Oracle® Retail Predictive Application Server
User Guide for the Classic Client
Release 13.2.1

October 2010

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Oracle® Retail Predictive Application Server User Guide, Release 13.2.1

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Preface

This guide describes the Oracle Retail Predictive Application Server user interface. It provides step-by-step instructions to complete most tasks that can be performed through the user interface.

Audience

This User Guide is for users and administrators of Oracle Retail Predictive Application Server. This includes merchandisers, buyers, business analysts, and administrative personnel.

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Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Related Documents

For more information, see the following documents in the Oracle Retail Predictive Application Server Release 13.2.1 documentation set:

- *Oracle Retail Predictive Application Server Release Notes*
- *Oracle Retail Predictive Application Server Licensing Information*
- *Oracle Retail Predictive Application Server Installation Guide*
- *Oracle Retail Predictive Application Server Administration Guide for the Classic Client*
- *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*
- *Oracle Retail Predictive Application Server Online Help for the Classic Client*
- *Oracle Retail Predictive Application Server User Guide for the Fusion Client*
- *Oracle Retail Predictive Application Server Online Help for the Fusion Client*
- *Oracle Retail Predictive Application Server Configuration Tools User Guide*
- *Oracle Retail Predictive Application Server Configuration Tools Online Help*

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When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 13.1) or a later patch release (for example, 13.1.2). If you are installing the base release and additional patch and bundled hot fix releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch and bundled hot fix releases can contain critical information related to the base release, as well as information about code changes since the base release.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following Web site:

http://www.oracle.com/technology/documentation/oracle_retail.html

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement "the Window Name window opens."

```
This is a code sample
    It is used to display examples of code
```

Introduction

Overview

The Oracle Retail Predictive Solutions are a set of products used for generating forecasts, developing trading plans, and analyzing customer behavior. These products use predictive technology to examine historical data and to predict future behavior.

The Oracle Retail Predictive Solutions run from a common platform called the Oracle Retail Predictive Application Server (RPAS) that includes features such as:

- Multidimensional databases
- Hierarchical data (product, time, and business location hierarchies)
- Aggregation and spreading of data
- Workbooks and worksheets for displaying and manipulating data
- Wizards for creating and formatting workbooks and worksheets
- Menus, quick menus, and toolbars
- Exception management and user-friendly alerts

This online help system describes these common features and the procedures associated with them.

Getting Started

Logging on to Oracle Retail Predictive Solutions

Navigate: From the Windows **Start** menu, select **Programs – Oracle Retail Predictive Solutions – Oracle Predictive Solutions**. The **Login Information** dialog appears.
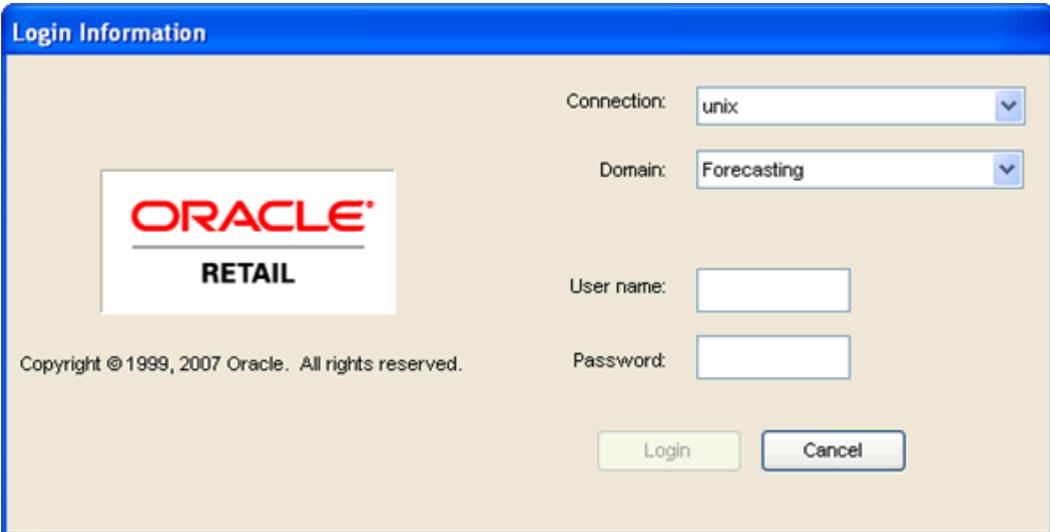
Login Information Dialog Box

> **Note:** If there are multiple servers, there will be a Connection drop-down box where you can select the server to use. Once you select the server, there will be one or more domains listed where you will select the domain to use.
>
> If necessary, click the **Connection** drop-down and select the server name.

1. In the **Domain** field, click the arrow to display a drop-down menu and select the domain you want to access.
2. In the **Name** field, type your system user name.
3. In the **Password** field, type your system password.

> **Note:** One or more of the above fields may not be visible if your system has been configured to automatically populate these field values.

4. Click **OK**. The Oracle Predictive Solutions screen appears.
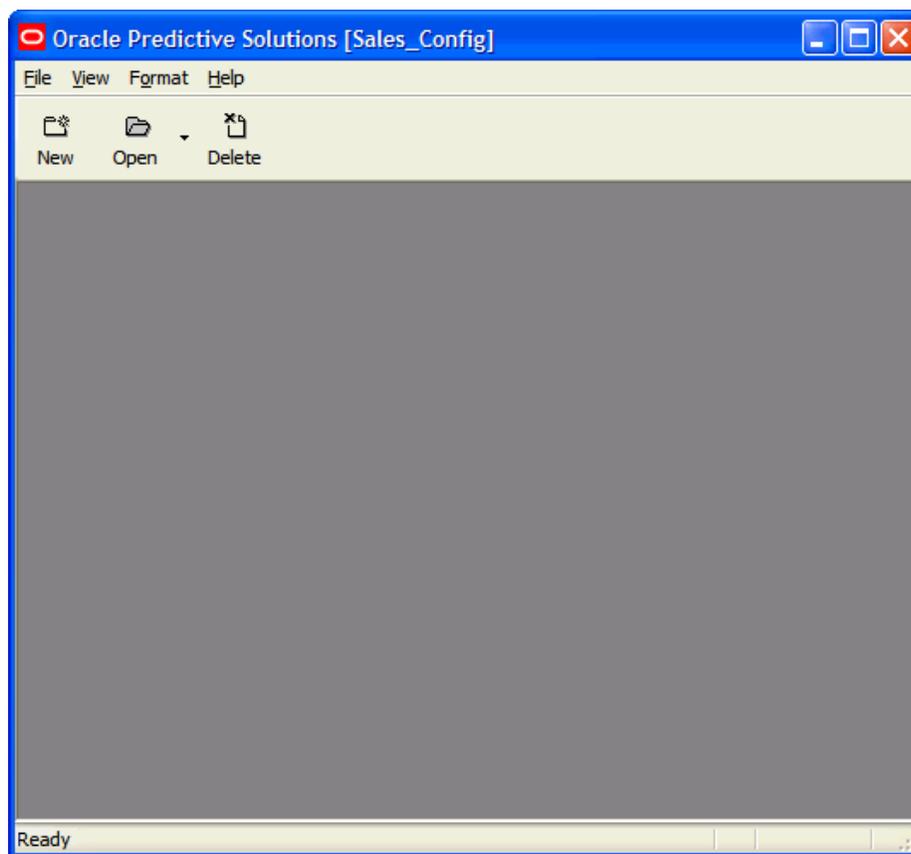
Oracle Predictive Solutions Screen

> **Note**: For information about accessing the RPAS Classic Client through a single sign-on environment such as the Oracle Retail Workspace portal, see the "Workspace and Single Sign-On" chapter of the *RPAS Administration Guide for the Classic Client* and the "RPAS Classic Client Web Deployment" chapter of the *RPAS Installation Guide*.

Changing Your Password

Perform the procedure below to change your password.

Navigate: From the **File** menu, select **Change Password**. The **Change Password** dialog box is displayed:
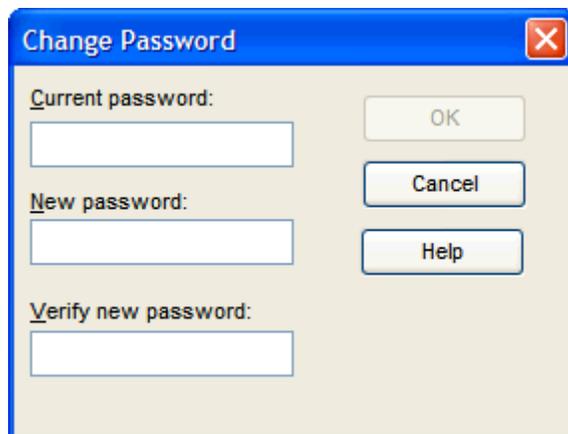
Change Password Dialog Box

1. In the **Current Password** field, type your old password.
2. In the **New Password** field, type the new password.
3. In the **Verify New Password** field, type the new password again.
4. Click **OK**.

> **Note**: The password requirements are set by your administrator. Depending on the requirements, your password may need to include a number, special character, or mixed case. If your password does not meet the requirements, a warning message appears that instructs you how to proceed.
>
> You may also be required to change your password periodically.

Logging Off and Leaving the Login Information Screen Open

Perform the following procedure to log off from the system and leave the Login Information screen open for use by another user or for logging on to another server.

Navigate: From the **File** menu, select **Logoff**.

If changes were made to an open workbook, the **Close Workbook** dialog appears.
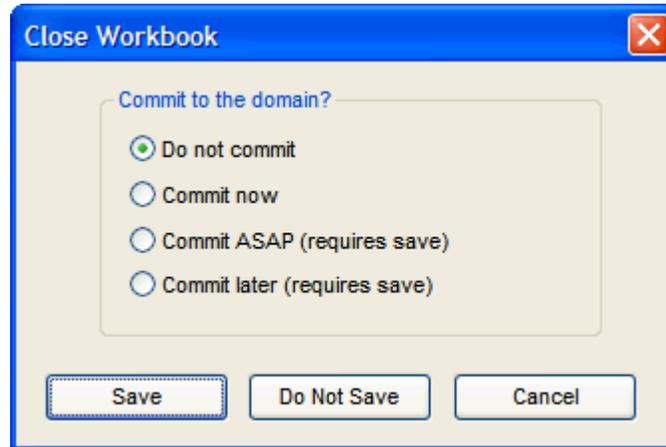
Close Workbook Dialog Box

1. Select one of the radio buttons: **Do not commit**, **Commit now**, **Commit ASAP**, or **Commit later**. See Appendix: Using RPAS Menus and Toolbars (subheading File Menu) – for an explanation of the terms Save and Commit.
2. Click **Save**, **Do Not Save**, or **Cancel**.

Logging Off and Exiting the System

Follow this procedure to log off and exit the system completely.

Navigate: From the **File** menu, select **Exit**.

If changes were made to an open workbook, the **Close Workbook** dialog box appears.
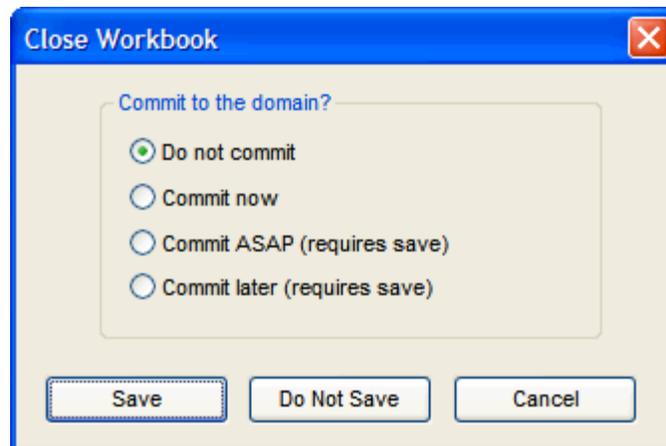
Close Workbook Dialog Box

1. Select one of the radio buttons: **Do not commit**, **Commit now**, **Commit ASAP**, or **Commit later**. See Appendix: Using RPAS Menus and Toolbars (subheading File Menu) – for an explanation of the terms Save and Commit.
2. Click **Save**, **Do Not Save**, or **Cancel**.

Concurrent User Sessions

Using RPAS, the same user can log in to the same domain multiple times. Every time the user logs in to the domain, a new RPAS server session is created for this user. These server sessions created by the same user who has logged in the same domain are called concurrent user sessions. Concurrent user sessions allow the same user to work on different workbooks at the same time. It also allows the user to login after a previous connection drop that may have rendered a server session useless.

The number of allowed concurrent user sessions is controlled by two RPAS security measures, which can be configured in the RPAS Security Administration workbook. The first measure is called Maximum User Session Limit. It specifies the maximum number of concurrent user sessions a user may start. The default value of this measure is five for all users. Its value can be configured per user. The second security measure is called Maximum Domain Session Limit. It specifies the maximum number of RPAS server sessions all users can start in the same domain. This measure is a domain level parameter. Users can start a concurrent user session only when both of these constraints are satisfied.

There are two functional restrictions of concurrent user sessions. First, two concurrent user sessions cannot work on the same workbook at the same time. A workbook must be exclusively owned by one session at a time. Second, two concurrent sessions cannot go through the wizard sequence of the same workbook template at the same time. When this is attempted, each of the concurrent build sessions locks the selection files under the user directory in the domain, and an error message appears.
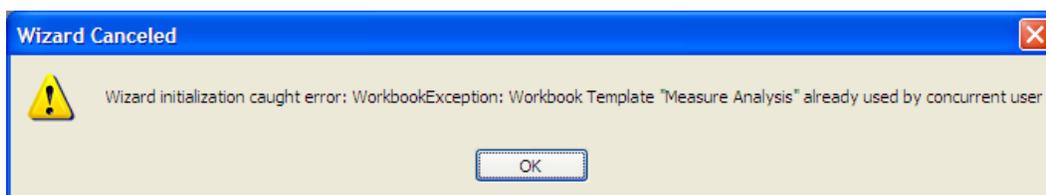
Concurrent User Session Error Message

Starting a Concurrent User Session

To start a concurrent user session, perform the following:

1. After you have already started a session, log in to the domain by entering your credentials in the login window. An **Already Connected** window appears.
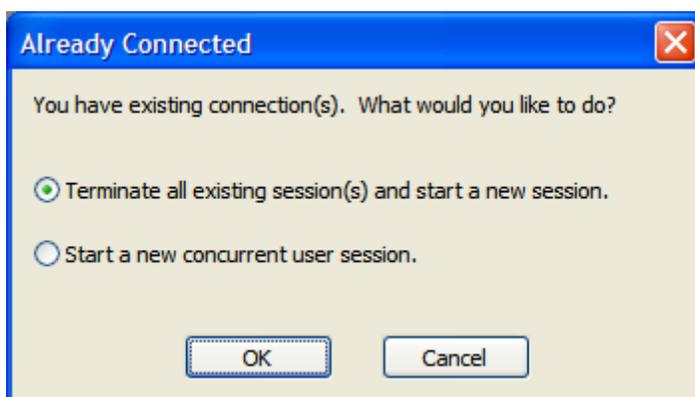
Already Connected Window

2. In the **Already Connected** window, choose one of the following options and click **OK**:

- **Terminate all existing session(s) and start a new session**. This option is useful when your previous session has encountered a network problem. If this option is selected, any previous session is allowed to complete its work if there is an open workbook. Calculation or custom menu actions are executed so that the workbook is in a consistent state. The current version of the workbook is automatically saved so that you can continue work on it later. Then the previous session closes, and a new user session starts for the logged on user. If there is an active RPAS Client associated with the terminated session, a notification window appears in that client stating that the session has been terminated.
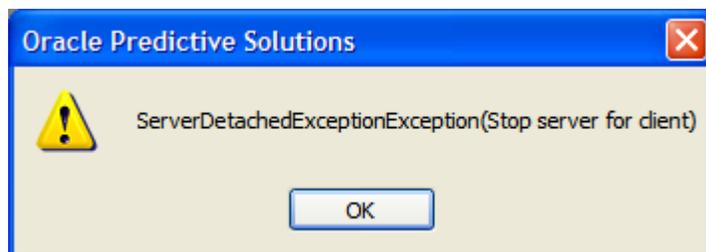
RPAS Client Termination Window

- **Start a new concurrent user session**. If both the Maximum User Session Limit and Maximum Domain Session Limit constraints are met, a new concurrent user session starts. If a constraint is not met, one of two notification windows appears and the login aborts.
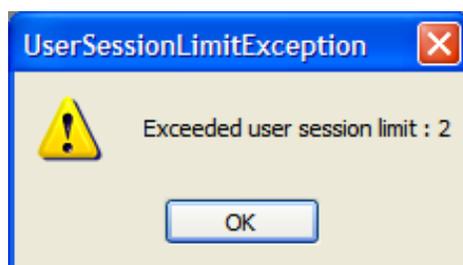
User Session Limit Exception Window
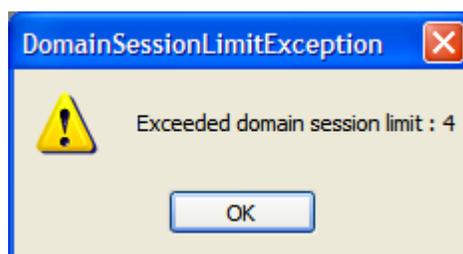
Domain Session Limit Exception Window

> **Note**: An RPAS Client option exists that controls whether the **Already Connected** window appears. If the foundation.ini file has the multi-session option set to true (MultiSession=true), this window does not appear and a concurrent user session starts automatically.

Auto-Save

RPAS automatically saves a backup version of the workbook any time a process is terminated as a result of a re-login attempt or a time out. All work until the last invocation of calc or a custom menu is saved, but all pending edits are lost.

If the workbook being auto-saved had been saved in the past, i.e., had been given a name by the user, the name of the auto-save workbook will be the original workbook name suffixed with _autosave. Additionally, the auto-saved workbook will have a new, current creation date. If the workbook had not yet been saved and named, the auto-save version will not have as easily identifiable a name. Instead, a workbook named **untitled** will be created and made available in your open dialog. You can identify this workbook by its creation date, modification date, and template name. This workbook will also have your work until the last calc or custom menu execution saved. All auto-saved versions will be accessible through the MRU list or through the **Open Workbook** dialogue.

At any point in time, if you decide to delete the original workbook and rename the auto-saved workbook to have the name of the original workbook, you can easily do that by first deleting the original workbook and then bringing up the **Rename Workbook** dialog from the **File** menu to rename the auto-saved workbook. For more information on renaming, see the Basic Workbook Procedures section in Chapter 3.

In RPAS, administrators have the capability to limit, on a template by template basis, the number of workbooks you can have at any point in time. If you were operating on the limit, the auto-save functionality will still create an additional workbook for you to prevent you from loosing your work in the event of a connection failure. However, once the limit has been exceeded due to auto-saving, RPAS will automatically stop auto-saving your workbooks for the particular template until you delete one or more workbooks for that template and bring the total number of your workbooks to or below the limit. Note that you can accomplish this by deleting any workbook, and do not have to choose between the original and the auto-save workbook. Once the number of workbooks within the particular template returns to or below the limit, RPAS will automatically re-enable auto-saving.

When RPAS discovers that the limit has been breached due to an auto-save, every time you open a workbook, RPAS will alert you with a pop-up dialog that the auto-save feature has been disabled and will instruct you to resolve the limit. You may choose to continue working with the workbook without resolving the limit, but the next time you loose a connection, you will also loose all your work after your last explicit save point.
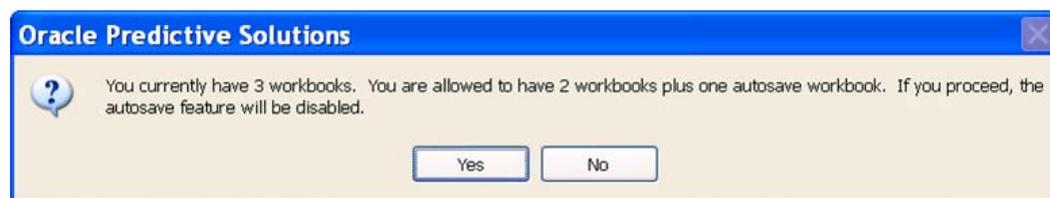
Auto-Save Limit Exceeded Dialog

2

Basic RPAS Concepts

Multidimensional Databases

Multidimensional database systems provide a multidimensional view of data. For predictive, planning, and analytical applications, a multidimensional database provides significant benefits over a relational database. Applications that run on RPAS use multidimensional databases to store data records in the master database, and multidimensional worksheets are used to present this data. This topic compares multidimensional and relational databases, and it describes the fundamental aspects of multidimensional databases, such as dimensions and hierarchies.

Relational Databases

Relational databases store data in a two-dimensional format where tables of data are presented in rows and columns. The following table shows a typical relational database (sales volumes for a printing company). The data in the relational table is stored in records (rows), and each record is divided into fields (columns).

In this example, the fields are Item, Store, and Sales Quantity. For example, the Minneapolis Store sold 47 packs of White Copy Paper in a certain time period.

Item	Store	Sales Quantity
Copy Paper, White, 500 Sheets	Minneapolis	47
Copy Paper, White, 500 Sheets	Atlanta	3
Photo Paper, Glossy, 25 Sheets	Minneapolis	12
Photo Paper, Glossy, 25 Sheets	Atlanta	44

Two-Dimensional Data Array

The data from the previous example is presented in the 2x2 matrix shown below. In this representation, the sales figures are located at the intersections of the x-axis (Store) and the y-axis (Item) in the matrix.

This matrix below is an example of an array that contains two dimensions (Store and Item). Arrays are the fundamental components of multidimensional databases.

Example: Two Dimensional Data Array

Dimensions

In RPAS, each axis in a multidimensional array is called a dimension, so in the example above, the dimensions are STORE and ITEM. These dimensions contain two positions each:

- STORE = Minneapolis and Atlanta
- ITEM = Copy Paper and Photo Paper

Each of the possible entities within a dimension is called a position. The sales information (quantity of items at a particular store during Week 1) is located at the intersections of the positions in individual cells of the matrix. For instance, the Atlanta Store sold 44 packs of photo paper during Week 1.

Applications that run on RPAS identify data through dimensional relationships. Dimensions are qualities of an item (such as a product, location, or time) or components of a hierarchy that define the structure and rollup within the hierarchy.

Example:
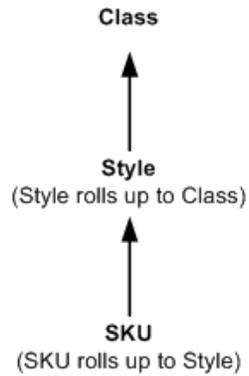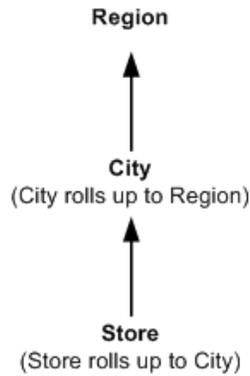
Example: Two Dimensional Database

Multidimensional data is easier to recognize when it is presented as an array rather than a relational database. In the previous two-dimensional database example, it is easy to see that there are two dimensions (item and store), and that each dimension contains two positions. For example, the sales information for copy paper sold is grouped into one row and can easily be totaled.

The array format displays immediate information about the number of dimensions in the data and the number of positions within each dimension. Therefore, arrays are far more organized than relational tables, and they ease data analysis and retrieval by eliminating the need to search individual records.

By storing data in an array format, systems can quickly and efficiently import and export data in a nightly batch process, which allows the accumulating and spreading of data to take place very quickly.

Three-Dimensional Relational Table

The relational database example can be extended by adding a third dimension to the data set. In the following example, the dimension "Customer Type" is added to the table. This dimension contains two possible positions (Trade Business and General Public Business). The addition of one dimension with two positions actually doubles the number of rows in the table. This method of presenting data is difficult to handle because the table's length expands considerably with the addition of each new dimension. This is why RPAS uses a multidimensional structure, which is explained in the following section.

Item	Store	Customer Type	Sales Quantity
Copy Paper, White, 500 Sheets	Minneapolis	Trade	47
Copy Paper, White, 500 Sheets	Minneapolis	General Public	23
Copy Paper, White, 500 Sheets	Atlanta	Trade	3
Copy Paper, White, 500 Sheets	Atlanta	General Public	17
Photo Paper, Glossy, 25 Sheets	Minneapolis	Trade	12
Photo Paper, Glossy, 25 Sheets	Minneapolis	General Public	43
Photo Paper, Glossy, 25 Sheets	Atlanta	Trade	44
Photo Paper, Glossy, 25 Sheets	Atlanta	General Public	41

How Multidimensional Databases Handle Additional Dimensions

A multidimensional structure accepts the addition of new dimensions while providing the ease of data analysis. There is now a three-dimensional 2x2x2 array (see the illustration below) that contains 8 cells rather than a two-dimensional (4x8) array that contains 32 data cells. The data is still sorted and presented in the same manner. The following figure shows a three-dimensional data array.
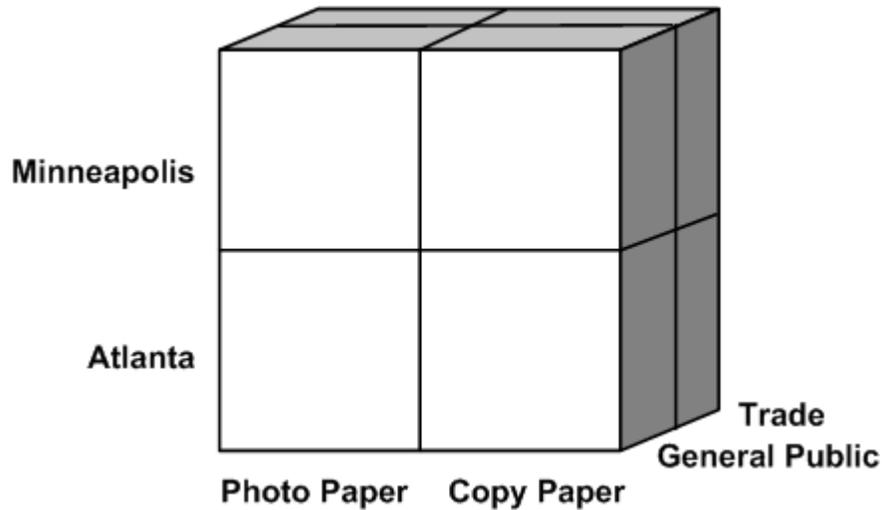
Example: Three-dimensional Array

Four-Dimensional Data Array

The three-dimensional data array can be expanded to four dimensions by adding the dimension of time. Four dimensions are more difficult to understand, so imagine an array that is similar to the figure below for each of the twelve months of the year (twelve positions in the time dimension).
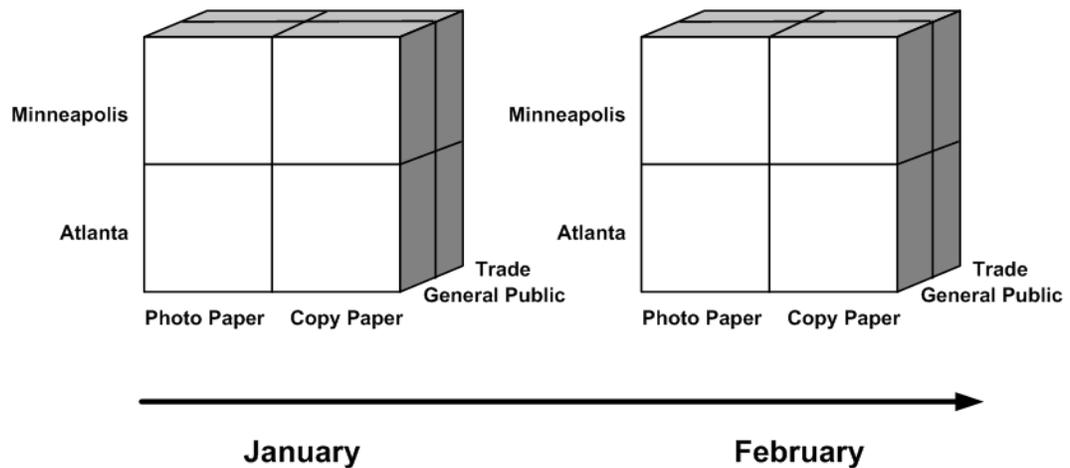
Example: Four-dimensional Array

Hierarchies

Hierarchies are a top-to-bottom set up of parent-child relationships between levels that belong to the same entity (for example, time = years, months, weeks, and days). Organizations use these structures to describe relationships between the many dimensions. A hierarchy provides a means to define relationships between dimensions by aggregates (roll ups, and alternate roll ups).

RPAS hierarchies reflect the hierarchies used in retailer's operational systems, such as the Oracle Retail Merchandising System (RMS). If you use RPAS in conjunction with RMS, the hierarchies will usually default to the RMS hierarchical structure.

The figure below (left) illustrates a sample RMS product hierarchy. The RMS hierarchy may also be augmented to include other rollups and attributes, such as product status or price point.

In the diagram on the right, the Style dimension contains an alternate roll-up to the Supplier dimension. Each position in the Style dimension will have one parent position in the Subclass dimension and one in the Supplier dimension.
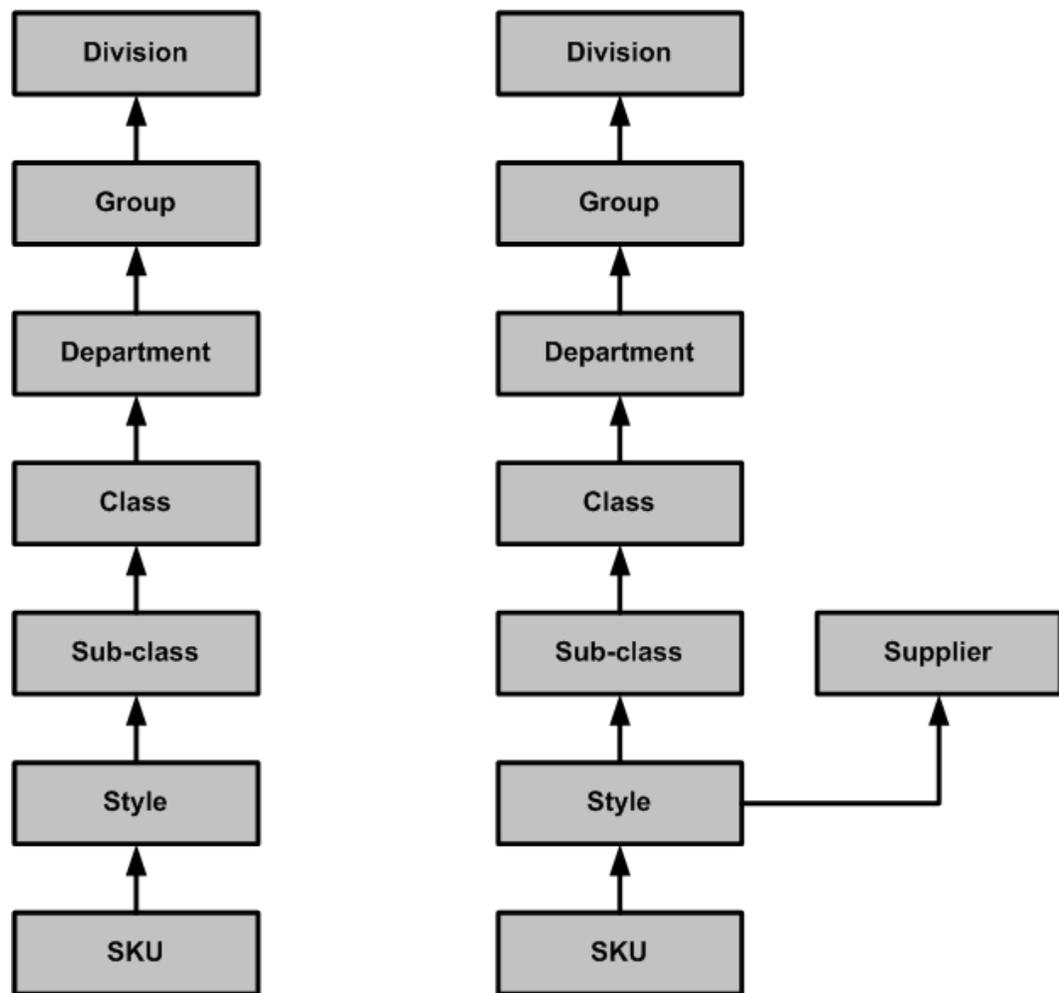
Example: RMS Product Hierarchy

Hierarchy Rules

Generally, hierarchies are far more complex than those in the previous examples. An item at a particular level in a hierarchy can be aggregated along several hierarchical paths. However, for any given roll-up path, that item can only belong to one parent at any higher dimensional level. For example, if a given store location is aggregated to the state level, that location can only belong to one state position (for instance, Georgia or Florida, but not both). You can view data at any level of detail by drilling down or rolling up through levels in the hierarchy. Hierarchies define the path of data aggregation and spreading.

Workbooks, Worksheets, and Wizards

Workbooks

The Oracle Retail Predictive Solutions integrate and manipulate your organization's planning and forecasting data and presents it in a workbook format. A workbook is a local copy of the data of record in the domain that the end user can easily view and manipulate. Its multidimensional framework is used to perform specific business functions, such as generating sales forecasts and building merchandise financial plans. To present data, a workbook can contain any number of multidimensional spreadsheets, called worksheets, as well as graphical charts and related reports. These components work together to ease the viewing and analysis of business functions.

Once the workbook framework and its specific attributes have been defined and built, the structure is saved as a workbook template, which allows new sets of data to be imported, manipulated, and presented as needed in a standardized format. This approach has the following advantages:

- It eliminates the need to redefine workbook parameters whenever you want to view a new set of data.
- It ensures that the calculations are correct.
- It imposes a standard approach on all users to the business process.

Remember that data in a workbook can be viewed at lower levels of detail or higher levels of aggregation. Different views are obtained by changing the path and/or the level of data rollup. Data in a workbook can also be manipulated at any hierarchical level. If you modify data at an aggregate level, these changes are distributed down to the lower levels. The reverse is also true — if you modify data at a lower level in the hierarchy, the aggregates of the data reflect those changes.

Building Workbooks

Workbooks can either be built in two ways:

- Automatically during nightly batch runs.
- Manually by using a wizard.

The Workbook Auto Build feature allows you to set up workbook builds, which take place on a regular basis during nightly batch runs. Workbooks to be built in this way are added to the auto build queue. This way, you are spared the processing time that is required to regularly enter the same selections, and you are spared the wait time associated with workbook builds.

Worksheets

Worksheets are multidimensional spreadsheets that are used to display information from the workbook. Workbooks can include one worksheet or multiple worksheets, which can present data in the form of numbers in a grid. These numeric data values can easily be converted to a graphical chart. Data can be viewed at a very high level of detail, or data values can be quickly aggregated and viewed at summary levels.

You can display the information in a worksheet in a variety of formats, generally by rotating, changing the data rollup, showing and hiding measures, and drilling up or down. The Oracle Retail Predictive Solutions also allow you to easily change the presentation style of data in a worksheet.

Wizards

A wizard is a feature that steps you through the process of building a new workbook from a workbook template. A wizard displays successive dialogs that require you to answer a sequence of questions or enter selections regarding the content of your workbook. Your responses to these questions are used to automatically format and populate the workbook that you want to build.

The specific information required by a wizard depends on the type of workbook being built. For example, the wizard might ask you to select the hierarchy level at which a source forecast should be run, or it may ask you to select the products and/or locations that should be included in a particular workbook.

A variety of workbook templates may exist for building different types of workbooks for each application. In addition, there are workbook templates for performing system administration and data maintenance on the Administration and Analysis tabs, respectively.

Menus, Quick Menus, and Toolbars

Menus

Standard pull-down menus are available for performing most commands. Click on the appropriate menu title in the application's menu bar to display the menu. Some applications may have added further menu options to those provided as standard by the platform.

Quick Menus

Quick menus (right-click menus) are available to access certain commands. To access a quick menu, right-click over an appropriate screen area. These quick menus are context-sensitive, which means their availability, appearance, and options depend on the screen area where you right-clicked.

Quick menus are essential tools for functions, such as:

- Changing the level and/or path of hierarchy rollup
- Hiding positions within a dimension
- Switching the view of your worksheet between outline view and block view
- Sorting or resorting data in a dimension
- Formatting grid and chart data

Toolbars

The RPAS toolbar contains iconic buttons (having the character of an icon) that give you direct access to many common commands and actions. To see the function of a particular toolbar button, move your cursor to a position above it. A caption describing the button's function will appear in the status bar at the bottom of the screen.

3

Using Workbooks, Worksheets, and Wizards

Using Workbooks and Worksheets

Once you log on to RPAS, the Oracle Predictive Solutions window appears.
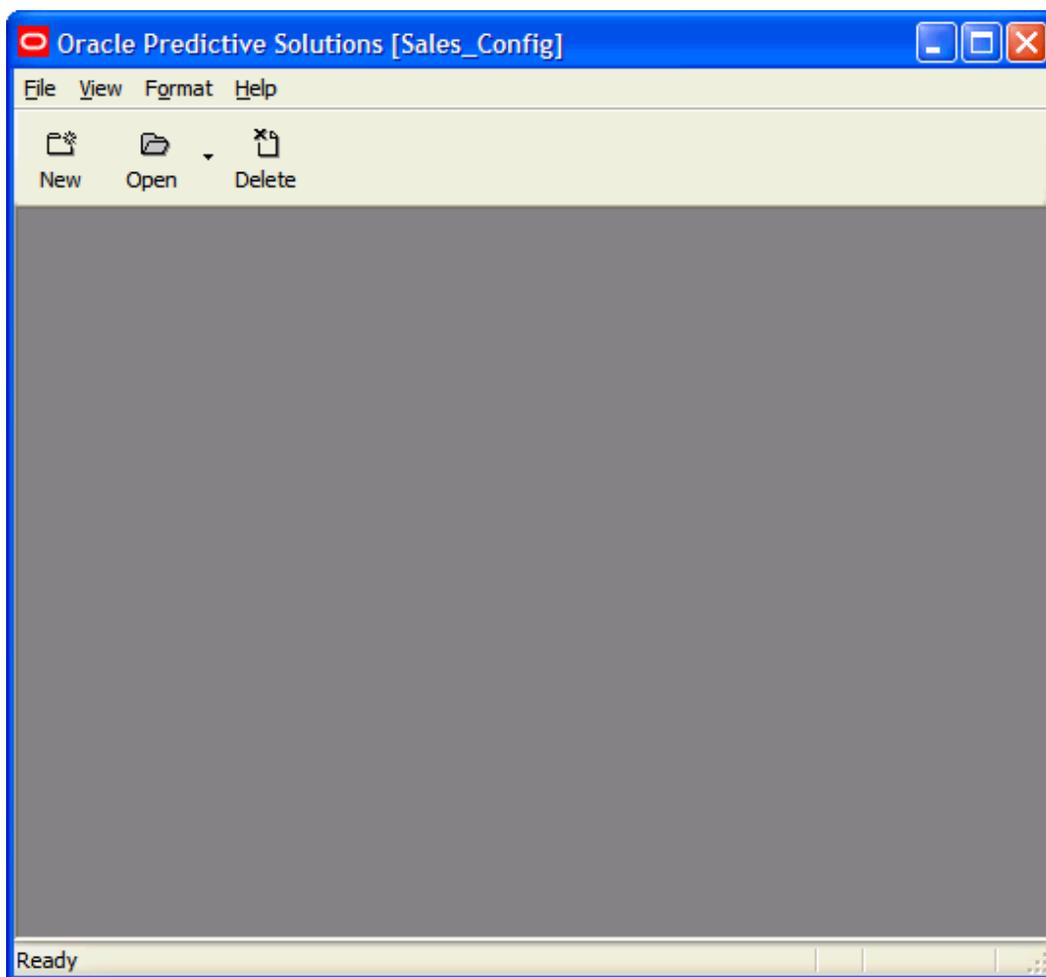
Oracle Predictive Solutions Window

Menu Bar

Overview

The menu bar is displayed under the workbook title bar. To access a particular command, left-click once on the menu label. A pull-down menu of options that are specific to that section is displayed. The choices of the menu are context-sensitive, meaning that the choices and their availability change depending on your current selection or mode of work. When an item is grayed-out, it is not available in your current selection or mode of work.

File Menu

When the **File** menu is selected, the **File** menu options appear.
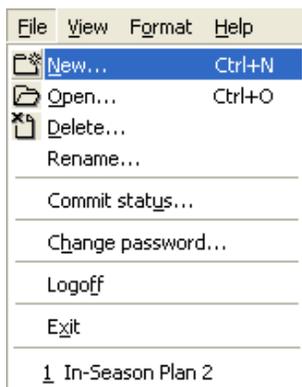
File Menu Options

> **Note: Save**, **Commit**, and **Print** options are added to the menu when a workbook is open. The **New File** menu is discussed in detail in Appendix: Using RPAS Menus and Toolbars.

File - New

The **New** menu option allows you to create a new workbook. When you select **File –
New**, the **New** dialog box appears.
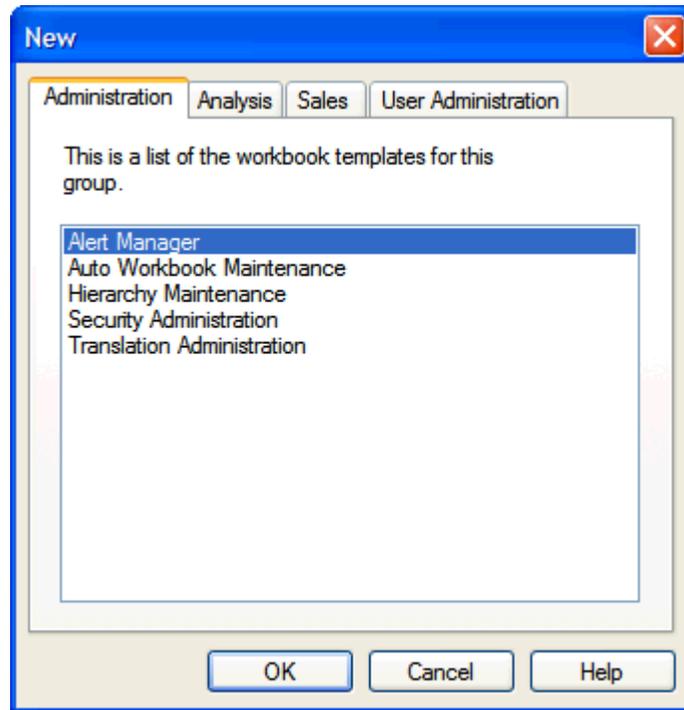
New Dialog Box

> **Note: File – New** gives the same results as the selecting the
> **New** button from the toolbar.
>
> The **New** dialog box, shown below, is a generic example.
> The tabs within this box are specific to the client
> configuration. There can be a number of tabs.
>
> See The New Dialog Box for a description of the tabs.

File - Open

The **Open** menu option allows you to open an existing workbook. When you select **File – Open**, the **Open** dialog appears.
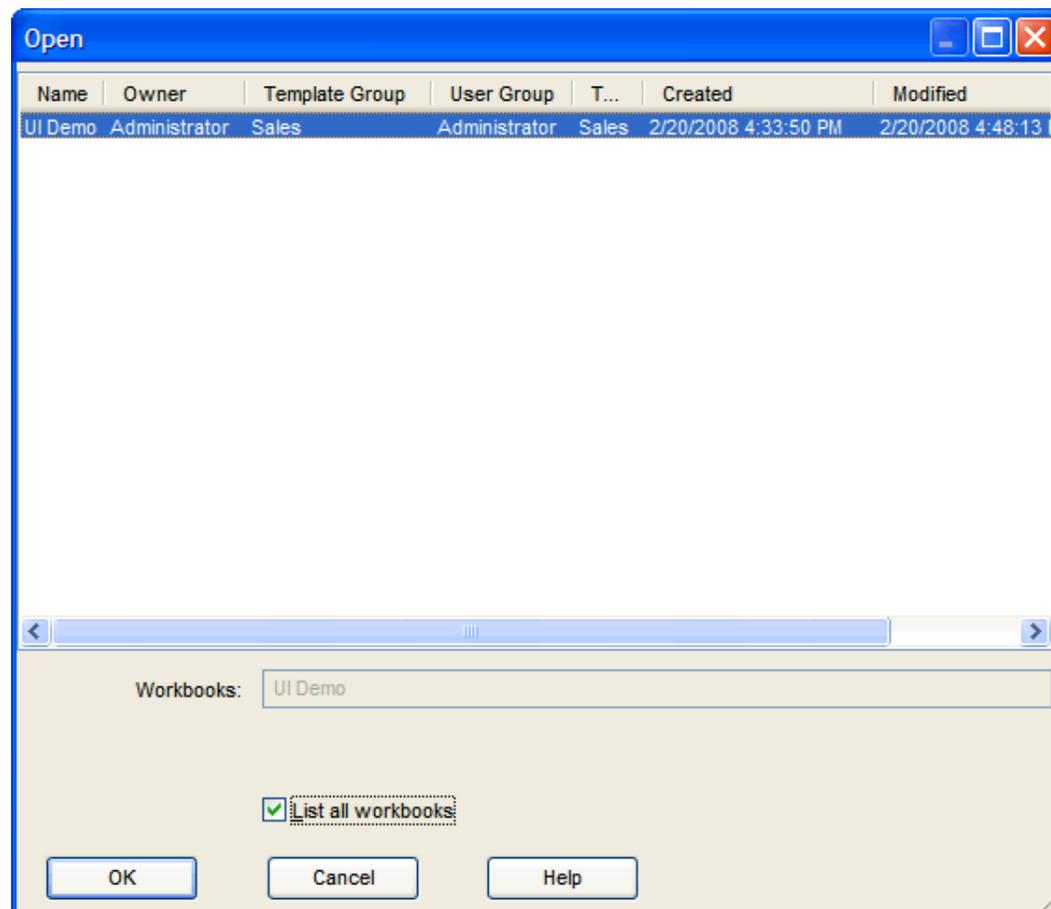
Open Dialog Box

This dialog box displays all of the workbooks that you are allowed to open. This includes all workbooks that you have created and saved, and not yet deleted. It also includes any workbooks that other users have saved with World Access. To open a workbook, highlight the selection you want to view, and click **OK**.

When you view the list of available workbooks, click on any column header to sort the workbooks by that attribute. For example, click the **Owner** column header to sort the workbooks alphabetically by owner.

Select **List all workbooks** option to display all workbooks in the system. This includes those that you do not have write access to. Listing those additional workbooks does not give you write access to them.

> **Note: File – Open** gives the same results as the **Open** button.

File - Delete

The **Delete** menu option allows you to delete existing workbooks. When you select **File** – **Delete**, the **Delete** dialog appears.
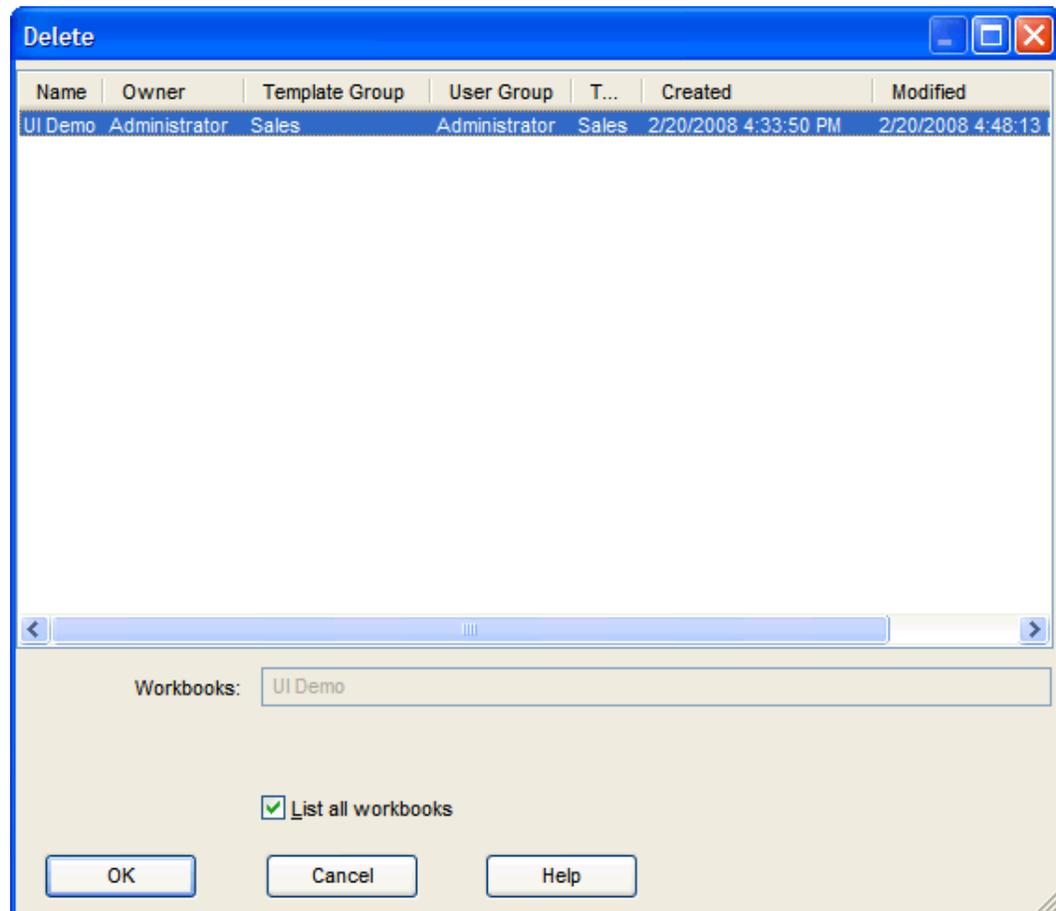
Delete Dialog Box

> **Note: File** – **Delete** gives the same results as the **Delete** button.

This dialog lists all of the workbooks that you are allowed to delete. This includes all workbooks that you have created and saved, and not yet deleted. It also includes any workbooks that other users have saved with World Access. To delete a workbook, select the workbook you want to delete, and click **OK**.

File – Rename...

RPAS allows you to rename a workbook without instead of having to keep multiple versions of it as additional workbooks. When you rename a workbook, its name will change, but its modification and creation date will remain intact. Your MRU list will be updated to reflect the change in name, and if the workbook you renamed had been saved with group or world access, the new name will be reflected to other users on their next login.

To rename a workbook, select **File - Rename...** to bring up the Rename dialog.
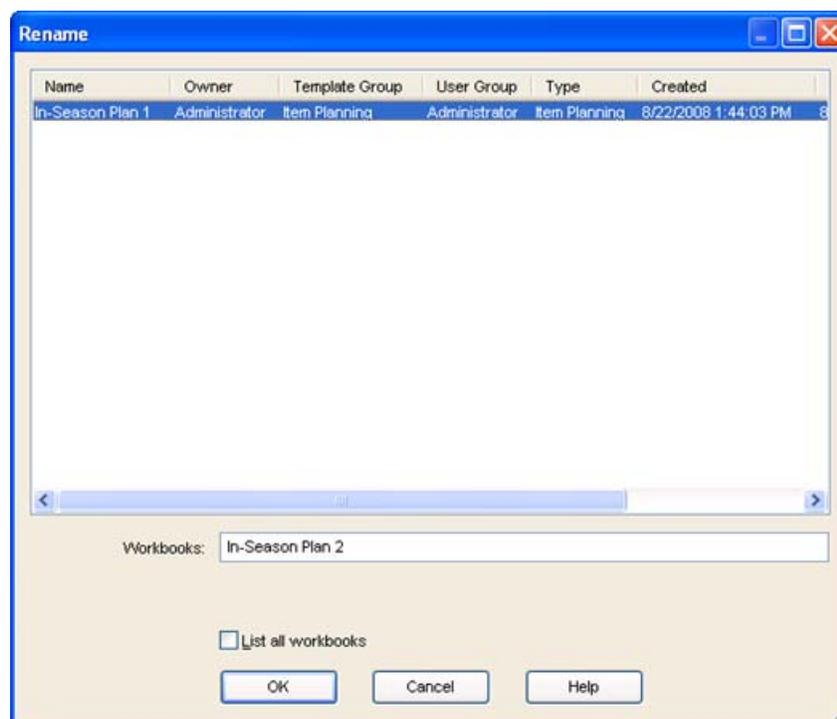
Rename Workbook Dialogue

You can only rename workbooks that you have write access to, and you can rename a workbook while it is open. Renaming a workbook is executed as soon as you approve it in the renaming dialog. That is, if you open a workbook, make some changes, rename the workbook, and then close the workbook without saving it, you will loose your changes but the renaming will persist.

File - Commit Status

The **Commit Status** menu option allows you to see the status of recent commit processes that used the Commit ASAP functionality. When you select **File – Commit Status**, the **Commit Status** dialog box appears.
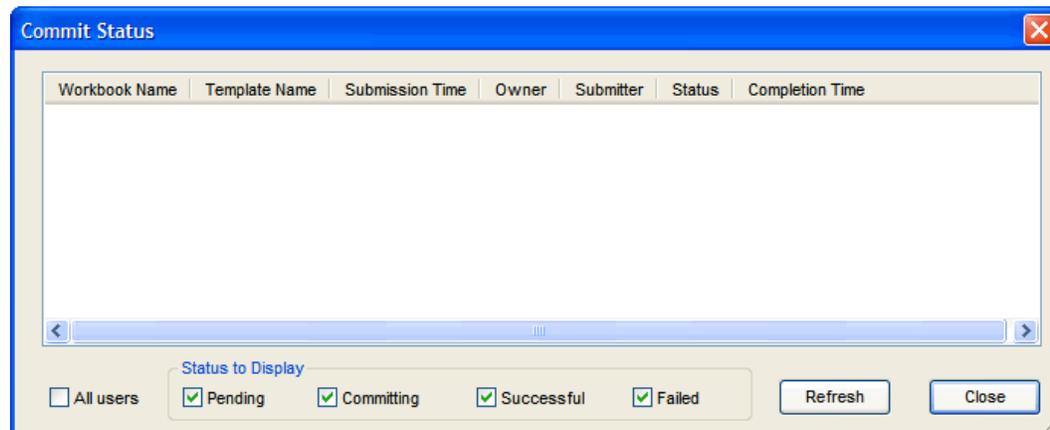
Commit Status Dialog Box

This dialog is available whether or not you have a workbook open.

The dialog box shows the following information about each commit request:

- Workbook Name

> **Note:** An unsaved workbook committed with Commit ASAP is assigned a Workbook Name of "untitled."

- Template Name
- Submission Time
- Owner
- Submitter
- Status
- Completion Time

At the bottom of the Commit Status window, you can filter the commit requests to view based on their status. To update the workbooks based on your selected filter criteria, click **Refresh**.

Workbooks may display the following status:

- Pending – The commit is queued up to take place at some point in the future
- Committing – The workbook is currently being committed
- Successful – The commit succeeded
- Failed – The commit failed

Columns in the **Commit Status** dialog box can be selected and the displayed data will be immediately sorted in ascending or descending order.

Data is refreshed and re-displayed when you click **Refresh**. This is useful when:

- You have changed the filters.
- You need to watch for a commit that is pending.
- You need to see when committing completes.

RPAS retains and displays the details of the last 1000 successful and unsuccessful commit ASAP process for the domain. Old details will automatically be removed from this status report in a time period that depends on the level of commit ASAP activity for the domain as a whole.

> **Note: Commit Now** and **Commit Later** actions will not display in the **Commit Status** dialog box.
>
> There can be only one pending commit ASAP in the queue for a given workbook/user/template name combination. If a subsequent commit ASAP is issued before the first has executed, the first commit ASAP is removed from the queue and will never get processed. The new commit ASAP is placed at the end of the queue.

File - Change Password

The **Change Password** menu option allows you to change your password. See the Changing Your Password section for more information.

> **Note:** RPAS can be installed as a web-based application (see the *RPAS Administration Guide* for more information). The **Change Password** menu option is disabled for web-based users.

File - Logoff

The **Logoff** menu option allows you to logoff from the system. If you have a workbook open, the **Close Workbook** dialog appears when you select **File – Logoff**.
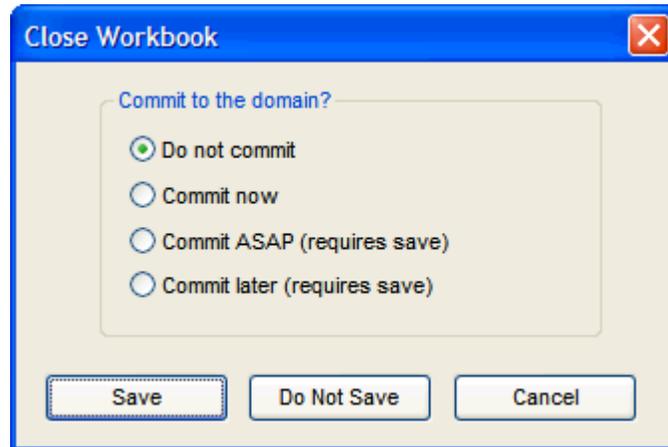
Close Workbook Dialog Box

If you do not have a workbook open, a message box appears when you select **File – Logoff**.
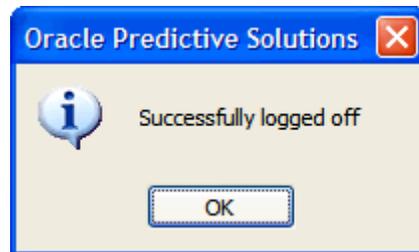
Logoff Verification Dialog Box

This is one of two methods that you can use to log off of the system.

When you select this option, you will be logged off, but the **Login Information** dialog box is still displayed. This leaves the system ready for another user to access.

If you have an unsaved workbook open at the time you select **Logoff**, the **Close Workbook** dialog box appears. Select the required commit activity, and select **Save** or **Don't Save** as required, or select **Cancel** to cancel the Logoff request.

File - Exit

The **Exit** menu option allows you to logoff and exit from the system. If you have a workbook open, the **Close Workbook** dialog appears when you select **File – Exit**.
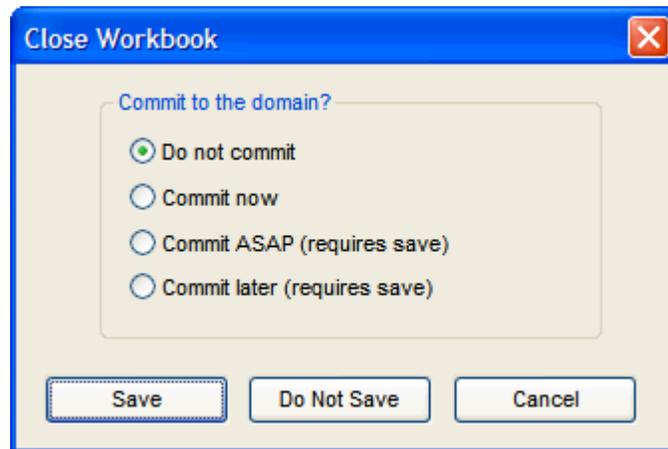
Close Workbook Dialog Box

If you do not have a workbook open, a message box appears when you select **File – Exit**.
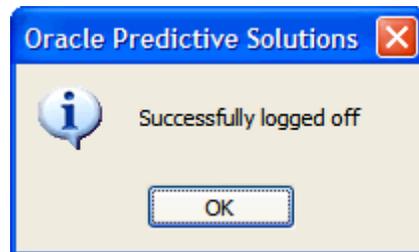
Logoff Verification Dialog Box

File – Exit is the second of two methods that you can use to log off the system.

The **Exit** option logs you off of the application and exits the system completely.

If you have an unsaved workbook open at the time you select **Exit** the **Close Workbook** dialog box appears.

Select the required commit activity, and click on **Save** or **Do not save** as required, or select the **Cancel** button to cancel the Exit request.

View Menu

When you click **View**, the **View** menu options appear:
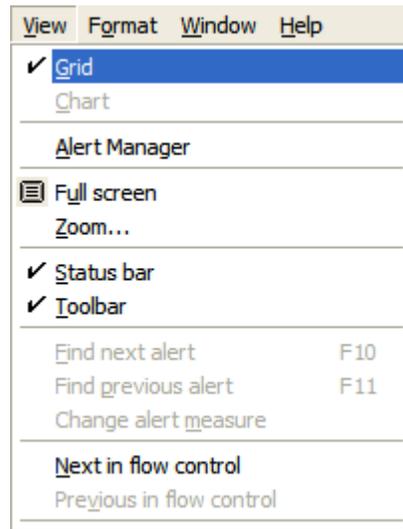
View Menu Options

> **Note:** Grid/Chart toggle, Zoom, Alert, and Flow control options are added to the menu when a workbook is open. This is discussed in detail in Appendix: Using RPAS Menus and Toolbars.

The following topics provide brief descriptions of the **View** menu options.

View – Alert Manager

The **Alert Manager** menu option displays the Alert Manager window, or it hides it if it is already displayed. When you select **View** – **Alert Manager**, the Alert Manager window appears (if it is not already visible).
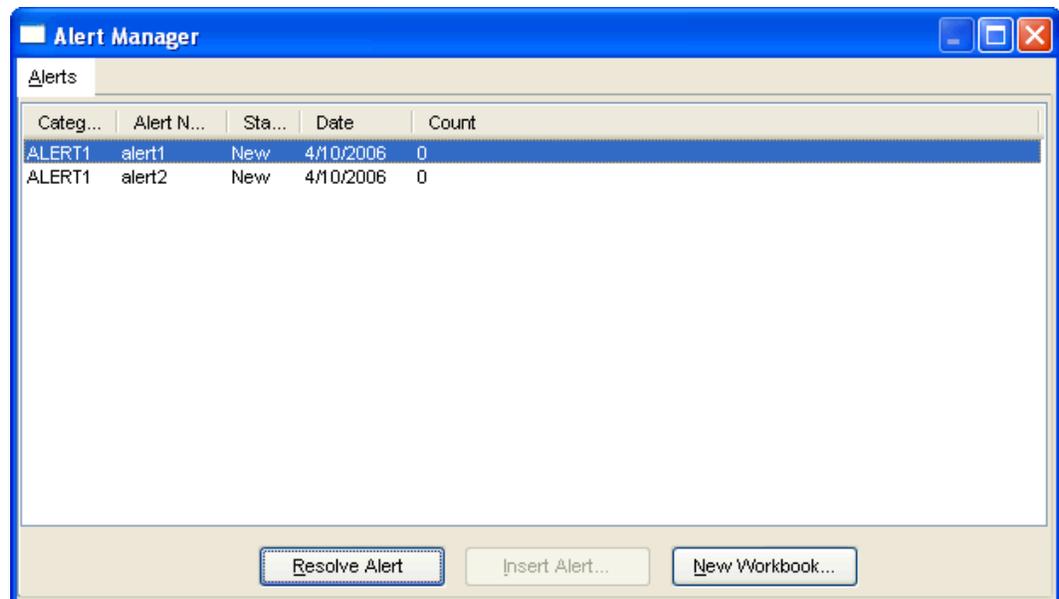
Alert Manager Window

> **Note:** See the Using the Alert Manager section for more information.

View – Full Screen

The **Full Screen** menu option hides the status bar, the tool bar, and the application title.

The window is maximized to fill the entire screen.

Click this option again to return the window to its original size.

View – Status Bar

The **Status Bar** menu option displays or hides the status bar at the bottom of the application window.

View – Toolbar

The **Toolbar** menu option displays or hides the toolbar at the top of the application window.

Format Menu

When you click **Format**, the **Format** menu options appear.
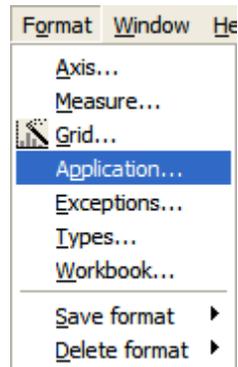
Format Menu Options when No Workbooks Open

> **Note:** Axis, Measure, Grid, Exceptions, Types, Workbook and Format Save/Delete options are added to the menu when a workbook is open. The new **Format** menu is discussed in detail in Appendix: Using RPAS Menus and Toolbars

For more information about saving and deleting formats, see Chapter 4: Saving and Deleting Formatting.

Format – Application

Selecting **Format** – **Application**, displays the **Format Options** dialog box.
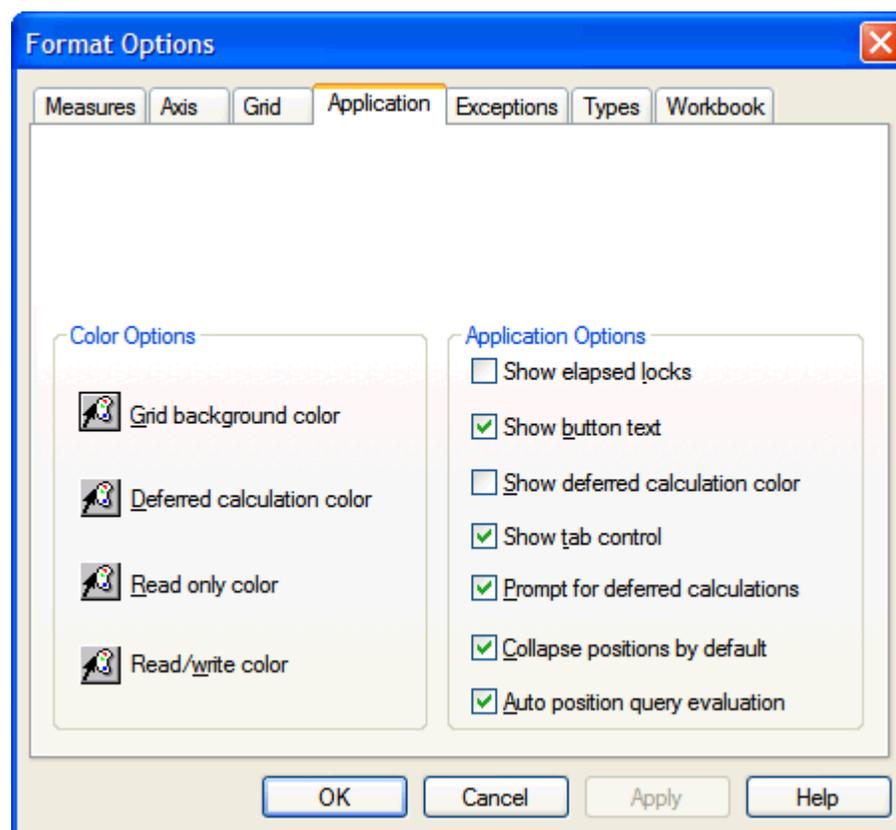
Format Options Dialog Box – Application Tab

Selections made on the Application tab affect all worksheets in the current workbook. The **Application** option on the **Format** menu is only available in Grid view (not Chart view).

To change the view from Chart to Grid, click the **Toggle** button , or select **View** – **Grid**.

The **Format Options** dialog box displays the following options and functionality:

Color Options

Grid Background Color

This option sets the color for the area within a worksheet window that lies beneath the grid display, column/row/slice axes, hierarchy tiles, and scroll bars.

Deferred Calculation Color

This option sets the background color for cells in which a deferred calculation is pending. The color chosen from this palette is only displayed if the **Show Deferred Calculation Color** check box (described below) is selected. The Deferred Calculation Color overrides the Read/Write Color selection for a cell.

Read-Only Color

This option sets the color for read only worksheet cells.

Read/Write Color

This option sets the color for read/write worksheet cells.

> **Note:** The **Read/Write Color** option will be overridden if a
> workbook is open and the **Shade Colors By Dimension**
> option on the **Format – Axis** tab is selected. Dimension
> shading (if toggled on) overrides any read/write color
> selection, but it does not override the read only color
> selection. If it appears that your read/write color selection is
> not recognized by the system, try toggling off the **Shade
> Colors By Dimension** option on the **Format – Axis** tab.

Application Options

Show Elapsed Locks

When this box is unchecked, elapse positions will only be the Read Only color. When the
box is checked, elapse positions will be the Read Only color with the elapsed lock.

Show Button Text

This option toggles the display of toolbar button titles. If this check box is selected, the
toolbar buttons appear large and include the button name/function. If this check box is
cleared, the toolbar buttons appear small and do not contain text.

Show Deferred Calculation Color

This option toggles the display of a distinctive background color for cells in which a
deferred calculation is pending. The color for such cells is specified by using the Deferred
Calculation Color option described above. When the Show Deferred Calculation Color
check box is selected, the selected color is displayed whenever applicable.

Show Tab Control

For workbook templates that support process tab control, you have the option of
disabling the tab control display. Check this check box to turn on the tab control bar.
Remove the check box to turn off the display. When the tab control bar is not displayed,
the **Previous** and **Next** buttons are still present on the application toolbar, which enables
you to advance through the workbook process flow.

Prompt for Deferred Calculations

There are some actions (such as opening another minimized worksheet) that require that
there are no cell edits that have not yet been calculated. In such circumstances, this
option allows you to enable or disable the display of a warning dialog. When the **Prompt
for Deferred Calculations** box is selected, the **Calculate Workbook** dialog box appears
which allows you to cancel the action if necessary.
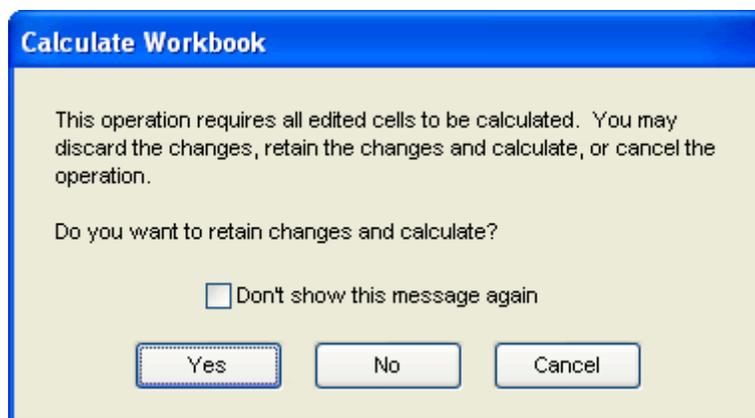
Calculate Working Dialog Box

For the above warning to be displayed, you must first edit a cell in a worksheet (for instance, changing the administrative rights from **Full Access** to **Denied**). Then certain actions (such as closing the worksheet) will cause the warning to be displayed.

> **Note:** If you select the **Don't show this message again** option, the system automatically defaults to **Yes**.

- Click **Yes** to retain and calculate the changes.
- Click **No** to discard the changes.
- Click **Cancel** to cancel the operation.

Collapse Positions by Default

When dimensions are expanded (showing parent-child relationships), and you place a check in the **Collapse Positions by Default** checkbox, these positions will collapse causing the child positions to get rolled up into their parent positions. The following examples demonstrate the difference in the way the positions are displayed based on the enablement of this checkbox:

Collapse Positions by Default Checkbox Unchecked
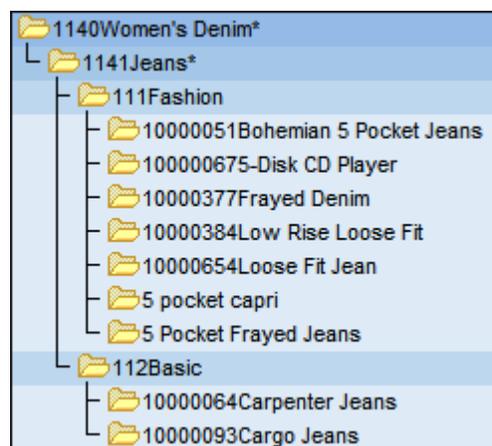
Parent-Child Positions Expanded

Collapse Positions by Default Checkbox Enabled

```
📁 1140Women's Denim*
📁 1240Men's Denim
```

Parent-Child Positions Rolled Up

Auto Position Query Evaluation

RPAS supports the use of Position Queries to drive the positions that are visible on a window. Those position queries are updated when certain events occur, such as changing the driver position in the Z-axis while the view is opened. By enabling Auto position query evaluation, the visible positions are updated when the associated Boolean measure is changed as the result of a calculation. For performance reasons, this option is disabled by default. A new position query button is displayed when there are position queries on the Z-axis of the worksheet. If this button is disabled, the position queries are up to date. If this button is enabled, which can only happen if the auto evaluation option is off, the position queries need to be updated by clicking the button.

Help Menu

When you click **Help**, the **Help** menu options appear.

```
Help
  Contents...
  (?) About...
```
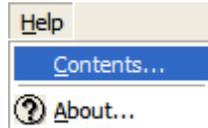
Help Menu Options

The following paragraphs list brief descriptions of the **Help** menu options.

Help – Contents

The **Contents** menu option displays the contents for the Oracle Retail Predictive Solutions Help system.

Help – About

The **About** menu option displays information about the application, which includes client version, server version, copyright, and licensing information.

New Dialog Box

When you select **File** – **New** or click the **New** button, the **New** dialog box appears. The tabs displayed within dialog box are specific to the client configuration. There can be a number of tabs. The various workbooks are accessed from these tabs.
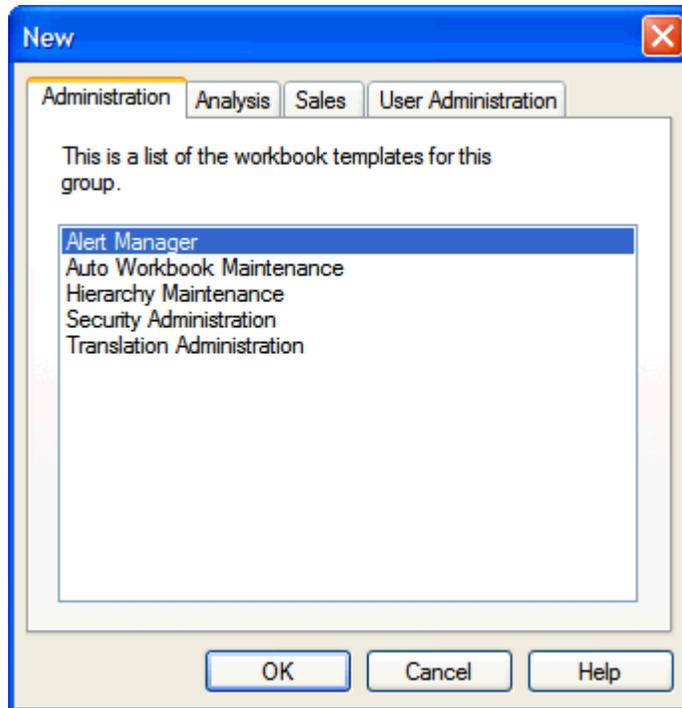
New Dialog Box

Administration Tab

See the *RPAS Administration Guide* for the workbooks that can be accessed from this tab.

Analysis Tab

Measure Analysis Workbook

The Measure Analysis workbook allows the user to view data associated with any stored measure in the Oracle Retail Predictive Solutions applications, such as actual sales data for specified product/location/calendar combinations. The user may also use the Measure Analysis workbook to edit values for writable measures.

Although a common use of the Measure Analysis workbook is to view actual sales data, the workbook is not restricted to presenting sales data alone. The user can view any data loaded into the Oracle Retail Predictive Solutions master database, such as selling prices, shipments, and orders. The Measure Analysis Wizard provides a list of all stored measures that have an Insertable measure property set to true (see the *RPAS Configuration Tools User Guide* for more information on measure properties). The user simply chooses the measures to be displayed in the new workbook.

Navigate: From the **File** menu, select **New**. The **New** dialog box appears.

1. Select the **Analysis** tab in the **New** dialog box.

2. Select **Measure Analysis**, and click **OK**. The Measure Analysis Wizard opens.
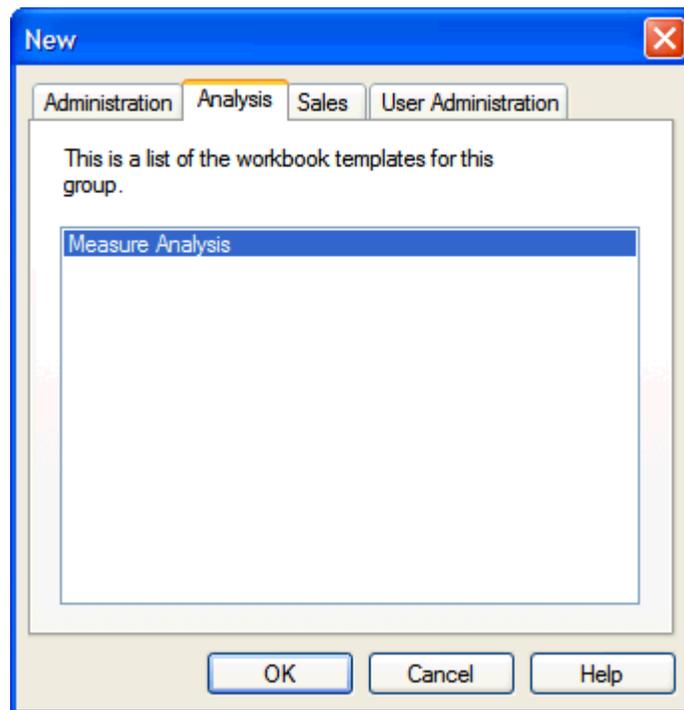
New Dialog Box – Analysis Tab

3. Select the measures to be included in the workbook and click **Next**. Use **Ctrl+Click** and/or **Shift+Click** to select multiple measures. The Available Calendar Positions (dates) screen appears.
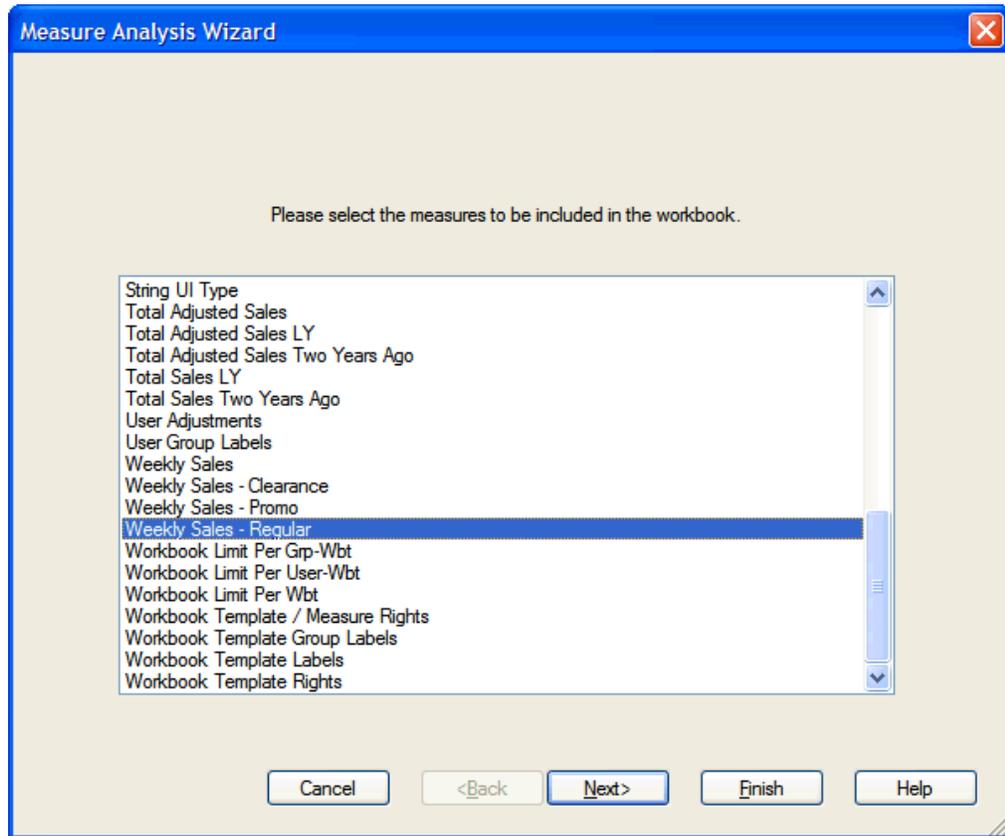
Measure Analysis Wizard - Select Measures Screen

4. Select the available positions (dates or range of dates) to be included in the workbook and click **Next**. The Available Location Positions (locations) screen appears.
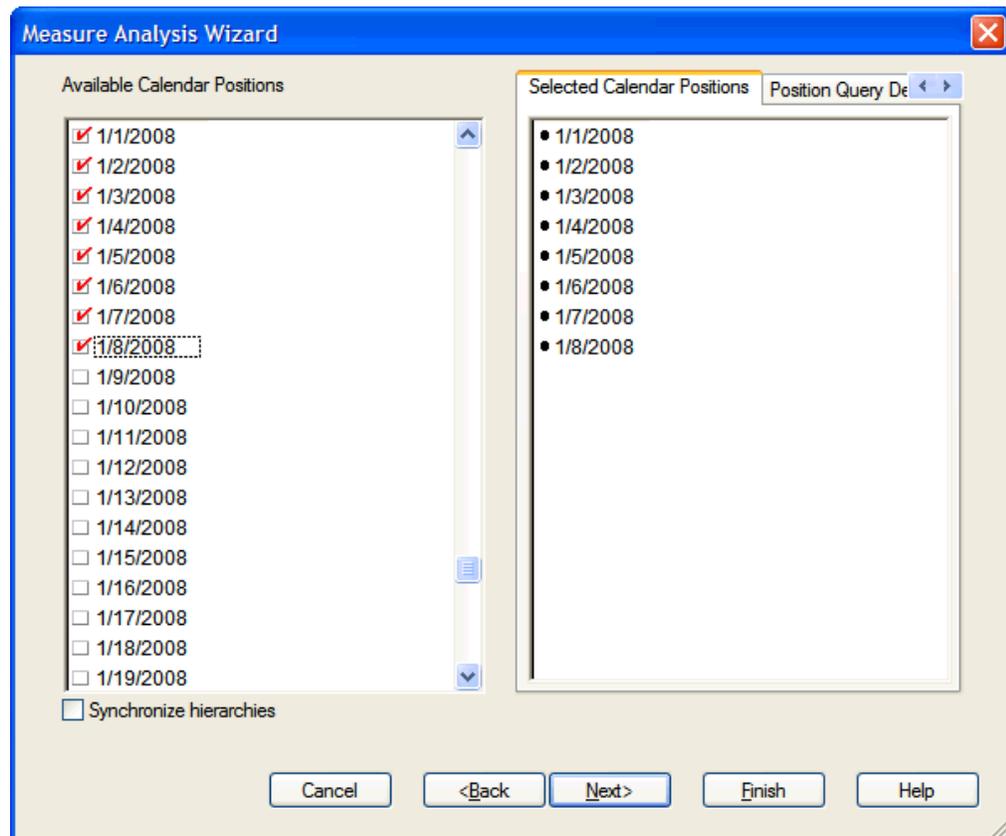
Measure Analysis Wizard – Available Calendar Positions (Dates) Screen

> **Note:** The following wizard pages are determined based on the base intersection(s) of the measures selected in the Select Measures Screen. The user will be presented with a hierarchy position selection wizard for each unique hierarchy represented by the measure(s) selected. For example, the Weekly Sales-Regular measure has a base intersection that is defined with the Product, Location and Calendar hierarchies. The following is an example of the wizard pages the user will see based on this measure.

5. Select the available positions (locations) to be included in the workbook, and click **Next**. The Available Product Positions (products) screen appears.
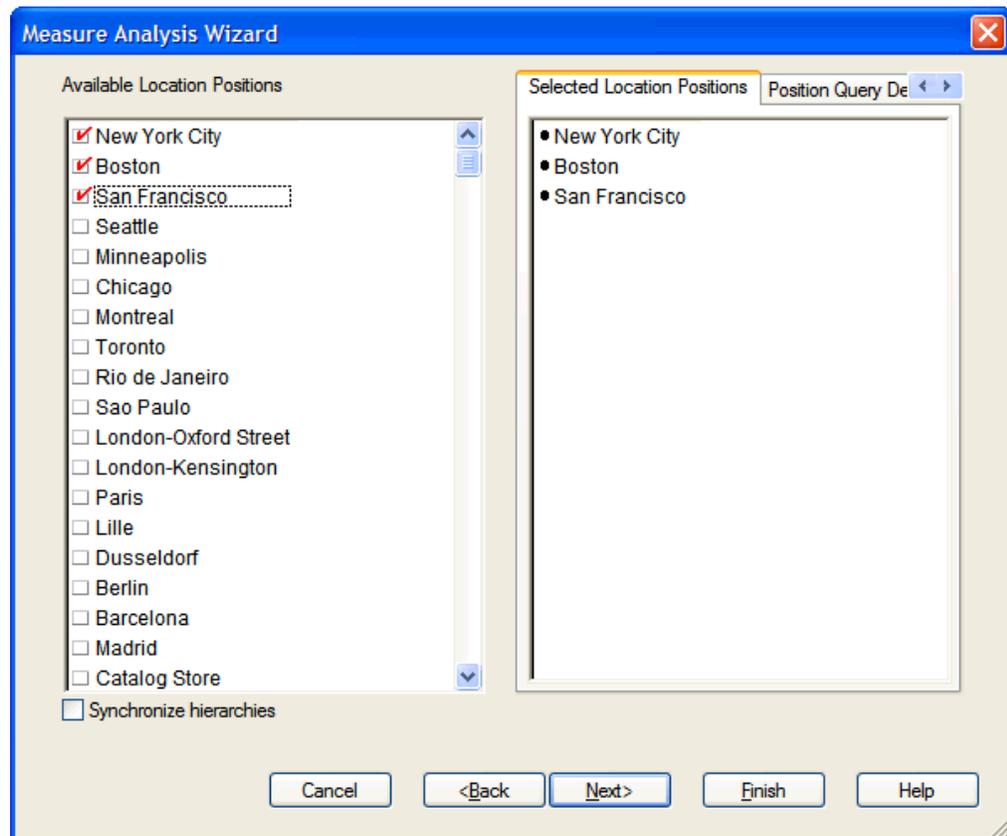
Measure Analysis Wizard – Available Location Positions (Locations) Screen

6. Select the available positions (products) to be included in the workbook, and click **Finish**.
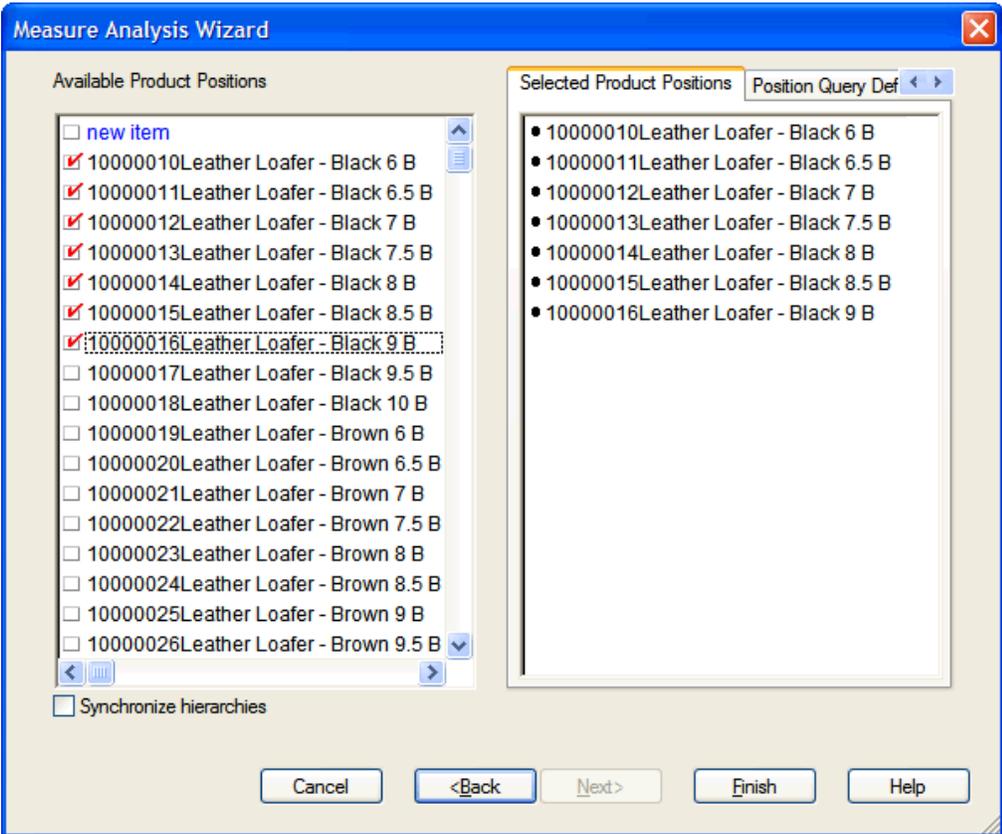
Measure Analysis Wizard – Available Product Positions (Products) Screen

7. The Measure Analysis Workbook is built. Edit the writable cells for the measure(s) that you selected as necessary. Commit capability will be enable for administrative users.

Example of Measure Analysis Worksheet

8. Select **Close** from the **File** menu to close the workbook. The **Calculate Workbook** dialog box appears. Click **Yes**.

Calculate Workbook Dialog Box

9. The **Close Workbook** dialog box appears. Select **Commit Now**, and click **Save** if the workbook is to be saved.
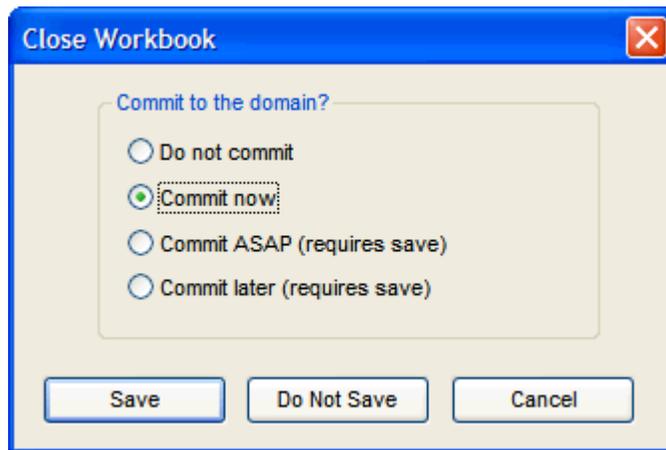
Close Workbook Dialog Box

10. The **Save As** dialog box appears. Enter the name your workbook in the **Workbooks** field, and click **OK**.
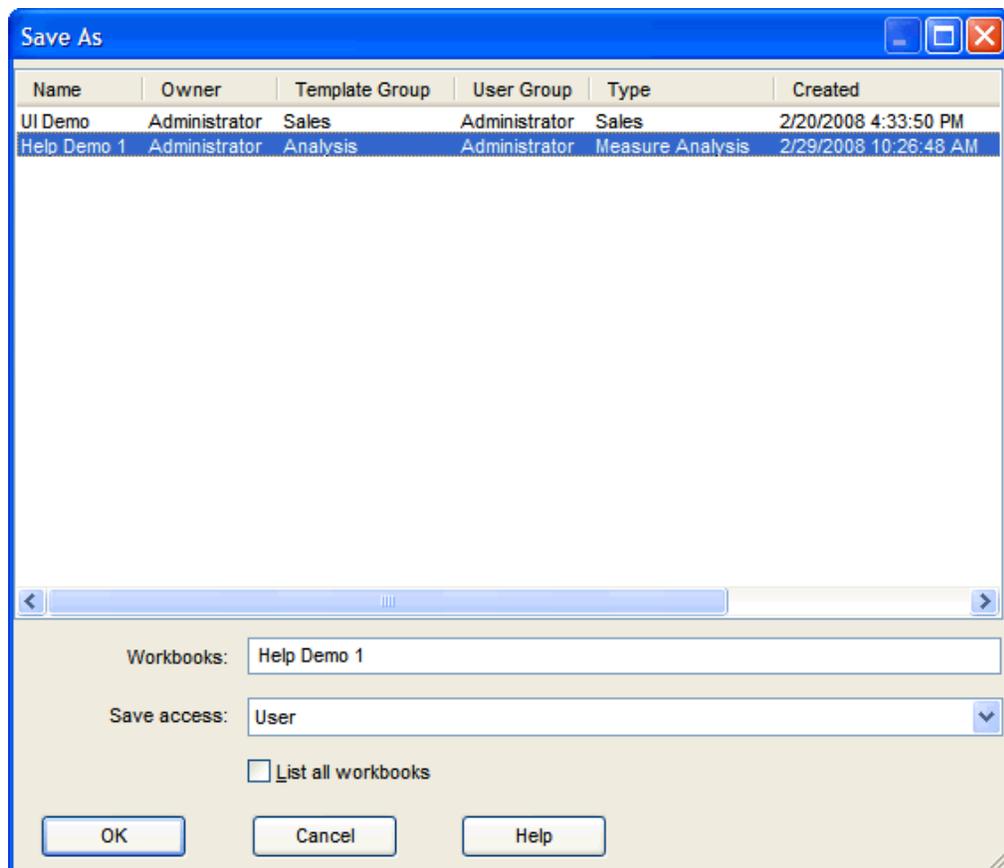
Save As Dialog Box

11. A message box appears to inform you that the data updates were successfully committed. Click **OK**.
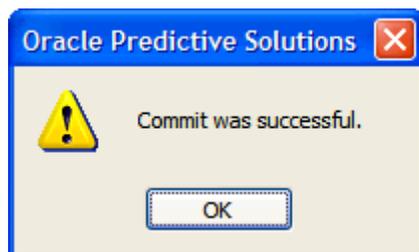
Commit Verification Dialog Box

Workbook and Worksheet Components

Worksheets have several common features. The measure labels, workbook titles, and specific data values contained in the figure below are provided as examples and will probably differ from your organization's hierarchical structure, terminology, and quantitative information.

Worksheet Example

Workbook Title Bar (A)

The Workbook Title Bar is displayed at the top of the screen along with the domain (appears in brackets) that you are logged on to. The domain specifies the type of products and locations that you are currently viewing.

Menu Bar (B)

The menu bar is displayed under the worksheet title bar. To access a particular command, left-click once on the menu label. A pull-down menu of options that are specific to that section is displayed. The choices of the menu are context-sensitive, meaning that the choices and their availability change depending on your current selection or mode of work. When an item is grayed-out, it is not available in your current selection or mode of work.

Toolbar (C)

The RPAS toolbar contains iconic buttons (having the character of an icon) that give you direct access to many common commands and actions. To see the function of a particular toolbar button, move your cursor to a position above it. A caption describing the button's function will appear in the status bar at the bottom of the screen.

Worksheet Title Bar (D)

The title of the current worksheet is displayed here.

Flow Control Worksheet Tabs (E)

There is a row of flow control worksheet tabs located near the top of the application window and beneath the toolbar. Each tab represents a distinct step in the business process that has been configured for your solution, and the tabs will usually be ordered in a logical progression of necessary steps. Each tab (or step) is associated with one or more separate worksheets. Click on a flow control tab to access the worksheet(s) that Toolbar are relevant to that step in the planning process.

When building a new workbook, the worksheet associated with each flow control tab may initially be minimized. When a worksheet is minimized, an icon representing that worksheet is displayed near the bottom of the screen. Double-click the icon to expand the worksheet to full view.

Display Worksheets from Different Flow Control Process Steps

When you click a specific tab in the flow control, only those worksheets associated with that process step are automatically available for view. If you want to simultaneously view two or more worksheets that are associated with different flow control tabs, you must display the relevant worksheet for one business step, and then use the Unhide option on the **Window** menu to display any of the workbook's other worksheets (even those related to other flow control steps). The system treats all worksheets that are not associated with the currently selected flow control step as if they are hidden. Therefore, any worksheet is available for view in a non-standard flow control step when you select that worksheet from the list provided on the **Unhide** dialog.

Status Bar

The status bar at the bottom of the worksheet window displays logon/logoff notifications, warnings, and other system messages. If a pull-down menu is currently expanded and the cursor is placed over any of that menu's available command options, the status bar will display a brief description of that menu option's function.

Hierarchy Tiles and Display Area

Hierarchies are the structures used by an organization to describe the relationships that exist between the many dimensions. Typically, any dimension will belong to one of the following four hierarchies displayed below.

Product | Location | Calendar | Measure
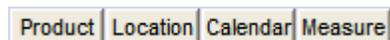
Hierarchy Tiles

There may be others, but these are the most common. These hierarchies are represented on the worksheet by hierarchy tiles that represent each hierarchy.

Hierarchy tile positions designate the worksheet axis where a particular hierarchy's information is displayed. To change the orientation of data in a worksheet, drag and drop the hierarchy tiles to reposition them. The hierarchy tiles that you will see in Oracle Retail Predictive Solutions include:

Hierarchy tiles can reside in the Row Display Area, the Column Display Area, or the Slice Display Area.

The location of a hierarchy tile determines how the tile's associated data is displayed. Data that is presented on the screen can be viewed in any format when you reposition the hierarchy tiles on the worksheet screen.

A row display area, which is located at the bottom left corner of the worksheet, is one of three portions of the worksheet that contain the hierarchy tiles. Positions in hierarchies with tiles in this location become the headers for rows of data, with all the data in a row being for a single position. The headings for these rows appear on the left side of the worksheet along the row axis.

The column display area is located at the top right corner of the worksheet. Positions in hierarchies with tiles in this location become the headers for columns of data, with all the data in a column being for a single position. The headings for these columns appear across the top of the worksheet along the column axis.

The slice display area is located at the top left corner of a worksheet. Moving a hierarchy tile to this location controls which hierarchies are displayed in the slice axis. Where one or more hierarchy tiles are in the slice display area, all the worksheet data is for just a single position in those hierarchies, with the current position (the context) shown in the VCR control. The worksheet can be considered to be a single page of data, with one page being available for all the combinations of positions in the hierarchies in the slice display area.

The row axis of the worksheet displays the contents and dimensions of the hierarchy tiles that are currently in the row display area. Data for these dimensions are presented in rows, and the labels for each row position appear down the left side of the worksheet.

The column axis of the worksheet displays the contents and dimensions of the hierarchy tiles that are currently in the column display area. Data for these dimensions are presented in columns, and the labels for each column position appear across the top of the worksheet.

Slice Axis and Scroll Bar

The slice axis, which runs perpendicular to the plane of the computer screen, is necessary for the system to present multidimensional data on your two-dimensional monitor. A slice is like a page in a book. A separate page (or slice) exists for each element of the dimension represented by the hierarchy tile residing in the slice display area.

The slice scroll bar works as a page-turner and is available when there is a hierarchy tile positioned in the slice display area. Click the right double triangles to page forward through data, and click the left double arrows to page back. The left line-arrow button moves you to the first page of data, and the right arrow-line button moves you to the last page of data.

Vertical Scroll Bar

The standard vertical scroll bar is used to navigate within the grid portion of the worksheet window. This scroll bar allows you to scroll up and down through the displayed data.

The thumbtack (sliding control on the scrollbar) shows the viewing position on the screen relative to the full body of data.

Perform the following functions on the vertical scroll bar:

- Click the thumbtack to press it. A pop-up caption displays the number of items along that axis and the item number that you are currently viewing.
- Click the thumbtack and hold the mouse button down. Drag the thumbtack rapidly to any location on the scroll bar. Release the mouse button to release the thumbtack.
- Click anywhere on the vertical scroll bar above the thumbtack to move up one page of data at a time.
- Click anywhere on the vertical scroll bar below the thumbtack to move down one page of data at a time.

Horizontal Scroll Bar

The standard horizontal scroll bar is used to navigate within the grid portion of the worksheet window. This scroll bar allows you to scroll left and right through the displayed data.

The thumbtack (sliding control on the scrollbar) shows the viewing position on the screen relative to the full body of data.

Perform the following functions on the horizontal scroll bar:

- Click the thumbtack to press it. A pop-up caption displays the number of items along that axis and the number that you are currently viewing.
- Click the thumbtack and hold the mouse button down. Rapidly drag the thumbtack to any location on the scroll bar. Release the mouse button to release the thumbtack.
- Click anywhere on the horizontal scroll bar to the left of the thumbtack to move one page of data to the left.
- Click anywhere on the horizontal scroll bar to the right of the thumbtack to move one page of data to the right.

Workbook and Worksheet Procedures

Basic Workbook Procedures

Creating a New Workbook

Navigate: From the **File** menu, select **New**.

1. Click the tab containing the workbook template group for the template you wish to select.
2. Click on the workbook template for the workbook type you wish to build.
3. Click **OK**.
4. Follow the wizard instructions to create the workbook.

Opening a Workbook

You are allowed to open only the following workbooks:

- Those workbooks that you have created and saved.
- Those workbooks created by other users and saved with World access or Group access for your group.

Navigate: From the **File** menu, select **Open**. Select the workbook to open, and click **OK**.

Closing a Workbook

Navigate: From the **File** menu, select **Close**.

If changes were made to the workbook, select a button to save, commit, or ignore (discard) the changes.

Saving a Workbook

Navigate: From the **File** menu, select **Save**.

1. If the **Save As** dialog box displays, type a name for the new workbook in the Workbook Name field and select an access level for the workbook (User, Group, or World).
2. Click **OK**.

> **Note:** Saving a workbook does not commit your changes to the master database.

Save a Workbook under a New Name

Navigate: From the **File** menu, select **Save As**.

1. Type a new name for the workbook under Workbook Name.
2. Select an access level for the workbook (User, Group, or World), and click **OK**.

Revert to the Last Saved Version of a Workbook

This procedure returns you to the most recently saved version of the workbook, discarding all changes made since the last save.

Navigate: From the **Edit** menu, select **Revert**. Click **OK**.

> **Note:** The Revert option is enabled only if the current workbook was already saved under a specified name, and if changes were made to the data since the last save.

Deleting a Workbook

Navigate: From the **File** menu, select **Delete**.

1. Select the workbook or workbooks to delete.

> **Note:** Deleted workbooks are permanently removed from the system.

2. Click **OK**.
3. Click **OK** again to confirm the deletion.

Renaming a Workbook

Navigate: From the **File** menu, select **Rename…**.

1. On the **Rename** dialog, select the workbook you wish to rename.
2. In the **Workbooks** field, type the new name.
3. Click **OK**.
4. Click **OK** again to confirm the deletion.

Save and Delete Workbook Formats

For information about saving and deleting formats, see Chapter 4: Saving and Deleting Formatting.

Manage Multiple Workbook Windows

Copy the Active Window and Worksheet (create a duplicate)

Navigate: From the **Window** menu, select **New Window**. The **New Window** dialog box appears.

New Window Dialog

1. In the **New Window** dialog box, type a label for the new window.
2. Click **OK**.

Rename the Active Window

Navigate: From the **Window** menu, select **Rename Window**. The **Rename Window** dialog is displayed.
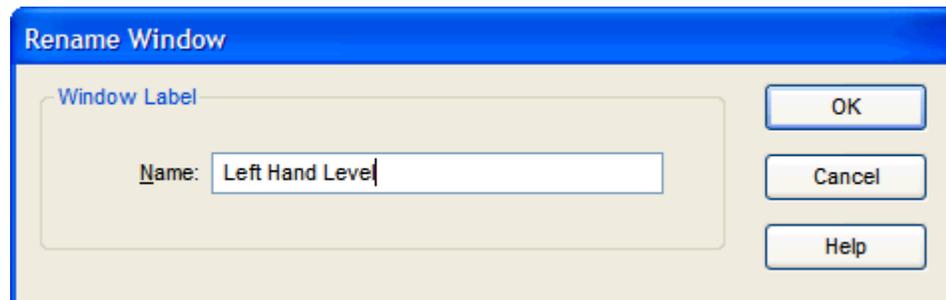
Rename Window Dialog Box

1. In the **Rename Window** dialog box, type a new label for the window.
2. Click **OK**.

Delete the Active Copy of a Window and Worksheet

Navigate: From the **Window** menu, select **Delete Window**.

> **Note:** This menu item is only enabled when the workbook contains multiple windows of the same type. If the active window was supplied by the configuration, you will not be able to delete it.

Hide an Active Window

Navigate: From the **Window** menu, select **Hide**.

> **Note:** A hidden window does not appear on the Windows
> List part of the Window menu, or as an icon. Use the
> **Window** – **Unhide** option to unhide a hidden window.

Show (Unhide) a Hidden Window

Navigate: From the **Window** menu, select **Unhide**.

1. On the **Unhide** dialog box, select the window you want to unhide.
2. Click **OK**.

Cascade Windows

Navigate: From the **Window** menu, select **Cascade**.

All unhidden windows are arranged so that all worksheet titles are visible, but only the active window (window on top) can be viewed completely.

Tile Windows Horizontally

Navigate: From the **Window** menu, select **Tile Horizontal**.

All windows that are not minimized are arranged in a stack that stretches from the top of the screen to the bottom. This display method is useful when you want to compare two or more windows by viewing them simultaneously.

Tile Windows Vertically

Navigate: From the **Window** menu, select **Tile Vertical**.

All unhidden windows are arranged from left to right across the full screen. This display method is useful when you want to compare two or more windows by viewing them side by side.

Minimize an Active Window

On the active window, click the **Minimize** button in the upper right corner.

Display a Minimized Window

On the minimized window icon at the bottom of the display , either click the **Maximize** button or double-click the window icon.

Print Worksheets and Generate Reports

Print a Worksheet

Navigate: From the **File** menu, select **Print**. The **Print** dialog appears.
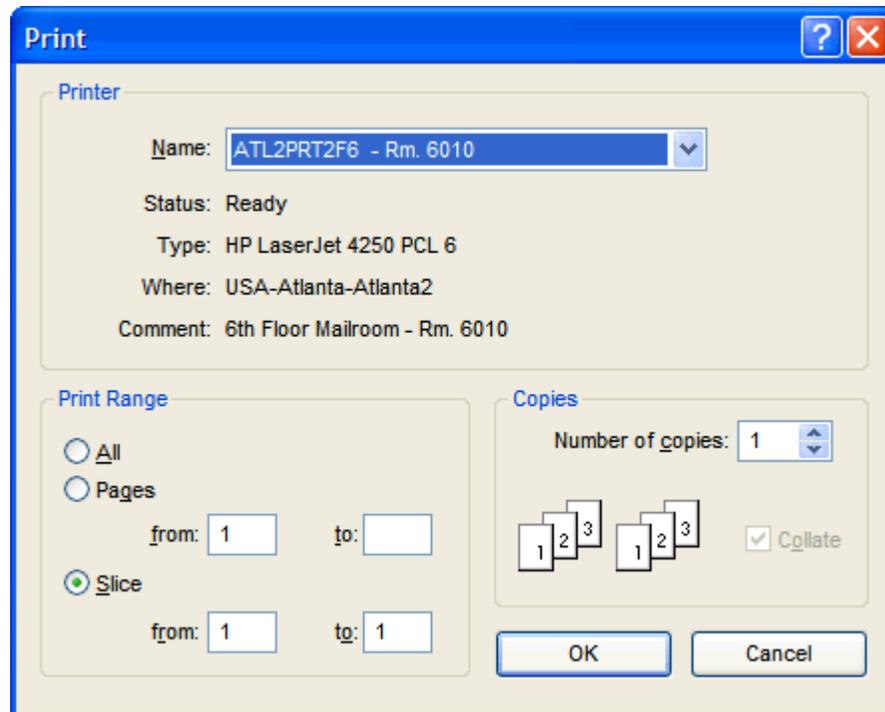
Print Dialog Box

1. In the **Print** dialog box, do the following:
    a. In the Name field, select a printer to use.
    b. In the Print Range box, enter a range of workbook pages or slices to print.
    c. In the Copies box, select the number of copies required.

    > **Note:** By first viewing your worksheet in Print Preview mode, you can determine the page numbers where particular worksheet data is displayed.

2. Click **OK**.

Preview a Printed Worksheet

Navigate: From the **File** menu, select **Print Preview**.

1. Perform any of the following procedures:
    - To page forward or backward through the document, click **Next Page** or **Previous Page**. You can also use the scroll bar at the right of the screen to scroll through the worksheet.
    - To change the magnification of the document, click **Zoom In** or **Zoom Out**.
    - To modify the page setup (for instance, page orientation, scaling, margins, headers/footers, page numbering scheme, or page breaks), click **Page Setup**.
    - To display the **Print** dialog box and print a copy of the document, click **Print**.
2. Click **Close**.

Print Multiple Worksheets

Navigate: From the **File** menu, select **Print Multiple**. The **Print Multiple** dialog appears.
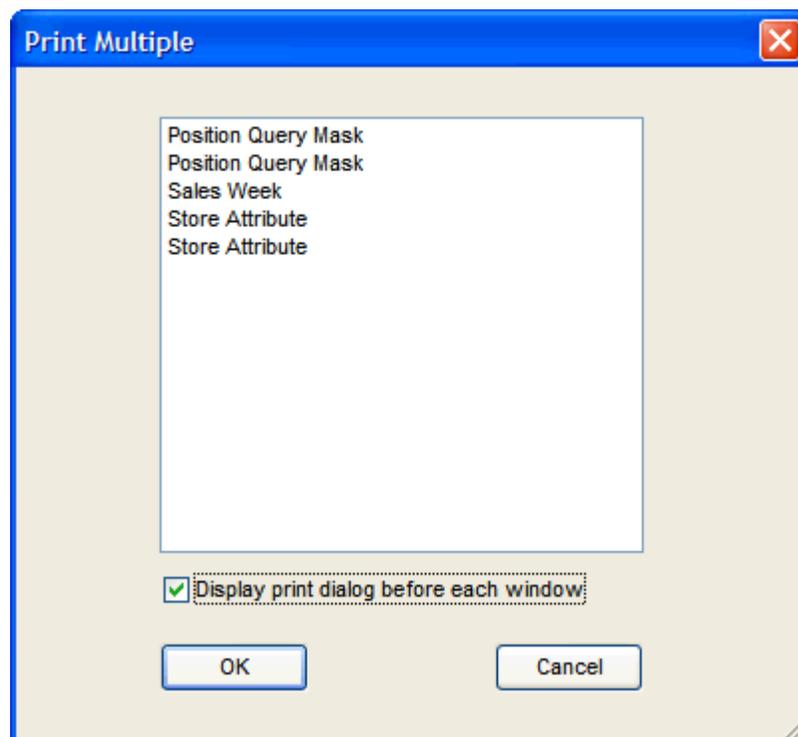
Print Multiple Dialog Box

1. Use **Ctrl+Click** to select multiple worksheets from the list provided.
2. Select **Display print dialog before each window** to have the **Print Options** dialog displayed individually before each worksheet is printed. This feature allows you to specify different printing options for individual worksheets in the print queue. De-select this option if the same printing options apply to all selected worksheets in the queue.
3. Click **OK** to submit your selections to the print queue.
4. Make your print option selections on the **Print Options** dialog. Selections made here will apply to all printed worksheets if the **Display print dialog before each window** option is unchecked. If the option is checked, this dialog will appear before each worksheet is printed.
5. Click **OK**.

Format and Enhance Print Output

There are several tools that you can use to enhance the output and the appearance of your printed worksheets. You can use these tools to generate custom reports from worksheets.

Select **Page Setup** from the **File** menu to display printing options. Page Setup options always override any settings in the **Windows Print Setup** dialog box, and they only apply to the current document (worksheet or chart).

Change the Page Orientation

Print settings are unique to each window. Print settings are saved to the formatting database.

> **Note:** To change page setup settings, you must display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**. The **Page Setup** dialog appears.
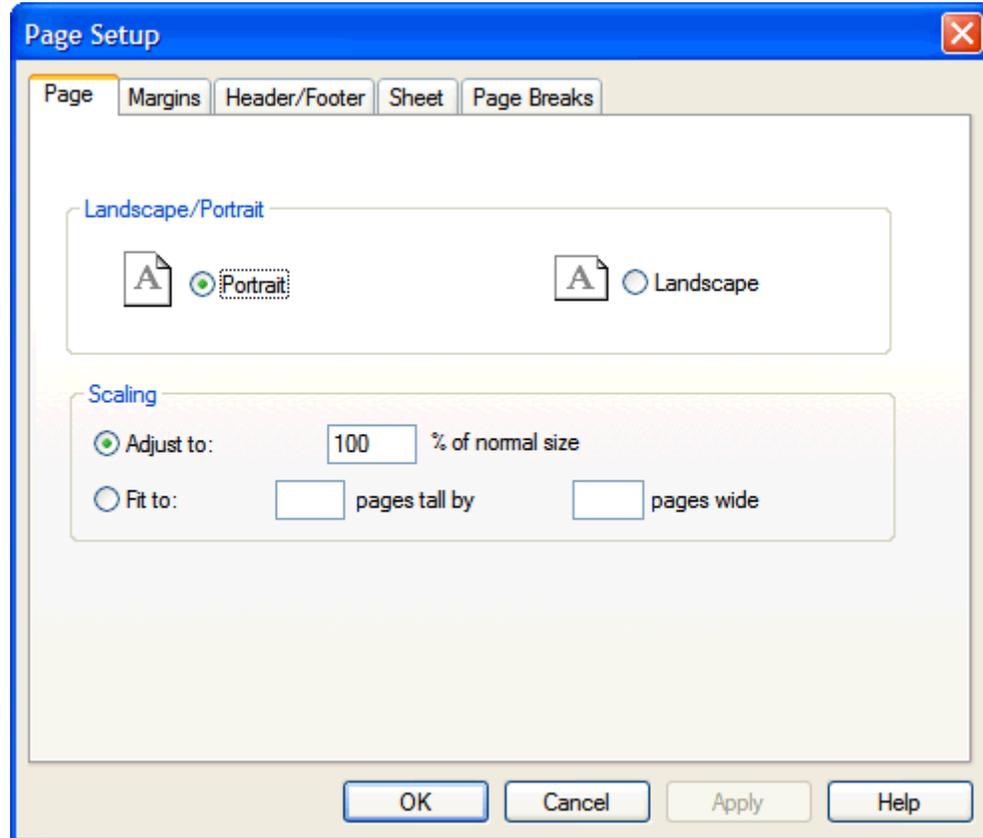
Page Setup Dialog Box – Page Tab

1. On the Page tab, select the appropriate page orientation option, **Portrait** or **Landscape**.
2. Click **OK**.

Scale the Size of Printed Output

> **Note:** To change page setup settings, you must display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**.

1. In the Scaling portion of the Page tab, perform either one of the following procedures:
   - Click the **Adjust To** option and enter a numeric value between 10 and 400. This is to specify an exact size for the printed output, which is a percentage of normal size.

- Select the **Fit To** option to specify exact page parameters for the printed output. The system will automatically expand or condense the view so that the current slice fills the designated number of pages (height x width).

   > **Note:** You can leave one parameter blank (either height or width) to have the system fill pages along that dimension.

2. Click **OK**.

Set Page Margins for Printed Documents

> **Note:** To change page setup settings, you must display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**.

1. Select the **Margins** tab.
2. Enter the desired values (in inches) for the top, bottom, left, and right margins.

   > **Note:** The combination of top and bottom margins must leave at least three inches of printable space per page.

3. View the results of your selections in the Preview window.
4. Click **OK**.

Create Customized Headers and Footers

> **Note:** To change page setup settings, you must display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**.

1. Select the **Header/Footer** tab.
2. Click the **Custom Header** or **Custom Footer** button.
3. Make changes to the left section, center section, and right section of the header or footer by manually entering the text, or by selecting the following formatting buttons above the text window.

   - **Font** – Opens the **Font** dialog where you specify the font, style, size, and script type for your header and footer text. Select the header/footer text to be formatted, and click the **Font** button. On the **Font** dialog, make the appropriate selections. Click **OK** to apply the changes.

   - **Date** – Inserts a field marker code that prints the current date at the cursor position. This date is automatically updated each time you print the document. To insert a specific (unchanging) date, enter the date manually.

   - **Time** – Inserts a field marker code that prints the current time at the cursor position. The time is automatically updated each time you print the document. To insert a specific (unchanging) time, enter the time manually.

   - **Page** – Inserts a field marker code that prints the page number on each page of your document.

   - **Page Of** – Inserts a field marker code that prints the current page number and the total number of pages in the document at the cursor position. For example, 2 of 14.

   - **Workbook** – Inserts a field marker code that prints the current workbook title at the cursor position.

- **Sheet** – Inserts a field marker code that prints the title of the current worksheet at the cursor position.
- **View** – Inserts a field marker code that prints an actual worksheet view at the cursor position. Click this button to produce the **Select Window** dialog, which allows you to select the worksheet window to insert. The inserted window cannot be the same main worksheet for which you are specifying setup options. By adjusting page margins and scaling, you can use this functionality to effectively print several worksheet views on a single page. Do this by inserting smaller windows into your header and footer.

4. Click the **Save** button to save this combination of header and footer options under a specified name.

5. Click **OK** to return to the **Header/Footer** dialog box to preview your work.

6. Click **OK** to close the **Page Setup** dialog.

Display Horizontal and Vertical Grid Lines on Printed Output

> **Note:** To change page setup settings, you must display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**.

1. Select the **Sheet** tab in the Page Setup window.
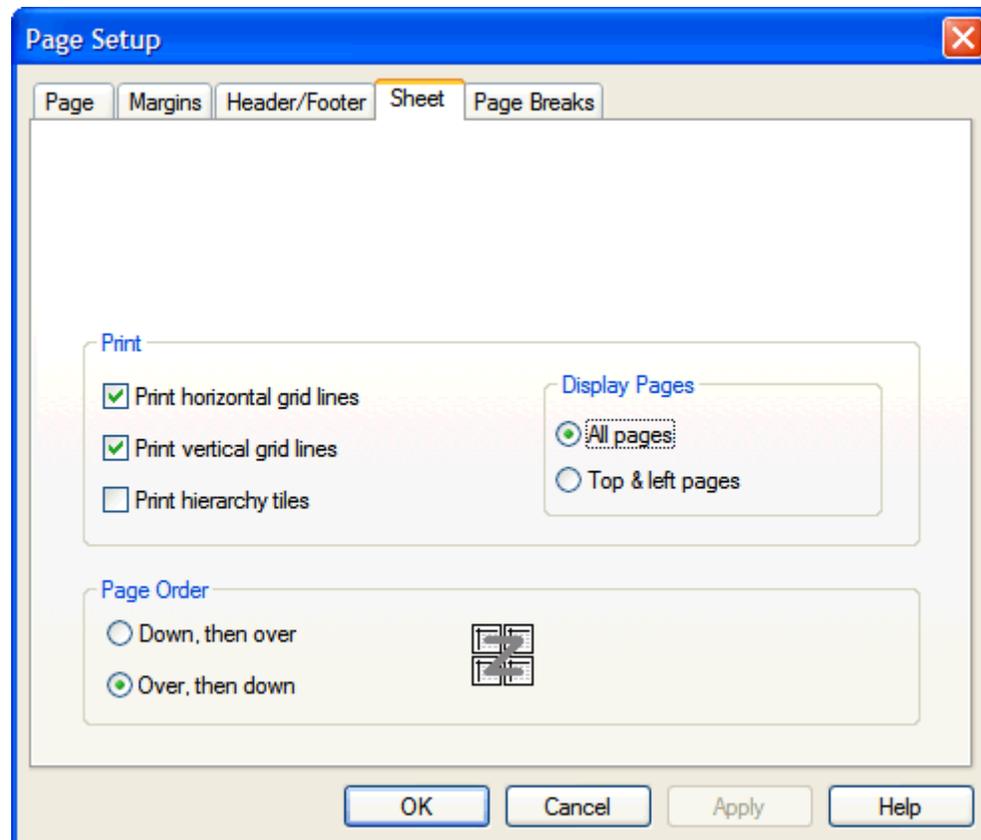
Page Setup Dialog Box – Margin Tab

2. In the Print section, make the appropriate selections as necessary:
   - Select the **Print Horizontal Grid Lines** option to show horizontal grid lines.
   - Select the **Print Vertical Grid Lines** option to show vertical grid lines.
3. Click **OK**.

Turn On/Off the Display of Hierarchy Tiles in Printed Output

> **Note:** To change page setup settings, display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**.
1. Select the **Sheet** tab.
2. Select **Print Hierarchy Tiles** to turn on the display of hierarchy tiles in your output. De-select this option to turn off the display.
3. Click **OK**.

Display Row and Column Labels on Printed Output

> **Note:** To change page setup settings, display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**.
1. Select the **Sheet** tab.
2. In the **Display Pages** section, choose one of the following options:
   - Select **All Pages** to select row and column header labels to appear across the top and left side of every printed page.
   - Select **Top & Left Pages** to select row and column header labels to appear across the topmost and leftmost pages only. This is how they will appear on the terminal display.
3. Click **OK**.

Set the Page-Numbering Order

> **Note:** To change page setup settings, display the data in Grid view (not Chart view).

Navigate: From the **File** menu, select **Page Setup**.
1. Select the **Sheet** tab.
2. In the **Page Order** section, choose one of the following options:
   - Select **Over, Then Down** to select page numbering across sequential rows from left to right (starting in the upper left of the document).
   - Select **Down, Then Over** to select page numbering down sequential columns from top to bottom (starting in the upper left of the document).
3. Click **OK**.

Specify Page Breaks for Printed Output

To change page setup settings, you must display the data in Grid view (not Chart view).

Specify Page Breaks after Each Position in a Selected Dimension

You can specify that page breaks should occur in your printed output after every position in a given dimension. This ensures that you have a separate page of output for each month of data or a separate page for each subclass in the Product hierarchy.

Navigate: From the **File** menu, select **Page Setup**.

1. Select the **Page Breaks** tab in the Page Setup window.
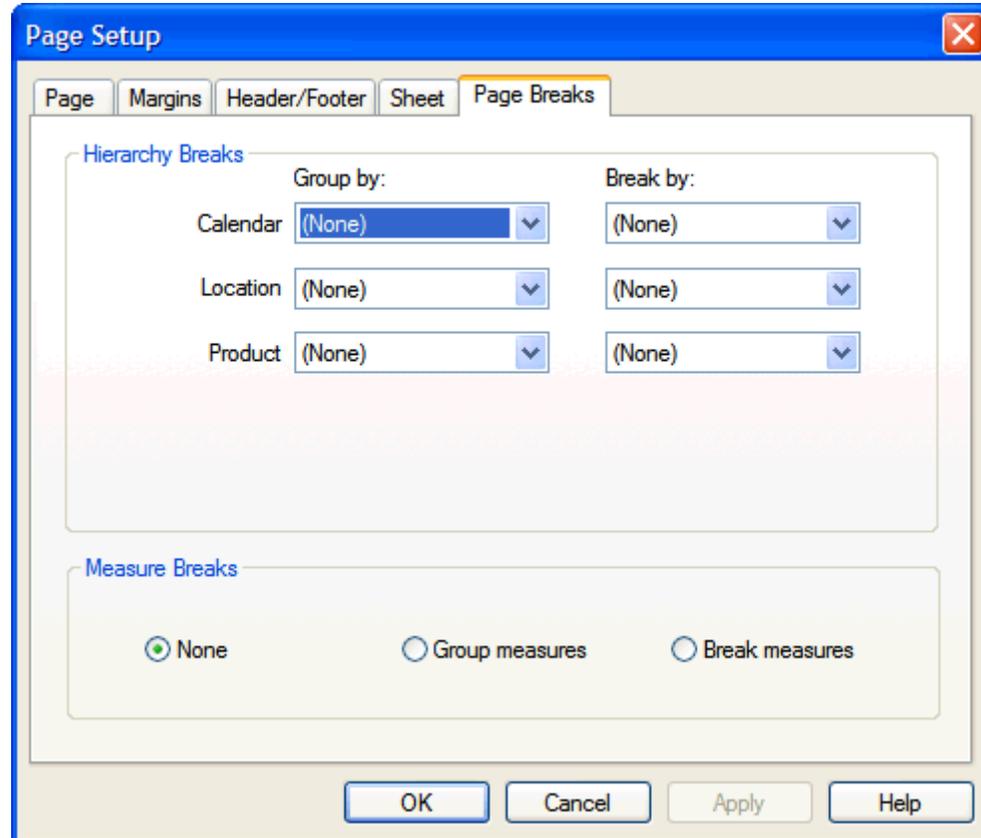
Page Setup Dialog Box – Page Breaks Tab

2. In the **Hierarchy Breaks** section of the dialog, locate the hierarchy (for instance, Product or Calendar) for which you want to set page breaks.

3. In the **Break By** list that corresponds to that hierarchy, select the dimensional level where you want to set page breaks. For example, select **Month** to force a page break after every month-level position. Each month of data will appear on a separate printed page.

4. Click **OK**.

Specify Page Breaks after Groups of Positions in a Selected Dimension

You can control the dimensional level where position groupings are made within each hierarchy. When you do this, hard page breaks will only occur at the end of complete positions within that dimension. A hard page break might not occur after every position (more than one full position may fit on a page), but only complete positions will appear together on the same page.

For example, January data and February data may appear on one page, and March and April may appear on another page. Forced page breaks will not occur until there is insufficient room on a page to print the next full month-level position.

Navigate: From the **File** menu, select **Page Setup**.

1. Select the **Page Breaks** tab.
2. In the **Hierarchy Breaks** section of the dialog, locate the hierarchy (for instance, Product or Calendar) for which you want to establish a position grouping level.
3. In the **Group By** list that corresponds to that hierarchy, select the dimensional level where you want to group positions. For example, select **Month** to force a page break after the maximum number of completed month positions have been fit onto a printed page.
4. Click **OK**.

Specify Page Breaks in the Measure Hierarchy

The Measure hierarchy is treated separately from the other hierarchies, such as Calendar and Product since there is typically not a dimension level to specify when selecting page break options for measures. Follow these steps to specify page breaks in the Measure hierarchy:

Navigate: From the **File** menu, select **Page Setup**.

1. Select the **Page Breaks** tab.
2. Click one of the following options in the **Measure Breaks** section of the dialog box:
   - **None** – There are no hard page breaks inserted in the printed output. This is the most economical option, because the maximum number of measures is fit onto each printed page.
   - **Group Measures** – This option inserts hard page breaks to be inserted whenever the maximum number of complete groups of measures has fit on a page.
   - **Break Measures** – This option inserts hard page breaks after every measure. Each measure will appear on a separate page of printed output.
3. Click **OK**.

Commit Changes to the Master Database

The Commit process merges your local database with the master database. Therefore, your data is transferred to the master so all system users have access to the same data. There are two methods of committing data to the master: Commit Now and Commit Later.

Commit Now immediately merges your workbook changes with the master database. When you select Commit Now, all other system users are temporarily locked out of the database during the commit process. The commit process requires that the master data file be overwritten, so no other users can build new workbooks or perform functions that require retrieval of data from the master file during this period. Whenever possible, you should select Commit Later to have your changes committed as part of an overnight batch process (when system use is minimal).

Commit a Workbook to the Master Database Immediately

Navigate: From the **File** menu, select **Commit Now**. Click **OK**.

Commit a Workbook to the Master Database Later

Navigate: From the **File** menu, select **Commit Later**. Click **OK**.

> **Note:** A checkmark beside the Commit Later option on the **File** menu indicates that the workbook was flagged to be committed during the next batch process. To remove the workbook from the commit queue, select the **Commit Later** option again.

Working with Cells

Select and Manipulate Cells in a Grid

Cells or groups of cells must be selected in the grid before certain operations can be performed on them. Operations, such as cutting and copying data, filling or clearing data cells, and displaying data in chart form are typically performed on a subset of worksheet cells that you must select before invoking the menu command.

There are several ways to select cells in the grid. Generally, you should make your selections in the worksheet axes (where the column and row headers appear) and not in the cells themselves.

Select a Single Cell

Click the column header that corresponds to the cell, and then click the corresponding row label.

Select all Cells in a Row

Click the row header for that group of cells.

Select all Cells in a Column

Click on the column header for that group of cells.

Select a Group of Continuous Cells in the Same Row

1. Click on the row header that corresponds to that group of cells.
2. Click on the column header for the first item in the group.
3. Hold down the **Shift** key, and click the column header that corresponds to the last item in the group.

Select a Group of Continuous Cells in the Same Column

1. Click the column header that corresponds to that group of cells.
2. Click the row header for the first item in the group.
3. Hold down the **Shift** key, and click the row header that corresponds to the last item in the group.

Select a Group of Non-Continuous Cells

1. Click the column header that corresponds to the first item in the group.
2. Hold down the **Ctrl** key, and click each column header that corresponds to a group item.
3. Click the row header that corresponds to the first item in the group.
4. Hold down the **Ctrl** key, and click each row header that corresponds to a group item.

Select a Block of Contiguous Cells

1. Click the top-most, left-most cell in the block you want to select.

2. Hold down the mouse button and drag the cursor to the bottom-most, right-most cell in the block that you want to select. As you drag the mouse, note that the column header and row header positions are automatically selected according to your actions.

3. Release the mouse button.

4. Click the row or column header to mark or unmark the last axis position selected.

5. Press the spacebar to toggle the last axis position selection on and off.

Navigating within a Cell

Press the F2 key to toggle the inter-cell navigation mode. While in this mode, the arrow keys will move the cursor around within the cell instead of navigating to the adjacent cell. Also, the ENTER key will insert a linefeed instead of completing the cell edit.

Enter Line-Feeds

Press the ALT+ENTER key combination simultaneously to enter line-feeds. Line-feeds can also be entered by pressing the ENTER key while in F2 mode.

Popup Cell Edit Window

Double-clicking within a cell will open a larger edit window that allows the user to view more of the cell contents. This is useful when editing cells that contain long or multi-line strings.

Word Wrap

A word wrap feature is available in cells. Word wrapping is when a line of text automatically "wraps" to the next line when it gets to the end of a text field.

Enter or Change Values in a Cell

The following are descriptions of actions you can take to change individual values in a grid.

Change Cell Size

1. Place the cursor on the cell border (either vertical line or horizontal line).

2. Click and drag the borderline until the cell size is the desired width (or height).

Default String Measures Limit

The default limit of string measures is 4000 characters. The limit can be adjusted by changing the value in the upper range measure property.

Numbers

Enter or overwrite a numeric value.

Alphanumeric Values or Plain Text

Enter or overwrite an alphanumeric value.

Drop-Down List Items

Select the desired option from the drop-down list. Click on the arrow button and select an item from the drop-down list.

Date Items

Select the desired date. Click the arrow button to display the calendar, and click the appropriate arrow keys to change the year, month, or date.

Check Box (Toggle) Items

Click the check box to change the status of the item (yes or no, on or off).

Math Operations

To increment the value in a cell using a mathematical formula, type in the following:

- To add: **+ [desired value to add]**
- To subtract: **+- [desired value to subtract]**
- To multiply: *** [desired value to multiply by]**
- To divide: **/ [desired value to divide by]**
- To apply a percentage: *** [desired percentage increment]** (For example, to increase a value by one-half, enter * 1.5.)

Modify Data with Cell Formulas

Cell formulas allow you to modify the value of a data cell in the grid by applying an operator (+, -, *, or /) to that value. With this functionality, you can make changes to data values without having to manually calculate the result. To perform this function, click in the data cell and type the operator that you want to add, subtract, multiply, or divide by.

For example, suppose that a particular data cell contains the value 10.

- Add: If you enter +10 in the cell, the value becomes 20.
- Subtract: If you enter + –10 in the cell, the value becomes 0.
- Multiply: If you enter *10 in the cell, the value becomes 100.
- Divide: If you enter /10 in the cell, the value becomes 1.
- Percentages: If you want to increase the value of a cell by 10%, multiply the value by 1.1 (enter *1.1)

There are many applications of cell formulas when modifying data. Cell formulas can only be applied to one cell at a time, but changes made to aggregate level cells will be spread down to lower-level cells along hierarchy lines. Similarly, any changes made to lower level cells will be reflected in the aggregates of that data.

Clear and Fill Cells in a Worksheet

Use the following procedures to clear data from worksheet cells and to quickly populate the cells of a worksheet.

Clear Data from Cells

1. Select the data cells that you want to clear.

> **Note:** If you do not select any data cells before you choose Clear Contents, in the next step, the system will clear the data cells for every writable measure in the currently-displayed slice. If you select certain cells; however, only those cells will be cleared.

2. From the **Edit** menu, select **Clear Contents**.

> **Note:** You can only clear contents from one dimensional level at a time. If you are viewing data in Outline mode, the **Clear Contents** dialog requires you to specify the dimension that you want cleared.

3. Click **OK**.

Fill (Populate) the Cells of a Worksheet

Use this procedure to quickly populate cells in a worksheet with a single value. This command only fills cells in one measure at a time.

1. Select the cells in the grid to be filled.

> **Note:** If you do not select any data cells before using the Fill command, in the next step, the system will fill the cells for an entire measure. If you select certain data cells, only those selected cells will be filled.

2. From the **Edit** menu, select **Fill**.
3. Select the measure to be filled from the Measure list.
4. Specify a fill value in the Fill Value field.
5. If you are filling data at a level other than base level, select a Spread Method (**Replicate**, **Even**, **Proportional**, or **Delta**).
6. If you are viewing data in Outline mode, the bottom portion of the **Fill** dialog requires you to specify the dimensional level at which to fill data. The system can only fill data for cells in one dimension at a time.
7. Click **OK**.

Cut and Copy the Data in Worksheet Cells

Cut the Contents of Worksheet Cells

Use this procedure to copy selected data to the application clipboard and to clear that data from the worksheet cells. Only data from writable measures can be cut. This procedure cuts data at the current hierarchical level, which is the lowest level that data is selected in the grid.

1. Select all data cells in the grid that you want to cut. If you do not select any data cells before using the Cut command, an error message will appear.

Cell Cut Error Message

If you select specific data cells, only the data for those cells will be cut.

2. From the **Edit** menu, select **Cut**, or click the **Cut** button on the application toolbar.

Copy the Contents in Worksheet Cells

Use this procedure to copy selected data to the application clipboard. Unlike the Cut function, the Copy function does not clear the data from the worksheet cells. This procedure copies data at the current hierarchical level, which is the lowest level that data is selected in the grid.

> **Note:** Any cells affected by deferred calculations must be either calculated or discarded by the user before the cells can be copied to the clipboard.

1. Select all data cells in the grid that you want to copy. If you do not select any data cells before using the Copy command, the dialog (above) is displayed. If you select specific data cells, only the data for those cells will be copied.

2. From the **Edit** menu, select **Copy**, or click the **Copy** button on the application toolbar.

> **Note:** The copy and paste operation for aggregated measures with ambiguous (ambig) measure types is not supported. However, **copy at base** works for ambig measures at aggregated levels.

Paste Copied Data into Cells

Use this procedure to paste data into measures. This procedure can only be performed if data has been placed on the application clipboard using a cut or copy function. Data can only be pasted into writable measures.

Cut or Copy Data to Paste into Other Cells

1. Select the data cells where you want the data pasted into. Only those selected cells will be overwritten with the pasted data.
2. From the **Edit** menu, select **Paste**, or click the **Paste** button on the application toolbar.

Cut, Copy, and Paste Base-Level Data

You can cut, copy, and paste data at the base level in your worksheet while viewing it at any aggregate level. Cutting, copying, and pasting in this manner allows you to quickly make base level changes by manipulating data at an aggregate level.

You choose whether or not to perform operations on base level data by manipulating the appropriate check box that appears on the **Cut Special**, **Copy Special**, and **Paste Special** dialog boxes.

Cut Base-Level Data

The cut data at base level feature allows you to view data at an aggregate level in your worksheet while cutting that same data at its base dimensional level, which is not currently displayed.

When you select the Cut Special function at an aggregate level, and you select the **Cut Data at Base Level** checkbox (on the **Cut Special** dialog), all base level data applicable to your selected aggregate data will be cut and copied to the application clipboard. Even though the Cut function is performed at the base dimensional level, it seems that the aggregate level data has been cut. This is due to the process of data roll-up.

To use the cut data at base level functionality, the base dimensional level for a given hierarchy cannot be displayed in your worksheet if you are in block view.

1. Select the aggregate level data to be cut. Only data from writable measures can be cut.

> **Note:** If your grid data contains any measures that are read-only, the system will be unable to cut data for the entire worksheet. In this case, a message will inform you that the cut request could not be completed.

2. From the **Edit** menu, select **Cut Special**.
3. Select the **Cut Data at Base Level** check box. Selecting the base level cut option causes all base level data applicable to your aggregate selection to be cut and copied to the application clipboard.
4. Click **OK**.

Copy Base-Level Data

The copy data at base level feature allows you to view data at an aggregate level in your worksheet while copying that same data at its base dimensional level, which is not currently displayed.

When you select the Copy Special function at an aggregate level, and you check the **Copy Data at Base Level** checkbox (on the **Copy Special** dialog), all base level data that is applicable to your selected aggregate data will be copied to the clipboard. Unlike the Cut Special function, Copy Special does not clear the data from the copied cells. Even though the Copy Special function is actually performed at the base dimensional level, after pasting, it seems like the aggregate level data has been copied. This is due to the process of data roll-up.

To use the copy data at base level functionality, the base dimensional level for a given hierarchy cannot be displayed in your worksheet.

1. Select the aggregate level data to be copied.

> **Note:** If no data cells are selected in the grid at the time the **Copy Special** dialog is opened, the system displays a dialog stating there are not any positions selected for the operation.

2. From the **Edit** menu, select **Copy Special**.

3. Select the **Copy Data at Base Level** option. Selecting the base level copy option causes all base level data applicable to your aggregate selection to be copied to the application clipboard.

4. Click **OK**.

Paste Base-Level Data

The paste data at base level feature allows you to view data at an aggregate level in your worksheet while pasting data into measures at the base dimensional level, which is not currently displayed.

The Paste Special menu item is only enabled after you place information on the application clipboard using the Cut, Cut Special, Copy, or Copy Special command. When you select the Paste Special function at an aggregate level, and you select the **Paste Data at Base Level** checkbox (on the **Paste Special** dialog), data will be pasted into the base level cells associated with your aggregate level paste selection.

To use the paste data at base level functionality, the base dimensional level for a given hierarchy cannot be displayed in your worksheet. To paste data at base level, ensure that you are viewing values at an aggregate level only, and perform the following steps:

1. Select the aggregate level cells that you want to paste the cut/copied data into. Only those cells will be overwritten with pasted data. You can only paste data into writable measures.

2. From the **Edit** menu, select **Paste Special**.

3. Ensure that the **Paste Data at Base Level** checkbox is selected. Whenever data has just been cut or copied at base level, the Paste Data at Base Level checkbox defaults to selected.

4. Click **OK**.

Cut, Copy, and Paste Multiple Slices

When you make cell selections prior to cutting, copying, or pasting data, the system only allows for the selection of the currently displayed position along the slice axis. The **Cut Special**, **Copy Special**, and **Paste Special** dialog boxes; however, allow you to specify that data should be manipulated for all positions (pages) in this axis.

Copy Data from All Slices

Use this procedure to simultaneously copy data from all pages in the slice axis.

1. Select the data cells to be copied.

2. From the **Edit** menu, select **Copy Special**.

3. On the **Copy Special** dialog, select **Copy All Slices**. When the box is selected, the copy operation behaves as if all positions in the slice dimension were selected prior to the copy. If the box is not selected, only data from the currently displayed slice position will be copied.

4. Click **OK**.

Cut Data from All Slices

Use this procedure to cut data from all pages in the slice axis simultaneously.

1. Select the data cells to be cut.

2. From the **Edit** menu, select **Cut Special**.

3. On the **Cut Special** dialog, select **Cut All Slices**. When the box is selected, the cut operation behaves as if all positions in the slice dimension were selected prior to the cut. If the option is not selected, only data from the currently displayed slice position will be cut.

4. Click **OK**.

Paste Data into All Slices

Use this procedure to simultaneously paste data into all pages in the slice axis.

> **Note:** You can paste data only into writable measures.

1. Select the cells where you want to paste the cut/copied data. Only those cells will be overwritten with the pasted data.

2. From the **Edit** menu, select **Paste Special**.

3. On the **Paste Special** dialog, select **Paste All Slices**. When the box is checked, the paste operation behaves as if all positions in the slice dimension were selected prior to the paste. If the box is unchecked, data will only be pasted into the currently displayed slice position.

> **Note:** If you did not choose to cut/copy data from all slices prior to this paste, and then you choose to paste clipboard data to all slices, the data that was cut/copied from the single visible slice will be replicated to all slices in the worksheet.

4. Click **OK**.

Copy Data to and Paste Data from the Windows Clipboard

The Cut, Cut Special, Copy, and Copy Special commands do not copy information to the Windows clipboard. When you use these functions, data is copied to an application-specific clipboard and cannot be pasted into other applications. If you plan on pasting worksheet data into another application, or if you want to paste data from another application into your worksheet, you must use the following procedures.

Copy Data to the Windows Clipboard

Use this procedure if you want to copy worksheet data to use in another application.

1. Select the data cells whose contents are to be copied.
2. From the **Edit** menu, select **Copy to Clipboard**.

> **Note:** When using this command, the maximum number of cells that can be copied is limited by memory. This operation should not be used to export entire workbooks.

Paste Data from the Windows Clipboard into a Worksheet

Use this procedure if you want to paste data from the Windows clipboard into your worksheet. Data can only be pasted into writable measures.

1. Select the data cells where you want to paste the clipboard data.
2. From the **Edit** menu, select **Paste from Clipboard**.

> **Note:** When using this command, the maximum number of cells that can be pasted is limited by memory. This operation should not be used to import data for entire workbooks.

Enlarge and Zoom on the Screen

Zoom Feature

You can enlarge the contents of the active window for easier viewing, or you can reduce the size of the contents to fit as much data on the screen as possible. Use the Zoom function to perform either of these tasks.

> **Note:** The Zoom feature is available only in grid (and not chart) mode. The grid view zoom level only affects the display of data on your computer terminal. Zooming does not affect the scaling value set in Page Setup, and it has no effect on printing.

1. Click in a worksheet window to make it active.
2. From the **View** menu, select **Zoom**. The **Zoom** dialog box displays.
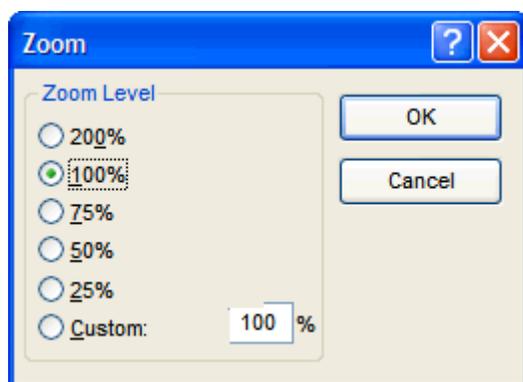
Zoom Dialog Box

3. Select the zoom level option you want. Alternatively, you may specify any magnification value between 10 and 400 by entering your choice in the Custom field.
4. Click **OK** to close the dialog and return to the resized worksheet.

> **Note:** The Zoom feature only affects the working area of the grid (column, row, slice headers, and grid data). The size of the worksheet window remains unchanged. Worksheet components such as the title bar, scroll bars, hierarchy tiles, and so on also remain unchanged.

A different zoom level can be specified for each worksheet in a workbook. When a workbook is closed, the zoom level for each worksheet is saved. When the workbook is opened again, each worksheet is initialized to its last saved zoom level.

Enlarge the Screen

Navigate: From the **View** menu, select Full Screen. The screen is enlarged by hiding the Windows status bar and the system title bar.

Select this option again to return the screen to its original size.

Change the View of Your Display

There are several procedures that you can perform to change the online view of your system display. Specifically, you can:

- Switch the view between grid mode and chart mode
- Show or hide various screen components
- Invoke the zooming feature to alter the size of the grid contents

Change Charts to Grids and Back

Change a Grid to a Chart

Use this procedure to display some or all of the data from a grid in a chart view. You can display up to 1000 positions of data in chart view.

1. To select specific data to appear in chart form, highlight all cells that you want to see displayed, or to display all of the grid's data on a chart, do not select any data.

2. From the **View** menu, select **Chart**, or select the **Toggle** button on the toolbar.

> **Note:** Chart view (especially line charts) is often used to easily identify trends and changes in data over periods of time. When you use a chart for this purpose, position the Calendar hierarchy tile along the column axis, and position the Measure hierarchy tile along the row axis. This will extend the time dimension along the x-axis and extend the measure of interest (such as Total Sales or Forecasted Demand) along the y-axis. You can position the Product and Location hierarchy tiles wherever you wish, such as along the slice-axis (z-axis) or alongside the Measure tile (row, or y-axis).

Change a Chart to a Grid

Navigate: From the **View** menu, select **Grid**, or select the **Toggle** button on the toolbar.

Show and Hide the Button Text, Status Bar, and Toolbar

Show/Hide Button Text in the Application Toolbar

Follow this procedure to turn on/off the display of toolbar button names in the application toolbar.

Navigate: From the **Format** menu, select **Application**.

1. Under Application Options, select the **Show Button Text** option to display button names on the application toolbar. Clear this option to turn off the display of button titles.

2. To apply the change to the worksheet without closing the dialog box, click **Apply**, or to accept the change and close the **Format Options** dialog, click **OK**.

Show/Hide Status Bar

Navigate: From the **View** menu, select **Status Bar**. Select **Status Bar** again to re-display it.

Show/Hide Toolbar

Navigate: From the **View** menu, select **Toolbar**. Select **Toolbar** again to re-display it.

Enter Measure Data Using a Scaling Factor

The scaling factor feature allows you to enter measure data that will be scaled or factored to an internal value, which is recognized by the server in data calculations. When you enter a value for a measure that has a scaling factor, the value that you enter will be multiplied by the scaling factor to arrive at this internal value. The display of the data and the ease of data entry can be greatly enhanced by use of a scaling factor.

For example, suppose that you want to enter data in thousands of units. You might find it tedious to enter 1000, 2000, 6000, and so on. A more sensible approach would be to enter the values 1, 2, and 6, and have the system apply a scaling factor (in this case 1000) to the entered data. The internal values of the three affected cells would be 1000, 2000, and 6000, and these internal values would be used in required data calculations. Removing the zeros from the display would result in a cleaner, less cumbersome worksheet appearance.

The scaling factor feature is used in conjunction with the prefix/suffix feature for formatted measures. In the case above, you would probably want to specify a suffix (for instance, k stands for 1000) for this measure, which indicates that the entered data has been scaled. The displayed data would then appear as 1k, 2k, and 6k. Even though your worksheet has been cleaned up by abbreviating the numeric display, the system still understands that the internal values of the edited cells are 1000, 2000, and 6000, respectively.

Specify a Scaling Factor for a Measure

Navigate: From the **Format** menu, select **Types**.
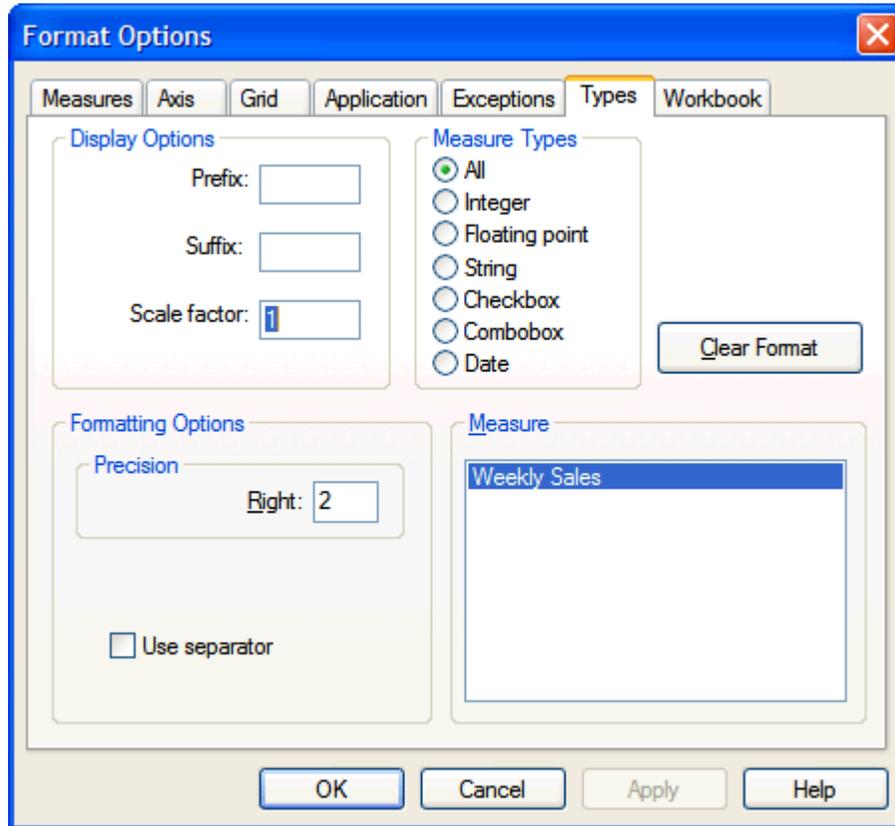
Format Options - Types Tab

1. In the Measure box, select the measure that you want to edit.

2. In the Display Options portion of the dialog, enter a scaling factor in the Scale Factor field.

> **Note:** The scaling factor must be a non-zero integer for integer-type measures, but may be any non-zero value for float-type measures. If you want, enter a prefix and/or suffix to be applied to the measure data. Ideally, the prefix/suffix should designate the nature of the scaling factor associated with this measure. For example, if your scaling factor is 1,000,000, you may wish to enter the suffix **m**.

3. To apply your changes to the measure and leave the **Format Options** dialog open, click the **Apply** button, or to process the changes and close the dialog, click **OK**.

Locate Items in the Worksheet

Use the following procedures to quickly find items in a worksheet. You can find specific positions along a particular grid axis, and you can locate the next/previous alert occurrence within the active alert measure.

Find a Position in a Grid Axis

Navigate: From the **Edit** menu, select **Find**.
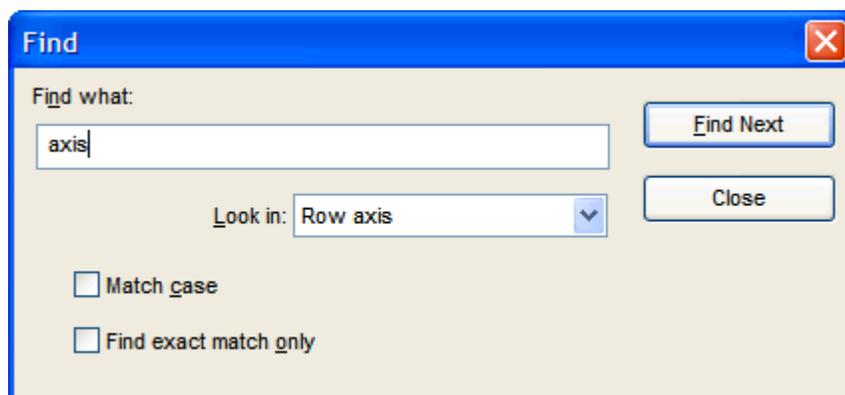
Find Dialog

1. Under Find What, type all or part of the name of the node or position (for example, product, location, measure) that you want to find.
2. Click the **Look In** option and select an axis (**Row**, **Column**, or **Slice**) to search. (You can also select the **Match Case** or **Find Exact Match Only** options to narrow your search.)
3. Click **Find Next**.

Find the Previous Identified Alert Instance

Navigate: From the **View** menu, select **Find Previous Alert**.

Find the Next Identified Alert Instance

Navigate: From the **View** menu, select **Find Next Alert**.

Find a Position in a Dimension

Navigate: Right-click a dimension and select **Find…**.

```
Hide Department
Show/hide…
Find…
Lock positions
Unlock positions
Maintain positions                    ▶

✔ all [Product]
✔ Department
  Class
✔ SubClass

  Select dimensions…
  Select rollup                       ▶

✔ Outline view
  Block view

  Show dimension labels
  Show attribute labels
✔ Show connector lines

  Format                              ▶

  Select display and sort attributes…
  Attribute-based sort…
  Resort Department attributes
  Attribute definition…

  Split dimension…
```

Selecting Find… from the Right-Click Context Menu

You can use the **Find…** option from the right-click context menu to search for a position within a dimension on the worksheet. This find functionality looks for a position with a matching label in the dimension where the context menu was accessed, with exception to the z-axis. For more information about using the find option in the z-axis, see the Find in the Z-Axis section.

When you have two or more hierarchies in the same axis, there will be as many instances of every position in the inner hierarchy (the hierarchy closer to the spreadsheet) as the number of positions displayed in the outer hierarchy (the hierarchy away from the spreadsheet). As a result, when searching for a position in a dimension in the inner hierarchy, the **Find…** functionality progressively scrolls through the worksheet finding each position in the outer hierarchy before restarting from the top.

For example, when searching for "20" on the following worksheet, the Find... functionality will first locate the positions "202 Long Sleeve" and "201 Short Sleeve" in the Catalog location. Then, it will continue on to the next location of "202 Long Sleeve" and "201 Short Sleeve" in the E-Biz location. Note that the Find... functionality will not stop searching at the end of the Catalog location, but instead will continue to search the entire dimension for all instances of a SKU containing "20."
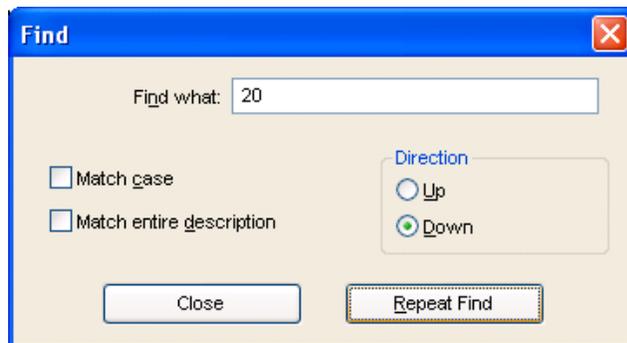
Example: Find Dialog Box Searching for "20"

Example: Worksheet Containing Multiple Instances of a SKU with "20" in its Label

Find in the Z-Axis

The right-click find option works differently when accessed from the z-axis. A search started in the z-axis looks for the search string only in the dimensions belonging to the hierarchy where the search was initiated. It does not look for the search string in any other hierarchy, even if there is more than one hierarchy present in the z-axis.

In addition, a find search from the z-axis does not automatically continue from the beginning of the hierarchy once the search has reached the end of the hierarchy. You must explicitly select the Search Up or Search Down radio buttons to reverse the order of search.

Rotate or Pivot an Axis on a Grid

Rotating or pivoting an axis (such as product, time, or location) on a grid allows you to display data in different orientations.

To Pivot along the Same Axis

1. Left-click and hold the hierarchy tile representing the hierarchy that you want to move.
2. Drag the hierarchy tile to the desired new position along the axis.
3. Observe the appearance of the cursor as you move the tile. When the cursor is over an available dropping point (display area), its appearance will change.
4. To drop the tile in its new display area, release the mouse button.

To Rotate a Hierarchy to Another Axis

1. Left-click on and hold the hierarchy tile representing the hierarchy that you want to move.
2. Drag the hierarchy tile to the desired display axis.
3. Observe the appearance of the cursor as you move the tile. When the cursor is over an available dropping point (display area), its appearance changes into an arrow.
4. To drop the tile in its new display area, release the mouse button.

Show and Hide Positions in the Grid Display

Once you have created a workbook that contains the products, time periods, and measures selected in the workbook wizard, you are able to hide any positions (nodes) that were initially incorporated during the workbook build. The position hiding feature allows you to remove undesired information from the grid display without requiring you to rebuild the workbook to attain the view you want.

> **Note:** When you select individual positions to hide from view, any data associated with those hidden nodes will still be reflected in any aggregate totals.

Hide Positions using the Quick Menu

1. Select an undesired node by clicking it within the axis display.

> **Note:** Use **Ctrl+Click** to select multiple positions together.

2. Right-click the mouse within that same axis area to produce the associated quick menu.
3. Choose **Hide Selection**.

Hide Positions using the Show/Hide Dialog

One method of hiding positions in the grid display is to access the **Show/Hide** dialog, which is actually the **Show/Hide** tab of the **Tree Options** dialog. This method is useful if you have a large number of nodes to hide at the same time. The **Show/Hide** dialog also provides the means to return already hidden nodes to the grid display.

> **Note:** The following procedure is used to show positions in hierarchies other than the Measure hierarchy.

1. Right-click in a dimension's axis area to display the quick menu relevant to that hierarchy.
2. Select **Show/Hide**. When the **Show/Hide** dialog displays, all currently hidden nodes are displayed on the left side of the dialog, and all currently visible nodes are displayed on the right side.
3. Click a node on the right side of the dialog to select it. Use **Ctrl+Click** to select multiple nodes together.
4. Click the left arrow button to move your selection(s) to the Hidden Nodes side of the dialog.
5. Click **OK**.

   When you return to the workbook, the grid display reflects the selections made on the Show/Hide tab.

> **Note:** Any data associated with the hidden position(s) will still be reflected in any aggregate totals.

Redisplay Currently Hidden Positions

The **Show/Hide** dialog provides the means to make any hidden positions visible in the grid display. Perform the steps below to re-display hidden positions in the grid.

> **Note:** The following procedure is used to show positions in hierarchies other than the Measure hierarchy.

1. Right-click in a dimension's axis area to display the quick menu relevant to that hierarchy.
2. Select **Show/Hide**. When the dialog displays, all currently hidden nodes are displayed on the left side of the screen and all currently visible nodes are displayed on the right side.
3. Click a node on the left side of the screen to select it. Use **Ctrl+Click** to select multiple nodes together.
4. Click the right arrow button to move your selection(s) to the Visible Nodes side.
5. Click **OK**.

   When you return to the workbook, the grid display reflects the selections made on the Show/Hide tab.

Show and Hide Positions in the Measure Hierarchy

Measure positions can be hidden from view in the same way as positions in other hierarchies. However, the **Show/Hide** dialog for measures appears much different. The **Show/Hide Measures** dialog has been designed to streamline the selection of measures, taking into account the attributes that comprise each measure's definition.

Hide Currently Visible Measures from View

To use the **Show/Hide Measures** dialog to hide a visible measure from grid view, perform the following steps:

1. On a worksheet, right-click in the measure axis to produce the associated quick menu.
2. Select **Show/Hide**.
3. In the Visible Measures portion of the dialog (upper right), click on a measure that you want to hide. You may select multiple measures from this list by using **Ctrl+Click**.
4. Click the left arrow button. The selected measures are removed from the Visible Measures window.
5. Click **OK**.

Show Hidden Measures in the Grid Display

To use the **Show/Hide Measures** dialog to return a hidden measure to the grid display, perform the steps below.

> **Note:** For most selections made in the following steps, multiple selections can be made by using **Ctrl+Click**.

1. On a worksheet, right-click in the measure axis to produce the associated quick menu.
2. Select **Show/Hide**.
3. In the Hidden Measures portion of the dialog, select the measures you want to show.
4. Click the right arrow button to add the measure to the Visible Measures list.
5. Click **OK**.

Specify the Display Order of Measures in the Grid

You can use the **Show/Hide Measures** dialog to specify or change the order in which measures are displayed in the grid. To do this, perform the following steps:

1. On a worksheet, right-click in the measure axis to produce the associated quick menu.
2. Click **Select display and sort attributes…**.
3. Select **User-defined order**.
4. Select the **Show/Hide** tab.
5. Select a measure from the Visible Measures list.
6. Click the up arrow or down arrow to move the selected measure up or down in the list display.
7. Repeat these steps for measures as required until the appropriate display order is attained.
8. Click **OK**.

Measure Profiles

Measure profiles can be created in RPAS Configuration Tools. For information about configuring measure profiles, please refer to *RPAS Configuration Tools User Guide*. In addition to the configured measure profiles, you can create, delete, and modify measure profiles in a workbook. Measure profiles created or modified in a workbook are stored with the formatting information and are treated the same as other workbook formatting information.

Create a Measure Profile

1. On a worksheet, right-click a measure to produce the associated quick menu.
2. Select **Show/Hide.** The **Tree Options** window appears with the **Show/Hide** tab visible.

Tree Options – Show/Hide Tab

3. Select all of the measures that you want to include in the measure profile, and ensure that all desired measures appear in the **Visible measures** section.
4. In the **Measure Profiles** text field, enter a label for the measure profile. If the label has not already been used, the **Update Profile** button changes to **Add Profile** and becomes enabled.
5. Click **Add Profile** to create a new measure profile with the current visible measures list and profile label.
6. Click **OK**.

Edit/Update a Measure Profile

1. On a worksheet, right-click a measure to produce the associated quick menu.
2. Select **Show/Hide**. The **Tree Options** window appears with the **Show/Hide** tab visible.
3. In the **Measure Profiles** drop-down list, select the measure profile that you want to update. The measures in the measure profile are displayed in the **Visible measures** section.
4. Add or remove measures that you want to include in the measure profile, ensuring that all desired measures appear in the **Visible measures** section. Once you add or remove measures, the **Update Profile** button is enabled.

> **Note**: Measures do not appear in the worksheet in the order shown in the **Visible measures** list unless the **User-defined order** option is selected on the **Sort/Display Attributes** tab. A note appears below the **Visible measures** list stating whether this option is selected.

5. Click **Update Profile**.
6. Click **OK**.

Change a Measure Profile Label

1. On a worksheet, right-click a measure to produce the associated quick menu.
2. Select **Show/Hide**. The **Tree Options** window appears with the **Show/Hide** tab visible.
3. In the **Measure Profiles** drop-down list, select the measure profile for which you want to change the label. The measures of the measure profile are displayed in the **Visible measures** section.
4. Click **Change Label**.
5. Enter the new label for the measure profile.
6. Click **OK** to return to the **Tree Options** window. The new label is now displayed.
7. Click **OK**.

Apply a Saved Measure Profile to a Worksheet

There are two methods for applying a saved measure profile to a worksheet:

Method 1

1. On a worksheet, right-click a measure to produce the associated quick menu.
2. Select **Show/Hide**. The **Tree Options** window appears with the **Show/Hide** tab visible.
3. In the **Measure Profiles** drop-down list, select the measure profile that you want to load. The measures of the measure profile are displayed in the **Visible measures** section.
4. Click **OK**.

Method 2

1. On a worksheet, right-click the measure axis to produce the associated quick menu.
2. Expand the **Select profile** submenu.
3. Click the measure profile you want to load.

Delete a Measure Profile

1. On a worksheet, right-click a measure to produce the associated quick menu.
2. Select **Show/Hide**. The **Tree Options** window appears with the **Show/Hide** tab visible.
3. In the **Measure Profiles** drop-down list, select the measure profile that you want to delete. The measures of the measure profile are displayed in the **Visible measures** section.
4. Click **Delete Profile**.
5. Click **OK**.

Select a Higher Hierarchy Level for Data Roll-Up

1. Right-click the desired grid axis.
2. Left-click and select **Select Rollup**.
3. Select the highest dimension to display.

Aggregate Data

Aggregate Data Using a Dimension List

The Dimension List option allows you to collapse/expand the display of one dimension at a time. When a worksheet dimension is collapsed from the grid display, all of that dimension's associated data is aggregated to the next higher level currently displayed.

1. Right-click any worksheet axis to display a quick menu of options that are relevant to that hierarchy. Dimensions that are currently displayed are shown in the dimension list with checkmarks beside them.

   > **Note:** If you want to aggregate data to a dimension higher than those shown in the dimension list, you must first use the **Select Rollup** option to specify the highest dimension that you want to see.

2. Click any currently checked dimension to collapse that hierarchical level. All associated data will be aggregated to the next higher dimension that is displayed.

   > **Note:** When you click any unchecked dimension in the list, the reverse process happens. The previously collapsed dimension will be displayed in the grid in its proper relative location in the hierarchy.

Aggregate Data using the Select Dimensions Menu

The Select Dimensions option allows you to collapse or expand the display of multiple dimensions at one time. Select this option to display a dialog box in which you can select exactly which dimensions you would like displayed in your worksheet.

1. Right-click any worksheet axis to display a quick menu of options that are relevant to that hierarchy.
2. Select **Select Dimensions**.
3. On the dialog that opens, select all dimensions that you want to display in your worksheet. Highlighted dimensions will appear in the display. Non-highlighted dimensions will be collapsed and data will be aggregated to the next higher level.

> **Note:** If you want to select a dimension higher than those shown in the dimension list, use the **Select Rollup** option to specify the highest dimension you want to see.

4. Click **OK**.

Aggregate Data Using the Dimension Labels

The Show Dimension Labels option is useful when you need to repeatedly collapse/expand dimensions without having to access the quick menu every time you do it. This option toggles the display of cursor-sensitive dimension header labels in your worksheet. When you click the label for a particular dimension, that dimension is collapsed in the grid and all associated data is aggregated to the next higher level. Once the dimension header labels are activated, dimensions can be collapsed or expanded with a single click the mouse.

1. Right-click on any worksheet axis to display a quick menu of options relevant to that hierarchy.

2. Select the **Show Dimension Labels** option.

> **Note:** Minimized tabs are displayed at the left side of the column axis headings or at the top of the row axis headings. This depends on your axis selection.

3. Place the cursor over these tabs. The tabs expand to display the dimension labels.

4. Click on any dimension label to collapse that dimension in the grid and aggregate the data to the next higher level.

> **Note:** Labels representing collapsed dimensions contain only a plus (+) sign. Click the plus sign to maximize the label and expand that dimension in the grid.

Spread Aggregate Data from an Individual Cell

1. Click inside an aggregate-level cell to edit. Spreading is ineffective for base-level (lowest-level) data.

2. In the cell, type a numeric value followed by one of the following:

- r (replicate)
- e (even)
- d (delta)
- p (proportional)

The values will use your spread method choice to spread to the lowest level. For a description of the spreading methods, see the Spreading overview topic.

Spread Aggregate Data from Many Cells

Select an aggregate-level cell or a group of aggregate-level cells that you want to contain the same value.

Navigate: From the **Edit** menu, select **Fill**.

1. Click the arrow below **Measure**, and select the measure that you want to fill. If you selected cells in the grid before selecting **Fill**, only the selected cells will be filled. If you did not select any cells, all of the cells for the measure selected will be filled.

2. In the Fill Value field, type a fill value. If the measure type is numeric, make sure that the value entered is numeric. If the measure type is non-numeric (can only contain values from a list), select the desired value from the drop-down list.

> **Note:** If you are viewing data in Outline mode when you select the Fill command, the system requires you to specify the aggregate level where you want to fill data. If the dimension you select is not an aggregate level, the Spread Method functions on the **Fill** dialog box will be disabled.

3. Select Spread Method (Replicate, Even, Delta, or Proportional). See the Spreading overview for a description of the spreading methods.

4. Click **OK**.

Dimension and Sorting Attributes

RPAS supports user definition of attributes on-the-fly within the workbook. The Attribute Definition feature allows dimension attributes to be created, deleted or modified. Such attributes are referred to as dynamic dimension attributes as opposed to static dimension attributes that are registered to the domain by RPAS dattrmgr utility (see the *RPAS Administration Guide* for more information on the registration of static dimension attributes).

During workbook build process, dynamic dimension attributes are brought into the workbook by RPAS framework if the dimension is present and the following conditions are met:

- The attribute is accessible by the log-on user.
- The source measure exists in the workbook.
- The other positions of this attribute fits into the workbook context.

The dynamic dimension attributes can be used for dimension splitting, sorting and displaying in the workbook. The attribute data is only updated when the attribute is used. Dynamic Dimension Attributes are excluded from the **Extra Measure Page and Insert Measure** menu option, because their representing measures have the insertable field set to false.

> **Note**: Sort and display attributes are saved to the formatting database.

Adding a New Dynamic Attribute

Navigate: Right-click over the hierarchy tile or positions in which to apply the new attribute, select the **Attribute definition** menu. From this menu the user can view the **Attribute Address Selections** dialog box.

1. The Select Attribute Dimension box defaults to hierarchy and dimension in which the user initiated the Attribute definition window. You may change the dimension or the hierarchy to apply the attribute. If the hierarchy is modified, click **Select** to reset the default values in the Select Source Measure and Select Other Hierarchies boxes. In the example below, positions along the Store dimension will have the resulting attribute applied.
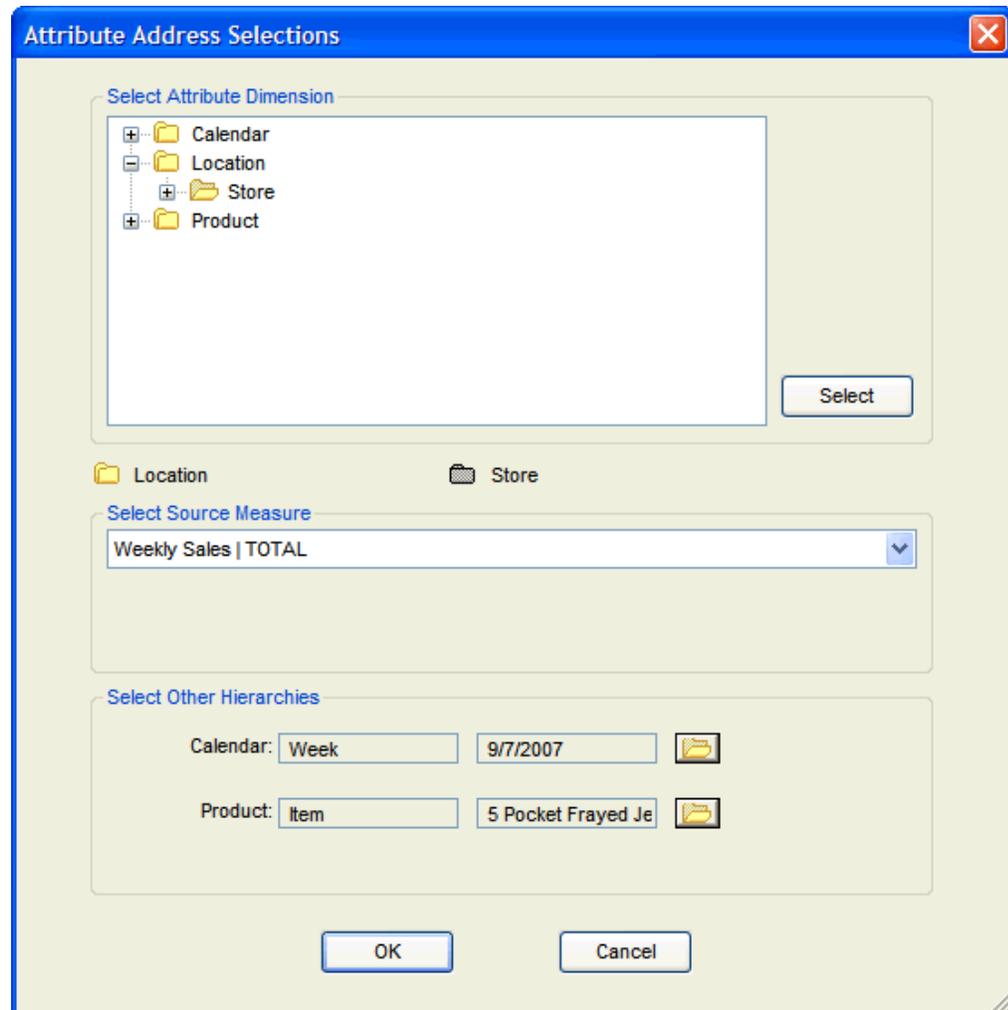
Example of Attribute Address Selections Dialog Box

2. The Select Source Measure box defaults to the active measure at the moment the user initiated the Attribute definition window. This box is a pick list that includes all viewable measures on the active worksheet.

3. The Select Other Hierarchies box displays the additional hierarchies, dimensions and a single position along the selected dimension to define the attribute. Select the position selection icon , to roll-up or down the hierarchy to select the correct dimension and position.

4. Select **OK**. The **Attribute Definitions** dialog box appears.
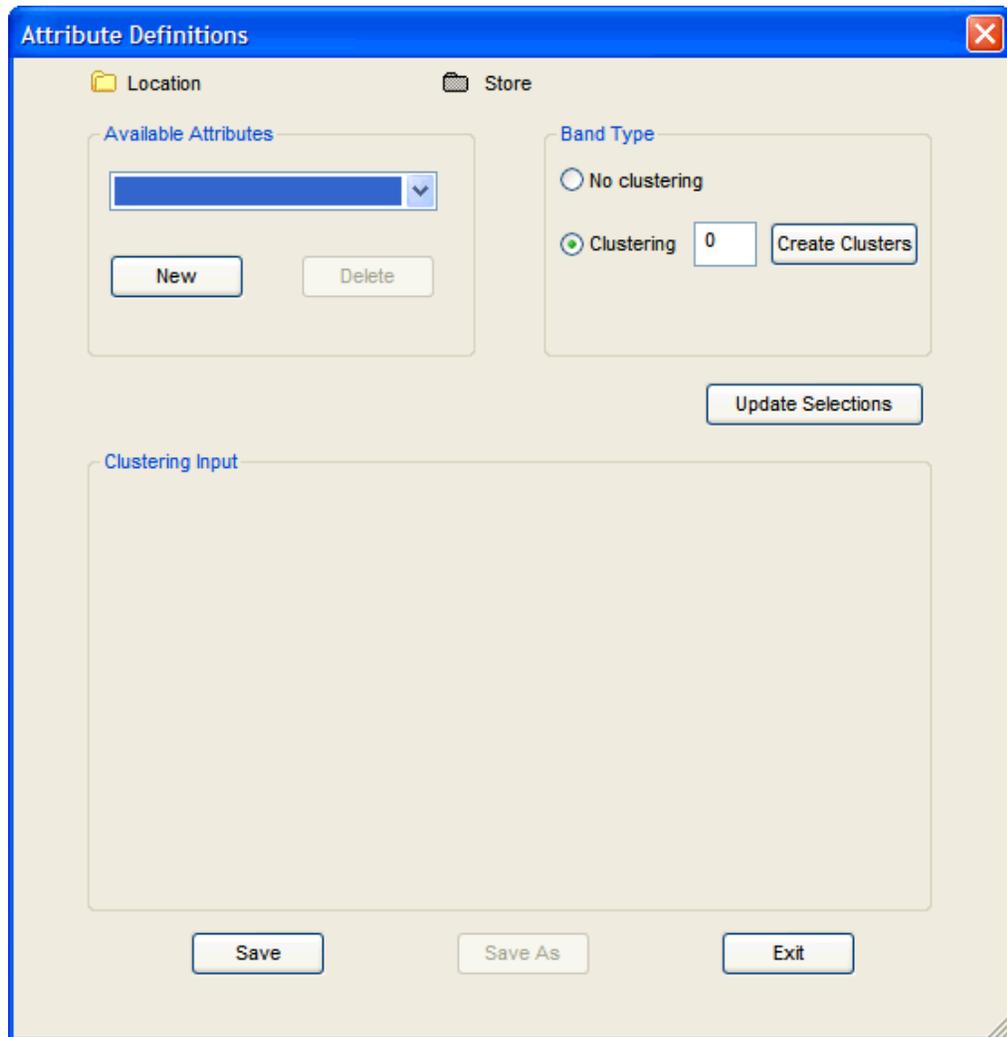
Attribute Definitions Dialog Box

5. From the **Available Attributes** drop-down list, select from the list of existing attributes, or click **New** if a new attribute is to be defined. If an existing attribute is selected from the drop-down list and it was previously defined using the **Attribute Definitions** dialog box, the values in the dialog default to the selections previously assigned to this attribute. You can modify any of these values.

6. Select the appropriate Band Type options, which determine whether or not the positions to which the attribute will be assigned are clustered.

- Select **No Clustering** if the measure data is to be used as an attribute label.
- Select **Clustering** if positions are to be grouped based on attribute values, enter the number of clusters (range is 1 to 100) in the Clustering text field, and click **Create Clusters**. The Clustering Input area of the screen displays new fields and information. The Clustering Input area displays the same number of cluster labels as the number of clusters defined in the Clustering text field.

Attribute Definitions Dialog Box / Cluster Input Fields

a. Starting with Label 1, the cluster attribute labels are listed in ascending order. You may change the cluster attribute labels as needed.

b. In the Value fields, data breakpoint values must be defined to determine how positions are assigned to the various bands. You may manually enter breakpoints, or click **AutoBanding** to automatically populate the breakpoint values based on the RPAS clustering algorithm.

> **Note:** In instances when there is low variability in the data selected for AutoBanding, the clustering algorithm may determine that the number of clusters selected is less than optimal (too many clusters to fit the data). In such instances not all breakpoints will be populated with a non-zero value. You may update the number of clusters and proceed with AutoBanding or manually set the breakpoint values.

7. Click **Update Selections** to return to the **Attribute Address Selections** dialog box, if the Attribute Dimension to cluster on or the positions from the other hierarchies to cluster over require modification. If breakpoints have previously been defined and subsequent changes are made to the **Attribute Address Selections** dialog box, the data breakpoint values should be redefined based on the updated dimensionality and positions for the attribute.

8. Click **Save** to save the new attribute definition. The **New Attribute** dialog box appears.

New Attribute Dialog Box

9. Enter the label for the new attribute, and click **OK**. The label must be unique. If an attribute label already exists in the system, an error message appears to indicate that a unique label must be entered. The **Save As** button remains inactive when defining new attributes.

Modify an Existing Dynamic Attribute

Navigate: Right-click over the hierarchy tile or positions in which the attribute applies, select the **Attribute definition** menu.

From this menu you can view the **Attribute Address Selections** dialog.

1. The Select Attribute Dimension box defaults to hierarchy and dimension previously defined in Attribute definition window. You may change the dimension or the hierarchy to apply the attribute. If the hierarchy is modified, click Select to reset the default values in the Select Source Measure and Select Other Hierarchies areas.

2. The Select Source Measure list defaults to the active measure displayed when the **Attribute Address Selection** dialog initially opened. The Select Source Measure list includes all viewable measures on the active worksheet.

3. The Select Other Hierarchies area displays the additional hierarchies, dimensions and a single position along the selected dimension to define the attribute. To roll-up or down the hierarchy to select the correct dimension and position, select the position selection icon .

4. Click **OK**. The **Attribute Definitions** dialog box appears.

5. Click the **Available Attributes** list, and select an existing attribute. The values and options in the **Attribute Definitions** dialog refresh according to the selected attribute definitions previously assigned.

> **Note:** During workbook build process, dynamic dimension attributes are brought into the workbook if all of the following conditions are met:
>
> - The dimension in which the attribute is defined is present in the workbook.
>
> - The attribute is accessible by the user.
>
> - The source measure in which the attribute is defined exists in the workbook.
>
> - The other positions defined for the attribute are present in the workbook.

6. Update the following fields and options as necessary:
   - Band Type: Select **No Clustering** or select **Clustering** and enter the number of clusters in the Cluster text field
   - Clustering Inputs: Modify the Cluster Labels, Breakpoint Values, or click **Auto-Banding** to update these fields.

7. Click **Update Selections** to return to the **Attribute Address Selections** dialog if the Attribute Dimension to cluster on or the positions from the other hierarchies to cluster over require modification.

8. Click **Save** or **Save As**. If **Save** is selected, a message appears to inform you that the attribute was successfully saved. If **Save As** is selected, the Save the attribute under a new name dialog box appears and prompts you to enter the new label for the attribute. The label must be unique. If an attribute label already exists in the system, an error message appears to inform you that a unique label must be entered.

Delete an Existing Dynamic Attribute

Navigate: Right-click over the hierarchy tile or positions in which the attribute applies, select the **Attribute definition** menu.

From this menu you can view the **Attribute Address Selections** dialog.

1. The Select Attribute Dimension box defaults to hierarchy and dimension previously defined in Attribute definition window. You may change the dimension or the hierarchy to apply the attribute. If the hierarchy is modified, click **Select** to reset the default values in the Select Source Measure and Select Other Hierarchies areas.

2. The Select Source Measure list defaults to the active measure displayed when the **Attribute Address Selection** dialog initially opened. The Select Source Measure list includes all viewable measures on the active worksheet.

3. The Select Other Hierarchies area displays the additional hierarchies, dimensions and a single position along the selected dimension to define the attribute. To roll-up or down the hierarchy to select the correct dimension and position, select the position selection icon .

4. Click **OK**. The **Attribute Definitions** dialog box appears.

5. Click the **Available Attributes** list, and select an existing attribute. The values and options in the **Attribute Definitions** dialog refresh according to the selected attribute definitions previously assigned.

6. Click **Delete** to remove the attribute definition from the system. A message appears to inform you that the attribute was successfully deleted.

7. Click **Exit** to close the **Attribute Definition** dialog box.

Display Attributes and Sort Dimensions Using Attributes

You can choose which of a dimension's attributes to display in worksheets, and you can select the order that a dimension's attributes are applied to the dimension during the sorting process.

An attribute is a piece of information that further describes a position in a given dimension.

Example

The SKU dimension of the product hierarchy could have three attributes associated with it: LABEL, COLOR, or PRICE. One SKU in this product hierarchy could have attribute values of:

- LABEL • SKU00012 - Cashmere Sweater
- COLOR • Pale Blue
- PRICE • $62

LABEL is the only attribute that is required, but positions in a dimension can be described with any number of attributes. Once established, attributes can be displayed in the grid if desired. You can also use a dimension's attributes to sort positions within that dimension. For example, you can specify that SKUs in your product hierarchy should be sorted in ascending order according to their PRICE attribute.

Display Attributes in a Worksheet

You can select any of a dimension's attributes to be displayed in a worksheet, and you can display more than one attribute at a time in any specified order. Whenever multiple attributes are shown for a given dimension, they are separated in the axis display by dotted lines.

1. Right-click on the worksheet axis representing the dimension for which you want to display attributes.

2. On the quick menu, choose **Select Display and Sort Attributes**. The Attributes to Display section of the resulting **Tree Options** dialog contains all available display attributes for the associated dimension. They will either be used (right side) or unused (left side).
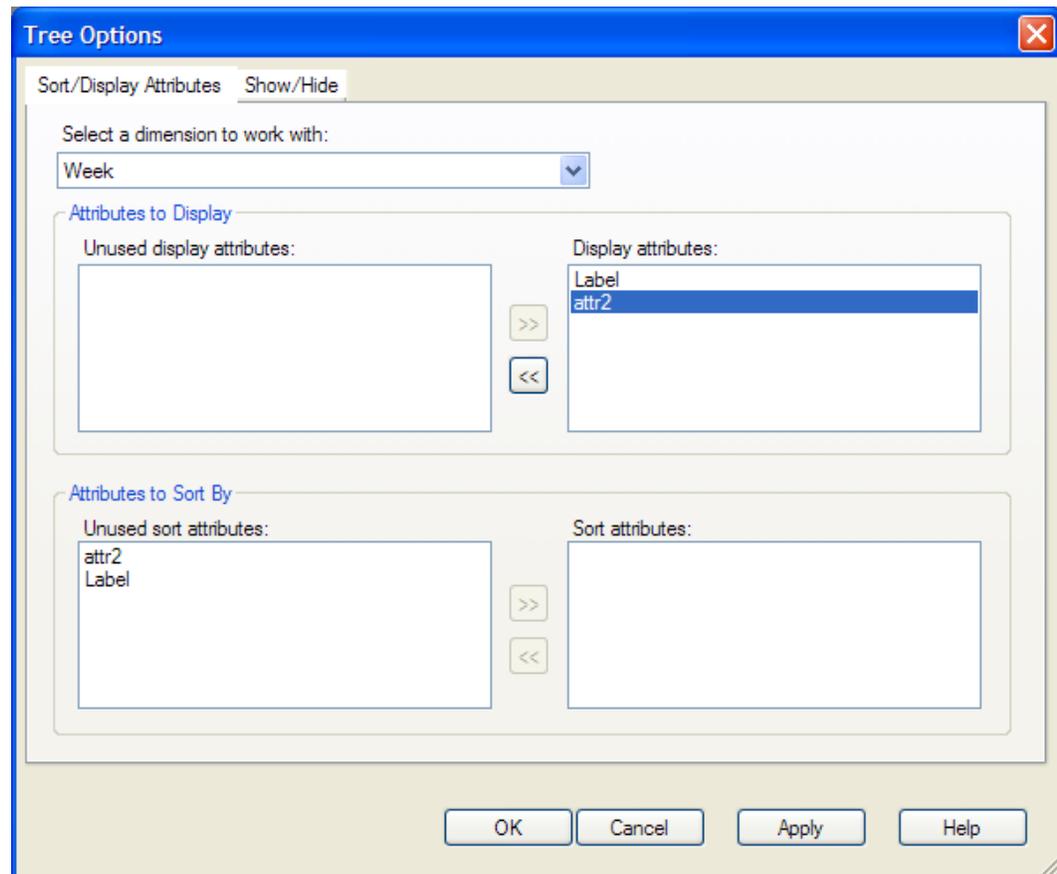
Tree Options Dialog Box

3. From the Attributes to Display area of the dialog box, select an attribute and use the left or right arrow buttons to move the attribute to the Unused Display Attributes or Display Attributes box. Repeat this step until all attributes that you want displayed in the worksheet appear in the Display Attributes box. Attributes will be displayed in your worksheet in the order that they appear in this list.

4. To reorder elements on the list, drag and drop the attribute upwards until its indicator is displayed in the appropriate location.

5. Click **OK** to return to the worksheet.

Use Attributes to Sort a Dimension's Positions

You can sort the positions in a dimension using any of the dimension's attributes. You specify which attributes are to be used for sorting and the order that the chosen attributes are to be applied to the dimension during the sorting process. For example, you can sort SKUs in the product hierarchy primarily by PRICE, and then within those prices you can sort by LABEL.

Selection of sort order is independent of the attribute display. This means that an attribute does not have to be displayed in the worksheet for it to be used for sorting.

1. Right-click on the worksheet axis that represents the dimension that you want to sort using attributes.

2. On the quick menu, choose **Select Display and Sort Attributes**. The **Attributes to Sort By** area of the **Tree Options** dialog box contains all of the available sort attributes for the associated dimension. They will either be used (right side) or unused (left side).

3. From the **Attributes to Sort By** area of the dialog box, select an attribute and use the left or right arrow buttons to move the attribute to the **Unused Sort Attributes** or **Sort Attributes** box. Repeat this step until all attributes that you want displayed in the worksheet appear in the **Sort Attributes** box.

4. During the sorting process, attributes will be applied to the dimension's positions in the order that they appear in the **Sort Attributes** box.

5. To reorder attributes in the **Sort Attributes** box, drag and drop the attribute upwards until its indicator is displayed in the appropriate location.

6. Click **OK** to return to the worksheet.

Sorting Positions in Multiple Windows

The selections for sort attributes for a single dimension may differ from worksheet window to worksheet window. This feature is useful when different views (provided by different sorts) of the data are desired at the same time. You can use the **New Window** command on the **Window** menu to create a copy of the current worksheet. Each copy of the worksheet is represented by a different window and can contain data that is sorted using a different sort method.

Sort Measures Using the User Specified Sort Order Function

When sorting and displaying measures, the User-Specified Sort Order can be used to dictate an exact order that measure positions should be displayed in the grid. The User Specified Sort Order allows you to rearrange measures so that they are displayed in an arbitrary order that you determine. This method allows you to select more specific sort orders that cannot be attained by ordering the sort attributes in the Sort Attributes box.

You can still sort positions in the Measure hierarchy according to any of that hierarchy's attributes. This way, the Measure hierarchy is no different from any other hierarchy represented by your data. For instance, you can specify that all measures should be sorted in the worksheet according to aggregation method. In this case, all measures with an aggregation method of Period End Total would be grouped together and displayed before measures with an aggregation method of Recalculated, which would appear before measures with a Total aggregation method. The system sorts measure positions alphanumerically based on the values assigned to the sort attribute in question.

It is more likely that you will want to specify a particular measure ordering scheme that cannot be attained by sorting the positions based on attributes. The User Specified Sort Order feature is designed to help you attain this specialized view.

When the User Specified Sort Order feature is enabled, it overrides any attribute sorting scheme specified on the **Select Display and Sort Attributes** dialog. When selected, this feature orders measure positions in your worksheet that are based on their current order as presented in the **Show/Hide** dialog. To change the order of the measures in your worksheet display, change the order of measures on the list in the **Show/Hide** dialog.

1. Right-click within the Measure axis, and choose **Select Display and Sort Attributes** from the quick menu.

```
Find...
Create percent of parent measure...

Cut
Copy
Paste

✓ Info
  all [Product]
✓ Class
  Subclass
  Grandparent
  Parent
  Item

  Select dimensions...
  Select rollup

  Show dimension labels
  Show attribute labels

  Format                              ▶

  Select display and sort attributes...

  Split dimension...
```
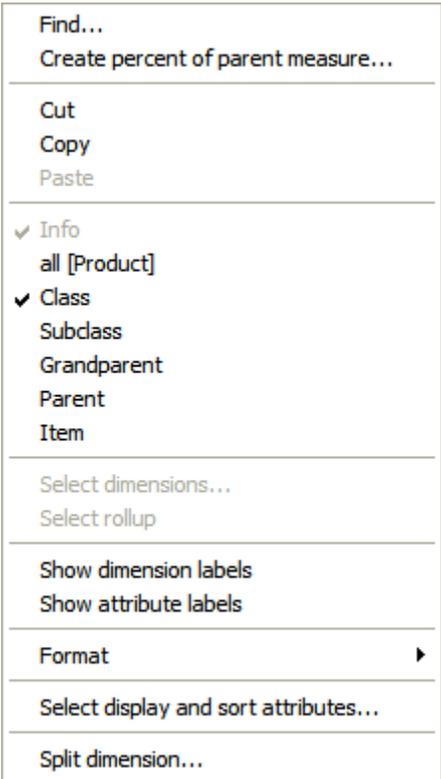
Select display and sort attributes Menu Option

2. On the **Sort/Display Attributes** tab, in the **Measure Ordering** box, select the **User defined order** radio button.
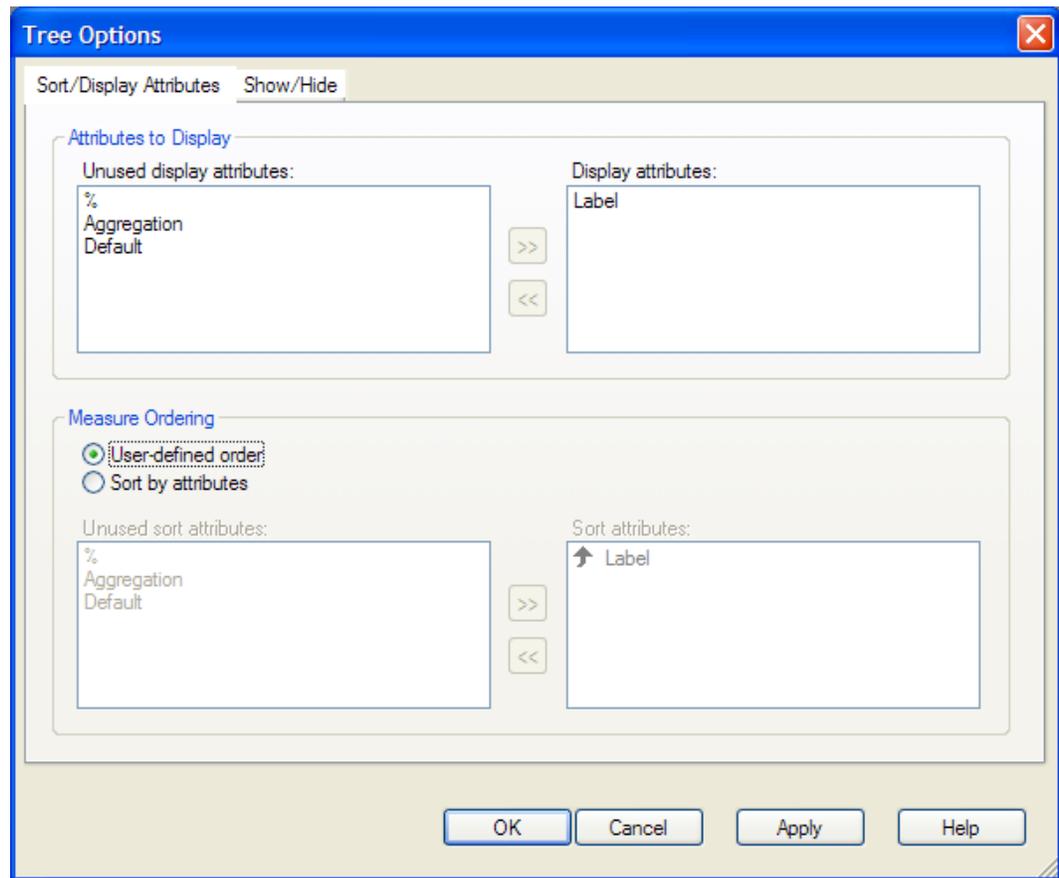
Tree Options Window

> **Note:** When this option is selected, the **Unused Sort Attributes** box and **Sort Attributes** box become disabled. The **User Specified Sort Order** feature overrides any selections made in these boxes.

3. Click the **Show/Hide** tab.

4. Select a measure in the **Visible measures** box.

Example of Visible Measures in the Show/Hide Tab

5. Click the up arrow or down arrow to move the selected measure up or down in the list display.

6. Repeat steps 4-5 for measures as required until the desired display order is attained. The order of the measures in the Visible Measures box will match the order of measures in your worksheet.

7. Click **OK**.

Return to an Attribute Sorting Scheme

To disable the user-defined sort order and again sort your measures using attributes, return to the **Sort/Display Attributes** tab and select the **Sort by attributes** radio button. The **Unused Sort Attributes** and **Sort Attributes** list boxes become enabled, which allow you to make sort attribute selections as desired.

Sort Measure Data in Multiple Windows

The selections for sort attributes for a single dimension can differ from worksheet window to worksheet window. This feature is useful when different views (provided by different sorts) of the data are desired at the same time. You can use the New Window command on the **Window** menu to create a copy of the current worksheet. Each copy of the worksheet is represented by a different window, and can contain measure data that is sorted using a different sort method.

Sort a Dimension by Grid Data Values

The sorting mechanism allows you to sort one dimension in a hierarchy according to the current data values in the grid. You do this by specifying a one-dimensional data space for a given dimension, and then by creating a user-named attribute based on that selected data. That attribute can then be used to sort and resort data in the corresponding dimension.

Example

Suppose that you want to sort all product classes in your product hierarchy in ascending order based on the total sales for each during the month of January. In this case, the dimension you want to sort is product class. To define the necessary one-dimensional data space, you must aggregate total sales for the product class dimension to the month level and select the January position. The one-dimensional data space is essentially a single row or column of data corresponding to the dimension you want to sort.

Once you have selected the data that you want to sort, you must create a system-recognized sort attribute based on this data. You might choose to call this attribute JanSales. Once an attribute is created, it can be used to perform the initial data sort, and can later be used for resorts of that same dimension if changes to the data occur.

Sort Hierarchies by Data Values in the Grid

Use the following procedure to sort one dimension in a hierarchy according to a set of data values in the grid:

1. Select a one-dimensional data space of grid data (a single column or row of data) to be sorted.

2. From the **Edit** menu, select **Attribute-based sort…**, or right-click on the axis for the dimension you are sorting to produce a quick menu, and select **Attribute-based sort…**. If your selection from the first step contained more than one measure, RPAS will detect it as an invalid slice of data and will display the following error message.

Multiple Measures Error Message

3. The **Attribute Address Selection** dialog will display to help you define a one-dimensional slice using a single measure. If you have only one measure selected, but your selection is still invalid because you have not selected a one-dimensional slice in which each position along the sort dimension has a unique value available, RPAS will display this dialog to help you construct a one-dimensional slice.
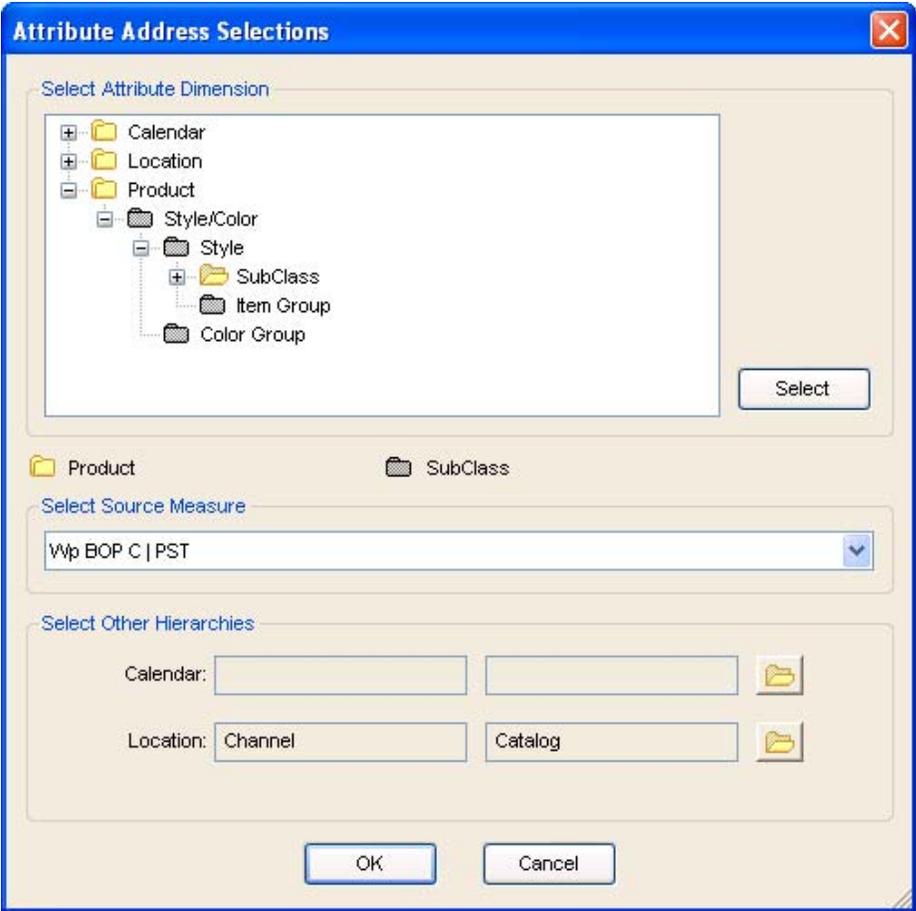
Attribute Address Selections Dialog

4. Once RPAS has ensured that you have made a one-dimensional selection, it will bring up the **Create Sort Attribute** dialog box, where you can enter a label for the sort attribute. This label must be unique, meaning that you should have no other attribute with the same label. The **Create Sort Attribute** dialog box contains an **Update Selections** button which you can use to bring up the **Attribute Address Selection** dialog box to examine the selection or to change it.
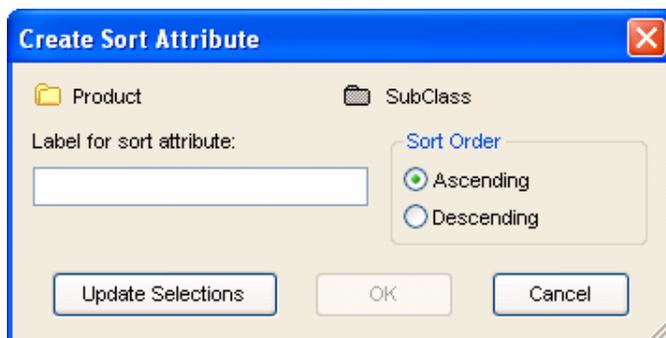
Create Sort Attribute Dialog

Choose a name that will help you identify what this particular sort accomplishes (for example, choose JanSales for a group of products to be sorted according to their total January sales).

> **Note:** If the dimension you are sorting is displayed in outline mode with other dimensions in that hierarchy, the **Create Sort Attribute** dialog will contain an additional field. This additional field allows you to specify the single dimension in which to apply the created sort attribute.

5. Click the appropriate radio button to specify the desired sort order (**Ascending** or **Descending**).

6. Click **OK** to begin sorting the selected data.

Re-Sort/Update a Dimension Using an Already Defined Sort Attribute

If changes to sorted data occur, you may want to re-sort the dimension based on the new values. Follow this procedure to reapply a sort attribute to a selected dimension.

1. Right-click over the axis for the dimension to be resorted. A quick menu is displayed.

2. Select **Resort**. The data is re-sorted according to the current attribute sort order specified for that dimension.

> **Note:** See Dimension Splitting for additional re-sort support using the Update icon on the menu bar.

Sorting Without Attributes

Using the **Sort Ascending** and **Sort Descending** buttons available on the toolbar, you can sort the positions in a dimension based on the values of a measure's slice for that dimension. You can do this without having to define additional attributes, as you would when using attribute based sort.

Sort Ascending and Sort Descending Toolbar Buttons

Once you have selected the desired, valid slice of measure data that you wish to sort the dimension's positions by, the sorting buttons will be enabled on the toolbar.

> **Note:** A slice is valid if it involves only one measure and if it has a unique value for each position along the dimension being sorted (meaning that one position along all other hierarchies in the measure's intersection has been selected).

Once you click one of the sort buttons, the selected positions will be sorted according to the measure's values in the selected slice. If the grid is in outline mode, that is, it is showing aggregate levels in separate rows or columns in the same grid, only the leaf dimension will be sorted. Positions grouped by aggregate levels will be sorted within themselves, but the aggregate positions will not be sorted.

Since the positions will have been sorted based on a specific slice, the sort persists as the user pages through positions along the Z-axis (page axis). As the user pages through positions along the Z-axis, RPAS does not assume an intention to re-sort based on new selections in the Z-axis.

This kind of sorting cannot be applied to positions in a dimension along the page axis. However, a user can pivot the desired dimension to either the X or Y axis, execute the sort along the desired slice, and then pivot the sorted dimension back to the page axis. The positions along the dimension in the page axis will maintain their sort order.

> **Note**: Since this sort order is dependent on the position context, which varies from workbook to workbook, it is not saved to the formatting database.

Sorting Positions in Ascending Order

1. Select the slice defining the dimension you wish to sort. The sorting buttons will be enabled on the toolbar.

> **Note:** All the positions within the selected dimension must be selected to sort.

2. Click the **Ascending** button in the toolbar. All selected positions will be reordered with the lowest cell value appearing in the topmost cell, as in the following example.

Example: Worksheet with Data Sorted in Ascending Order

Sorting Positions in Descending Order

1. Select the slice defining the dimension you wish to sort. The sorting buttons will be enabled on the toolbar.

> **Note:** All the positions within the selected dimension must be selected to sort.

2. Click the Descending button in the toolbar. All selected positions will be reordered with the highest cell value appearing in the topmost cell, as in the following example.

Example: Worksheet with Data Sorted in Descending Order

Change the Order of Sort Attributes for a Dimension

To change the order of sort attributes for a dimension:

1. Right-click over the axis for the dimension that contains the sort attributes you want to edit, and choose **Select Display and Sort Attributes** from the quick menu.
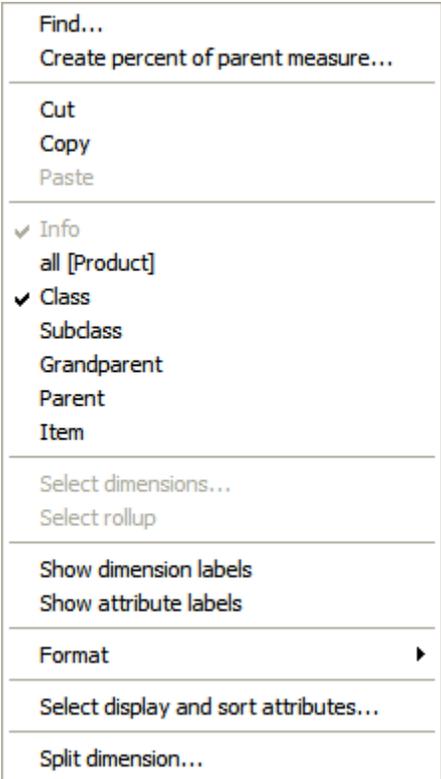
Select Display and Sort Attributes Menu Option

2. On the dialog box that is displayed, the Attributes to Sort By area contains all available sort attributes for the dimension. They are either used (right side) or unused (left side).
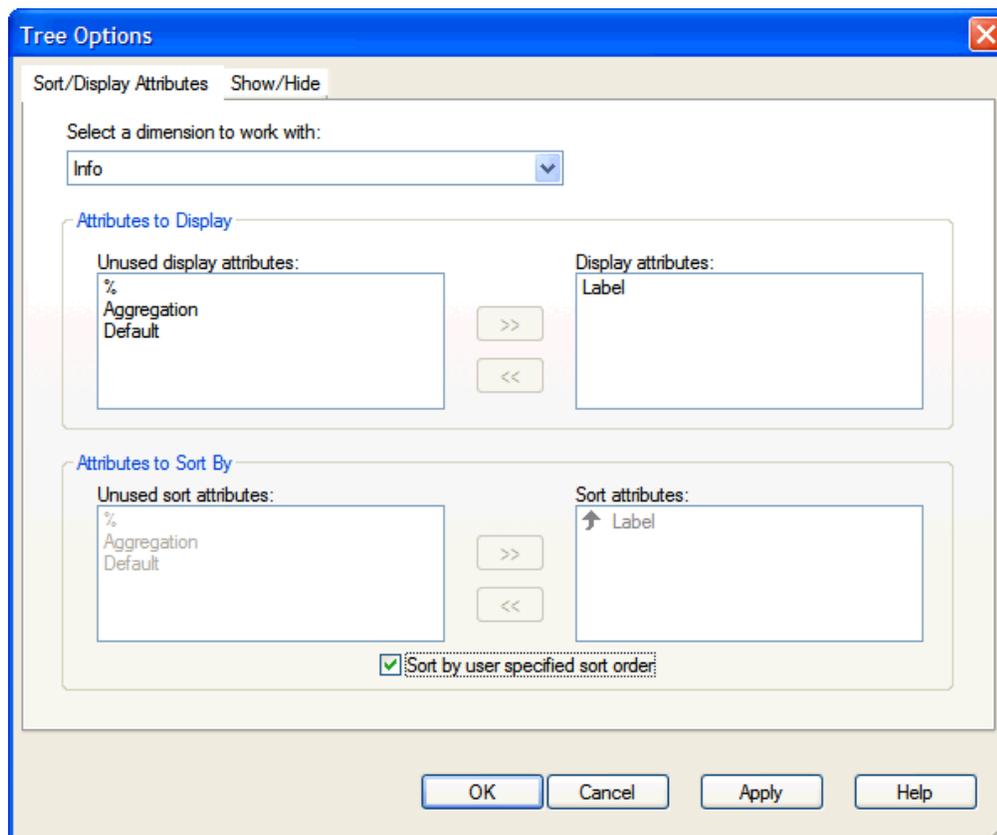
Example of Tree Options Dialog Box

3. If desired, click a sort attribute to highlight it, and use the left or right arrow buttons to move the attribute to the desired side of the screen.

4. To reorder the elements on the list, drag and drop the attribute upwards until its indicator is in the appropriate location.

5. Attributes in the Sort Attributes list box are reordered according to your actions. The order of attributes on this list specifies the major to minor sorting scheme that the system applies to the dimension each time the Sort or Resort command is invoked.

6. Click **OK**.

Dimension Splitting

The RPAS Dimension Splitting features allow users to set-up, view, and manipulate data using dynamic, ad-hoc attribute hierarchies. This is achieved by building dynamic hierarchies where attribute values become positions within a dimension. Once a dynamic hierarchy is created, all grid-type features such as editing, locking, protection processing, etc., are fully functional (see Adding a New Dynamic Attribute for more information on building and maintaining dynamic attribute hierarchies).

Once a workbook is saved with a dimension split, the split is retained for the lifetime of the workbook. You also have the ability to apply saved splits in new workbooks, eliminating the need to redefine the split.

> **Note**: Formatting changes made to a split dimension are not saved to the formatting database.

The following is a summary of use cases that Dimension Splitting supports:

- At any step in the workflow, the user splits a single dimension in a single hierarchy using the Dimension Splitting Dialog. Only one dimension can be split in any hierarchy, though dimensions in many hierarchies may be split at a given point in time. This is achieved through multiple invocations of the Dimension Splitting Dialog, once for each hierarchy whose dimension is being split.

  > **Note**: A hierarchy can only be split once per workbook. If the hierarchy is split again, all worksheets containing the old split will be re-split along the new split definition. If the worksheet cannot support the new split, it will be unsplit to the original hierarchy.

- The user is able to specify a split definition by picking one or more (a maximum of four) attributes from a list of all splitting attributes for a given dimension. Once such a split is defined, but not necessarily saved or catalogued, the user is able to exercise the split computation and view it. In addition, the user can do the following:
  - Save a split definition to the domain catalogue without viewing it.
  - View an existing (catalogued in the domain) split definition.
  - Modify an existing (catalogued in the domain) split definition.
  - Modify an existing split definition and save it as a new split definition in the domain.
  - Delete an existing split definition.
  - View an existing split.
  - Save a split definition to the domain catalogue after viewing the split.

Split a Dimension Based on an Attribute

Navigate: Right-click over the hierarchy tile or positions in which the split will apply, select the **Split Dimension** menu.

From this menu, you can view the **Dimension Splitting** dialog box.
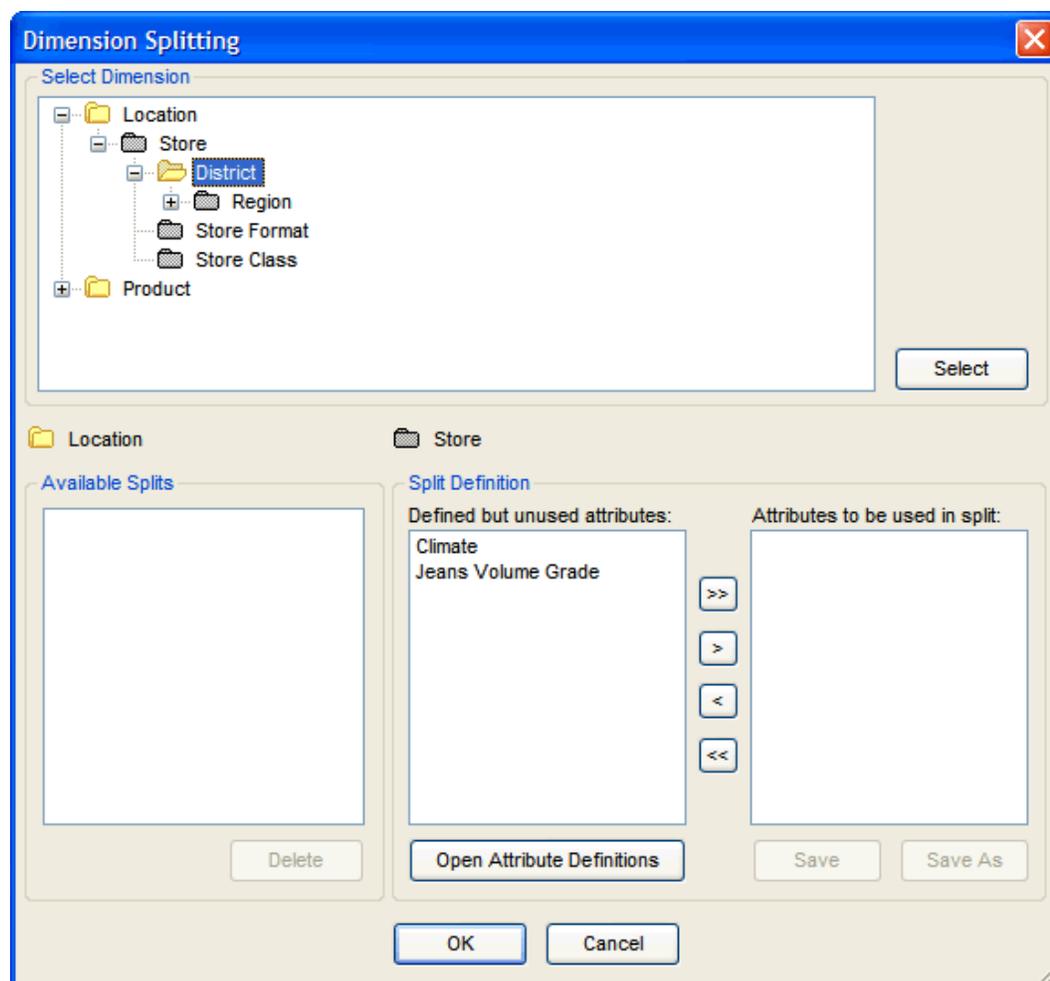
Dimension Splitting Dialog Box

1. The **Select Dimension** box defaults to the dimension in which the user initiated the **Dimension Splitting** dialog. The **Available Splits** and **Split Definitions** boxes will display values if attributes have been defined that match the dimension to be split. If no values are populated in the **Available Splits** or **Split Definitions** boxes, there are no attributes defined that match the dimension selected to split. To define an applicable attribute, select **Open Attribute Definitions** (see Adding a New Dynamic Attribute for more information on building and maintaining dynamic attribute hierarchies).

2. From the **Select Dimension** box, you may also change the dimension to split. If the dimension is modified, click **Select** to populate the **Available Splits** and the **Split Definition** boxes. If there are no values in the **Available Splits** and **Split Definition** boxes, return to the previous step.

3. The **Available Splits** box displays split definitions that have been previously saved by the user in this or other workbooks. You may apply a previously saved split definition to the current worksheet. A single saved split can be applied from this dialog box using the arrow keys to move the saved split(s) to the **Attributes to be used in split** box. The **Attributes to be used in split** box will update to reflect the attribute associated with the saved split selected by the user, rather than the label of the saved split.

4. The **Split Definition** box displays the user's attribute definitions that may be applied to the dimension to be split. Single or multiple attributes can be applied from this window using the arrow keys to move the attribute(s) to the Attributes to be used in split box. The maximum number of attributes that a dimension can be split upon is 4.

5. Select **OK** to view the data in the worksheet along the split dimension.

6. Once the split dimension can be viewed in the worksheet, you may split another dimension along different hierarchy in the same view. Right-click over a different hierarchy tile or positions in which the split will apply, select the **Split Dimension** menu. See Step 1 to continue.

> **Note:** Dimensions along the calendar hierarchy cannot be split.

Save a Split Dimension

Saved (or cataloged) split definitions allow the user to apply a previously defined dimension split to a new workbook. A split is only saved along a single dimension although the user may be viewing data using a multi-dimension split (two attributes, each along different hierarchies).

1. Once a dimension split has been applied to the worksheet, you can save the split by right-clicking over the hierarchy tile or positions in which the split applies and selecting the **Save Current Split** menu.

2. Enter the label for the saved split definition and select **OK**.

3. You can unsplit the dimension and re-apply the saved dimension split or apply it once in a new workbook.

> **Note:** It is not necessary to save a split definition to view it. The user can simply create an arbitrary split definition in the **Split Definition** box and view it without saving.
>
> If a saved (catalogued) split definition is changed but not saved before the user moves to a different split definition or exits the dialog, the user will be prompted to save or discard the changes to the catalogued split definition.
>
> If a saved (catalogued) split definition becomes invalid (but not unusable) due to unavailability (deletion) of one or more of its defining attributes, or unusable due to unavailability of all its defining attributes, the user will see a message indicating the split is no longer valid.

Unsplit a Dimension

Once a dimension split has been applied to the worksheet, the user can unsplit the dimension by right-clicking over the hierarchy tile or positions in which the split applies and select the **Unsplit Dimension** menu. The user may repeat this step to unsplit additional dimensions in the worksheet.

Delete a Saved Dimension Split

1. To delete a saved dimension split, the user must first unsplit the dimension in which the saved dimension split applies.

2. Right-click over the hierarchy tile or positions in which the saved dimension split applies, select the **Split Dimension** menu.

3. The **Available Splits** box displays the split definitions that have been previously saved by the user in this or other workbooks. Highlight the saved dimension split to be deleted and click **Delete**. Repeat for additional saved splits.

> **Note:** This action permanently removes the saved split definition from the system, preventing the split from being re-applied in the same workbook or new workbooks that are built. No commit from the workbook is required for the deletion to be made permanent.

Dynamic Position Maintenance

Dynamic Position Maintenance (DPM) enables users to dynamically add or remove positions to a non-calendar dimension while working in a workbook. These user-defined or informal positions are updated in both the domain and workbook hierarchies. Positions added by the user are referred to as informal positions versus positions added during the hierarchy load process are referred to as formal positions. If/when the informal position is to be made formal, the position's name (label is not necessary for the update to occur) must first be updated to reflect the correct position name that will be loaded during the hierarchy load process. Prior to the hierarchy load, an administrative utility is run against the environment to change the status of a position from informal to formal (see the *RPAS Administration Guide* for more information on the updateDpmPositionStatus utility). This process will enable the loading and purging of that position through the hierarchy load process and will disable further DPM activities on the position.

> **Note:** Access to the DPM menus and dimensions that DPM functionality can be applied is determined in the solution and workbook configuration (see the *RPAS Configuration Tools User Guide* for more information on enabling DPM functionality).

DPM Limitations

The following limitations for DPM exist:

1. The DPM functionality is not supported for maintaining calendar dimensions. The implications of adding new periods to an existing workbook or domain are not trivial, since the rolling nature of calculations for measures such as stock would mean that the data for those measures, and other measures that depend on them, would be inconsistent.

2. In a global domain environment, the DPM process cannot be used for maintaining positions at or above the partition level. For example, if a global domain is partitioned by department that rolls up to division, users will not be able to use DPM functionality to add informal departments or divisions.

3. In a global domain environment, the DPM process cannot be initiated from workbooks in the master domain.

4. Positions from alternate hierarchies that are not already in the workbook cannot be imported into the workbook to be used as parents for new DPM positions.

Add a New Position to the Hierarchy

Navigate: Right-click over the hierarchy tile or positions in which the new position(s) will be added, select the **Add position** menu.
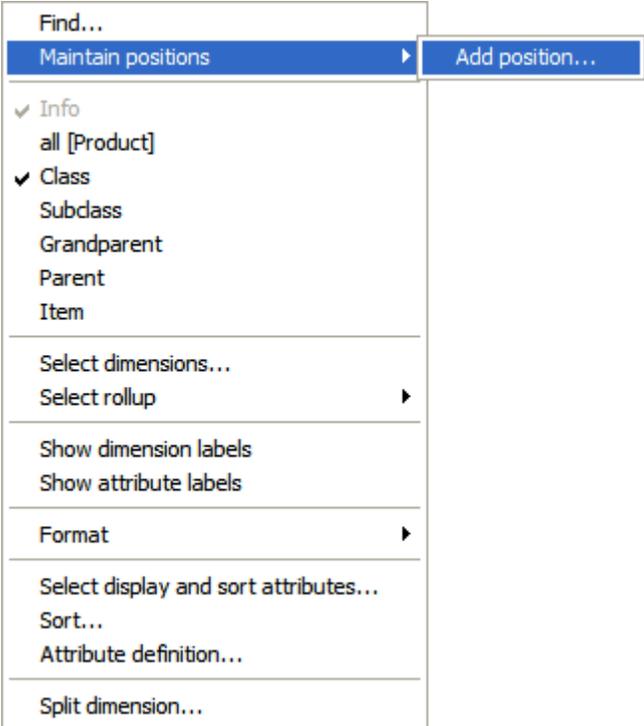
Right-Click Menu Showing Maintain Positions Option

From this menu, you can view the **Dynamic Position Maintenance** dialog box. The structure for the selected hierarchy, with the lowest child dimension displayed at the top, appears. A writable (non-gray) field next to a dimension indicates that an informal position may be added to the dimension. The folder icon [icon] next to a dimension indicates that the user may select an existing position in the hierarchy to associate as a parent or child of a newly added position. All dimensions along the main branch of the hierarchy and the alternate branches must be populated with a position value before the user is able to save and view the new informal position(s) in the workbook. For the dimensions that are not writable and do not include a folder icon, the position will be automatically populated based on the immediate child position selected.
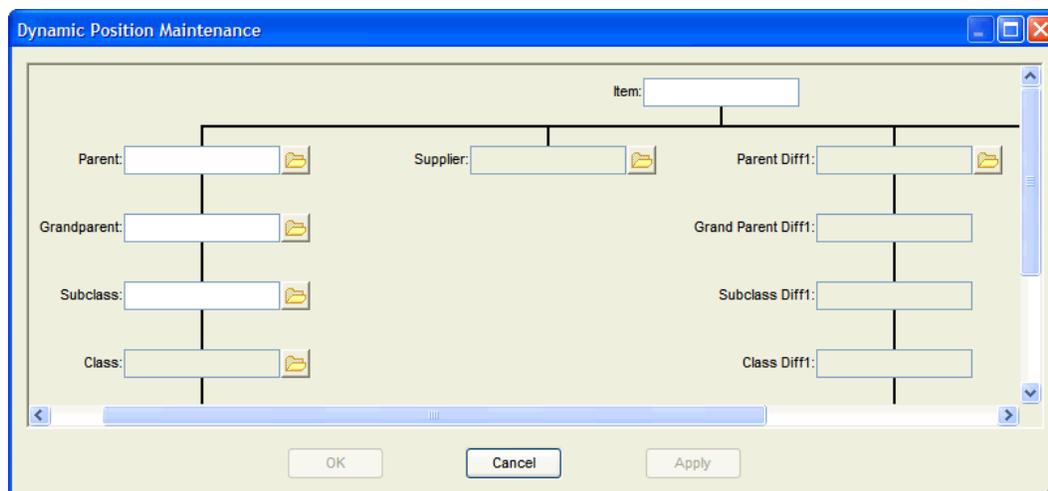
Dynamic Position Maintenance Dialog Box

1. Select the dimension that will have a new position added (from the writable, non-gray fields).

2. Enter the new position label. The position label is the description of the position that the user sees in the RPAS Client. As you begin to type in the value for the position label, the **Position Description** dialog box appears.

Example of Position Description Dialog Box

3. Enter the new position name. The position name is the RPAS internal identifier associated with the position label. Select **OK** to add the position.

> **Note:** With exception to underscores, no non-alphanumeric characters can be used in position names. Only alpha-numeric characters can be used. In addition, the position name cannot contain white spaces.

> **Note**: Position names that vary only by capitalization are considered to be the same position name. For instance, denimshorts and DenimShorts are considered the same name.

4. After adding a new position in the Dynamic Position Maintenance window, add new positions for other writable dimensions, or use the folder icon to view the available formal or informal positions in the other selected dimensions that may be defined as a parent or child of the new position(s).
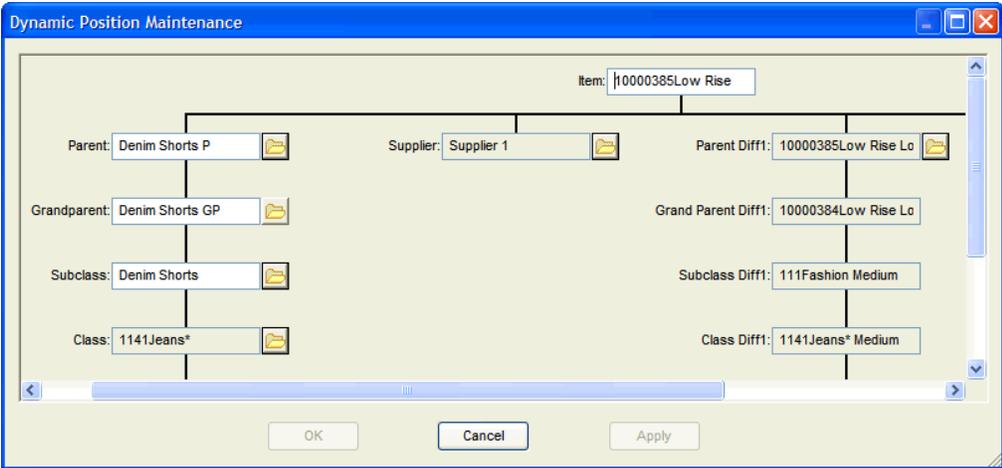
Example of Dynamic Positions Maintenance Dialog Box

5. Once the hierarchy is fully populated with position values, click **OK** or **Apply** to add the new informal position(s) to the hierarchy.
   - Select **OK** to apply the modifications and exit out of the Dynamic Position Maintenance window.
   - Select **Apply** to remain in the **Dynamic Position Maintenance** dialog box, if additional modifications to the positions are required.
   - Select **Cancel** to close the Dynamic Position Maintenance window, ignoring the user's position changes.

6. You can now view the newly added position(s) in the workbook. All informal positions in the workbook appear in blue.
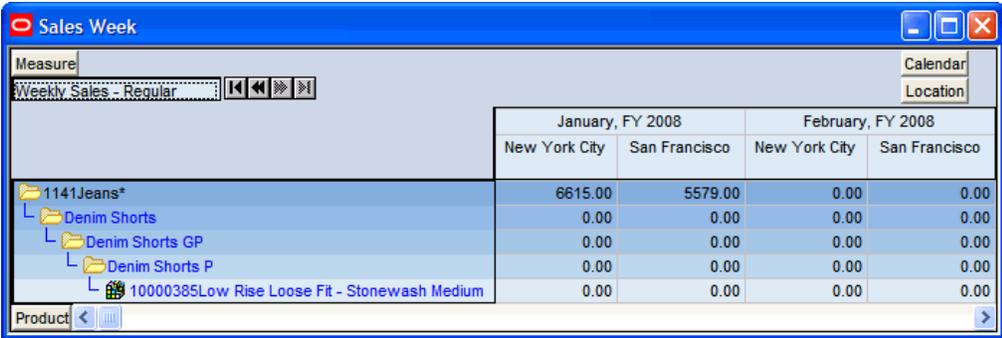
Example of New Informal Positions in Workbook

Modify an Informal Position

Once informal positions are added to the hierarchy, the DPM process allows you to:

▪ Change the parent of an informal position to another formal or informal parent.

▪ Update the position name and position label.

> **Note:** Only informal positions can be modified using the DPM feature. The **Modify** menu will not be visible if there are no informal positions in the workbook.

Navigate: Right-click on the hierarchy tile or positions in which informal position(s) will be modified, select the **Modify position** menu. The **Select Product** dialog box appears.
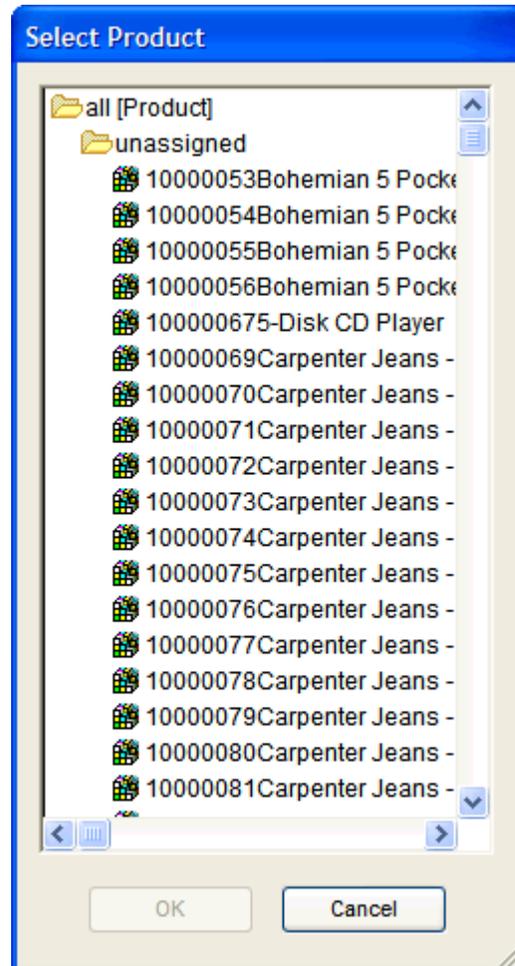
Select Product

1. Select the informal position to modify.

2. From this menu, you can view the **Dynamic Position Maintenance** dialog. The dialog displays the selected informal position and its parent positions (no child positions below the selected informal positions are displayed).
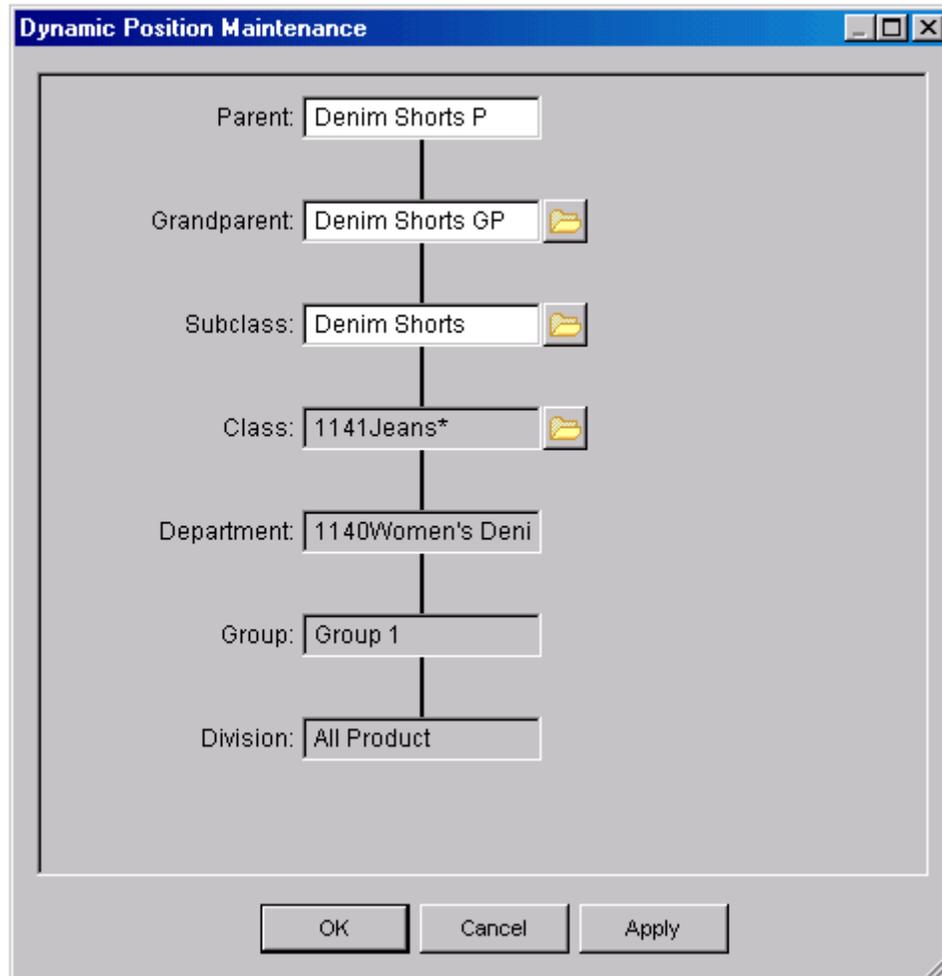
Dynamic Position Maintenance

3. Select the existing informal position and modify the position label or position name AND/OR select any parent of an informal position to change the parent assignment.

4. When the user has completed the modifications, select **OK** or **Apply** to add the new informal position(s) to the hierarchy.

- Select **OK** to exit out of the **Dynamic Position Maintenance** dialog box.
- Select **Apply** to remain in the **Dynamic Position Maintenance** dialog box if additional modifications to the positions are required.
- Select **Cancel** to close the **Dynamic Position Maintenance** dialog box, ignoring any position changes.

Delete an Informal Position

Once informal positions are added to the hierarchy the DPM process allows a user to delete an informal position and all child positions to which the informal position is a parent.

> **Note:** Only informal positions can be deleted using the DPM feature. The **Delete** menu will not be visible if there are no informal positions in the workbook.

Navigate: Right-click over the hierarchy tile or positions in which informal position(s) will be deleted, select the **Delete position** menu. The **Select Product** dialog box appears.
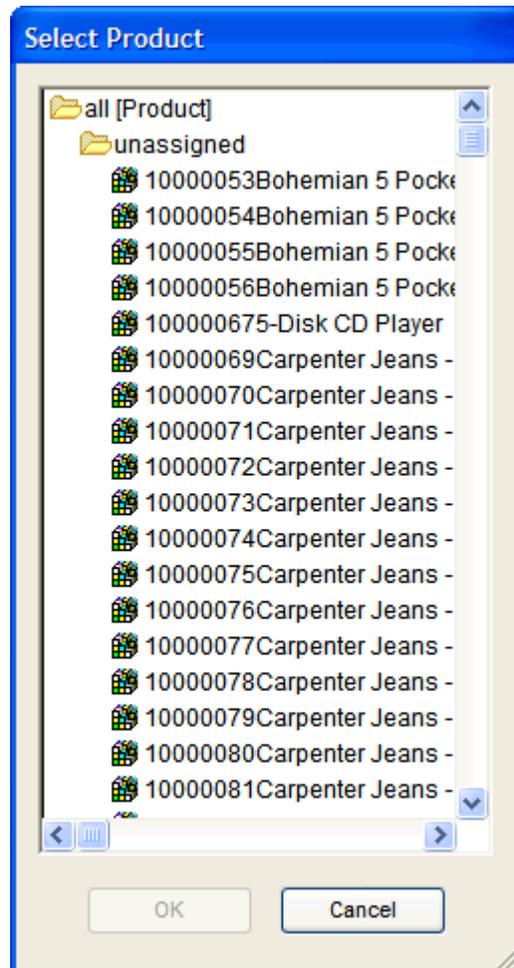
Example of Select Product Dialog Box

1. Select the informal position to delete. If there are no children positions associated with the selected informal position, the deletion is immediate and cannot be undone. If the selected informal position has child positions associated with it, a warning message appears to inform you that the positions that will be deleted.
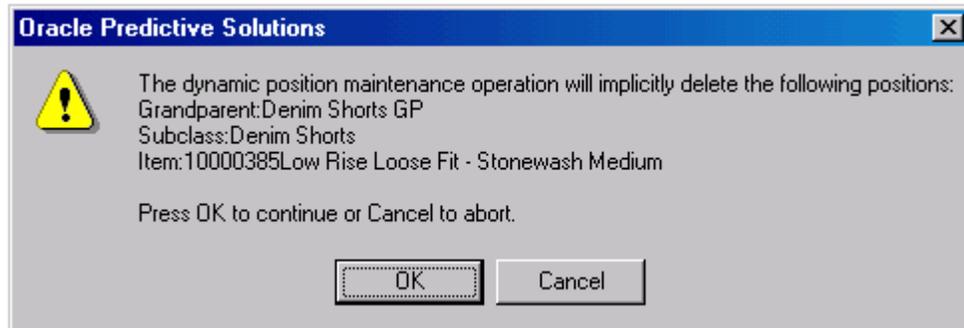
2. Select **OK** to continue the deletion, or click **Cancel** to abort.

> **Note:** Deletion is permanent and cannot be undone.

Position Images

The ability to view images associated with specific positions is critical for assortment planning and may also be useful for other activities such as store planning. As part of the system configuration process, a workbook and specific dimensions for any non-calendar hierarchy may be enabled for image display. When image display is enabled, the user may:

- View an image associated with a chosen position.
- Compare images associated with two or more positions.
- Scroll through images of positions visible on the grid without having to bring up image displays for each of those positions individually.
- If permitted by the template, save, replace or remove the image associated with a chosen position.

Associating an Image with a Position

If the template for the current workbook is enabled for image modification, you can associate an image with any position at the Subclass, Grandparent, Parent, or Item level.

1. Right-click on the position in a worksheet for which you want to associate an image, and select the **Display Picture** menu item.

```
Hide Subclass
Show/hide...
Find...
Maintain positions                    ▶

✓ Info
  all [Product]
✓ Subclass
  Grandparent
  Parent
  Item

Select dimensions...
Select rollup                         ▶

Show dimension labels
Show attribute labels

Format                                ▶

Select display and sort attributes...
Sort...
Resort Subclass attributes
Attribute definition...

Split dimension...

Display Picture
```
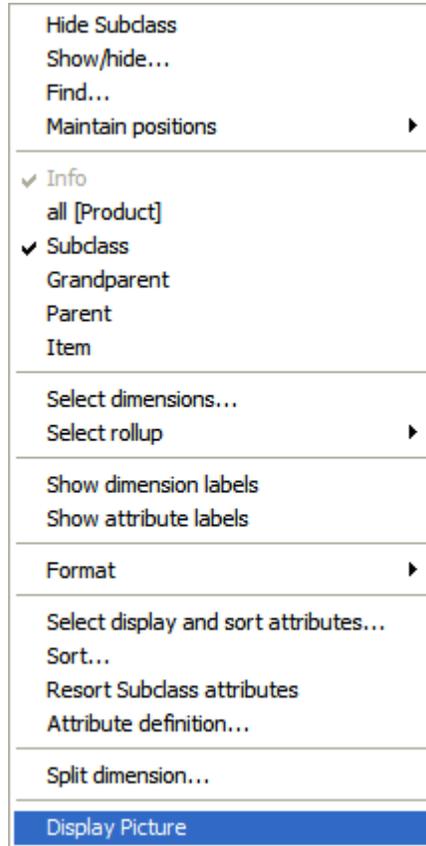
Selecting Display Picture

2. In the **Image Display Dialog** window, click the **Open** button in the **Details** pane and browse to the image file you wish to associate with position.   Click **OK**.

Image Display Dialog Window

> **Note:** RPAS stores the path to the selected image. Images must be stored independently from RPAS. The user should browse to images stored on a local computer, an image file server, or other content management system.

3. Click the **Save** button to associate the selected image with the position, or the **Undo** button to undo the image selection.

4. Click **Close**.

5. Commit the workbook to make image path changes permanent; if you do not commit the workbook, the image path will only be valid in the current workbook.

Viewing Images

1. Right-click on the position in a worksheet for which you want to view an image. If the dimension is image-enabled, you can select the **Display Picture** menu item.

2. If an image is associated with the selected position, it will be displayed in the upper pane of the **Image Display Dialog** window. On this window, you may:

   - Use the **Zoom In** button and the **Zoom Out** button to more closely examine the image.

   - View the hierarchy position of the selected position the **Details** pane.

     > **Note:** To view the image associated with a different position in the worksheet, right-click on the different position and select the **Display Picture** menu item to view multiple images at once.

3. Click **Close**.

Modifying the Image Path

Navigate: Right-click on a position in a worksheet and select **Display Picture.**

If the template for the current workbook is writing-enabled, you can change the image path to a new location on your local machine. Modifying the image path is useful if you have either moved the image file to a new location, or if you want to associate a new image with the selected position.

1. In the **Image Display Dialog** window, click the **Open** button in the **Details** pane and browse to the new location of the desired image file. Click **OK**.

2. Click the **Save** button to associate the selected image with the position, or the **Undo** button to undo the image selection.

3. Click **Close**.

4. Commit the workbook to make image path changes permanent; if you do not commit the workbook, the modified image path will only be valid in the current workbook.

Disassociating Images from Positions

Navigate: Right-click on a position in a worksheet and select **Display Picture.**

If you no longer want an image to be associated with a position, you have the ability to delete the image path from that position.

1. In the **Image Display Dialog** window, click the **Delete** button to remove the image path to the currently associate image.

2. Click **Close**.

3. Commit the workbook to make image path changes permanent; if you do not commit the workbook, the image path will only be disassociated from the selected position in the current workbook.

Locking and Unlocking

Cell Locking and Unlocking

The cell locking feature allows you to lock one or more editable cells in the grid. When a grid cell is locked, calculations performed as a result of data manipulations do not affect the locked data values. This functionality allows you examine various what-if scenarios to determine the best course of action for planning or forecasting.

The locked status of a cell is indicated by the presence of a picture of a lock in the cell's left portion. Once an eligible cell is locked, the system determines whether the remaining grid cells are eligible or ineligible to be locked. If a cell becomes ineligible to be locked, the right-click menu associated with that cell will not contain the Lock option. Furthermore, any read/write cells that become ineligible for locking are made read-only.

You may choose to lock a data cell at any time to protect that cell from forced recalculations due to data manipulations elsewhere in the worksheet. For example, you may want to see the effect of a change to Sales Value on Inventory levels without forcing a change to Receipts. Another example would be to change Sales Value at an aggregate level (such as Month) and spread the result to only three of the four weeks that comprise that month. In this case, you could effectively hold the second week's Sales Value constant while spreading the aggregate-level increase among the remaining three weeks.

> **Note:** All cells that belong to a measure with aggregation type AMBG or AMBGP and represent values at an intersection higher than the base intersection cannot be locked. The Lock Cell menu item obtained on the right click menu will not be available for such cells.

Examples of Cell Locking

The following topic describes two typical examples of cell locking usage.

Example 1: Using Cell Locking to Affect Spreading/Aggregation

Suppose you want to change a sales value at an aggregate level (for instance, Month) and spread this result to three out of four underlying cells while holding the fourth constituent cell value constant. Without the use of the cell locking feature, a change that is made to the Month-level cell will force a recalculation of all underlying Week-level cells that roll up into that month. The cell locking feature allows you to hold the value of one week constant while spreading the effects of the aggregate-level change to the remaining three weeks.

In the following example, suppose you want to change the December Weekly Sales value for the Fashion subclass from 1785 to 3000 while holding the value in the first week of December at 436. Right-click in the cell that contains the Weekly Sales value for the Fashion subclass in the first week of December. Select **Lock Cell** from the resulting pop-up menu. A padlock icon 🔒 will now appear in the locked cell.

Example Worksheet

Select Lock Cell

Edit the Month-level sales value for December. After the recalculation occurs, note that week 1's sales value remains unchanged. The additional aggregate sales value of 1215 is spread among the remaining three weeks according to those weeks' original contribution to the month's total. In this case, the Weekly Sales measure was configured with the Spread Method set to Proportional.

The Additional Aggregate Sales Value

Example 2: Evaluating the Effect of a Change to One Measure Value on Another Measure Value without Forcing Changes to any Other Measures that would normally be affected during the Recalculation Process.

You may want to examine the effect of a change to Sales Value on inventory levels without forcing a change to the Receipts value.

A change to the Sales Value results in the recalculation of the following equation:

End of Period (EOP) Inventory = Beginning of Period (BOP) Inventory + Receipts – Sales – Markdown – Shrinkage

When this expression is recalculated under normal circumstances (when cell locking is not implemented), EOP Inventory and BOP Inventory are held constant. Therefore, a change to Sales Value normally forces a recalculation of the Receipts value, Markdown value, and Shrinkage value. The In Season Financial Plan example demonstrates the effect of a change to Sales Value without using the cell locking functionality.

In Season Financial Plan Example

For 12/7/2007, the Sales value is changed from 860.00 to 620.00. The Markdown value and Shrinkage value are recalculated based on the new Sales value. EOP Inventory and BOP Inventory are held constant, and a change is forced to projected receipts.

Change is Forced to Projected Receipts

Since EOP Inventory remains the same, there is no effect of the Sales Value change on subsequent weeks of data.

The same operation is performed from the original state of the worksheet, but this time the cell locking feature is used to hold constant the projected receipts value.

Use the Cell Locking Features

When projected receipts are locked, the decrease in Sales Value must be reflected in a change (increase) to EOP Inventory. When the EOP Inventory changes, this effect is propagated to subsequent weeks because the EOP Inventory value for 12/7/2007 becomes the BOP Inventory value for 12/14/2007.

The Decrease in Sales Value

Locking a Grid Cell

To lock a grid cell:

1. Right-click in the cell you want to lock.
2. Select **Lock Cell** from the pop-up menu.
3. A picture of a lock displays in the cell to indicate that the cell's status is locked. When recalculations of grid values are performed, the locked cell's value will be held constant, which means that data manipulations that would normally force a change to the locked cell's value will now result in no change to the locked data.

> **Note:** If the Lock option is not displayed on a particular cell's right-click menu, that cell is ineligible to be locked. This condition occurs as a result of the placement of other locks elsewhere in the worksheet. Cells that exist at a different hierarchical level than a locked cell may be ineligible for locking if they exist along a different path of aggregation.

Unlocking a Single Grid Cell

To unlock a single grid cell:

1. Right-click in the cell you want to unlock.
2. Select **Unlock Cell** from the pop-up menu.

Unlocking all Currently Locked Grid Cells

To unlock all currently locked grid cells:

1. Right-click any grid cell.
2. Select **Unlock All Cells** from the pop-up menu.

Measure Locking

The Measure Locking feature allows you to simultaneously lock all of the cells that are associated with a given measure in a worksheet. As with individual cell locking, the locked status of each cell in the measure is indicated by the lock picture in each cell's left portion. A locked measure is also indicated by the appearance of the lock image in the axis header for that measure.

Locking a Worksheet Measure

To lock a worksheet measure:

1. Right-click over the axis label for the measure you want to lock.
2. On the quick menu, select the **Lock Measure** option.

Elapsed Time Locking and Refreshing

Elapsed time periods correspond to past time periods along the time horizon. Measure data over such periods typically corresponds to actual values and should not change during workbook calculations.

At the time of the initial workbook build, rules may be present to properly set the elapsed time threshold. Upon opening the workbook, cell values that meet the elapsed time lock criteria will be read-only. These cell values will only be affected by incremental calculations, in other words, calculations resulting from user edits. Incremental calculations will not be honored during refreshes, commits, or custom menu executions. However, a workbook may also be configured to automatically refresh the elapsed time threshold through the execution of refresh or calc rule groups. When the user executes the refresh or calculation rule group, if the elapsed time has changed since the workbook was built or the last refresh of the elapsed time lock, the user will see the elapsed time locks update.

Position Locking

Position Locking allows you to lock all measures in the workbook along one or more positions of non-Calendar hierarchies. Cells along unlocked positions will still be editable and can also change as a result of calculations.

This feature is particularly useful in planning scenarios where a planner plans for specific stores or classes at the lowest level of granularity and then plans the rest of the stores or classes at aggregate levels. For example, in a particular region, a retailer may have 20 stores, of which 3 have special characteristics that require them to be planned individually. However, when planning these stores, the planner wants to observe the effect of their plans on the whole region. In this case, the planner would build a workbook with all 20 stores and then plan each of these stores at the store level, at times rolling up to higher levels to analyze the impact of the store's plan at the aggregate level. Once the low level planning of these stores has been done, the planner would want to plan the remaining 17 stores at the region level; however, unless the plans for these 3 stores are somehow protected or locked away, the planner would not be able to ensure that the region level changes will not spread down and change any of their store level plans. To make this possible, the planner would use position locking to lock the 3 stores. The planner would then roll up to the region level and plan the region, knowing that spreading and measure rules will not change the values of the locked stores.

Once a position has been locked, an icon (🔒) will appear next to it in the tree, and all cells for the locked position will become read-only. These cell values will not be affected by incremental calculations, i.e., calculations resulting from user edits. However, these cell values may still be changed as the result of a refresh or a custom menu execution. This behavior can be prevented by using the positionLocked function in the RPAS Configuration Tools; for more information, see the *RPAS Configuration Tools User Guide*.

If an aggregate level position is locked, all lower level positions that roll up to the locked position will also be locked. If any of the lower level positions is unlocked, its parent positions will automatically be unlocked. Higher level positions and positions at the same level will remain editable. Furthermore, if there are any pending edits in the workbook, you will be prompted to either calculate or discard these edits before being able to lock the position.

Because DPM positions would conflict with the read-only state of locked positions, they cannot be added beneath a locked position. However, extant DPM positions are able to be position locked, after which they will no longer be able to be modified or deleted. After position locking has occurred, any new measures inserted into the workbook will be automatically locked along the locked position. Once the workbook has been saved, the status of locked positions will persist across workbook openings.

> **Note:** Position locking is not allowed along the Calendar or Measure hierarchies, nor is it allowed along dimension splitting-generated hierarchies. Additionally, the ALL position cannot be locked; however it can be used to unlock all positions along the hierarchy.

Position Locking and Cell Locking

Because explicit cell locking invokes measure protection processing and position locking does not, a cell can only be cell locked or position locked, but not both. If any cells within a locked position have previously been explicitly cell locked, they will lose their cell lock status and be converted to position locked cells. You will be prompted to either confirm or cancel this action; a cancellation will abort the entire position locking action. A confirmation will continue the position locking process, and all cells within the locked position will no longer be available for cell locking.

> **Note:** If a position lock is removed, cells that had previously been cell-locked will not automatically revert back to its prior state.

Position Locking and Measure Locking

Because position locks cannot be applied along the Measure hierarchy, and the Measure hierarchy is independent of other types of hierarchies that can be position locked, position locking is independent of measure locking. It is possible for cells to be affected by both types of locks, and the removal of one type of lock will not remove of the other from these cells.

Position Locking and Elapsed Time Locking

Because position locks cannot be applied along the Calendar hierarchy, and the Calendar hierarchy is independent of other types of hierarchies that can be position locked, position locking is independent of elapsed time locking. It is possible for cells to be affected by both types of locks, and the removal of one type of lock will not remove of the other from these cells.

Locking Positions

1. Select one or more positions along a particular dimension.

2. Right-click and select **Lock Positions**. The selected positions will now be locked along all measures in the workbook.

Unlocking Positions

1. Select one or more locked positions you wish to unlock.

2. Right-click and select **Unlock Positions**. The selected positions will now be unlocked, along with its parent position (if any). This is because in order for a parent position to be locked, all its child positions must also be locked.

Change the Format of a Grid

There are several ways to format the display of axes within your worksheet grid:

- You can modify the text color, fill color, and text font in your worksheet axes
- Toggle the display of connector lines
- Specify whether or not a shading scheme is used to differentiate dimensions in your worksheet's outline view.

Change the Text Color, Fill Color, or Font for Worksheet Axes

To change the text color, fill color, or font for worksheet axes:

Navigate: From the **Format** menu, select **Axis**.
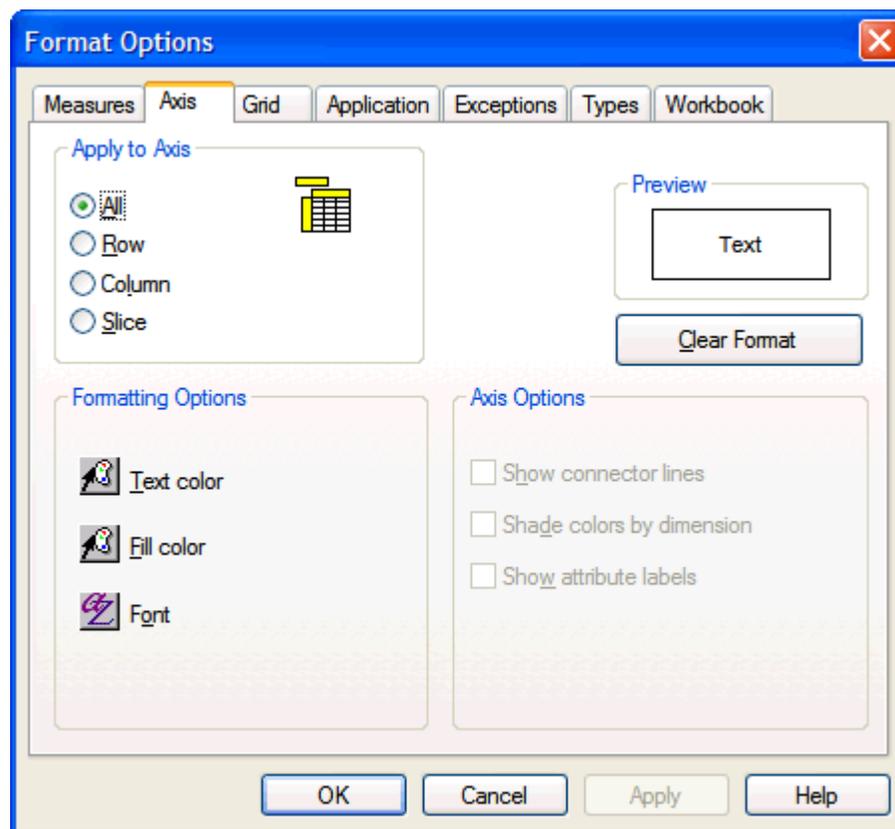
Format Options - Axis Tab

1. In the **Apply To Axis** section, choose the axis that you want to apply the new format to: Row, Column, Slice, or All.

2. From Formatting Options, choose the feature that you want to modify: **Text Color**, **Fill Color**, or **Font**.

3. Make the necessary changes on the **Color** or **Font** dialog box, and click **OK**.

4. To apply the changes to the worksheet without closing the dialog box, click **Apply**.

5. To accept the changes and close the **Format Options** dialog, click **OK**.

Show/Hide Connector Lines in Grid Axes (Outline View)

To show/hide connector lines in grid axes:

> **Note:** Connector lines are only displayed when an axis is viewed in outline mode.

Navigate: From the **Format** menu, select **Axis**.
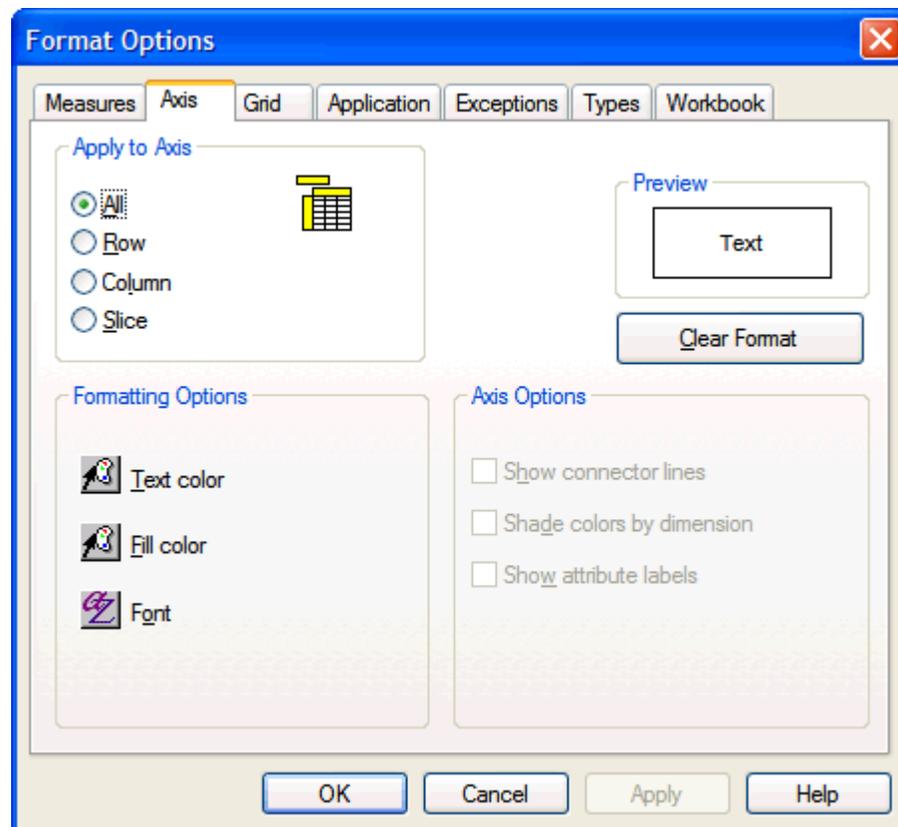
Format Options - Axis Tab

1. In the Apply To Axis section, choose the axis that you want to apply the new format to. The **Show Connector Lines** option can only be applied to one axis at a time (Row, Column, or Slice).

2. From Axis Options, select the **Show Connector Lines** check box to display lines. Clear this check box to remove the lines.

3. To apply the change to the worksheet without closing the dialog box, click **Apply**.

4. To accept the change and close the **Format Options** dialog, click **OK.**

Specify a Shading Scheme to Differentiate Dimensions (Outline View)

> **Note:** This option only has an effect when you are viewing an axis in outline mode. A shading scheme to differentiate dimensions will override any selection made regarding the specified color for read/write cells.

Navigate: From the **Format** menu, select **Axis**.
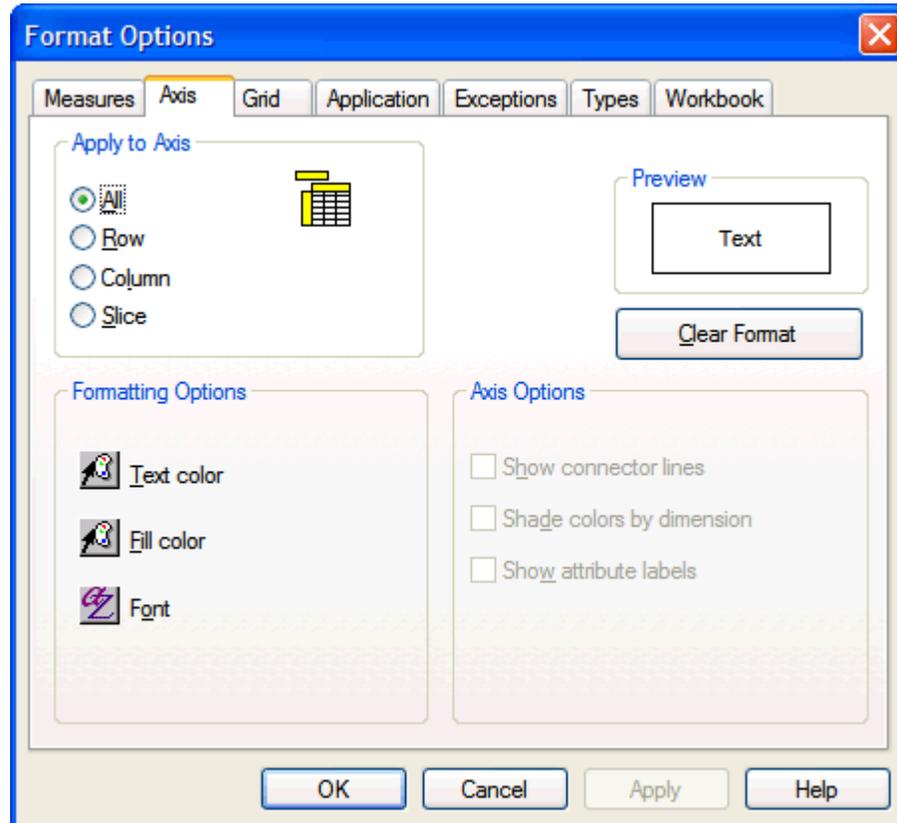
Format Options - Axis Tab

1. In the Apply To Axis section, choose the axis to which to apply the shading scheme. The **Shade Colors By Dimension** option can only be applied to one axis at a time (Row, Column, or Slice).

2. From Axis Options, select the **Shade Colors By Dimension** check box to use the shading scheme. Regardless of dimension, clear this check box to display all cells of a given measure in the same manner.

3. To apply the change to the worksheet without closing the dialog box, click **Apply**.

4. To accept the change and close the **Format Options** dialog, click **OK**.

Specify the Appearance of Attribute Labels in the Axis Display

To specify the appearance of attribute labels in the axis display:

> **Note:** This option turns on or off the display of attribute labels, and it is only applied to the Row Axis and the Column Axis. To turn on the display of position attribute values, right-click over the desired axis, and choose **Select Display and Sort Attributes** from the menu.

Navigate: From the **Format** menu, select **Axis**.
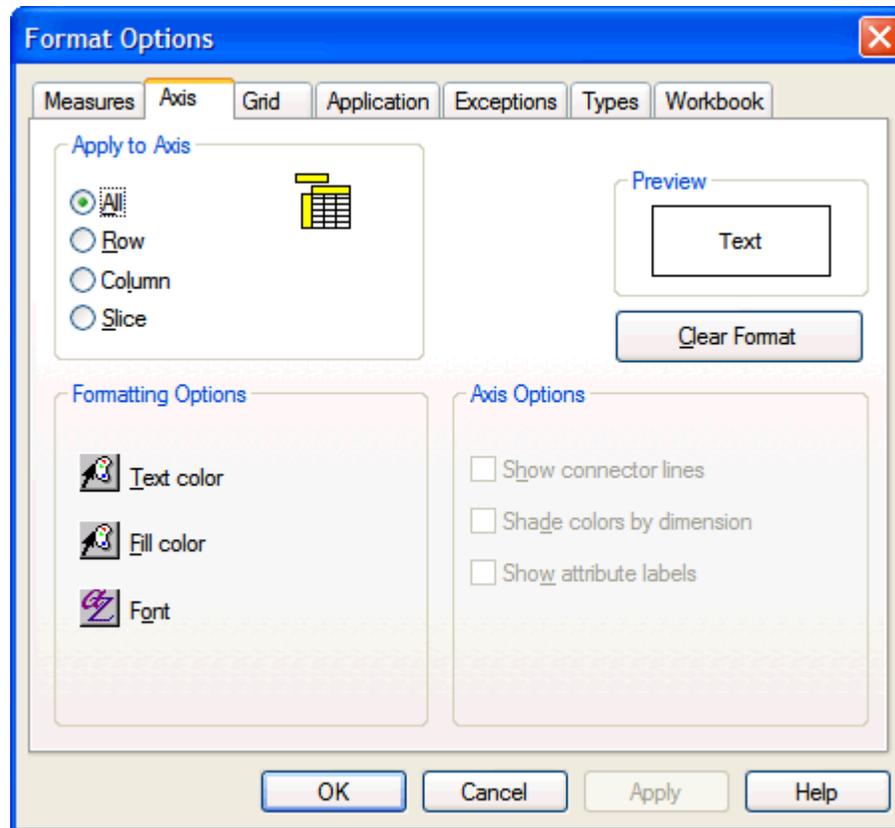
Format Options - Axis Tab

1. In the **Apply to Axis** section, choose either the row axis or the column axis.

2. From the **Axis Options**, check the **Show Attribute Labels** option to display labels.

3. Clear the option to turn off the display.

4. To apply the change to the worksheet without closing the dialog box, click **Apply**, or to accept the change and close the **Format Options** dialog, click **OK**.

Format Grid Components

Change the Background Color of the Grid Display

Follow this procedure to modify the color of the grid background. The grid background is the portion of the window behind the data grid, hierarchy tiles, and axes.

Navigate: From the **Format** menu, select **Application**.
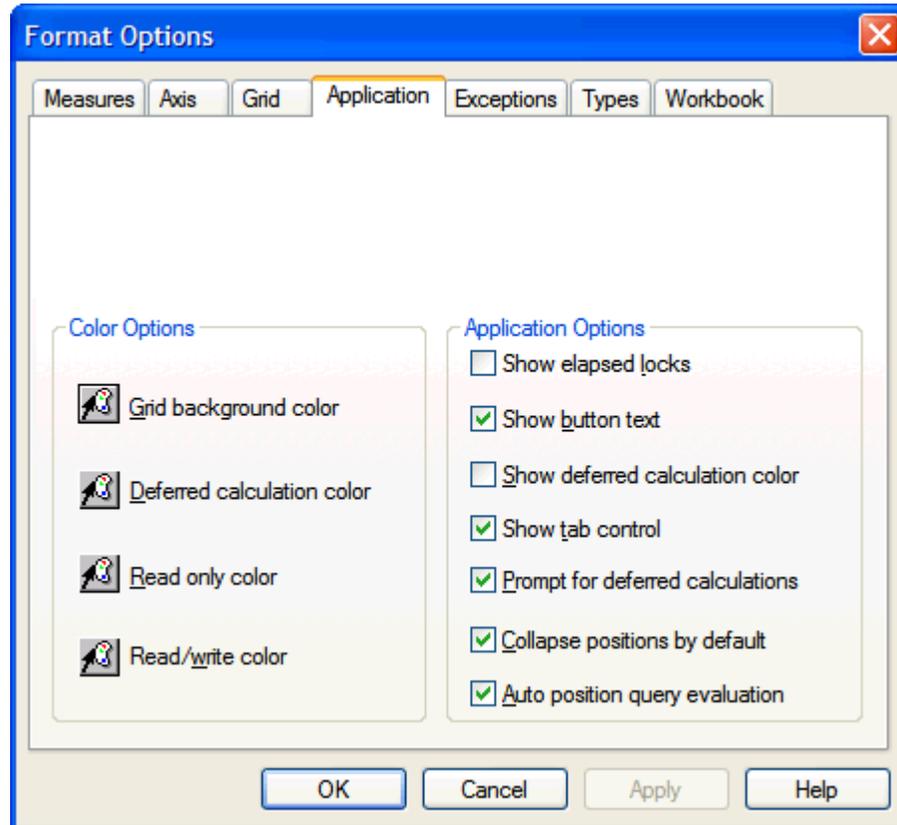
Format Options - Application Tab

1. Under Color Options, click **Grid Background Color**.
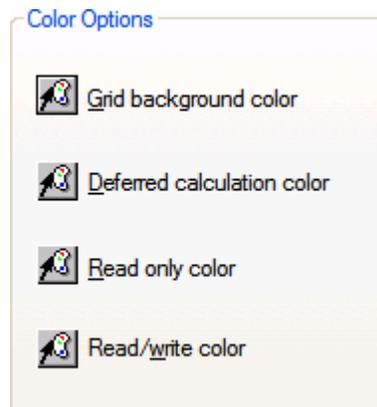
Color Options

2. Make a color selection for the grid background.

3. Click **OK**.

4. To apply the change to the worksheet without closing the dialog box, click **Apply**, or to accept the change and close the **Format Options** dialog, click **OK**.

Format the Display of Grid Lines

Follow these procedures to specify the appearance of grid lines in your worksheet. You can turn on or off the display of horizontal and vertical grid lines. If grid lines are displayed, you can specify their color.

Change the Color of Grid Lines in your Worksheet

To change the color of grid lines in your worksheet:

Navigate: From the **Format** menu, select **Grid**.
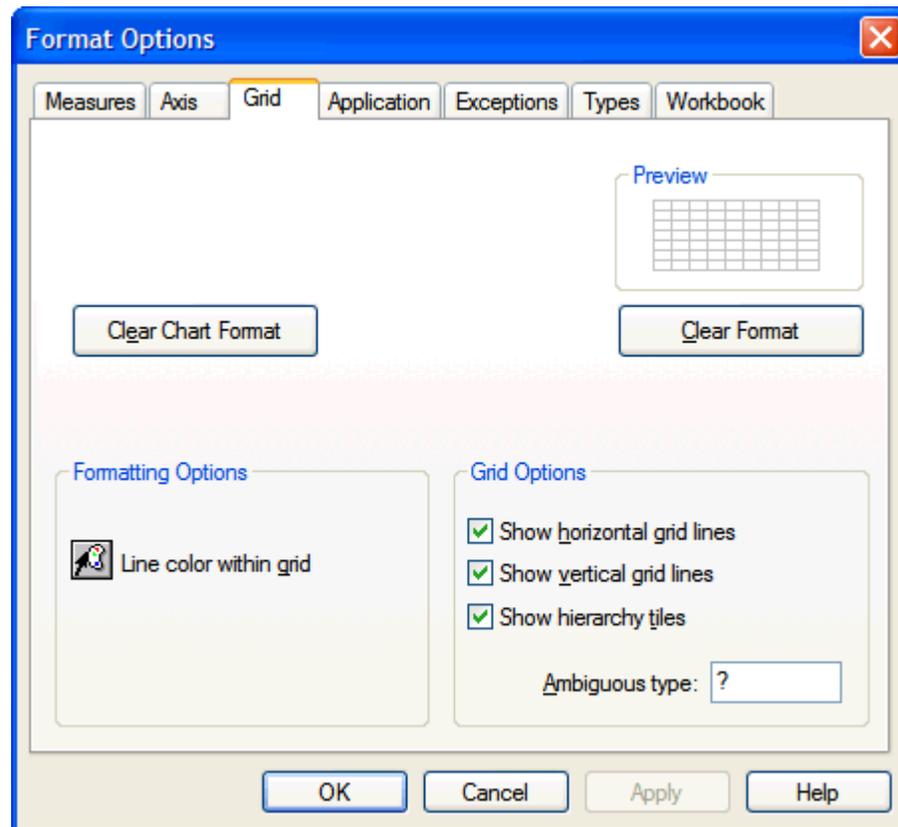
Formatting Options - Grid Tab

1. From Formatting Options, click **Line Color within Grid**.

2. Make a color selection for your worksheet grid lines.

3. Click **OK**.

4. Click **Apply** to apply the change to the worksheet without closing the dialog box, or click **OK** to accept the change and close the **Format Options** dialog.

Turn On/Off the Display of Horizontal or Vertical Grid Lines in your Worksheet

To turn on/off the display of horizontal or vertical grid lines in your worksheet:

Navigate: From the **Format** menu, select **Grid**.

1. From Grid Options, select **Show Horizontal Grid Lines** and/or **Show Vertical Grid Lines** check boxes to turn on the display of grid lines. Clear these check boxes to turn off the display of grid lines.

2. Click **Apply** to apply the change to the worksheet without closing the dialog box, or click **OK** to accept the change and close the **Format Options** dialog.

Turn On/Off the Display of Hierarchy Tiles

To turn on/off the display of hierarchy tiles:

Navigate: From the **Format** menu, select **Grid**.

1. From Grid Options, select the **Show Hierarchy Tiles** check box to turn on the display of hierarchy tiles. Clear this check box to hide the display of hierarchy tiles.

2. Click **Apply** to apply the change to the worksheet without closing the dialog box, or click **OK** to accept the change and close the **Format Options** dialog.

Specify a Value to Appear in Ambiguous Type Cells

Follow this procedure to specify the string to be displayed in an aggregate-level cell when it is not clear how the system should aggregate certain data values. This string indicates the presence of lower level data that cannot be displayed at a particular level of aggregation. For example, pick list-type data at the SKU level would aggregate ambiguously if different SKUs in the same Style contained different pick list values. Here, you can specify what the system should display in a Style-level cell.

Navigate: From the **Format** menu, select **Grid**.

1. From Grid Options, enter a string in the **Ambiguous Type** (for example, Ambig) field that should appear in all worksheet cells containing data that aggregates ambiguously.

2. To apply the change to the worksheet without closing the dialog box, click **Apply**, or to accept the change and close the **Format Options** dialog, click **OK**.

Change the Format of a Measure

You can modify the text color, fill color, and text font of a measure's cells and label. You can also specify the alignment, border style, and border color for the grid cells that are associated with a measure.

Format the Display of Text and Borders for Measure Cells and Labels

To format the display of text and borders for measure cells and labels:

Navigate: From the **Format** menu, select **Measure**.
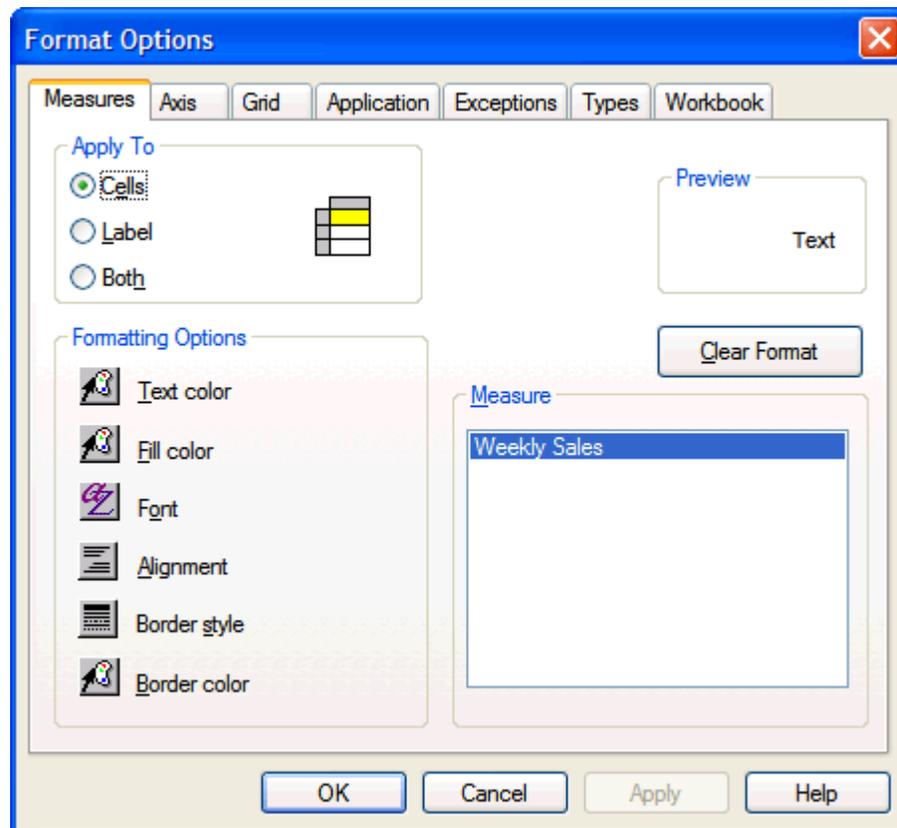
Format Options - Measures Tab

1. In the **Measure** area, select all measures that contain the labels or cells that you want to reformat.
2. Select an **Apply To** option (**Cells**, **Labels**, or **Both**).
3. Select a **Formatting Option** (**Text Color**, **Fill Color, Font**, **Alignment**, **Border Style**, or **Border Color**).
4. Make the necessary formatting changes in the dialog box you selected, and click **OK**.
5. Click **Apply** to apply the changes to the worksheet without closing the dialog box, or click **OK** to accept the changes and close the **Format Options** dialog.

Set Application-Wide Formatting Options

You can set application-wide formatting options for all workbooks viewed in the Oracle Retail Predictive Solutions. These formatting options include:

- The grid display background color.
- The color for both read-only and read/write worksheet cells.
- The appearance of toolbar button text.
- The appearance of the flow control tabs.

Enable/Disable the Display of the Toolbar Button Text

Use this procedure to toggle the display of toolbar button names. When button text is turned on, the toolbar buttons appear large and include the button name/function. When button text is turned off, the buttons appear small and contain no text.

1. From the **Format** menu, select **Application**.

2. In the **Application Options** area, select **Show Button Text**.

3. Click **Apply** to apply the change to the worksheet without closing the dialog box, or click **OK** to accept the change and close the **Format Options** dialog.

Set the Display Color for Read-Only and Read/Write Cells

To set the display color for read-only and read/write cells:

Navigate: From the **Format** menu, select **Application**.

1. In the **Color Options** area, click either **Read Only Color** or **Read/Write Color** to produce a color palette for the selected cell type.

2. Make a color selection from the color palette, and click **OK**.

3. To apply the change to the worksheet without closing the dialog box, click **Apply**, or to accept the change and close the **Format Options** dialog, click **OK**.

> **Note:** The **Read/Write Color** selection will be overridden if the **Shade Colors By Dimension** option on the **Format – Axis** tab is selected. Dimension shading (if toggled on) overrides any read/write color selection, but it does not override the read only color selection. If your read/write color selection does not appear to be recognized by the system, try toggling off the **Shade Colors By Dimension** option on the **Format – Axis** tab.

Enable/Disable the Display of the Flow Control Tabs

Navigate: From the **Format** menu, select **Application**.

4. In the **Application Options** area, check the **Show Tab Control** option to turn on the tab control display. Clear this option to turn off the display.

5. Click **Apply** to apply the change to the worksheet without closing the dialog box, or click **OK** to accept the change and close the **Format Options** dialog.

Specify Options for Deferred Calculations

You can specify various formatting options for the deferred calculation feature. Specifically, you can enable the display of a distinctive background color for worksheet cells where a deferred calculation is pending. You can also enable or disable the appearance of a warning dialog that appears when you have a populated queue of deferred data changes that must be submitted before you perform another server action.

Change the Format of Exception Values for a Measure

You can specify the formatting for exceptions or data values that fall outside of an acceptable range that you define. Formatting options are only available for numeric measures.

Navigate: From the **Format** menu, select **Exceptions**.
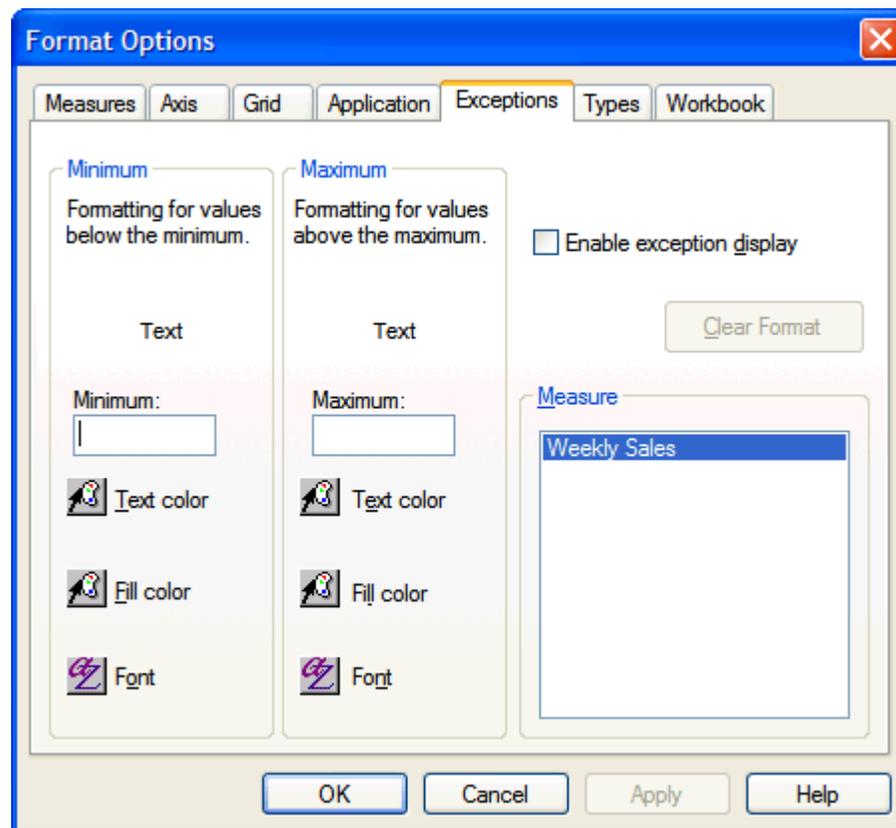
Format Options - Exceptions Tab

1. In the **Measure** area, select a measure that has exceptions that you want to modify.
2. In the **Minimum** field, type a threshold value for the low end of the measure's acceptable range.
3. Select a formatting option for displaying values that fall below the low threshold (**Text Color**, **Fill Color**, or **Font**).
4. Make any formatting changes in the dialog box that you selected, and click **OK**.
5. In the **Maximum** field, type a threshold value for the high end of the measure's acceptable range.
6. Select a formatting option for displaying values that exceed the high threshold (**Text Color**, **Fill Color**, or **Font**).

7. Make any formatting changes in the dialog box that you selected, and click **OK**.

8. Select **Enable Exception Display** to turn on the display of the exception formats you selected. If this option is not selected, the exceptions will not be formatted in the grid, but the system will save your exception formatting selections, which can be enabled as needed.

9. To apply the changes to the worksheet without closing the dialog box, click **Apply**, or to accept the changes and close the **Format Options** dialog, click **OK**.

Enable/Disable the Display of a Deferred Calculation Warning Prompt

Use this procedure to turn on or off the deferred calculation warning prompt. This message displays when you have a populated queue of data changes that must be submitted or canceled before you perform another server action. The system must deal with a populated queue before the server can be called for another reason, such as maximizing a currently minimized worksheet. When the warning message is turned on, a dialog will display before the data changes are sent to the server. This allows you to cancel the action if desired.

Navigate: From the **Format** menu, select **Application**.
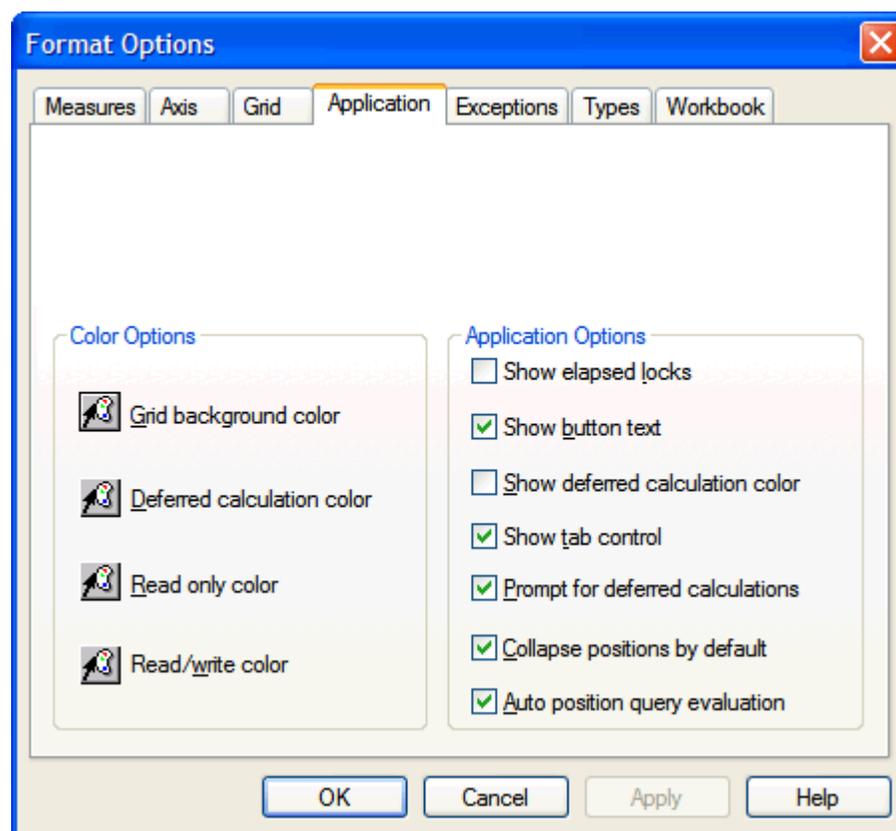
Format Options - Application Tab

1. In the **Application Options** area, select **Prompt for Deferred Calculations** to enable the display of the warning prompt. If this option is left unchecked, queued data changes will be automatically sent to the server when you choose to perform another server-intensive action.

2. To apply the change to the worksheet without closing the dialog box, click **Apply**, or to accept the change and close the **Format Options** dialog, click **OK**.

Enable/Disable the Display of the Flow Control Tab

Navigate: From the **Format** menu, select **Application**.

1. In the **Application Options** area, select the **Show Tab Control** option to turn on the tab control display. Clear this option to turn off the display.

2. Click **Apply** to apply the change to the worksheet without closing the dialog box, or click **OK** to accept the change and close the **Format Options** dialog.

Enable/Disable Synchronized Page Scrolling

Navigate: From the **Format** menu, select **Workbook**.
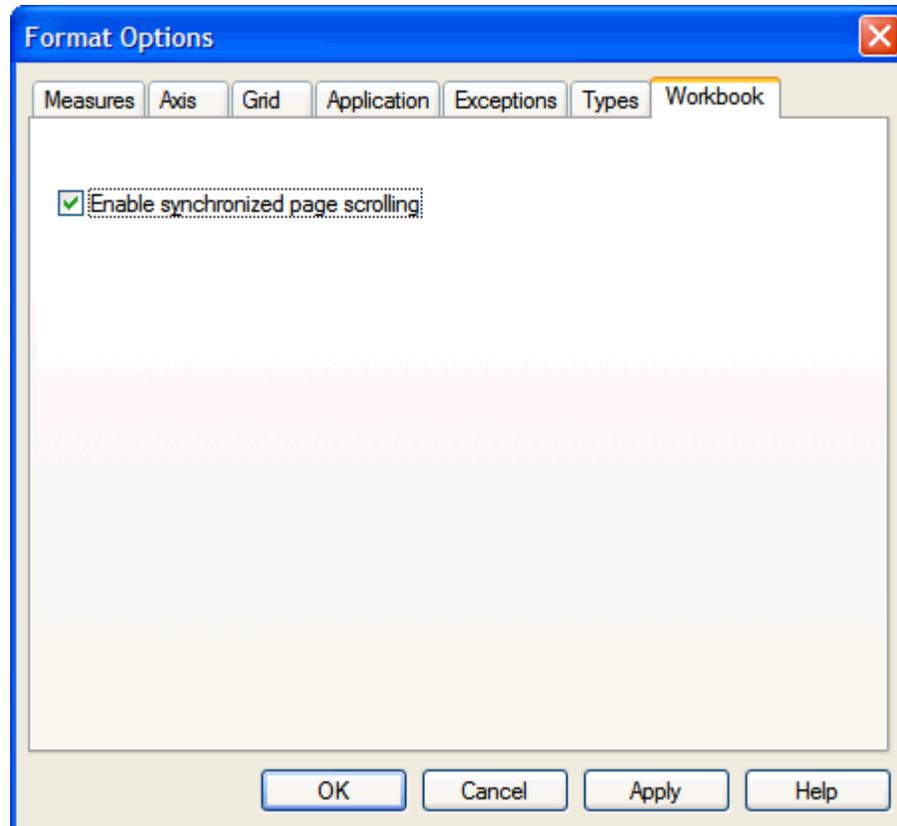
Format Options – Workbook Tab

Select **Enable Synchronized Page Scrolling** to enable the synchronized scrolling feature. Clear this option to disable the feature and support independent slice scrolling among the windows.

Enable/Disable the Display of the Selected Deferred Calculation Color

To enable/disable the display of the selected deferred calculation color:

Navigate: From the **Format** menu, select **Application**.

1. In the **Application Options** area, check the **Show Deferred Calculation Color** checkbox to display a distinct background color in cells where a deferred calculation is pending. Clear this checkbox to disable the color display.

2. To apply the change to the worksheet without closing the dialog box, Click **Apply.** To accept the change and close the **Format Options** dialog, click **OK**.

Set the Display Color for Read-Only and Read/Write Cells

To set the display color for read-only and read/write cells:

Navigate: From the **Format** menu, select **Application**.

1. In the **Color Options** area, click either **Read Only Color** or **Read/Write Color** to produce a color palette for the selected cell type.
2. Make a color selection from the color palette, and click **OK**.
3. To apply the change to the worksheet without closing the dialog box, click **Apply**, or to accept the change and close the **Format Options** dialog, click **OK**.

> **Note:** The **Read/Write Color** selection will be overridden if the **Shade Colors By Dimension** option on the **Format – Axis** tab is selected. Dimension shading (if toggled on) overrides any read/write color selection, but it does not override the read only color selection. If your read/write color selection does not appear to be recognized by the system, try toggling off the **Shade Colors By Dimension** option on the **Format – Axis** tab.

Specify a Deferred Calculation Color

Follow the procedure below to specify a particular background color for worksheet cells where a deferred calculation is pending.

> **Note:** If enabled, the **Deferred Calculation Color** overrides the **Read/Write Color** selection for a cell.

Navigate: From the **Format** menu, select **Application**.

In the **Color Options** area, click **Deferred Calculation Color**.

Make a color selection for cells where a deferred calculation is pending, and click **OK**.

Click **Apply** to apply the change to the worksheet without closing the dialog box, or click **OK** to accept the change and close the **Format Options** dialog.

Specify Type-Based Formatting Options for Measures

Follow these procedures to specify formatting options (for instance, decimal precision, separator, and spin increment) for floating point type, integer type, and string type measures.

Specify Formatting Options for a Floating Point Type Measure

To specify formatting options for a floating point type measure:

Navigate: From the **Format** menu, select **Types**.
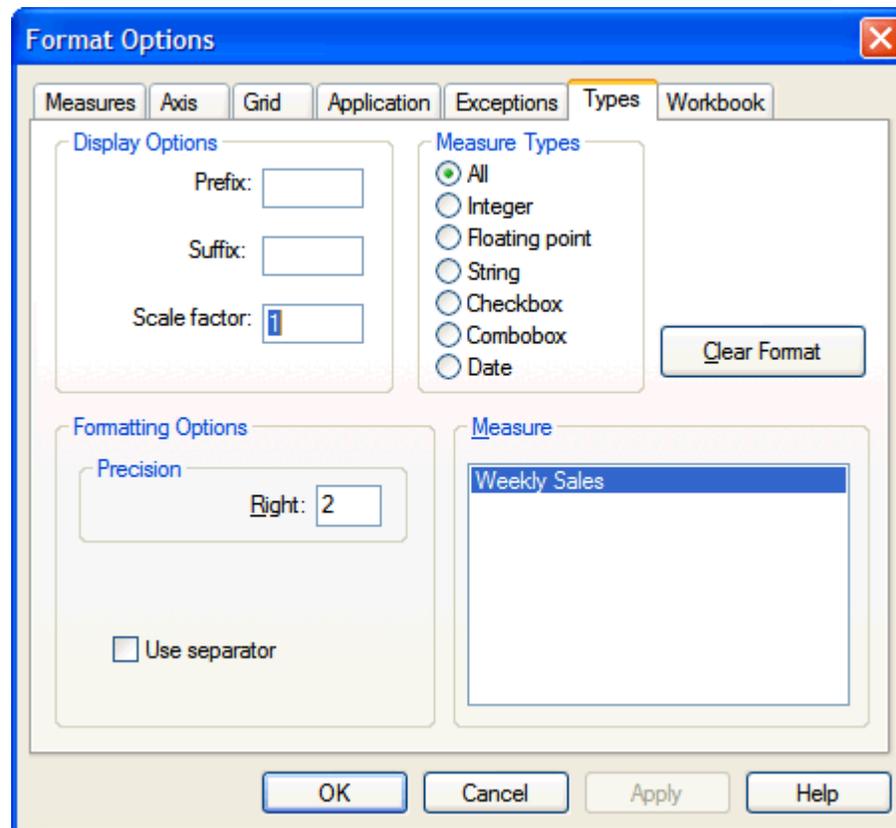
Format Options - Types Tab

1. In the **Measure Types** area, click the **Floating Point** radio button. Your choice here populates the Measure portion of the dialog with a list of all floating point measures that are currently in the worksheet. You can also retain the default type selection, **All**, to list all available measures in the worksheet.

2. In the **Measure** area, select the measure that you want to format.

3. If desired, enter values for the prefix, suffix, and/or scale factor for cells that are associated with your selected measure.

4. Enter a value in the **Precision** field to indicate the number of digits to be displayed to the right of the decimal.

5. Select **Use Separator** to specify the use of a separator (comma) between every three digits.

6. Click **Apply** to apply the changes to the worksheet without closing the dialog box, or click **OK** to accept the changes and close the **Format Options** dialog.

Specify Formatting Options for an Integer Type Measure

To specify formatting options for an integer type measure:

Navigate: From the **Format** menu, select **Types**.

1. In the **Measure** area, click the measure that you want to format.

2. Select **Use Spin Button** to display up and down arrows in the measure's cells that allow you to increase or decrease the cell's value. Leave this option cleared to require direct entry of new data values.

3. If **Use Spin Button** is selected, click the arrows in the **Increment Spin By** field to specify the amount that the system will increase or decrease a cell value when spin buttons are clicked in the worksheet.

4. Select **Use Separator** to specify the use of a separator (comma) between every three digits.

5. Click **Apply** to apply the changes to the worksheet without closing the dialog box, or click **OK** to accept the changes and close the **Format Options** dialog.

Specify a Prefix or Suffix for Measure Values

Follow this procedure to specify a string to be displayed before or after each value in a selected measure.

For example, you can specify the prefix **$** to be displayed before each value in a monetary measure, or you can specify the suffix **%** to be displayed after each value in a percentage measure.

Prefixes and suffixes are often used in conjunction with scale factors. For example, if you specify a scale factor of 1,000, you may wish to specify the suffix **k** for all values in that measure to indicate the nature of the scale.

Navigate: From the **Format** menu, select **Types**.

1. In the **Measure** area, click the measure where you want to set a prefix and/or suffix.

2. In the **Display Options** area, enter string values for the prefix and/or suffix.

3. Click **Apply** to apply the changes to the worksheet without closing the dialog box, or click **OK** to accept the changes and close the **Format Options** dialog.

Specify Workbook-Specific Formatting Options

Currently, synchronized page scrolling is the only workbook-specific formatting option available. This feature allows you to simultaneously scroll the slice position of multiple windows. When synchronized scrolling is enabled, all windows that contain the same slice (page) dimension will scroll to a new slice position when any one window is scrolled. When synchronized scrolling is disabled, scrolling through slice positions in one window does not affect the slice position display of other windows.

Create and Format Charts

Chart Types

Navigate: Select **View - Chart**. Then, select **Format – Chart.**
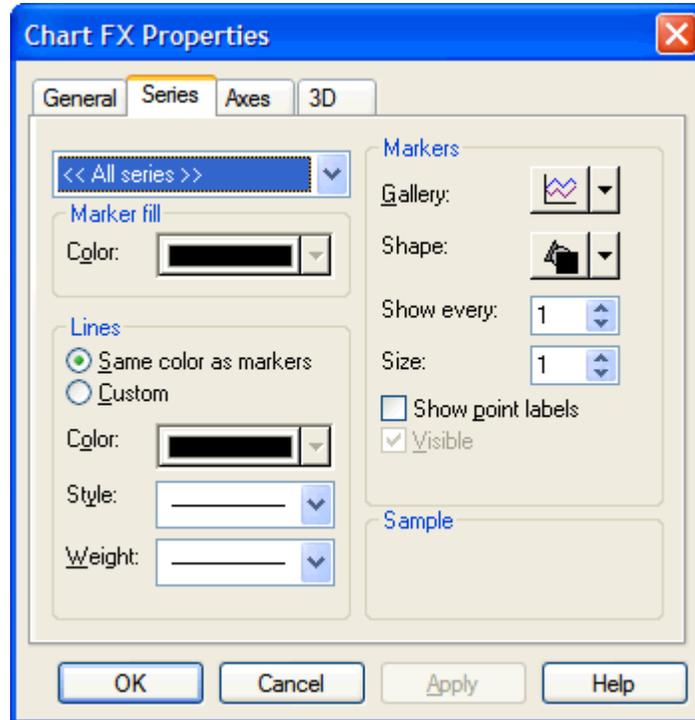
Chart FX Properties - Series Tab

On the **Series** tab, different chart types can be applied to individual series in the charted data, or a chart type can be specified globally for the entire data set.

When you select a chart type from the **Gallery** menu, drag your cursor over the chart type images.
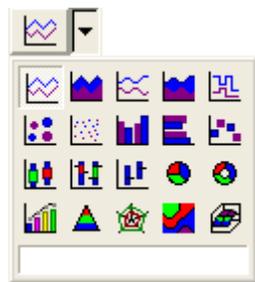
Available Chart Types

The name of each chart type will appear in the text field at the bottom of the menu. The Chart FX charting utility provides the following available chart types (and their descriptions):

- **Line** – Line shows trends or changes in data over a period of time. Each data point in the series is connected with a line.
- **Area** – Area shows the relative importance of values over a period of time. Each data point in the series is connected with a line, and the area beneath this line is shaded.

- **Curve** – Curve is similar to a line chart, but the lines curve to smoothly pass through each point or data marker.

- **Area-Curve** – Area-Curve is a combination of the Area chart type and the Curve chart type. Each data point in the series is connected with a smooth, curving line, and the area beneath the curve is shaded.

- **Step** – Step is similar to a line chart, but only vertical and horizontal line segments connect the data points in a series. The resulting graph appears as stair steps.

- **Scatter** – Scatter is a point chart that shows the relationship or degree of relationship between numeric values in several series, or it plots two groups of numbers as one series of x-y coordinates.

- **Bubble** – Bubble plots a set of values with one of the values specifying the size of the bubble marker. If two data series are plotted, values in the first series specify the position (height) of the bubble marker along the y-axis, and the corresponding values in the second series specify the size of the bubble marker drawn at each position. If three data series are plotted, values in the first two series define the (x,y) coordinates of the bubble marker, and the corresponding values of the third series specify the bubble marker volume.

- **Bar** – Bar shows variation between data sets by depicting series as bars stretching vertically towards the top of the chart window.

- **Gantt** – Gantt is basically a horizontal version of a bar chart. This chart type shows variation between data sets by depicting series as bars stretching horizontally across the chart window. Gantt charts are commonly used to track activities over time.

- **Cube** – Cube is similar to a bar chart, but a cube is displayed at the proper height instead of a complete bar.

- **Candlestick** – Candlestick is a chart that is typically used in financial areas, as related to stock prices.

- **Open-High-Low-Close** – Open-High-Low-Close is a chart that is typically used in financial areas, as related to stock prices. Each marker is defined by four series that represent a stock's opening, high, low, and closing prices.

- **High-Low-Close** – High-Low-Close is a chart that is typically used in financial areas, as related to stock prices. Each marker is defined by three series that represent a stock's high, low, and closing prices.

- **Pie** – Pie shows the relationship or proportions of parts to a whole. Percentages of the whole for each piece of the pie are calculated and displayed in the chart.

- **Doughnut** – Doughnut is the same as a pie chart, but with a hole in the center.

- **Pareto** – Pareto is a chart that is often used in statistical areas. Bars show a variation over a period of time, and a cumulative curve indicates the proportion accumulated by each column in the chart.

- **Pyramid** – Pyramid shows the relationship of parts to a whole in the format of a pyramid. Different point values in the series are represented by different colors and levels in the pyramid.

- **Radar** – Radar plots values in polar coordinates and shows the relative importance of values over a period of time.

- **Contour/Spectral** – Contour/Spectral is basically a line chart with different colors assigned to different ranges beneath the plotted values. This depends on each point height (y value). The contour plot is displayed in a 2D representation.

- **Surface** – Surface is basically a line chart with different colors assigned to different ranges beneath the plotted values. This depends on each point height (y value). The surface plot is usually displayed in a 3D representation.

Change the Chart Type

> **Note:** You must be in chart view in order to display the **Chart FX** dialog box. If you are in grid view, click the **Toggle** button before you proceed.

Toggle Button

Navigate: Select **Format - Chart**, or click **Format** on the toolbar. The **Chart FX Properties** dialog box displays.
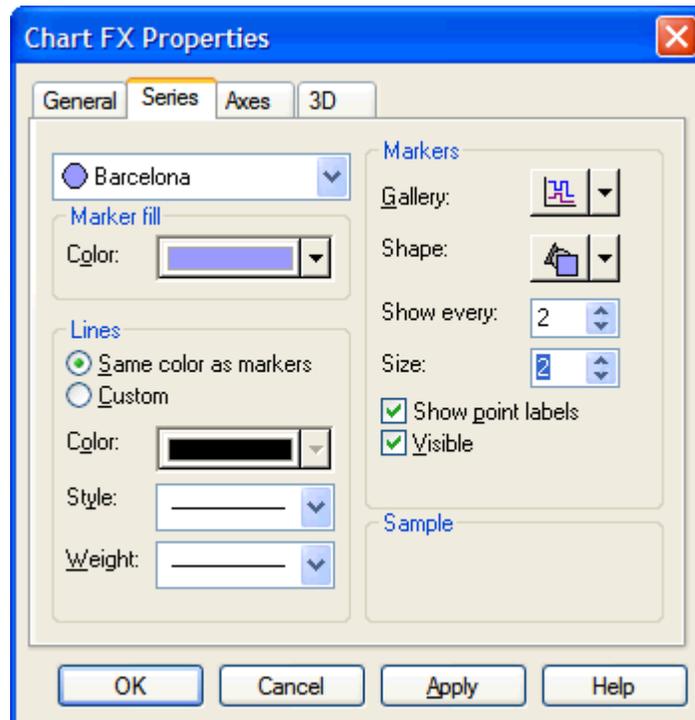
Chart FX Properties

1. Select the **Series** tab.

2. Click the **Gallery** arrow to produce a menu of available gallery types.

> **Note:** You can change the chart type for an individual data series by selecting that series' name from the series pick list at the top left of the dialog. If **<All Series>** is selected, the gallery type you choose will affect the entire chart format.

3. Click the desired chart type. To identify the chart types in the gallery menu, drag your cursor over the chart type images. The name of each chart type appears in the text field at the bottom of the menu.

4. Click **OK**.

Show/Hide Legends in a Chart

You can toggle the display of both the series legend and the values legend in your chart. The series legend identifies the collection of data represented by each plotted series in your chart. The values legend, also called the point legend, identifies the units displayed along the x-axis of your chart. For example, if your chart displays the calendar hierarchy along the x-axis, the values legend would identify the week or month indicated at each point.

Hide a Currently Displayed Legend

1. Right-click on the legend to be hidden. A Chart FX quick menu appears.
2. Select **Hide**.

> **Note:** When the values legend (point legend) is hidden, the values that correspond to each x-axis point are displayed directly on the chart.

Show a Currently Hidden Legend

1. Click **Tools** on the Chart FX toolbar.

> **Note:** If the Chart FX toolbar is currently hidden, display it by right-clicking within the chart display area and selecting the **Toolbar** option from the quick menu.

2. Perform the following as needed:
   - Select **Values Legend** to redisplay the values legend (point legend).
   - Select **Series Legend** to redisplay the series legend.
3. You can toggle the display of both the series legend and the values legend in your chart.
4. The series legend identifies the collection of data represented by each plotted series in your chart.
5. The values legend, also called the point legend, identifies the units displayed along the x-axis of your chart. For example, if your chart displays the calendar hierarchy along the x-axis, the values legend identifies the week or month indicated at each point.

Resize Chart and Legend Display Areas

To resize the chart and legend display areas, position the cursor immediately over a divider line between the chart display and legend display area. When the appearance of the cursor changes, click and hold the divider line, drag the line to any position you choose, and release the mouse button. The chart display and the affected legend are redrawn to reflect the new boundaries.

You can perform this same function at the edge of the chart box (the area within the chart axes). Drag this boundary to increase or decrease the size of the chart.

Title a Chart

Choose one of the following two methods to create a chart title that will appear immediately above the chart display:

Method 1

Navigate: Select **Format** - **Chart**, or click **Format** on the toolbar.

On the General tab of the **Chart FX Properties** dialog, enter a title for your chart in the **Title** text field, and click **OK**.

Method 2

1. Right-click anywhere within the main chart display to produce the Chart FX quick menu.
2. Select **Edit Title**.
3. Type or edit the title for your chart in the text box.

Change the Font, Font Style, Font Size, and Color of Chart Text

Access the Chart FX right-click menu to change the format of text in your chart. Text can be changed in chart areas such as the chart title, chart axes, axis titles, point labels, series legend, and point legend.

1. Right-click on the text that you want to change. A Chart FX quick menu of formatting options for that text is produced.
2. Select **Font**.
3. On the **Font** dialog, make the desired changes to the font, font style, font size, effects, color, and script type. As you make your changes, view the results in the Sample window.
4. Click **OK**.

Create Titles for Individual Chart Axes

Your chart can contain not only a main chart title, but also a title for each axis. Follow this procedure to create titles for your individual chart axes:

Navigate: Select **Format - Chart**, or click **Format** on the toolbar.

1. Click the **Axes** tab.

2. In the axis selection list at the top left of the dialog, choose the axis for which you want to create a title.
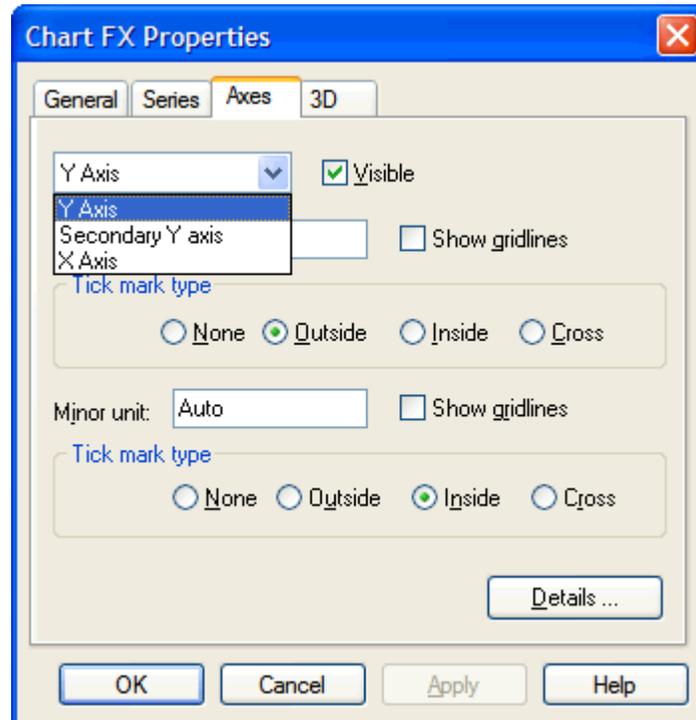
Chart FX Properties - Axes Tab - Axes List Options

3. Click **Details**.

4. Click the **Labels** tab of the **Axis Properties** dialog.

5. Enter an axis title in the **Title** text box at the bottom of the dialog.

6. Click **OK** to return to the **Chart FX Properties** dialog.

7. Click **OK** to return to your chart.

Rotate and Pivot in Chart View

The charting feature supports rotating and pivoting data while in chart view. You can drag hierarchy tiles to different axes and reposition them along the same axis. This function is performed in the same manner that it is in grid view. When hierarchy tiles are repositioned in chart view, the new arrangement of hierarchies is preserved in the grid view of that same data.

> **Tip:** Use the **New Window** feature on the **Window** menu to simultaneously view both grid mode data that is based on one arrangement of hierarchy tiles and chart mode data that is based on a different arrangement.

Change Data Values within a Chart

The charting feature allows you to change data values directly while in chart mode. You are not required to toggle back to grid mode to manually enter new data values.

> **Note:** Only writable measures can be changed in either chart mode or grid mode. Data points corresponding to read-only measures cannot be dragged and dropped.

Alternatively, you can open the Chart FX Data Editor to manually enter exact data values while in chart mode. The Data Editor is an editable data grid that contains the values of the elements plotted in your chart. You can double-click any writable data value in the grid to edit it. The chart is instantly redrawn to reflect your change.

Change Data Values by "Hot Charting"

"Hot charting" is the process of amending data values by dragging and dropping data points in the chart.

1. Click and hold the data point that you want to edit.
2. With the mouse button depressed, drag the data point to its new location. As you move the data point, balloon text expands to indicate the y-axis value nearest the point's current location.

> **Note:** If the point labels feature is toggled on, the point label changes to indicate the current value of the data point.

3. Release the mouse button to drop the point in the appropriate location.

Display a Chart in 3D View

Follow this procedure to change your chart from a two-dimensional to a three-dimensional view.

Navigate: Select **Format** - **Chart**, or click **Format** on the toolbar.

1. Click **General**.
2. In the Effects portion of the dialog, select the **3D** option to display your chart in three-dimensional mode. Clear the check box to display your chart two-dimensionally.
3. Click **OK**.

If you switch to a three-dimensional view of your chart, the system will display your data in standard 3D view. You have the option to manipulate certain aspects of this 3D view (for instance, rotation angles, shadowing, depth, and perspective) to create a customized three-dimensional chart.

Show/Hide a Selected Data Series on the Chart Display

Navigate: Select **Format** - **Chart**, or click **Format** on the toolbar.

1. Click the **Series** tab.
2. In the Series List at the top left of the dialog, select an individual series to show or hide. Do not select **<All Series>**.
3. Select the **Visible** option to include the selected series in the chart display. Clear this check box to hide the selected series from the chart display.
4. Click **OK**.

Show/Hide Point Labels on the Chart Display

1. Right-click anywhere within the chart display to produce the Chart FX quick menu.

2. Select the **Point Labels** option to toggle the display of point values.

> **Note:** For bar graphs, labels that indicate the value of each bar are displayed immediately above each series. For line graphs, the point labels appear above each point marker in the series.

View a Measure's Calculation Expression and Description (Show Measure Information)

When you view an open workbook, you can use the Show Measure Information feature to see the calculation expression and the description associated with a particular measure. This functionality gives you quick access to information that is related to the generation of an alert:

For normal measures, Show Measure Information displays a description; this data comes from the Description field.
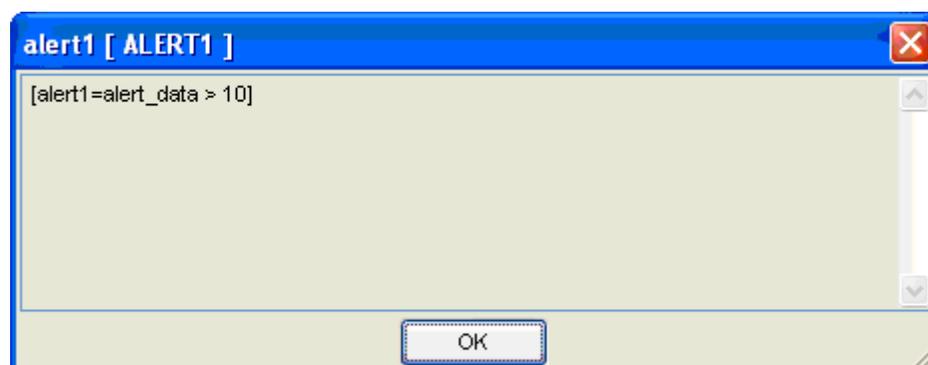
Show Measure Information

For normal measures, Show Measure Status displays an expression when the measure is forced; this data is output from the Rule Engine.
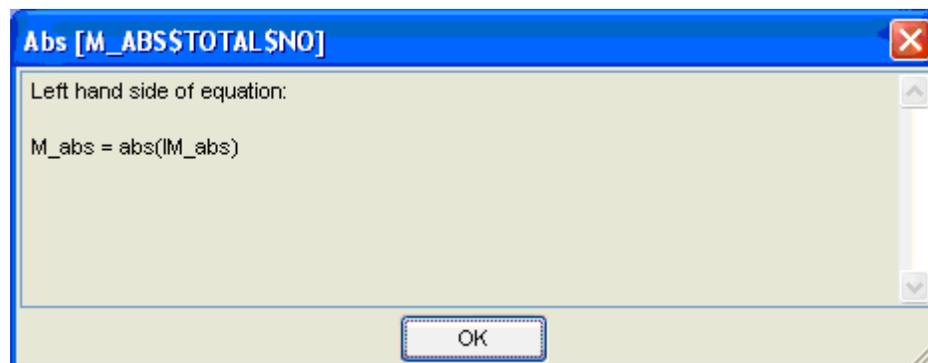
Show Measure Status

For alert measures, Show Measure Information and Show Measure Status both show an expression.

1. Right-click the measure's label in the measure axis of your worksheet.

2. On the quick menu, select **Show Measure Information**.

3. View the calculation and measure description information in the **Measure Info** dialog.

4. Click **OK**.

Using Wizards

The basic purpose of wizards is to allow you to select specific data to be incorporated into your new workbook. The new workbook wizard will walk you through the process of creating a new workbook from a template. A wizard is an automated feature that prompts you for answers to a series of questions. It then uses your answers to format the workbook that you want to create. The specific questions depend on the type of workbook being built.

Wizards are also used by the system to gather required information related to various administrative, analyses, planning, and forecasting processes. For example, wizards are in place to aid System Administrators in the task of adding and deleting system users, and to aid users in the process of defining and editing alerts. Whenever user input is required by the system to conduct a particular task, wizards are the interface through which the system collects the necessary information.

Typical Wizards Encountered When Using RPAS

- New workbook creation wizards – This wizard prompts you for information regarding the contents and layout of new workbooks. Your system may contain workbook template wizards for Administration workbooks, Analysis workbooks, Planning workbooks, and/or Forecasting workbooks.

- Alert Builder wizard – This wizard is used to define how user-created measures are to be evaluated during the alert generation process.

- User Administration wizard – This wizard is used by System Administrators to add/delete system users, add/delete user groups, and change user passwords and settings.

How Wizards are Invoked and Navigated

To access a new workbook wizard for a template:

Navigate: From the **File** menu, select **New**.

1. Select a workbook template.

2. Proceed through the wizard screens. Make the appropriate selections on each screen, and click **Next** to advance.

3. Click **Back** to change information that was selected on a previous screen.

4. Click **Finish** when you reach the final wizard screen, which is indicated when **Next** is no longer enabled. The system will assimilate all wizard selections made and format and build your new workbook.

Wizard AutoFinish

Each time you complete the required information on a wizard screen, click the **Next** button to advance to the next screen. Notice that the **Finish** button is also enabled at most stages in the wizard process. As an alternative means of completing a wizard, you may click the **Finish** button to have the system automatically complete the wizard process, which is based on stored selection data.

Dialog screens in wizards automatically reflect the selections made the last time the wizard was successfully completed. Before building a new workbook, the system creates a record of the choices made on each wizard screen. The system maintains this record of the most recent selections. Therefore, enough default information is generally present for the system to build a new workbook without requiring you to access every dialog within the wizard.

The **Finish** button is enabled to allow you to instruct the system to build a new workbook or to perform a process that is based on the most recent information it has stored for a given workbook template. Whenever the **Finish** button is pressed, the system automatically processes the remaining wizard screens, and it accepts whatever selections are currently stored for each dialog. If the system encounters a screen where a valid selection does not exist (requiring user input), the AutoFinish process is interrupted. At this point, the dialog in question is displayed, and you are required to enter the appropriate information before the **Next** and **Finish** buttons become enabled.

Wizard Two-Tree Selection Dialogs

One very common type of wizard screen you will encounter is the two-tree selection dialog. On this type of screen, you are asked to pick items (such as products or time periods) from a list of Available items and move them to a list of Selected items. Only items in the Selected items list will be incorporated into the new workbook.

Selection dialogs in new workbook wizards automatically reflect the hierarchical position selections made the last time that wizard was used to build a new workbook. For example, suppose that you are building a new Forecast Maintenance Workbook in Oracle Retail Demand Forecasting. The list of products chosen in the product selection dialog of this wizard automatically appears on the Selected Products side of the product selection dialog the next time you build a new Forecast Maintenance Workbook. Of course, you can still select and de-select products as desired; the automatic pre-selection process is intended to provide you with a logical selection starting point based on the most recent items of interest.

Wizard Procedures

Single-Selection Wizards

All of the screens that you encounter in the wizard process are of the single-select variety. Single-select wizard dialogs require you to make a selection from a single list of options.

Select Options from Single-Select Dialogs

When only one choice is allowed for a short list of options, radio buttons are used to force a single selection. Click the radio button that corresponds to your preference, and click **Next** to proceed to the next screen.

If there is a long list of available options, a selection list (rather than radio buttons) is provided. Click on your desired option to highlight it, and click **Next** to proceed.

Wizard Two-Tree Selection Lists

The wizards in the Oracle Retail Predictive Solutions frequently use selection lists. Selection lists allow you to select values from one list and move them into another. Use these lists to assign contents to workbooks.

Select or Move Items on a Wizard Two-Tree Selection Dialog

Use the following instructions to move hierarchy items from the **Available** list into the **Selected** list or to move items from the **Selected** list back into the **Available** list. Only those items in the **Selected** items list will be incorporated into the workbook.

1. Check the boxes next to the items that you want to move to the **Selected** list. The corresponding items are displayed in the **Selected** list.
2. To remove items from the **Selected** list, disable the boxes next to the corresponding items in the **Available** list.
3. After you finish selecting items, click **Next** or **Finish**.

Add All Items from a Wizard's List of Available Items

1. Right-click on the **Available** list (left side).
2. Select **Add All**.

Remove All Items from a Wizard's List of Selected Items

1. Right-click on the **Available** list (left side).
2. Select **Remove All**.

Collapse a Node or Expand a Branch on a Wizard Two-Tree List

> **Note:** The Collapse Node and Expand Branch options are available only when you right-click on a node that is not base level.

Collapse a Node on a Wizard List

1. Right-click on a non-base level node in a wizard list.
2. Select (left-click on) **Collapse Node**.

Expand a Collapsed Node on a Wizard List

1. Right-click on the collapsed node.
2. Select (left-click on) **Expand Branch**.

Collapse or Expand an Entire Dimension on a Wizard Two-Tree List

Navigate: From a wizard two-tree selection dialog, right-click on a wizard list (Available or Selected).

On the menu that appears, all dimensions available for display are listed beneath the Find option. Currently expanded dimensions are indicated by checkmarks.

1. To expand a collapsed dimension (has no checkmark), click on its label.
2. To allow dimensions not on the list to be expanded, select a higher level for hierarchy rollup.

Collapse or Expand Multiple Dimensions on a Wizard Two-Tree List

Navigate: From a wizard two-tree selection dialog, right-click on a wizard list (Available or Selected).

1. Select (left-click) **Select Dimensions**.
2. In the **Select Dimensions** dialog box, highlight each dimension that you want to display in your worksheet. Make sure that all dimensions that you want to remain collapsed in your worksheet view are left unselected.
3. Click **OK**.
4. To allow dimensions not on the list to be expanded or collapsed, select a higher level for hierarchy rollup.

Select a Higher Level for a Hierarchy Rollup

Navigate: From a wizard two-tree selection dialog, right-click on a wizard list (Available or Selected).

From the menu that displays, choose **Select Rollup** and the highest dimension that you want to display.

You can streamline the process of item selection in wizards by saving lists of selections so that the same set can be instantly applied to any applicable two-tree selection dialog. Saving and loading complete lists of commonly selected items reduces the time required to build new workbooks. This is because it eliminates the need to re-select combinations of items over time or across workbook templates.

Find an Item on a Wizard Two-Tree List

1. Right-click any item on a wizard two-tree selection list.
2. Left-click **Find** to select it.
3. Under **Find What**, type all or part of the name of the item to find. The wizard will attempt to find the item as you type. Only the list that you right-clicked (Available or Selected) will be searched.

You can select the **Match Case** or the **Match Entire Description** check boxes to further limit your search.

If necessary, click **Repeat Find** to locate the next matching occurrence.

Dimension labels, if displayed, are dynamic headers that appear at the top of each wizard list (Available or Selected). Each label indicates the dimension that appears in the column beneath it, and the labels can be used to quickly collapse or expand the dimension that they represent.

Show/Hide Dimension Labels in Wizard Two-Tree Lists

Dimension labels are dynamic headers that, if displayed, appear at the top of each wizard list (Available or Selected). Each label indicates the dimension appearing in the column beneath it, and the labels can be used to quickly collapse or expand the dimension that they represent.

1. On a wizard two-tree dialog, right-click on a list (Available or Selected).
2. The **Show Connector Lines** option toggles (on and off) the connector lines that indicate hierarchical relationships on the list. A checkmark indicates that the lines are shown.
   - To show hidden connector lines, select **Show Connector Lines** (when this item is unchecked).

- To hide shown connector lines, select **Show Connector Lines** (when this item is checked).

3. Once the dimension labels are shown, you may click on a label to collapse the dimension that it represents. When you do this, the label is minimized to contain only a plus (+) sign. Click on this minimized label to expand the associated dimension.

Show/Hide Connector Lines in Wizard Two-Tree Lists

1. On a wizard two-tree dialog, right-click on a list (Available or Selected).

2. The **Show Connector Lines** option toggles on and off the connector lines that indicate hierarchical relationships on the list. A checkmark indicates that the lines are shown.

   - To show hidden connector lines, select **Show Connector Lines** (when this item is unchecked).

   - To hide shown connector lines, select **Show Connector Lines** (when this item is checked).

Saving/Loading Selections as Position Queries

1. On a wizard two-tree selection window, select the positions for the current hierarchy that are to be included in the workbook.

   > **Note:** If using an existing position query, proceed to the next step.

2. Select the **Position Query Definitions** tab on the right-hand side of the wizard two-tree selection window.
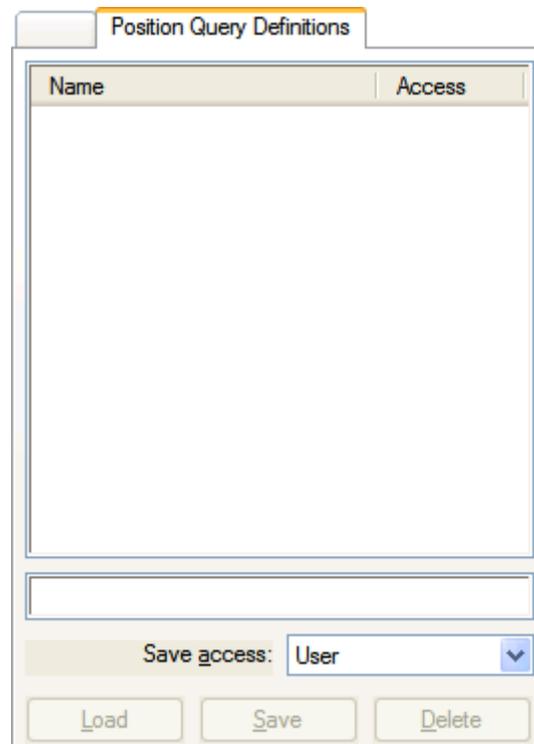
Position Query Definitions Tab

3. To save the current selections as a position query, enter a name in the bar located above the **Save access** drop down list. To load an existing position query, select the desired query and click **Load**.

4. If saving a position query, select **User** or **World** from the **Save access** list.

    ▪   **User** access will only allow the current user to view and use the Position Queries Definitions (PQD) in wizard processes.

    ▪   **World** access will allow all users to view and use the PQD in wizard processes.

5. Click **Save**.

    > **Note:** To change the name or if a mistake is made, select the position query, and click **Delete**. Retype the name and click **Save**. To update an existing position query, type the name of an existing position query and click **Save**.

6. Click **Next** at the bottom of the wizard page to move to the next wizard page.

    > **Note:** Position queries are saved independently for each hierarchy in the wizard process.

7. Continue through the wizard process as normal until complete.

8. Click **Finish** to build the workbook.

Saving PQDs that do not Select New Positions

When a PQD is saved in the wizard, it contains only the selections at the highest level possible. When the PQD is loaded, those high-level positions are selected again. Then, the selection is spread to the current set of base positions. This allows new positions in the hierarchy to be selected.

If you do not want new positions to be selected when the PQD is loaded, perform the following steps when saving the PQD:

1. In the workbook template, ensure that the base dimension is available to be displayed in the left-side tree.

2. In the wizard, set the rollup of the left-side tree to the higher-level dimension.

3. Select the high-level positions.

4. Change the rollup of the left-side tree to the base dimension.

5. Save the PQD.

The PQD saves the selection at the highest-level that is displayed in the left-side tree.

Displaying Attributes in the Wizard

The RPAS client allows you to display attributes associated with a dimension in the wizard. This is useful for assisting the user in determining positions to include in the workbook and may also be useful for the set up of position queries. To display dimension attributes:

1. On a wizard two-tree selection window, right-click on any position and open the **Select display and sort attributes** menu.

2. To change the current dimension in which to display the attributes, select the desired dimension from the **Select a dimension to work with** drop-down menu.

3. In the **Attributes to Display** dialog, you can move unused attributes to the **Display attributes** column or move unwanted attributes to the **Unused display attributes** column.

4. If multiple attributes are to be displayed in the wizard, you can change the order of display by highlighting an attribute and dragging it into the desired order.

> **Note:** User selections in the **Select display and sort attributes** dialog while in the wizard have NO impact on the attributes displayed in the workbook or on the way data is sorted in the workbook. Once in the workbook, the user may access this dialog again to display attributes, change the order of display, and specify a sort order.

Maximum Number of Positions Exceeded

For some wizards, the maximum number of selectable positions may have been limited at a particular level in the hierarchy level. If your selection exceeds the maximum number of positions allowed for the workbook at that level, you will be notified via a pop-up dialog when you press the **Next** button to navigate to the next wizard screen. You will not be able to build the workbook unless you bring your selections within the limit.
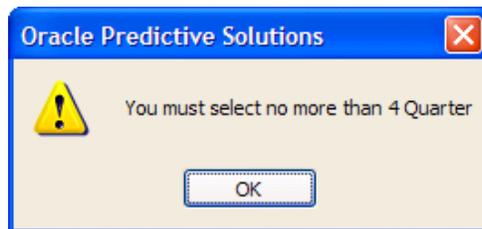
Maximum Positions Exceeded Warning Dialog

4

Saving and Deleting Formatting

RPAS allows you to configure formatting settings of workbooks and worksheets and save those settings for future use. You can configure the appearance of measures, grids, axes, and exceptions; set the type-specific parameters of measures; and enable synchronized page scrolling.

> **Note**: It is no longer necessary to delete existing formats before upgrading RPAS versions. RPAS automatically upgrades the formatting database to the latest version.

The following settings are saved in the formatting database:

- Hierarchy and measure tile locations
- Visible dimensions (aggregate roll-ups)
- Measure order and format
- Window position and label
- Slice selection
- Block view vs. outline view
- Format Menu settings
- Right-click Menu settings

> **Note**: Split dimension/hierarchy settings and the sort order without attributes setting are not saved in the formatting database.

Formatting Menus

There are two formatting menus in RPAS: the format menu and the right-click menu.

Format Menu

The **Format** menu is in the menu bar. The following can be configured from this menu:

- Axes: color and font settings for the row, column, and page axes
- Measures: colors, fonts, alignments, and borders
- Grids: gridline formats and display values
- Applications: application level settings for the computer
- Exceptions: display of measure values that fall outside the configured ranges
- Types: type-specific parameters of measures such as field length of strings or decimal-precision of floats
- Workbooks: synchronized page scrolling
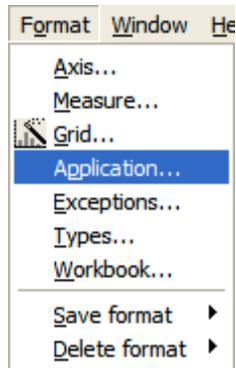
Format Menu Options

Right-click Menu

The second formatting menu available is the context-sensitive right-click menu. The following can be configured from this window:

- Show/hide settings for positions
- Dimension rollups
- Outline/block mode
- Show dimension/attribute labels
- Manage dimension attributes
- Attribute-based sorts
- Measure profiles
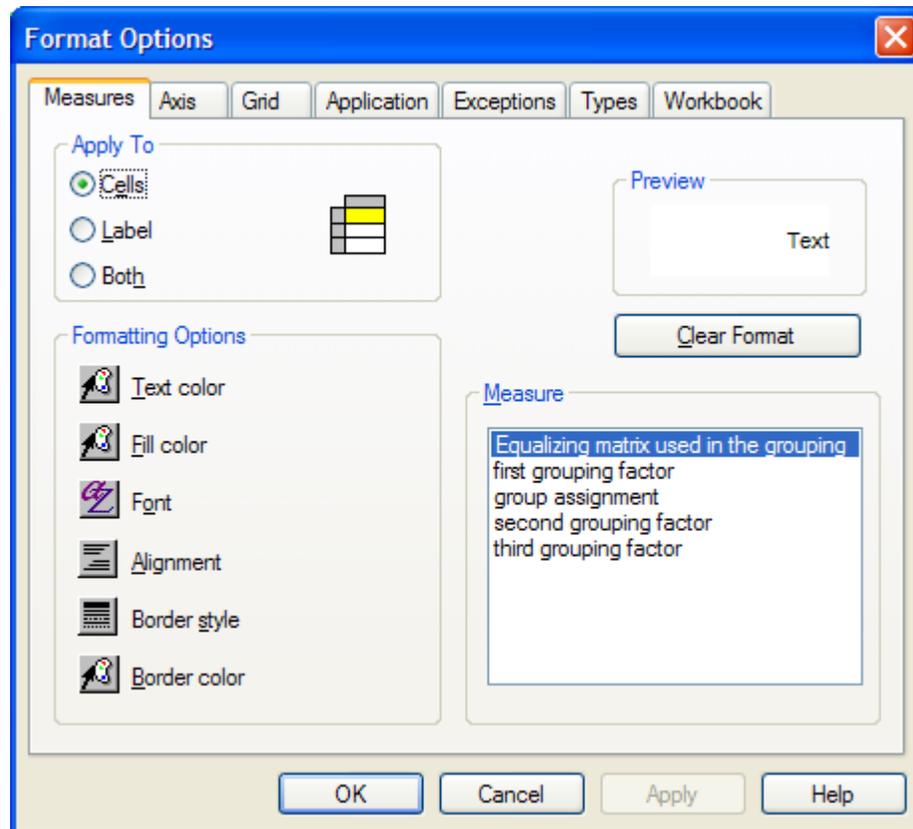
Right-click Format Menu

Format Levels

You can save formatting at three different levels: user, group, or template.

- User: Formatting saved at the user level is only available to that user. Other users do not see these formats.
- Group: Users can save formatting to any group to which they belongs. However, when building a workbook, users only see the formatting of their primary group.
- Template: Formatting saved at the template level is available to all RPAS users in an organization.

By allowing users to save formatting changes at different levels, RPAS allows users to have personal user settings that do not affect formatting at the group or template level.

Saving Options

When saving formatting settings, you have the option to save all formatting, **Save All**, or just save the changes you have made, **Save Changes Only**.
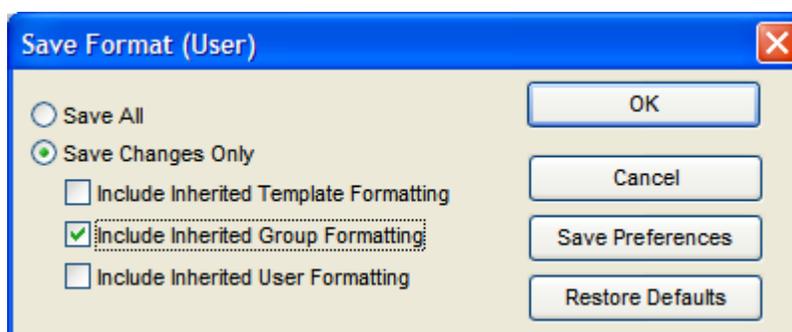
Save Format

Save Changes Only

The **Save Changes Only** option allows you to save only what you have changed so that a subset of the workbook's formatting is merged into the existing saved format. This subset consists of changes made since the workbook was first constructed. You also have the option to include changes inherited from any of the saved styles. During the merge, any conflicting settings in the existing saved format are overwritten while non-conflicting settings are left alone. This allows multiple users to manage group and template styles: users can write to the same files without necessarily writing over the changes of others.

Since formatting is saved incrementally, non-conflicting changes to formatting can be propagated throughout different levels. When a workbook is created, a superset of all changes in the applicable user, group, and template level styles is made with all conflicting changes resolved by the lowest level, user. Therefore, if a change is made to the group formatting, each group member sees it in every new workbook as long as a conflicting formatting setting does not exist at the user level.

> **Note**: The saved formats you inherited may have changed since you built your workbook. You should have a strategy in place for managing multiple users who save to the group and template formats.

Save All

The **Save All** option can be used if you do not want to inherit any changes made to a higher level. Selecting **Save All** writes an entry for each formatting setting whether or not you changed it from the group or template format. Essentially, this blocks any changes that were made at a higher level from the level to which you are saving. Once **Save All** is applied to the user format, that user is not able to see changes made to the group or template level formatting again. Accordingly, if **Save All** is applied to a group format, then no member of the group can see the changes made to the template level. However, each group member maintains access to any user level overrides that he or she saved. Since **Save All** overrides all formatting, the only way to revert to **Save Changes Only** is to delete the formatting at that level.

Configuration Changes

Changes made to worksheets and measure profiles are treated differently from other format changes since they come from multiple sources. Worksheets and measure profiles added to the configuration affect every new workbook for that template, regardless of the saved formatting. Worksheets and measure profiles added by a user exist only inside the saved formatting.

> **Note**: It is no longer necessary to delete your saved formatting when adding or removing worksheets from the configuration. RPAS seamlessly integrates any changes into all new workbooks.

User Windows

You can create a copy of a window (worksheet) using the **Window** menu. User-created windows and their formats are saved with the other formatting changes. In addition, you can delete an unwanted window from a saved style, and this deletion can be saved to a lower-level of formatting (such as the user or group level) without affecting the source (template level). For example, if you inherit a window through the group level, delete that window, and then save at the user level, you will not see that window again, but other members in your group will still inherit that window in their workbooks. However, if you delete that window and then save at the group level, your group members will not see that window again unless they had saved it to their user level.

> **Note**: Windows supplied by the configuration cannot be deleted. This ensures that there is always a window of a particular worksheet available for copying.

Save a Workbook Format

Use this procedure to save any formatting changes you have made to the workbook.

Navigate: From the **Format** menu, select **Save Format**. The **Save Format** window appears.
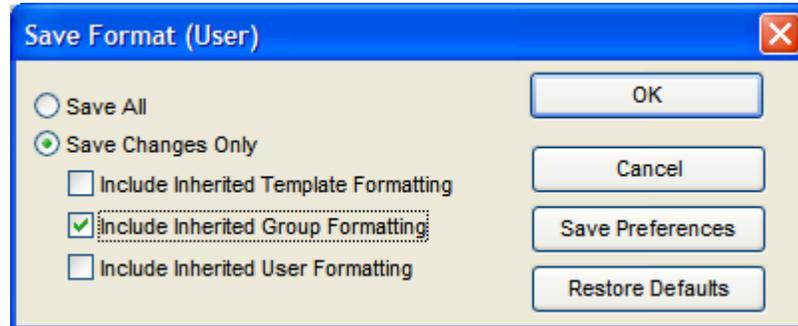
Save Format Window

Select **Save All** or **Saves Changes Only.**

- **Save All**: saves all formatting settings whether you changed them from the group or template format or not. This blocks any changes that were made at a higher level from your user level.
- **Saves Changes Only**: saves only the changes you made to the formatting. Any conflicting settings in the existing saved format are overwritten while non-conflicting settings are left alone. Inherited formatting is the saved formatting that was used to generate the workbook. By checking these boxes, you are including these formats in your change set, making it possible to propagate formatting from one level to another (for instance, moving your saved user formats to the group level).
  - Select **Include Inherited Template Formatting** to include formatting changes inherited from the template level.
  - Select **Include Inherited Group Formatting** to include formatting changes inherited from the group level.
  - Select **Include Inherited User Formatting** to your formatting changes inherited from the user level.

Click the **Save Preferences** button if you want your selections to be used the next time you save formatting to this level. These preferences are cached in the user directory on the RPAS Server. This guarantees that these preferences are available regardless of the computer you use and that they are not shared across users.

If you want to remove any saved preferences and return to the system defaults, click **Restore Defaults** and then click **Save Preferences.**

Delete a Workbook Format

Use this procedure to clear any formatting changes that you have previously saved. Format deletions only affect the workbook template that is associated with that format. For example, if you select **Delete Format** while viewing a Forecast Maintenance workbook, the deletion will only affect new Forecast Maintenance workbooks.

If you have been granted Admin status, you can delete formats at both user level and template level. If your access level is user, you can only delete formats for yourself. Deleting a format at template level means that all new workbooks opened by any user using that same workbook template will no longer default to the deleted format.

You can also delete formats for a user group. These changes apply to all users within that group.

Navigate: From the **Format** menu, select **Delete Format**.

Select user level, template level, or group level depending on the level that you want to delete the format.

- Select **User** if you want to delete a saved user format.
- Select **Template** if you want to delete a global format. This affects all other users who build future workbooks using this template.
- Select **Group** and select from the list of available user groups if you want to delete formats for a user group.

Use Cases

The following use cases describe the various options for saving templates.

Including Inherited Changes

Actors

Steve: member of the US sales group
Nigel: member of the UK sales group

Scenario

Steve has created a layout and measure list that his manager wants to share with everyone in the sales organization. He saves this new layout at the template level.

Preconditions

- The US sales group has its measure formatting set with the prefix **$** and the exception levels set to thresholds appropriate for the US dollar.
- The UK sales group has its measure formatting set with the prefix **£** and exception levels set to thresholds appropriate for the British pound.
- The template level formatting does not contain currency-specific information.

Steps

1. Steve creates a new workbook.
2. Steve selects **Format – Save Format – Template** from the menu.
3. In the **Save Format** window, Steve selects **Save Changes Only** and checks **Include Inherited User Format**.
4. Nigel builds a new workbook and sees the new layout while retaining the currency settings for the UK sales group.

Merging Conflicting Changes

Actors

Bob, Tom, and George: members of marketing

Scenario

Bob, Tom, and George are all members of marketing. Bob and Tom each have some formatting settings that they would like to propagate to the group level.

Preconditions

- No group style existed when Bob and Tom initially created their workbooks.
- Bob saves his formatting settings first.
- George has no user format.

Steps

1. Bob opens one of his saved workbooks and saves it to the marketing user group by selecting **Format – Save Formatting – Group – Marketing**.

Bob's Initial Formatting

2. In the **Save Format** window, Bob selects **Save Changes Only** and checks **Include Inherited User Format**.

3. Tom opens one of his saved workbooks and saves it to the marketing user group by selecting **Format – Save Formatting – Group – Marketing**.

Tom's Initial Formatting

4. In the **Save Format** window, Tom selects **Save Changes Only** and checks **Include Inherited User Format**.

5. George creates a new workbook which uses the new group format.

George's New Workbook

6. Bob creates a new workbook which uses a combination of the new group format and his user format.

Bob's New Workbook

Using Save All with Conflicting Position Lists

Actors

Nigel: member of the European sales group, in charge of stores in UK

Fritz: member of the European sales group, in charge of stores in Germany

Scenario

The European sales group has decided it does not want to use changes made to the template and has instructed all its employees to use **Save All** when updating the group formats.

Nigel and Fritz each have modified their column widths to accommodate the name lengths of new stores in their respective sales areas.

Preconditions

- Some store column widths in the existing group format are too small to accommodate the new store names.
- Nigel only has the UK region in his workbook.
- Fritz only has the German region in his workbook.

Steps

1. Nigel adjusts the column widths to accommodate his new stores and saves this format to the group level by selecting **Format – Save Formatting – Group – European Sales** and checking **Save All**.
2. Fritz then adjusts the column widths to accommodate his new stores and saves this format to the group level by selecting **Format – Save Formatting – Group – European Sales** and checking **Save All**.
3. Nigel builds a new workbook. The positions in the UK region have not been affected by Fritz's saved format since they were not in Fritz's workbook.

Adding and Removing a User Window

Actors

Fred: manager of US sales group

Tom, Bob, and George: members of the US sales group

Nigel: member of the UK sales group

Scenario

Nigel is instructed to modify the template configuration so that the Regional Sales window/worksheet has a corresponding chart window called Regional Sales Chart. Once he makes this modification, Fred decides that the chart is not necessary for the US sales group. Fred deletes the chart window and updates the group format.

Preconditions

Tom has a user format that used **Save All**.

Steps

1. Nigel selects the Regional Sales window and selects **Window – New Window**.

2. Nigel names the new window Regional Sales Chart and saves it to the template format using Save Changes with none of the check boxes selected.

3. Tom creates a new workbook. Since he had previously saved a user format with the **Save All** option, he does not see the new Regional Sales Chart window.

4. Bob builds a new workbook. He sees the Regional Sales Chart window.

5. George creates a new workbook and sees the new window. Deciding that he likes his formatting the way it is, he saves a new user format using the **Save All** option.

6. Fred creates a new workbook. He decides that his group does not need the chart. He selects the Regional Sales Chart window and selects **Window – Delete Window**. He saves his formatting to the US sales group level.

7. Bob builds a new workbook. As a member of the US sales group, he now does not see the Regional Sales Chart window.

8. Nigel builds a new workbook. Since he is not a member of the US sales group, he still sees the Regional Sales Chart window.

9. George builds a new workbook. Since he saved his user level formatting using the **Save All** option when the Regional Sales Chart was in his workbook, he still sees the chart.

Changing Views of Data in Worksheets

Aggregation

Aggregation is the process of bringing pieces of data together to form a larger group. After hierarchical relationships are established, data can be viewed at any level in the hierarchy. Aggregation allows you to view data at summary levels.

For example, the linked figure represents a simple product hierarchy for a company's selection of shirts.
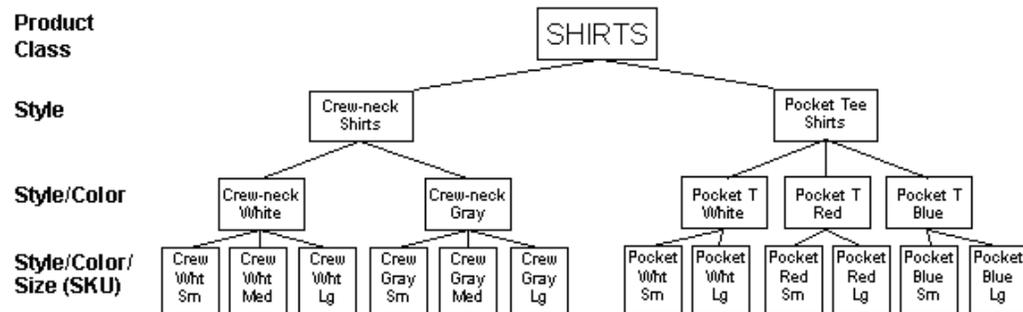
Hierarchy

If sales values for this same hierarchy were to appear in the form of a planning worksheet, quantities could be viewed at the very lowest level in the hierarchy (style/color/size, or SKU level).

They can also be viewed at any higher level in the hierarchy. Suppose that there were exactly five of each SKU item in this hierarchy sold over a given period. When the SKU level items are aggregated to the style/color level, you would see that 15 white crew-neck shirts were sold (5 small + 5 medium + 5 large).

Further aggregation would show that a total of 30 crew-neck shirts were sold (15 white crew-necks + 15 gray crew-necks). If this paradigm is extended to the product class level, aggregation would show that 60 shirts were sold (30 crew-necks + 30 pocket tees).

Data can be aggregated along many possible hierarchical paths. The possible paths of data aggregation are defined at the time of system installation. For example, SKUs can roll up into styles, product lines, product classes, and ultimately product divisions. These same SKUs can also roll up along different hierarchical paths into vendors that provide the products or into the level products that are sold on commission. Whichever hierarchical path of aggregation you select, a particular SKU cannot roll up into more than one parent position along that path.

The function of aggregation in the forecasting process is very important. In the forecast generation process, it may be necessary for the system to collect and group data from very low levels in order to run useful forecasts. Data is often too sparse to identify clear patterns at lower levels. For this reason, it may become necessary to aggregate sales data from a low level to a higher level in the hierarchy in order to generate a reasonable forecast. Once the forecast is created at the higher level, you can allocate the results to whatever lower level you want. This is done through the process of spreading, which is discussed in the overview of spreading topic.

Aggregation is also important in the plan approval process. Typically, you would not want to approve sales plans at the SKU/Week level. This level of approval might be very time-consuming if hundreds of thousands of SKUs were involved. Sales plan figures are usually aggregated to a higher level, such as Style/Month, for approval.

Data Aggregation in a Worksheet

When viewing quantitative data in a worksheet, you may require a view of the information at a more aggregate level. The Oracle Retail Predictive Solutions use the hierarchical structure defined by your organization to roll up information for presentation at a higher level. Rollup is the path that the system follows from the root of the hierarchy to another higher dimension in the hierarchy during the aggregation process.

There are several ways to obtain views of the data at these higher levels. Regardless of the method you choose, you must first select the highest dimension level that you want to see within the rollup path that you want to use. To do this, properly position the cursor and right-click. Then select the **Select Rollup** option from the quick menu. The quick menu associated with a given hierarchy can be accessed when the cursor is positioned over that hierarchy's axis in the grid.

For example, to select the rollup for the product hierarchy:

1. Position the cursor over any point in the axis where the product hierarchy is displayed.

2. Right-click the mouse to obtain the associated quick menu.

3. Choose **Select Rollup**, and select the highest dimension to be displayed.

Data Aggregation in Outline View

The following discussion about data aggregation options is most applicable when you view your worksheet data in block mode. This is because block mode only allows the display of data values at one dimensional level at a time (the lowest level currently expanded in the grid). The following procedures effectively collapse lower-level dimensions, which results in the aggregation of data to the next higher level.

When you view your worksheet in outline view, the display lets you see data at multiple dimensional levels at the same time, so you do not need to collapse lower-level dimensions to see aggregate totals for higher levels. The menu items described below are still useful for manipulating the display (collapsed vs. expanded) of various dimensional levels for the data hierarchies in your worksheet.

Aggregation Options

You can choose any of the following three methods to aggregate your data and view it at the higher level. To access these options, right-click any worksheet axis and a quick menu will be displayed. The following are the options that enable aggregation.

```
Hide selection
Show/hide...
Find...
Maintain positions                    ▶
──────────────────────────────
✓ Info
  all [Product]
✓ Class
✓ Subclass
✓ Grandparent
  Parent
  Item
──────────────────────────────
Select dimensions...
Select rollup                         ▶
──────────────────────────────
Show dimension labels
Show attribute labels
──────────────────────────────
Format                                ▶
──────────────────────────────
Select display and sort attributes...
Sort...
Resort Class attributes
Attribute definition...
──────────────────────────────
Split dimension...
```
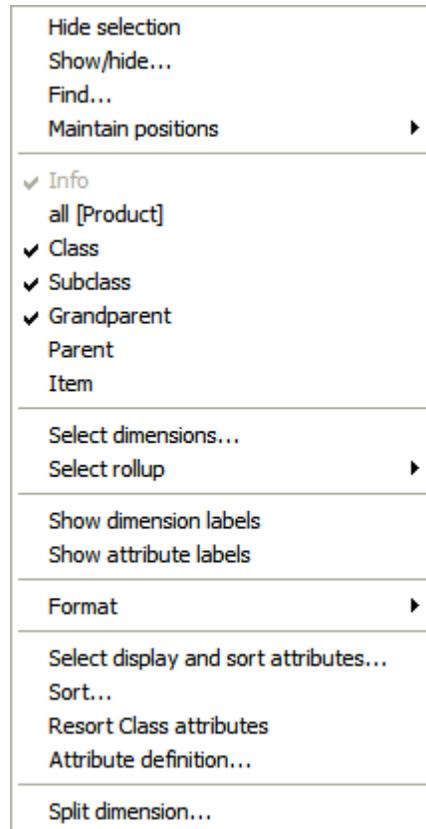
Right-Click Menu Showing Dimension List and Other Options

Dimension List Options

The Dimension List option allows you to expand or collapse the display of one dimension at a time. When a worksheet dimension is collapsed from the grid display, all of that dimension's associated data are aggregated to the next higher level that is currently displayed.

In the above example, the following dimensions are displayed as options:

- all [Product]
- Class
- Subclass
- Grandparent
- Parent
- Item

> **Note:** These options will vary depending on the hierarchy and dimension positions in the worksheet.

To aggregate data using the Dimension List option:

1. Right-click any worksheet axis to display a quick menu of options that are relevant to that hierarchy. Dimensions that are currently displayed are shown in the dimension list with checkmarks beside them.

> **Note:** If you want to aggregate data to a dimension higher than those shown in the dimension list, you must first use the Select Rollup option to specify the highest dimension that you want to see.

2. Click any currently checked dimension to collapse that hierarchical level. All associated data will be aggregated to the next higher dimension that is displayed.

> **Note:** Clicking any unchecked dimension in the list causes the reverse process to happen. The previously collapsed dimension will be displayed in the grid in its proper relative location in the hierarchy.

Select Dimensions Option

The Select Dimensions option allows you to simultaneously expand or collapse the display of multiple dimensions. Select this option to display a dialog box where you can select the exact dimensions that you want displayed in your worksheet.

To aggregate data using the Select Dimensions option:

1. Right-click any worksheet axis to display a quick menu of options that are relevant to that hierarchy.
2. Select the **Select Dimensions** option.
3. On the dialog that opens, select all dimensions that you want to display in your worksheet. Highlighted dimensions will appear in the display. Non-highlighted dimensions will be collapsed and data will be aggregated to the next higher level.
4. Click **OK**.

Show Dimension Labels Option

The Show Dimension Labels option is useful when you want to expand or collapse dimensions repeatedly, and if you want to avoid accessing the quick menu each time you do it. This option toggles the display of cursor-sensitive dimension header labels in your worksheet. When you click on the label for a particular dimension, that dimension is collapsed in the grid, and all associated data is aggregated to the next higher level. Once the dimension header labels are activated, dimensions can be expanded or collapsed in one single click.

To aggregate data using the Show Dimension Labels option:

1. Right-click any worksheet axis to display a quick menu of options relevant to that hierarchy.
2. Select the **Show Dimension Labels** option. Minimized tabs display, which is located at the left side of the column axis headings or at the top of the row axis headings, depending on your axis selection.
3. Place the cursor over these tabs. The tabs expand to display the dimension labels.
4. Click any dimension label to collapse that dimension in the grid and aggregate the data to the next higher level.

> **Note:** Labels representing collapsed dimensions contain a plus (+) sign. Click the plus sign to maximize the label and expand that dimension in the grid.

Display Worksheet Data in Chart Form

Displaying worksheet data in chart form is a useful feature in worksheets. Any numeric data or subset of data in a worksheet can easily be converted to a chart format. Viewing data in a graphical format can enable users to subjectively assess (at a glance) how well system and final forecasts have predicted actual sales values. Charts can be used for many other purposes, such as graphically illustrating changes in sales and forecast patterns over time. Patterns and trends in data can be recognized much quicker when data is presented in the form of a chart than when that same data is shown in spreadsheet form.

Customizing Chart Content

You can place as much or as little information as necessary in charts. Select the data cells in the grid that you want to see charted. When you toggle your worksheet view to chart mode, only the selected information is extracted from the grid and plotted in your chart. Like grid-format worksheets, you can save and commit charts as components of the workbook. The data that they contain can be printed and/or exported for use in other systems. Also, by using the **New Window** option on the **Window** menu, you can simultaneously view workbook data in grid mode and chart mode.

Customizing Chart Format

In addition to customizing content, you can customize the various attributes of a chart's format as follows:

- Choose the type of the chart (for instance, bar graph, line graph, and pie chart) and switch between chart types.
- Specify the color scheme for your chart, including selections for individual data series, the chart background, the legend, and the chart area.
- Specify the content and style of the chart title.
- Specify customized axis settings, such as the major and minor axis units, the axis scale, and the individual axis titles.
- Switch between a two-dimensional and a three-dimensional view of your charted data.
- Control features, such as shadowing, depth, and perspective of your 3D chart.

Chart Styles

Specific combinations of chart formatting options can be saved as chart styles. These saved styles can be applied to subsequent collections of data, which eliminates the need to manually format each new chart to your specifications.

Rotating and Pivoting Chart Data

The charting feature supports the rotation and pivoting of data while in chart view. Hierarchy tiles can be dragged to different axes and repositioned in the same manner that it is performed in grid view. Rotating and pivoting can facilitate data analysis by providing different views of the same data.

Changing Data Values in a Chart

You can directly change data values while in chart mode. You are not required to toggle back to grid view to manually key in new data values. These values can be amended by dragging and dropping data points in the chart.

Pivoting Data

Pivoting is similar to rotating, but only one axis is involved. Pivoting occurs when two or more hierarchy tiles that reside on the same axis change their order on the worksheet. To pivot data, drag and drop one hierarchy tile in front of the other. The same cursor indicators that are used in rotating data are also used when pivoting data.

Suppose you are viewing a worksheet that has the Product and Calendar hierarchies displayed along the row axis with product positions subdivided into weeks. You want to pivot the display in such a way that the week positions are subdivided by products. To do this, click and hold the Product hierarchy tile, and drag the tile to a position to the right of the Calendar tile. When the cursor changes one of the following, drop the tile by releasing the mouse button:

Left arrow cursor

Right arrow cursor

Circular cursor

Rotating Data

While viewing quantitative data in the grid format, you may want to alter the manner that the information is presented. For example, you may want the product information (such as SKU or color) to be presented in rows down the left side of the screen, while location information (such as store or city) appears as orthogonal columns across the top of the screen. Another user may prefer to view the same data with the axes reversed. This means that the location dimension data appears in rows and the product dimension data is presented in columns. The process of rotating allows you to view key business information in a variety of arrangements. Rotating is the process of moving the product, time, location, or other hierarchies from one axis to another.

Multiple hierarchies can be displayed on any single axis, and each hierarchy can be rotated so that it appears on any of the three available axes. To rotate a hierarchy to another axis, drag the hierarchy tile that represents it to the display area of that axis. A hierarchy tile can reside in any of three locations on a worksheet:

- Top left (slice axis)
- Bottom left (row axis)
- Top right (column axis)

Try moving the hierarchy tiles on your worksheets to get a feel for how data can be rotated.

Reposition a Hierarchy Tile

To reposition a hierarchy tile:

1. Position the cursor over the tile that you want to relocate.

2. Click and hold the left mouse button. The appearance of the cursor changes to indicate the action that you are performing.

3. While holding down the left mouse button, move the tile to the desired display area. The cursor will change when it is positioned over an available dropping point.

4. Release the mouse button to drop the tile.

Cursor Indicators when Rotating Data

When rotating data, the cursor changes to indicate the action.

When you first click and hold the hierarchy tile that you want to relocate, the cursor is displayed as a hand grasping a tree diagram. The cursor changes when it is positioned over an available dropping point (display area).

Hand Grasping a Tree Diagram

The Up Arrow cursor indicates that the tile you are dragging will be dropped above a tile that is already in place.

Up Arrow Cursor

The Down Arrow cursor indicates that the tile you are dragging will be dropped below a tile that is already in place.

Down Arrow Cursor

The Left Arrow cursor indicates that the tile you are dragging will be dropped to the left of a tile that is already in place.

Left Arrow Cursor

The Right Arrow cursor indicates that the tile you are dragging will be dropped to the right of a tile that is already in place.

Right Arrow Cursor

The Circular Arrows cursor indicates that the positions of the tile you are dragging and the tile above where the cursor is positioned will be swapped.

Circular Arrows Cursor

Selecting Items

You can select items or groups of items in the application by using the mouse, the keyboard, or a combination of the two. The following standard rules apply when selecting items:

Click an item to select it. The following bullet points provide additional information on selecting data cells in your worksheet:

- Click an item that has already selected to de-select it.
- To use the mouse to select a group of contiguous items, position the mouse cursor over the first item in the group.
  a. Press and hold the left mouse button.
  b. Drag the cursor to the last element in the group.
  c. Release the mouse button.

  > **Note:** This selection method is not available in the wizards.

- To select a group of contiguous items, select one position with the mouse and hold down the Shift key while choosing another position. This process selects the first item, the last item, and any positions in between.

  > **Note:** This selection method is not available in the wizards.

- To select a group of items that are not contiguous, hold down the Ctrl key, and click any required positions.
- Use the spacebar to toggle the selection of the last active item.

Selecting Items in a Wizard List

Selection of hierarchy data (e.g., products, locations, and time periods) to be included in a workbook is often required when particular workbook wizards are accessed. The desired hierarchical positions on the **Available** side of the wizard must be highlighted and moved to the **Selected** side of the wizard for inclusion in a workbook.

Selecting Items in the Grid

Cells or groups of cells must be selected in the grid before certain operations can be performed on them. Operations like cutting and copying data, filling or clearing data cells, and displaying data in chart form are typically performed on a subset of worksheet cells that you must select prior to invoking the menu command.

There are several ways to select cells in the grid. In general, cell selections should be made in the worksheet axes (where the column and row headers appear), and not in the cells.

- To select one cell, click the column header that corresponds to the cell, and click the corresponding row label.

- When no selections exist, click on any column header in the column axis to automatically select that entire column. The same is true for selections made in the row axis. Selection of a particular row header results in the selection of the entire row. When selections simultaneously exist in the column axis and in the row axis, any cells located at that row/column intersection will be selected in the grid. The selection rules outlined above, such as using the Shift and Ctrl keys to select multiple items, can be applied in the axis headers to isolate groups of cells.

- If you want to select a block of contiguous cells, the following method allows you to make your selection within the grid.

    a. Click in the topmost, leftmost cell in the block to be selected.

    b. Hold down the mouse button, and drag the cursor to the bottommost, rightmost cell, and release the mouse button.

    c. As you drag the mouse, the corresponding column header and row header positions are automatically selected according to your actions.

Spreading

Spreading (the opposite of aggregation) allows you to view data at more detailed levels. In spreading, totals at higher level dimensions are allocated to lower level dimensions, which are based on the lower level's relationship to the total.

Spreading Aggregate Forecast Values

When data is too sparse to create useful forecasts at a low level, it can be aggregated to a summary level. The system spreads forecast totals at this higher level back down to the lower level, which is based on the lower level's percent contribution to the higher. The data at the lowest level in the hierarchy may be too sparse to create a meaningful forecast; however, this same data can be very useful in determining the percent contribution that each position in the lower level makes toward the higher level.

For example, an aggregate-level class/store forecast predicts 50 shirts to be sold in Store #001 over a given time period. A forecast at the lower SKU/store level also determines that red shirts make up 40% of the demand, blue shirts make up 30%, white shirts make up 20%, and black shirts make up 10%. These percentages can be used to spread the total of 50 shirts back down to the lower level of color.

For example, an aggregate-level class/store forecast predicts 50 shirts to be sold in Store #001 over a given time period. A forecast at the lower SKU/store level also determines that red shirts make up 40% of the demand, blue shirts 30%, white shirts 20%, and black shirts 10%. These percentages can be used to spread the total of 50 shirts back down to the lower level of color.

Shirt Color	SKU/Store Forecast	% of Total, SKU/Store	New SKU/Store Forecast, spread from Class/Store
Red	8	40%	20
Blue	6	30%	15
White	4	20%	10
Black	2	10%	5
Total	20	100%	50

Additional forecasts are often run at low levels in the hierarchy to determine the percentages to be used when spreading forecast data from higher levels. Forecast data at low levels might be enough to generate reliable percentage-to-whole information, but the actual forecast numbers are much more robust when generated at the aggregate level.

REPD Functionality

The Oracle Retail Predictive Solutions let you spread aggregate data into individual cells by using a group of methods called REPD (Replicate, Evenly, Proportionally, Delta) functionality. REPD functionality lets you choose from four methods of spreading data at an aggregate level down to lower levels in a hierarchy. You must enter a number in a data cell at an aggregate level and spread that number down to lower levels by one of the following methods:

- **By Replication** – A value entered into a cell at an aggregate level will be replicated (copied) into every cell at the aggregate cell's base level. This results in a higher aggregate cell total (the value entered multiplied by the number of base-level cells).

- **Evenly** – A value entered into a cell at an aggregate level will be evenly distributed among all cells at the aggregate cell's base level.

- **Proportionally** – A value entered into a cell at an aggregate level will be distributed proportionally among all cells at the aggregate cell's base level (proportional to the original values in the base-level cells).

- **Delta** – The difference between a value entered into a cell at an aggregate level and the original value of that cell will be distributed evenly among all cells at the aggregate cell's base level.

> **Note:** Delta spreading cannot be used for measures with a recalc aggregation type. This is a method of recalculation at each aggregate level.

You must be viewing and entering data at an aggregate level for this functionality to work. Enter a number in a data cell at an aggregate level followed by r, e, p, or d. This will apply the Replicate, Even, Proportional, or Delta distribution function to spread that number to the lowest level.

> **Note:** Save information in the workbook before trying these features. If you are uncomfortable with the results, use the Edit – Revert command to undo the changes.

Example

The following is an example of the spreading process. Suppose there are five cells at the lowest level in a hierarchy. These five cells aggregate into one cell. The five lower-level cells contain the values 2, 4, 6, 8, and 10. When the data is rolled up to the higher level, the aggregate total is 30.

- **Replicate** – If you enter 60r to replace 30 as the aggregate cell total, the number 60 will be replicated to all of the cells below, which replaces the original numbers with 60, 60, 60, 60, and 60. In this case, the aggregate total would be recalculated as the sum of the five lower-level cells, 300.

- **Even** – If you enter 60e to replace 30 as the aggregate cell total, the number 60 will be divided evenly among all the cells below, which replaces the original numbers (12, 12, 12, 12, and 12).

- **Proportional** – If you enter 60p to replace 30 as the aggregate cell total, the number 60 will be spread proportionally across the lower level cells based on their original content. Since the original aggregate of the numbers was 30, entering 60 in the aggregate cell doubles that total. The lower level cells will contain the values 4, 8, 12, 16, and 20.

- **Delta** – If you enter 60d to replace 30 as the aggregate cell total, the number 30 (the difference between 60 and 30) will be spread evenly across the lower level cells based on their original content. The lower level cells will contain the values 8, 10, 12, 14, and 16.

Worksheet Axis

In a worksheet, the active axis is highlighted with a distinctive border called a marker. This marker appears as a dotted-lined rectangle that outlines the marker position's label text. In grid cells that contain read-only data, the active cell can be identified in the same way. In read-write cells, the active cell is the one that contains the insertion point. The following keys and key combinations let you change the selection by moving the marker or insertion point from one element to another.

Up Arrow

In the grid, the up arrow moves the marker up one cell. In the Row Axis and Slice Axis, the up arrow moves the marker up one position in the same dimension. In the Column Axis, the up arrow moves the marker up one dimension.

Down Arrow

In the grid, the down arrow moves the marker down one cell. In the Row Axis and Slice Axis, the down arrow moves the marker down one position in the same dimension. In the Column Axis, the down arrow moves the marker down one dimension.

Right Arrow

In the grid, the right arrow moves the marker one cell to the right. In the Row Axis and Slice Axis, the right arrow moves the marker one dimension to the right. In the Column Axis, the right arrow moves the marker one position to the right within the same dimension.

Left Arrow

In the grid, the left arrow moves the marker one cell to the left. In the Row Axis and Slice Axis, the left arrow moves the marker one dimension to the left. In the Column Axis, the left arrow moves the marker one position to the left within the same dimension.

Home

In the grid, Home moves the marker to the beginning of the row. In the Row, Column, or Slice Axes, Home moves the marker to the first position of the highest dimension on that axis if you are in outline view. If you are in block view, Home moves the marker to the first position of the innermost dimension on that axis.

End

In the grid, End moves the marker to the end of the row. In the Row, Column, or Slice Axes, End moves the marker to the last position of the lowest dimension on that axis.

Tab

Tab moves the marker forward, visiting the various axes and proceeding across cells of the grid. The marker moves from the Column Axis to the Slice Axis, the Row Axis, and then into the first visible cell of the grid. Continued use of the Tab key moves the marker across the row (cell by cell) until the end of the row is reached.

Shift + Tab

Shift + Tab moves the marker backward across a row, cell by cell, until the first cell of the row is reached. Continued use of the **Shift + Tab** combination moves the marker to the Row Axis, to the Slice Axis, to the Column Axis, and back to the first visible cell of the grid.

Ctrl + Home

In the grid, **Ctrl + Home** moves the marker to the upper left corner of the grid.

Ctrl + End

In the grid**, Ctrl + End** moves the marker to the bottom right corner of the grid.

6

Using Special RPAS Features

Exception Management and Alerts

Because of the large volumes of data that needs to be managed by the Oracle Retail Predictive Application Server, the server includes an Alert Manager feature that highlights users that might otherwise go unnoticed. You can set up business rules to alert users about OTB opportunities, stock outages, sales performance against plan, margin opportunities, and many others. Each of these alerts has a role within a business process that demands highly accurate management of large amounts of business information. The Alert Manager will take you directly to the area of the plan that needs action, so these alerts go beyond exception reporting.

Alerts are set up by identifying a business measure as the foundation, and then creating the alert by using a mathematical rule. A facility behind the scene will find the areas of a plan that fall outside the thresholds that is declared within the alert rules. This will create a message, or alert, that is flagged to the user through the Alert Manager window.

At this point, the alerts have been identified and the user can go directly to the affected areas of the Workbook and take appropriate action.

Using the Alert Manager

The Alert Management feature provides user-defined and user-maintained exception reporting. This process allows you to define a measure that is checked daily to see if any of its values fall outside of an acceptable range or do not match a given value. When this happens, an alert is generated to let you know that a value may need to be examined and possibly amended in a workbook.

The Alert Manager is the interface that the system uses to inform you of all alert conditions that were identified during the last execution of the Alert Finder program. The Alert Manager window provides a list of all identified instances where a given measure's values falls outside of the established limits.

The Alert Manager provides two methods of viewing the measures associated with identified alerts: loading alerts and inserting alerts. If no workbooks are currently open, you may pick an alert from the list to load and have the system automatically construct a workbook that contains that alert's measure and any other measures that you want to display. This workbook allows you to examine the actual measure values involved in the generation of the alert, so you can make decisions about what needs to be done next. If you have an open workbook already displayed, you can use the Alert Manager to insert a new alert measure into the current workbook. This functionality enables you to view multiple alert measures simultaneously, and it allows you to address alert-related issues without requiring you to build a new workbook for each.

You may also use the Alert Manager window to keep track of alerts that have been resolved. Change the alert resolution status to **Yes** for those alerts that no longer require attention.

> **Note**: The Alert 1 measure has a base intersection of item. The Alert Manager finds the first worksheet that has the closest intersection to that of the alert measure, and it inserts the alert measure in that worksheet. If it does not find any worksheet with a matching intersection, it creates a new worksheet and inserts the alert measure. Worksheets added in this manner are not saved to the formatting database.

Show/Open the Alert Manager Window

From the **View** menu, select **Alert Manager**.

Hide/Close the Alert Manager Window

Click the X in the upper-right corner of the Alert Manager window, or you can select the Alert Manager option on the **View** menu (when this item is selected) to toggle off the display of the Alert Manager.

Load an Alert into a New Workbook

After selecting an alert listed on the Alerts tab in the Alert Manager window, you can click the **New Workbook** button to have the system construct a workbook where you can view the identified alert hits. Clicking the **New Workbook** button places you in a wizard that prompts you for necessary details regarding the workbook build.

Perform the following steps to load an alert into a new workbook. After you have made the necessary selections in each step below, click the **Next** button to advance to the next screen. If the **Finish** button is enabled, you may click it at any time to proceed with the workbook build.

Navigate: From the **View** menu, select **Alert Manager**. The **Alert Manager** dialog box appears.
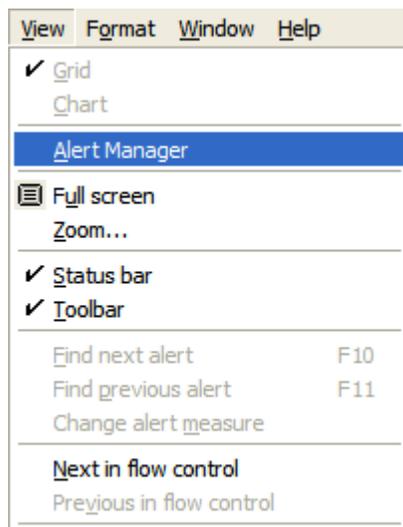
Selecting the Alert Manager

1. Click an alert that is listed on the Alerts tab in the Alert Manager window. This alert becomes the active alert in the workbook for the purposes of the Find Next Alert and Find Previous Alert options.
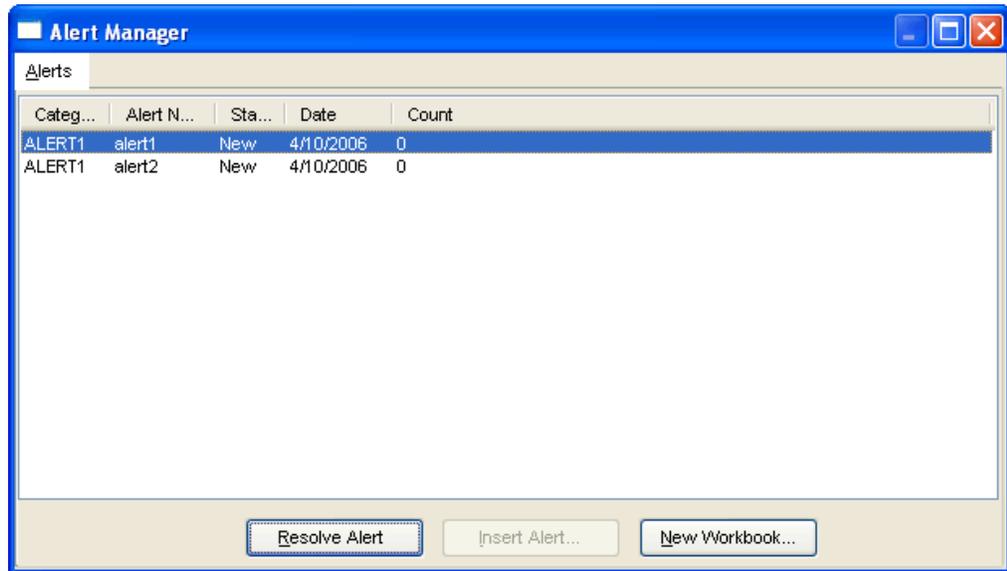
Alert Manager - Alerts

2. Click **New Workbook**. The **Alert Manager** dialog is displayed.
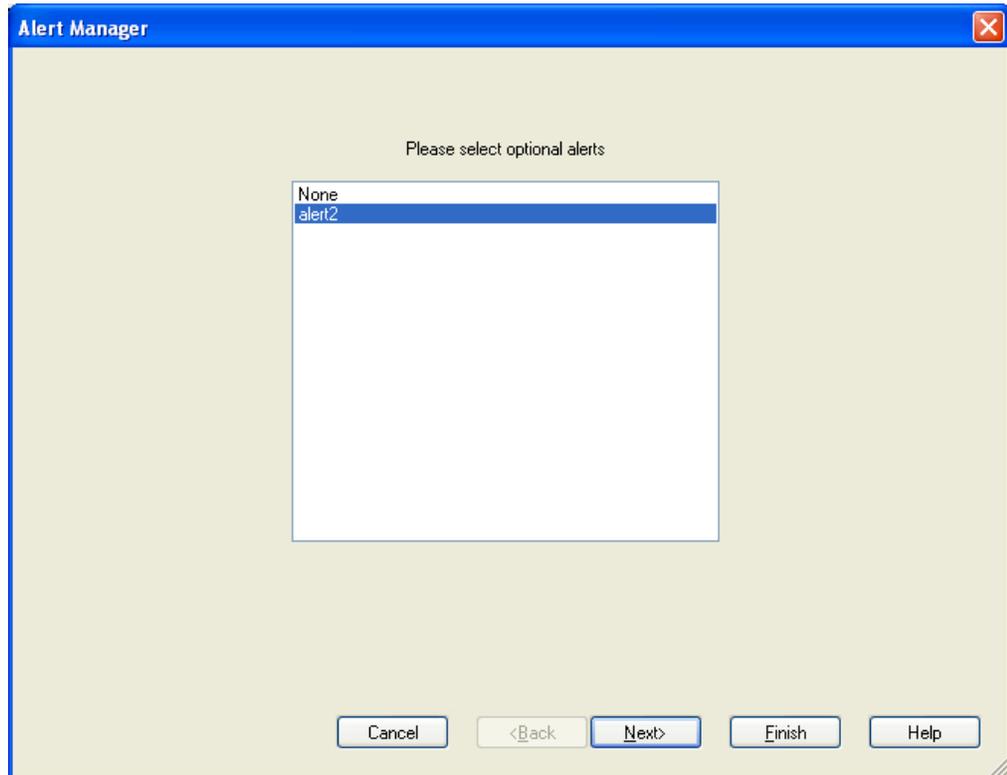
Alert Manager

3. Select any additional alerts that you want to include in the new workbook, and click **Next**. The **Alert Manager** dialog is displayed.
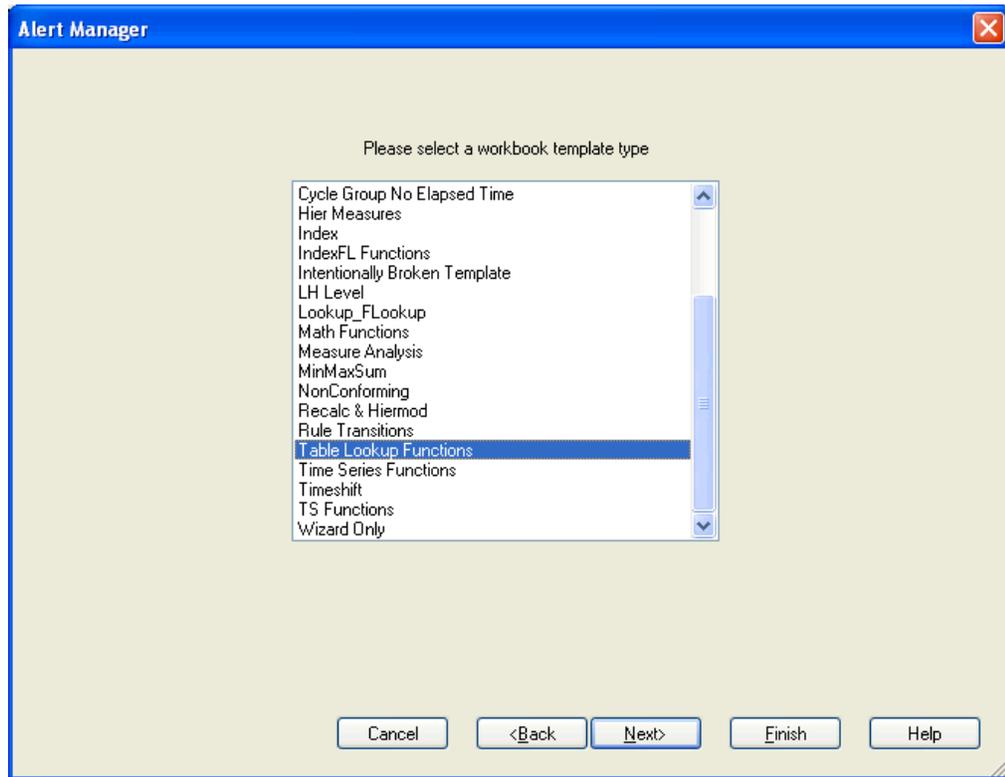
Alert Manager

4. Select the workbook template that you want to use to build the workbook, and click **Next**. The **Alert Manager** dialog is displayed.
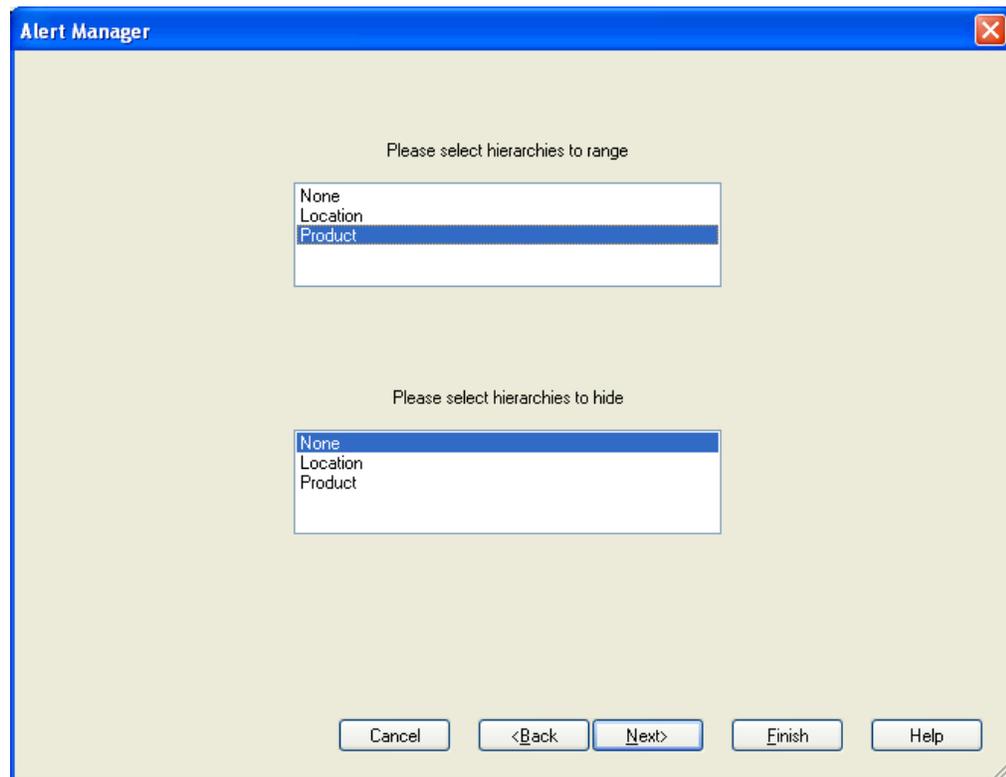
Alert Manager

5. Select the hierarchies that you want to range.

> **Note:** If a hierarchy is selected to be ranged, only the positions in the hierarchy that triggered an alert will be available for selection in the new workbook wizard. For instance, if you choose to range the product hierarchy, the product selection screen for the new workbook wizard will only allow you to choose product positions for which an alert was triggered. This means that all non-alert-related positions will be excluded from the workbook build.
>
> However, if the user builds an Alert Manager Auto Build workbook against a non-triggered alert (meaning that the alert has a zero hit count), all positions are available to the user regardless of whether the user decides to range the hierarchy in the hierarchy range wizard screen.

6. Select hierarchies that you want to hide. When you select the hierarchies to hide, non-alert positions in the hierarchies you specify will not be shown in the workbook when it is initially built. If desired, these positions can later be un-hidden by accessing the **Show/Hide** dialog.

> **Note:** You cannot range and hide the same hierarchy or you will get a warning message.

7. Click **Next**. At this time, you will be placed in the wizard for the workbook template that was selected in step 4. Follow the instructions on each wizard screen, and make selections as necessary.

8. The measure on which the loaded alert is based will be the first measure displayed in the newly-built workbook. Checkmarks identify the positions associated with a recognized alert.

Navigating Alerts

You can use the **Find Next Alert** and **Find Previous Alert** options in the **View** menu to navigate through the alert occurrences of the active alert measure. You can also use **F10** to find the previous alert and **F11** to find the next alert.

When using the **Find Next Alert** and **Find Previous Alert** options, only the alert occurrences of the active alert measure are found. For instance, let's say there are two alert measures in a workbook: Alert A and Alert B. When you use **Find Next Alert** to navigate through Alert A, once you reach the last alerted cell of Alert A and click **Find Next Alert** again, it returns to the first alerted cell of the Alert A measure. It does not continue to the first alerted cell of the Alert B measure.

Alert occurrences are navigated in the order that they appear in the active alert measure. This order may not correspond to the order that the cells are displayed in the worksheet. Pivoting the hierarchies in the grid view changes the order that the cells are displayed, but it does not affect the order in which the alert occurrences are navigated using **Find Next Alert** or **Find Previous Alert**.

In addition, you can search for alert occurrences in only certain columns or rows. To do this, select the columns or rows you want to search though and then use the **Find Next Alert** and **Find Previous Alert** options. Only the alert occurrences within the selected columns or rows are found.

Insert an Alert into an Open Workbook

You can access the Alert Manager window to insert an alert measure into a workbook that is already open. In order to view alert information, this functionality allows you to address alert-related issues without requiring you to build a new workbook. You can view multiple alert measures simultaneously in the same workbook.

Whenever you insert an alert measure into an open workbook, the measure automatically becomes the active alert measure. The active alert measure for a workbook is the one that is referenced by the system when you choose menu options, such as **Find Next Alert** and **Find Previous Alert**. **Find Next Alert** and **Find Previous Alert** will find the next or previous position in the worksheet within the active alert measure for which the alert condition is true. The **Range By Alerts** menu option allows you to hide all positions in a given hierarchy for which an alert condition was not triggered. This is evaluated with respect to the active alert measure.

When you insert an alert measure into an open workbook, no check is made to determine whether all the positions that triggered the new alert condition are currently present in the open workbook. For example, if you chose to range hierarchies during the initial workbook build, which excludes non-alert-related positions for the original alert measure, some of the positions identified by the newly inserted alert might not be present in the open workbook. If this is the case, you will be required to build a new workbook in order to display the excluded positions.

Perform the following steps to insert a new alert measure into an open workbook:

Navigate: From the **View** menu, select **Alert Manager** to display the Alert Manager window.

1. Click the alert that you want to insert into the open workbook.
2. Click **Insert Alert**.

Change the Active Alert Measure in a Worksheet

When multiple alert measures exist in a worksheet, one of the measures must be treated as the active alert measure. When you perform menu functions, such as **Find Next Alert**, **Find Previous Alert**, and **Range By Alerts**, the currently active alert measure is the one that the system references and uses to conduct these tasks.

For example, the **Find Next Alert** function finds the next alert occurrence within the active alert measure (the next position where an alert has been triggered). To search for alert occurrences corresponding to a different alert measure, you must designate this measure as the active alert measure for the worksheet.

To change the active alert measure, perform the following steps:

Navigate: From the **View** menu, select **Change Alert Measure**.

1. Click on the measure you want to be the active alert measure.
2. Click **OK**.

The measure that you selected is now the worksheet's active alert measure. Whenever you select the menu options **Find Next Alert** or **Find Previous Alert**, the system searches for the next/previous alert occurrence within your chosen alert measure. If you choose to **Range By Alerts**, the system evaluates your chosen active alert measure and hides all positions in a particular hierarchy that do not represent alert hits.

Resolve an Alert

After taking the appropriate actions regarding identified alerts, you can use the Alert Manager window to keep track of alerts that have been resolved. Change the status of a listed alert from New to Resolved, which indicates that appropriate actions have been taken to address the alert condition.

To indicate that an alert was resolved:

1. On the Alert Manager window, click on the alert that was addressed.
2. Click **Resolve Alert**. The Resolved status of the alert changes to Resolved.

> **Note:** You can reverse this action and return the alert's Resolved status to New by selecting an alert that has already been resolved and clicking the **Unresolve Alert** button.

Open an Alert Workbook

You can use the Alert Manager window to open an alert workbook that was already created.

1. On the Alert Manager window, click the **Alert Workbooks** tab.
2. Select the alert workbook that you want to open.
3. Click the **Open Workbook** button. The selected workbook is opened.

Resolve an Alert Workbook

You can use the Alert Manager to keep track of alert workbooks that have been resolved. From the Alert Workbooks tab, you can change the status of a listed alert workbook from New to Resolved, which indicates that appropriate actions have been taken to address the alert condition.

Navigate: From the **View** menu, select **Alert Manager**.

1. On the Alert Manager window, click the **Alert Workbooks** tab.

2. Select the alert workbook that you want to resolve.
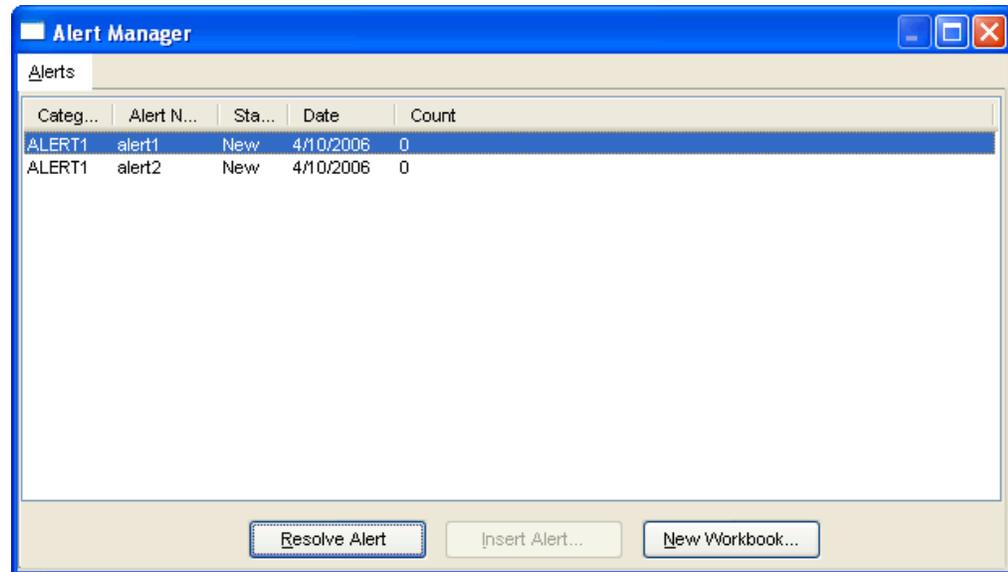
Select alert workbook

3. Click **Resolve Alert**. The status of the alert changes to Resolved.

> **Note:** You can reverse this action and return the alert workbook's Resolved status to Reviewed by selecting an already resolved alert workbook and clicking the **Unresolve Alert** button.

Alert Manager Fields

Alerts are displayed as a list in the Alert window. For each alert, the following attributes are listed:

- **Category:** The category to which the alert belongs.
- **Alert Name:** The name of the identified alert.
- **Priority:** The priority of the alert (High, Medium, or Low).
- **Status:** Specifies whether the alert is resolved or unresolved. After you select an alert from the list, you can change the status of the alert by clicking the **Resolve Alert** or **Unresolve Alert** button.
- **Date:** The date when the Alert was identified.
- **Count:** The number of values that had this alert.
- **Workbook:** The name of the workbook that contains the alert. This field is only shown on the Alert Workbooks tab.

Alert Manager Buttons

The Alert Manager window displays the following buttons:

- **Resolve Alert:** Moves a new alert to the Resolved state, which identifies that you have addressed the alert.
- **Unresolve Alert:** Moves a resolved alert to the New state, which indicates that you must readdress the alert.
- **Insert Alert:** Allows you to insert the selected alert into the open workbook. See Insert an Alert into an Open Workbook for more information.
- **New Workbook:** Allows you to create a new workbook that includes the alert you selected. Clicking the **New Workbook** button places you in a wizard that will prompt you for necessary details regarding the workbook. See Load an alert into a new workbook for more information.
- **Open Workbook:** Allows you to open an alert workbook that was previously created. This button is only available on the Alert Workbooks tab.

Percent-of-Parent Measures

A percent-of-parent measure allows you to define, view, and edit a measure as a proportion or percentage of another measure for a parent that is up one or more hierarchies. These measure relationships are also referred to as participation measures. These measures can be viewed and edited, and they can be pre-configured in the RPAS Configuration Tools or defined in the RPAS client in a worksheet.

Typical uses of this functionality are to define measures that are percentage participations of sales measures. Typically, these are:

- Fixed level (such as class) so the participation of each item to the class can be viewed and manipulated
- To the next level up in the product hierarchy

The following sections describe the percent-of-parent feature and how to create these measures in the RPAS client. The following examples will use the sample product hierarchy structure:

```
SKU ── style ── subclass ── class ── company ── all
```
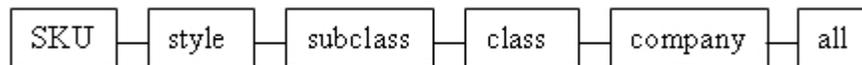
Sample Product Hierarchy Structure

> **Note:** For percent-of-parent contributions in instances when very small values (with a precision of six, such as 0.000001) are being stored in the cell. Small values are considered to be 0.0 when determining the percent-of-parent contribution.
>
> **Note:** Percent-of-parent measures can be defined only on measures that have Total as their default aggregate method.

Definition and Usage

Perform the following procedure to define a percent-to-parent measure.

1. Right-click the measure axis and select **Create Percent of Parent Measure** in the quick menu. The **Create Percent of Parent** dialog appears.
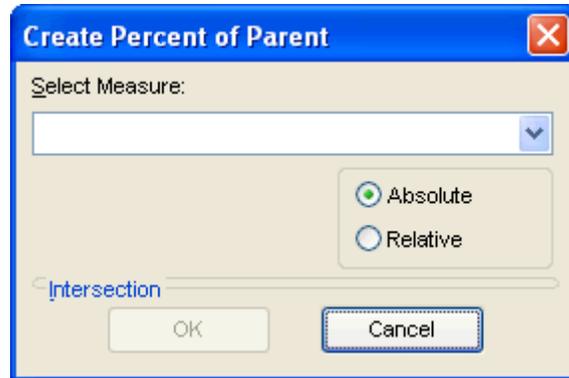
Create Percent of Parent

2. Select the measure where a percent-of-parent measure is desired. The drop-down list contains all measures defined for the active worksheet.

3. Select the desired percent-of-parent measure type. The dialog box is context sensitive and the available parameters will change based on the type that is selected. The following sections contain detailed information about the different types and how they are defined.

4. Once the type and the required parameters are assigned, click **OK**. The new measure appears in the worksheet.

> **Notes:** When changing the percentage of the percent-of-parent measure, values of the underlying measure will change to reflect the newly set percentage.
>
> Multiple percent-of-parent measures can be defined for the same underlying measure; however, only one percent-of-parent measure or the underlying measure can be edited before calculation. All other versions will be protected.
>
> The use of smart edit is not allowed in the percent-of-parent measure.
>
> The value of a percent-of-parent measure is a fraction that will be between zero and one. If desired, you must format the measure to be displayed as a percentage.

Absolute

The absolute type of percent-of-parent measures allows you to explicitly define the parent level(s) that are used to calculate the percentage at all child levels.

If you set the absolute parent level to the class dimension in the product hierarchy, the percent-of-parent measure will show:

- The SKU as a percent of the class at the SKU level
- The style as a percent of the class at the style level
- The subclass as a percent of the class at the subclass level

This is using the previously defined sample hierarchy structure.

After you select the measure from the Select Measure list and select the **Absolute** option in the **Create Percent of Parent Measure** dialog box, you will see an Intersection area. This area contains drop-down lists for all hierarchies. Within these lists, the measure is dimensioned with each drop-down list, which contains the dimensions that are available for that hierarchy.

1. Select the dimension/level for each hierarchy that is to be explicitly set.
2. Click **OK**. A new percent-of-parent measure appears in the worksheet. For absolute relationships, cells at or above the dimension/level will be hashed out.

Relative

The relative percent-of-parent measure type calculates the value for a given level, which is the percentage of that level and its immediate parent (meaning one level higher). This type can only be set for a single hierarchy.

Using the previously defined sample hierarchy structure, the percentages displayed are as follows:

- SKU level – The SKU as a percent of the style.
- style level – The style as a percent of the subclass.
- subclass level – The subclass as a percent of the class.

After you select the measure from the Select Measure list and select the **Relative** option in the **Create Percent of Parent Measure** dialog box, you will see a Hierarchy drop-down list. This drop-down list contains the hierarchies on which the measure is dimensioned.

1. Select the hierarchy that will be used to calculate the percentage. Only a single hierarchy is possible with the relative percent-of-parent measure type.
2. Click **OK**. The new percent-of-parent measure appears in the worksheet.

Certain dimensions will have multiple parents if there are multiple branching hierarchies. For relative percent-of-parent measures, the calculation of the percentage is always based on the active roll-up in the current window.

The calculated value is based on the actual next level up in the hierarchy, which is based on the hierarchy structure (not necessarily the one that is displayed). In the previous examples, imagine that SKU-subclass-class is displayed in the client, but the underlying structure is SKU-style-subclass-class. When viewing the value at SKU, the percentage is based on style (not the subclass even though style is not displayed). Cells at the top of the hierarchy are hashed out because those values cannot be calculated.

A

Appendix: Using RPAS Menus and Toolbars

Using RPAS Menus and Toolbars

Application Main Menu Bar

The menu bar and the items contained in each menu are context-sensitive, and they change according to what you are working on and how you are working. Menu items that are grayed out are not available to you in your current work mode.

When no workbooks are open, the menu bar displays the following options:

File   View   Format   Help

When a workbook is open, the menu bar displays the following options:

File   Edit   View   Format   Window   Help

Menu Shortcuts

You can also access menus by pressing the Alt key followed by the underlined letter for the menu item. For example, **Alt+F** accesses the **File** menu. Some menu items have shortcut key combinations, which have the key combination displayed next to the menu item name. For example, **Ctrl+N** accesses the **New** file dialog box. In addition to key combinations, some menu items can be directly accessed from toolbar buttons.

File Menu

The **File** menu contains the following options:

File – Change Password

See File - Change Password.

File – New

See File - New.

File – Open

See File - Open.

File – Save

Select **File – Save** to store all of the information in the workbook, which includes the current layout of the worksheets and charts. If the workbook you are working on has been saved, selecting this menu item will update the stored information. If the workbook has not been saved, selection of this menu item will open the **Save As** dialog box, which prompts you for a workbook name. The **Save** menu item is only enabled when a workbook has been created or opened.

Saving a workbook does not commit it to the master database. You must select **Commit Now** or **Commit Later** from the **File** menu to commit your changes to the master.

File – Save As

The **Save As** menu option opens a dialog box where you can specify the name of the workbook to be saved.

You can also specify the nature of access privileges associated with the workbook. The default access privilege is the creator of the workbook alone, but you can also grant group access privileges or world access privileges. The **Save As** menu option is only enabled when a workbook is open.

Type a name for the workbook in the Workbooks text field of the **Save As** dialog.

Use the following **Save Access As** radio buttons to specify access privileges for this workbook:

- **User** – only you can access and make changes to the workbook.
- **Group** – only those users who are in your group (as determined by your System Administrator) can edit the workbook.
- **World** – any user can update the workbook.

All of the workbooks that were previously saved are listed when the **Save As** dialog box is displayed. When viewing the list of previously saved workbooks, click on any column header to sort the workbooks by that attribute. For example, click the Owner header to sort the workbooks alphabetically by owner.

If you select the **List all workbooks** check box, all workbooks in the system (including those to which you do not have write access) will be displayed. Keep in mind that listing those additional workbooks does not give you write access to them.

Click **OK** to save the workbook, or click **Cancel** to return to the workbook without saving.

File – Close

The **Close** menu option is only available when a workbook is open. If the workbook was previously saved and no new changes have been made, selecting Close will close the workbook.

If the current workbook has not been saved, or if changes were made since the last save, selecting this item will display the **Close** dialog box with the following choices:

- **Save** – If the workbook was previously saved, selecting Save will save the workbook with the current name and then close it. If the workbook was not previously saved, Save will display the **Save As** dialog box where you specify the name of the workbook before closing it.
- **Commit Now** – This commits the changes to the master database and closes the workbook. If it is not necessary to immediately commit the workbook to the master database, use the Commit Later option.
- **Commit Later** – This places the workbook name in a list of workbooks that will be committed to the master database at a later time during a batch process. Whenever possible, use Commit Later instead of Commit Now to maximize productivity.
- **Save and Commit Now** – This performs both of the functions described above. If the workbook was previously saved, the system:
  - Saves the workbook under its current name
  - Commits the new changes to the master database
  - Closes the workbook

If the workbook was not previously saved, the **Save As** dialog box is displayed, and it will prompt you for a workbook name. The workbook is saved under this name, the changes are committed to the master database, and the workbook is closed.

- **Save and Commit Later** – This performs both of the functions described above. If the workbook was previously saved, the system saves the workbook under its current name. It then places that name on a list of workbooks to be committed in a batch process at a later time, and it closes the workbook. If the workbook was not previously saved, the **Save As** dialog box is displayed, and it prompts you for a workbook name. The workbook is saved under this name, the **Commit Later** function is executed, and the workbook is closed.
- **Ignore Changes** – This closes the workbook without saving or committing any changes.
- **Cancel** – This returns you to the open workbook.

File – Delete

See File - Delete.

File – Exit

See File - Exit.

File – Logoff

See File - Logoff.

File – Commit Status

See File - Commit Status.

File – Commit ASAP

See File - Commit Status.

File – Export Sheet

The **Export Sheet** menu option exports the current view for the worksheet to an output file on the client machine.

Selection of this item displays a **Save As** dialog box where you can specify:

- The output file name
- The directory where the file will be saved
- Other customizable options

In the **Save As** dialog, use the Save In list to select the directory where you want the file to be exported. When the appropriate directory is selected, enter an output file name in the File Name field, or select one from the list of those displayed. If you do not enter or select an output file name, a file extension is automatically attached to the name you select.

The Save As Type list allows you to select the format of the output file that you create. When you type in the file name you want at the top of the dialog box, the appropriate file extension is attached to that name as determined by your selection in the Save As list. Typical Save As file types are:

- .TXT – Text file
- .DIF – Data interchange format

The Delimiter option allows you to specify the character that is used to separate information in the output file. Standard choices for this character are Tab, Comma, or Space, but you can specify any character you want by selecting the **Other** radio button. This option is available only for text file exports.

The Labels option specifies the format of the label headers across the top of every cell in the output file. The choices for the Labels option include:

- **Do Not Include** – Labels are not provided at the top of data cells.
- **Include Once** – Only one label is placed across the top of each section of cells.
- **Repeat: Labels** – Repeated as necessary across the top of every data cell.

The Description option allows you to determine whether labels or names are used when specifying certain positions in your exported file. For example, the position name for a store in the RDF system might be STR_4540 and the label for that position name might be 52-4540 GA/Atlanta. The names are more concise, but the full labels are more descriptive and informative. The choices for the Description option are:

- **Labels** – Uses the full, descriptive label assigned to a position.
- **Names** – Uses the concise, actual position name in the system.

When you have named your output file and made the appropriate selections, click **OK** to export the file, or click **Cancel** to return to the workbook without exporting.

File – MRU (Most Recently Used) List

The MRU (Most Recently Used) list is located directly beneath the **Exit** option on the **File** menu. The MRU list is a list of the four most recently opened workbooks. When a workbook is displayed on the MRU list, it can be quickly accessed by selecting that workbook directly from the **File** menu.

If you open a workbook that already exists, and you save it under a new name by selecting **Save As** from the **File** menu, the old and the new workbook names will appear on the MRU list.

File – Page Setup

The **Page Setup** dialog box contains options for the format of the print output of a document. This option always overrides the settings that were established in the Windows **Print Setup** dialog box, and the settings only apply to the current document (worksheet or chart).

There are five options available in this dialog box, which are presented in a tab format:

- **Page** – Allows you to specify the page orientation (portrait vs. landscape) and customize (scale) the size of the printed output.
- **Margins** – Allows you to specify and preview the page margins (expressed in inches).
- **Header/Footer** – Allows you to customize the header and footer information that appears on the pages of your output. You may select information to be displayed on the left, center, and right portions of your header and footer.
- **Sheet** – Allows you to select how you want row and column label information displayed, and specify the appearance of horizontal and vertical grid lines. This tab also allows you to set the order of page numbering (left to right, top to bottom).
- **Page Breaks** – Allows you to specify the placement of page breaks for printed output.

When you have made your selections, click **OK** to apply the changes to the page setup. Click **Cancel** to return to the worksheet without making changes to the page setup. The **Apply** button is only functional when Page Setup is used in conjunction with the Print Preview screen. Click the **Apply** button to view your selections in Print Preview mode without closing the **Page Setup** dialog.

File – Print

The **Print** menu option displays the **Print** dialog box where you select printing options such as printer, print range, and number of copies.

- **Printer** – Click the drop-down list in this dialog section to specify the path and name of the printer that you want to use.

- **Print Range** – Click the appropriate radio button to designate the range for the printed output.

- **All** – Prints every page in the workbook. The ordering of page numbers (top to bottom or left to right) can be specified on the Sheet tab of the **Page Setup** dialog.

- **Pages** – Allows you to specify a subset of pages to be printed. In the fields provided, enter the numbers of the first and last pages in the range to be printed.

> **Usability Tip:** Use the **Print Preview** option on the **File** menu to determine the page numbers of the information you want to print. It may be helpful to use the custom header/footer feature in Page Setup to insert page number field marker codes in your document.

- **Slice** – Allows you to specify a range of complete slices to be printed. The slice axis runs perpendicular to the plane of the computer screen. A separate slice exists for each element of the dimension represented by the hierarchy tile that resides in the slice display area. In the boxes provided, enter the numbers of the first and last slice in the range to be printed.

- **Copies** – Enter the number of copies to be printed, or use the spin buttons to increment the copy total.

File – Print Multiple

The **Print Multiple** menu option produces a dialog that allows you to select multiple worksheets to submit to the print queue.

Use **Crtl+Click** to select multiple worksheets from the list.

Select the **Display print dialog before each window** option to have the **Print Options** dialog displayed individually before each worksheet is printed.

Click **OK** to submit your selections to the print queue. The standard **Print Options** dialog is presented to allow you to make print option selections. Selections made on this dialog will apply to all printed worksheets if the **Display print dialog before each window** is not selected. If the box was checked, this dialog will reappear before each worksheet is printed.

File – Print Preview

The Print Preview option displays a standard print preview window, so you can view the output before printing.

- Click the **Previous Page** or **Next Page** button to page backward and forward through the document. This can also be done by using the standard vertical scroll bar.

- Click the **Zoom In** or **Zoom Out** button to change the magnification of your document.

- Click the **Page Setup** button to access the **Page Setup** dialog. Here you can modify document features such as page orientation, scaling, margins, headers/footers, page numbering scheme, and page breaks.

▪ Click the **Close** button to close the **Print Preview** dialog and return to the main document view.

File – Refresh

The selective/partial Refresh feature allows you to refresh a portion of your workbook measures with original domain data while leaving other measures unchanged.

Edit Menu

The **Edit** menu contains the following options:

Edit – Cut

The **Cut** menu option copies selected worksheet data to an application clipboard and clears the data from the worksheet cells. Select the data cells whose contents are to be cut, and then select **Cut** from the **Edit** menu. Only data from writable measures can be cut.

When you use the **Edit – Cut** option to cut data, the function performs the cut at the current hierarchical level. Data can be cut from only one dimensional level at a time, so if multiple dimensions are represented in your grid selections, the cut is performed at the lowest dimensional level actually selected.

If data cells are selected in the grid before you invoke the **Edit – Cut** option, only data from those selected cells will be cut. Note that the Cut operation treats the currently displayed position on the slice axis as the only selected slice position.

> **Note:** The **Cut** command does not copy information to your Windows clipboard. The data is copied to an application-specific clipboard and cannot be pasted into other programs. If you intend to paste the data into another application, you can choose the **Edit – Copy to Clipboard** command.

Edit – Cut Special

The **Cut Special** option copies selected worksheet data to an application clipboard and clears the data from the copied cells. Unlike the **Edit – Cut** operation, the **Cut Special** command provides a dialog where you can specify options for specialized cut functions, including cutting data at base level and cutting data from all worksheet slices. Select the data cells whose contents are to be cut, and then select **Cut Special** from the **Edit** menu. Only data from writable measures can be cut.
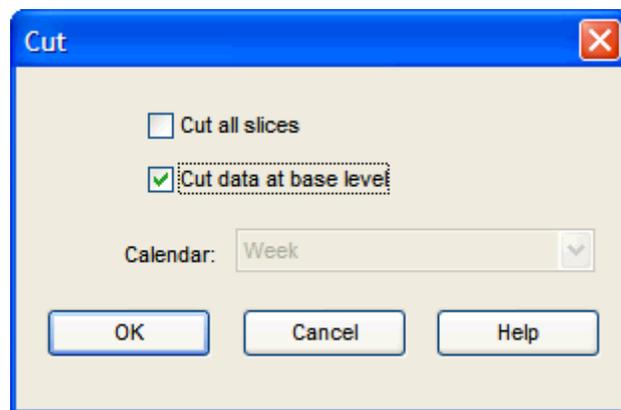

Cut Special Dialog

> **Note:** The **Cut** command does not copy information to your Windows clipboard. The data is copied to an application-specific clipboard, and it cannot be pasted into other programs. If you intend to paste the data into another application, you can choose the **Edit – Copy to Clipboard** command.

Cut Data at Base Level

The **Cut Data at Base** Level option allows you to cut data at an applicable dimensional level beneath the level selected in the grid. This feature allows you to view data at an aggregate level while cutting data at a dimensional level that is not currently displayed. When you select the **Cut Special** function at an aggregate level and you select the **Cut Data at Base Level** check box, all base level data applicable to that selected aggregate data will be cut and copied to the application clipboard. Although the cut function is actually performed at the base dimensional level, it seems that the aggregate level data has been cut (due to the process of data rollup).

Cut All Slices

When you make cell selections prior to cutting data, the system only allows for the selection of the currently displayed position along the slice axis. The **Cut Special** dialog, however, contains a check box that allows you to specify that data should be cut for all positions (pages) in this axis. When the box is checked, the cut operation behaves as if all positions in the slice dimensions were selected prior to the cut. If the box is left unchecked, only data from the currently displayed slice position will be cut.

Cutting Data While in Outline View

Outline View allows you to view data for multiple dimensional levels simultaneously in the same worksheet. The system, however, allows the cutting of data from only one dimensional level at a time. Whenever multiple dimensions are displayed in outline view for a given hierarchy, the **Cut Special** dialog requires you to select the dimensional level at which you want to cut data. The **Cut Special** dialog has drop-down lists that are enabled for each hierarchy displayed in outline mode.

Edit – Copy

The **Copy** menu option copies selected worksheet data to an application clipboard.

Edit – Copy is typically used with the **Edit – Paste** command to speed the process of populating data cells in a worksheet. Select the data cells whose contents are to be copied, and then select **Copy** from the **Edit** menu.

When you use the **Edit – Copy** option to copy data, the function performs the copy at the current hierarchical level. Data can only be copied from one dimensional level at a time, so if multiple dimensions are represented in your grid selections, the copy is performed at the lowest dimensional level actually selected. Unlike the **Cut** function, **Copy** does not clear the data from the copied cells.

If data cells are selected in the grid before you invoke the **Edit – Copy** command, only data from those selected cells will be copied. Note that the Copy operation treats the currently displayed position on the slice axis as the only selected slice position.

If there are no data cells selected in the grid at the time the **Copy** function is invoked, the system will copy the data for every cell in the worksheet.

> **Note:** The **Copy** option does not copy information to your Windows clipboard. The data is copied to an application-specific clipboard, and it cannot be pasted into other programs. If you intend to paste the data into another application, you can choose the **Edit – Copy to Clipboard** command.

Copy to Clipboard

The **Copy to Clipboard** menu options copies selected data to a general application clipboard that allows the user to then paste that data into a different application.

When you use the **Edit – Copy to Clipboard** option to copy data, you will be prompted to either calculate any deferred calculations or discard all changes (not just the ones in the grid selection).

Edit – Copy Special

The **Copy Special** menu option copies selected worksheet data to an application clipboard.

Unlike the **Edit – Copy** operation, the **Copy Special** command provides a dialog where you can specify options for specialized copy functions. This includes copying data at base level and copying data from all worksheet slices. Select the data cells whose contents are to be copied, and then select **Copy Special** from the **Edit** menu.

Copy Special Dialog

> **Note:** The **Copy Special** command does not copy information to your Windows clipboard. The data is copied to an application-specific clipboard and cannot be pasted into other programs. If you intend to paste the data into another application, you can choose the **Edit – Copy to Clipboard** command.
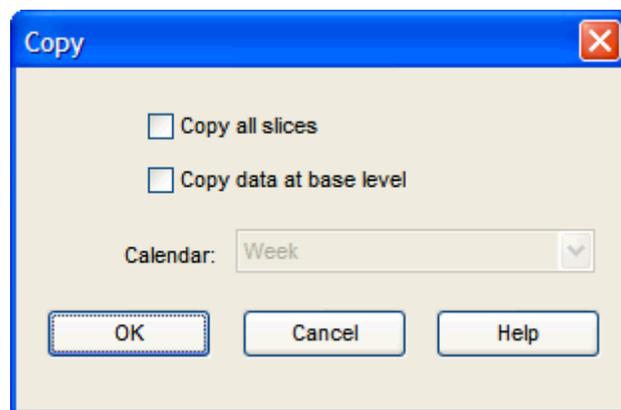
Copy Data at Base Level

The **Copy Data at Base Level** check box allows you to copy data at an applicable dimensional level beneath the level selected in the grid. This feature allows you to view data at an aggregate level while copying data at a dimensional level not currently displayed. When you select the **Copy Special** function at an aggregate level and you select the **Copy Data at Base Level** check box, all base level data applicable to that selected aggregate data will be copied to the application clipboard. Although the copy function is actually performed at the base dimensional level, after pasting, it seems that the aggregate level data has been copied (due to the process of data rollup).

Copy All Slices

When you make cell selections prior to copying data, the system only allows for the selection of the currently displayed position along the slice axis. The **Copy Special** dialog contains a check box that allows you to specify that data should be copied for all positions (pages) in this axis. When the box is checked, the copy operation behaves as if all positions in the slice dimensions were selected prior to the copy. If the box is left unchecked, only data from the currently displayed slice position will be copied.

Copying Data While in Outline View

Outline View allows you to simultaneously view data for multiple dimensional levels in the same worksheet, but the system only allows the copying of data from one dimensional level at a time. Whenever multiple dimensions are displayed in outline view for a given hierarchy, the **Copy Special** dialog requires you to select the dimensional level from where you want to copy data. The **Copy Special** dialog has drop-down lists that are enabled for each hierarchy that is displayed in outline mode.

Edit – Paste

The **Paste** menu option pastes data into measures.

This menu option is only enabled after you have placed data on the application clipboard using the **Cut**, **Cut Special**, **Copy**, or **Copy Special** command from the **Edit** menu. The **Paste** option pastes the data was last placed on the system clipboard into the selected cells.

Select the data cells that you want to paste data into, and then select **Paste** from the **Edit** menu. Data can only be pasted into writable measures.

> **Note:** The **Paste** command does not paste data from your Windows clipboard. This command only pastes data from an application-specific clipboard and cannot be used to import data from another application. If you want to paste copied data from another program, you must choose the **Edit – Paste from Clipboard** command.

Pasting Data from Multiple Measures

If you used the Cut, Cut Special, Copy, or Copy Special command to cut or copy data for multiple measures, note that your selection can only be pasted into the exact same measures for a new position.

The following illustration is some sample data for SKU1 that is to be copied to the Regular Sales and Clearance Sales measures of SKU2.

Sample Data

If Regular Sales and Clearance Sales for SKU1 are copied together, this data can only be pasted to the Regular Sales and Clearance Sales measures of another position. To copy the data from Regular Sales into a different measure, you must copy Regular Sales alone. These are the results after the multiple measure copy.

Multiple Measure Copy

Performing Specialized Paste Functions

The Paste command is the simplest method of pasting clipboard data into your worksheet. There are also some specialized paste functions that you can perform by accessing the appropriate dialog from the **Edit – Paste Special** option, rather than **Edit – Paste**:

- You can paste data at a lower level of aggregation that are not currently displayed in the grid.
- You can paste data into all worksheet slices simultaneously.
- You can choose to exclude NA values when pasting data.
- When pasting data at an aggregate level, you can specify the method by which values should be spread down to lower level constituent cells, and/or you can choose a spread pattern measure.

Edit – Paste Special

Paste Data into Measures

The **Paste Special** menu option is only enabled after you have placed data on the application clipboard using the **Cut**, **Cut Special**, **Copy**, or **Copy Special** options from the **Edit** menu. Unlike the **Edit – Paste** operation, the Paste Special command provides a dialog for you to use to specify options for specialized paste functions. This includes:

- Pasting data at base level
- Pasting to all worksheet slices
- Specifying spread methods for pasted data.

Select the data cells that you want to paste the data into, and then select **Paste** from the **Edit** menu. The **Paste** dialog box appears. Data can only be pasted into writable measures.

Paste All Slices

When you make cell selections prior to pasting data, note that the system only allows for the selection of the currently displayed position along the slice axis. However, the **Paste Special** dialog contains an option that allows you to specify that data should be pasted into all positions (pages) in this axis.
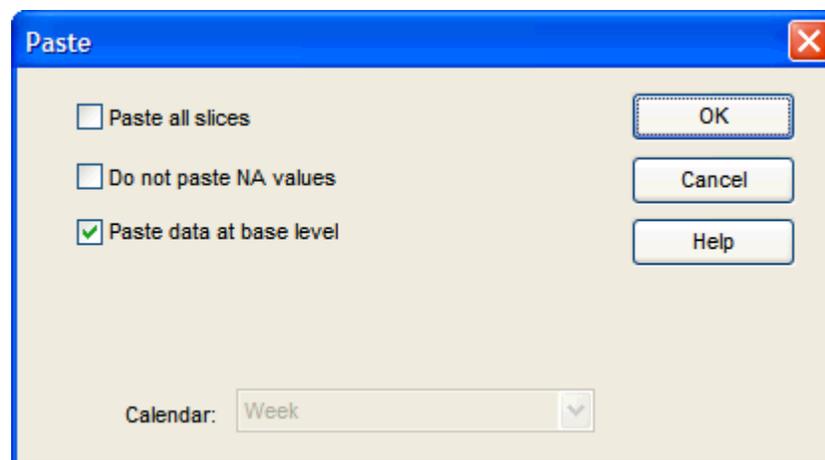
Paste Special Dialog Box

When the option is select, the paste operation behaves as if all positions in the slice dimensions were selected prior to the paste. If the box is left unchecked, data will only be pasted into the currently displayed slice position.

> **Note:** If you did not choose to cut or copy data from all slices prior to this paste, and then you choose to paste the clipboard data to all slices, the data that was cut or copied from the single visible slice will be replicated to all slices in the worksheet.

Don't Paste NA Values

If the **Don't Paste NA Values** option is selected, the system will not paste cut or copied NA data values into the current selection. Whenever the system encounters an NA value in the clipboard data, that value is ignored and the data cell being pasted keeps its

original value. In other words, when this option is selected, current grid data is not overwritten by NA values.

Paste Data at Base Level

The **Paste Data At Base Level** check box allows you to paste data at an applicable dimensional level beneath the one selected in the grid. This feature allows you to view data at an aggregate level while pasting data at a dimensional level that is not currently displayed. When you select the Paste function at an aggregate level and you select the Paste Data At Base Level check box, all base level data applicable to that selected aggregate data will be pasted into the selected data cells.

> **Note:** Whenever data has just been cut or copied at a base level, the Paste Data At Base Level check box defaults to Selected.

Specifying Spread Method for Pasted Data

The bottom portion of the **Paste** dialog is enabled when you are pasting data at a level other than base. The options in this section control how data pasted into an aggregate level is spread down to lower dimensional levels. If the **Paste Data at Base Level** option is selected, this portion of the dialog becomes disabled.

The **Spread Method** radio buttons allow you to specify the way that aggregate cell data is to be spread to lower dimensions:

- **Replicate** – Any value pasted in an aggregate level cell will be replicated exactly to every base level cell that comprises the aggregate total.

> **Note:** After the spread, this method results in a recalculation of the aggregate cell totals.

- **Even** – Any value pasted into an aggregate level cell will be spread evenly among that cell's lower level constituents.
- **Proportional** – Any value pasted in an aggregate level cell will be spread proportionally among all lower level constituent cells. This is based on these cells' contents before the paste.
- **Delta** – The difference between the value pasted in the aggregated cell level and the original value of the aggregate cell level will be spread evenly among all lower-level constituent cells.

When the **Don't Spread to NA Values** option is selected, pasted aggregate data is not spread to lower level cells that contain NA values before the paste. The NA values are left intact, and the aggregate data is spread to the remaining lower level cells that comprise the aggregate total.

Pasting Data While in Outline View

Outline View allows you to simultaneously view data for multiple dimensional levels in the same worksheet, but the system only allows the pasting of data into one dimensional level at a time. Whenever multiple dimensions are displayed in outline view for a given hierarchy, the **Paste Special** dialog requires you to select the dimensional level at which you want to paste data. The **Paste Special** dialog has drop-down lists that are enabled for each hierarchy displayed in outline mode.

Pasting from One Position to Many Positions

Multi-cell cut and copy regions that contain a single position in a dimension can be pasted into a larger region that contains more positions along that same dimension. In such cases, the entire cut and copy region is replicated across the additional positions in the paste region. For example, it is possible to copy data from a single store but for multiple weeks, and then paste that data into multiple stores. The copy region would simply be replicated for each new store in the paste selection.

The following figures provide an example of the one-to-many paste functionality. Data from four weeks at a single store position is copied (the copy region is shaded in the first figure), and this data is pasted to the other four locations.

Single Store Positions

Multiple Locations

Edit – Paste from Clipboard

The Paste from Clipboard option pastes data from the Windows clipboard into selected worksheet cells.

Use this paste operation if you want to paste data from another application into the current worksheet. Select the data cells where you want to paste clipboard data, and then select **Paste from Clipboard** from the **Edit** menu.

> **Note:** When using this command, you can only paste a maximum of 10,000 cells at a time. Any attempt to paste more than that results in failure of the operation. This operation should not be used to import data for entire workbooks.

Supported Copy and Paste Operations

The following tables identify the supported copy and paste operations based on the UI Type for the measure being copied and the measure being pasted.

- When copying and pasting from server, you can copy the following source measures to the following destination measures. All other attempts to copy or paste are incompatible.

Source Measure Type	Destination Measure Type	Notes
Boolean	Boolean	None
Date	Date	None
Integer	Integer	None
Picklist	Picklist	Copy/Paste succeeds if the drop-down contents of the source and destination cells are identical.
Real	Real	None
Single Hier	Single Hier	Copy/Paste succeeds if the source and destination dimensions are identical.
Single Hier	String	The Position Name is copied to destination.
String	String	None

- When copying from a cell to the clipboard, RPAS copies the string representation of the cells to the clipboard so that they can be pasted into either other cells in the grid or to non-RPAS applications. The following table explains what would be copied to the grid based on the type of cell being copied from.

Cell Type Being Copied From	Copy/Paste Behavior
Boolean	If the value is true, "1" is copied; otherwise "0" is copied.
Date	The formatted date is pasted in the cell.
Integer	The formatted number is pasted in the cell.
Picklist	The value is pasted in the cell.
Real	The formatted number is pasted in the cell.
Single Hier	The value is pasted in the cell.
String	The value is pasted in the cell.

- When pasting from the clipboard to cells, RPAS treats the copied data as Strings and tries to convert the string values to the values of the destination cell. RPAS does this irrespective of whether the values on the clipboard have come from RPAS versus a different application. The following table explains what RPAS will paste into the cells based on the value of the string being copied.

Cell Type Being Pasted To	Copy/Paste Behavior
Boolean	If the value of the string is "0", then FALSE, otherwise TRUE.
Date	If the value of the string is a properly formatted date in the same format as shown in the RPAS UI, and the given date is a valid date, the value will be pasted otherwise error would be flagged.
Integer	It the value of the string is a number, then the number is truncated to the integer value and pasted. If the string is not a number, an error is flagged. If the cell has been formatted to embellish the numeric value with non-numeric characters such as currency symbols, then a string value that has exactly the same formatting can also be pasted to the cell.
Picklist	This type of cell cannot be pasted into.
Real	If the value of the string is a number, then the value will be pasted. If the value is not a number, an error is flagged. If the cell has been formatted to embellish the numeric value with non-numeric characters such as currency symbols, then a string value that has exactly the same formatting can also be pasted to the cell.
Single Hier	This type of cell cannot be pasted into.
String	The string value will be pasted.

Edit – Revert

The **Revert** menu option reverts to the most recently saved version of the workbook.

This option allows you to return to a prior state without having to close the workbook, select **Ignore Changes** from the **Close** dialog box, and reopen the workbook.

The **Revert** option is only enabled if the current workbook has already been saved under a specified name, and if changes have been made to the data since the last save.

When you select **Revert** from the **Edit** menu, the **Revert** dialog box opens to inform you that all changes made since the last save will be lost.

Click **OK** to abandon the current workbook and return to the most recently saved version, or click **Cancel** to keep the changes you have made and return to the current workbook.

Edit – Fill

The **Fill** menu option quickly populates the cells in a worksheet.

This command fills only one measure at a time.

If there are no data cells selected in the grid at the time the **Fill** dialog box is opened, the system will fill the data cells for the entire measure that you select in the **Measure** drop-down list. If certain data cells were selected in the grid, only those selected data cells will be filled.

Select the measure to be filled from the **Measure** drop-down list. This field only displays writable measures. The properties of the **Fill Value** field change depending on your selection in the **Measure** drop-down list. If the selected measure contains values restricted to a list, the **Fill Value** field will change to a drop-down list in which you can select the appropriate value. If the measure selected is numeric or alphanumeric, the **Fill Value** field allows you to enter the value that you want entered in the effected cells.

Specifying Spread Method for Filled Data

The lower portion of the **Fill** dialog is enabled when you are filling data into worksheet cells at an aggregate level. This section allows you to specify the method by which aggregate data is to be spread to lower level constituent cells.

The **Spread Method** radio buttons allow you to specify the way that aggregate cell data is to be spread to lower dimensions. The options are:

- **Replicate** – Any value filled into an aggregate level cell will be replicated exactly to every base level cell that comprises the aggregate total.

    > **Note:** After the spread, this method results in a recalculation of the aggregate cell totals.

- **Even** – Any value filled into an aggregate level cell will be spread evenly among that cell's lower level constituents.

- **Proportional** – Any value filled into an aggregate level cell will be spread proportionally among all lower level constituent cells. This is based on these cells' contents before the fill.

- **Delta** – The difference between the value pasted in the aggregated cell level and the original value of the aggregate cell level will be spread evenly among all lower-level constituent cells.

When the **Don't Spread to NA Values** check box is selected, filled aggregate data is not spread to lower level cells that contain NA values before the fill. The NA values are left intact, and the aggregate data is spread to the remaining lower level cells that comprise the aggregate total.

Filling Data While in Outline View

Outline View menu option allows you to simultaneously view data for multiple dimensional levels in the same worksheet, but the system only allows the filling of data into one dimensional level at a time. Whenever multiple dimensions are displayed in outline view for a given hierarchy, the **Fill** dialog requires you to select the dimensional level where you want to fill data. The **Fill** dialog has drop-down lists enabled for each hierarchy displayed in outline mode.

Edit – Clear Contents

The **Clear Contents** menu option quickly clears the contents of the cells in a worksheet.

Select the data cells that you want to clear, and choose **Clear Contents** from the **Edit** menu.

If there are no data cells selected in the grid at the time the **Clear Contents** function is invoked, the system will attempt to clear the data for every cell. However, if your grid data contains any measures that are read-only, the system will be unable to clear data for the entire worksheet. In this case, a message informs you that the system could not complete the request.

Edit – Find

The **Find** menu option locates a specified position in any axis.

This function allows you to perform an alphanumeric search for text entered in the **Find What** field of the dialog. This function can be useful in various circumstances (for example, when you want to move quickly to a particular SKU item in a very large worksheet).

In the **Find** dialog, the **Look In** drop-down list allows you to narrow your search to one of the three available axes: **Row Axis**, **Column Axis**, or **Slice Axis**.

The **Match Case** and **Find Exact Match Only** options allow you to further narrow your search by imposing more restrictions.

Click **Find Next** to search for the next matching occurrence.

Edit - Sort

The **Sort** menu option displays the **Attribute Address Selections** window, wherein you can add, modify, or delete a dynamic attribute. See the Dimension and Sorting Attributes section for more information.

Edit – Insert Measure

Insert a Measure into an Open Worksheet

If you have the necessary access rights, you can insert a new measure or group of measures into an open workbook. This functionality reduces the need to build new workbooks whenever a view of currently unrepresented measures is required. The ability to insert new measures into open workbooks is particularly useful when establishing access to alerts.

Use the following procedure to select a measure or group of measures to be inserted in a currently open workbook.

> **Note:** A worksheet must be open and active for the **Insert Measure** menu option to be enabled. Any measure(s) selected to be inserted in the workbook will be placed on the currently active worksheet.

Navigate: From the **Edit** menu, select **Insert Measure**.

1. Select the desired measure(s) in the **Measures** list.
2. Click **OK**.

> **Note:** Measures with writeable access that are added to the workbook using Insert Measure can be edited in the workbook. However, these measures have no commit rule, thus user edits cannot be committed to the domain.

Edit – Automatic Calculation

The **Automatic Calculation** menu option places the system in automatic calculation mode.

In this mode, every change to a cell in the spreadsheet causes a recalculation, which requires immediate communication from the worksheet (client) back to the database (server). In this mode, there may be an appreciable pause between making a change and being able to effect the next change.

A check mark is displayed beside either the **Automatic Calculation** option or the **Manual Calculation** option to indicate the mode the system is currently in. Select the desired menu option to change calculation modes.

> **Note:** You cannot calculate the cumulative effect of more than one measure at a time.

Edit – Manual Calculation

The **Manual Calculation** menu option places the system in deferred (manual) calculation mode.

In this mode, worksheet changes are collected until you manually submit the queue to the server for processing. Changes made to data cells are shown in italic font until they are sent to the server.

A check mark is displayed beside either the **Automatic Calculation** option or the **Manual Calculation** option to indicate the mode the system is currently in. Select the desired menu option to change calculation modes.

Example:

A situation in which deferred calculation is preferable is if you want to change multiple measures so that the intended expression can be selected by the calculation engine. For example, the following two expressions both appear in the same rule:

1. Gross Margin = Revenue - Cost
2. Revenue = Gross Margin + Cost

Depending on which measure (for example, Gross Margin) has changed, you may wish to calculate different expressions, so that the derived measure depends on the changed measure(s). If calculations are occurring automatically, RPAS is always going to calculate Gross Margin first, because it is the first expression in the rule. However, if you want to see the effect of change in Cost as well as Gross Margin, you would want to use the second expression. While in automatic calculation mode, you cannot do this. With deferred calculation mode, you have the ability to select which expression within a rule to calculate.

Edit – Calculate Now

The **Calculate Now** menu option submits a queue of data changes to the server for processing.

Queued changes are executed in the order that they were made. This menu option is only enabled when the system is in manual (deferred) calculation mode.

Edit – Remove Last Deferred Entry

The **Remove Last Deferred Entry** menu option removes the last deferred data entry from the list of queued items to be sent to the server for processing.

This option allows you to undo the last data change made and return the contents of the affected cell to its original value. This menu option is only enabled when the system is in manual (deferred) calculation mode.

Edit – Remove All Deferred Entries

The **Remove All Deferred Entries** menu option removes all pending deferred data changes from the list of queued items to be sent to the server for processing.

This option allows you to undo all data changes made since the last set of deferred entries was processed. When this option is selected, the original contents of the affected cells are restored. This menu option is only enabled when the system is in manual (deferred) calculation mode.

View Menu

The **View** menu contains the following options:

View – Grid

This option switches to the grid view of your worksheet when you are in Chart view.

You may also use Toggle to switch between the chart and the grid.

Toggle Toolbar Button

View – Chart

This option switches to the chart view of your worksheet when you are in Grid view.

All numeric data or subsets of such data in a worksheet can be easily converted to a graphical chart.

You can also use Toggle to switch between the chart and the grid.

Toggle Toolbar Button

In the Chart view, the grid rows are displayed on the y-axis, the grid columns are displayed on the x-axis, and the current visible slice position is displayed on the z-axis. If there are items selected in the grid at the time the view is toggled to Chart, the chart will only display those items. If there is no selection, the chart will display all items (for a maximum of 1000 positions). The Chart view is created at the current aggregate level of the grid.

View – Alert Manager

See Chapter 3.

View – Full Screen

See Chapter 3.

View – Zoom

The **Zoom** menu option displays the **Zoom** dialog. This dialog allows you to enlarge the grid contents of the active window for easier viewing, or reduce the size of the contents in order to fit as much data on the terminal display as possible.

A different zoom level can be specified for each worksheet in a workbook. When a workbook is closed, the current zoom level for each worksheet is saved.

The grid view zoom level only affects the display of data on the computer terminal. Zooming does not affect the scaling value set in Page Setup and has no effect on printing.

View – Status Bar

See Chapter 3.

View – Toolbar

See Chapter 3.

View – Find Next Alert

The **Find Next Alert** menu option scrolls the worksheet to the next occurrence of the active alert. When searching for the next alert, the system begins in the current alert cell and scans the active alert measure forward. When an alert is found, the worksheet is scrolled so that the cell containing the alert appears in the worksheet window.

View – Find Previous Alert

The **Find Previous Alert** menu option scrolls the worksheet to the previous occurrence of the active alert. When searching for the previous alert, the system begins in the current alert cell and scans the active alert measure backward. When an alert is found, the worksheet is scrolled so that the cell containing the alert appears in the worksheet window.

View – Change Alert Measure

The **Change Alert Measure** menu option produces a dialog from which you choose the active alert measure for the worksheet. When more than one alert measure exists in a worksheet, one must be the active alert referenced when performing such menu commands as **Find Next Alert** and **Find Previous Alert**.

View – Next in Flow Control

The **Next in Flow Control** provides a menu-driven method of advancing to the next step in the business process. Each distinct step is associated with a separate worksheet or a set of worksheets. Choosing this option has the same effect as clicking the **Next** toolbar button.

The steps in the business process are represented by the flow control tabs, which normally appear immediately beneath the application toolbar. To view the worksheet(s) associated with a particular step, you can click the corresponding tab.

View – Previous in Flow Control

The **Previous in Flow Control** menu options provide a menu-driven method of returning to the previous step in the business process. Each distinct step is associated with a separate worksheet or set of worksheets. Choosing this option has the same effect as clicking the **Previous** toolbar button.

The steps in the business process are represented by the flow control tabs, which normally appear immediately beneath the application toolbar. To view the worksheet(s) associated with a particular step, you can click on the corresponding tab.

View – Sort

The **Sort** menu option displays the **Create Sort Attribute** dialog box.

This dialog allows you to create a user-named attribute based on selected grid data that can be used to sort and re-sort data in the attribute's corresponding dimension.

The sorting mechanism allows you to sort one dimension in a hierarchy according to current data values in the grid. To sort data, you must first select a one-dimensional data space (a single column or row of data in the grid). Once the data is selected, choose the **View – Sort** menu option to display the **Create Sort Attribute** dialog box.

Format Menu

The **View** menu contains the following options:

Format – Application

See Format – Application.

Format – Axis

This option displays the Axis tab of the **Format Options** dialog.
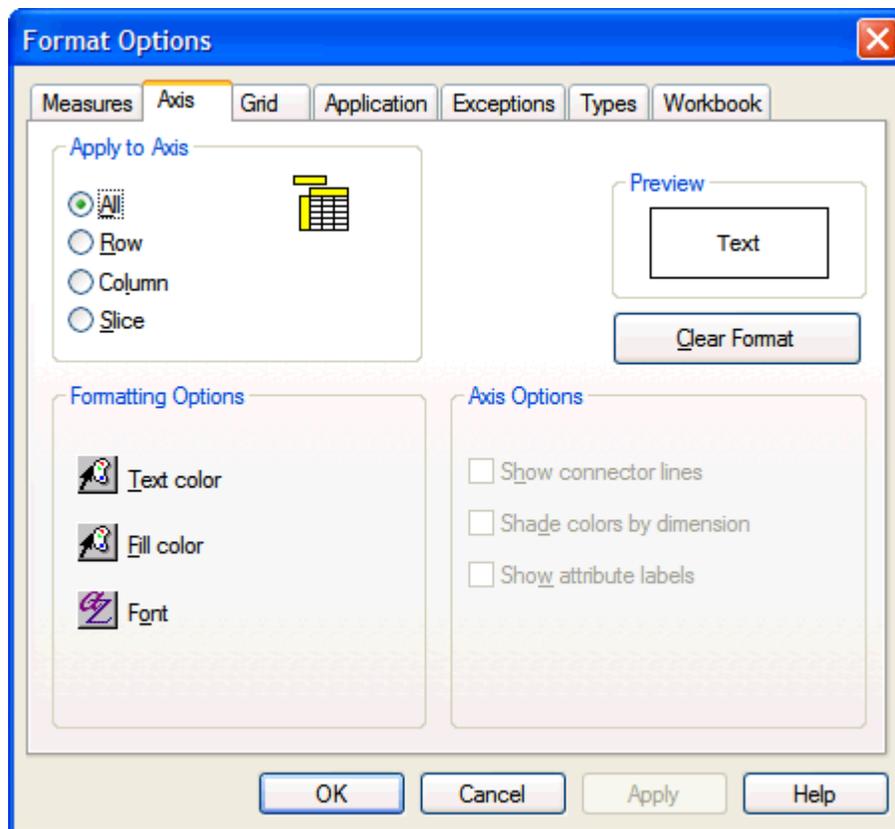
Format Options Dialog Box - Axis Tab

The changes you make on this tab affect the appearance of the row, column, and/or slice axes of your worksheet. The **Axis** option on the **Format** menu is only available in Grid view.

Apply to Axis

On the Axis tab, the **Apply To Axis** options allows you to select whether to apply your changes to the Row Axis, Column Axis, Slice Axis, or All Axes. If you want to apply a format to a specific axis, select the appropriate **Apply To Axis** option before you select a fill or font.

Formatting Options

Use the Formatting Options area to select which aspects of your worksheet to change. Select the corresponding button to change these formatting options:

- **Text Color** – Sets the color of text in the axes of the worksheet.
- **Fill Color** – Sets the background color for worksheet axes.
- **Font** – Displays a standard font dialog box, in which you select the size and style of text in your worksheet axes.

Axis Options

The available options affect the axis display of axes that are currently in outline view. Axis options can only be changed for one grid axis at a time. Click the check boxes to toggle the display of the following axis options:

- **Show Connector Lines** – Toggles the display of connector lines in the selected axis when multiple dimensions are displayed in outline view.
- **Shade Colors by Dimension** – Toggles the use of a shading scheme to differentiate dimensions in the axis and grid display. When this check box is selected, position labels and data cells that belong to different hierarchical levels are shaded differently.
- **Show Attribute Labels** – Toggles the display of label headers that designate attributes for positions appearing along the chosen axis. For the column axis, these attribute labels appear to the left of the column axis header area. For the row axis, the labels appear directly above the row axis header area.

> **Note:** This option turns on/off the display of attribute labels. To turn on the display of position attribute values, right-click over the desired axis and choose **Select Display and Sort Attributes** from the menu.

Preview Window

The Preview window provides a sample view of your changes.

Clear Format

The **Clear Format** button removes all formatting options from the selected axis.

- Click **Apply** to make your changes without closing the dialog box.
- Click **OK t**o make the changes and return to your worksheet.
- Click **Cancel** to close the dialog box without applying any format changes.

> **Note: Cancel** does not undo any changes that have already been made using the **Apply** button.

Format – Chart

The **Chart** menu option on the **Format** menu is only available when you are viewing data in Chart mode. This menu item allows you to customize a variety of chart features, including chart type, color scheme, title style, axis settings, and 2D/3D aspects.

Select **Format-Chart** or click the **Format** button on the workbook toolbar. The **Chart F/X Properties** dialog box appears.
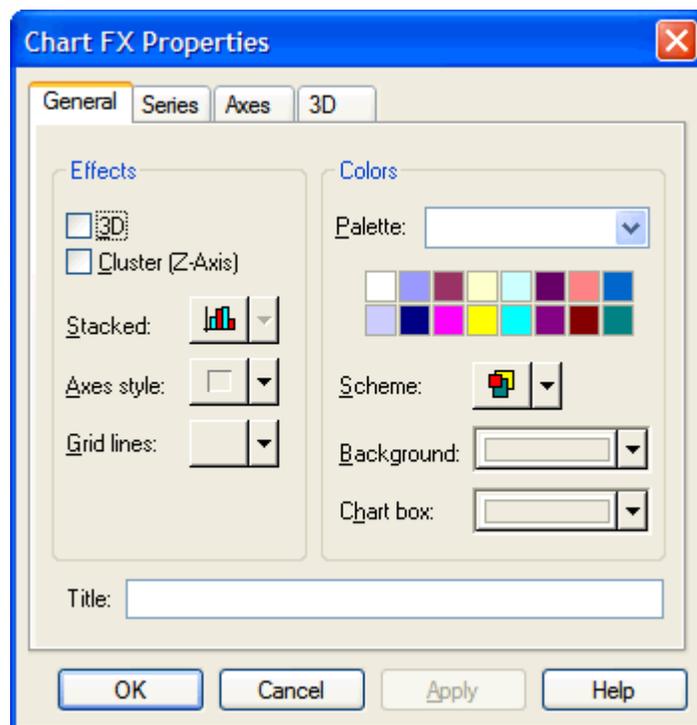
Chart FX Properties - General Tab

Format – Chart – 3D

The **3D** tab of the **Chart FX Properties** dialog allows you to customize properties of three-dimensional charts. The features on the 3D tab are only enabled when your chart is displayed in 3D view. To change your chart to 3D mode, select the **3D** option on the General tab in **Chart FX Properties** dialog box, which is accessed by selecting **Format – Chart**.

Rotated View

The **Rotated View** option allows you to toggle between the standard three-dimensional view of your chart and your customized, rotated view. Select this check box to convert your chart to the rotated view specified by selections made on the 3D tab. This field is only enabled when you are viewing your chart in 3D mode.

X Angle

If **Rotated View** is selected, the **X Angle** field allows you to enter the numeric value of the x-axis rotation angle. The rotation of the x-axis can also be performed by dragging the blue marble in the interactive rotation figure at the upper left of the dialog.

Y Angle

If **Rotated View** is selected, the **Y Angle** field allows you to enter the numeric value of the y-axis rotation angle. The rotation of the y-axis can also be performed by dragging the red marble in the interactive rotation figure at the upper left of the dialog.

Shadows

The **Shadows** option allows you to specify the shadow effect for your 3D chart. There are three options available: None (Unlit), Fixed Angle, and Realistic.

Depth

Drag the pointer on the **Depth** slider to control the depth of your 3D view. Move the pointer to the right to increase depth.

Perspective

Drag the pointer on the **Perspective** slider to alter the perspective of your 3D view. Use the sample rotation frame at the top right of the dialog to preview your chosen perspective.

When you have made your selections, click **Apply** to apply the changes and leave the **Chart F/X Properties** dialog open. Click **OK** to apply the changes and close the dialog, or click **Cancel** to return to your chart without implementing any changes.

Format – Chart – Axes

The **Axes** tab of the **Chart FX Properties** dialog allows you to customize axis settings, such as the appearance of major/minor axis units, gridlines, and tick marks.

Axis Selection List

Select the axis you want to format from the axis list. Any formatting changes made on the Axes tab will be applied to the selected axis.

Visible

The **Visible** option toggles the display of the labels and tick marks of the axis selected in the list. Uncheck this check box to remove tick marks and axis values from the chart display.

Major Unit / Minor Unit

The **Major Unit / Minor Unit** option allows you to set the major interval and the minor interval for the selected axis.

Labels for major unit values are displayed alongside their respective tick marks; minor unit values show tick marks only.

Show Gridlines

The **Show Gridlines** option toggles the display of gridlines associated with the major/minor units along the selected axis.

Tick Mark Type

The **Tick Mark Type** option allows you to specify the style of tick mark for the major/minor unit values along the selected axis.

Options include: None, Outside, Inside, and Cross.

Details

Click the **Details** button to specify more options for the selected axis, including minimum/maximum axis values, axis titles and text orientation, and gridline color/style/weight.

Format – Chart – Axes – Labels

This option allows you to create axis titles and manipulate the text orientation of labels displayed on the selected axis.

Orientation

Click the spin buttons ⏶⏷ to increase or decrease the angle of rotation for label text. As you click the buttons, the preview window provides you a sample view of the selected text orientation.

Show Labels

The **Show Labels** option toggles the display of axis labels.

Select this option to display labels for the selected axis.

2 Levels

The **2 Levels** option allows you to create staggered labels such that consecutive labels are represented in different modes of alignment.

Rotate With Chart

The **Rotate With Chart** option allows you to specify whether text should rotate accordingly with any change in the chart's three-dimensional rotation.

Select this check box to have axis text rotated along with the chart's 3-D manipulation.

Title

The **Title** option allows you to enter a title for the selected axis.

Format – Chart – Axes – Scale

This option allows you to format the scale of the selected axis.

Minimum / Maximum

The **Minimum / Maximum** option allows you to specify a minimum value and maximum value for the chosen axis.

If any chart value falls below this minimum or above this maximum, the chart will be clipped.

Scale Unit

The **Scale Unit** option sets the scale unit for the axis.

The default is 1.00. The chosen axis labels and values in the grid are scaled by any value entered in this field. For example, if you enter a scale unit of 1000, the default axis labels and data points in the grid are divided by 1,000. Thus, you can display large data values in an abbreviated format.

Format

The **Format** option sets the format of the selected axis.

Choose a format type from the list:

- **None** – Displays numeric data with no formatting
- **Number** – Displays numeric data with a comma separator every three digits
- **Currency** – Displays numeric data preceded by a dollar sign and with a comma separator every three digits
- **Scientific Notation** – Displays numeric data in scientific notation (exponential format)
- **Percentage** – Converts numeric data to percentage format and displays this value followed by a % sign

Decimal Places

The **Decimal Places** option allows you to set the number of digit places to follow a decimal in axis labels and chart values.

Logarithmic Scale

The **Logarithmic Scale** option toggles the display between logarithmic and linear scales.

Select this option to create a logarithmic scale with a log base of 10.

Zero Line

The **Zero Line** option allows you to set the starting point for the chart at zero.

For line charts, selecting this option has the effect of drawing a gridline at the zero mark along the selected axis. This allows you to easily see negative data values in the chart, as these point markers fall below the zero line.

For bar charts, selecting this option causes bars to be drawn starting at the zero mark and incremented in the appropriate direction (positive or negative). If there are negative values in your chart, these bars will be drawn in a negative direction (below the zero line).

Format – Chart – General

The **General** tab of the **Chart FX Properties** dialog allows you to select general types of formatting options for your chart. Use this tab to specify display effects and color schemes for various chart features.

Effects

- **3D** – This option toggles the display between 2D/3D views. When selected, the chart will be displayed in three-dimensional mode.
- **Cluster (z-axis)** – This option activates/deactivates z-axis clustering. When you are viewing your chart in 3D mode and this feature is checked, each charted series will appear in a separate row along the z-axis.
- **Stacked** – This option allows you to stack all series in the chart. This option is only available when the chart type is **Area**, **Area-Curve**, **Bar**, or **Gantt**. There are three stacked-style options:
    - Side by Side (no stacking) – Series are placed alongside each other and are not stacked.
    - Stacked – At any given position, each data series is charted on top of the previous one, adding its value to the stacked bar.

- Stacked 100% – Like the stacked option, each data series is positioned above the previous one, adding its value to the stacked bar. However, for each position, each series' percentage of the total is calculated and charted, such that all series together total 100%. At any given position, this option allows you to compare the strength of each series relative to the whole.

- **Axes Style** – This option allows you to change the line style of the chart axes. There are four options: None (no axes), 3D Frame, Math, and Flat Frame.

- **Grid Lines** – This option allows you to specify the display of grid lines in your chart. The four options are: None, Horizontal, Vertical, and Both.

Colors

- **Palette** – This option allows you to change the entire color palette for the chart. Changing the palette will affect all elements of the chart. Click the arrow to produce a list of available palettes.

- **Scheme** – This option allows you to select the pattern display for plotted data series. The options are: Solid (color), B/W Patterns, Color Patterns, B/W Hatched, Hatched (color).

- **Background** – This option allows you to specify the color of the chart background and point legend. Click the arrow to produce a color palette, and click the desired color.

- **Chart Box** – This option allows you to specify the color of the chart box (the area within the grid axes). Click the arrow to display a color palette, and click the desired color.

Title

Enter a title for your chart in the **Title** text field.

When you have made your selections, click **Apply** to apply the changes and leave the **Chart FX Properties** dialog open. Click **OK** to apply the changes and close the dialog, or click **Cancel** to return to your chart without implementing any changes.

Format – Chart – Series

The **Series** tab of the **Chart FX Properties** dialog allows you to set and customize settings for each data series independently. The changes you make on this dialog will be applied to the data series selected in the drop-down list at the top left of the dialog (or to all series if the **<All Series>** option is chosen).

The options available on this tab change depending on the chart type.

Format – Chart – Series (Bar/Gantt chart types)

Series List

Select a data series to modify from this drop-down list. Any changes you make on this dialog will be applied to the data series selected in the drop-down list at the top left of the dialog (or to all series if the **<All Series>** option is selected).

Fill

The **Fill** option allows you to specify the fill color of the bar representing the selected series. Click the arrow to display a color palette, and click the desired color.

Border

The bars representing each series may be displayed without a border, or with a custom border whose color, style, and weight you define.

- **None** – Click this radio button to plot the selected series without a border.
- **Custom** – Click this button to specify border features for the selected series. Customizable features are: color, style, and weight.

Styles

- **Gallery** – This option allows you to change the chart type. Each series may be represented by a different chart type (for example, Series #1 may be plotted as a line chart, and Series #2 may be plotted as a bar chart). Alternatively, select the **<All Series>** option in the series list to change the chart type of each series uniformly. Click the arrow to produce a menu of available chart types.
- **Gap Width %** – This option specifies the thickness of each bar by allowing you to adjust the spacing between groups of series along the point axis. Increase the gap width percentage to increase the spacing between points, thus decreasing the thickness of each series' bar.

Bar Styles

- **Square** – Click this button to represent the selected series by standard rectangular bars.
- **Cylinder** – Click this button to represent the selected series by shaded cylindrical bars.
- **Cone** – Click this button to represent the selected series by shaded conical bars.

> **Note:** or Cylinder and Cone style bar charts, you are also provided the ability to increase/decrease the number of cylinder/cone facets (sides). Valid values for this field include integers from 2 to 32. The greater the number of sides, the more depth and realism your chart will appear to have.

- **Show Point Labels** – Select this check box to include point values on your chart. For bar graphs, the value of each point will appear above the bar.
- **Visible** – This option allows you to show/hide the selected series in the chart. Select this check box to include the series in the display. Clear the check box to hide the series. This option is only available when a single series is selected in the series list (and not **<All Series>**).
- **Sample** – This option provides you with a sample view of the fill color and border features selected for the chosen series.

When you have made your selections, click **Apply** to apply the changes and leave the **Chart FX Properties** dialog open. Click **OK** to apply the changes and close the dialog, or click **Cancel** to return to your chart without implementing any changes.

Format – Chart – Series (Line/Curve chart types)

Series List

Select a data series to modify from this drop-down list. Any changes you make on this dialog will be applied to the data series selected in the drop-down list at the top left of the dialog (or to all series if the **<All Series>** option is selected).

Marker Fill

The **Marker Fill** option allows you to specify the fill color of the selected series' point markers.

Click the arrow to produce a color palette, and click the desired color.

Lines

Each series line may be displayed in the same color as the point markers, or you may specify a custom line color/style/weight.

- **Same color as markers** – Click this radio button to have the selected series' point markers and line displayed in the same color.

- **Custom** – Click this radio button to specify an independent line color, line style, and line weight for the selected series.

Markers

Each series may be represented by a different chart type (for example, Series #1 may be plotted as a line chart, and Series #2 may be plotted as a bar chart). Alternatively, select the **<All Series>** option in the series list to change the chart type of each series uniformly. Click the arrow to produce a menu of available chart types.

- **Gallery** – This option allows you to change the chart type.

- **Shape** – Allows you to specify the shape of the selected series' point markers. Click the arrow to produce a menu of available shapes.

- **Show Every** – Allows you to specify an interval at which to display point markers. For example, enter 3 to have every third point marker displayed. The default value is 1, which displays every point marker for the series.

- **Size** – Increases/decreases the size of the point markers for the selected series. Increase the value to enlarge the markers.

- **Show Point Labels** – Select this check box to include point values on your chart. For line graphs, the value of each point will appear above the point marker.

- **Visible** – Allows you to show/hide the selected series in the chart.

  Select this check box to include the series in the display. Clear the check box to hide the series. This option is only available when a single series is selected in the series list (and not **<All Series>**).

- **Sample** – Provides you with a sample view of the custom line style selected for the chosen series.

When you have made your selections, click **Apply** to apply the changes and leave the **Chart FX Properties** dialog open. Click **OK** to apply the changes and close the dialog, or click **Cancel** to return to your chart without implementing any changes.

Format – Delete Format

The **Delete Format** option clears any formatting changes that you have previously saved as a format.

If **Delete Format** is selected, any new workbooks created using the same workbook template will no longer default to this format. The **Delete Format** option on the **Format** menu is available when you are viewing your data in either Grid or Chart mode.

> **Note:** Format changes are saved with the workbook template, so it only affects future workbooks created from that same template. For example, if you select Delete Format while viewing a Planning Workbook, the format of a new Measure Analysis Workbook will not be affected.

Format – Exceptions

The **Exceptions** menu option displays the **Exceptions** tab in the **Format Options** dialog box.

Here you can specify the formatting for exceptions or data values that fall outside an acceptable range that you define. The formatting options are only available for numeric measures. The **Exceptions** option on the **Format** menu is only available in Grid view.

Measure List

The **Measure List** option allows you to select the measure whose exception values are to be formatted. Click on a measure in the list to select it. Make your measure selection here before specifying a range or any display features to be formatted.

Minimum

This section of the dialog allows you to set the minimum value of the acceptable range for a measure, as well as the text color, fill color, and font in which to display any value falling below that minimum.

Maximum

This section of the dialog allows you to set the maximum value of the acceptable range for a measure, as well as the text color, fill color, and font in which to display any value falling above that maximum.

> **Note:** The amounts entered in the **Minimum** and **Maximum** fields must be within the valid range for an editable measure. For example, if the valid range for a measure is 1 to 99, the system will not accept a **Maximum** value of 100. An error message will appear prompting you to re-enter this number.

Enable Exception Display

The **Enable Exception Display** option toggles the display of your selected exception formats. If the option is selected, the exception formats will be applied and displayed in your worksheet wherever applicable. If the option is not selected, exception values will not be displayed; however, the system retains your specified exception formats for use at a later time.

Clear Format

The **Clear Format** button removes any exception range and formatting set for the selected measure.

To make your changes without closing the dialog box, click the **Apply** button. To make the changes and return to your worksheet, click **OK**. To close the dialog box without applying any format changes, click **Cancel**.

> **Note: Cancel** does not undo any changes that were already made using the **Apply** button.

Format – Grid

The **Grid** option displays the **Grid** tab of the **Format Options** dialog.

Here you can change the appearance of the grid lines in your worksheet. You can also specify the string values to be displayed when data in cells is NA, or when the value of aggregate-level data is ambiguous. The Grid option on the **Format** menu is only available in Grid view.

Formatting Options

The **Formatting Options** section allows you to select the color of the grid lines in your worksheet. Click the **Line Color Within Grid** button to produce a color palette to use to specify the desired color.

Grid Options

The Grid Options section allows you to specify whether grid lines and hierarchy tiles should appear on your worksheet. Also use this section to specify display values for instances in which cell data is NA or ambiguous.

The Grid options are:

- **Show Horizontal Grid Lines** – If this option is selected, the horizontal grid lines are displayed on the screen.
- **Show Vertical Grid Lines** – If this option is selected, the vertical grid lines are displayed on the screen.
- **Show Hierarchy Tiles** – If this option is selected, the hierarchy tiles are displayed on your worksheet. Clear this check box to eliminate the hierarchy tiles from your worksheet view.
- **NA** – In this field, you can specify a string value that you want to appear in all cells that have NA as a value (for example, N/A, *, and so on).
- **Ambiguous Type** – In this field, you can specify the string to be displayed when it is not clear how the system should aggregate certain data values. This string indicates the presence of lower level data that cannot be displayed at a particular level of aggregation. For example, picklist-type data at the SKU level would aggregate ambiguously if different SKUs in the same Style contained different picklist values. You can specify here what the system should display in a Style-level cell.

Preview Window

The **Preview window** provides a sample view of your changes.

Clear Format

The **Clear Format** button removes all grid formatting options from your worksheet.

To make your changes without closing the dialog box, click the **Apply** button. To make the changes and return to your worksheet, click **OK**. To close the dialog box without applying any format changes, click **Cancel**.

> **Note: Cancel** does not undo any changes that have already been made using the **Apply** button.

Format – Measure

The **Measure** option displays the Measures tab in the **Format Options** dialog box.

The changes made on this tab affect the way measure labels and data appear in your worksheet. The **Measure** option on the **Format** menu is only available in Grid view.

Apply To

The **Apply To** option allows you to select whether to apply your changes to the cells, to the labels, or to both.

Measure List

The **Measure** drop-down list allows you to select one or more measures to be formatted. Click on a measure in the list to select it. Use **Ctrl + Click** or **Shift + Click** to make multiple selections at the same time. Make your measure selections here before choosing any worksheet features to format.

Formatting Options

Use the Formatting Options area to select the aspects of your worksheet to change. Any formatting options selected affect only the measure(s) selected in the Measure drop-down list at the time the changes are applied. Select the corresponding button to change these formatting options:

- **Text Color** – This option sets the color of text for the selected measure's label and/or cells.
- **Fill Color** – This option sets the background color for the selected measure's label and/or cells.
- **Font** – This option displays a standard font dialog box where you select the size and style of text for the selected measure's label and/or cells.
- **Alignment** – This option allows you to select left, center, or right alignment for the selected measure's cells.
- The Alignment feature can be formatted for cells only (not measure labels).
- **Border Style** – This option displays a dialog box that contains a list of available border styles (solid line, dashed line, dotted line, and so on) to apply to the selected measure's data cells. This dialog box permits you to apply the border to the top, bottom, right, and/or left side of the cells. The Border Style feature can be formatted for cells only (not measure labels).
- **Border Color** – This option sets the color for the border applied to the selected measure's data cells. The Border Color feature can be formatted for cells only (not measure labels).

Preview Window

The **Preview window** provides a sample view of your changes.

Clear Format

Clear Format removes all formatting options from the selected measure(s).

To make your changes without closing the dialog box, click **Apply**. To make the changes and return to your worksheet, click **OK**. To close the dialog box without applying any format changes, click **Cancel**.

> **Note: Cancel** does not undo any changes that have already been made using the **Apply** button.

Format – Save Format

The **Save Format** option allows you to save any formatting changes you have made to the workbook with the workbook template.

In doing so, you cause any new workbook that you create using that same workbook template to default to your saved format. This feature prevents you from having to redefine formatting changes each time you recreate a workbook. The **Save Format** option on the **Format** menu is available when you are viewing your data in either grid or chart mode.

Depending on your access level, you can save formats at the User level, Template level, or Group level. If you save a format at the User level, that format will affect subsequent workbooks created by you alone. If you have administrative access, you can save a format at the Template level, and all new workbooks created in the system by any user using that same workbook template will automatically default to that format. Formats saved at the User level override those saved at the Template level. You can also save formats at the Group level. These changes affect subsequent workbooks created by members of the group you specify.

> **Note:** These styles are saved with the workbook template, so they only affect future workbooks created from that same template. For example, if you make formatting changes while viewing a Planning Workbook and then select **Save Format**, these changes will not be seen when you create a new Measure Analysis Workbook. They will, however, be seen whenever you create a new Planning Workbook.
>
> Saved formats do not affect previously created and saved workbooks.

Format – Types

The **Types** option displays the Types tab of the **Format Options** dialog where you can modify the cell formatting options for measures. The **Types** option on the **Format** menu is only available in Grid view.

Measure List

The **Measure** drop-down list allows you to select the measure for which cell formats are to be modified. Click on a measure in the list to select it. Make your measure selection here before specifying any display options or formatting options to be changed.

Display Options

- **Prefix** – Enter any string to appear as a prefix before each data value for the selected measure. For example, you can enter **$** to indicate the monetary nature of a sales measure.

- **Suffix** – Enter any string to appear as a suffix after each data value for the selected measure. For example, you can enter **%** to indicate that a given measure value is a percentage.

- **Scale Factor** – Enter an integer value to act as a scaling factor for the measure. When you enter data for a measure that contains a scaling factor, the value you enter is multiplied by the measure's scaling factor to obtain an internal value that is recognized by the server in data calculations.

Formatting Options

The formatting options available depend on the type of measure selected.

Floating Point type measures have the following formatting options:

- **Precision** – This option allows you to specify the number of digits to be displayed to the right of the decimal.

- **Use Separator** – This option allows you to specify whether a separator (a comma) should appear between every three digits. Integer type measures have the following formatting options:

- **Use Spin Button** – This option displays up and down arrows in the worksheet cell that allow you to increase or decrease the cell's value.

- **Increment Spin By** – This option allows you to set the amount that the system will increase or decrease the cell value when you click on the spin buttons. This option is only enabled when the **Use Spin Button** check box is selected.

- **Use Separator** – This option allows you to specify whether a separator (a comma) should appear between every three digits.

  String type measures have the following formatting option:

- **Max # of Characters** – This option allows you to set the maximum number of characters permissible in an individual data cell.

Preview Window

The **Preview window** provides a sample view of your changes.

Clear Format

Clear Format removes any type formatting set for the selected measure.

To make your changes without closing the dialog box, click **Apply**. To make the changes and return to your worksheet, click **OK**. To close the dialog box without applying any format changes, click **Cancel**.

> **Note: Cancel** does not undo any changes that have already been made using the **Apply** button.

Format – Workbook

The **Workbook** option displays the Workbook tab of the **Format Options** dialog.

This tab allows you to enable/disable the synchronized page scrolling feature.

Enable Synchronized Page Scrolling

Select this option to enable synchronized page scrolling. Often, multiple windows exist that contain the same page or slice dimension. Slice dimensions are those that appear along the z-axis of a window (that is, the top left of the worksheet). Positions along the slice dimension are viewed as pages that you can scroll through using the slice scroll bar to the right of the position indicator.

When synchronized page scrolling is enabled, all windows that contain the same slice dimension will scroll to a new slice position when any one window is scrolled.

When synchronized page scrolling is disabled, scrolling through slice positions in one window does not affect the slice position display of other windows.

Window Menu

The **Window** menu contains options for manipulating open windows. It includes the following options:

Window – New Window

This option creates a new window.

This new window has the same contents as the active window, and can display different parts of the window or show the same parts of the window in different views. If the contents of the original window change, all of the other windows that contain the same information will reflect those changes. When you open a new window, it becomes the active window and is displayed on top of all other open windows. This menu item is enabled as long as there is at least one window open in the application.

Window – Delete Window

This option deletes the current window. This menu item is only enabled when the workbook contains more than one window of the same type.

If the active window is the last window of that type, you will not be able to delete it.

Window – Rename Window

This option allows you to specify a new name for the active window. A dialog displays where you can type the new name.

Window – Hide

This option hides, but does not delete, the active window. A hidden window is not displayed as an icon or on the **Windows List** area at the bottom of the **Window** menu. You can unhide a window by selecting **Unhide**.

Window – Unhide

This option displays a dialog box that lists all currently hidden windows. Highlight one or more window titles, and click **OK** to unhide them. This menu item is only enabled when there is at least one hidden window.

Window – Cascade

The **Cascade** option arranges all open windows so that all worksheet titles are visible, but only the window on top (the active window) can be viewed completely. To view any other window in the cascade, click on that window's title bar to bring it to the front.

Window – Tile Horizontal

This option arranges all currently open windows in a stack that stretches from the top of the screen to the bottom. The height of each window depends on the number of windows that must be displayed. This display method is useful when you want to view two or more windows simultaneously for comparison.

Window – Tile Vertical

This option arranges all currently open windows vertically from left to right across the full screen. The width of each window depends on the number of windows that must be displayed. This display method is useful when you want to view two or more windows side by side for comparison.

Window – Windows List

The bottom portion of the **Window** menu contains a list of all unhidden windows. Each unhidden window is represented here (grid or a chart, open or minimized). A checkmark is located beside the active window. To activate any other window from this list, click the window name.

Select **Unhide** from the **Window** menu to view a list of currently hidden windows.

Window – Message Log

The **Message Log** option produces a dialog box that displays error messages.

This menu option is only enabled when there are messages to be read.

Help Menu

Help – Contents

The **Contents** menu option displays the contents for the Oracle Retail Predictive Solutions Help system.
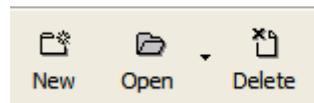
Help – About

The **About** menu option displays information about the application, which includes client version, server version, copyright, and licensing information.

Application Toolbar

Toolbar Buttons

The application toolbar has several buttons that give direct access to common commands and actions that you otherwise access through menu options.
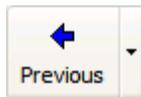

Toolbar when No Workbooks Are Open

Toolbar when Workbooks Are Open

Previous Button

The **Previous** button navigates to the previous step in the business process.

Previous Button

Note: This button produces the same result as **View – Previous in Flow Control**.

Each distinct step is associated with a separate worksheet or set of worksheets.

This button only appears on the toolbar when the open workbook template is one for which process tab control can be enabled. For some templates, tab control is not available.

The steps in the business process are represented by the flow control tabs, which normally appear immediately beneath the application toolbar. To view the worksheet(s) associated with a particular step, you can click the corresponding tab.

Next Button

The **Next** button navigates to the next step in the business process.


Next Button

> **Note:** This button produces the same result as **View – Next in Flow Control**.

Each distinct step is associated with a separate worksheet or set of worksheets. This button only appears on the toolbar when the open workbook template is one for which process tab control can be enabled. For some templates, tab control is not available.

The steps in the business process are represented by the flow control tabs, which normally appear immediately beneath the application toolbar. To view the worksheet(s) associated with a particular step, click on the corresponding tab.
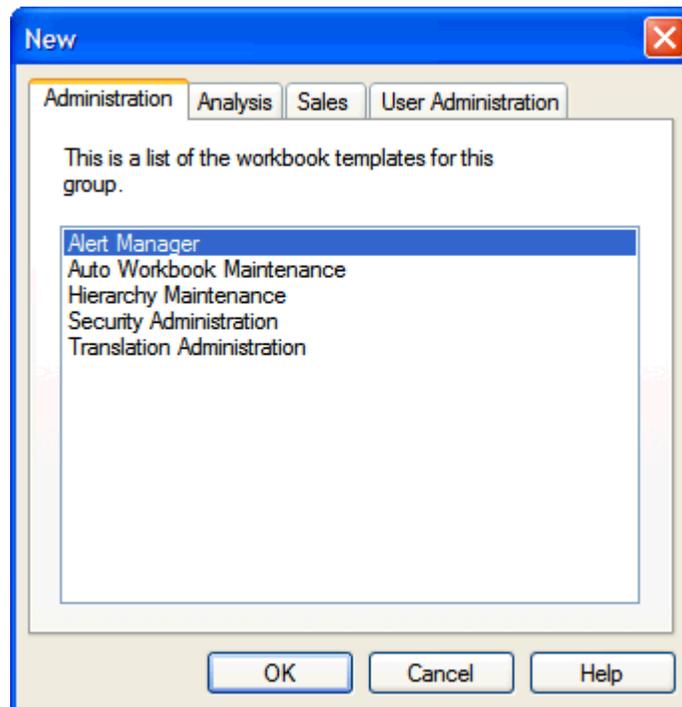
New Workbook Button

Use the **New Workbook** button to create a new workbook.
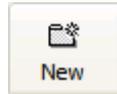
New Workbook Button

> **Note:** Clicking this button is the same action as choosing **File – New**.

The **New** dialog appears and allows you to choose a workbook template.
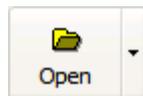

New Dialog Box

This toolbar option is always available, but if you select it while a workbook is already open, you will be prompted to close the current workbook before building the new one.
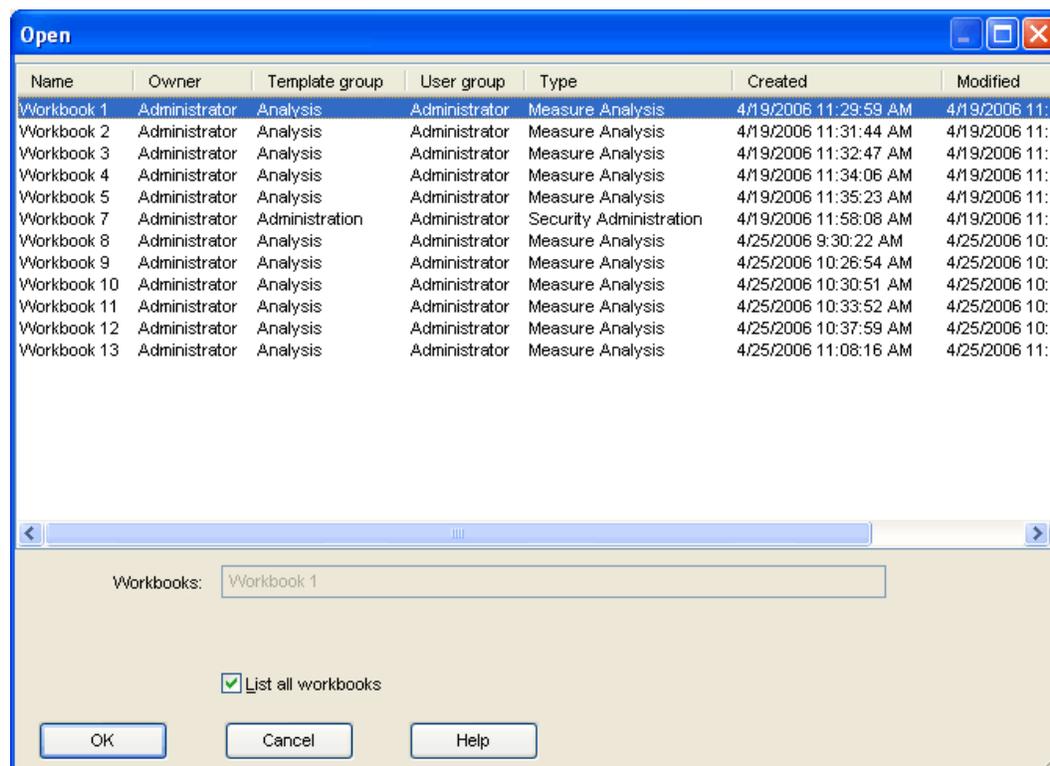
Open Workbook Button

Use the **Open Workbook** button to open an existing workbook.

Open Workbook Button

> **Note:** Clicking this button is the same action as choosing
> **File– Open**.

The **Open** dialog is displayed from which you choose a workbook from a list of those available.

Open Workbook Dialog

To bypass the **Open** dialog and quickly select a workbook to open, click on the small arrow to the right of the **Open** toolbar button. This arrow produces list of available workbooks from which you can choose one to open.

This toolbar option is always available, but if you select it while a workbook is open, you will be prompted to close the current workbook before opening another.
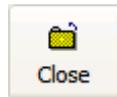
Refresh Workbook Button

The **Refresh Workbook** button refreshes the currently open workbook.

Refresh Button

> **Note:** Clicking this button is the same action as choosing **File– Refresh**.

Close Workbook Button

The **Close Workbook** button closes the currently open workbook.

Close Workbook Button

> **Note:** This button has the same action as choosing **File – Close**.

If the workbook has been previously saved and no new changes have been made, this toolbar button closes the workbook. If the current workbook has not been saved, or if changes have been made since the last save, this button produces the **Close** dialog. Use the **Close** dialog to specify whether and how to save/commit changes to the workbook before closing.

The **Close** toolbar button is only available when a workbook is currently open.

Save Workbook Button

The **Save Workbook** button stores all information in the workbook, including the current layout of worksheets and charts.

Save Workbook Button

> **Note:** This button performs the same action as **File – Save**.

If the current workbook was previously saved, the **Save** button updates the stored information. If the workbook has not been previously saved, the **Save** button produces the **Save As** dialog where you specify a workbook name.

The **Save** button is only enabled when a new workbook has not been saved, or when changes have been made to a saved workbook.

The **Save** button does not commit changes to the master database. To commit changes, choose **File – Commit Now** from the main menu.

Cut Button

The **Cut** button feature copies selected worksheet data to an application clipboard and clears the data from the worksheet cells.

Cut Button

Only data from writable measures can be cut.

> **Note:** The **Cut** button performs the same action as **Edit – Cut**.

When you use the **Edit – Cut** option to cut data, the function performs the cut at the current hierarchical level. Data can only be cut from one dimensional level at a time, so if multiple dimensions are represented in your grid selections, the cut is performed at the lowest dimensional level actually selected.

> **Note:** The **Cut** option does not copy information to your Windows clipboard. The data is copied to an application-specific clipboard and cannot be pasted into other programs. If you intend to paste the data into another application, you can choose the **Edit – Copy to Clipboard** option.

Performing Specialized Cut Functions

The **Cut** toolbar button (the **Edit – Cut** option) is the simplest method of cutting data from your worksheet. There are some specialized cut functions that you can perform by accessing the appropriate dialog. Namely, you can opt to cut the data at the base level, and/or you can opt to cut the data from all slices in the worksheet. If you want to perform either of these operations, choose the **Edit – Cut Special** option.

Copy Button

The **Copy** button copies selected worksheet data to an application clipboard.
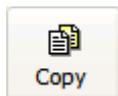
Copy Button

> **Note:** This button performs the same action as choosing **Edit – Copy**.

The **Copy** function is typically used with the **Paste** function to speed the process of populating data cells in a worksheet.

When you click the **Copy** button, the system performs the copy at the current hierarchical level. Data can only be copied from one dimensional level at a time, so if multiple dimensions are represented in your grid selections, the copy is performed at the lowest dimensional level actually selected. Unlike the Cut function, Copy does not clear the data from the copied cells.

> **Note:** The **Copy** command does not copy information to your Windows clipboard. The data is copied to an application-specific clipboard and cannot be pasted into other programs. If you intend to paste the data into another application, you can choose the **Edit – Copy to Clipboard** command.

Performing Specialized Copy Functions

Using the **Copy** toolbar button (the **Edit – Copy** command) is the simplest method of copying data in your worksheet. There are some specialized copy functions that you can perform by accessing the appropriate dialog. Namely, you can opt to copy the data at the base level, and/or you can opt to copy the data from all slices in the worksheet. If you want to perform either of these operations, choose the **Edit – Copy Special** function.

Paste Button

The **Paste** button paste data into measures.

Paste Button

> **Note:** This button performs the same action as choosing **Edit – Paste**.

This toolbar button is only enabled after you have placed data on the application clipboard by using the Cut, Cut Special, Copy, or Copy Special function. The Paste option pastes the data that was last placed on the system clipboard into the selected cells.

Select the cells that you want to paste data into, and click **Paste**. Data can only be pasted into writable measures.

> **Note:** The Paste command does not paste data from your Windows clipboard. This command only pastes data from an application-specific clipboard, and it cannot be used to import data from another application. If you want to paste copied data from another program, you must choose the **Edit – Paste from Clipboard** command.

Calculate Button

The **Calculate** button submits a queue of data changes to the server for processing.

Calculate Button

> **Note:** This button has the same action as selecting the **Edit – Calculate Now** menu option.

This button is only enabled when the system is in Manual (Deferred) Calculation mode.

Queued changes are executed in the order that they were made.

Update Button

The **Update** button recalculates all sort attributes and dimension splits displayed in the workbook based on user edits since the attribute or dimension split was applied to the data.

Update Button

Toggle View Button

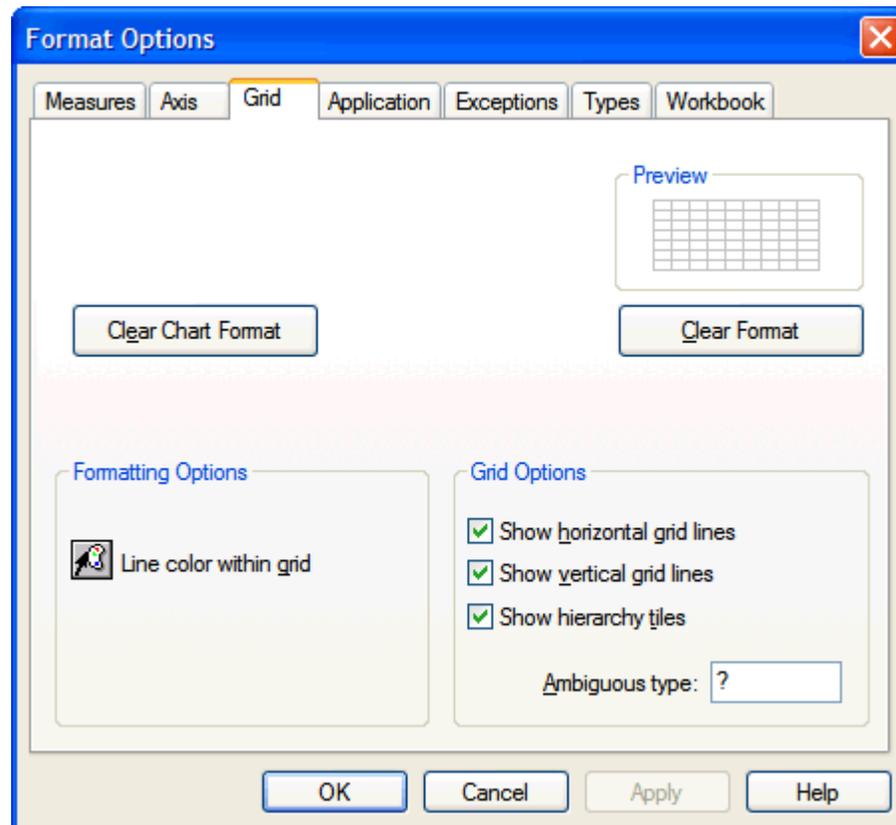The **Toggle** button toggles the display of worksheet data between Grid view and Chart view.

Toggle Button

> **Note:** This button has the same action as choosing **View – Chart** or **View – Grid**.

Format Button

When viewing your worksheet in Grid mode, the **Format** button displays the **Format Options** dialog, which allows you to customize settings for grid features.

Format Options - Grid Tab

Format Button

> **Note:** Clicking this button is the same action as choosing
> **Format – Grid**.

The **Format Options** dialog allows you to perform such functions as:

- Customize the display of horizontal and vertical gridlines
- Specify the text color, fill color, font, and alignment of cells and labels
- Specify a color scheme for the grid background, deferred calculation cells, read only cells, and read/write cells
- Customize formatting for exception values
- Specify prefixes, suffixes, and scale factors to facilitate data entry

When viewing your worksheet in Chart Mode, the **Format** button displays the **Chart FX Properties** dialog, which allows you to customize settings for chart features.
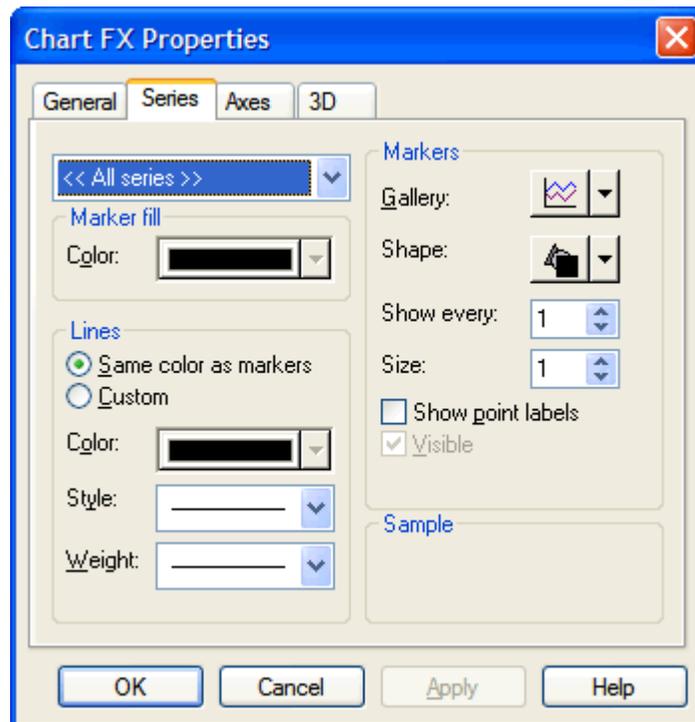

Chart FX Properties

> **Note:** Clicking this button is the same action as choosing
> **Format – Chart**.

The **Chart FX Properties** dialog allows you to perform such functions as:

- Specifying the chart type (line chart, bar chart, pie chart, and so on)
- Customizing the color scheme for all chart series, background, point markers, and chart box
- Selecting a 2D or 3D view of your chart, rotating a chart in three-dimensional space, and specifying depth and perspective for three-dimensional charts
- Customizing the axis display (major/minor units, tick mark appearance, axis titles, axis scale)
- Creating a title for your chart

Chart View Quick Menu

When you are viewing your chart using the Chart F/X utility, you can right-click anywhere within the chart display to produce a convenient quick menu. This menu provides easy access to commonly used chart formatting commands. It allows you to quickly toggle the display of various chart components, and it provides the means to change colors, fonts, titles, and other display features.

Data Editor

This option toggles the display of the Chart F/X Data Editor. This is a data grid that contains the values of the elements plotted in your chart. You can double-click any data value in the grid to edit it. The chart will then be redrawn to reflect your change.

Legend Box

This option toggles the display of the series legend.

Gallery

This option provides quick access to the gallery types menu, which allows you to select a new chart type.

Color

This option provides quick access to a color palette, which allows you to change the color of a selected chart area.

Right-click on a chart area (data series, chart box, background, and so on) to produce the quick menu, and select a new color for that chart area from the color palette.

Edit Title

The Edit Title option provides quick access to a text box where you can type or edit the chart title.

Point Labels

The Point Labels option toggles the display of point labels (data values corresponding to each marker) in your chart.

Font

The Font option provides access to a standard font dialog where you can select or change the font, font style, font size, effects, and color of text in your chart. Right-click on the chart text you want to change, and then select Font from the resulting quick menu to display the **Font** dialog.

Properties

The Properties option opens the **Chart F/X Properties** dialog.

> **Note:** This menu option has the same result as clicking
> **Format** on the main toolbar.

Chart FX Toolbar

When you view your worksheet in chart mode, the Chart FX charting utility provides a toolbar that you use to access various formatting and chart manipulation features. Pass your cursor over the toolbar to display the button title in a pop-up caption.

If the toolbar is currently hidden and you want to display it, right-click within the chart display area, and select Toolbar from the quick menu.
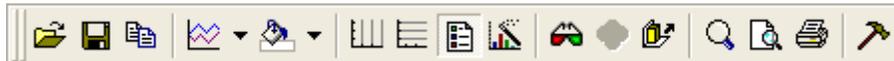
Chart FX Toolbar

Open Chart

The Open Chart option allows you to open a previously saved chart.

Save Chart

The Save Chart option allows you to save a copy of your chart as an individual file. You then specify the name, location, and file type. Charts may be saved as Chart F/X files, Chart F/X templates (no data), and text files (data only, metafile pictures, or bitmap pictures).

Copy to Clipboard

The Copy to Clipboard option allows you to copy your chart to a clipboard that can be used in other applications. You can copy your chart in one of three formats:

- bitmap image
- metafile picture
- text (data only)

This functionality is particularly useful if you want to embed a copy of your chart in a separate document, such as a Word file. Copy your chart to the clipboard as a bitmap image, and paste the chart into the other application.

Gallery

The Gallery option provides quick access to the gallery types menu, which allows you to select a new chart type.

Color

The Color option provides quick access to a color palette that allows you to change the color of a selected chart area.

Vertical Grid

The Vertical Grid option toggles the display of vertical grid lines in your chart.

Horizontal Grid

The Horizontal Grid option toggles the display of horizontal grid lines in your chart.

Legend Box

The Legend Box option toggles the display of the series legend.

Properties

The Properties option opens the **Chart FX Properties** dialog. This menu option has the same result as clicking the **Format** button on the main application toolbar.

3D/2D

The 3D/2D option toggles between two-dimensional and three-dimensional views of your data.

Rotate

The Rotate option produces the 3D tab of the **Chart FX Properties** dialog. On this tab, you can customize the properties of three-dimensional charts, including specialized rotation views. This toolbar button is only enabled when the chart is in 3D mode.

Z-Clustered

The Z-Clustered option activates and deactivates z-axis clustering. When you are viewing your chart in 3D mode and this feature is selected, each charted series appears in a separate row along the z-axis.

Zoom

The Zoom option allows you to zoom in on a section of your chart and view it at a higher magnification. Click this toolbar button to activate the Zoom feature. Then click and hold the mouse button over a corner of the chart area that you want to enlarge. Drag the cursor to the opposite corner of the area that you want to magnify, and release the mouse button. To return to normal view, click the **Zoom** button again.

Print Preview

The Print Preview option opens a dialog that you can use to preview your chart before printing. On this dialog, you can specify options, such as print orientation and margins.

Print

The Print option allows you to print copies of your chart.

Tools

The Tools option provides a menu of features that can be shown or hidden. Click on any menu item to display it if it is currently hidden, or to hide it if it is currently displayed. Use this button to show and hide the values legend, the series legend, the data editor, the palette bar, and the pattern bar.