layout – gives a print preview like window for review before printer selection.
- 9 Page Layout- gives print choices such as margin and orientation.
- 10 Resolution- gives page resolution viewing options.

- 11 Find – type in search value.
- 12 Next – moves to the next record from the Find option.

Report Use – Export Report Button

Report Use – Export Report Button

Export

- Select **Export** Icon (floppy disk)
- Select the file format to save
- Save file
- Open the saved file

Time Series - History and Forecast

Class	Family	Item Description	Option	Net Total	Full Total	Total
101	WARD HELPER	101	AWD HELP	144,557		144,557
101	WARD HELPER	101	AWD HELP	20	20	20
101	WARD HELPER	101	AWD HELP	175,962	175,962	175,962
101	WARD HELPER	101	AWD HELP	6,574	6,574	6,574
101	WARD HELPER	101	AWD HELP	1,360	1,360	1,360
101	WARD HELPER	101	AWD HELP	60	60	60

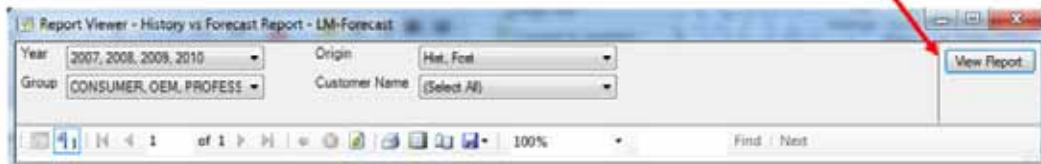
QAD

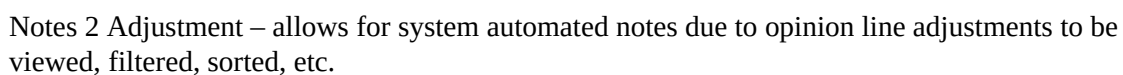
DMA User Reports 118

View Report

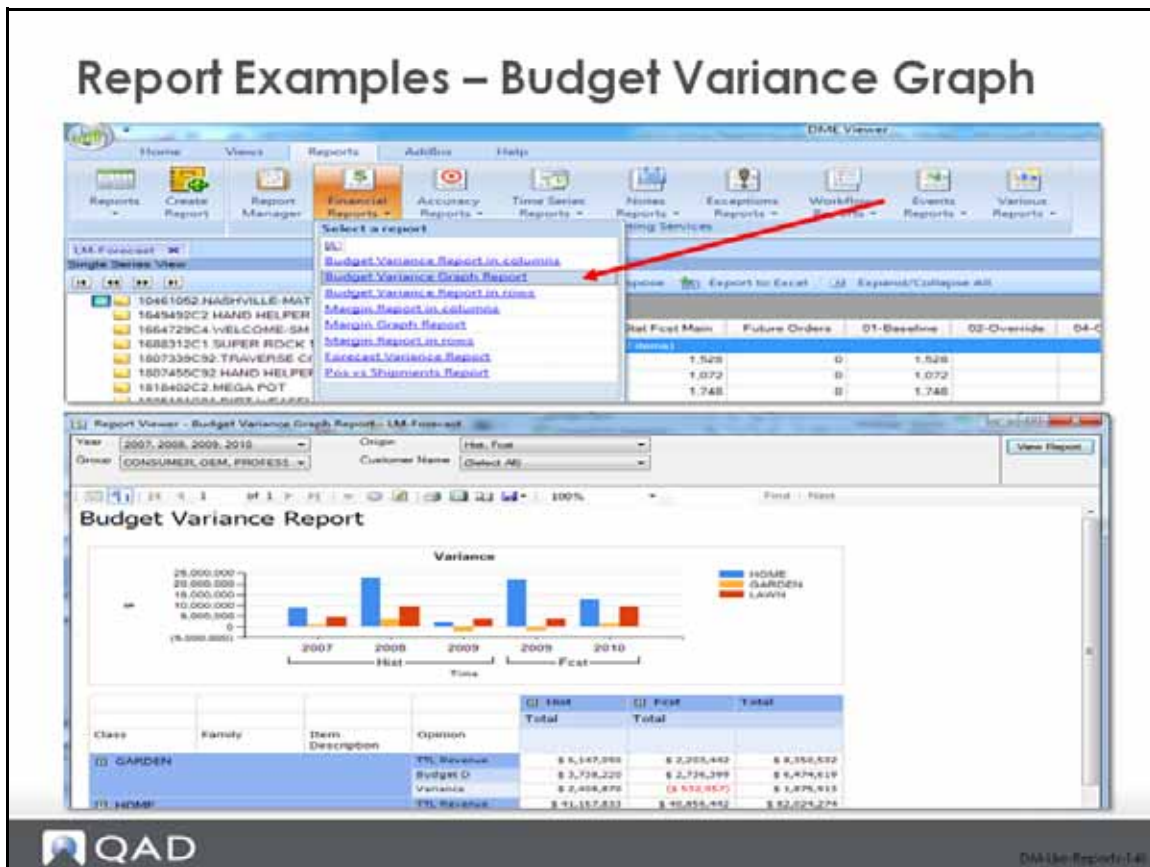
View Report

- Selecting View Report refreshes the report for any changes that may have occurred since report generation



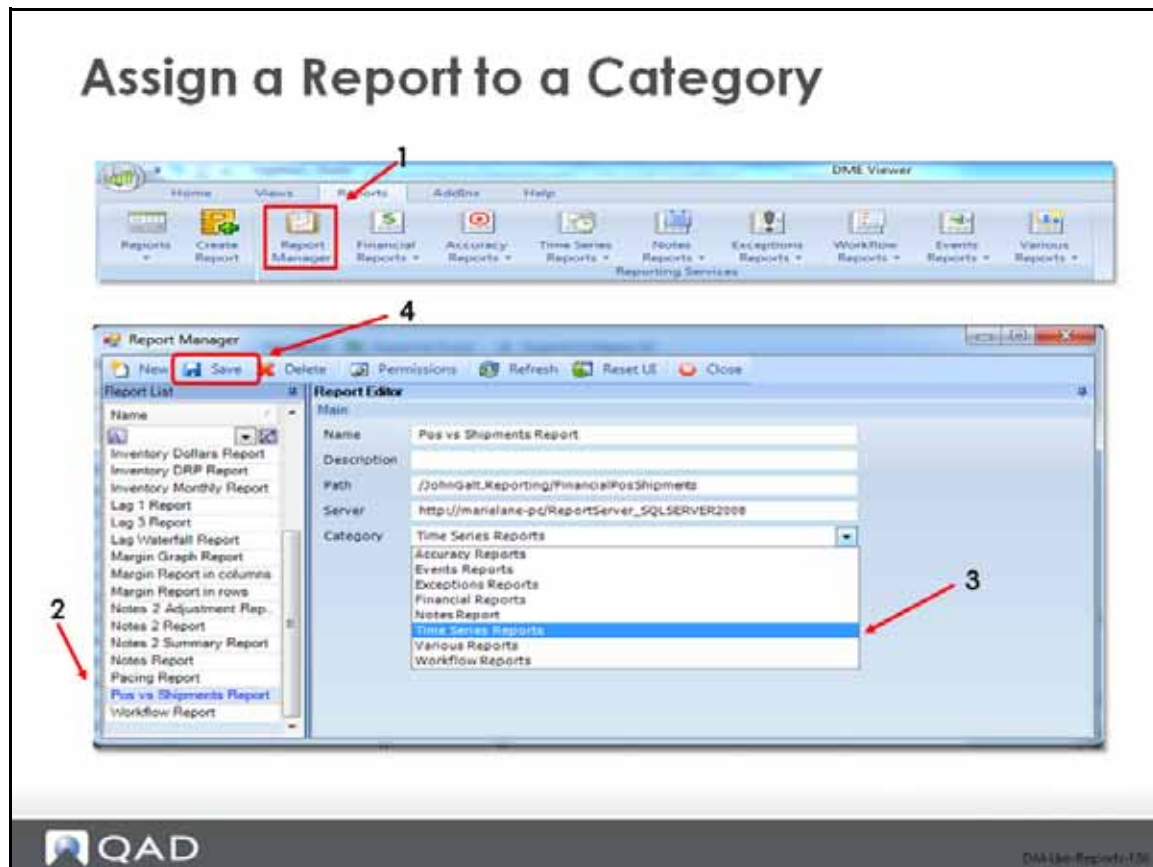


Report Examples – Budget Variance Graph



Budget Variance Graph - compares Final Forecast (Fcst) Revenue with Budget Revenue expectations

Assign a Report to a Category

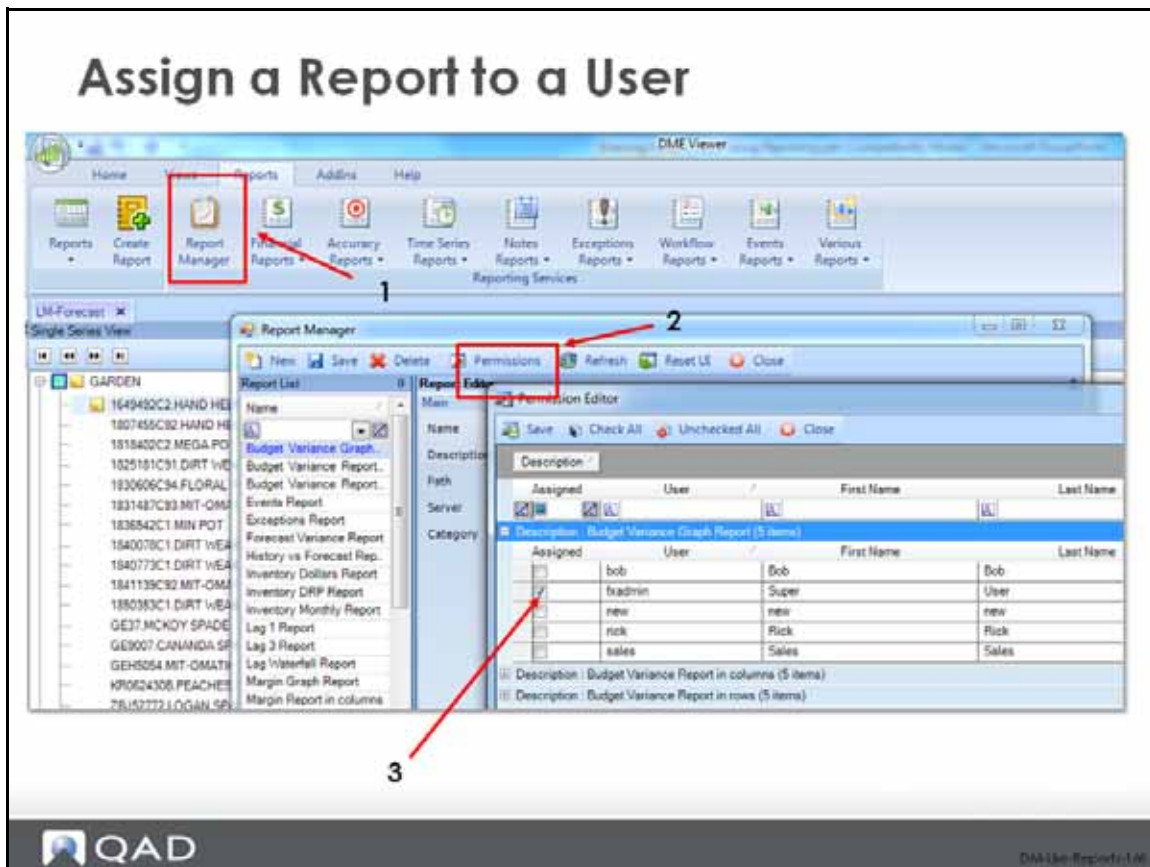


Use the Report Manager to change the Category assignment for a Report:

- 1 Select the Report Manager button.
- 2 Select the desired report from the Report List.
- 3 Select the desired Category from the drop down choices.
- 4 Save.

Note This Category re-assignment from the default is for all scenarios

Assign a Report to a User



Use the Report Manager to assign Reports to users:

- 1 Select the Report Manager button.
- 2 Select the Permissions button within the Report.
- 3 Check the Assigned box for users who should have access to the Report.

Note Use the column headers to regroup attributes for quick assignment

Recap – Reporting

Recap – Reporting

- User created **Pivot reports**, **Report Templates** and **user defined reports** are available in the DME
- The **Report Templates** and **user defined reports** are categorized into logical groups within separate buttons in the **Reports tab Reporting Services area**
- Report views can be exported into **Excel** and other file formats
- The **Report Templates** and **client defined reports** are assigned to individual users by the Administrator

Chapter 19

Creating A New Series

Overview – Creating New Series

Overview – Creating New Series

- Based on administrator given permissions, Users have the ability to create **New Series**
- **New series** can either copy the observations from another series, or start from zero
- A **New Series** cannot be created with a hierarchy applied
- A **New Series** created in a **Detail Scenario** will not be included when committing back to the **Living Master**



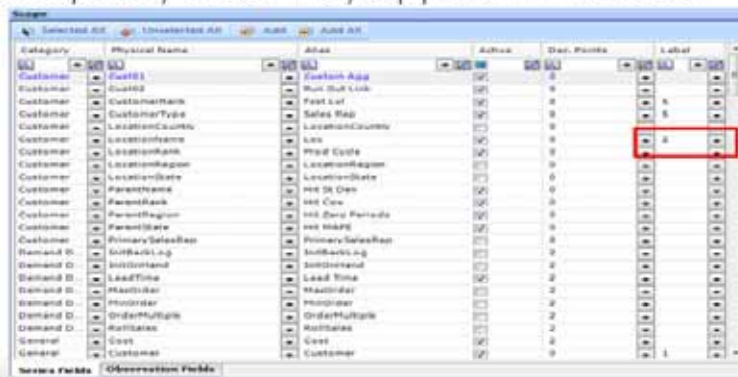
DM Create New Series 001

When creating a new series, Key Fields must be used to create unique series. Otherwise duplicates will be created in the database.

Define Key Fields

Define Key Fields

- Before creating a new series, make sure the Display Set is properly set up
- In the Display Set define which key fields make the series unique usually these are part of the label
 - Also specify order they appear in the label

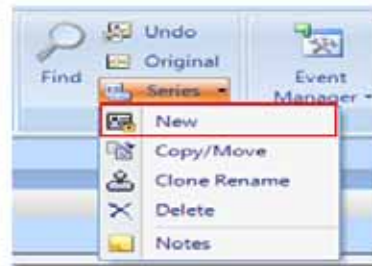


Note In situations where the label uses a description instead of a key field, for example SKU description instead of SKU number, use SKU number to create the new series. The MSU will reset the label in the Batch Scheduler.

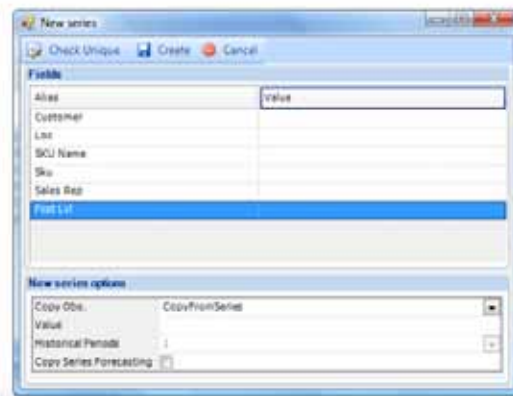
Creating New Series

Creating New Series

- Select **New** from the Series drop-down in the **Edit** section of the ribbon off the **Home** tab



- The **New Series** window will display



New series

Check Unique Create Cancel

Fields

Field	Value
Alias	
Customer	
Loc	
SKU Name	
SKU	
Sales Rep	
Product List	

New series options

Copy Obs.	CopyFromSeries
Value	
Historical Periods	
Copy Series Forecasting	

Creating New Series (continued)

- Pick fields to put in the labels from the list, or create new ones
- Decide whether to copy observations from another series, or to initialize to 0. If you start at 0, pick how many historical periods will be present
- Click **Check Unique** to determine if the series already exists



This message appears if you try to create a series that already exists. Choose different fields and try again.



This message appears if the series doesn't exist. You can proceed.

- Click **Create**
 - When prompted to refresh the series list, click **Yes**

Dtl Scenario and Hierarchy

Dtl Scenario and Hierarchy

- For security reasons, **New Series** created in **detail scenarios** will not be included when committing back to the **Living Master**
 - This prohibits several users from creating the same item with slight variations in their detail scenario from creating duplicates in the Living Master database
- If you are using a Hierarchy it should be re-applied after creating the new series



DAM Creator - Master Series - 6.1

Overview – Creating New Series

Overview – Creating New Series

- Users have the ability to create new series if the Administrator gives them permission
- New series can either copy the observations from another series, or start from zero
- A new series cannot be created with a hierarchy applied
- A New Series created in detail scenarios will not be included when committing back to the Living Master

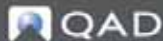
Chapter 20

Find, Copy or Move A Series

Overview – Find Series & Copy/Move

Overview – Find Series & Copy/Move

- The **Find Series** function in the Viewer helps users locate specific series
- In the **Find Series** window, you may enter any portion of the description of the series you wish to find
- Use the **Copy/Move** functionality to copy or move one or more series from one scenario to another
- The **Copy/Move** function is a way to manually add new items to an existing scenario
- Before copying or moving series, ensure the following about both the source and destination scenarios
 - Scenarios have the same time buckets
 - Neither scenario has a conversion factor applied
 - Both scenarios are in the same mode (currency or units)



DM-Find-Copy-Move-001

Using “Find Series”

Using “Find Series”

- There are a number of ways to open the **Find Series** window:
 - Click the **Find** button in the Edit section of the Home tab



-OR-

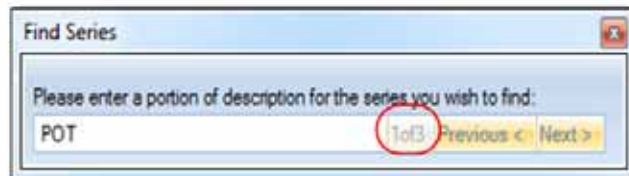
- Press **Ctrl + F**
- OR-
- **Right Click** in the **Series View** and select **Find Series**
- Note: The Find Series feature works on the Single and Multi-series Views but not on Summary View.

Using “Find Series”

- The Find Series window displays



- In the Find Series window, type in any portion of the description for the series you wish to find.
- The Record count to the right of the field indicates how many records match the criteria you have entered

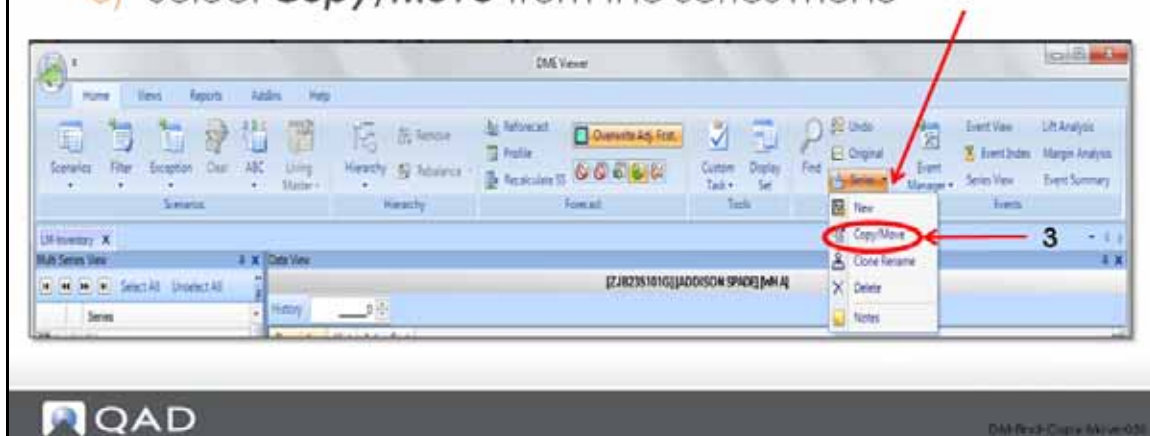


- Click Next and Previous to move to series that meet the criteria

Starting Copy/Move

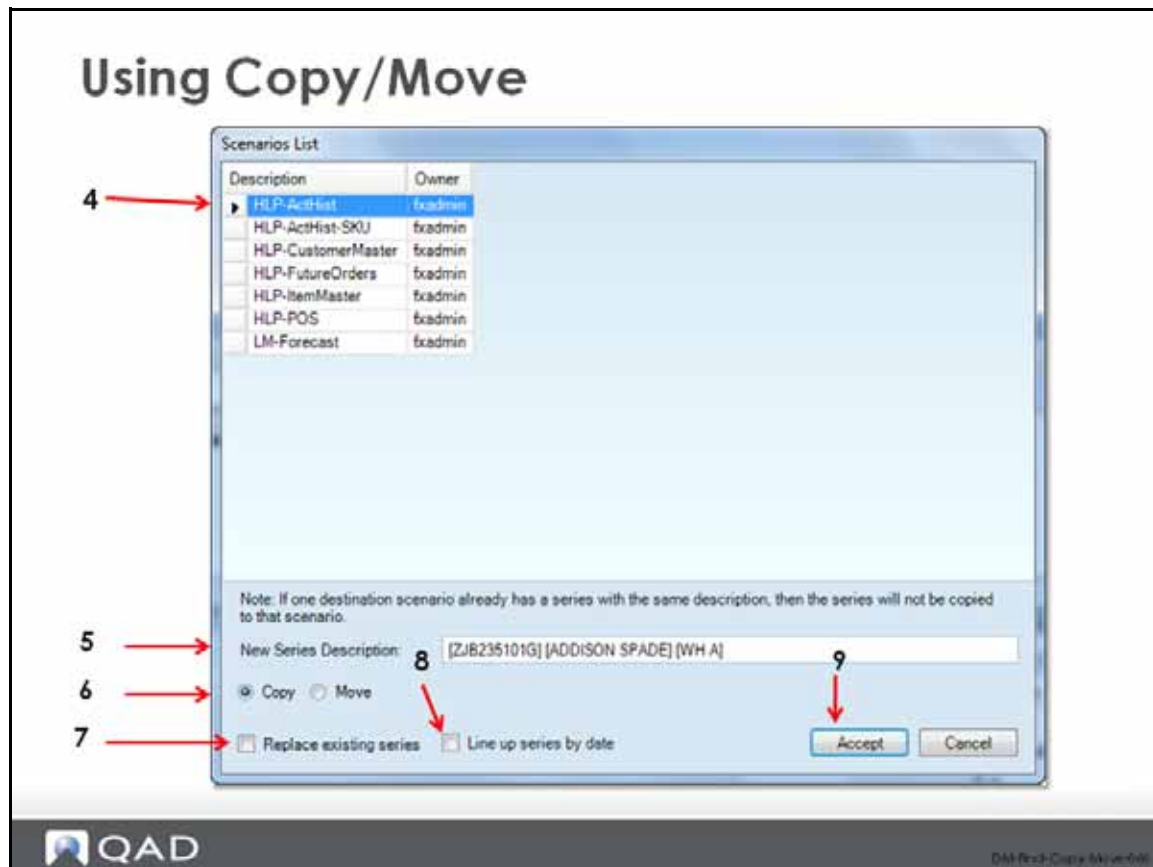
Starting Copy/Move

- 1) Select the series to copy or move in the Series Viewer
- 2) In the ribbon, click the **Series** button in the **Edit** section of the **Home** tab to open the drop-down menu
- 3) Select **Copy/Move** from the Series menu



- 1 Select the series to copy or move in the Series Viewer.
- 2 In the ribbon click the Series button in the Edit section of the Home tab to open the drop-down menu.
- 3 Select Copy/Move from the Series menu.

Using Copy/Move



- 4 Select the destination scenario from the Scenarios List.
- 5 Enter a description for the New Series in the destination scenario; if you selected the series from the Single Series Viewer the name will already be in the description field, you can modify the name.
- 6 Select the Copy radio button at the bottom of the window to copy the series into the target scenario, or the Move radio button to move the series.
- 7 Select the Replace existing series check box.

Note Selecting this option will overwrite any series in the destination scenario with the same Description.
- 8 Select the Line Up Series by Date check box, which helps to organize series by date.
- 9 Click the Accept button.

Note Users cannot commit series added to a DTL scenario unless the series also exists in the Living Master.

Recap – Find Series & Copy/Move

Recap – Find Series & Copy/Move

- The **Find Series** function in the Viewer helps users locate specific series
- In the **Find Series** window, you may enter any portion of the description of the series you wish to find
- Use the **Copy/Move** functionality to copy or move one or more series from one scenario to another scenario
- **Copy/Move** is a way to manually add new items to an existing scenario

Chapter 21

Clone/Rename Series

Clone/Rename

Clone/Rename

- This functionality allows you to manage forecasts for new items by copying an existing forecast into a new series
- Once the new series is created any necessary adjustments can be made without impacting the original

Using Clone/Rename

Using Clone/Rename

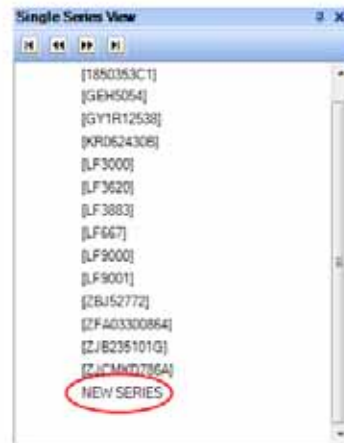
- Select the series to clone or rename in the Series Viewer
- In the ribbon, click the **Series** button in the **Edit** section of the Home tab to open the drop-down menu
- Select **Clone Rename** from the **Series** menu



Note You can also select the series you want to clone/rename in the single or multi series viewer and right click to select Clone/Rename.

Using Clone/Rename

- In the **Clone/Rename Series** window, enter the name for the new series in the "New Series Description" field
- Select **Clone** to make a duplicate of the selected series with a new name or select **Rename** to give the existing series a different name
- Click **Accept**
 - DME will add the new series and prompt you to refresh when done



Change Identifier Clone/Rename

Change Identifier Clone/Rename

- Change the Series information to a unique identifier
 - For example item number/SKU/customer number
- These value changes must include one of the key fields
- If these values are not different from the values in the original series the series will be duplicated in database

Series Information	
Customer	
Coef Var Limit	
Custom Agg	
Fcost Lvl	sku
Prod Cycle	
Std Dev Limit	
WMape Limit	
Zero Per Ratio Limit	
General	
Cost	35.69
EOQ	0
Fcost Level Nsl	
Fcost Level Ssl	
Gen Txt Exception	
Item	1807339C92
No Sales	

Recap - Manage Series

Recap - Manage Series

- Allows you to manage forecasts for new items by copying an existing forecast into a new record
- Once the new record is created appropriate adjustments can be made without affecting the original
- You must change the key values in the Series Information to make sure the new series is unique



QAD Cloud Reserve 6.1

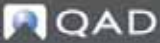
Chapter 22

Using “Same As” To Develop A Forecast

Same As Functionality

Same As Functionality

- Use "**Same As**" for new products or a product whose marketing strategy is changing
- **Same As** methods:
 - Same As History
 - Same As Seasonality
 - Both


DM-Using-SAs-030

Same As History

- Allows you to replace one product's history with another product's history by a certain percentage, adjusted by a certain percentage

Same As Seasonality

- Allows you to replace the seasonality pattern of one product's forecast with the seasonality of another product's forecast to simulate data for products with similar seasonal characteristics

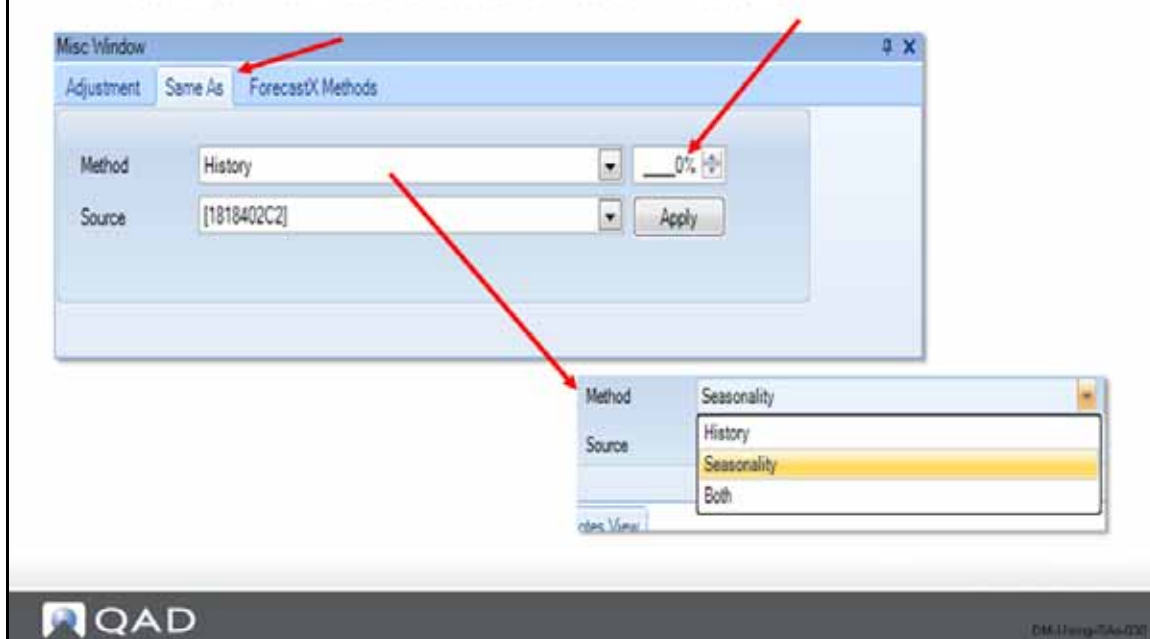
Both

- Changes both history and the forecast as described above
 - When modifying history, the user will need to reforecast to see a change in the statistical forecast.

Note Same As History changes values stored in the opinion line value (History). Same As Seasonality changes values stored in the opinion line fvalue (Forecast).

Same As Tab – Misc. Window

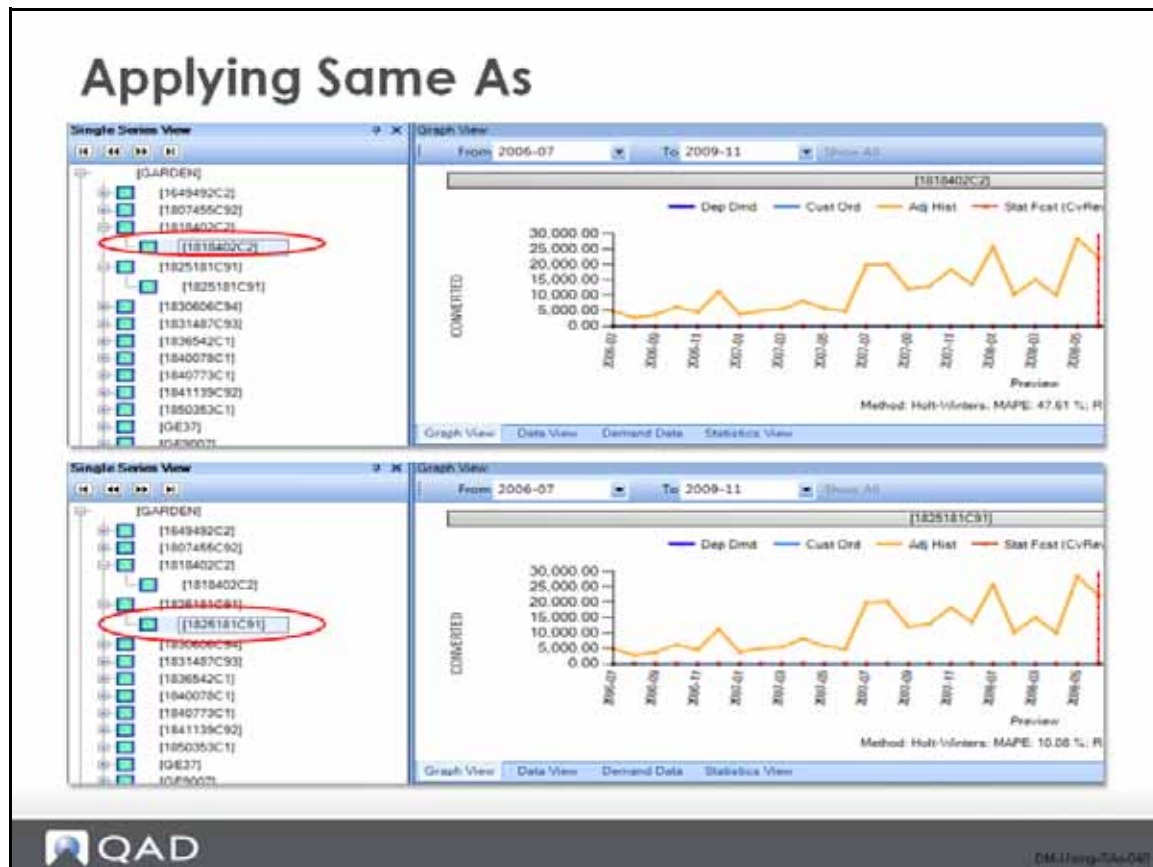
- Select a series in the Viewer and click the Same As tab in the Misc. Window



You can apply either of the following options to the selected series:

- Select History, Seasonality or Both as the Method
- Select the Source series to “copy” in the drop-down list
- Use the percentage option to increase or decrease the history by the specified factor
- Apply

Applying Same As



- Use “Same As” for New or changing products
- Note that the two series selected in these examples have the same history
- This results from selecting “History” on the Same As tab and applying the same history from one series to another

Recap - Same As

Recap - Same As

- Use "**Same As**" for new products or a product whose marketing strategy is changing
- Allows the user to replace one product's history with another and change it by a certain percentage

OR

- Allows the user to replace the seasonality of one product's forecast with the seasonality of another product's forecast to simulate data for products with similar properties
- When modifying history the user will need to reforecast to see a change in the statistical forecast

Chapter 23

Reforecasting in the Viewer

Reforecasting – Overview

Notes Configuration - Overview

- The **Configuration tab** in the **DME Admin Tool** allows the Administrator to configure settings available on the **Notes Editor** and to **require notes** for data changes



- The **Reason Notes option** allows for the configuration and addition of the **Reason Codes** available to select for notes on the **Notes Editor window**
- The **Configuration option** allows for setting the requirement for the entry of a note when saving changes made in the Data View



DME Notes-Config-001

Users can create Series Forecast Settings to configure alternate Statistical forecasts, differing from the Primary method based on:

- Time periods
- Historical opinion lines
- Forecast methods and/or settings

Running Reforecast

Running Reforecast

- You may want to Reforecast the **Primary Statistical Forecast (FVALUE)** for a series or the whole scenario, if modifications have been made to history
- To run the reforecast process select **Reforecast** from the **Home** tab



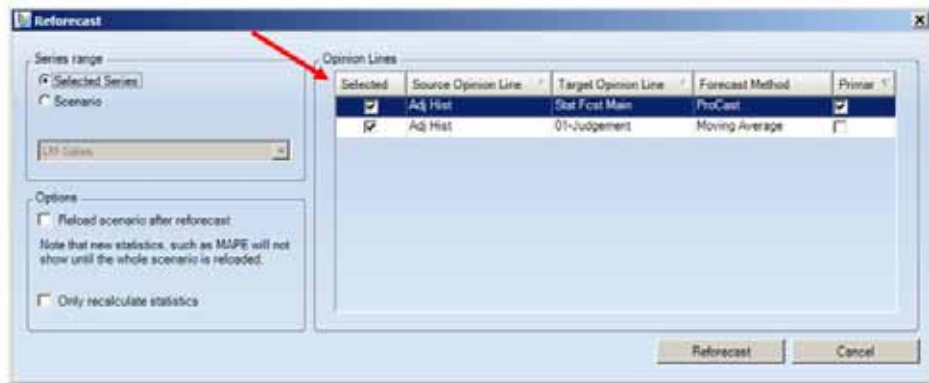
Users may need to reforecast the Primary Statistical Forecast (FValue) when adjustments have been made to History that could result in a different statistical result. Adjustments could include:

- Removal of outliers such as
 - A major weather event such as a hurricane
 - A distribution center or store opening generating a pipeline fill
 - Correcting or removing erroneous data

Select Reforecast Profile

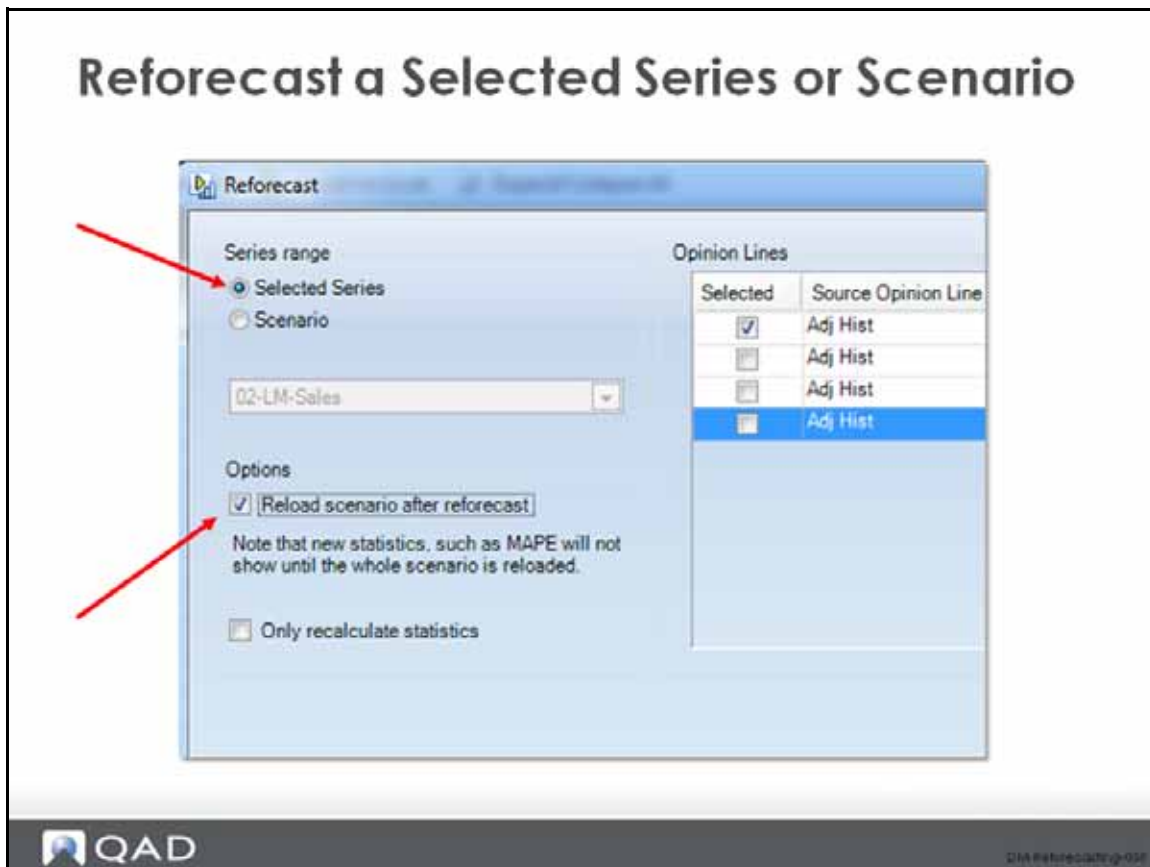
Select Reforecast Profile

- The Primary column indicates the Profile that is used for the **Primary Statistical Forecast (FVALUE)**
 - The **Primary Statistical Forecast (FVALUE)** is configured in the **Admin tool** for the scenario
 - Check the **Selected** box, to run another Profile



Note Multiple profiles can run at one time, covered later in the module.

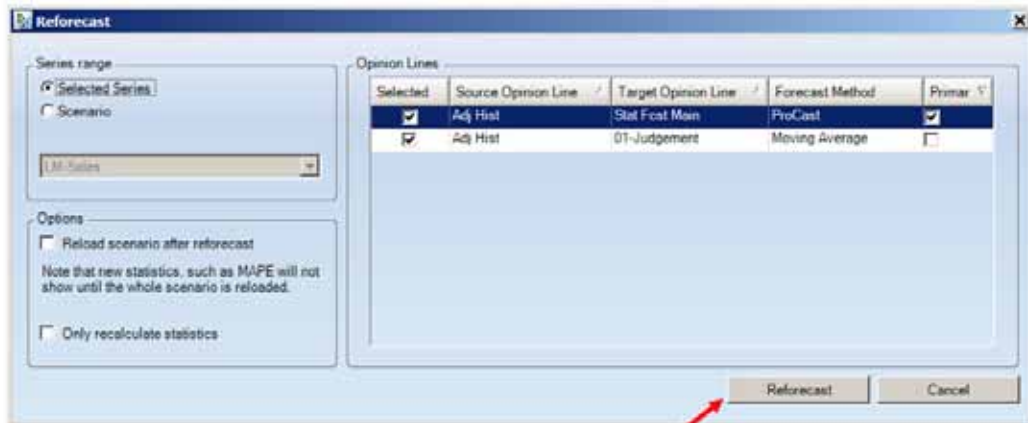
Reforecast a Selected Series or Scenario



- In the Series Range, choose Selected Series to reforecast the series currently highlighted
 - Or select Scenario to reforecast all series in the scenario
- Under Options, check Reload scenario after reforecast to display all updated data
- Selecting Only recalculate statistics will not replace the statistically generated forecast
 - It will display the metrics in the Statistics View window or Series Information (for Primary Statistical Forecast (FVALUE) only) that would result from the reforecast

Complete Reforecast

- Select the **Reforecast** button



Replacing Adjustments using “Original”

Replacing Adjustments using “Original”

- If a Reforecast adjustments have been made to the Primary Statistical forecast opinion line, **Original** will replace the adjustments with the originally generated statistical Forecast
- Select the **Original** located in the **Edit** section of the Home tab

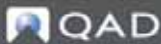


Note Changes can be undone or rolled back to their original status as long as the user has not saved, clicked away from the current series or changed to another View.

Configuring Series Forecasting

Configuring Series Forecasting

- The Primary statistical forecast is configured using **DME Admin Tool**
- Users may have reasons to use other methods in addition to the primary forecasting method
- Users can run alternate forecast methods and compare results
- Users have 27 forecast methods at their disposal



DME Forecasting 001

- The Primary statistical forecast for each scenario is configured using DME Admin Tool
 - This default method applies to all series
- While Procast is a popular choice as the default method since it has a best-fit algorithm, some series may require individual fine tuning
- In the DME Viewer, the user can add opinion lines to forecast with different methods, time periods or history source opinion lines and compare the results
- In addition to Procast, there are 26 forecast methods the user can choose from for a Series Forecast
- Some of the more common methods for a Series forecast would be Lifecycle, Moving Average or a sporadic method such as Croston's

Definitions for Series Forecasting

Definitions for Series Forecasting

- **Forecast Setting**
- **Source** opinion line
- **Target** opinion line
- **Forecast Method**
- **Forecast Setting**



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Forecast Setting: a term used for a new forecast configuration

- The basic elements of a Forecast setting are a Source opinion line, a Target opinion line, and a Forecast Method
- The Source opinion line is the historical line of observational data that will be used to generate the statistical forecast
- The Target opinion line is the opinion line that will store the statistical forecast
- The Forecast Method is the designated statistical method that will be used to generate the forecast
- The Primary Forecast Setting will be the one selected in the Admin Tool when a scenario is created, used as the default setting for all series

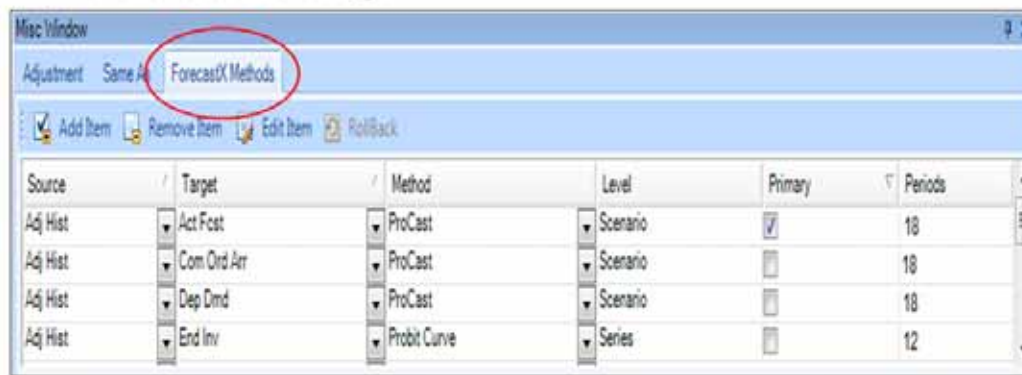
Overview of Series Forecasting

Overview of Series Forecasting

- Forecast Settings and hierarchies
- Additional forecast configurations can be added
- An individual series can have multiple forecasts
 - generated using different **Source** opinion lines
 - generated using different **Methods**
- Each configuration is mapped to separate **Target** opinion lines
- The same **Target** opinion line cannot be used more than once for the same series

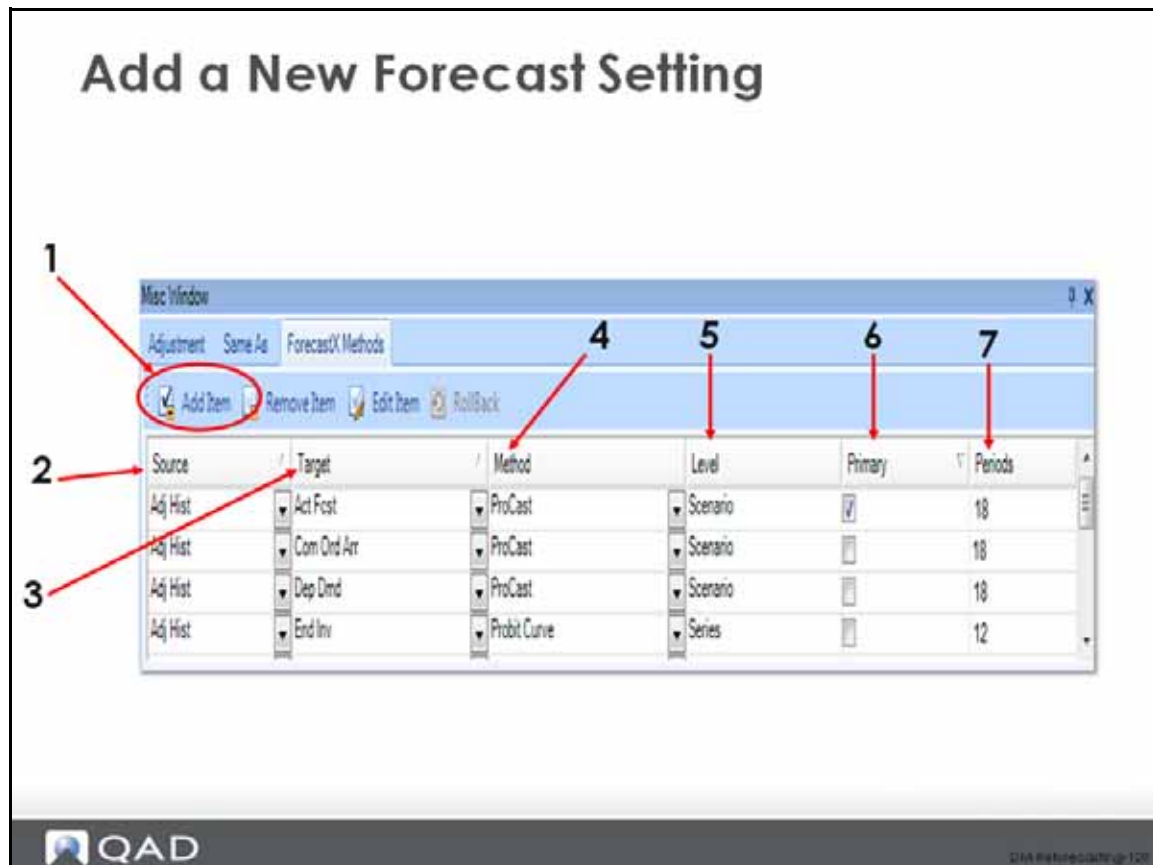
Forecast Settings

- In the **Misc** Window, select the **ForecastX Methods** tab
- Here you can view existing forecast settings for the selected series as well as add, remove or edit forecast settings



The default information displayed includes the Source and Target opinion lines, the forecast Method, the Level, the Primary method indicator and the number of Periods generated in the Forecast. More configurations settings are available by selecting a forecast and clicking the Edit Item button.

Add a New Forecast Setting



- 1 Click the Add Item button. A new forecast setting is added to the grid, the Source, Target, or Method must be selected from the drop down.
- 2 Select the desired Source opinion line for generating the statistical forecast.
- 3 Select the Target opinion line where the statistical forecast result will be stored.
- 4 Select the forecast Method from the drop-down list. Additional forecast settings can be configured in the Edit Item configuration window. Double-clicking on the setting will also bring up the window.
- 5 Indicate the Level at which this forecast will be applied. Settings at the Scenario level (default) will be copied to every series in the scenario. Settings at the Series level will only affect the selected series.
- 6 The Primary check box indicates which setting is defined in the Admin Tool.
- 7 The system will enter the number of observational periods available in the Periods column. This value can be changed in the Edit Item window. However, the value can not exceed the current number of observational periods available in the Viewer or a warning message will be generated.

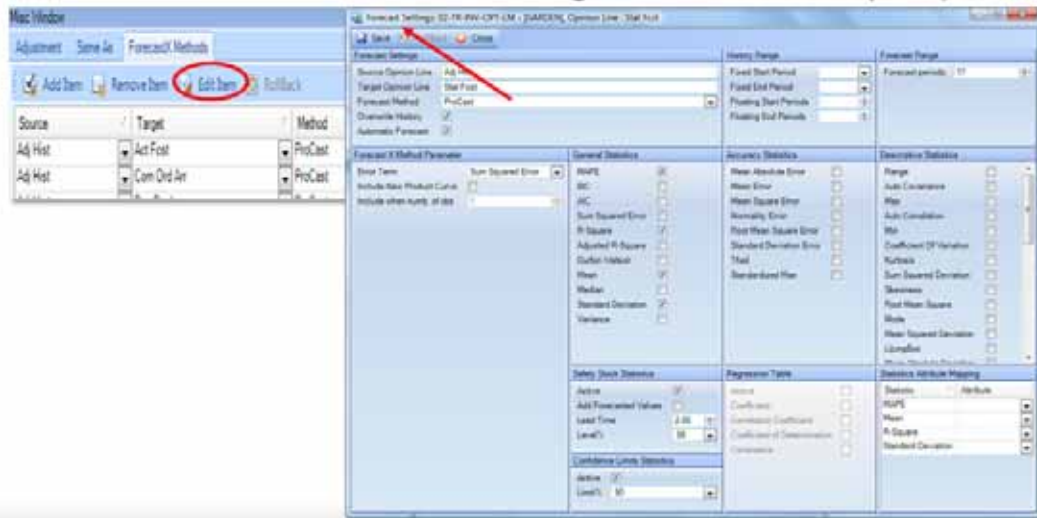
Note When the forecast setting is initially created, a record is created for all series in the scenario. Individual series settings can be changed and retained in this record; however, those series not individually changed will retain the general setting.

Note Once the forecast has been saved, the Source and Target fields can no longer be changed. If another series is selected without populating these fields, the forecast setting will be deleted.

Edit Forecast Profile for Forecast Settings

Edit Forecast Profile for Forecast Settings

- For additional configuration of a selected forecast setting, click the **Edit Item** button and the **Forecast Settings** window displays



Edit Additional Forecast Settings

Edit Additional Forecast Settings

1. The **Forecast Settings** section contains general configurations for the Forecast Setting you are currently editing.



Forecast Settings	
Source Opinion Line	Adj Hist
Target Opinion Line	Stat Fcst
Forecast Method	ProCast
Overwrite History	☒
Automatic Forecast	☒

The Source and Target Opinion Lines cannot be changed.

Forecast Method:

This field is used to select the Forecast Method to use to create the statistical forecast.

Overwrite History:

Specifies if historical periods can be overwritten when running the forecast.

Note Outlier adjustment will overwrite historical values.

Automatic Forecast:

Specifies if the current forecast setting should be executed when the scenario level forecast is executed

Edit Additional Forecast Settings

2. The ForecastX Method Parameter section holds the specific parameters that can be configured for each Method.

For Procast

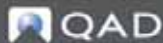
Forecast Settings	
Source Opinion Line	Adj Hist
Target Opinion Line	Stat Fcast
Forecast Method	ProCast
Overwrite History	☒
Automatic Forecast	☒

Forecast X Method Parameter	
Error Term	Sum Squared Error
Include New Product Curve	☐
Include when numb. of obs	6

For Moving

Forecast Settings	
Source Opinion Line	Adj Hist
Target Opinion Line	01 Baseline
Forecast Method	Moving Average
Overwrite History	☒
Automatic Forecast	☒

Forecast X Method Parameter	
Average Periods	6



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The parameters available in this section will vary based on the Forecast Method selected in the Forecast Settings section.

Refer to the Administrators Guide – Statistical Methods section for more information on settings per Method.

Edit Additional Forecast Settings

3. The History Range section indicates how many historical periods will be used to generate the resulting forecast.

History Range	
Fixed Start Period	[Empty Dropdown]
Fixed End Period	[Empty Dropdown]
Floating Start Periods	12
Floating End Periods	36

History Range	
Fixed Start Period	2007-01
Fixed End Period	2007-12
Floating Start Periods	[Empty Dropdown]
Floating End Periods	[Empty Dropdown]

Fixed Start and End Period:

With this selection, you can select fixed periods that will be specified in the Fixed Start Period and Fixed End Period fields.

Example To base the forecast only on data from 2007, you would enter 2007-01 and 2007-12.

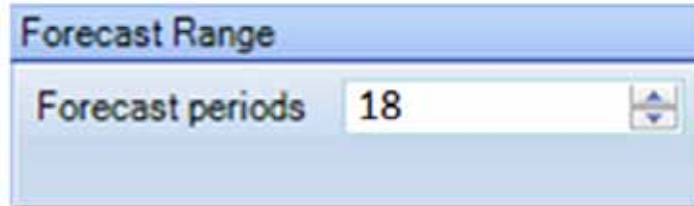
Floating Start and End Periods:

With this type of history selection you can configure a forecast setting that will always use a set number of historical periods.

Example If your series have 36 months of history, you can use the last 24 months for a forecast setting by setting the Floating Start Periods to 12 and the Floating End Periods to 36.

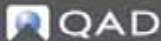
Edit Additional Forecast Settings

4. Designate the desired number of future **Forecast periods** used to generate the forecast.



The image shows a software dialog box titled "Forecast Range". Inside the dialog, there is a label "Forecast periods" followed by a text input field containing the number "18". To the right of the input field is a standard Windows spin button (up and down arrows).

If you decrease the number of forecast periods, it will decrease the number of periods that are reforecast only. For example, if the original forecast periods is 24 months, and you reduce it to 6 months, it will reforecast the next 6 months only and the following 18 months will stay the same.

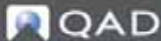
Did Not Recalculate 1.7%

- During the initial creation of the Forecast Setting record this value defaults to the number of periods available in the Viewer
- You can change this value from 18 months to 12 or 6 for example
- You cannot exceed the number of periods available in the Viewer or a warning message will display

Edit Additional Forecast Settings

5. Use the check boxes in these sections to indicate any additional statistics to generate for the forecast.

General Statistics	Accuracy Statistics	Descriptive Statistics
MAPE ☒	Mean Absolute Error ☐	Range ☐
BIC ☐	Mean Error ☐	Auto Covariance ☐
AIC ☐	Mean Square Error ☐	Max ☐
Sum Squared Error ☐	Normality Error ☐	Auto Correlation ☐
R-Square ☒	Root Mean Square Error ☐	Min ☐
Adjusted R-Square ☐	Standard Deviation Error ☐	Coefficient Of Variation ☐
Durbin Watson ☐	Theil ☐	Kurtosis ☐
Mean ☒	Standardized Mae ☐	Sum Squared Deviation ☐
Median ☐		Skewness ☐
Standard Deviation ☒		Root Mean Square ☐
Variance ☐		Mode ☐
		Mean Squared Deviation ☐
		LjungBox ☐
		Mean Absolute Deviation ☐

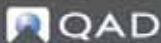
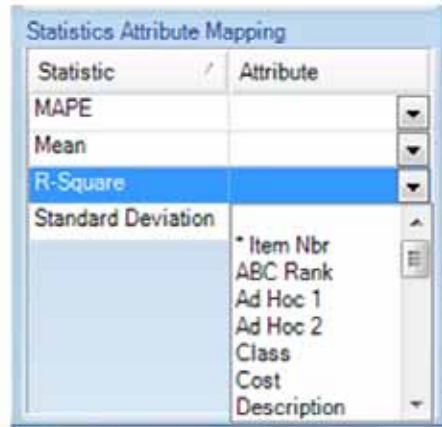


ENR Reforecasting T&E

Refer to the Administrators Guide – Accuracy Statistics section for more information on these settings.

Edit Additional Forecast Settings

6. The **Statistics Attribute Mapping** section allows the mapping of any of the selected statistics chosen from the General, Accuracy, and Descriptive Statistics sections to be saved into series attributes.

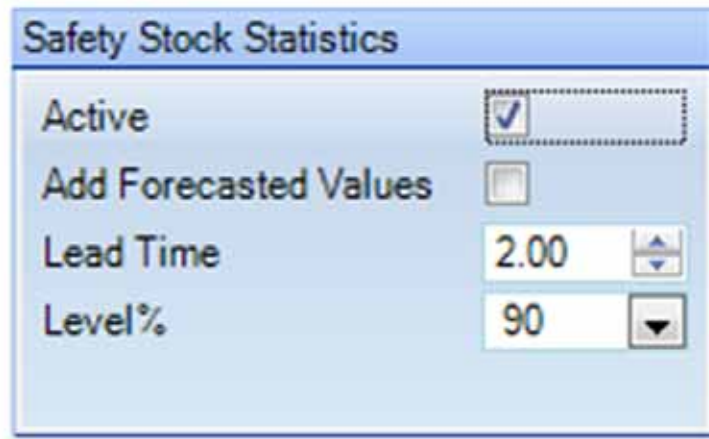


Did Not Record Page 1 of 1

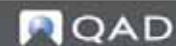
Note Any series attributes assigned to a statistic will be overwritten with these values after the forecast setting has run.

Edit Additional Forecast Settings

7. Safety Stock Statistics can be activated by checking the Active box.



Safety Stock Statistics	
Active	☒
Add Forecasted Values	☐
Lead Time	2.00
Level%	90



Edit Reforecasting 200

- The Safety Stock can incorporate the forecast value by checking Add Forecasted Values
- Lead Time is based on the periods in the Scenario. For example if the Scenario is in weekly buckets the value of “2” represents two weeks
- Level% represents the service level desired

Example 90% of the time inventory will cover demand forecasted

Edit Additional Forecast Settings

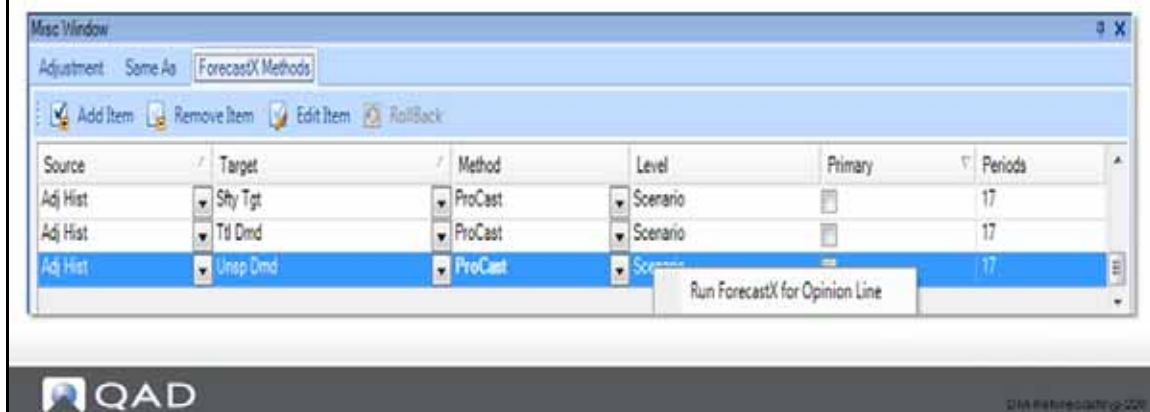
8. Confidence Limits Statistics can be activated or deactivated using the Active check box.
 - The Confidence interval is modified by changing the Limit%
9. When Regression methods are selected for the Forecast method, the Regression Table section will be active and the selections available to include in the metric display.

Confidence Limits Statistics	
Active	☒
Limit%	90

Regression Table	
Anova	☒
Coefficient	☒
Correlation Coefficient	☐
Coefficient of Determination	☐
Covariance	☐

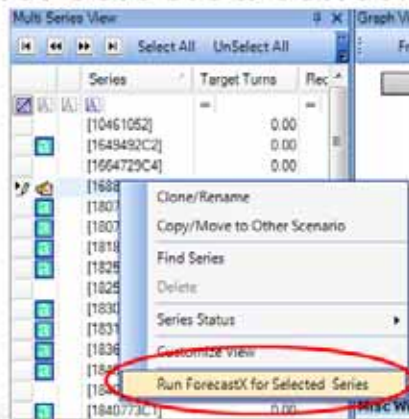
Options for Running the Forecast

- There are three options for running the forecast
- 1. Right-click on the method and select **Run ForecastX for Opinion Line** from the menu. This will run the selected forecast for the selected series and Target opinion line:



Options for Running the Forecast

2. The forecast can be run from the Series view. Select the series in the Single Series View or select multiple series in the Multi Series View, right-click and select **Run ForecastX for Selected Series**.



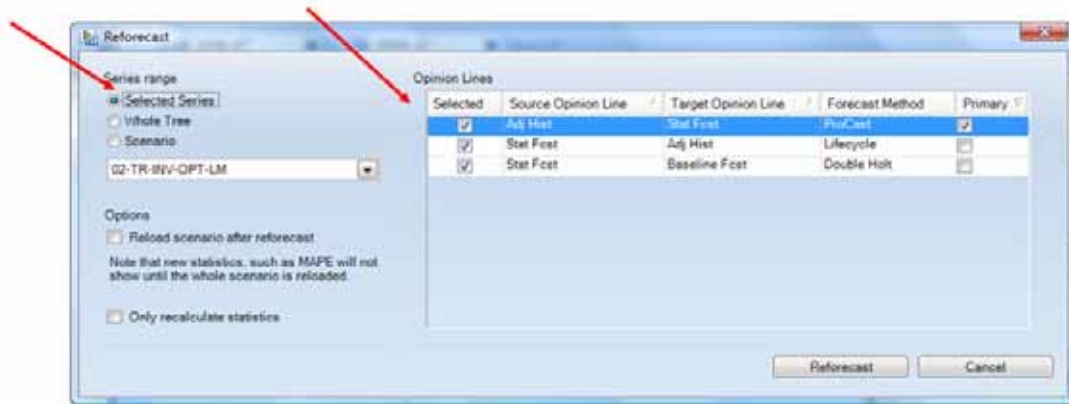
Options for Running the Forecast

3. Run forecast settings for one or all series by selecting the desired series and clicking the **Reforecast** button on the **Home** menu as described previously in this module for the Primary Statistical forecast method.



Options for Running the Forecast

- The **Reforecast** window displays



Select the Series Range as the Selected Series, the Whole Tree (active when on a hierarchy level) or for the selected Scenario.

Use the check boxes in the Selected column to indicate which Forecast Settings to run.

Reforecasting – Recap

Reforecasting – Recap

- Users can calculate or modify the **Primary Statistical Forecast (FVALUE)** opinion line in the Viewer
- If the recalculated Primary Statistical Forecast (FVALUE) opinion line has not been saved, users can easily revert back to the original
- Users can create alternate statistical forecasts and compare them to the primary statistical forecast

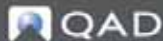
Chapter 24

Creating Exceptions – History to Forecast

Exceptions - Overview

Exceptions - Overview

- When developing a Demand Plan for 100, 1,000 or 100,000 SKU's, how do you look at them all?
- **Exceptions** allow you to develop criteria that will highlight items that have forecast issues and focus on those areas that need your attention
- **Exceptions** can be **run ad-hoc, or scheduled in the Batch Scheduler**
- All **exceptions** will use an opinion line which will be compared to
 - either another opinion line, or a constant value



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Exceptions are applied to either a static or floating time period.

The result of the calculation is either:

- A numeric result, or
- The name of the exception (used for a true/false exception)

Comparing The Percentage Difference Between History To Forecast

Comparing The Percentage Difference Between History To Forecast

- In this example, we will create an Exception to compare the last twelve months of History to the next twelve months Forecast values, and identify all series where the forecast differs by 25%
- This would be useful to determine where the forecast is either growing or dropping
- This method could also be used to compare historical sales against the forecast of a customer or a sales person and highlight major differences

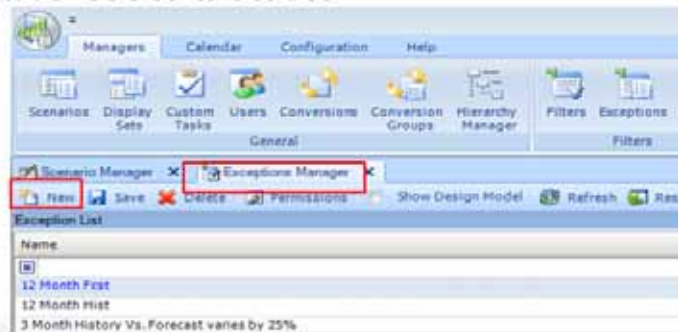
Creating A New Exception

Creating A New Exception

- In the **DME Admin Tool** or the **DME Viewer** click the **Exceptions** button to open the **Exception Manager**



- Click the **New** button

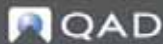


Name & Description (Optional)

- Enter a **Name** and **Description** (optional) for this **Exception** in the **Main Settings** area

The screenshot shows the 'Exception Editor' window with the 'Definition' tab selected. Under the 'Main Settings' section, the 'Name' field contains '12 Months History Vs. 12 Months Forecast' and the 'Description' field contains 'Flag any item whose 12 month forecast differs from sales over the past 12 months by 25% or more'. These two fields are enclosed in a red rectangular box. Other settings visible include 'Exception Result' set to 'Compute Value', 'Output Field' set to 'Adjusted Forecast', 'Reset OutPut Field' checked, and 'Filter' set to 'None'.

- The Name should be descriptive because this Exception can be used with different scenarios
 - In this example, we will create an Exception to compare the last 12 months of History to the next 12 months of forecast values, and identify all series where the forecast differs by 25% or more



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In this example, we will create an Exception to compare the last 12 months of History to the next 12 months of forecast values, and identify all series where the forecast differs by 25%.

Name & Exception Result

Name & Exception Result

- The **Exception Result** defines the exception output type:
 - **Compute Value**: Output a calculated value to a numeric Series attribute
 - **Exception Name**: Output the name of the Exception as text in a Series attribute
- In this example, the Exception Result will compute a value

The screenshot shows the 'Exception Editor' window with the 'Definition' tab selected. Under 'Main Settings', the 'Name' is '12 Months History Vs. 12 Months Forecast' and the 'Description' is 'Flag any item whose 12 month forecast differs from sales over the past 12 months by 25% or more'. The 'Exception Result' is set to 'Compute Value' (highlighted with a red box), and the 'Exception Name' is also visible. The 'Output Field' is 'Adjusted Forecast', 'Reset Output Field' is checked, and the 'Filter' is 'None'.

Output Field Settings

Output Field Settings

- Select an **Output Field** where the **Exception Result** will be stored
 - In this case, the Output Field is the Series Attribute – Adjusted Forecast
- Select the **Reset Output Field check box**
 - This ensures the Exception Result doesn't become confused with other attributes in the Output Field

The screenshot shows the 'Exception Editor' dialog box with the 'Main Settings' tab selected. The 'Name' field contains '12 Months History Vs. 12 Months Forecast'. The 'Description' field contains 'Flag any item whose 12 month forecast differs from sales over the past 12 months by 25% or more'. The 'Exception Result' section has two radio buttons: 'Compute Value' (selected) and 'Exception Name'. The 'Output Field' dropdown menu is set to 'Adjusted Forecast'. The 'Reset Output Field' checkbox is checked. The 'Filter' dropdown menu is set to 'None'. A red rectangular box highlights the 'Output Field' and 'Reset Output Field' settings.

Output Field is used to select the field where the resulting “Compute Value” or “Exception Name” is stored. This information can be viewed in the Series Information panel in the Viewer.

The options available in this drop-down list will vary based on the selected Exception Result.

If you plan to run multiple exceptions, the results must be stored in unique Output Fields, or they will override each other

Note The values in the Output Field will only show numeric fields if Compute Value is selected, and only a text field – the name that you enter into the Name field – if Exception Name is selected.

Base Opinion Line

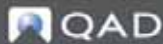
Base Opinion Line

- Select the **Opinion Line** to use as the **Base Opinion Line**
 - For this exercise we will use **Value**
- The **Base Opinion Line** section allows you to indicate which existing Opinion Line to use as a base for this exception
 - Only one base Opinion Line can be selected and this data is compared to the criteria by the Exception calculation



The screenshot shows a configuration window titled "Base Opinion Line". It contains the following fields and options:

Base Opinion Line	
Opinion Line	History
Date Range Type	☐ Fixed ☒ Sliding
Historical Periods	12
Forecast Periods	0



Oracle® Demand Management 6.1

The Base Opinion Line section allows you to indicate which existing Opinion Line to use as a base for this exception. Only one base Opinion Line can be selected and this data is compared to the criteria by the Exception calculation.

Base Opinion Line Date Range

Base Opinion Line Date Range

- Select the **type of date range** to use for the Exception
 - **Fixed:** Specify a fixed data range using the Start Period and End Period fields
 - This is good for generating single exceptions
 - **Sliding:** Specify a certain number of historical and/or forecast periods
 - This is best if you plan to reuse an exception month after month - the dates will reset automatically

Base Opinion Line

Opinion Line Value

Date Range Type ☒ Fixed ☐ Sliding

Start Period 2009-06

End Period 2009-12

Base Opinion Line

Opinion Line Value

Date Range Type ☐ Fixed ☒ Sliding

Historical Periods 12

Forecast Periods 12

Number of periods

Number of periods

- Select the **number of periods** to use in the **Exception**
- For this example use **Sliding** with **6 historical periods and 0 forecast**
 - This will use the last 6 historical periods
- This setting applies to the **Base Opinion Line** only

Base Opinion Line

Opinion Line Value

Date Range Type ☐ Fixed ☒ Sliding

Historical Periods 6

Forecast Periods 0

Impact of 2 Different Settings for History

6 Historical Periods & 0 Forecast Periods

Period	History	Forecast
2011-02	20,000.00	19,982.54
2011-03	24,850.00	23,250.49
2011-04	25,600.00	24,305.37
2011-05	26,280.00	26,900.02
2011-06	27,750.00	26,560.57
2011-07	25,020.00	27,398.42
2011-08	24,320.00	22,657.29
2011-09	24,350.00	24,990.88
2011-10		21,585.73
2011-11		24,205.12
2011-12		16,178.60
2012-01		20,163.46
2012-02		21,223.42
2012-03		24,841.46
2012-04		24,895.63
2012-05		26,300.50
2012-06		26,734.09
2012-07		26,066.95

6 Historical Periods & 6 Forecast Periods

Period	History	Forecast
2011-02	20,000.00	19,982.54
2011-03	24,850.00	23,250.49
2011-04	25,600.00	24,305.37
2011-05	26,280.00	26,900.02
2011-06	27,750.00	26,560.57
2011-07	25,020.00	27,398.42
2011-08	24,320.00	22,657.29
2011-09	24,350.00	24,990.88
2011-10		21,585.73
2011-11		24,205.12
2011-12		16,178.60
2012-01		20,163.46
2012-02		21,223.42
2012-03		24,841.46
2012-04		24,895.63
2012-05		26,300.50
2012-06		26,734.09
2012-07		26,066.95

Base Opinion Line

Base Opinion Line

- To set our Base Opinion Line for 12 Months History Vs. 12 Months Forecast
- Make the following selections in the **Base Opinion Line** section
 - Using "History" as the **Base Opinion Line**
 - Select "12" **Historical Periods**
 - Use "0" **Forecast Periods**

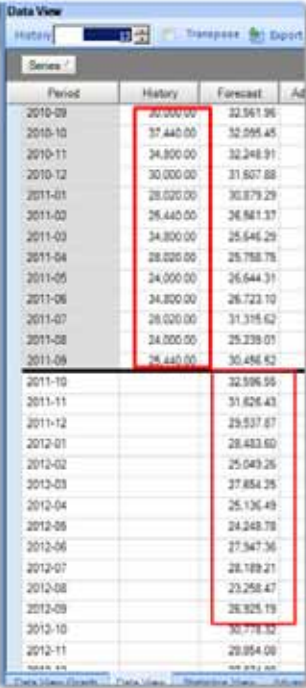


The screenshot shows a software window titled "Base Opinion Line". It contains the following fields and options:

Base Opinion Line	
Opinion Line	History
Date Range Type	☐ Fixed ☒ Sliding
Historical Periods	12
Forecast Periods	0

12 Months History Vs 12 Month Forecast

12 Months History Vs 12 Month Forecast



Period	History	Forecast	Adj
2010-09	30,000.00	32,561.96	
2010-10	37,440.00	32,595.45	
2010-11	34,800.00	32,248.91	
2010-12	30,000.00	31,607.88	
2011-01	28,020.00	30,879.29	
2011-02	26,440.00	30,861.37	
2011-03	34,800.00	25,646.29	
2011-04	28,020.00	25,788.78	
2011-05	34,000.00	26,644.31	
2011-06	34,800.00	26,723.10	
2011-07	28,020.00	31,315.62	
2011-08	34,000.00	25,339.01	
2011-09	26,440.00	30,486.62	
2011-10		32,596.55	
2011-11		31,826.43	
2011-12		29,537.67	
2012-01		28,483.60	
2012-02		25,043.26	
2012-03		27,854.35	
2012-04		25,136.49	
2012-05		24,248.78	
2012-06		27,347.36	
2012-07		28,189.21	
2012-08		23,258.47	
2012-09		26,325.19	
2012-10		30,778.32	
2012-11		29,054.00	

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Comparison

Comparison

- Select whether this **Exception** uses a comparison to a specific value or to another opinion line
- Constant: Compares the values to a specific value



The screenshot shows a dialog box titled "Comparison". It has two radio buttons: "Constant" (which is selected) and "Opinion Line". Below the radio buttons is a text field labeled "Value" containing the number "0.00".

- Opinion Line: Compares one opinion line against another



The screenshot shows a dialog box titled "Comparison". It has two radio buttons: "Constant" and "Opinion Line" (which is selected). Below the radio buttons are two fields: "Opinion Line" with a dropdown menu showing "ActShipments" and "Offset Periods" with a text field containing "0".

Comparison

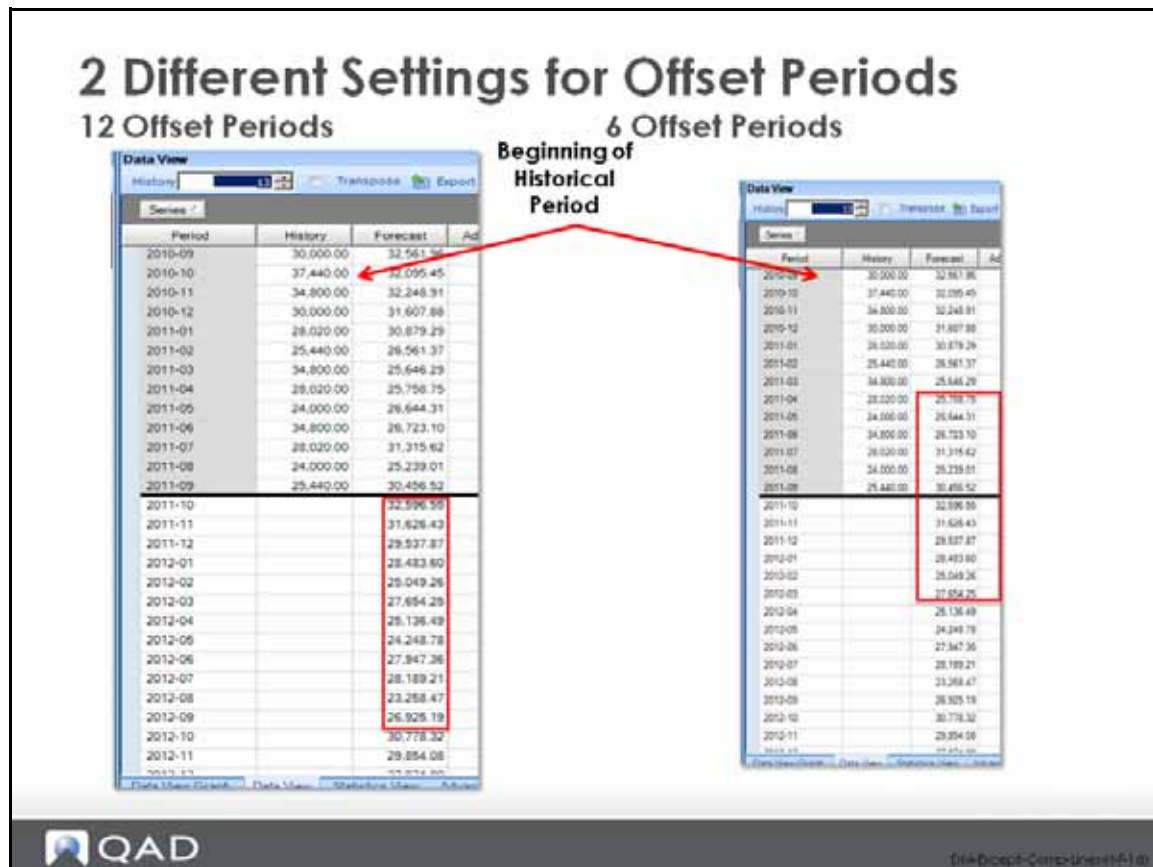
- In the **Comparison** section, select "**Opinion Line**" as the "**Compare Against**" option. For our example, select "**Forecast**"
- Set the Offset Periods field to "**12**", to compare the next 12 months of forecast periods to the previously defined 12 months of historical periods



The screenshot shows a dialog box titled "Comparison". It contains three fields: "Compare Against" with radio buttons for "Constant" and "Opinion Line" (the latter is selected), "Opinion Line" with a dropdown menu showing "Forecast", and "Offset Periods" with a text input field containing "12".

- The beginning of the comparison **Forecast** is **12 periods (months)** further down the timeline than the beginning of the historical period selected for **History**

2 Different Settings for Offset Periods



Offset Periods in the comparison section are measured against the beginning of the historical period

If we had used Forecast as our Baseline Opinion Line and used History as our Comparison Opinion Line, to obtain the same result as our example we would have had to make our comparison a negative (-12) twelve periods.

Exceptions - Calculation

Exceptions - Calculation

- The exception calculation is a three-step process
 1. **Group** the data into **Buckets**, and apply an aggregation method (Method Inside Buckets)
 2. **Compare** the results from the Method Inside Buckets
 3. **Apply** an aggregation among the comparison results (Method Outside Buckets)
- **Buckets** are used to group the data
 - Example - to compare quarterly numbers use 3
- If you don't want to aggregate buckets set the bucket length to 1
 - Each observation will stand on its own

Exceptions - Calculation

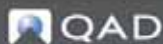
- **Buckets** are used to group the data
 - Example - to compare quarterly numbers use 3
- If you don't want to aggregate buckets set the bucket length to 1
 - Each observation will stand on its own

Exception Definition

Exception Definition

- Enter the **bucket length**
 - This is the number of periods per group
 - Set the number of **Periods in Bucket** as 1
 - **Method Inside Buckets** as "Sum" since we are summing all values together for twelve months to determine if there have been a 25% increase or decrease from History

Exception Definition	
Periods in Bucket	1
Method inside Buckets	Sum
Calculate	%Variance
Method outside Buckets	Max



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Periods in Bucket – The number of periods in this bucket. A bucket is a logical unit which groups periods together.

Example If the data is monthly, and you specify the number of Periods in the Bucket as “3”, you are grouping your data into 3 month buckets and doing a quarter by quarter comparison.

Method inside Buckets – Select the aggregate methods for grouping the data within a bucket. Possible values are:

- Sum - Add all values and compare the totals
- Average – Compare the average of all values
- Min - Select the lowest value, returns an exception if all instances fit the criteria
- Max - Select the highest value, returns an exception if one or more instances fit the criteria

Method Inside Buckets

Method Inside Buckets

- You can perform the following calculations on the values for **each period within the bucket**
 - Sum** - All values within the bucket are summed
 - Avg** - All values within the bucket are averaged
 - Min** - The minimum value in the bucket is selected
 - Max** - The maximum value in the bucket is selected

Exception Definition

Periods in Bucket: 1

Method inside Buckets: Sum

Calculate: Avg, Max, Min

Method outside Buckets: Sum



Oracle Receipt-Compliance M2M

Method inside Buckets – Select the aggregate methods for grouping the data within a bucket. Possible values are: Sum - Add all values and compare the totals.

- Average – Compare the average of all values
- Min - Select the lowest value, returns an exception of all instances fit the criteria
- Max - Select the highest value, returns an exception of one or more instances fit the criteria

Exception Definition - Calculate

Exception Definition - Calculate

- Use the **Calculate** drop-down to select **Variance** as the comparison method

Exception Definition	
Periods in Bucket	6
Method inside Buckets	Sum
Calculate	Variance
Method outside Buckets	%Absolute Variance %Variance Absolute Variance Variance

Calculate Options – Types Of Variance

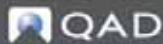
Calculate Options – Types Of Variance

Base – Comparison = **Variance** = the difference between the base and the comparison value

$| \text{Base} - \text{Comparison} |$ = **Absolute Variance** = the absolute difference (positive or negative, converted to a positive difference) between the base and comparison value

$\frac{\text{Base} - \text{Comparison}}{\text{Comparison}}$ = **Percent Variance** – the percentage of the difference between the base and the comparison value

$\left| \frac{\text{Base} - \text{Comparison}}{\text{Comparison}} \right|$ = **Absolute Percent Variance** – the absolute percentage of the difference between the base and the comparison value



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Method Outside Buckets

Method Outside Buckets

- After the values are calculated for the **Method inside Buckets**, and the Calculate method is applied, the calculated values will now be aggregated using the Method outside Buckets: **Sum, Avg, Min, Max**

Exception Definition

Periods in Bucket: 6

Method inside Buckets: Sum

Calculate: Variance

Method outside Buckets: Sum

Condition Type: ☒ Single Condition ☐ And ☐ Or

Operator: - Value: 0.00

Operator: + Value: 0.00

Design Model Sample Data

Monthly	2008-12	2009-01	2009-02	2009-03	2009-04	2009-05	2009-06	2009-07	2009-08	2009-09	2009-10	2009-11
Value	48.00	98.00	144.00	192.00	240.00	288.00	336.00	384.00	432.00	480.00	528.00	576.00
		Sum	288.00		Sum	720.00		Sum	1,152.00		Sum	1,584.00
Value	97.00	194.00	291.00	388.00	485.00	582.00	679.00	776.00	873.00	970.00	1,067.00	1,164.00
		Sum	582.00		Sum	1,455.00		Sum	2,328.00		Sum	3,201.00

For example, an Exception that identifies the quarter with the highest sales in the last 12 months, would compare the “Max” value among the buckets

Method outside Buckets - Select the aggregate method to use for data that is not included in a bucket. Possible values are:

- Sum - Add all values
- Average - The average of all values
- Min - Select the lowest value
- Max - Select the highest value

Exception - Results

Exception - Results

- The **Method Outside Buckets** will result in a single number
- This number is then compared to a range of values, and if it falls within that range, the **Exception** is true for that series
- This number is the result that goes into the numeric value if **Compute Value** is used

Condition type

Condition type

- Use the condition fields to set the Exception range

For our example:

- Select **Operator** Greater Than or Equal ($\geq$) to **Value** .25 (25%) or
- Select **Operator** Greater Than or Equal ($\geq$) to **Value** -.25 (-25%)

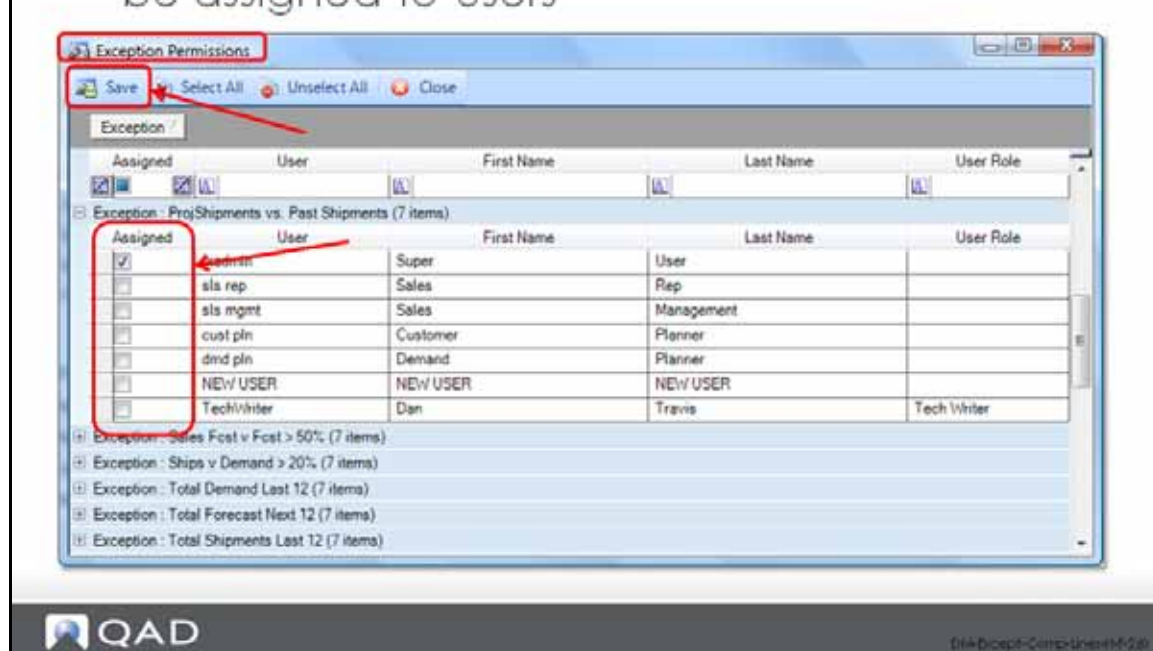
The screenshot shows the 'Exception Definition' dialog box. On the left, there are four fields: 'Periods in Bucket' (set to 1), 'Method inside Buckets' (set to Sum), 'Calculate' (set to %Variance), and 'Method outside Buckets' (set to Max). On the right, there is a table with three columns: 'Operator', 'Value', and 'Condition Type'.

Operator	Value	Condition Type
$\geq$	0.25	Or
$\geq$	-0.25	

Assign the Exception to Users

Assign the Exception to Users

- Once the Exception is created it needs to be assigned to users



- 1 Select the created Exception in the Exception List.
- 2 Click the Permissions button.
- 3 In the Exception Permissions window, use the check boxes in the Assigned column to indicate which Users will have access to the Exception.
- 4 Click Save.

The Exception is now available for use by the selected Users.

Series That Meet Exception Criteria

Series That Meet Exception Criteria

Series that match exception criteria are highlighted in blue

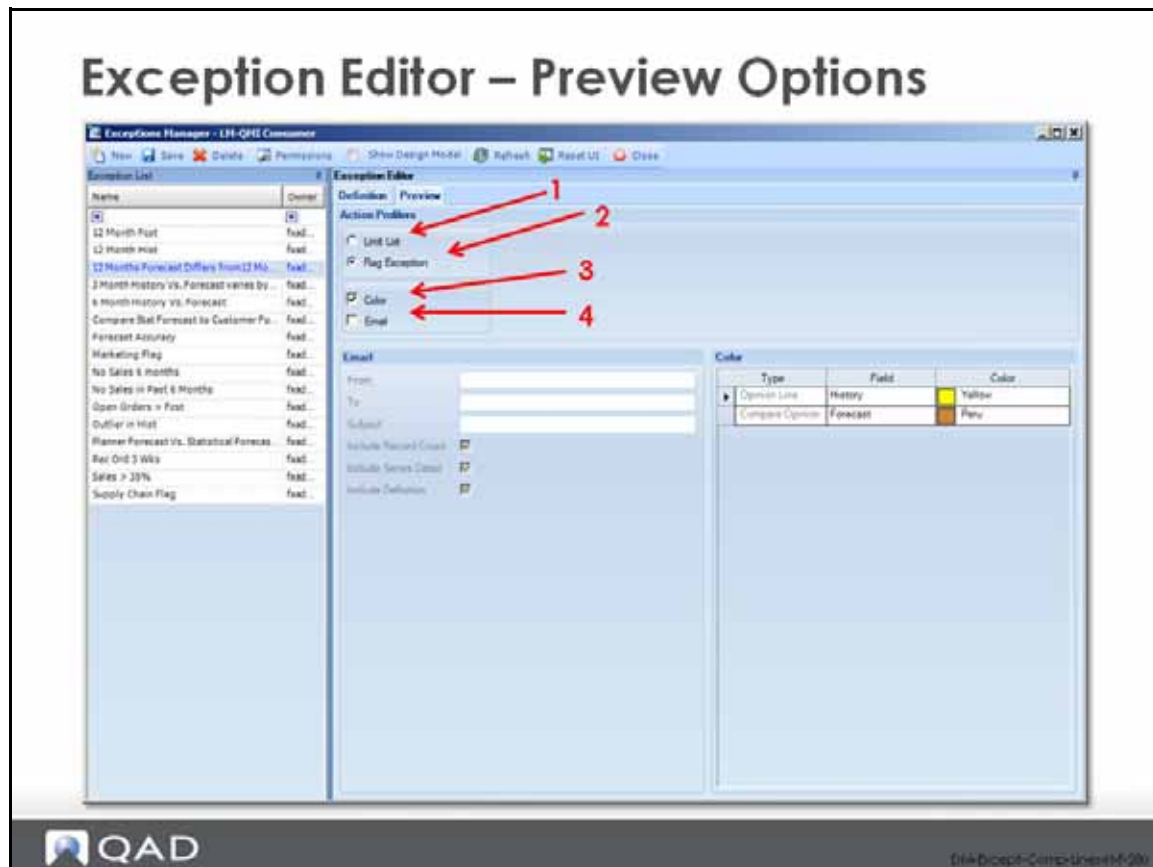
Difference of 26%

Customer	
PrimarySalesRep	Claude Dumas
General	
Adjusted Forecast	0.26
Cost	0.75
Customer	Bon Marche France
Exception	
Planner Forecast	
Price	4.50
Sku	03210
Product	
ProductClass	DISINFECTANTS
ProductFamily	UNSCENTED
ProductName	Disinfectant Wipes

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Exception Editor – Preview Options



The Preview Options tab in the Exceptions Editor permits you to determine how Exceptions are displayed and whether anyone will be automatically notified when an Exception occurs.

- 1 Limit List – Selecting this option instructs the Viewer to display only items meeting the Exception criteria.
- 2 Flag Exception – Selecting this option instructs the Viewer to display all items, but to flag any items meeting the Exception criteria.
- 3 Color – Select this option to highlight Exceptions in the Viewer and make them easier to locate.
- 4 Selecting this option will activate the Color section below and allow you to choose the color used to highlight the Exception.
- 5 Email – Select this option to send an email to a specified account whenever an Exception occurs.
 - a Selecting this option will activate the Email section below and allow you to set your email preferences.

Exceptions – Recap

Exceptions – Recap

- **Exceptions** are used for two purposes:
 - To create comparisons between opinion lines
 - To set a **series attribute** to an aggregate function of an **opinion line**
- **Exceptions** can be run ad-hoc, or scheduled in the Batch Scheduler
- All **exceptions** must be assigned a series attribute to contain the result



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Exceptions are applied to either a static or floating time period.

The result of the calculation is either:

- A numeric result, or
- The name of the exception (used for a true/false exception)

Chapter 25

Creating Exceptions – Main to Secondary

Exceptions - Overview

Exceptions - Overview

- **Exceptions** are used for two purposes
 - To create comparisons between opinion lines
 - To set a **series attribute** to an aggregate function of an **opinion line**
- **Exceptions** can be **run ad-hoc, or scheduled in the Batch Scheduler**
- All **exceptions** will use an opinion line which will be compared to either
 - Another opinion line
 - A constant value
- This lesson will compare two opinion lines one representing a statistical forecast and one a sales persons or customers forecast

DMA-Creater-Exception-Main-Sec-001

Exceptions are applied to either a static or floating time period.

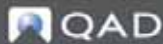
The result of the calculation is either:

- A numeric result, or
- The name of the exception (used for a true/false exception)

Comparing History To Forecast

Comparing History To Forecast

- To improve our forecast, we often encourage key stakeholders, such as Sales, Marketing, Planners, and Customers to contribute their knowledge to a forecast
- We would often like to determine if there are major variations between two forecasts such as:
 - The statistical forecast or main planners forecast; and
 - The forecast from Sales, Marketing or a customer
- This method can also be used by a supplier that has implemented Collaborative Planning, Forecasting & Replenishment (CPFR) to compare their forecast with a customer's forecast



QAD Create Exception Main Sec 428

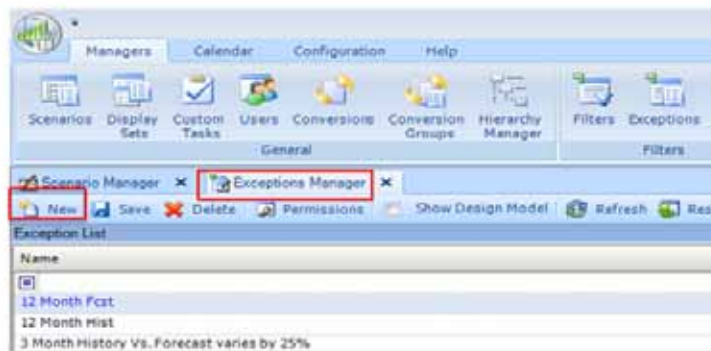
In this example, we will create an Exception to compare the next 12 months of the Statistical Forecast to the next 12 months of a Planners Forecast , and identify all series where the forecast differs by 20%.

Creating A New Exception

- In the **DME Admin Tool** click the **Exceptions** button to open the **Exception Manager**



- Click the **New** button



Creating A New Exception

- Enter a **Name** and **Description** (optional) for this **Exception** in the **Main Settings area**

Main Settings	
Name	Compare Stat Forecast to Customer Forecast
Description	Variance Greater than 20%
Exception Result	☒ Compute Value ☐ Exception Name
Output Field	Adjusted Forecast
Reset OutPut Field	☒
Filter	None

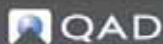
- The Exception Result defines the exception output type
 - Compute Value:** Output a calculated value to a numeric Series attribute
 - Exception Name:** Output the name of the Exception to a text Series attribute

Output field

Output field

- The **Output Field** drop-down is used to select the series attribute where the resulting value or exception name is stored
 - Select the **Reset Output Field** check box to overwrite any existing values in the selected Output Field
 - If you plan to run multiple exceptions, the results must be stored in unique Output Fields, or they will override each other

Main Settings	
Name	Compare Stat Forecast to Customer Forecast
Description	Variance Greater than 20%
Exception Result	☒ Compute Value ☐ Exception Name
Output Field	Adjusted Forecast
Reset OutPut Field	☒
Filter	None



DMA-Creative-Exception-Main-Set-001

Output Field Used to select the field where the resulting “Compute Value” or “Exception Name” is stored. This information can be viewed in the Series Information panel in the Viewer.

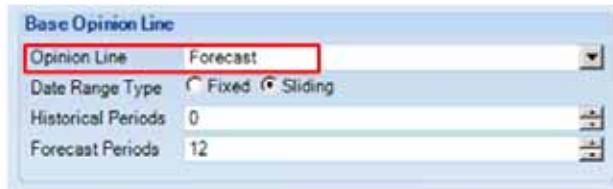
The options available in this drop-down list will vary based on the selected Exception Result.

Note The values in the Output Field will only show numeric fields if Compute Value is selected, and only a text field – the name that you enter into the Name field – if Exception Name is selected.

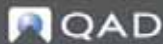
Base Opinion Line

Base Opinion Line

- Select the **Opinion Line** to use as the **base opinion line**
- For this exercise we will use **Value**
 - The **Base Opinion Line** section allows you to indicate which existing Opinion Line to use as a base for this exception
 - Only one base Opinion Line can be selected and this data is compared to the criteria by the Exception calculation



Base Opinion Line	
Opinion Line	Forecast
Date Range Type	☐ Fixed ☒ Sliding
Historical Periods	0
Forecast Periods	12



QAD Create Budget Main Sec 5.71

The Base Opinion Line section allows you to indicate which existing Opinion Line to use as a base for this exception. Only one base Opinion Line can be selected and this data is compared to the criteria by the Exception calculation.

Base Opinion Line Date Range

Base Opinion Line Date Range

- Select the **type of date range** to use for the Exception
 - **Fixed:** Specify a fixed data range using the Start Period and End Period fields
 - This is good for generating single exceptions
 - **Sliding:** Specify a certain number of historical and/or forecast periods
 - This is best if you plan to reuse an exception month after month
 - The dates will reset automatically - we will use **Sliding**

The image displays two side-by-side screenshots of the 'Base Opinion Line' form in a software application. Both screenshots show the 'Opinion Line' dropdown set to 'Forecast'. In the left screenshot, the 'Date Range Type' is set to 'Fixed' (indicated by a red box), and the 'Start Period' and 'End Period' fields are populated with '2011-10' and '2012-09' respectively. In the right screenshot, the 'Date Range Type' is set to 'Sliding' (indicated by a red box), and the 'Historical Periods' and 'Forecast Periods' fields are populated with '0' and '12' respectively. The 'Sliding' option is also selected with a radio button. The QAD logo is visible in the bottom left corner of the slide, and the text 'DAM Create Exception Main Sec 601' is in the bottom right corner.

Number of periods

Number of periods

- Select the **number of periods** to use in the **Exception**
- For this example use **Sliding** with **0 historical periods and 12 forecast**
 - This will use the next 12 forecast periods
- This setting applies to the **Base Opinion Line** only

Base Opinion Line

Opinion Line: Forecast

Date Range Type: ☐ Fixed ☒ Sliding

Historical Periods: 0

Forecast Periods: 12

Impact of 2 Different Settings for Forecast

Impact of 2 Different Settings for Forecast

6 Forecast Periods

Period	History	Forecast
2010-11	25,250.00	23,868.53
2010-12	15,000.00	17,535.39
2011-01	18,750.00	19,679.02
2011-02	20,000.00	19,982.84
2011-03	24,850.00	23,250.49
2011-04	25,600.00	24,305.37
2011-05	26,280.00	26,900.02
2011-06	27,750.00	26,560.57
2011-07	25,020.00	27,398.42
2011-08	24,320.00	22,657.29
2011-09	24,350.00	24,390.88
2011-10		21,585.73
2011-11		24,205.12
2011-12		16,178.80
2012-01		20,163.46
2012-02		21,223.42
2012-03		24,841.46
2012-04		24,895.63
2012-05		26,300.90
2012-06		26,734.09
2012-07		26,066.95
2012-08		23,630.86
2012-09		24,471.80
2012-10		21,585.73
2012-11		24,205.12
2012-12		16,178.80

12 Forecast Periods

Period	History	Forecast
2010-11	25,250.00	23,868.53
2010-12	15,000.00	17,535.39
2011-01	18,750.00	19,679.02
2011-02	20,000.00	19,982.84
2011-03	24,850.00	23,250.49
2011-04	25,600.00	24,305.37
2011-05	26,280.00	26,900.02
2011-06	27,750.00	26,560.57
2011-07	25,020.00	27,398.42
2011-08	24,320.00	22,657.29
2011-09	24,350.00	24,390.88
2011-10		21,585.73
2011-11		24,205.12
2011-12		16,178.80
2012-01		20,163.46
2012-02		21,223.42
2012-03		24,841.46
2012-04		24,895.63
2012-05		26,300.90
2012-06		26,734.09
2012-07		26,066.95
2012-08		23,630.86
2012-09		24,471.80
2012-10		21,585.73
2012-11		24,205.12
2012-12		16,178.80

Comparison

Comparison

- Select whether this **Exception** uses a comparison to a specific value or to another opinion line

- **Constant:** Compares the values to a specific value



The screenshot shows a dialog box titled "Comparison". It has two radio buttons: "Constant" (selected) and "Opinion Line". Below the radio buttons is a text field labeled "Value" containing the number "0.00".

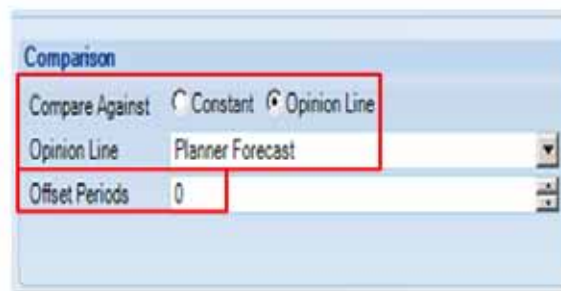
- **Opinion Line:** Compares one opinion line against another



The screenshot shows a dialog box titled "Comparison". It has two radio buttons: "Constant" and "Opinion Line" (selected). Below the radio buttons is a text field labeled "Opinion Line" containing the text "Planner Forecast". Below that is a text field labeled "Offset Periods" containing the number "0". A red rectangle highlights the "Opinion Line" and "Offset Periods" fields.

Comparison

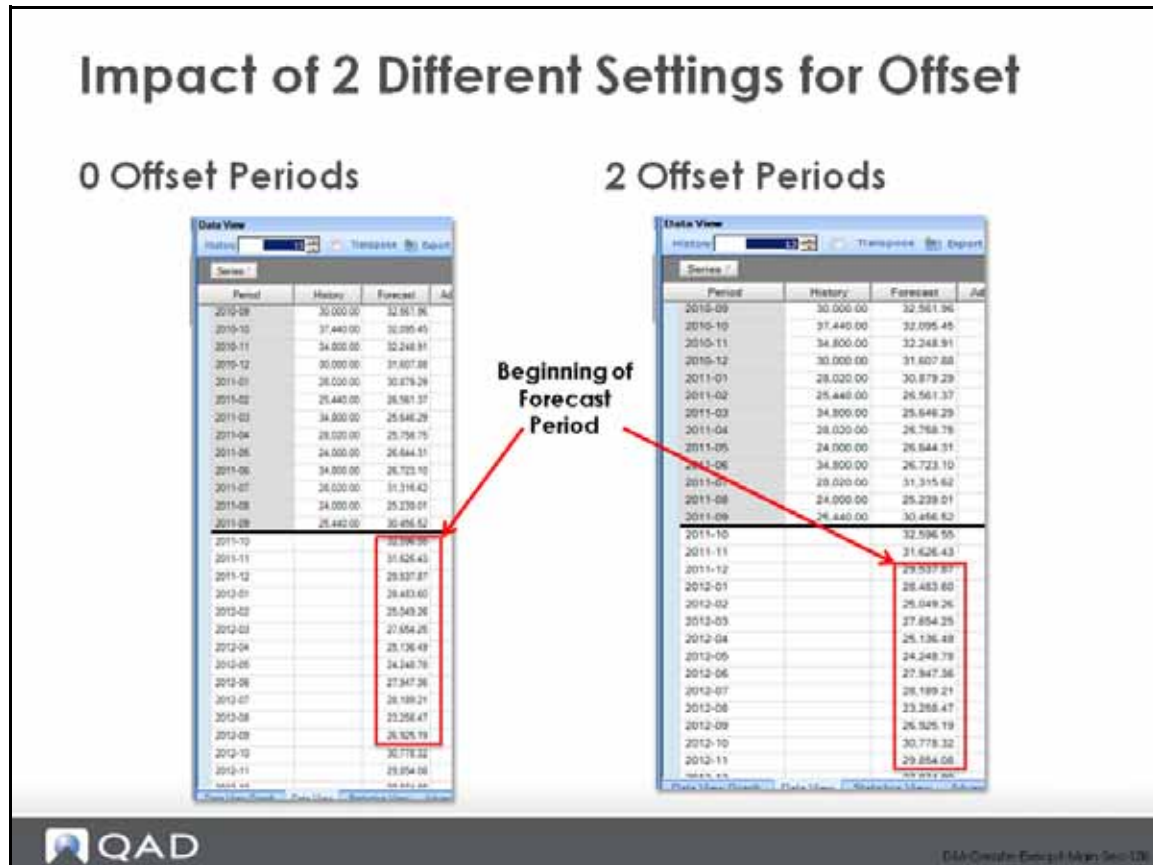
- For this example, select "Opinion Line" to compare to the Statistical Forecast to the Planner Forecast
- Set the Offset Periods to "0" to indicate that you will be comparing two forecasts of the same months



The screenshot shows a 'Comparison' dialog box with the following fields:

Comparison	
Compare Against	☐ Constant ☒ Opinion Line
Opinion Line	Planner Forecast
Offset Periods	0

Impact of 2 Different Settings for Offset



Offset Periods in the comparison section are measured against the beginning of the base period.

Exceptions - Calculation

Exceptions - Calculation

- The exception calculation is a three-step process
 1. **Group** the data into **Buckets**, and apply an aggregation method (Method Inside Buckets)
 2. **Compare** the results from the Method Inside Buckets
 3. **Apply** an aggregation among the comparison results (Method Outside Buckets)
- **Buckets** are used to group the data
 - Example, to compare quarterly numbers
- If you don't want to use buckets set the bucket length to 1

Exception definition

Exception definition

- Enter the **bucket length**
 - This is the number of periods per group
 - Set the number of **Periods in Bucket** as 1
 - This will compare each month of the Statistical Forecast with each month of the Planners Forecast
 - **Method Inside Buckets** as "**Sum**" since we are comparing the sum of each month determine if there are any differences that exceed 20%

Exception Definition	
Periods in Bucket	1
Method inside Buckets	Sum
Calculate	%Variance
Method outside Buckets	Max

Method inside Buckets

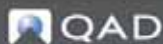
Method inside Buckets

- You can perform the following calculations on the values for **each period within the bucket**
 - **Sum** - All values within the bucket are summed
 - **Avg** - All values within the bucket are averaged
 - **Min** - The minimum value in the bucket is selected
 - **Max** - The maximum value in the bucket is selected

Exception Definition

Periods in Bucket	1
Method inside Buckets	Sum
Calculate	Avg
Method outside Buckets	Max
	Sum

Operator	Value	Condition Type
<=	0.20	Or
<=	-0.20	



DAM-Creating Budget Maps Sec 3.6

Calculate Options – Types Of Variance

Calculate Options – Types Of Variance

Base – Comparison = **Variance** = The difference between the base and the comparison value.

$| \text{Base} - \text{Comparison} |$ = **Absolute Variance** = The absolute difference (positive or negative, converted to a positive difference) between the base and comparison value.

$\frac{\text{Base} - \text{Comparison}}{\text{Comparison}}$ = **Percent Variance** – The percentage of the difference between the base and the comparison value.

$| \frac{\text{Base} - \text{Comparison}}{\text{Comparison}} |$ = **Absolute Percent Variance** – The absolute percentage of the difference between the base and the comparison value.

Exception Definition - Calculate

Exception Definition - Calculate

- Use the **Calculate** drop-down to select **%Variance** as the comparison method

Exception Definition

Periods in Bucket	1	Operator		Value		Condition Type	
Method inside Buckets	Sum						
Calculate	%Variance			0.20		Or	
Method outside Buckets	%Absolute Variance			-0.20			
	%Variance						
	Absolute Variance						
	Variance						

Design Model Sample Data

QAD

QAD Oracle ERP Suite 11R

Method Outside Buckets

Method Outside Buckets

- After the values are calculated for the **Method inside Buckets**, and the Calculate method is applied, the calculated values will now be aggregated using the Method outside Buckets: **Sum, Avg, Min, Max**

The screenshot displays the 'Exception Definition' window in the QAD software. The 'Method outside Buckets' dropdown menu is open, showing options: '%Absolute Variance', '%Variance' (highlighted), 'Absolute Variance', and 'Variance'. The 'Operator' dropdown is set to '>=' and the 'Value' is '0.20'. The 'Condition Type' is set to 'Or'. Below the window, the 'Design Model Sample Data' table is shown, which includes columns for months from 2011-11 to 2012-10 and rows for 'Forecast' and 'Planner Forecast'. The table also includes a row for '%Variance' and a 'Result(Max)' value of 1.99.

Month:	2011-11	2011-12	2012-01	2012-02	2012-03	2012-04	2012-05	2012-06	2012-07	2012-08	2012-09	2012-10
Forecast	4.00	30.00	72.00	75.00	48.00	266.00	184.00	9.00	550.00	77.00	624.00	676.00
	4	30	72	75	48	266	184	9	550	77	624	676
Planner Forecast	2011-11	2011-12	2012-01	2012-02	2012-03	2012-04	2012-05	2012-06	2012-07	2012-08	2012-09	2012-10
	3.00	44.00	159.00	40.00	55.00	120.00	63.00	128.00	351.00	580.00	209.00	768.00
	3	44	159	40	55	120	63	128	351	580	209	768
%Variance	%Variance	%Variance	%Variance	%Variance	%Variance	%Variance	%Variance	%Variance	%Variance	%Variance	%Variance	%Variance
	0.33	-0.32	-0.55	0.88	-0.13	1.22	1.92	-0.93	0.57	-0.87	1.99	-0.12
Result(Max)												1.99

Example An Exception that identifies the quarter with the highest sales in the last 12 months, would compare the “Max” value among the buckets.

Exception - Results

Exception - Results

- The **Method Outside Buckets** will result in a single number
- This number is then compared to a range of values, and if it falls within that range, the **Exception** is true for that series
- This number is the result that goes into the numeric value if **Compute Value** is used

Condition type

Condition type

- Use the condition fields to set the Exception range

For our example

- Select "or" as the Condition Type to indicate more than one condition;
- Select the ">=" and "<=" signs from the Operator list;
- Enter ".20" and "-.20" as the Values

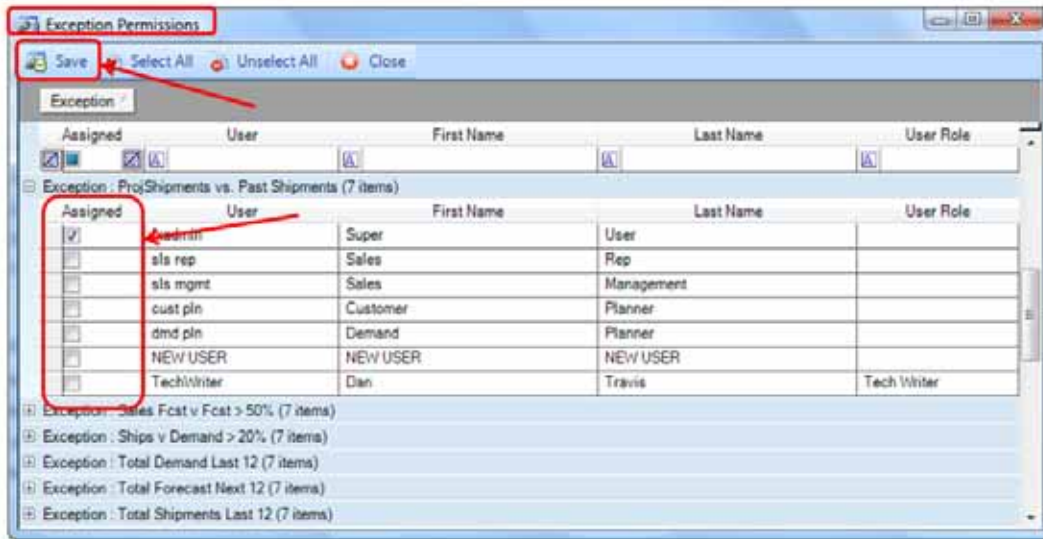
The screenshot shows the 'Exception Definition' window in QAD. On the left, there are fields for 'Periods in Bucket' (set to 1), 'Method inside Buckets' (set to Sum), 'Calculate' (set to %Variance), and 'Method outside Buckets' (set to Max). On the right, there is a table for defining conditions. The table has three columns: 'Operator', 'Value', and 'Condition Type'. The first row shows the operator '>=' and the value '.20'. The second row shows the operator '<=' and the value '-.20'. The 'Condition Type' column for both rows is set to 'Or'. A red rectangle highlights the table area.

Operator	Value	Condition Type
>=	.20	Or
<=	-.20	Or

Assign the Exception to Users

Assign the Exception to Users

- Once the Exception is created, it needs to be assigned to users



- 1 Select the created Exception in the Exception List.
- 2 Click the Permissions button.
- 3 In the Exception Permissions window, use the check boxes in the Assigned column to indicate which Users will have access to the Exception.
- 4 Click Save.

The Exception is now available for use by the selected Users.

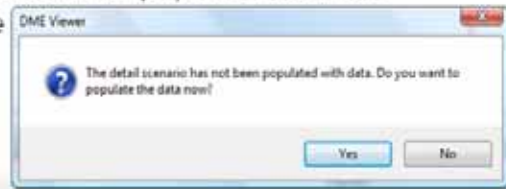
Chapter 26

Detailed Scenario – Viewer Population Wizard

Accessing Data through the Viewer

Accessing Data through the Viewer

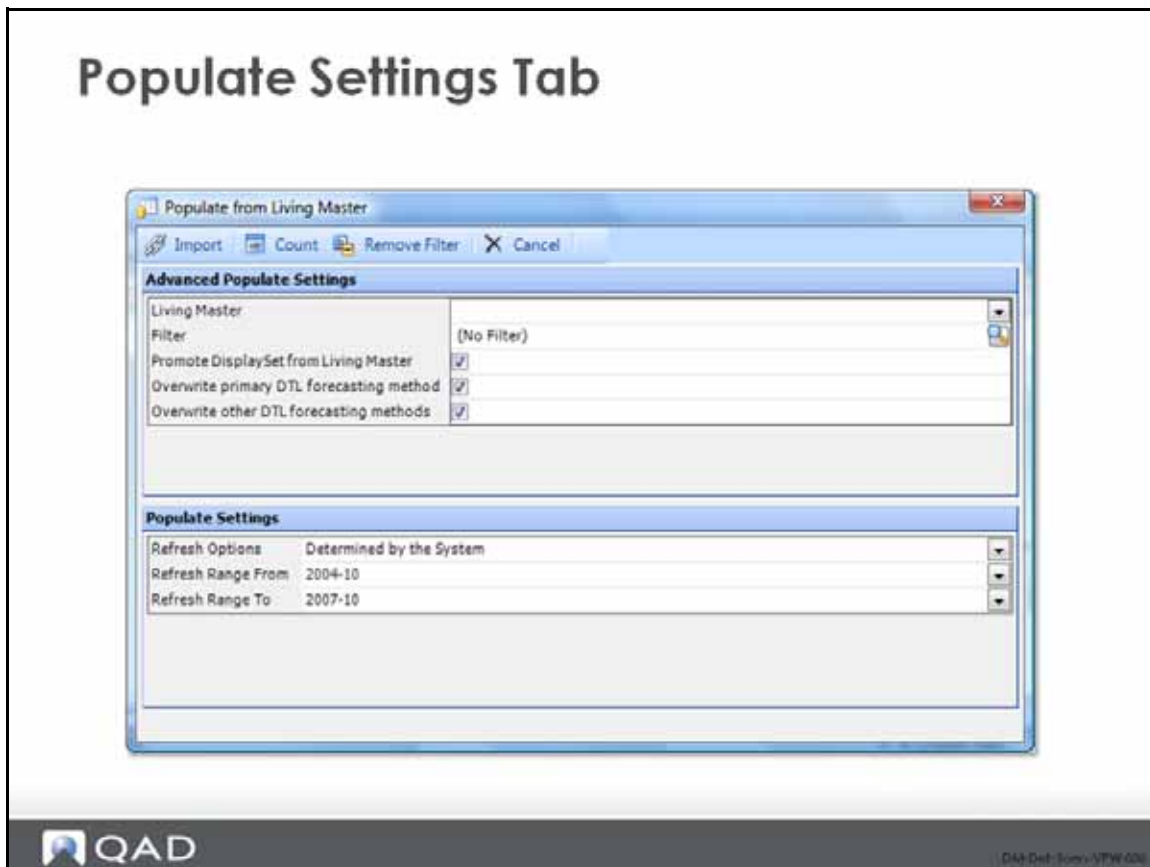
- When opening a **DTL Scenario**, the data available is based on the **permissions** assigned by the System Administrator
 - The first time a user accesses their **DTL scenario**, it will be empty
 - The **DME Viewer** pop-up window asks the user to populate the **DTL scenario** with the forecasted data from the **Living Master Scenario**
 - Click **Yes** to populate the scenario with data. If you click No, the scenario will remain empty and can be populated at any time.



D:\DME-Tools\VPW-001

Note This step is not required when logging into a Living Master Scenario.

Populate Settings Tab

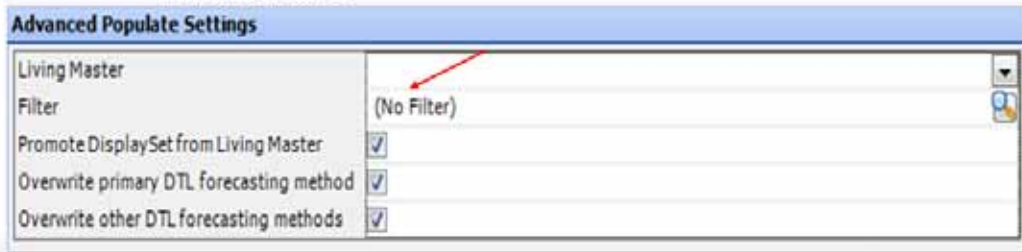


The Populate from Living Master screen displays, allowing the user to download data from a Living Master Scenario.

- 1 Select the Living Master from the drop-down box in which the data resides.
- 2 Select a Filter from the drop-down box, or leave No filter selected, if a filter is not desired to work with a subset of the available series.
- 3 Click Count to see how many series would be imported based on the current settings.

Populate Settings Tab

- Select **Promote Display Set** from Living Master to use the same Alias field names defined in the Living Master Display Set
 - Select **Overwrite Primary DTL** forecasting method to overwrite any changes to the primary forecasting setting for series in the DTL scenario
 - Select **Overwrite other DTL forecasting methods** to overwrite all other user created forecast settings in the DTL scenario



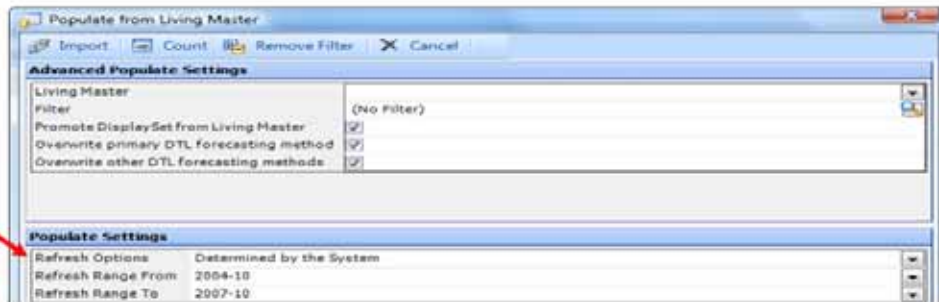
Advanced Populate Settings	
Living Master	
Filter	(No Filter)
Promote DisplaySet from Living Master	☒
Overwrite primary DTL forecasting method	☒
Overwrite other DTL forecasting methods	☒

Note The last two settings will populate the DTL scenario with the forecast settings from the Living Master. Any forecast settings created by the user in the DTL scenario are lost if they are not committed back to the Living Master.

Populate Settings – Refresh Options

Populate Settings – Refresh Options

- **Determined by the System** – Refreshes existing series information, but adds new series that do not exist (Default)
 - **Refresh Only** – Refreshes existing series information only
 - **Recreate Target Scenario** – Removes all series and reloads the data associated with the series



Refresh Range

Refresh Range

- The system will default to the complete historical and forecast period date range available
 - If this range is not desired change the From and To values

Populate from Living Master

Import Count Remove Filter Cancel

Advanced Populate Settings

Living Master

Filter (No Filter)

Promote DisplaySet from Living Master ☒

Overwrite primary DTL forecasting method ☒

Overwrite other DTL forecasting methods ☒

Populate Settings

Refresh Options Determined by the System

Refresh Range From 2004-10

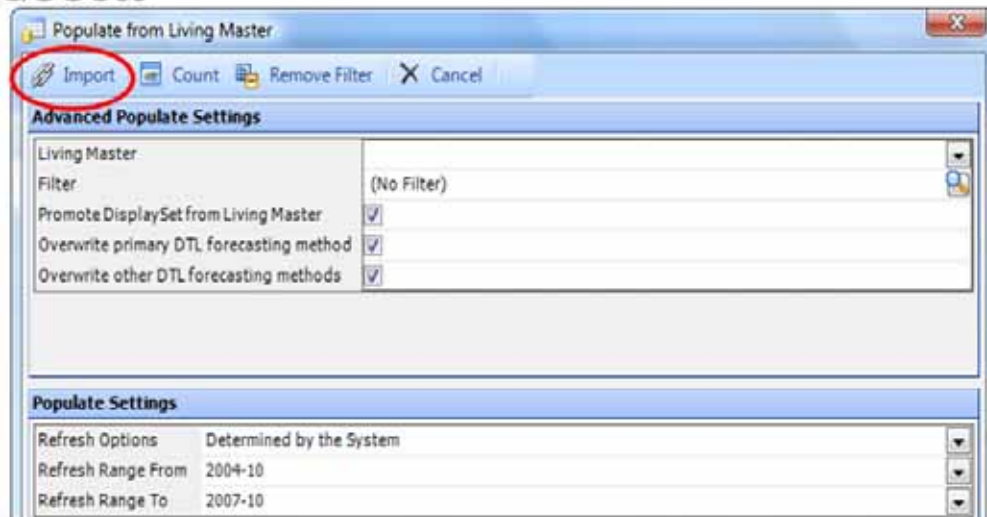
Refresh Range To 2007-10

Note Not required when “Recreate Target Scenario” is selected.

Accessing Data through the Viewer

Accessing Data through the Viewer

- Click the **Import** button to populate the scenario with all data to which the user has access

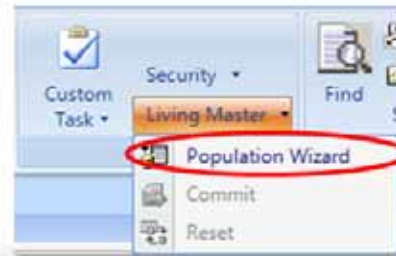


Note If you click Cancel, the scenario will remain empty, but can be populated at any time.

Populating The Detailed Scenario

Populating The Detailed Scenario

- The **DTL scenario** can be populated at any time:
 - The **DTL scenario** should be re-populated after the month-end process has updated the **Living Master**
 - The **Population Wizard** can be found in the **ribbon** on the **Living Master drop-down** in the **Scenarios section** of the **Home tab**
 - The same setting options previously described will be available
 - After work is complete the changes are committed back to the Living Master



Viewer Population Wizard – Recap

Viewer Population Wizard – Recap

- The **DTL scenario** can be populated at any time.
- The **DTL scenario** should be re-populated after the month-end process has updated the Living Master.
- The **Population Wizard** can be found under the **Living Master menu option** in the **Scenarios section** of the **Home tab**

Chapter 27

ABC Analysis

Using ABC Analysis

Using ABC Analysis

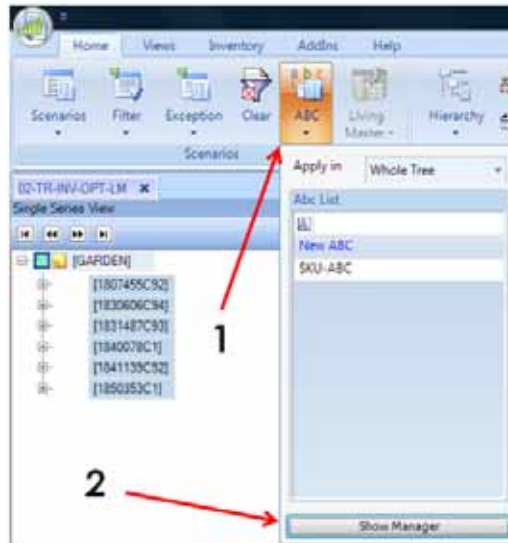
- **ABC templates** define reusable settings to perform ranking calculations on your data
- **ABC templates** allow the user to select and display which SKU's, customers, or regions, represent the majority of your business
- **Conversion factor** options within ABC templates allows for the calculation of rank in terms of different measures such as cost or revenue
- Rankings can be based on actual data or forecast data

Creating ABC Templates

Creating ABC Templates

1. Click the **ABC** icon in the ribbon to expand the **ABC List** drop-down
2. Click the **Show Manager** button

The **ABC Manager** window displays



Creating ABC Templates - Name

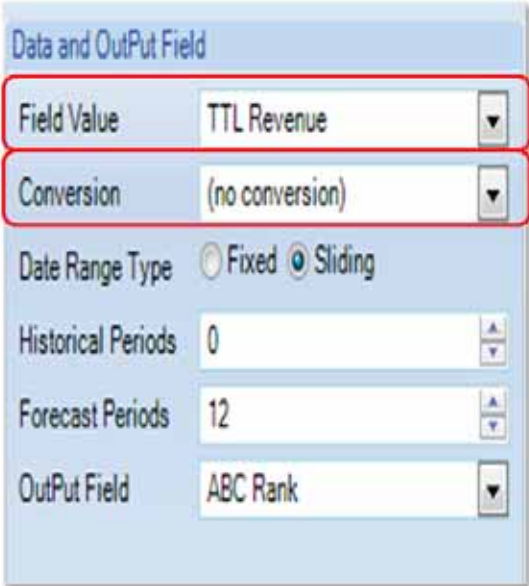
Creating ABC Templates - Name

- In the **ABC Manager**, click the **New** button
 - The fields in the **ABC Manager** panel are cleared
- In the **General** section, enter a **Name** for ABC Template, such as "Customer Rank"
- Enter an optional **Description** for the template

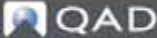


DMABC-2016-040

Data & Output Field



- **Field Value** - Opinion Line to use for ranking
 - This can be a calculated opinion line
- **Conversion** - allows user to create a calculation manually i.e. Choose Field Value = Sales Fcst and Conversion = Price to create a calculation to rank ABC based on Total Revenue


TMA ABC Analysis v3.0

In the Data and Output Field panel, use the Field Value drop-down list to select the desired Opinion Line, such as “Final Fcst”.

Select the desired Conversion from the list. The default setting is (no conversion). When the conversion math is applied it is (Field Value * Conversion = Ranking %).

Date Range

Date Range

- Date Range Type buttons are Fixed or Sliding and the fields below will vary based on the selection
- Select field to populate with rank in Output Field drop-down box

The image displays two side-by-side screenshots of the 'Data and OutPut Field' dialog box, illustrating the configuration for 'Fixed' and 'Sliding' date range types. Both screenshots have a red box highlighting the 'Date Range Type' section.

Left Screenshot (Fixed):

- Field Value: UserValue04
- Conversion: ConvFactor01
- Date Range Type: ☒ Fixed ☐ Sliding
- Start Period: 2009-06
- End Period: 2010-05
- OutPut Field: ABC Rank

Right Screenshot (Sliding):

- Field Value: TTL Revenue
- Conversion: (no conversion)
- Date Range Type: ☐ Fixed ☒ Sliding
- Historical Periods: 0
- Forecast Periods: 12
- OutPut Field: ABC Rank

Fixed:

Use specific Start and End periods for the range

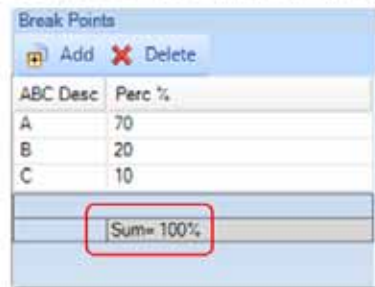
Sliding:

Specify a number of Historical and Forecast Periods to use as a date range, periods covered by range will always be re-calculated from current date

Setting Break Points

Setting Break Points

- In **Break Points** section, choose the **Perc %** (percentages) to group
 - A = Top 70 %
 - B = Mid 20%
 - C = Lowest 10%
- Use **Add** and **Delete** buttons to insert or remove categories



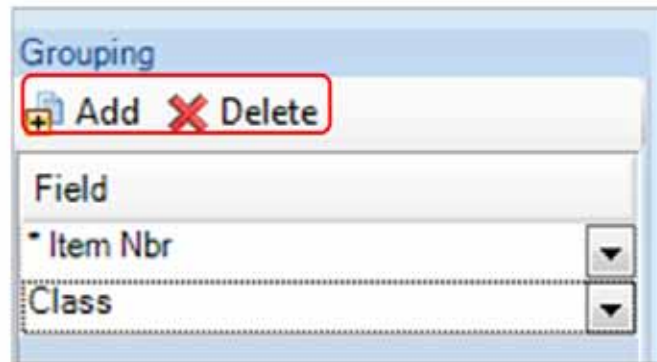
ABC Desc	Perc %
A	70
B	20
C	10
Sum= 100%	

- The total of all percentages must equal 100%

Grouping Section

Grouping Section

- **Grouping** section, use drop-down lists to select fields on which to base the ranking
 - records will be ranked by Item Nbr and Class

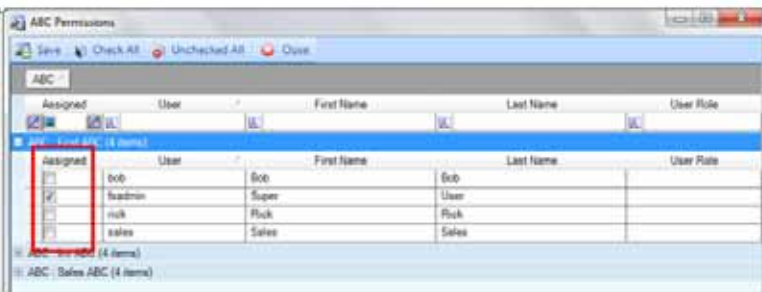
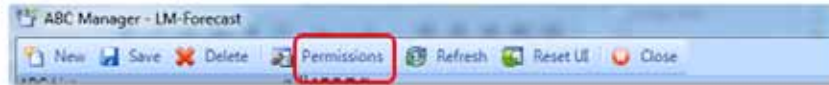


- Use **Add** and **Delete** buttons to insert or remove fields from grouping

Granting Permissions

Granting Permissions

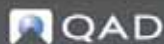
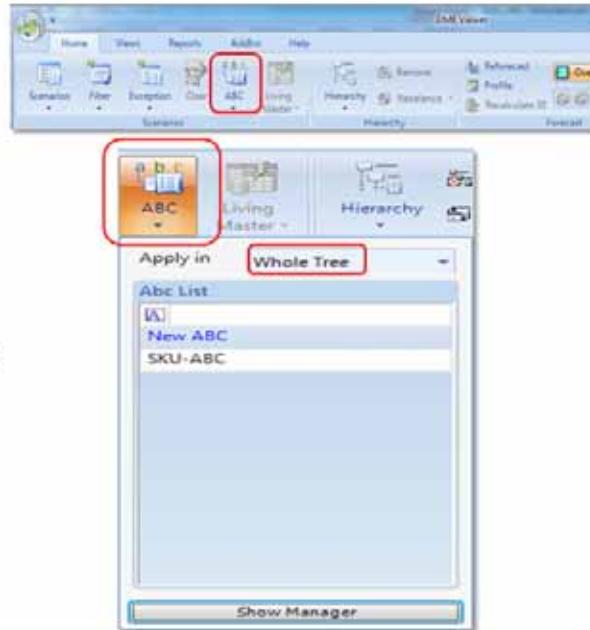
- Once the **ABC Template** has been created, you can assign users to it
 - Select the template and click the Permissions button
 - Use check boxes in the Assigned column to indicate users with access to this template
 - Click Save



Run ABC Analysis

Run ABC Analysis

- Click ABC icon in ribbon to expand ABC List drop-down
- Use Apply In drop-down list to indicate where template should be applied



DM-ABC Analysis 100

- Whole Tree applies ABC Template to all levels of a hierarchy, available only when a hierarchy is applied
- Scenario allows User to choose a specific Scenario for use, current Scenario displays as the default
- Select the template to apply from the ABC List
- The template automatically applies at the selected level

View ABC Analysis

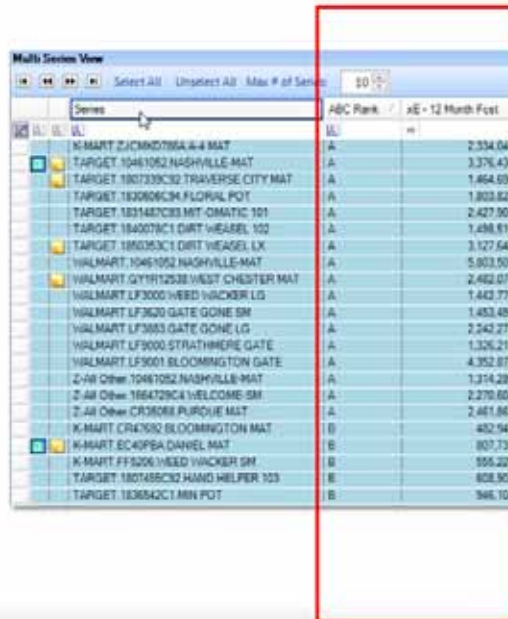
View ABC Analysis

- There are several options to use results of the ABC analysis
 - Add the attribute (ex: ABC Rank) to the Multi-Series View using the Attribute Selector
 - Look at the attribute on the Series Information window
 - Use the attribute for creating a filter to work in the viewer

View ABC Analysis – Multi-Series View

View ABC Analysis – Multi-Series View

- **Multi-Series View** shown with **ABC Rank** (Output Field from ABC template)
- The "**12 Month Fcst**" contains the values used for the **ABC rank**
 - These values were calculated using an Exception similar to the conversion in the ABC template



Series	ABC Rank	xE - 12 Month Fcst
K-MART ZJCMND786A A-4 MAT	A	2,334,040
TARGET 10461062 NASHVILLE-MAT	A	3,376,430
TARGET 1807339C32 TRAVERSE CITY MAT	A	1,464,690
TARGET 1830806C34 FLORAL POT	A	1,803,822
TARGET 1831487C33 MIT-OMATIC 101	A	2,427,906
TARGET 1840078C1 DIRT WHEEL 102	A	1,498,616
TARGET 1850353C1 DIRT WHEEL LX	A	3,127,643
WALMART 10461062 NASHVILLE-MAT	A	5,903,505
WALMART GY1H12533 WEST CHESTER MAT	A	2,462,674
WALMART LF3000 WOOD WACKER LG	A	1,443,770
WALMART LF3620 GATE GONE SM	A	1,453,496
WALMART LF3003 GATE GONE LG	A	2,242,271
WALMART LF3000 STRATHMORE GATE	A	1,326,215
WALMART LF3001 BLOOMINGTON GATE	A	4,352,871
Z-Air Other 10461062 NASHVILLE-MAT	A	1,314,280
Z-Air Other 1864729C4 WELCOME SM	A	2,270,604
Z-Air Other CR3608 PURDUE MAT	A	2,461,863
K-MART CR47632 BLOOMINGTON MAT	B	482,941
K-MART EC40PBA DANIEL MAT	B	807,735
K-MART FF5206 WOOD WACKER SM	B	555,229
TARGET 1807455C32 HAND HELPER 103	B	808,903
TARGET 1836842C1 MIN POT	B	546,103

View ABC Analysis – Output Field

View ABC Analysis – Output Field

- **Multi-Series View** shown with **ABC Rank (Output Field from ABC template)**
- The "**12 Month Fcst**" contains the values used for the **ABC rank**
 - These values were calculated using an Exception similar to the conversion in the ABC template

Series Information	
Customer	
Channel	FASHION
Customer Name	TARGET
Sales Rep	
General	
* Customer Nbr	58000
* Item Nbr	1807339C92
Cost	35.69
Price	39.99
xE - 12 Month Fc	1,464,690
xE - 12 Month H	1,356,941
xE - Has Outlier	
xE - Marketing	Marketing Flag
xE - No Sales	
xE - Orders > Fc	
xE - Sales Vs Bt	Sales > 35%
xE - Supply Chas	Hi MAPE-Hi Vol
xP - PP Date	
xP - PP User	
Item Link	
Discontinued Dt	
HF vs LF	LF
Less than 2 year	
Sporadic	
Line Item	
Total Company	
Metric	
ABC Rank	A
COV	

Recap – ABC Templates

Recap – ABC Templates

- **ABC Templates** define reusable settings to perform ranking calculations on your data
 - Use **ABC Templates** to determine which SKU's, customers, regions, etc. represent the majority of your business
 - Use **Conversion Factor** options within ABC Templates which allows calculation of rank in terms of different measures such as cost or revenue
 - Determine ranking based on actual data or forecast data

Chapter 28

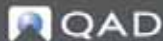
Event Manager

Overview - Event Manager

Overview - Event Manager

- **Events** are special situations or actions that can change forecasting behavior
- They can be a one time event, or expected to reoccur on some frequency
- Examples of **Events**
 - Sales promotion expected to drive volume up 20% for a month
 - Store closing for remodeling will result in selling 20,000 less units over a two month range
 - New contract ensures the sale of 10,000 units over the next four months

**NOTE: Events do not change the forecast.
They put the event value in a separate
opinion line.**



2014-2015 QAD Inc.

The Event Manager allows the user to create of Events which can be applied to one or more series:

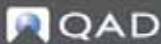
- Events can be applied to one or more periods of time
- Created Events can be shared with other users
- Only the owner that creates the Event can delete or update it

Note Events do not change the forecast. They put the event value in a separate opinion line.

Configuring Events – Event Categories

Configuring Events – Event Categories

- The Administrator will typically create an **Event Category** in the **Event Configuration** section of the **Admin Tool**
- Users can also be given **permission** to create **Event Categories**
- At least one Category must be defined in **DME Admin Tool** and there is no upper limit on the number created
- The **Name**, **Symbol**, and **Color** is defined for the **Category**
 - The **Description** field is optional



Task-Based Admin 500

The Event Configuration created in the Admin Tool defines which opinion lines are used for the history, forecast and event value entries. The Scenario must have an Event Configuration assigned before the Event functionality can be used.

Event Manager – Creating Events

Event Manager – Creating Events

- There are different ways to add or apply Events in DME
 - Create Events from the Graph View
 - Create Events from the Data View
 - Apply from the Event List
 - Edit Events by Series in the Event Manager
 - Create Events in the Event Manager
- Each of these methods will be covered in this training module

Creating Events from the Graph View

Creating Events from the Graph View

- On the a **Graph View**, left click on the **period** to create the **Event**, then **right click** and select **Create Event**



- The **Event Settings** screen displays with the **Event Date** populated with the selected period

Creating Events from the Graph

Creating Events from the Graph

- On the **Event Settings** screen, use the **Main** section to define the **Event**

The screenshot shows the 'Event Settings - [OEM]' window. The 'Main' section is highlighted with a red box and contains the following fields:

- Event Id: 4
- Name: BOGO
- Description:
- Category: Promo
- Market Spend: 1000.00
- Application Type: Additive

The 'Adjustment' section has the following fields:

- Adjustment: Percentage
- Adj. Value: 30.00

The 'Event Dates' section has the following field:

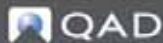
- Dates: 2007-11-

- The Event ID field will be pre-populated and cannot be edited
- The Description is optional
- The options in the Category drop down are those created in the DME Admin Tool
- Market Spend is used on the Margin Analysis report, such as the amount spend on a newspaper ad
- The Application Type options are “Additive” and “Multiplicative”
 - This defines if the value will add to or multiple as a lift to the base forecast generated to create the Final Fcst

Creating Events from the Graph

- The **Adjustment** section allows definition on how the data will be effected Possible values are
 - Judgment Events user entered
 - **Amount** - add the specified amount that will add to the existing value
 - **Percentage** - adds a percentage of the existing value
 - **Statistical** - used to run the **Event Model** on history data
 - When using a **Statistical** adjustment past events must selected

The screenshot shows the 'Adjustment' dialog box. The top section has a dropdown menu for 'Adjustment' currently set to 'Percentage', and a text field for 'Adj. Value' containing '0.00'. A red arrow points to the 'Adjustment' dropdown. The bottom section shows a list of adjustment types: 'Amount', 'Percentage', and 'Statistical'. A red arrow points to the 'Statistical' option in the list.

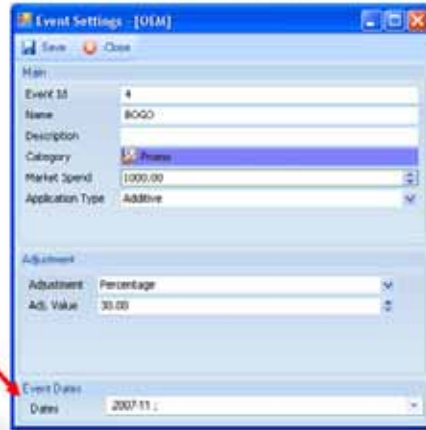


Link Event Manager

Note If Statistical is selected as the Adjustment type, the Adj. Value and Application Type fields will become inactive.

Creating Events from the Graph

- **Event dates** can be in the past or future
 - There must be at least one date in the past
 - The selected period will display automatically
 - others can be selected from the drop down list



The screenshot shows the 'Event Settings - [OIM]' dialog box. It has a 'Main' section with fields for 'Event ID' (4), 'Name' (BOGO), 'Description', 'Category' (Promo), 'Market Spend' (1000.00), and 'Application Type' (Additive). Below this is an 'Adjustment' section with 'Adjustment' set to 'Percentage' and 'Adj. Value' set to '30.00'. At the bottom, the 'Event Dates' section is highlighted with a red arrow, showing a 'Dates' field with '2007-11-1'.

Note Events do not change the forecast. They put the event value in a separate opinion line.

Creating Events from the Graph

- Click the **Save** button, the user will be given the option to **Save only** or **Save and Apply**
 - Selecting Apply will run event calculations and re-balance the series



Notice the adjustment has been made to the 2007-11 period in the Graph View.

Hovering over the icon will display the event note.

Creating Events from the Data View

Creating Events from the Data View

- On a **Data View**, left click on the period to create the **Event**, then right click and select **Create Event**

Data View [K-MART] [CH33058] [PAPER MATE]

History: 3-25

Description	Act Hist	Adj Hist	S1-Baseline	S2-Override	S3-Promo	S4-Consensus Fcast	Event Volume
2008-10	300	300	116				300
2008-11	0	0	131				0
2008-12	600	600	0				600
2009-01	200	200	443	0			200
2009-02	1,300	1,300	35	0			1,300
2009-03	400	400	1,176	0			400
2009-04	0	0	257	0			0
2009-05	1,100	1,100					1,100
2009-06	200	200					200
2009-07	0	0					0
2009-08							0
2009-09							0
2009-10							0
2009-11							0

Graph View Data View Demand Data Statistics View Advanced Statistics View

- The Event Settings screen displays, follow steps **Creating Events from Graph View**



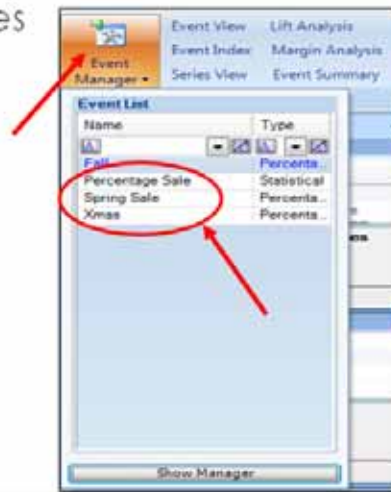
Trak-Trend - Page 106

Note Events do not change the forecast. They put the event value in a separate opinion line.

Event Manager – Apply Events

Event Manager – Apply Events

- The **Event Manager drop-down** allows the user to apply existing **Events** to a Series
 - This will apply the adjustment to the same periods for one or more series



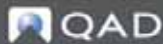
- 1 Select a series from the Single Series View or press the Ctrl key to select multiple series from the Multi Series View.
- 2 Click the Event Manager button in the toolbar to expand the Event List drop-down.
- 3 Select the desired Event from the Event List to apply.

All selected series will have the values applied as defined in the selected Event.

Overview – Event Manager

Overview – Event Manager

- The **Event Manager** feature in DME allows the user to make adjustments to a forecast based on an event that occurred or will occur in future periods
- The **Event Manager** consists of six tabs that can be used to mark past events
 - Calculate the impact
 - Copy that impact to future periods
- The **Event Manager** also provides users with event analysis capabilities that can be used to determine profitability



Trak-Tuned Page 126

Note Events do not change the forecast. They put the event value in a separate opinion line.

Edit Event By Series

Edit Event By Series

- The **Series View** tab of the **Event Manager** allows the user to edit
 - the value configuration and selected periods to which an **Event** was applied to for the selected Series

The screenshot displays the 'Event Manager' application in 'Series View' mode. On the left, a list of series is shown, including 'Event Index', 'Fall', 'Percentage Sales', 'Spring Sale', and 'Times'. The main area features a table with columns for 'Series', 'Option Lines', and various time periods from '2009-01' to '2009-06'. The '2009-03' column is highlighted in yellow, indicating an active event. Below this, a 'Linked Events' table lists events such as 'Event Index', 'Fall', 'Percentage Sales', and 'Spring Sale' with their respective values and dates. A red arrow points to the '2009-03' column in the main table.

- Select a series from the Single Series View or press the Ctrl key to select multiple series from the Multi Series View
- In the Events section of the toolbar, click the Series View button
- On the Series View panel click the Refresh button
- The data for the selected series will display. Any Events applied to the current periods will display in yellow (See next slide)

Edit Event By Series

- In the **Linked Events** section the **Event** can be removed
 - or change the periods to which it was applied

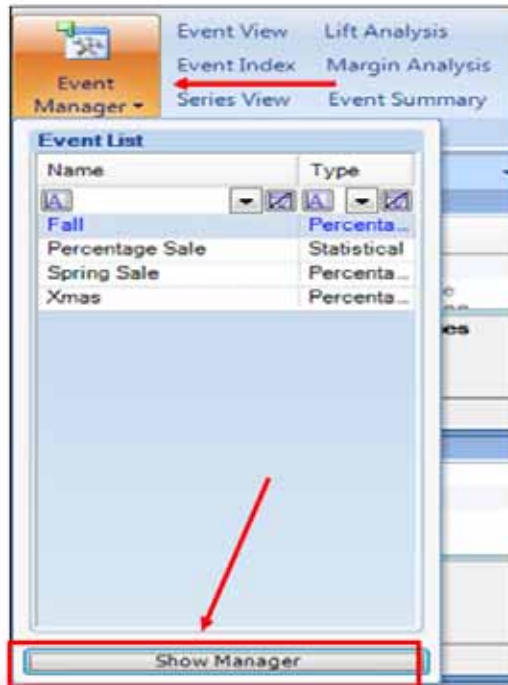
Event Id	Category	I	C	Event Name	Type	Value	Series	Dates	Remove
11	Index			Event Index	Index	0	[10461052]	2006-02 ... 2006-0...	☒
5	Promotion			Spring Sale	Percentage	14.2	[10461052]	2009-03 ; 2010-03...	☐
10	Sales			Percentage Sale	Statistical	0	[10461052]	2009-03 ; 2009-06...	☐

- Click the Dates field to open a list of periods to select or remove
- To remove an Event from the series, select the check box in the Remove column and click the Remove Selected button
- Click the Save button and the changes will be applied

Create Events in the Event Manager

Create Events in the Event Manager

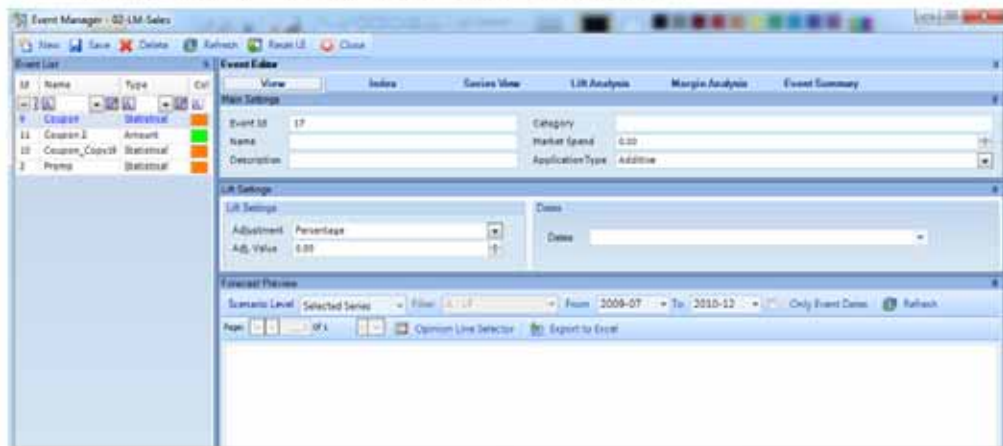
- Click the **Event Manager** button in the toolbar to expand the **Event List** drop-down
- Click the **Show Manager** button at the bottom of the drop-down



Event Manager – Creating Events

Event Manager – Creating Events

- The **Event Manager** screen displays
 - Click on the **View** tab and then the **New** button to begin a new event configuration in **Event Editor** section in the right-hand window



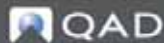
Event Manager – Creating Events

- In the **Main Settings** section enter a **Name** and **Description**
 - The **Event ID** field will be pre-populated and cannot be edited
 - Enter a **Name** and a Description (optional)
 - The options in the **Category drop down** choices are those created in the **DME Admin Tool**
 - Enter **Market Spend** if desired
 - The **Application Type** options are **Additive** and **Multiplicative** as described in earlier sections of this module



The screenshot shows a 'Main Settings' window with the following fields and values:

Field	Value
Event Id	17
Name	BOGO spring event
Description	
Category	BOGO
Market Spend	0.00
ApplicationType	Additive

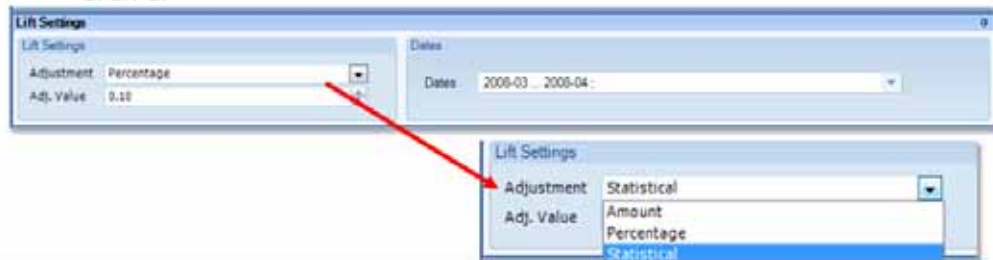


Disk Event Manager 1.7.0

Note Events do not change the forecast. They put the event value in a separate opinion line.

Event Manager – Creating Events

- In the **Lift Settings** section select the type of **Adjustment**
 - **Amount** - add the specified amount to the existing value
 - **Percentage** - adds a value calculated as percentage of the existing forecast value
 - **Statistical** - used to run the Event Model on history data



When using a Statistical adjustment, the user must select past events.

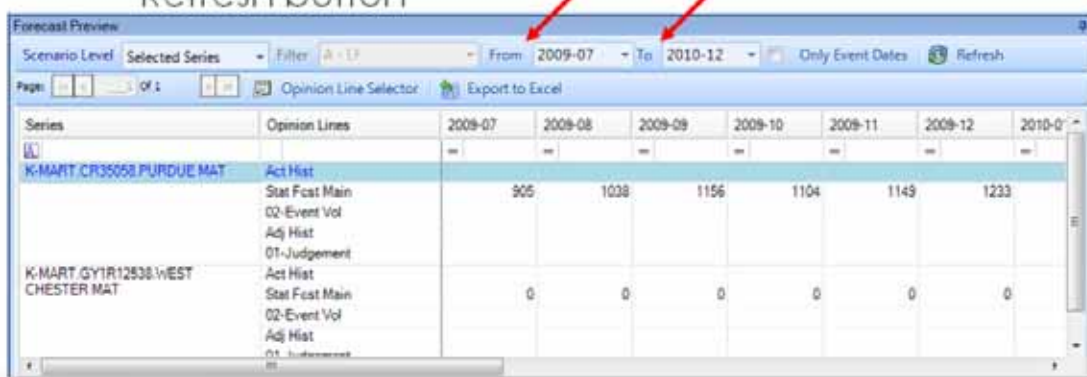
Event Manager – Creating Events

- The **Adj. Values** field indicates the amount of adjustment to apply based on the selected **Adjustment type**
 - In the **Dates** section Click on the **Dates** field and use the drop-down list to select the periods to which this Event will be applied

The screenshot displays the 'Event Manager' interface. On the left, the 'Lift Settings' panel shows 'Adjustment' set to 'Percentage' and 'Adj. Value' set to '10.00'. On the right, the 'Dates' panel shows a 'Dates' field with the value '2009-09 ; 2009-05 ; 2009-12 ;'. A red arrow points from the 'Dates' field to a dropdown menu that is open, showing a list of periods from 2007-07 to 2009-01. The dropdown menu has a 'Check All' button and an 'Uncheck All' button.

Event Manager – Creating Events

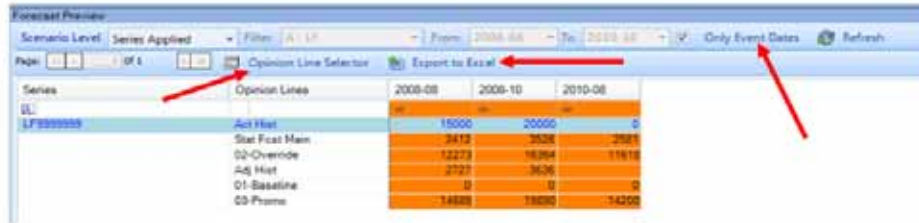
- The **Forecast Preview** panel shows the impact of the **Event** based on the current settings
 - Use the From and To fields to select the periods to preview a specific time range and click the Refresh button



Series	Opinion Lines	2009-07	2009-08	2009-09	2009-10	2009-11	2009-12	2010-01
K-MART CR35058 PURDUE MAT	Act Hist							
	Stat Fcast Main	905	1038	1156	1104	1149	1233	
	Q2-Event Vol							
	Adj Hist							
	Q1-Judgement							
K-MART GYR12538 WEST CHESTER MAT	Act Hist							
	Stat Fcast Main	0	0	0	0	0	0	
	Q2-Event Vol							
	Adj Hist							
	Q1-Judgement							

Event Manager – Creating Events

- The data impacted by the **Event** displays in the **color** of the selected **Category**
 - Click the **Only Event Dates** button to show only event dates instead of a date range
 - Click **Refresh** to see results



Series	Opinion Lines	2008-08	2009-10	2010-08
DL				
LF5500005	Act Hist	15000	20000	0
	Stat Post Main	3412	3538	2581
	02-Override	12273	16364	11618
	Adj Hist	2727	3636	
	01-Baseline	0	0	0
	03-Promo	14888	19888	14208

- The Forecast Preview can be exported to Excel for analysis, click on **Export to Excel** and save the file
- Click the **Opinion Line Selector** button to select the lines to show in the **Forecast Preview**

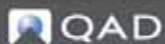
Event Manager – Creating Events

- When finished click the **Save** button
 - DME will then ask if the user wants the calculations in this event to be applied
- Click **Yes** to apply the **Event** or click **No** to **Save only**
 - The **Event Status** field in the **Main Settings** section is then updated to **Applied**
- The **Event** is now saved and added to the **Event List** and available for applying to other series

Create an Event Index

Create an Event Index

- DME provides the ability to create and apply an **Event Index**
- The **Event Index** is an opinion line used to indicate multiple events over a span of time
- DME provides two methods for creating an Event Index
 - Enter an **Event ID** on the **Data View**
 - Use the **Event Index** tab on the **Event Manager** to create the index and apply it to one or more series



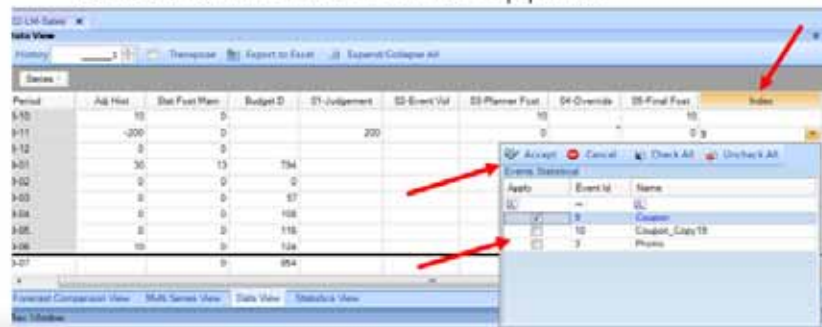
2014-2015 QAD

This feature is similar to the Event Index in the Wizard in previous versions and works directly with the Event Model forecast method.

Event Manager – Creating Events

Event Manager – Creating Events

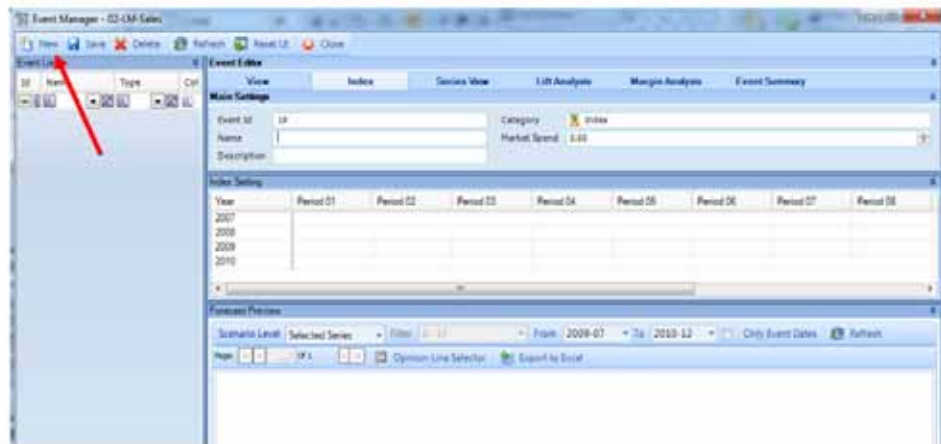
- **Right-click** on the Index opinion line to open the **Events Statistical** window
 - Check the **Apply** column of the desired statistical **Event**
 - Click on **Accept** and the **Event ID** will be populated into the opinion line
 - **Save** and the **Event** will be applied



Create an Event Index – Event Manager

Create an Event Index – Event Manager

- On the Home tab in the **Events** section of the toolbar, click the **Event Index button**
 - The **Event Manager** displays the Index tab
 - Click the **New button** to begin



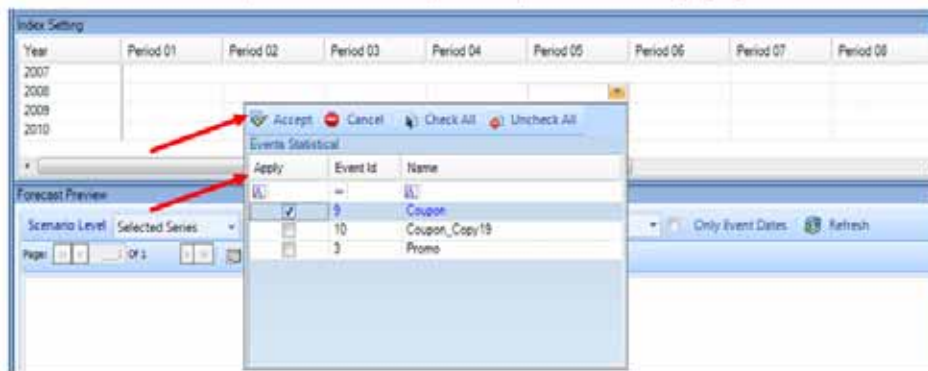
Create an Event Index – Event Manager

- Enter information into the **Main Settings** section including
 - The **Event ID** field in the **Main Settings** section is system-generated and pre-populated
 - The ID specifies the order in which events are applied
 - Give the **Index Event** a **Name** and if desired a **Description**
 - The Category field defaults to **Index**
 - The **Symbol** assigned to this **Category** will display on the **Graph View** for the periods to which the Index is assigned

Event Id	18	Category	Index
Name	Newspaper ad	Market Spend	0.00
Description			

Create an Event Index – Event Manager

- The **Index Setting** section allows the user to assign statistical events to individual periods
 - Click on an individual year and period and check the **Apply** column of the desired statistical **Event** to assign to this period and select **Accept**
 - Save and you will be prompted to **Apply** the **Event**



Create an Event Index – Event Manager

- The **Forecast Preview** panel shows the impact of the Event based on the current settings
- Click the **Refresh** button to populate this section based on the settings selected above

Forecast Preview

Scenario Level Series Applied Filter A-UF From 2008-01 To 2008-12 Only Event Dates Refresh

Page: 1 of 1 Opinion Line Selector Export to Excel

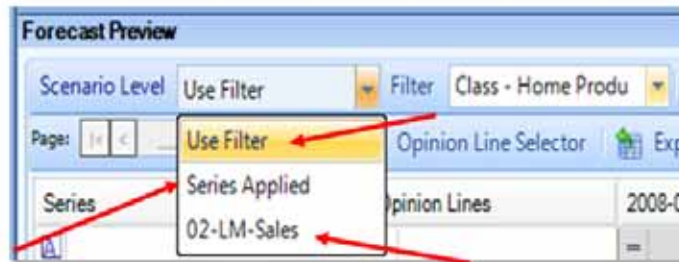
Series	Opinion Lines	2008-01	2008-02	2008-03	2008-04	2008-05	2008-06	2008-07
K-MART.CR35058.PURDUE MAT	Act Hist	100	100	500	300	0	200	
	Stat Fcast Main	325	242	153	112	95	36	
	01-Judgement			0				
	02-Event Vol			139				
K-MART.GY1R12538.WEST CHESTER MAT	Act Hist	30	0	0	20	0	0	
	Stat Fcast Main	7	5	0	1	9	5	
	01-Judgement			0	0			

- Periods impacted by the Event are highlighted in the color of the selected Category, such as the “2008-05” period in yellow below
- The From and To fields are used to indicate which periods are displayed in the preview
- Click the Only Event Dates button to show only event dates instead of a date range
- Click the Refresh button again after making changes to the settings to update the Forecast Preview

Event Manager – Event Index

Event Manager – Event Index

- Use the **Scenario Level** drop down to select, **Save** and **Apply** to other series
 - Select **Use Filter** to select a **Filter** from the activated drop down to apply to all series within the Filter
 - Select **Series Applied** to show the current highlighted series
 - Select the **scenario name** to apply to all series in the scenario



Tisk-Tisk Page 291

Note Events do not change the forecast; they put the event value in a separate opinion line.

Event Manager – Lift Analysis

Event Manager – Lift Analysis

- The **Lift Analysis** tab is used to review the calculated lift value from statistically applied events

Item	Actual Demand	Lift Factor	2007-01	2007-02	2007-03	2007-04	2007-05	2007-06	2007-07	2007-08	2007-09	2007-10	2007-11	2007-12	2008-01
(K.MAT) (C01554) (PURDUE MAT)	Actual Demand		4000	4300	1900	700	400	300	900						
(K.MAT) (C01554) (PURDUE MAT)	Lift Factor														
(K.MAT) (C01700) (BLOOMINGTON MAT)	Actual Demand		2000	3000	2000	600	2400	2200	3100						
(K.MAT) (C01700) (BLOOMINGTON MAT)	Lift Factor														
(K.MAT) (C01804) (PUNNET MAT)	Actual Demand		20525	20150	21750	10250	50375	20810	13450						
(K.MAT) (C01804) (PUNNET MAT)	Lift Factor														
(K.MAT) (C01911) (WATER SNAKE 101)	Actual Demand		600	100	50	150	100	150	300						
(K.MAT) (C01911) (WATER SNAKE 101)	Lift Factor														
(K.MAT) (C01920) (WEDD WACKER SH)	Actual Demand		15000	9375	10700	10175	12125	8250	14375						
(K.MAT) (C01920) (WEDD WACKER SH)	Lift Factor														
(K.MAT) (C01920) (WEDD WACKER SH)	Actual Demand		230	250	150	100	100	50	400						
(K.MAT) (C01920) (WEDD WACKER SH)	Lift Factor														
(K.MAT) (C02111) (MONEY SPACE)	Actual Demand				400	0	0	0	0						
(K.MAT) (C02111) (MONEY SPACE)	Lift Factor														
(K.MAT) (C02300) (CANADA SPACE)	Actual Demand		700	30	0	30	30	25	700						
(K.MAT) (C02300) (CANADA SPACE)	Lift Factor														
(K.MAT) (C02654) (MT ONATIC LG)	Actual Demand														
(K.MAT) (C02654) (MT ONATIC LG)	Lift Factor														
(K.MAT) (C01912) (WEDD CHESTER MAT)	Actual Demand		10	0	10	0	30	0	30						
(K.MAT) (C01912) (WEDD CHESTER MAT)	Lift Factor														
(K.MAT) (C0064000) (PEACHES SPACE)	Actual Demand														
(K.MAT) (C0064000) (PEACHES SPACE)	Lift Factor														
(K.MAT) (C02000) (WEDD WACKER LG)	Actual Demand			100	0	0	0	0	60						
(K.MAT) (C02000) (WEDD WACKER LG)	Lift Factor														
(K.MAT) (C02000) (WEDD WACKER LG)	Actual Demand		650	750	350	575	500	575	850						
(K.MAT) (C02000) (WEDD WACKER LG)	Lift Factor														
(K.MAT) (C02000) (WEDD WACKER LG)	Actual Demand			10	0	30	10	0	10						
(K.MAT) (C02000) (WEDD WACKER LG)	Lift Factor														

Event Manager – Lift Analysis

- The **Scenario Level drop-down** allows the user to select series for display and review

Scenario Level	Index	Series View	Lift Analysis	Margin Analysis
Scenario Level	LM-Sales	Filter	Refresh	Export to Excel
[K-MART] [C25]			Actual Demand	4800 4300 1100 700
[K-MART] [C347692] [BLOOMINGTON MAT]			Actual Demand	2000 3200 2000 800
[K-MART] [EC40PBA] [DANIEL MAT]			Actual Demand	26525 20150 21750 19250
[K-MART] [FF211] [WATER SNAKE 101]			Actual Demand	600 100 50 150

- Select Use Filter to select a Filter from the activated drop down to display all series within the Filter
- Select Selected Series Applied to show the current highlighted series
- Select the scenario name to display all series in the scenario
- Select Use Events to display all series with the applied selected Event
- Click the Refresh button after making changes to update the Lift Analysis view

Event Manager – Margin Analysis

Event Manager – Margin Analysis

- The **Margin Analysis** tab displays former and new forecasts, event adjustments, costs, and margins by series for a selected event

Event Editor

View Index Series View Lift Analysis **Margin Analysis** Event Summary

Scenario Level Use Events Filter: None From: 2009-07 To: 2010-12 Refresh

Price Ave Price Cost Ave Cost Events Statistical Export to Excel

	2009-07	2009-08	2009-09	2009-10	2009-11	2009-12
☒ [K-MART] [GY1R12530] [WEST CHESTER MAT]						
01-Baseline	31.45	0	1.53	4.72	4.6	
Event Volume	0	0	0	0	0	
04-Consensus Post	31.45	0	1.53	4.72	4.6	
Ave Price	92.75	92.75	92.75	92.75	92.75	
Ave Cost	55.69	55.69	55.69	55.69	55.69	
Original Revenue	2,916.99	0.00	141.91	437.78	428.65	
Original Cost	1,751.45	0.00	85.21	262.88	256.17	
New Revenue	2,916.99	0.00	141.91	437.78	428.65	
New Cost	1,751.45	0.00	85.21	262.88	256.17	
Market Spend	0.00	0.00	0.00	0.00	0.00	
Old Margin	1,165.54	0.00	56.70	174.92	170.48	
New Margin	1,165.54	0.00	56.70	174.92	170.48	

Event Manager – Margin Analysis

- The **Scenario Level** drop-down allows the user to review the analysis on a specific scenario, on specific events, or on series meeting filter criteria
- Select from the drop choices (refer to previous slides for choice definitions)



The screenshot shows the 'Event Editor' window with the 'Margin Analysis' tab selected. The 'Scenario Level' dropdown is set to 'Use Events'. The 'From' date is '2009-07' and the 'To' date is '2010-12'. The 'Refresh' button is highlighted. The table below shows data for '01-Baseline' and 'Event Volume' across the years 2009-07 to 2009-11.

	2009-07	2009-08	2009-09	2009-10	2009-11	2009-12
01-Baseline	31.45	0	1.53	4.72	4.8	
Event Volume	0	0	0	0	0	

- Use the **From** and **To** fields to indicate the periods to be included in the analysis

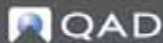
Event Manager – Margin Analysis

- Use the **Cost** and **Price** fields to select the opinion lines to use for analysis
 - The selected Opinion Lines display the results in **white**

The screenshot shows the 'Event Manager - Margin Analysis' window. It includes tabs for View, Index, Series View, Lift Analysis, Margin Analysis (selected), and Event Summary. Below the tabs are filters for Scenario Level, Use Events, and a date range (From 2009-07 to 2010-12). There are also buttons for Price, Ave Price, Cost, Ave Cost, Events, Statistical, and Export to Excel. The main table displays data for the following opinion lines: 01-Baseline, 04-Consensus Post, Ave Price, Ave Cost, Original Revenue, Original Cost, New Revenue, New Cost, Market Spend, Old Margin, and New Margin. The columns represent the years 2009-07, 2009-08, 2009-09, 2009-10, 2009-11, and 2009-12. The 'Ave Price' and 'Ave Cost' rows are highlighted in white, indicating they are selected for analysis.

	2009-07	2009-08	2009-09	2009-10	2009-11	2009-12
01-Baseline	31.45	0	1.53	4.72	4.8	
04-Consensus Post	31.45	0	1.53	4.72	4.8	
Ave Price	92.78	92.78	92.78	92.78	92.78	
Ave Cost	55.89	55.89	55.89	55.89	55.89	
Original Revenue	2,916.99	0.00	141.91	437.78	426.85	
Original Cost	1,751.45	0.00	86.21	262.86	256.17	
New Revenue	2,916.99	0.00	141.91	437.78	426.85	
New Cost	1,751.45	0.00	86.21	262.86	256.17	
Market Spend	0.00	0.00	0.00	0.00	0.00	
Old Margin	1,165.54	0.00	56.70	174.92	170.68	
New Margin	1,165.54	0.00	56.70	174.92	170.68	

- Only data for the selected Opinion Lines can be edited
- Click on any field in white to manually change the value



Click Event Manager

- Use the Events field to choose whether to include Statistical Events or Judgment Events in the analysis
- The options in the Event List will update each time the Events field is changed
- Click Refresh after changing any criteria to update the Analysis

Event Manager - Recap

Event Manager - Recap

- Allows for the creation and application of **Events** which can be applied to one or multiple series
- **Events** can be shared with other users but only the user who created the event can make changes
- **Events** can be created from the **Graph View**, the **Data View**, including user created views, or the **Event Manager window**
- Use the **Event Manager** drop-down to apply an Event
- Once an **Event** has been applied, the affected series is displayed with an icon corresponding to the event

Additional Advanced Concepts



Event Manager - Exercise

Event Manager - Exercise

- Define and create an historical event for a newspaper ad that gives a 10% lift, that reoccurs in a future period for multiple series

The screenshot displays the QAD Event Manager interface. On the left, the 'Data View' table shows historical data for a series. A right-click context menu is open over the '2008-07' period, with the 'Create Event' option highlighted. On the right, the 'Event Settings' dialog box is shown, configured for a new event.

Period	Adj Hist	Stat Fcst Main	01-Judgement	02-Event Vol	05-Fin
2008-06	14	8			
2008-07	50	50			
2008-08	50	34			
2008-09	10	11			
2008-10	14	19			
2008-11	50	13			
2008-12	10	10			
2009-01	50	50			

Event Settings - K-MART.LF3000.WEED WACKER LG

Main

Event Id: 19

Name: Newspaper ad 10%

Description:

Category: **Frame**

Market Spend: 0.00

Application Type: Multiplicative

Adjustment

Adjustment: Percentage

Adj. Value: 10.00

Event Dates

Dates: 2008-07

- Create an historical event for a newspaper ad that gives a 10% lift
- Right click on the period and select Create Event
- Give the Event a Name
- Select the Category
- Set the Application Type as Multiplicative
- Set the Adjustment as Percentage and the Adj Value as 10 to represent 10%
- Save

Event Manager - Exercise

- Notice the **Judgement event value** as been added to the opinion line and **Statistical Forecast** recalculated

02-LM-Sales

Data View

History | Transpose | Export to Excel | Expand/Collapse All

Series /

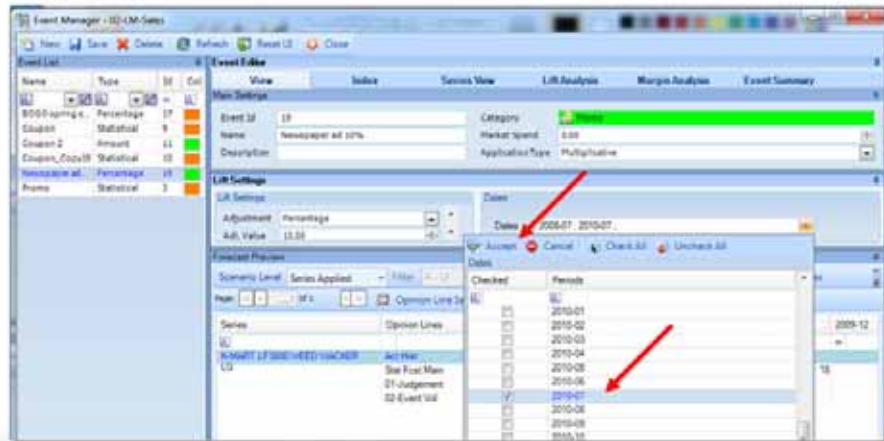
Period	Adj Hist	Stat Fcst Main	01-Judgement	02-Event Vol	05-Final Fcst	Index
2008-04	0	15			0	
2008-05	0	14			0	
2008-06	0	13			0	
2008-07	45	13	5		50	
2008-08	50	14			50	
2008-09	0	16			0	
2008-10	0	15			0	
2008-11	50	14			50	
2008-12	0	16			0	
2009-01	50	15			50	
2009-02	0	17			0	

Forecast Comparison View | Multi Series View | Data View | Statistics View

Event Manager - Exercise

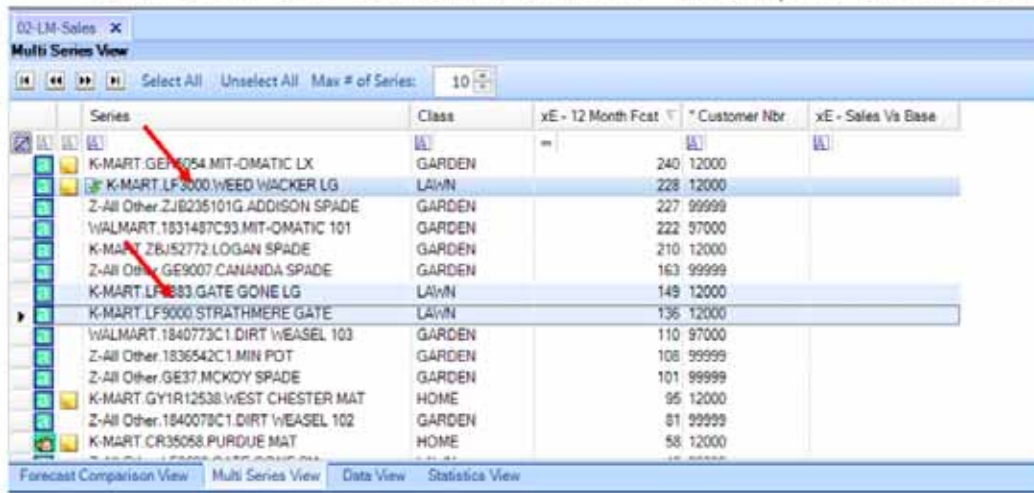
- Apply the Event to a future period
 - Select the period
 - Select **Edit Event**
 - And **add the future date**
 - **Accept**
 - **Apply**

Period	Adj. Val	See First Man	01-Judgement	02-Event Val	03-First First	Notes
2009-04	0.1	10				
2009-05	0.1	14				
2009-06	0.1	13				
2009-07	40	13				
2009-08	80	14				
2009-09	0.1	10				
2009-10	0.1	10				
2009-11	80	14				
2009-12	0.1	10				



Event Manager - Exercise

- **Apply** the **Event** to another series
- Select the desired series – the Multi series view can be used to select multiple desired



02-LM-Sales x

Multi Series View

Select All Unselect All Max # of Series: 10

Series	Class	xE - 12 Month Fcat	* Customer Nbr	xE - Sales Vs Base
K-MART.GE1054.MIT-OMATIC LX	GARDEN	240	12000	
K-MART.LF3000.WEED WACKER LG	LAWN	228	12000	
Z-All Other.ZJ8235101G.ADDISON SPADE	GARDEN	227	99999	
WALMART.1831487C93.MIT-OMATIC 101	GARDEN	222	97000	
K-MART.Z6J52772.LOGAN SPADE	GARDEN	210	12000	
Z-All Other.GE9007.CANANDA SPADE	GARDEN	163	99999	
K-MART.LF3083.GATE GONE LG	LAWN	149	12000	
K-MART.LF9000.STRATHMERE GATE	LAWN	136	12000	
WALMART.1840773C1.DIRT WEASEL 103	GARDEN	110	97000	
Z-All Other.1836542C1.MIN POT	GARDEN	108	99999	
Z-All Other.GE37.MCKOY SPADE	GARDEN	101	99999	
K-MART.GY1R12538.WEST CHESTER MAT	HOME	95	12000	
Z-All Other.1840078C1.DIRT WEASEL 102	GARDEN	81	99999	
K-MART.CR35058.PURDUE MAT	HOME	58	12000	

Forecast Comparison View Multi Series View Data View Statistics View

Apply The Event To Another Series

Apply The Event To Another Series

The screenshot shows the 'Event Manager - 02-LM-Sales' application. The 'Event Editor' window is open, displaying the 'Series View' tab. The 'Event List' on the left shows a list of events, with 'Newspaper ad' selected. The 'Selected Series' dropdown is set to 'Selected Series'. The 'Refresh' button is highlighted. The 'Opinion Line Selector' and 'Export to Excel' buttons are also visible. The 'Linked Events' table at the bottom shows a list of events with columns for Event ID, Category, Event Name, Type, Value, Series, and Dates.

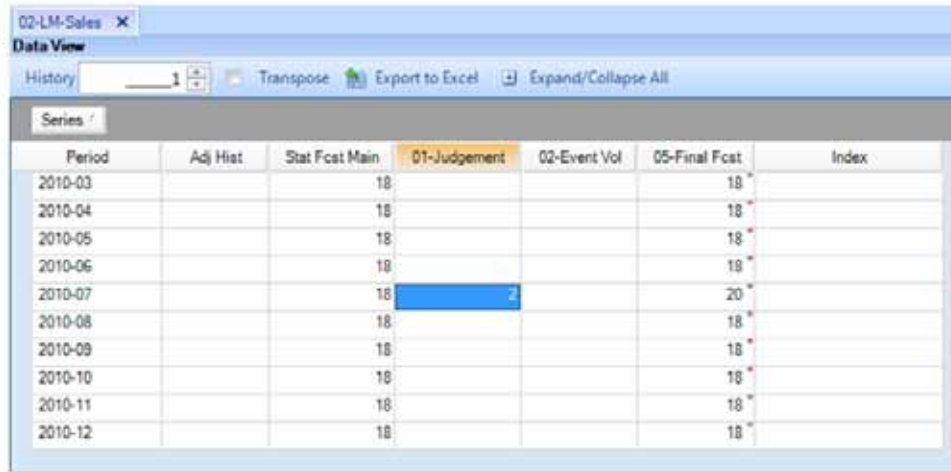
Event ID	Category	Event Name	Type	Value	Series	Dates	Remove
10	BOGO	Coupon_Copy	Statistical	0	K-MART LF3000 WEEB WACKER..	2008-03 : 2008-	
19	Promo	Newspaper ad..	Percentage	10	K-MART LF3000 WEEB WACKER..	2008-07 : 2010-	
18	Promo	Coupon_Copy	Statistical	0	K-MART LF3000 WEEB WACKER..	2008-03 : 2008-	

QAD

- Select the Series View in the Events menu
- Select the desired Event from the Event List
- Select Selected series from Scenario Level and Refresh
- Save
- Apply

Event Manager - Exercise

- Notice the Judgement event value as been added to the future period of the opinion line and Final Fcst recalculated



Period	Adj Hist	Stat Fcst Main	01-Judgement	02-Event Vol	05-Final Fcst	Index
2010-03		18			18	
2010-04		18			18	
2010-05		18			18	
2010-06		18			18	
2010-07		18	2		20	
2010-08		18			18	
2010-09		18			18	
2010-10		18			18	
2010-11		18			18	
2010-12		18			18	

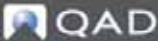
Chapter 29

Life Cycle Forecasting

Life Cycle Forecasting - Overview

Life Cycle Forecasting - Overview

- **Lifecycle Forecasting**
- **Uses for Lifecycle Forecasting**
 - Introduction of a new product with little or no actual data
 - Retirement of a product
 - Patent expiration (e.g., ending medical patents on medications)
 - Seasonality

PM Lifecycle Forecasting 020

Lifecycle Forecasting

Enables users to apply a pre-defined pattern to the forecast of a series in order to compensate for either predictable growth or a decrease in demand for a product that is not captured by most statistical forecasting methods.

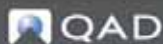
Uses for Lifecycle Forecasting

Lifecycle Forecasting is useful for applying general foreseeable trends that occur over a length of time.

Creating the Life Cycle Profile

Creating the Life Cycle Profile

- **Profiles** can be created based on the history pattern for one or more series in the scenario
- The **Profile Manager** calculates a number of profiles based on the series selected
- The user controls which **profiles** appear on the graphs below
- The user can create a **Manual profile** by copying and pasting another row or by entering values directly
- The most important step in the profile creation is selecting the item(s) (or records) that best represent the desired curve



TM Life Cycle Forecasting-031

Lifecycle Profiles are typically created by a Super User; however a profile can be created by users with appropriate permissions.

- Profiles are defined using the Profile Manager
- Profiles are available to all users and can be shared across scenarios

Once created, the Lifecycle Profile is available for use by selecting “LifeCycle” as the Forecast Method.

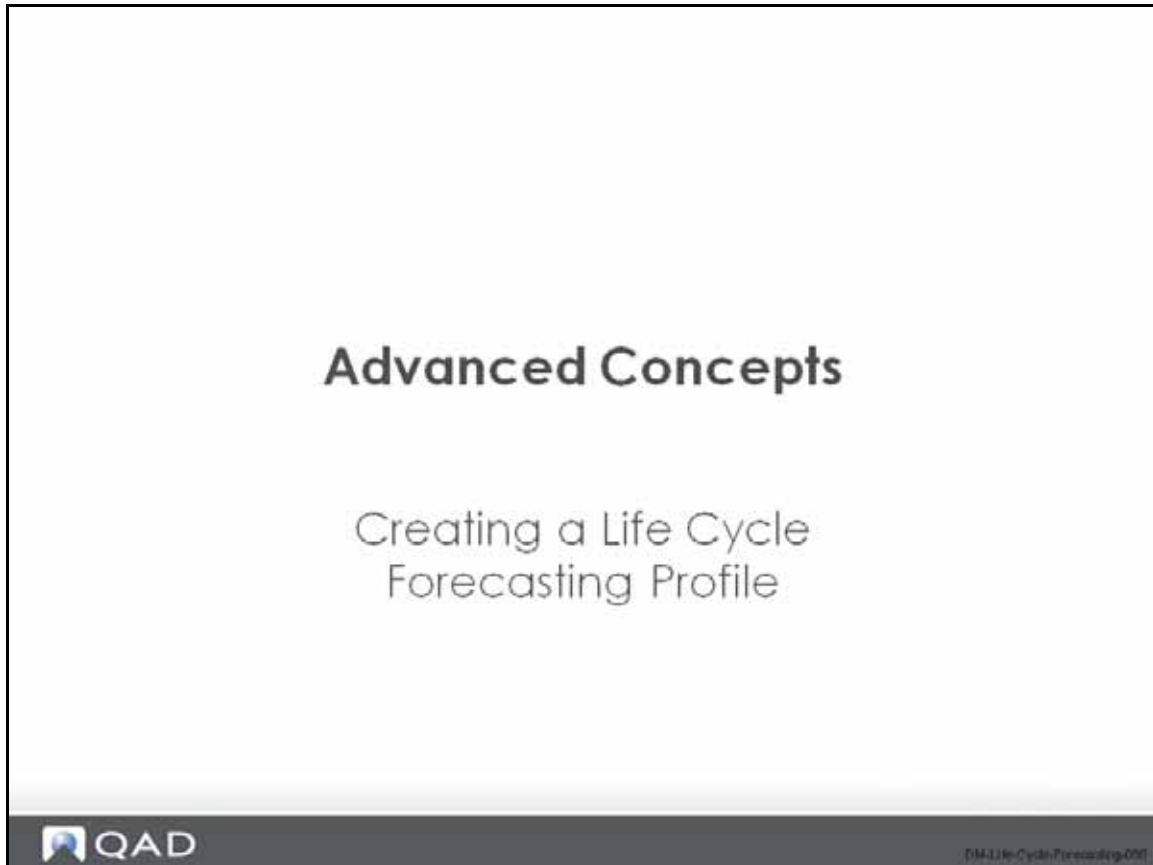
- Can be applied to a series, the tree of an applied Hierarchy, or a Scenario
- Time periods used for the applied Profile are defined by the user
- Multiple Profiles can be used; however, the time periods in the profiles cannot overlap
- Total units used over the time period can be defined by the user

Recap – Life Cycle Forecasting

Recap – Life Cycle Forecasting

- **Lifecycle** forecasting enables users to apply a pattern to the forecast of a series in order to compensate for predictable growth or a decrease in a product's demand that is not captured by most statistical forecasting methods
- **Lifecycle** forecasting is useful for applying general foreseeable trends that occur over a length of time
- **Lifecycle** forecasting can be useful with the introduction of a new product with little or no actual data, the retirement of a product, patent expiration, or seasonality
- **Profiles** used in **Lifecycle Forecasting** are defined by the user

Creating a Life Cycle Forecasting Profile



Create The Main Settings

Create The Main Settings

- Name the profile
- Filter - Series can be added manually or by using an existing filter
- SQL - Displays the structure of the filter statement selected above
- Opinion Line – Select the opinion line used to calculate the profile
 - The data in this opinion line for the periods specified in the Series Detail pane are included for the selected series

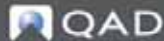
Name	Garden Glove products	Profile Index	Avg
Filter	Tag - Garden Glove	Profile Index Volume	1,928.27
SQL	([Series] [ProductClass] = GARDEN) AND ([Series] [ProductFam]	Profile Percent	Avg
Opinion Line	Adj Hist	Profile Percent Volume	48,278.50

If you select a filter, any series meeting the filter criteria will be automatically added in the Series Detail pane. The data from the series meeting this filter's criteria will be used to calculate the profile.

Series Detail

Series Detail

- The **Series Detail** section allows the user to select the series used to create this profile

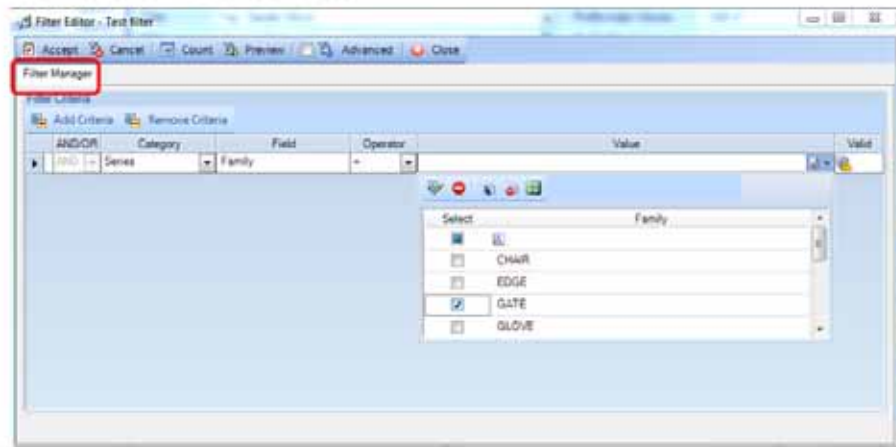


DM11hr-Cycle Forecasting-001

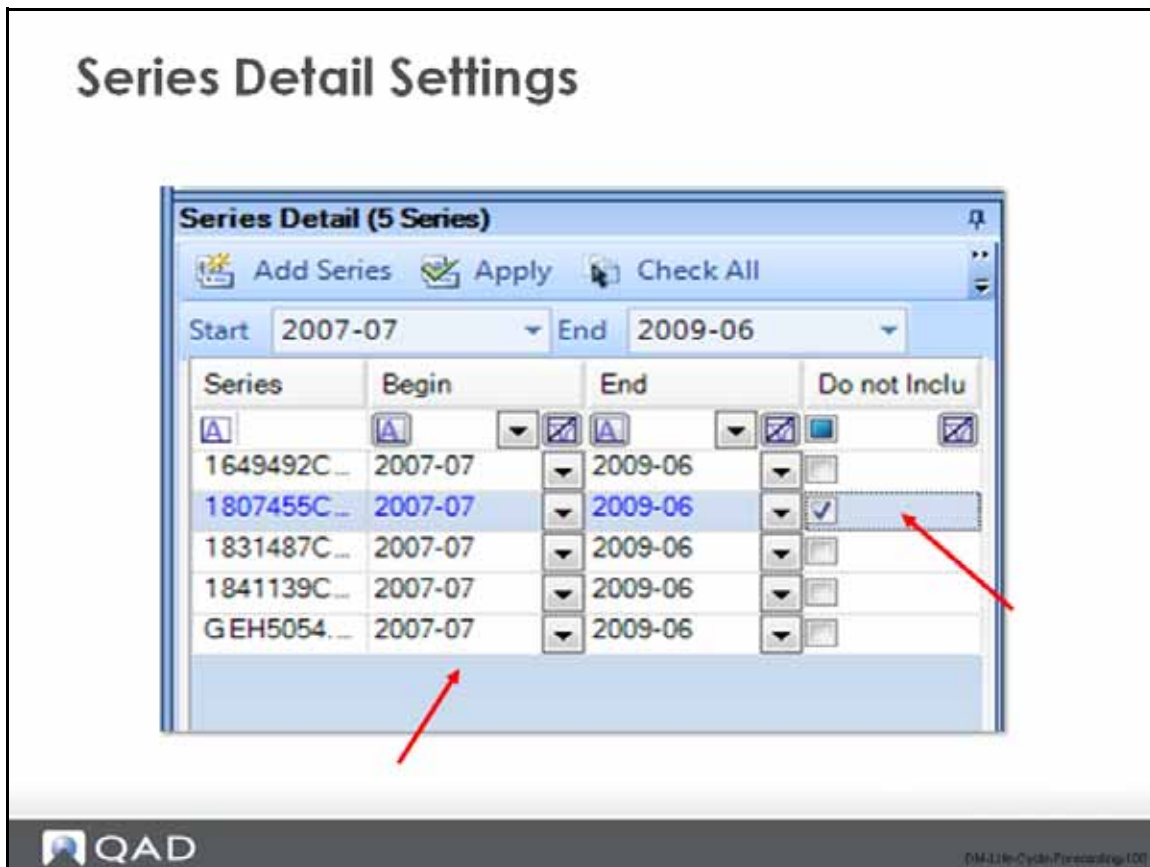
- This section can be populated automatically by selecting a Filter in the Main Settings section
- The user can also click the Add Series button to manually select the series to use from the Filter Manager
- The series selected in the Series Detail section and data within the time periods are used to populate the Calculations panel and to generate the Profiles and Graphs

Adding A Series

- Use the **Filter Manager** after clicking Add Series to add and select specific records. Add criteria as necessary to limit the list to the desired series



Series Detail Settings

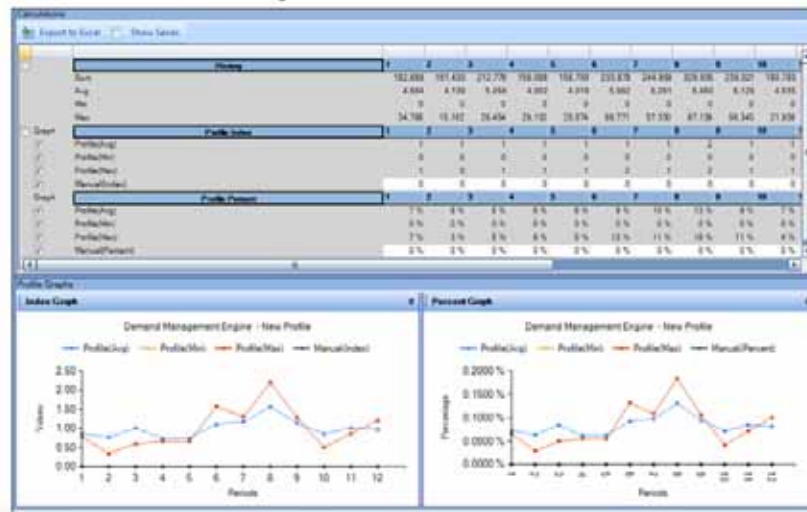


- Use the Start and End drop-down to indicate the date range of series to display
 - This range specifies the data used for the calculations in each series
- Use the check box in the Do Not Include column to indicate which series are not included in the profile
- Click the Apply button to update the Calculations pane with any series you added or you changed the range
- Clicking Apply also updates the Profile Index Volume and Profile Percent Volume fields in the Main Settings

Calculations & Profile Graphs

Calculations & Profile Graphs

- The data from the series selected in the Series Detail is applied to the **Calculations** and **Profile Graphs** sections of the screen



Calculations & Profile Graphs

- Select the **Show Series** check box to display data for the individual series in addition to the **Sum, Avg, Min, and Max** values
- The fields in the **Manual (Index)** and **Manual (Percent)** rows are editable
 - Click on any field in these rows to manually enter values
- Click **Save** when finished
 - The profile is added to the Profile List at left

The screenshot shows the 'Calculations' window in QAD Demand Management 6.1. The window has a 'Show Series' checkbox which is checked. Below the checkbox, there are two main sections: 'Profile Index' and 'Profile Percent'. Each section contains a table with 16 columns representing time periods (1-16). The 'Profile Index' section has rows for 'Profile Index', 'Profile (Index)', and 'Manual (Index)'. The 'Profile Percent' section has rows for 'Profile Percent', 'Profile (Percent)', and 'Manual (Percent)'. The 'Manual' rows are highlighted in yellow, indicating they are editable. The 'Profile Index' and 'Profile Percent' rows show calculated values for each time period. The 'Manual' rows are currently empty, allowing for manual entry of values.

Profile Index Settings

Profile Index Settings

- **Profile Index** - Specifies which of the available Index calculations will be used as the **Profile's Index values**
 - The results of each of the following calculations display in the **Calculations pane**
 - **Manual** - Enter a value for each period manually in the Manual (Index) line on the Calculations pane
 - **Avg** - Use the average Index calculation of all the selected series
 - **Min** - Use the minimum Index calculation of all the selected series
 - **Max** - Use the maximum Index calculation of all the selected series

Profile Index Settings

- Specific Series –Use the Index calculation for one specific series instead of the Avg, Min or Max calculations which include all selected series.



The screenshot shows the 'Main Settings' dialog box with the following fields:

Field	Value
Name	New Profile
Filter	Forecast v. Sales
SQL	[Series] [UserField5] <= Sales Fcast v Fcast > 50%
Opinion Line	Adj Hist
Profile Index	Avg
Profile Index Volume	4,453.70
Profile Percent	Min
Profile Percent Volume	3,808.00

Profile Percent

Profile Percent

- Specifies which of the available Percentage calculations will be used as the Profile's Percent values
 - The results of each of the following calculations display in the Calculations pane
 - **Manual** - Enter a value for each period manually in the Manual (Percent) line on the Calculations pane
 - **Avg** - Use the average Percent calculation of all the selected series
 - **Min** - Use the minimum Percent calculation of all the selected series
 - **Max** - Use the maximum Percent calculation of all the selected series

Profile Percent

- Specific Series –Use the Percent calculation for one specific series instead of the Avg, Min or Max calculations for all selected series

The screenshot shows the 'Main Settings' dialog box with the following values:

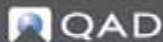
Field	Value
Name	New Profile
Filter	Forecast v. Sales
SQL	{[Series][UserField5] = 'Sales Fcast v Fcast > 50%'}
Option Line	Adj Hist
Profile Index	Avg
Profile Index Volume	4,453.70
Profile Percent	Min
Profile Percent Volume	3,808.00

Profile Volumes

Profile Volumes

- **Profile Index Volume** - Displays the Total Volume for the selected **Profile Index** using the selected index type (i.e., **Manual**, **Avg**, **Min**, **Max** or a **specific series**)
- **Profile Percent Volume** - Displays the Total Volume for the selected Profile Percent using the selected index type (i.e., **Manual**, **Avg**, **Min**, **Max** or a **specific series**)
- Both of these fields are read only and are populated once the Profile Index and Profile Percent selections are made

Main Settings	
Name	New Profile
Filter	Forecast v. Sales
SQL	[Series] [UserField5] = "Sales Fcst v Fcst > 50%"
Opinion Line	Adj Hist
Profile Index	Avg
Profile Index Volume	4,453.70
Profile Percent	Min
Profile Percent Volume	3,808.00



Manual Profile Index and Profile Percent

Manual Profile Index and Profile Percent

- A manual entry can be typed or copy/paste into the manual **Profile Index** or **Profile Percent**

Calculations

Export to Excel Show Series

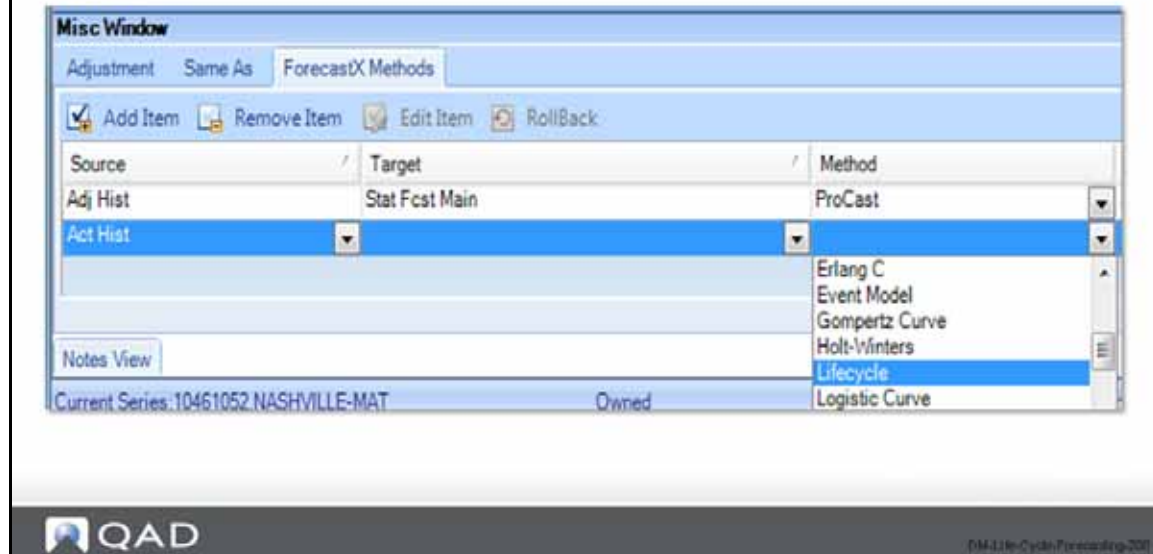
History	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sum	59.531	44.529	43.327	54.364	63.148	61.668	43.881	47.230	70.028	54.031	40.052	75.843	67.065	128.572	108.332	61
Avg	3.307	2.474	2.407	3.020	3.508	3.426	2.427	2.624	4.335	3.002	2.225	4.214	3.727	7.032	6.018	3
Min	697	0	0	666	794	665	0	0	0	773	0	664	0	1,056	0	0
Max	10.795	8.777	7.890	8.305	13.831	11.892	7.926	8.469	17.048	8.944	7.890	35.288	27.596	75.325	62.531	15

Profile Index	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Profile(Avg)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2
Profile(Min)	2	0	0	2	2	2	0	0	0	2	0	2	0	2	0	0
Profile(Max)	1	0	0	0	1	1	0	0	1	0	0	2	2	4	3	0
Manual(Index)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Profile Percent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Profile(Avg)	4%	3%	3%	4%	4%	4%	3%	3%	5%	4%	3%	5%	4%	5%	7%	7%
Profile(Min)	7%	0%	0%	7%	8%	7%	0%	0%	0%	3%	0%	7%	0%	10%	0%	0%
Profile(Max)	2%	2%	2%	2%	3%	3%	2%	2%	4%	2%	2%	0%	0%	17%	14%	0%
Manual(Percent)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Running A Profile

- The Created profiles can now be used as a **ForecastX** method

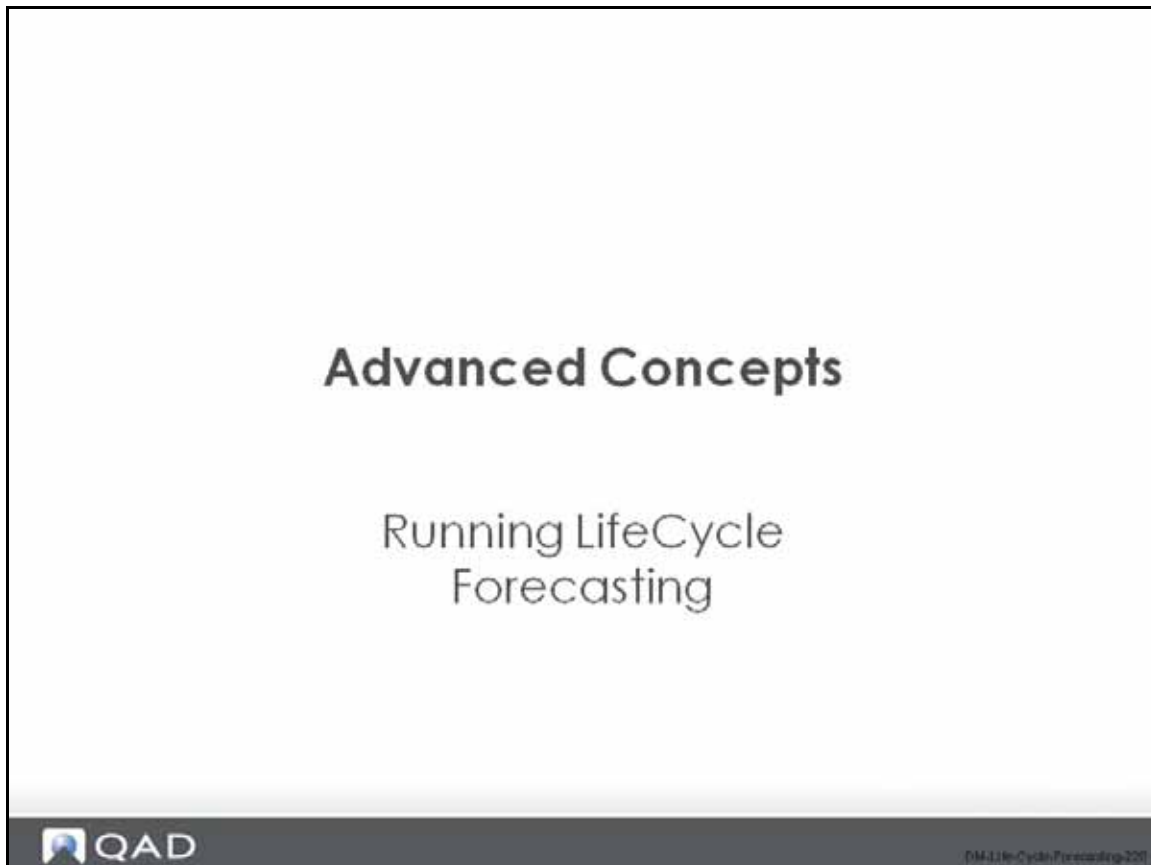


Recap – Setting Up A Life Cycle Profile

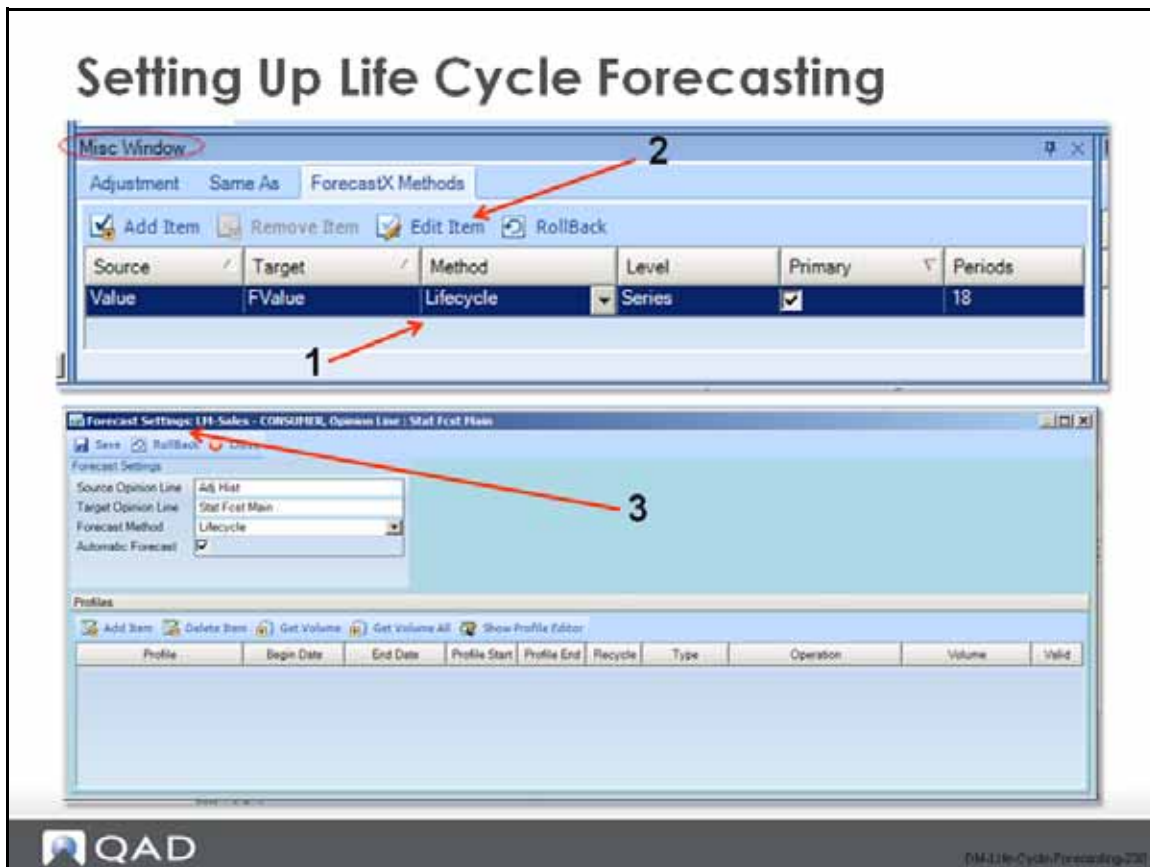
Recap – Setting Up A Life Cycle Profile

- **Profile Manager** enables users to create a pattern of demand that can be applied using the **Lifecycle ForecastX** method
- **Profile Manager** allows the user to control what history data to use as a starting point for the profile calculations, which can then be manually overwritten
- **Profile Manager** provides two methods of applying the **lifecycle** forecast – **Profile Index and Profile Percent**
 - The user can apply the default volumes for each **lifecycle** forecast or maintain them individually

Running LifeCycle Forecasting

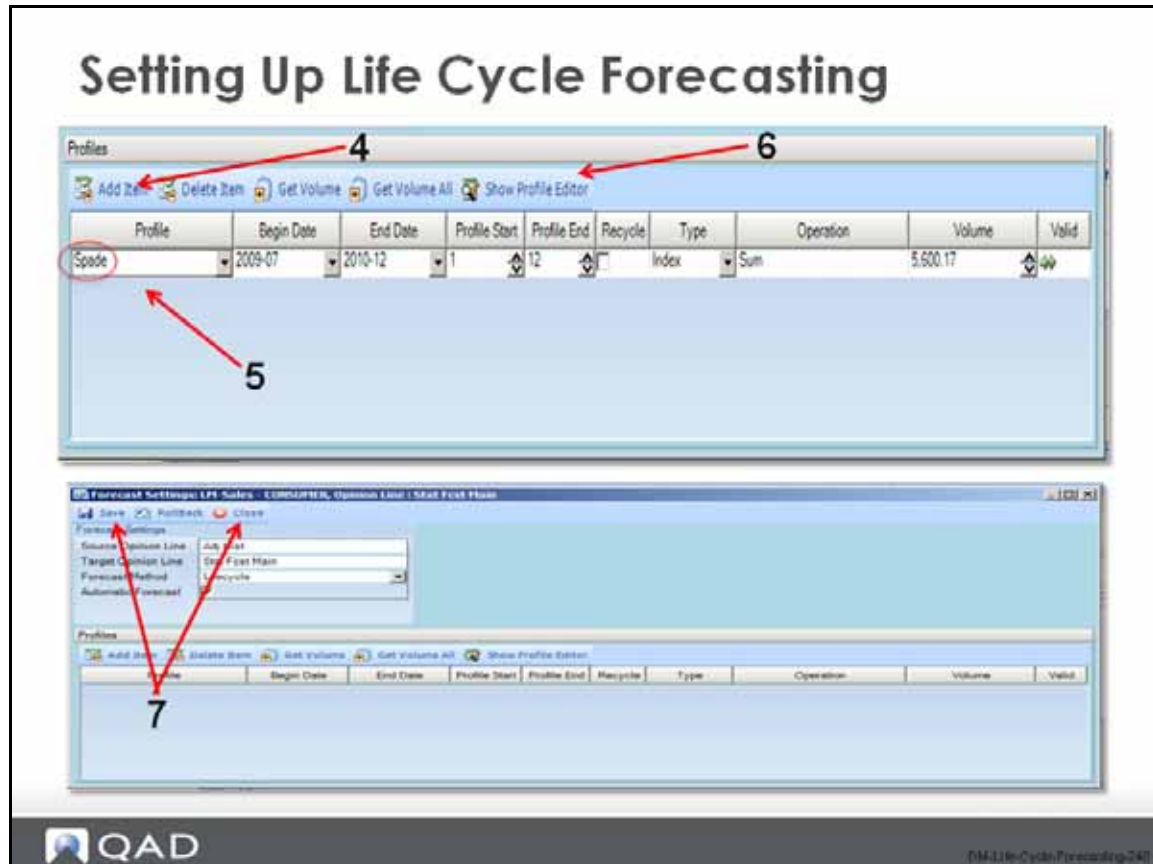


Setting Up Life Cycle Forecasting



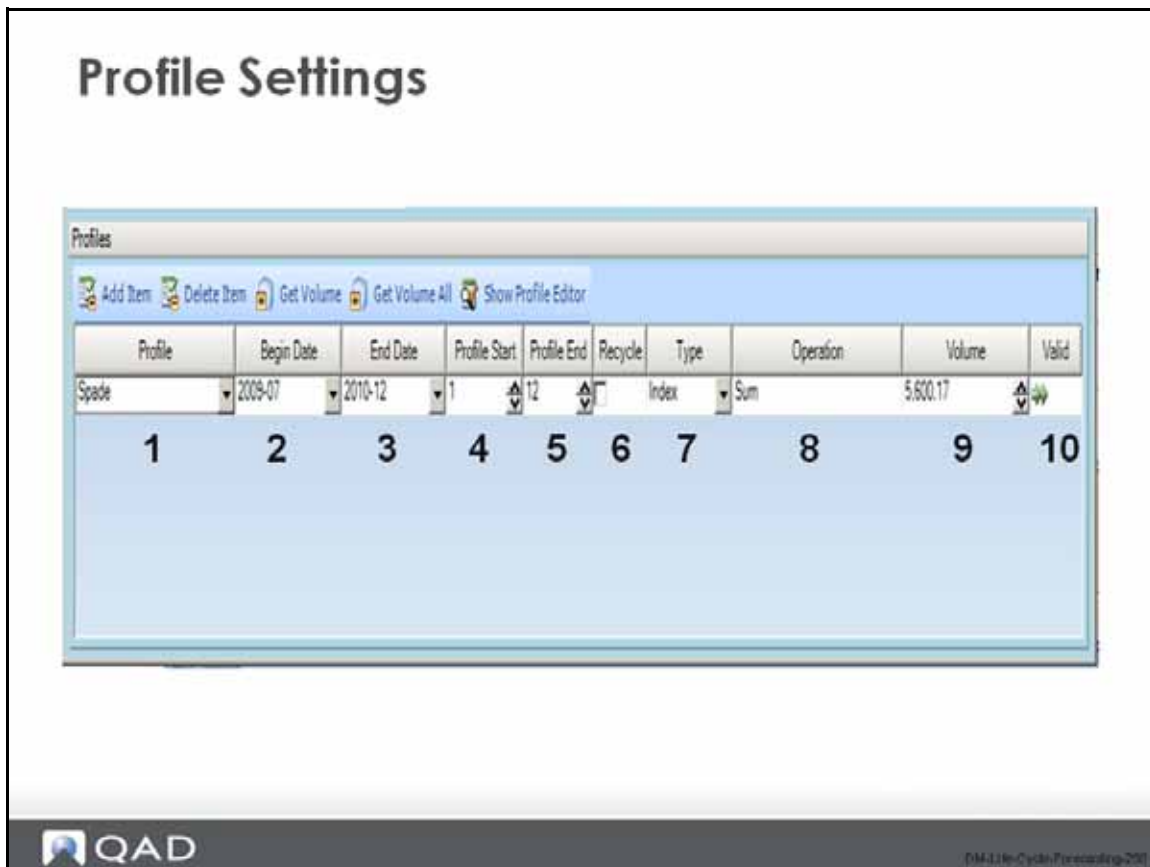
In the Viewer, select the series for which you want to run the Lifecycle Forecast from the Single Series or Multi Series View.

- 1 On the ForecastX Methods tab in the Misc Window, select Life Cycle as the forecast method.
- 2 Click the Edit Item button.
- 3 The Forecast Settings window displays.



- 4 In the Profiles section, click the Add Item button to insert a row.
- 5 Select the Profile to use from the drop-down list. The remaining fields are populated automatically with the settings from the selected profile.
- 6 Click the Show Profile Editor button to edit the selected profile.
- 7 Click Save when finished and then click Close to exit the window.

Profile Settings



1 Profile

This is the list of profiles that are available for the users. These profiles are either loaded or have been created in the Viewer.

2 Begin Date

The starting date of the profile in the series. The default is the first forecast period.

3 End Date

The last date of your profile in the series. The default is the last available forecast period.

4 Profile Start

The start period of the profile. The profile may have 12 periods, however, it might make sense to start the profile on a different period based on the desired result.

5 Profile End

The end period of the profile.

6 Recycle

Cycles back to the beginning of the profile once the end of the profile is reached.

7 Type

Index or Percent. Index is taking the volume multiplied by the factor for each period. Percent is taking the volume and spreading it across the entire range of the profile based on the profile.

8 Operation

The default from the initial setting. Options are Sum, Max, Min, Manual. This is set when creating the profile and can not be changed here.

9 Volume

The desired volume to use with the Index or Percent. The default is set when creating the profile but can be overwritten here.

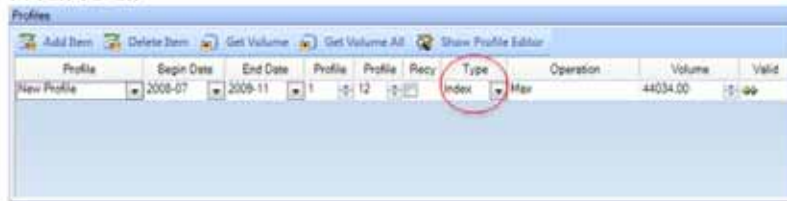
10 Valid

Green arrow for valid setting.

Running Life Cycle Forecasting

Running Life Cycle Forecasting

- Under the Type field you can select either Index or Percent
- You have the option to change the volume associated with the profile
 - If a change is made the Operation will change to "Manual"



- If the forecast horizon is longer than the profile, you can use the Recycle check box to repeat the profile pattern
 - This may not be appropriate for scenarios such as end of life

Running Life Cycle Forecasting

- On the **ForecastX Methods** tab in the **Misc Window**, right-click on the **Lifecycle** forecast method
- Select **Run ForecastX for Opinion Line** from the menu



The forecast is run using the settings in your selected profile

Recap – Running Life Cycle Forecasting

Recap – Running Life Cycle Forecasting

- **Lifecycle Forecasting** enables users to apply a pattern to the forecast for a series in order to compensate for either predictable growth or a decrease in a product's demand that is not captured by most statistical forecasting methods
- **Lifecycle Forecasting** is useful for applying general foreseeable trends that occur over a length of time
- **Lifecycle Forecasting** is useful for the introduction of a new product, the retirement of an existing product, patent expiration, or seasonality

Chapter 30

Pivot Reports

Pivot Reports - Overview

Pivot Reports

- User created **Pivot Reports**, **Report Templates** and **User Defined Reports** are available in the **DME**
- In the **DME**, the user can create custom **Pivot Reports** using the **Pivot Report window** on the **Reports tab**
- **Pivot Reports** allows for viewing and comparison of data for informational purposes and to see patterns, trends, and relationships
- The user can also run previously saved **Pivot Reports** by selecting them from the **Reports drop-down** menu

Excel 2007 Macro Security Settings

Excel 2007 Macro Security Settings

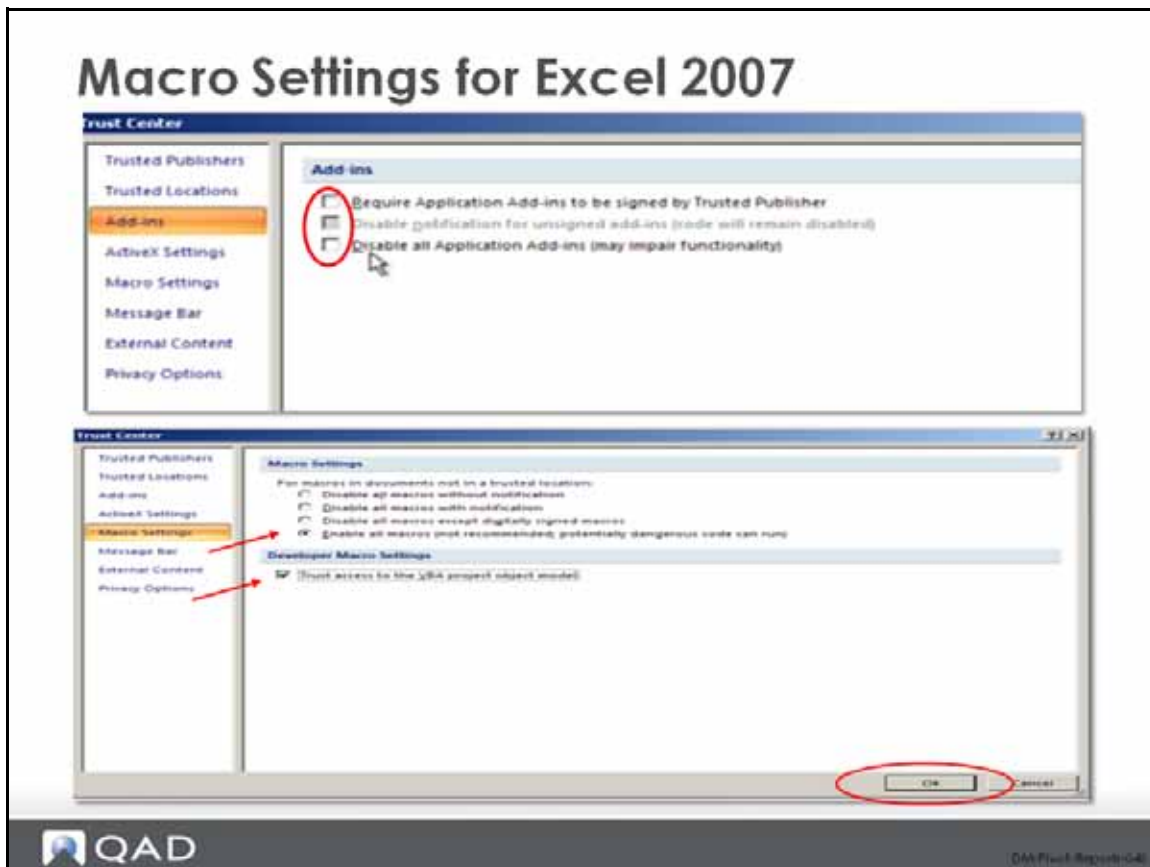
- Macro security settings need to be adjusted in Excel 2007 in order to assure the successful creation of Pivot Reports
- Macro settings in Excel 2003 follow



Macro Settings for Excel 2007.

- Open Excel, select Excel Options
- Select Trust Center and Trust Center Settings

Macro Settings for Excel 2007



- In the open Trust Center window, select Add-ins. Ensure these boxes are NOT checked
- In the open Trust Center window, select Macro Settings. Select the settings “Enable all macros...” and “Trust access to the VBA...”
- click OK
- Close Excel and re-open to use

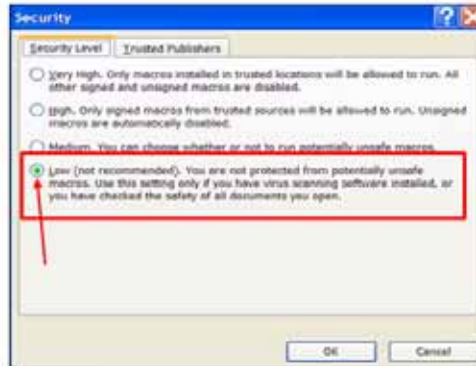
Macro Settings for Excel 2003

Macro Settings for Excel 2003

- Open Excel, go to Tools > Macro > Security as shown

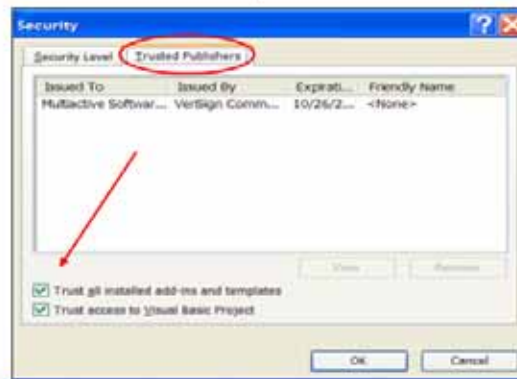


- In the displayed window, set the Security Level to "Low"



Macro Settings for Excel 2003

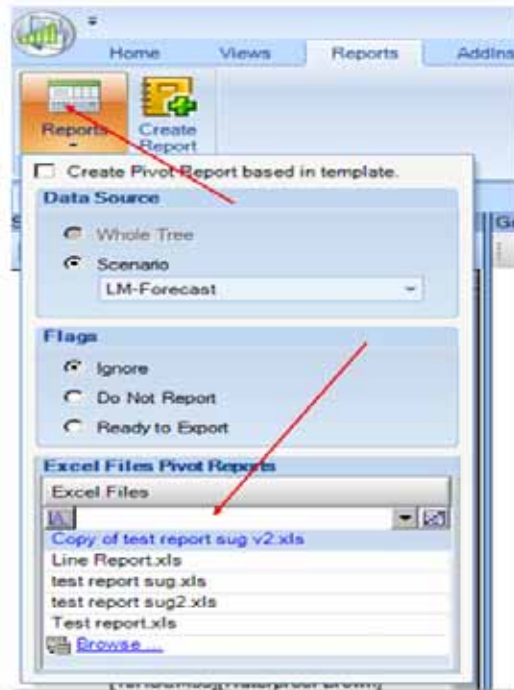
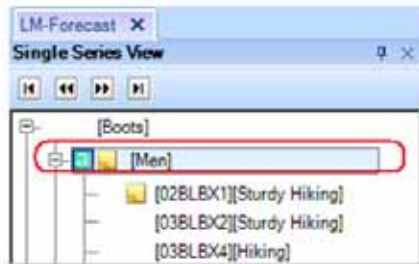
- Click the **Trusted Publishers**, check both the **Trust all installed add-in and templates** and **Trust Access to Visual Basic Project** boxes
- Click **OK**
- Close **Excel** and re-open to use



Pivot Reports in the DME Viewer

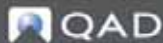
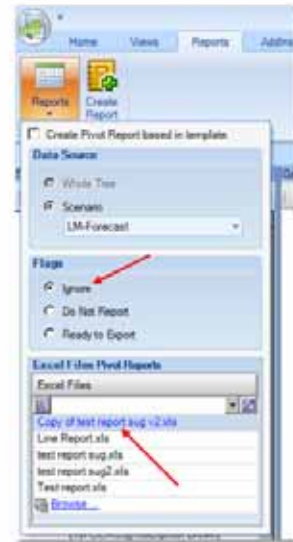
Pivot Reports in the DME Viewer

- In the DME Viewer, the **Reports tab** allows you to either run an existing **Pivot Report** or create a **new report**
- To run a previously saved **Pivot Report**, click on the **Reports icon** to expand the drop-down and select a report



Pivot Reports in the DME Viewer

- Select the appropriate **Flag** to use in the report
 - **Ignore** – (Default) **Ignore** all flags in the Demand Management Engine
 - **Do Not Report** – Ignore all series that are marked **Do Not Report**
 - **Ready To Export** – Import only those series marked **Ready To Export**
 - In the **Excel Files Pivot Reports** section, select the desired report from the list or click the **Browse** link to select a **saved Excel report** from your hard drive



DME Pivot Reports-000

The default location where reports are stored is: C:\Documents and Settings\All Users\Application Data\John Galt Solutions\Reports\Pivot Reports.

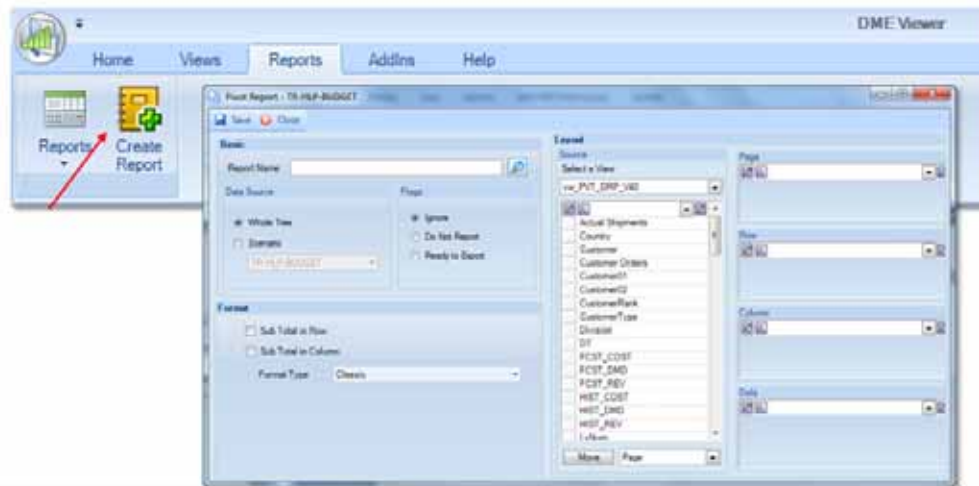
Once the report is selected, the user has the capability to:

- Refresh existing components
- Adjust parameter page and data range

Using Create Reports Button

Using Create Reports Button

- Pivot Reports can be created by clicking the Create Reports button on the Reports tab
 - The Pivot Report window displays



Creating Pivot Reports – Basic Section

Creating Pivot Reports – Basic Section

- In the **Basic** section of the window, either enter a **report name** or click the **magnifying glass icon** to search for an existing report to use as a basis for the new report
- Select the **Data Source** to use in generating the report
- **Whole Tree (default)** – for applied Static Hierarchies
- **Scenario** – select a specific scenario from the drop-down list
 - The drop-down list will only be active if Scenario is selected

The screenshot shows the 'Basic' section of a report creation window. It includes a 'Report Name' field with a magnifying glass icon for searching. Below this is the 'Data Source' section, which has two options: 'Whole Tree' (selected) and 'Scenario'. The 'Scenario' option has a drop-down menu showing 'TR-HLP-BUDGET'. To the right is the 'Flags' section with three options: 'Ignore' (selected), 'Do Not Report', and 'Ready to Export'. Red arrows indicate the locations mentioned in the text: the magnifying glass icon and the 'Scenario' radio button.

Select Flags

Select Flags:

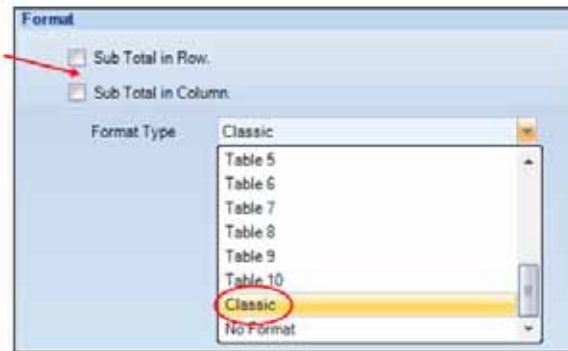
- **Ignore** – (Default)
Ignores all flags in the Demand Management Engine
- **Do Not Report** – Ignores all series that are marked "Do Not Report"
- **Ready To Export** – Imports only those series marked "Ready To Export"

The screenshot shows a software window titled "Basic" with a "Report Name" field and a "Data Source" section. The "Data Source" section has two radio buttons: "Whole Tree" (selected) and "Scenario". Below "Scenario" is a dropdown menu showing "TR-HLP-BUDGET". To the right of the "Data Source" section is a "Flags" section with three radio buttons: "Ignore" (selected), "Do Not Report", and "Ready to Export". A red arrow points from the "Scenario" radio button to the "Ignore" radio button.

Format Section

Format Section

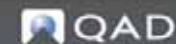
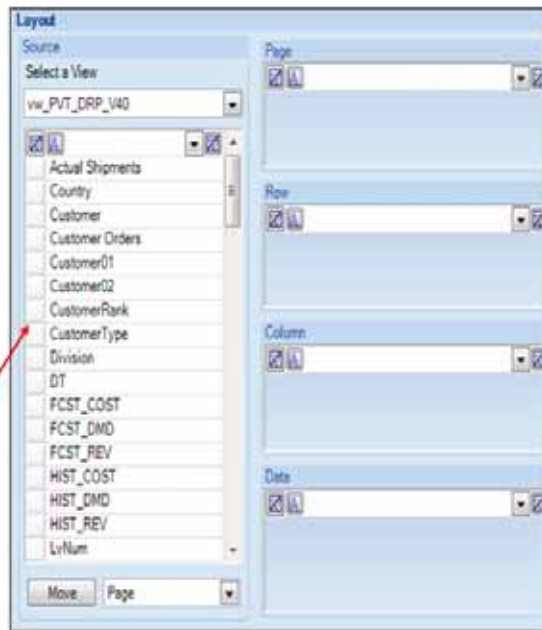
- The Format section provides several pre-formatted report styles
- Use the first two checkboxes to include sub-totals to be displayed for the data for the row or the column
- Choose a Format Type to use pre-formatted templates, or leave the default setting of "Classic" for a standard pivot report display



Layout Section

Layout Section

- Select a view from the drop-down list
- Typical installations include (2) standard views
 - One or more client specific views with the display set alias names
 - Custom calculation developed in the implementation process



QAD Pivot Reports 130

- Move the appropriate fields into the Page, Row, Data, and Column
- To move a field, select it from the list and then use the drop-down at the bottom of the list to indicate where you want to move the field
- Click the Move button and the field is moved to the corresponding section
- OR select and drag the field from the Source window list to the desired display location Page, Row, Data, or Column
- Click the Save button when finished

Creating Pivot Reports - Layout Section

Creating Pivot Reports - Layout Section

- **Fields** in the **Page section** are typically **series attributes or dates**, Customer, Warehouse, or Salesperson
 - These fields are used to filter the report after creation
- **Fields** in the **Row section** are typically **series attributes or dates**, used for information or grouping data to a higher level
 - For example series level data at the Customer, Region, Sku level, could be summarized to only the Region level by putting Region only in the Row



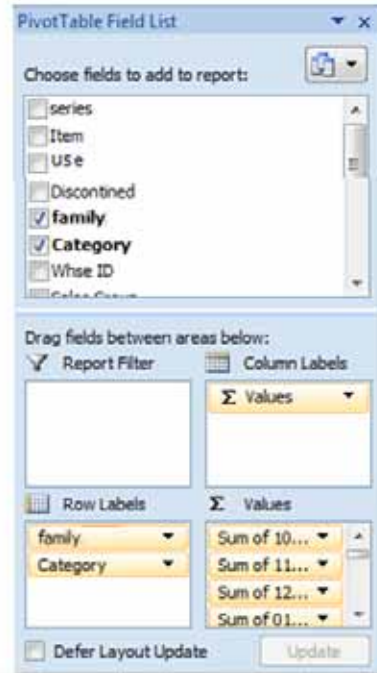
Creating Pivot Reports - Layout Section

- **Fields** in the **Column section** are typically **dates**, or could be **series attributes**, typically used to display dates for the numerical data or group to yearly totals
- **Fields** in the **Data section** would typically be **opinion lines** such as shipments, orders, and the forecast
 - Data in this section can be a summed, averaged, min or max

Creating Pivot Reports – Other Options

Creating Pivot Reports – Other Options

- Pivot Reports can also be created from a previously created Report
 - Open a previously created report
 - Save the report with another name
 - Make the desired information changes via the Pivot Field list by moving information into the desired sections, like that described in using the Pivot

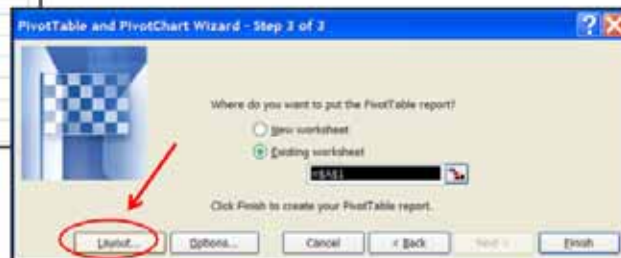


Using The PivotTable Wizard

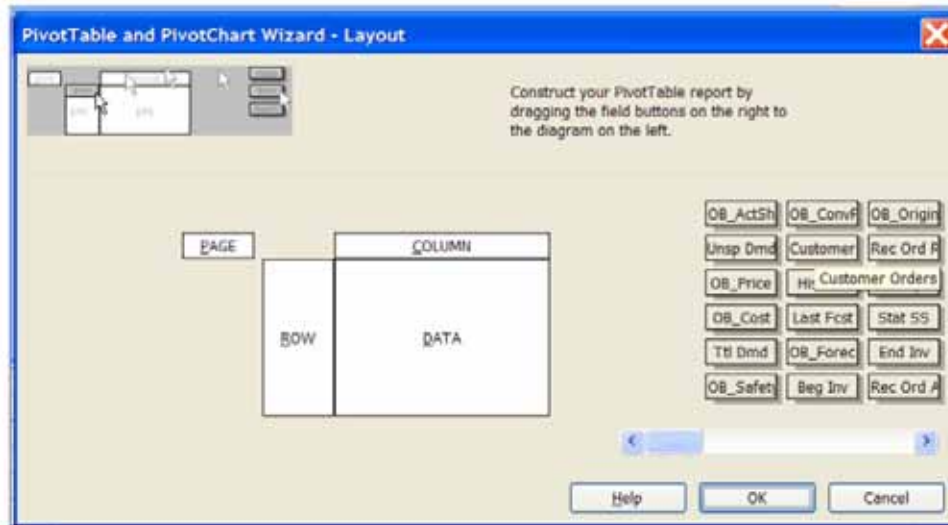
Using The PivotTable Wizard



- In Microsoft Excel, right-click on Row 1, Column A and select "PivotTable Wizard"
- The following PivotTable and PivotChart Wizard window will display. Click the Layout button



Using The PivotTable Wizard



General rules:

- Row contains series attributes such as Sku, Item #, Customer, etc.
- Data may contain observational information such as Customer Orders, Forecast
- Select from the available buttons and drag them into the Page, Row, Column, or Data sections

Note Hover the cursor over one of the buttons, the field name will expand to illustrate the entire named field.

Using The PivotTable Wizard



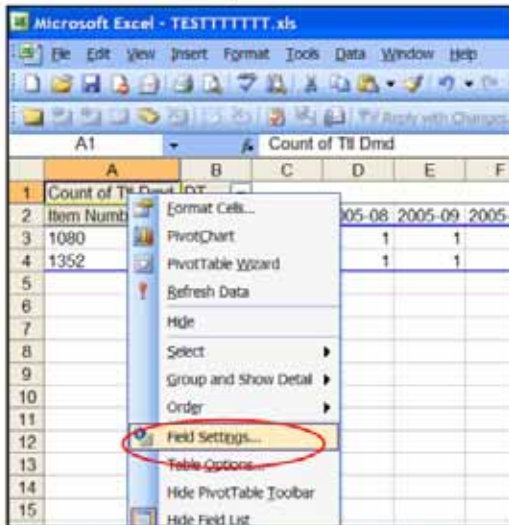
- After making the desired selections or changes, click OK



- The following window will display
 - Click the Finish button

Pivot Reports - Format Fields

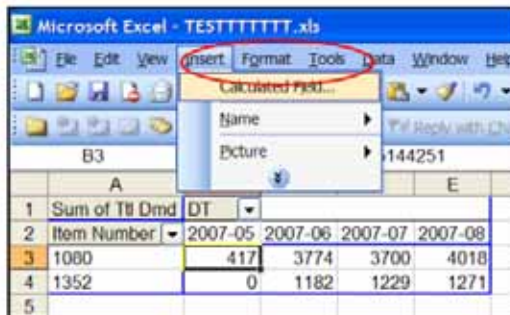
Pivot Reports - Format Fields



- Change Data area information from **Count** to **Sum**, format decimal places and perform many other functions in **Field Settings**
- Go to any **field** within the **Pivot table**, **right-click** and select **Field Settings** or select in the **Excel** menu
- Or select from the **menu**

Create a Calculated Field

Create a Calculated Field



- From the **Insert** menu, Select **Calculated Field** from the drop-down menu
- Or in Excel 2007, select from the Formulas, Calculated Field



Calculated Field continued



- Name the **calculation**
- Double click from the **Fields list** to add the field to the **Formula box**
- Add an **operator** (-, +, /, *)
- **Double click** from the **Fields list** to add another field
- Repeat as necessary, after the formula is complete, click **Add**
- Click **OK**

Note The new calculated field is added into the report and can be moved or changed as described for any field in the Field List.

Pivot Reports - Recap

Pivot Reports - Recap

- **PivotTable reports** allow for organization and comparison of data to see patterns, trends, and relationships
- In the Demand Management Engine, create custom **Pivot Reports** from the **Reports tab** by clicking the **Create Reports button**
- Macro security settings need to be adjusted in **Excel** in order to assure the successful creation of **Pivot Reports**
- Depending upon how many series and observations in the selected scenario, the downloading into **Excel** may take a view minutes

