



Infor XA – Market Monitoring and Analysis User's Guide

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The MMA User's Guide, published by MAPICS, Inc, is a consolidation of the following manuals originally produced by Silvon Software.

- Part 1 – Systems Administrator Guide
- Part 2 – User Guide
- Part 3 – Technical Reference Manual

MMA User's Guide

Part 1 - Systems Administrator Guide

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CHAPTER 1 • BEFORE YOU BEGIN

QuickLook

Use this chapter to learn how to:

- Identify who should read this manual.
- Recognize document conventions.
- Navigate through *MAPICS XA Market Monitoring and Analysis (MMA)* using the keyboard and the mouse.

Who Should Read this Book

MMA is a Microsoft Windows® based data analysis tool designed to provide a quick and effective response to sales trends. This manual is intended for any user responsible for implementing or administering *MMA*. This list includes:

- System administrators responsible for the setup and maintenance of the *MMA* database.

What to Know Before Using this Product

Windows 95, Windows 98, and Windows NT

You should be able to use all of the basic Windows features and functions, for example:

- **Windows Desktop** - Perform all actions on a window, such as sizing, scrolling, selecting, maximizing, minimizing, opening, closing, and using the mouse or keyboard keys.
- **Icons** - Double-click on icons to open windows, applications, folders, documents, or files using the mouse.
- **Menus** - Click on menu titles located on the menu bar to access drop-down menus.
- **Command buttons** - Click on command buttons that are labeled with text, an icon, or both to perform an action.
- **List box** - Use a list box to select an item from the list of choices displayed. If available, scroll up and down to view the entire list.
- **Text box** - Use a text box to type or edit a text value.
- **Dialog box** - Use a dialog box to exchange information or dialog with Windows or the application. Also, use to enter additional information needed to perform a task. Typically includes **OK** and **Cancel** command buttons.
- **Clipboard** - Use the Clipboard to cut and copy information (text or graphics). Windows stores copied information in the clipboard and then lets you paste it into another place.
- **Control Panel** - Use the Control Panel to customize Windows' options, such as screen colors, fonts, mouse, desktop pattern, keyboard rate, date and time, network options, and so forth.
- **Explorer** - Use Explorer to handle administrative tasks, such as locating, copying, moving, and deleting files.

AS/400

If you are using *MMA* in conjunction with the AS/400, you should be familiar with these AS/400 functions:

- Communications (routers) between the AS/400 and the PC.
- OS/400 operating system.
- Program Development Manager (PDM).
- Source Entry Utility (SEU).
- Control Language (CL) commands.
- Command line.
- AS/400 security.

Document Conventions

Text, keyboard, and mouse conventions are employed to help you learn and use *MMA*.

Text Conventions

The following text conventions are used:

| | |
|---------------------|--|
| <i>Product Name</i> | Italics indicate MAPICS products, references to other manuals, new terms, and variables. |
| a:\setup | Bold type indicates information you type. |
| Close | Arial bold type indicates command buttons you click. |
| File Run | The symbol indicates the sequence you use to select the menu items listed. In this example, you would select the File menu and then select the Run item. |
| ENTER | Capital letters indicate keys you press or programs, files, directory names, or drive letters. |
| ADDLIBLE | Courier New type indicates code-based information, such as system messages, field syntax, macros, or commands. |

[Note, Recommendation, Tip]: Notes containing important information are bordered by lines on the top and bottom.

Caution: Caution messages are bold and enclosed in a box.

Keyboard Conventions

Keys you press on the keyboard are shown in capitals (ENTER, ALT, and so forth). Other keyboard conventions addressed here may differ depending on the type of keyboard you are using.

| | |
|----------------------------|--|
| Shortcut keys | Press ALT and the underlined letter of a menu to access the menu. For example, press ALT+F to display the <u>F</u> ile Menu. |
| TAB key | Press TAB to move from field to field. |
| ENTER key | Press ENTER in place of a command. |
| KEY+KEY | Use key combinations to perform an action. Press and hold down the first key, and then press the second key. For example, press SHIFT+ENTER. |
| ESC Key | Press ESC to stop a function in process or to cancel an operation. |
| Navigation keys | Press arrow keys, HOME, END, PAGE UP, or PAGE DOWN to move around. |
| Numeric keypad keys | Use the numeric keypad on your keyboard to enter numeric values. Be sure the NUM LOCK key on your keyboard is turned on. |

Mouse Conventions

The following terms explain how you use the mouse to access or process information.

| | |
|----------------------|--|
| Click | Use the mouse to place the arrow over an item, such as an icon, button, file, or field. Click the left mouse button one time to select (or highlight) the item. |
| Double-click | Use the mouse to place the arrow over an item. Click the left mouse button <i>two times in rapid succession</i> to select the item, or start an action. |
| Drag and drop | Use the mouse to place the arrow over an item. Click the left mouse button and continue to hold down the left mouse button as you move the item to a new position on the screen. Release the left mouse button to drop the item into the new position. |

Notes

CHAPTER 2 • GETTING STARTED

QuickLook

Use this chapter to learn how to:

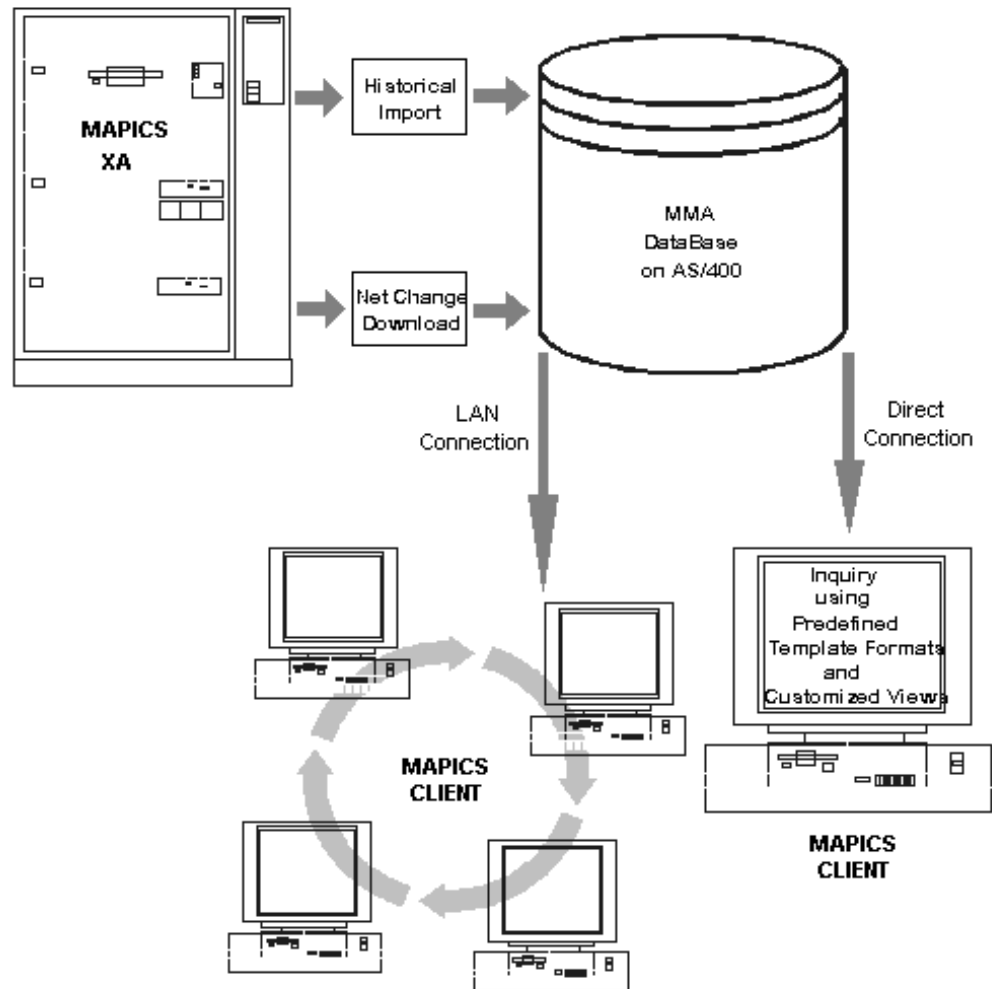
- Familiarize yourself with *MMA* features.

What is *MMA*?

MMA is a client server application that combines a multi-dimensional data warehouse with powerful analysis tools. Through the use of user-definable levels of analysis and flexible definition of categories, *MMA* captures data from your primary business systems and combines it into a single data warehouse. The *MMA* analysis tools allow you to then analyze and compare your data based on your unique business structure. Features include:

- Best Fit Analysis
- Customized Desktop
- File Export Capabilities
- Multi-currency
- Variable Periods
- Security/Authority
- Data Entry
- Data Copy
- Realignment

MMA Functional Overview



CHAPTER 3 • DATABASE CREATION

Quicklook

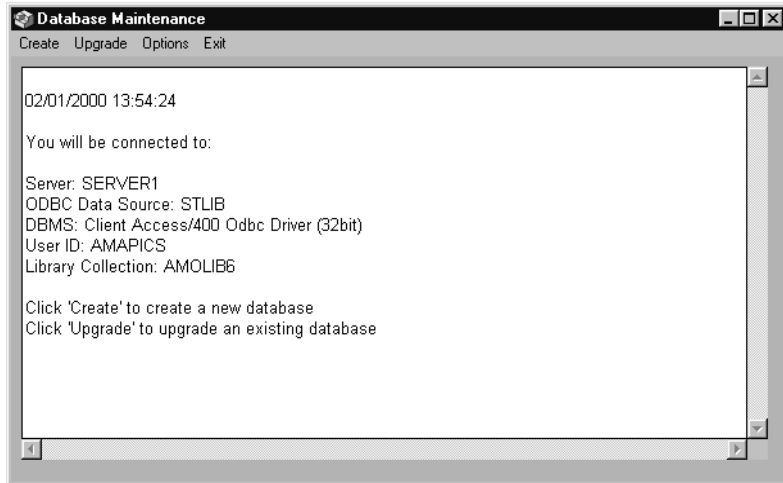
Use this chapter to learn how to:

- Upgrade your database.
- View table definitions and attributes for a new database.
- View table definitions and attributes for an upgraded database.
- Create tables that are specific to your individual implementation.
- Search and replace category/values.
- Copy ViewGroups.

Database Maintenance

Upgrades the tables specified in Environment Setup.

Database Maintenance is used to upgrade the collections and tables for your database.



Database Maintenance window

To upgrade your current database:

The Upgrade function is used when you are upgrading an existing *MMA* database to a new release.

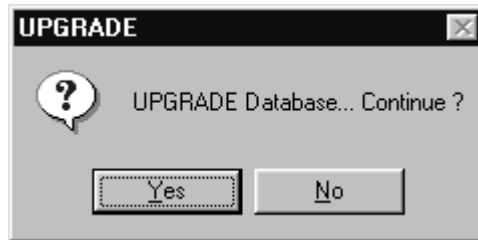
Warning: The upgrade process should not be run more than once. In case of errors, preserve the *.txt files in the MMA60 local directory and call your support line. The current release of this product does not contain an error restart feature.



1. Access the Database Maintenance window by clicking the *Database Maintenance* icon from the *MMA Programs* group.

Note: All import and move processes must be complete prior to upgrade. Before executing an upgrade, make sure that all import and move processes are completed, and that there no pending jobs from Add DSL, Remove DSL, Clear Data, and Performance Tuning Workbench.

2. Click **Upgrade**, and the Upgrade prompt window displays.

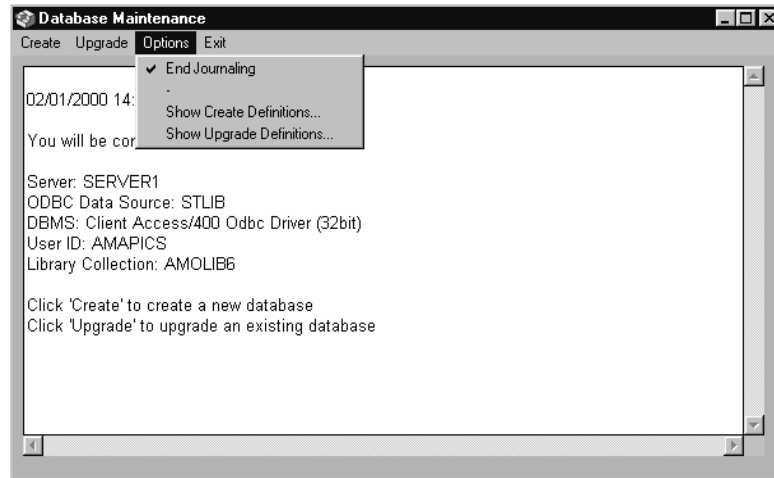


Upgrade Prompt window

3. To upgrade your current database to the new release of *MMA*, click **Yes**. If you do not want to upgrade the database at this time, click **No**.

Database Maintenance Options

The Options menu can be used to display the tables and Views information for Create and Upgrade definitions.



Database Maintenance Options menu

End Journaling

Use to start or stop the creation of journals. The system default is not to run journaling. If you want to run journaling, click Options | End Journaling to remove the check mark.

Note: Be aware that selecting journaling can greatly affect system performance.

Show Create Definitions

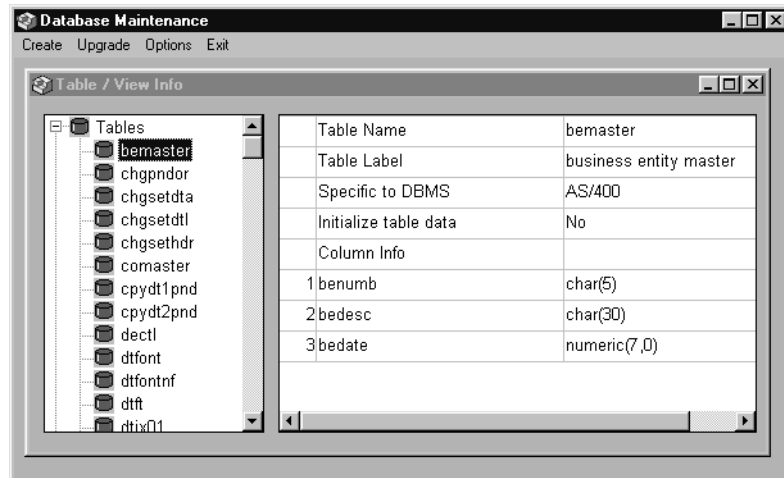
Use Show Create Definitions to display all the tables and Views that are created during the initial setup of the MMA database. See "Show Create Definitions" on page A13 for additional information about this function.

Show Upgrade Definitions

Use Show Upgrade Definitions to display all the tables and Views that are updated when you select the Upgrade Database option. See "Show Upgrade Definitions" on page A14 for additional information about this function.


Show Create Definitions

The Show Create Definitions function can be used to view detail information about the tables and Views that are created in the database.



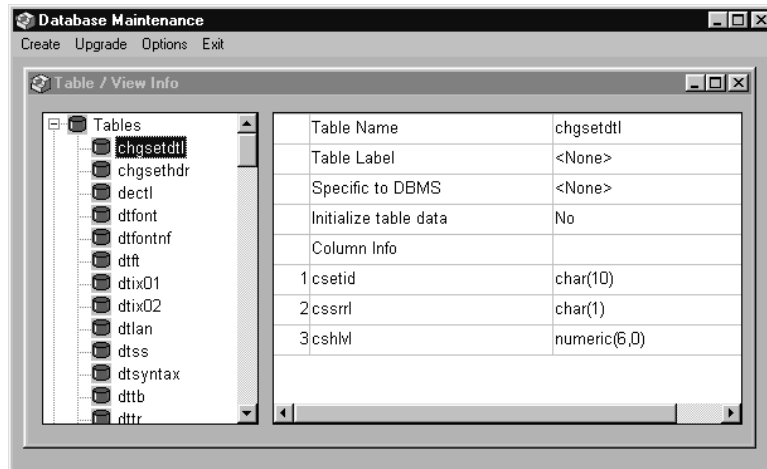
Show Create Definitions - Table/View Info window

To view detail information:

1. Select Options | Show Create Definitions on the Database Maintenance window.
2. Select Tables or View on the Table/View Info window. A list of tables or Views displays.
3. To view detail information for a specific Table/View, click the appropriate Table/View name. The associated detail information displays on the right side of the window.
4. To exit the window, click  , or to exit *Database Maintenance*, click the **Exit** menu option.


Show Upgrade Definitions

If you want to view the database tables and Views that are upgraded for the system, use the Show Upgrade Definitions function.



Show Upgrade Definitions - Table/View Info window

To view detail information:

1. Select Options | Show Upgrade Definitions on the Database Maintenance window.
2. Select Tables or View on the Table/View Info window. A list of tables or Views displays.
3. To view detail information for a specific Table/View, click the appropriate Table/View name. The associated detail information displays on the right side of the window.
4. To exit the window, click  , or to exit *Database Maintenance*, click the **Exit** menu option.

Database Install

Database Install creates the tables that are specific to your implementation based on your individual Dimension and structure code definitions.

Note: The database must be created using *Database Maintenance* prior to defining tables.



Database Install window

File Menu Options

Dimensions

Use to access the Maintain Dimensions window.

Note: The Maintain Dimensions function does not apply to *MMA*.

DSL

Data Summary Levels (DSL's) are definitions of how data is to be summarized in the history files and are used to tune your system for better performance. The DSL is the identifier associated with a defined set of Dimensions at which data is to be summarized.

Exit

Use this to exit *Database Install*.

Installation Menu Options

Structure Codes

Use to access the Table Structure Sets window.

Note: The Table Structure Sets function does not apply to *MMA*.

Define Tables

Use to access the Define Tables window and define the tables that are specific to your implementation. The tables defined here are used to map where the data is kept on the server.

Create Tables

Use to access the Create Tables window and create the tables that are defined in the Define Tables function.

Other Installs

Use to access the Create Tables window.

Note: The Other Installations function does not apply to *MMA*.

Help Menu Options

Help Index

Use to access MMA online Help.

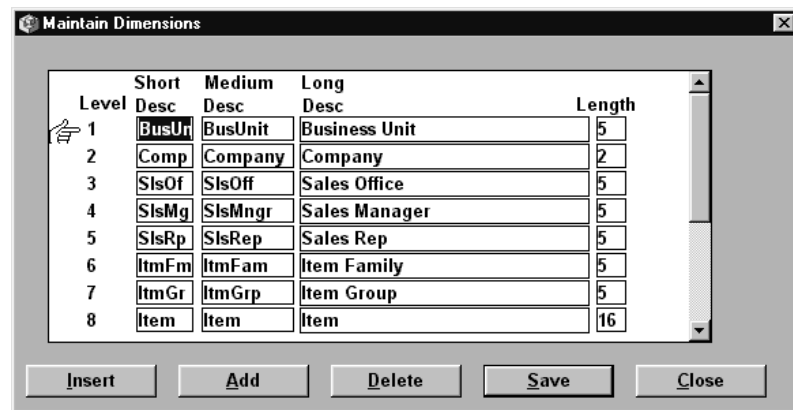
About DataBase Install

Use to view version and copyright information about *Database Install*.

Defining Dimensions

Dimensions are used to group data for analysis within *MMA*. Dimensions allow you to view summarized data at all levels of your organization.

Note: Dimensions are pre-defined for *MMA*; therefore, the Maintaining Dimensions function does not apply to *MMA*.



Maintain Dimensions window

To access the Maintain Dimensions window

1. Select File | Dimensions from the main window of the *Database Install* application.
2. Click **Close** to exit the window.

Maintain Dimensions Fields

Level

The level number identifies the order in which Dimensions display. This number is system generated.

Short Desc

Short description of each Dimension displayed in *MMA* Views. Up to five alphanumeric characters may be defined for the level.

Medium Desc

Medium description of each Dimension displayed in *MMA* Views. Up to ten alphanumeric characters may be defined for the medium description. This field is the default during Template definition.

Long Desc

Long description of each Dimension displayed in *MMA Views*. Up to 40 alphanumeric characters may be defined for the long description.

Length

The number of characters that represent the values for the Dimension. Maximum 25 characters.

Maintain Dimensions Command Buttons

Close

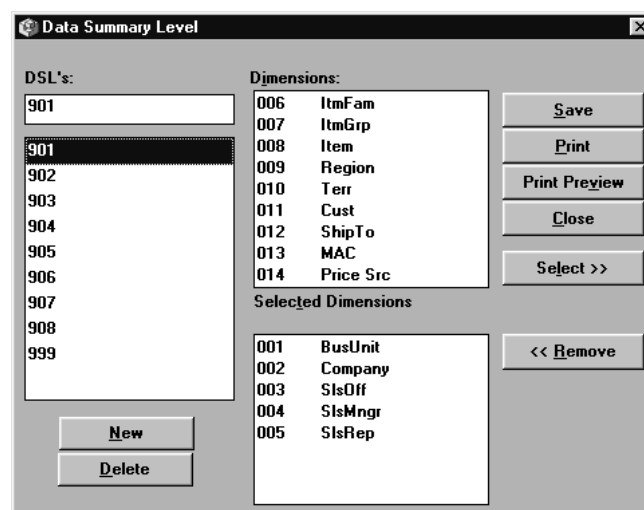
Click **Close** to exit the Maintain Dimensions window and return to the main window of the *Database Install* application.

Creating Data Summary Levels

DSL's are definitions of how data is to be summarized in the history files and are used to tune your system for better performance. The DSL is the identifier associated with a defined set of Dimensions at which data is to be summarized.

When you run a Performance Tuning Workbench analysis on your system, the workbench makes suggestions for DSL's that should be created or removed to enhance system performance. When you need to create or remove a DSL, you must access the Add or Remove DSL function in *Administration*.

Note: For more information about using the Performance Tuning Workbench functionality, see Chapter 6 in this *Systems Administrator Guide*.



Data Summary Level window

To create DSL's:

1. Choose File | DSL from the main window of the *Database Install* application.
2. Click **New** to clear all of the detail Values from the fields.
3. Enter the DSL number in the box below the DSL's heading.
4. Select one or more Dimensions to be included in the DSL from the Dimensions list box by highlighting the Dimension then clicking **Select**, or double-clicking on the required Dimension(s).
5. The Dimensions included in the active DSL display in the Selected Dimensions list box.

6. *{Optional}* If you want to preview and then print the DSL report, click **Print Preview** and then **Print**.
7. Click **Save** and then **Close**.

Data Summary Level Maintenance Fields

DSL's

Level 999 is the lowest level and usually includes all Dimensions.

All valid DSL's display in this group box. The selected one displays at the top of the list in a field that can be maintained. If more DSL's exist than can fit within the box, a scroll bar displays enabling you to scroll through all available DSL's.

Dimensions

Dimensions must be defined prior to DSL's because Dimensions are included in DSL's.

All available (non-selected) Dimensions display in the Dimensions list box. If more Dimensions exist than can fit within the box, a scroll bar displays to scroll through available Dimensions. A Dimension can be added to the selected DSL by highlighting it in the list box and clicking **Select**. The selected Dimensions display in the Selected Dimensions list box. A double-click on a Dimension also makes a selection.

Selected Dimensions

All Dimensions included in the selected DSL display in the Selected Dimensions list box. Dimensions can be removed from the active DSL by highlighting the Dimension displayed in the Selected Dimensions list box and clicking **Remove**. The Dimension that is removed from the Selected Dimensions list box is added to the list of available Dimensions. A double-click on the selected Dimension also removes the Dimension.

DSL Maintenance Command Buttons

Save

Click **Save** to save your entries and redisplay the *Database Install* window. You must click **Close** to close the active window.

Print

Click **Print** to print a DSL Dimension Report without previewing the report.

Print Preview

Click **Print Preview** to view a DSL Dimension Report before you print it. Once in the Print Preview window, click **Print** to print the report, or **Close** to exit the preview.

Close

Click **Close** to close the Data Summary Level window without saving any entries. If entries were made without selecting **Save**, a message warning you that edits were made and a save was not performed displays. This ensures that you do not accidentally exit without saving.

Select

To add a Dimension to the active DSL, highlight the Dimension displaying in the Dimensions list box and click **Select**. The Dimension is removed from the listing of available Dimensions and placed in the Selected Dimensions list box. A double-click on the Dimension selected in the Dimensions list box also makes a selection.

Remove

To remove a Dimension from the active DSL, choose the Dimension from the Selected Dimensions list box and then click **Remove**. The Dimension is removed from the Selected Dimensions list box and then added to the listing of available Dimensions above. A double-click on the Dimension displaying in the Selected Dimensions list box also removes a Dimension from the DSL.

New

Click **New** to reset the Data Summary Level window to create a new DSL. After creating the new DSL, be sure to update your entries by clicking **Save**.

Delete

Highlight the Data Summary Level you want to delete and click **Delete**. A delete confirmation window displays to verify deletion. Verify your selection and click **Yes** to confirm deletion.

Note: If a DSL is included in a data source, it cannot be deleted.

| DSL-Dimension Report | | | | | 02/03/21 |
|----------------------|------------|-------------|---------------|--------|--------------|
| | Dim. level | Short desc. | Long desc. | Length | Master table |
| DSL : 901 | 1 | BusUn | Business Unit | 5 | STCSMF10 |
| | 2 | Comp | Company | 2 | STCSMF10 |
| | 3 | SlsOf | Sales Office | 5 | STCSMF10 |
| | 4 | SlsMg | Sales Manager | 5 | STCSMF10 |
| | 5 | SlsRp | Sales Rep | 5 | STCSMF10 |
| DSL : 902 | 1 | BusUn | Business Unit | 5 | STCSMF10 |
| | 2 | Comp | Company | 2 | STCSMF10 |
| | 3 | SlsOf | Sales Office | 5 | STCSMF10 |
| | 4 | SlsMg | Sales Manager | 5 | STCSMF10 |
| | 5 | SlsRp | Sales Rep | 5 | STCSMF10 |

DSL Dimension Report

To print the DSL Dimension Report:

1. Select File | DSL from the main window of the *Database Install* application.
2. To preview the report before you select to print, click **Print Preview**.
3. To print the report from either the DSL window or the Print Preview window, click **Print**.
4. To exit this window, click **Close**.

DSL Dimension Report Fields

The DSL Dimension Report contains all of the defined information for each DSL. The following information prints on the report:

- Dimension Level
- Short Description
- Long Description
- Field Length
- Master Table association
- DSL number

Maintaining Table Structure Sets

Table structure sets are used to define table characteristics using previously defined Dimensions and to determine how the data warehouse data tables are created.

Note: The Table Structure Sets function does not apply to *MMA*.

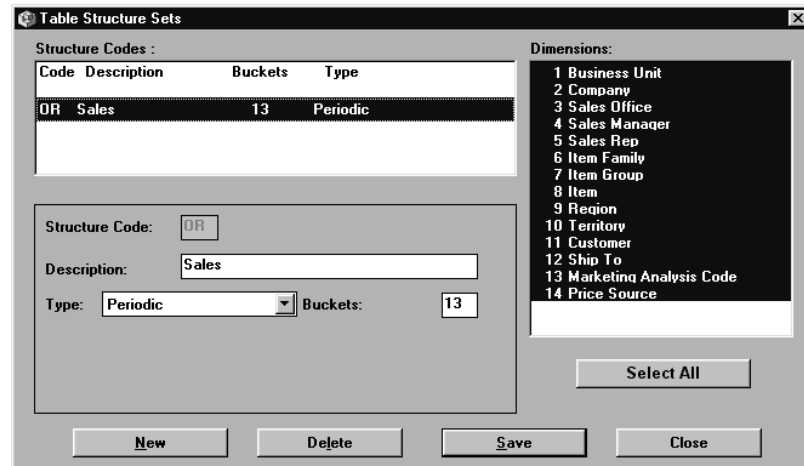


Table Structure Sets window

To access the Table Structure Sets window:

1. Select Installation | Structure Codes from the main window of the *Database Install* application. The Table Structure Sets window displays.
2. Click **Close** to exit this window.

Table Structure Sets Fields

Structure Codes

Two-character code used to identify the table structure set. This field defaults from the system and is not maintainable.

Description

Description of the structure code.

Type

Identifies the type of bucket used for the Dimension type.

Buckets

Number of buckets that make up the structure code.

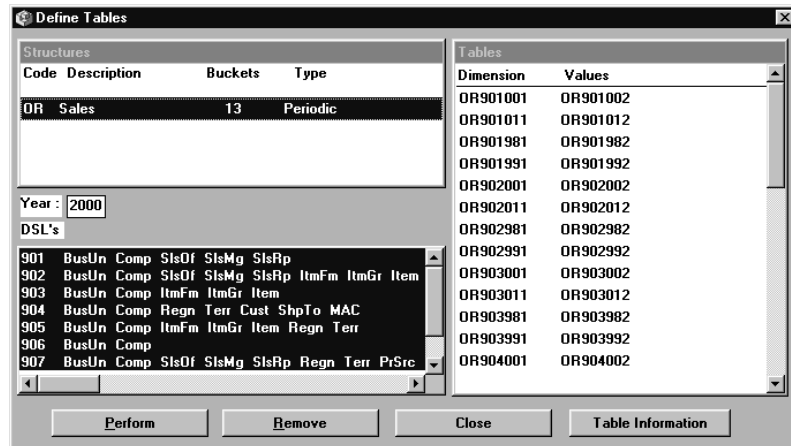
Table Structure Sets Command Buttons

Close

Click **Close** to exit the Table Structure Sets window and return to the main window of the *Database Install* application.

Maintaining Tables

Dimensions can be used to create table structure sets. You can define the table style for each table structure set and also view the number of records that exist for each table.



Define Tables window

To define tables for a table structure set:

1. Select Installation | Define Tables from the main window of the *Database* Install application. The Define Tables window displays.
2. Select the structure code by highlighting it.

Note: For new structure codes defined to the system, the year and associated DSL's display.

3. Enter a four-digit year for which the tables need to be created and press the TAB key.
4. Select the DSL's for which this table has to be created.
5. Once you have selected the year and DSL's, click **Perform** to generate the table names and the information to the database.

Note: The tables will be created but will not have any information contained within them at this time.

6. Click **Close** to exit this window.

Define Tables Command Buttons

Perform

Once you have selected tables to be associated with the appropriate structure code, click **Perform** to create the tables in the database.

Remove

Use to remove the table definitions for a table structure. A confirmation window displays to verify that the correct table definitions are selected for deletion.

Close

Use to exit the Define Tables function and return to the main *Database Install* window.

Table Information

Select a table structure and click **Table Information** to display record counts for the associated tables. The following window displays.



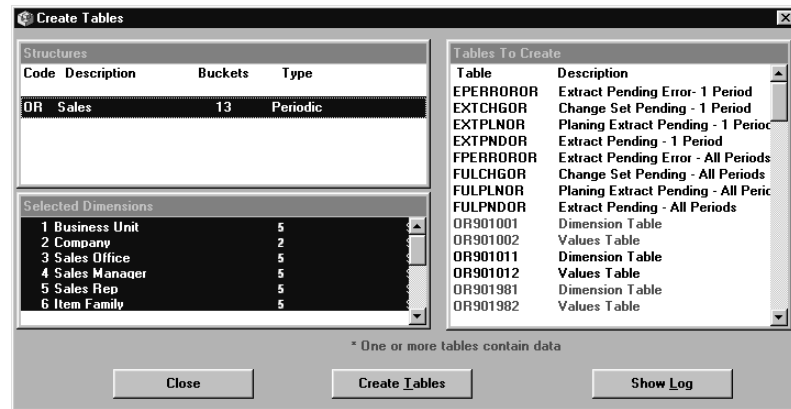
Table Information window

Note: Once a table is created and record information exists for the table, the table style should not be changed.

Creating Tables

The Create Tables function is used to create the pending and warehouse files required for your implementation. Tables are created for each table code structure displayed in the Structures box of the Create Tables window. The Create Tables function must be selected for each structure code in order for all tables to be created.

Note: The tables that are created can vary for each structure code and are dependent on how you defined your tables.

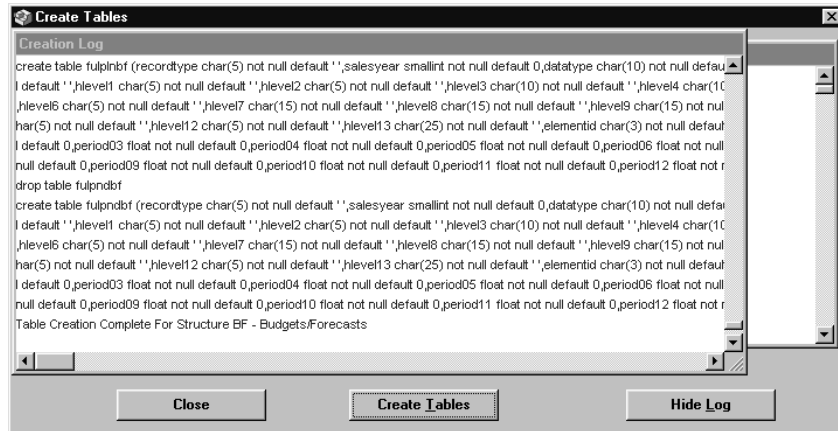


Create Tables window

To create tables:

1. Select Installation | Create Tables from the main window of the *Database Install* application. The Create Tables window displays.
2. Highlight the table structure code you want to create tables for in the Structures box. Notice that when you select a table structure code, the associated Dimensions and tables to be created also display.
3. Click **Create Tables** to start the creation process.

4. *{Optional}* Click **Show Log** to view tables as they are created.



Create Tables window - Creation Log

5. When all tables are created, you can click **Close** to exit the Create Tables function.

Create Tables Fields

Structures

Displays the list of available table structures you can select in order to create tables. Structure codes are defined in the Table Structure Sets function.

Selected Dimensions

Displays the Dimensions associated with the selected tables structure code. Dimensions are pre-defined in the Maintain Dimensions function. See "Defining Dimensions" on page A17 for more information about this function. Dimensions are attached to tables in the Table Structure Sets function.

Tables to Create

Displays the tables that are created for the selected table structure code. Tables displayed in red have data and will not be created.

Create Tables Command Buttons

Close

Click **Close** to exit the Create Tables function.

Create Tables

Click **Create Tables** to start the process of accumulating data for each of the displayed tables associated with the selected table structure code.

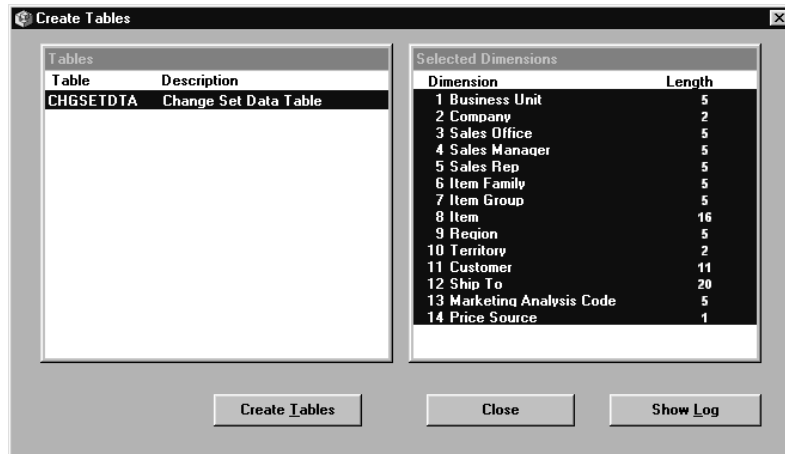
Show Log/Hide Log

Use to display or hide the log of tables as they are being created.

Other Installations

The Other Install function is used to generate the tables used for Change Set information.

Note: The Other Installations function does not apply to *MMA*.



Create Tables window

To access the Create Tables window:

1. Select Installation | Other Install from the main window of the *Database Install* application.
2. Click **Close** to exit this window.

Create Tables Fields and Buttons

For information about the Create Tables window fields and buttons, see "Creating Tables" on page A27.

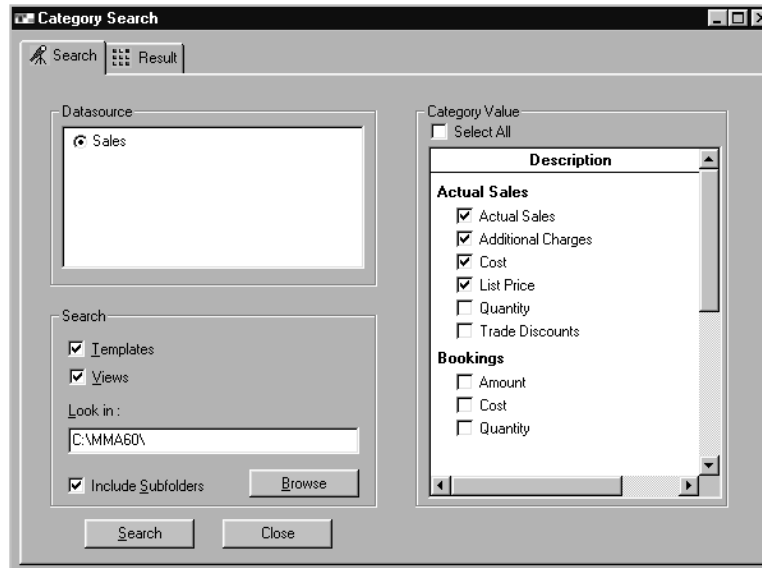
Category Search Utility

The Category Search Utility is a Migration Utility that provides the *MMA* system administrator with a tool that will identify, and optionally update, Template and View period range definitions for selected category/values. This tool can be used in a situation where the ViewGroup associated with a category changes. When this happens, the period range definition held in the Templates and Views for that category must be updated with period ranges from the new ViewGroup.

Migration Utility icon



In order to activate the Migration Utility, you must select the Migration Utility check box from the Select Components window during the *MMA* installation process. Once it is installed, you may access the Migration Utility from within the *MMA* Program group listing.

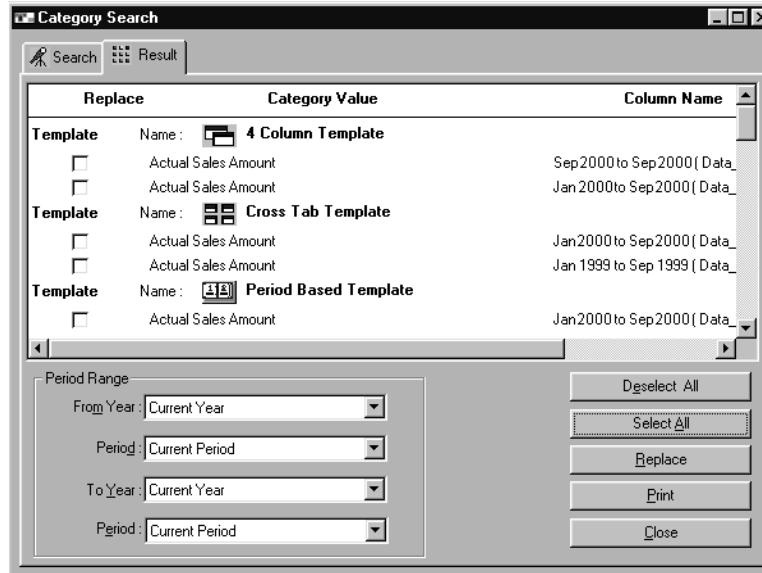


Category Search window - Search tab

To search for a selected category/value:

1. Open the Migration Utility from within the *MMA* Program group listing.
2. Select Utilities | Search Categories/Values. The Category Search window displays.
3. Select the Datasource radio button for which you want to display category/values. The data sources displayed were previously defined in the *Administration* application.
4. In the Category Value list box, select the check box for the category/values you want to search for. If you want to search for all of the category/values that display, click the Select All check box.
5. In the Search group box, select whether you want to search in Templates and/or Views for the selected category/values.
6. *{Optional}* If you selected to search within a View, you must specify the directory path in the Look in field. Click **Browse** to search for the directory path if needed.

7. *{Optional}* If you specified a directory path in Step 6, you may search within subfolders by clicking the Include Subfolders check box.
8. Click **Search** to begin the search for the category/values, or click **Close** to close this window without performing any searches.
9. Click the Result tab to view the results of your search. The following window displays.



Category Search window - Result tab

10. Based on the criteria that you specified for the search, select the Template or View that you want to replace by clicking the appropriate check box. If you want to replace all of the Templates or Views listed, click **Select All**. If you are not satisfied with your decision, you may click **Deselect All**.
11. Select the new period range the Template or View should be replaced with by using the drop-down selection lists.
12. Click **Replace**.
13. You may click **Close** at any time to close this window without saving any changes, if you did not click **Replace**.

Category Search Fields

Search Tab

Datasource

This group box displays the various data source descriptions taken from the STCSDT11 table. You may select one data source at a time. For each data source selected, the corresponding category/values for that data source display in the Category Value list box.

Search

Templates

If you select the Templates check box, then the search is performed on all Templates. Templates is selected by default.

Views

If you select the Views check box, the search is performed on all Views saved in the directory specified in the Look in field. If this check box is not selected, then the Look in field and Include Subfolders check box are disabled.

Look in:

In this field, the user specifies the directory path in which to search for all the Views. This field is only enabled if the Views check box is selected.

Include Subfolders

When this check box is selected, it allows the program to search the subfolders in the selected directory.

Category Value

This list box displays all of the category/values for the selected data source. You may select multiple category/values by selecting the check boxes. You must select a category/value in order to perform a search.

Select All

When the Select All check box is selected, all category/values in the list box will be selected.

Result Tab

Replace

The Templates and Views found as a result of the search display in the Result tab. The Replace check box allows the user to select only a specific column to replace the Period.

Period Range (From Year, To Year, Period)

If you want to replace the From and To Periods with new period ranges, then you select valid period ranges for the selected columns. The period range displays all of the View Set Items for the selected data source. Once you have selected new ranges, click **Replace** to change the From and To Periods for Templates, as well as Views.

Category Search Command Buttons

Search Tab

Browse

Use this button to select a path for the Look in field.

Search

This button performs the search on the Templates and Views for the selected category and displays the result in the Result tab of the Category Search window.

Close

Use this button to close the Category Search window.

Result Tab

Deselect All

By clicking this button, all Templates and Views that were selected to be replaced will now be deselected.

Select All

The **Select All** button will select all Templates and Views to replace.

Replace

In order to use the **Replace** button, at least one Template or View should be selected. Once this button is clicked, the replaced Templates or Views display in red.

Print

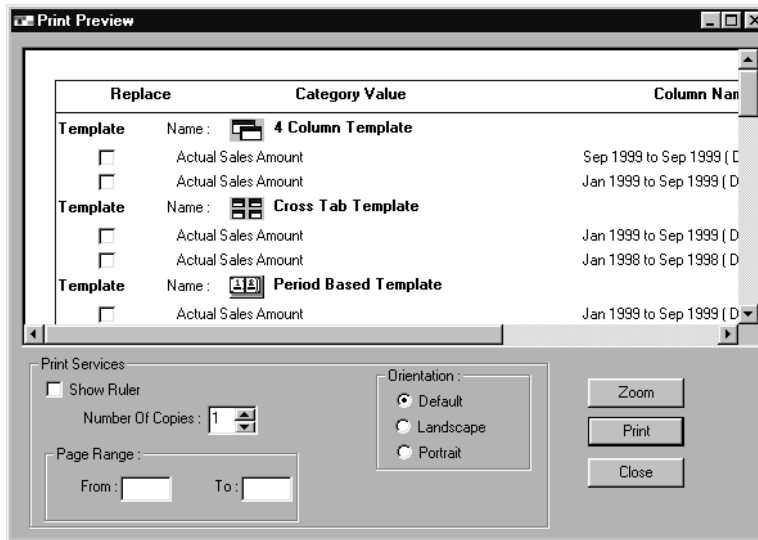
By clicking the **Print** button, a Print Preview window displays where you may choose to print the results of your search.

Close

Click **Close** to close this window without saving your changes.

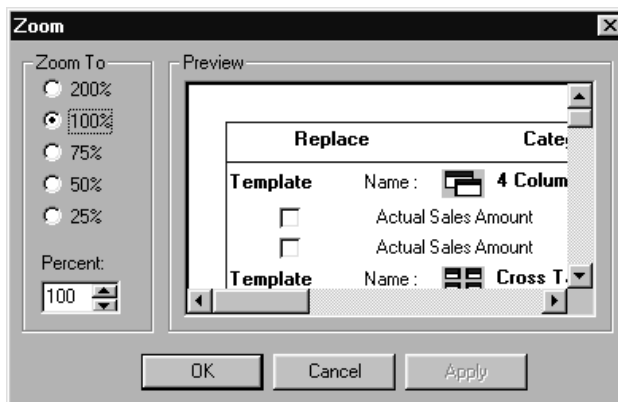
To print the results of your search:

1. From within the Results tab of the Category Search window, click **Print**. The Print Preview window displays.
2. *{Optional}* You may select the Show ruler check box if you want to view the Dimensions of the report.
3. Specify the number of copies you want to print by using the increase or decrease arrow. One copy is selected as the default.
4. If the report has multiple pages, select the page range that you want to print by typing the page number in the From and To fields.
5. Specify the orientation of the report when it prints by clicking the respective radio button.



Print Preview window

6. If you want to zoom in on the report so it will print larger or smaller, click **Zoom**. The following window displays.



Zoom window accessed from Print Preview window

7. Specify the percentage you want to zoom to by selecting the corresponding radio button, or you may specify a percentage using the increase or decrease buttons.
8. Click **Apply**, then **OK** to close the Zoom window.
9. The Print Preview window redisplay and you may click **Print** to print the results of your search.

Print Preview Fields

Print Preview

This is the area of the window where you can view how the report will print. If the ruler is displayed, margins can be adjusted using the ruler displayed on the top and the left of the Print Preview window.

Show Ruler

Select the Show Ruler check box and use the rulers to size the margins to fit appropriately on a page.

Number Of Copies

Use the arrows to select the desired number of copies you want to print. By default, only one copy will print. The number of copies specified to print applies to the entire report.

Orientation

You can determine the orientation of the printed report by selecting the appropriate radio button. Portrait orientation prints the page so that it is taller than wide. Landscape orientation prints the page so that it is wider than tall. The orientation default can be set up in the Printer Setup window.

Page Range

Specify the portion of the document you want to print by entering page numbers in the From and To fields. If there is no entry made in these fields, the entire document will print.

Print Preview Command Buttons

Zoom

You can zoom to a higher percentage to get a close-up view of your document and have the font size increase on the printed report. You can also zoom to a lower percentage to decrease the font size within your document. Click **Zoom** to access the Zoom window and specify the zoom size.

Print

Click this button to print the report.

Close

Click **Close** to close the Print Preview window without printing.

Zoom Fields

Zoom To

Use the radio buttons to select the zoom size. By default, the print preview displays at 100%. If you want to zoom to a percentage not offered by the radio buttons, enter the zoom value in the Percent field or use the arrow buttons to scroll to the desired zoom percentage.

Preview

The Preview area of the window displays the report as it will print based on the zoom selection.

Zoom Command Buttons

OK

Click **OK** to accept your selections and close the window.

Cancel

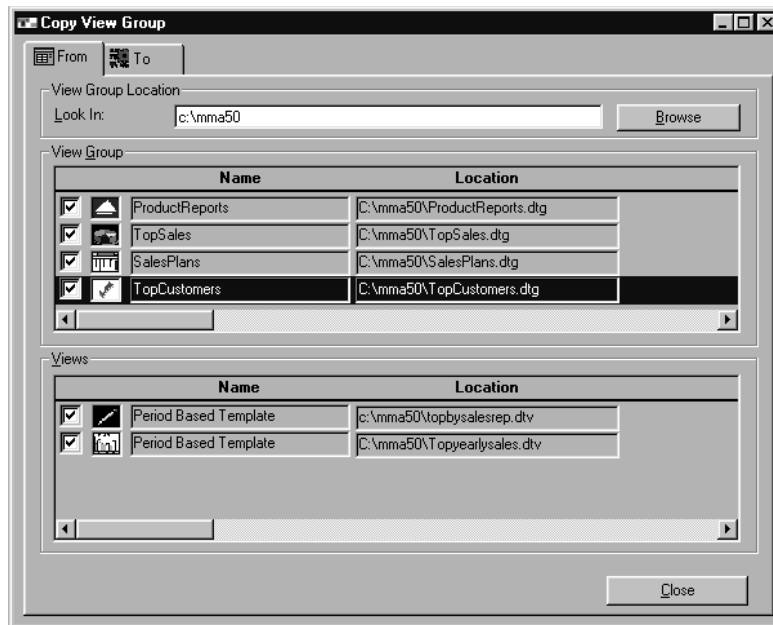
Click **Cancel** to close the window without accepting any selections.

Apply

Click **Apply** to apply the changes you made in this window to the report. The window remains active so you can make any additional modifications.

Copy View Group Utility

The purpose of the Copy View Group Utility, a Migration Utility, is to automate the process of moving Views and ViewGroups between *MMA* directories. This utility can be used when upgrading to a new version of *MMA* and the new client software is installed into a different directory. This utility provides the user with a tool that will manage the process of copying the selected Views and ViewGroups updated with the appropriate file locations.

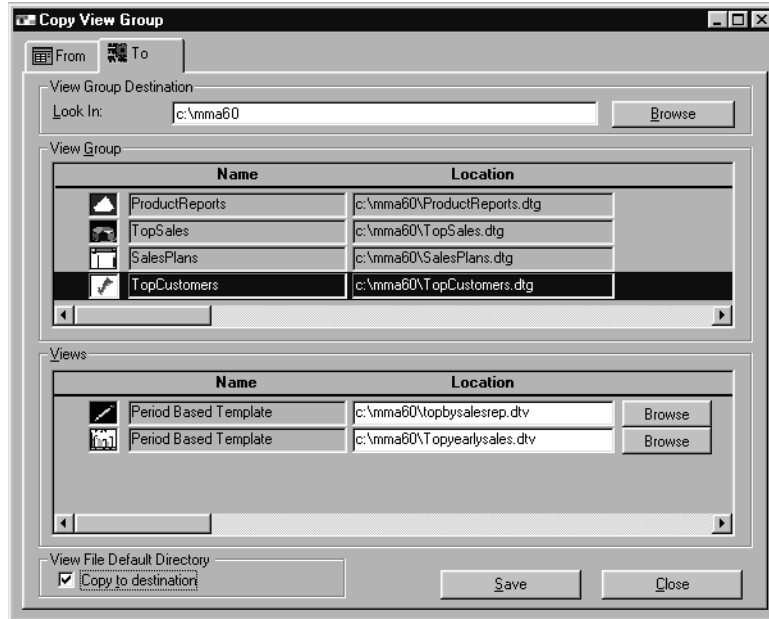


Copy View Group window - From tab

To copy a ViewGroup:

1. Open the Migration Utility from within the *MMA* program group listing.
2. Select Utilities | Copy View Groups. The Copy View Group window displays.
3. Specify the directory of the *MMA* version in which the ViewGroups you want to Copy from were created. Type the name of the directory in the Look In field or click **Browse** to select the directory.
4. Once you have specified the path name, the corresponding ViewGroups and Views from that directory display in the bottom portion of the Copy View Group window.
5. By default, all ViewGroups are selected. You may deselect the ViewGroup by clicking the check box next to the ViewGroup name.
6. For each selected ViewGroup, the corresponding Views are highlighted in the Views list box in the bottom portion of the window.
7. By default, all Views are selected. You may deselect any Views by clicking the check box next to the View name.

8. Click the To tab to specify where to copy the ViewGroups.
9. Select the destination directory for the ViewGroups you selected in the From tab by either typing the directory path name in the Look In field, or by using the **Browse** button. The destination directory should be the same as the directory for the new version of *MMA* in which you will use the copied ViewGroups.



Copy View Group window - To tab

10. The ViewGroup and Views list boxes display the choices you selected in the From tab, but the directory for the ViewGroups and Views will be the directory specified in the To tab Look In field.
11. To copy both ViewGroups and Views into the new directory, leave the Copy to destination check box deselected. This disables the **Browse** button in the Views list box. Both ViewGroups and Views will be copied to the specified directory.
-- OR --
To copy just Views, select the Copy to destination check box. You can choose a directory to copy the Views to by clicking the **Browse** button in the Views list box. Views will be copied to the specified directory. If you do not use the **Browse** button, Views will be copied to the default View directory for the version of *MMA* in the directory specified in the To tab Look In field. The default View directory is controlled in *DBView* using the Defaults window (accessed through the Options menu).
12. Click **Save**, then **Close**.

Copy View Group Fields

View Group Destination Look In

In both the From and To tabs, this field is used to specify the directory path for the file that contains ViewGroups you want copied.

View Group

The View Group list box displays all of the ViewGroups saved within or to be copied to the directory specified in the Look In field. By default, all ViewGroups are selected to be copied.

Views

The corresponding Views for each ViewGroup that is selected displays in the Views list box. By default, all Views are selected.

Copy to destination

This check box is selected when you want to copy only the Views that are in the ViewGroups selected in the From tab. Use the **Browse** button in the Views area of the To tab to specify the directory to copy the Views to. If the check box is not selected, ViewGroups and Views selected in the From tab will be copied to the directory specified in the To tab Look In field.

Copy View Group Command Buttons

Browse

In both the From and To tabs in the View Group Destination area, click **Browse** to specify the directory path for the ViewGroups. In the To tab in the Views area, click **Browse** (after selecting the Copy to destination check box) to select a directory to copy Views to.

Save

In the To tab, when you click **Save** and the Copy to destination check box is selected, the View files are copied to the destination directory specified in the Views area. If no directory is specified using the **Browse** button in the Views area, Views will be copied to the default View directory for the version of *MMA* in the directory specified in the To tab Look In field. The default View directory is controlled in *DBView* using the Defaults window (accessed through the Options menu).

If the Copy to destination check box is not selected and **Save** is clicked, the ViewGroups and Views are copied to the directory specified in the To tab Look In field.

Close

Clicking **Close** will close the window without copying any ViewGroups or Views.

Notes

CHAPTER 4 • SETTING UP

QuickLook

Use this chapter to learn how to create, view, or maintain:

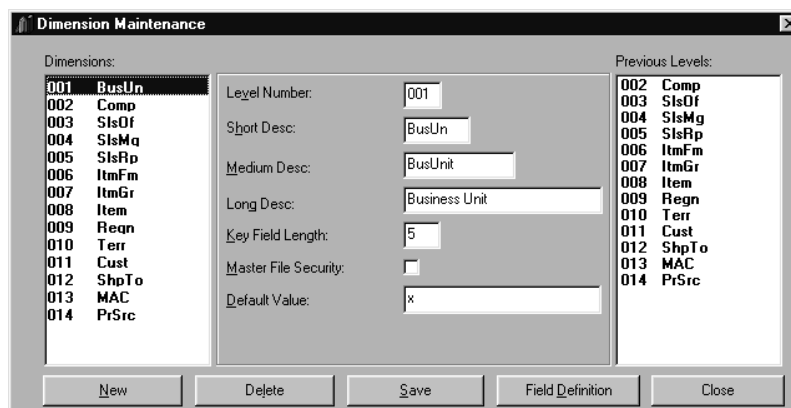
- Dimensions
- Field Definitions (Pickup Fields)
- Values
- Categories
- Data Sources
- Data Source Tables
- Drill Down Sets
- Display Masks
- Rounding Factors
- Colors
- Parameter Master Maintenance
- User Profiles
- User Authorization
- Refresh User List
- ViewSets
- ViewSetItems
- Current Date
- ViewGroups
- ViewBuckets
- Currency Codes

Dimensions

A maximum of 99 Dimensions can be defined.

MMA uses Dimensions to analyze data. Dimensions are established to allow you to view summarized data at all levels of your organization. For each Dimension defined, there is associated field information if field definitions (pickup fields) are defined. See "Field Definitions" on page A44 for more information about this function.

Caution: *MMA* is a pre-defined data warehouse, which includes pre-defined Dimensions and previous levels. Once Dimensions are defined, they should not be changed within an *MMA* production system.



Dimension Maintenance window

To access the Dimension Maintenance window:

1. Choose File | Dimensions from the *Administration* main window.
2. Click **Close** to exit the window.

Dimension Maintenance Fields

Dimensions

All available Dimensions display in the Dimension list box. Dimensions are used to identify the different levels of analysis defined within *MMA*. Select a Dimension in the list box to display corresponding detail information and previous levels.

Level Number

The number used to identify a specific Dimension. A Dimension level number can be a maximum of three numeric characters. Up to 99 Dimensions can be defined. This field cannot be maintained for an existing Dimension.

Descriptions

The short, medium, and long descriptions associated with the selected Dimension display here. The Dimension descriptions are used/displayed in *DBView* Inquiries.

Key Field Length

The number of characters that represent the values within the selected Dimension display in the Key Field Length field.

Master File Security

This check box does not apply to *MMA*.

Default Value

The Default Value is used by the server-based import process. If the import process finds a blank Dimension value in the input data, the system will update the column in the warehouse table with the Default Value field. Up to 25 alphanumeric characters may be used to define the Default value.

Previous Levels

When Dimensions are defined, relationships, if any, between levels are also defined. In order to determine if a relationship exists, you would ask the question, "If I know the value for one level, can I always determine the value of a related level?" For example, if you know the item number, you always know the Item Group and Item Family to which it belongs. Therefore, the Item should contain previous levels of Item Group and Item Family.

Dimension Maintenance Command Button

Close

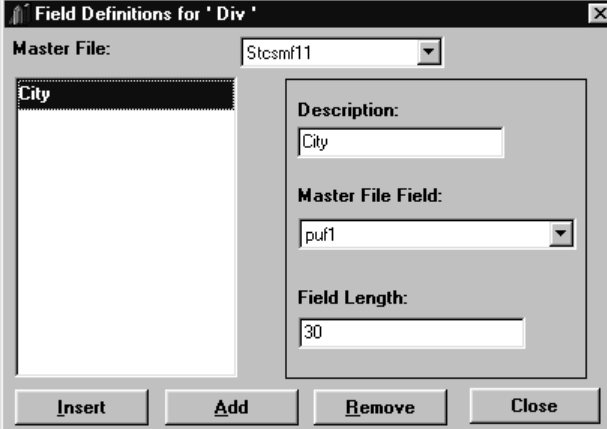
Click **Close** to close the Dimension Maintenance window.

Field Definitions

Field definitions are also called pickup fields.

In addition to a short, medium, and long description, up to 35 fields containing static information can be associated with each Dimension. These values are called "Field Definitions" and are pre-defined for MMA customers. The Field Definitions window displays when you click **Field Definition** in the Dimension Maintenance window.

Note: MMA is a pre-defined data warehouse, which includes pre-defined field definitions.



Field Definitions window

To access the Field Definitions window:

1. Click **Field Definition** in the Dimension Maintenance window.
2. Click **Close** to exit the window.

Field Definitions Fields

Master File

More than one Dimension can reside in the same Master File.

Dimensions values and descriptions are stored in the STCSMF10, STCSMF11, or STCSMF35 tables. Dimensions without additional field definitions are stored in STCSMF10. Dimensions with up to 15 additional fields defined reside in STCSMF11. Dimensions with up to 35 additional fields reside in STCSMF35.

Description

Full description of the field associated with the selected Dimension. This field displays the Field Definition that is currently highlighted in the listing. The description can be up to 30 alphanumeric characters in length.

Master File Field

Select the Master File Field in which the Field Definition resides. The identifiers are user-defined.

Field Length

The length of each field definition.

Field Definitions Command Button

Close

Click **Close** to close the Field Definitions window and redisplay the Dimension Maintenance window.

Values

Values are a type of data that is stored in *MMA*. Examples of values are Amounts, Quantity, Cost, and so forth. Values are linked to categories. Therefore, the definition of the values must be completed before categories can be defined.

Note: Values are pre-defined for *MMA* customers, but calculated values may still be set up by *MMA* customers.

| Value | Sequence | Short Description | Medium Description | Long Description | Display Mask | Calculated | View Currency |
|-------|----------|-------------------|--------------------|------------------|--------------|--------------------------|-----------------|
| F01 | 1 | Amt | Amount | Amount | Money | <input type="checkbox"/> | Canadian Dollar |

Value window

To access the Value window:

1. Choose File | Values from the *Administration* main window.
2. Click **Close** to exit the window.

To set up a calculated Value:

1. Choose File | Values.
2. Click **New** to clear all of the value detail from the fields.
3. Enter the value.
4. Enter the sequence that determines the position of the value in any listing.
5. In the Description fields, enter a short, medium, and long description.
6. Select a default Display Mask from the drop-down selection list. If the list is empty, that means that the Display Masks are not created. Close this window and create the Display Masks. See "Creating a Display Mask" on page A63 for more information about this function.
7. Select the Calculated field check to indicate that the value is a calculated value.

Note: If a value is attached to a category, the value cannot be selected as a calculated value. Set up the new calculated value and then attach it to a category, as indicated in Step 10 on the next page.

8. *{Optional}* If you have multi-currency capabilities, you may select the default currency for this value by selecting it from the View Currency drop-down selection list.
9. Click **Save** and then **Close**.
10. Associate the calculated value with a Category and Expression. See "Categories" on page A49 for more information.

Value Fields

Values

Existing values display in the selection Values list box. These values are flexible across all categories. If more than seven values exist, a vertical scroll bar allows you to scroll through additional values.

Value

Up to three alphanumeric characters may be used to define the value.

Sequence

The Sequence field determines how the values are sequenced in the value listing when Templates are defined. In this example, the *Amount* value displays first in any listing. When **New** is selected, this field automatically displays the next sequential number. The sorting of values can be adjusted using this field. A newly created value with a sequence number of "1" automatically displays at the top of the list and all existing values are repositioned accordingly.

Descriptions

There are three descriptions associated with each value. The short description can be a maximum of five alphanumeric characters in length, the medium 15, and the long description 40 characters in length. Value descriptions are optional.

Display Mask

The Display Mask associated with the value is a default value but can be overwritten at the time a Template is defined. A selection list containing all Display Masks is available by clicking the drop-down arrow. Display Masks can be added through the File | Display Masks function. See "Creating a Display Mask" on page A63 for more information about this function.

The medium description is used on most listing displays.

The Display Mask determines how each value displays in a View (for example, dollar sign, decimal positions, zero suppress, and so forth.).

Calculated

If this check box is selected, the value is a calculated value, and must be further defined in the Category Maintenance window. If a calculated value has been defined in the Category Maintenance window and the calculated value needs to be removed, the value would have to be removed from any categories before the Calculated check box could be deselected in the Value window. See the "Categories" on page A49 for information about setting up calculated values.

View Currency

This field only displays if the multi-currency function is enabled. See "Defining a Value in a Multi-Currency Environment" in Chapter 8 of this *Systems Administrator Guide* for more information about this function.

Value Command Buttons

New

Click **New** to clear all fields in the Value window to create a new calculated value. The Sequence field is pre-filled with the next available number when **New** is selected, but can be adjusted if necessary. After creating the new calculated value, be sure to click **Save** to save your entries.

Save

Click **Save** to save your entries and redisplay the active window. You must click **Close** to close the active window.

Delete

Calculated values can be deleted by highlighting the value and then clicking **Delete**. Values pre-defined for *MMA* customers cannot be deleted. A delete confirmation window displays to verify deletion. Verify the deletion selection and click **Yes** to confirm deletion.

Close

Click **Close** to close the Value window. The system displays a warning message if changes were made to a value without saving. This ensures that you do not exit without saving your changes.

A value linked to a category cannot be deleted.

Categories

Up to 99 values can be attached to a single category.

A category is a way of grouping your data and includes previously defined values. For example, the *Actual Sales* category includes Amount, Quantity, and Cost.

Note: Categories are pre-defined for *MMA* customers. Calculated categories can be defined. See "Values" on page A46 for more information and then complete the second set of instructions below.

| Categories: | | Category Details: | |
|-------------|------------|-------------------|--------------------------|
| AS | ActSls | Category: | BK |
| BK | Booking | Calculated: | <input type="checkbox"/> |
| OT | Other type | Descriptions: | Bkngs |
| | | | Booking |
| | | | Bookings |
| | | Data Source: | DSOR |
| | | | Lowest DSL: 999 |

| Associate Values | | Selected Values | |
|------------------|-------------|-----------------|----------|
| F03 | List Price | F01 | Amount |
| F05 | Add Charges | F02 | Quantity |
| F06 | Trade Disc. | F04 | Cost |

Display Mask: Money (#####,###,###,##0.00)
View Currency: No Currency Conversion

Category Maintenance window

To access the Category Maintenance window:

1. Choose File | Categories from the *Administration* main window.
2. Click **Close** to exit the window.

To associate calculated values with a category:

1. Set up the calculated value. See "Values" on page A46 for more information.
2. Choose File | Categories from the *Administration* main window.
3. Click **New** to clear all of the detail values from the fields.

4. Enter the category ID in the Category field.

Note: Up to two alphanumeric characters may be used to define a regular category, however, up to ten alphanumeric characters may be used to define a calculated category.

5. In the Description fields, enter a short, medium, and long description for the calculated category.
6. *{Optional}* Check the Calculated check box to indicate the category is a calculated category (a category that has a calculated value associated with it).
7. Associate the calculated value with the active category by double-clicking on the value while it displays in the Associate Values list box or by highlighting the value and clicking **Select**.
8. *{Optional}* Adjust the descriptions and the default Display Mask.
9. *{Optional}* If you have selected that this category be calculated, then select a ViewGroup from the drop-down selection list to be associated with this category.

Note: A ViewGroup must be specified to ensure that the number of buckets across structure codes are the same.

10. *{Optional}* If you have multi-currency capabilities, you may select the default View Currency for this value by selecting one from the View Currency drop-down selection list.
11. Click **Expression** to define a calculation for the calculated value. Click **OK** and then **Close** from within the Expression window.
12. Click **Save** and then **Close**.

Category Maintenance Fields

Categories

Single-click on a category to view information about it. All categories display in the selection list box. Detail for the selected category displays in the upper-right corner of this window.

Category

When **New** is selected, all detail fields are normally cleared to allow entry of a new category. The selected category displays in the Category field and can be maintained. Up to two alphanumeric characters may be used to define a regular category, however, up to ten alphanumeric characters may be used to define a calculated category. Categories are pre-defined in *MMA*, but customers can associate calculated values with categories.

Descriptions

There are three descriptions associated with each category: a short, medium, and long description can be maintained. The short description supports up to five alphanumeric characters in length, the medium 15, and the long description 40 characters in length. All category descriptions are optional. The medium description is most frequently used.

Calculated

If this box is checked, a formula for all the values is mandatory and a valid ViewGroup must be linked to the Selected Category. If this field is not checked, only the regular values display in the Values list box, and a ViewGroup cannot be specified.

Data Source

If this category is not a calculated category, then the category must be associated with a data source.

Lowest DSL

The DSL that contains the lowest level of detail is displayed here. This is a display-only field.

Associate Values

Values must be previously defined with the Value function on the File menu. All values except calculated values are pre-defined for MMA customers. Values display in the selection list box. For a regular category, only regular values are displayed, and no calculated values are displayed. For a calculated category, only calculated categories display. Values are logical pieces of data defined to the category. Selection of values can be done two different ways; by double-clicking on the value, or selecting the value and then clicking **Select**. The value displays in the Selected Values box.

Selected Values

The values associated with the active category display in the Selected Values list box. Up to 99 values can be associated with a single category.

Seq

The number entered in the Seq field determines the position of this value in the Selected Value box on any Template or View definition.

Short/Medium/Long Desc

All detail fields relating to the value default from the Values function but can be overridden in the Category Maintenance window. There are three descriptions associated with each value. Value descriptions are optional and default from the Value Maintenance program. The descriptions can be adjusted in the Category Maintenance window to more specifically reflect the category/value combination. The long description is used as the default description for data columns in the View smart text.

View Group

If this category is a calculated category, then a ViewGroup must be selected from the drop-down selection list.

Display Mask

Because Display Masks are associated with categories, they must be defined prior to category definition. The mask associated with the selected value displays in the Display Mask field. The Display Mask field can be changed by making a different selection from the drop-down list. See "Creating a Display Mask" on page A63 for more information about this function.

View Currency

This field only displays if the multi-currency function is enabled. For more information on multi-currency capabilities, see Chapter 8 of this *Systems Administrator Guide*.

Category Maintenance Command Buttons

New

Click **New** to clear the category detail values. The cursor is positioned in the Category field to create a new category. After creating the new category, be sure to save your entries by clicking **Save**.

Save

You must click **Close** to close the active window. Click **Save** to save your entries and redisplay the active window.

Delete

Highlight the category you want to delete and then click **Delete**. Categories that are pre-defined should not be deleted. A delete confirmation window displays. Verify your selection and click **Yes** to confirm deletion. This function deletes the category only, not the actual data.

Expression

If the Calculated check box has been checked, clicking **Expression** displays the Expression window where the formula for each calculated value is defined. If the Calculated check box is not checked, this button is inactive. You may specify up to 500 characters for the expression. The expression you define will use the medium description.

Print

This command button prints the Category Maintenance report that lists all of the defined category information.

Print Preview

When **Print Preview** is clicked, the report displays on the screen. You can click **Print** from this window to print the report.

Close

Click **Close** to close the Category window. A warning message displays if **Close** is selected prior to **Save**. This ensures that you do not accidentally close the window without saving your entries.



Expression window

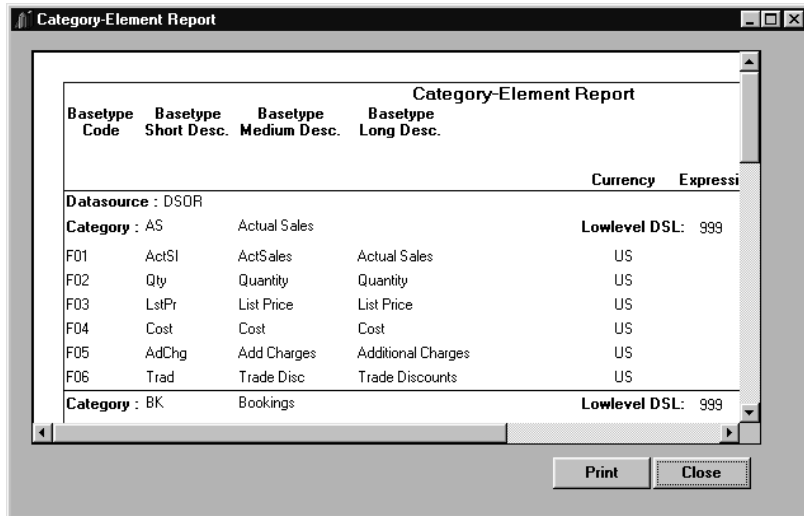
To access the Expression window:

1. Click **Expression** from the Category Maintenance window.
2. Highlight the category value and click **Select**, or double-click on the category value to select.
3. Define your calculation using the parenthesis, add, subtract, divide, or multiply buttons. You may specify up to 500 characters for the expression.
4. Once you have defined your expression, click **OK**.
5. Click **Close** from the Category Maintenance window.

Note: All of the category values in a formula must be from one data source.

To delete a calculated expression:

- Highlight the entire calculation, and press the DELETE key. You may now enter a new calculation or click **OK** to exit the Expression window.



Category Element Report

To print the Category Element Report:

1. Select File | Categories.
2. Within the Category Maintenance window, click **Print Preview** to preview the report, or click **Print** to print the report.
3. Click **Close** to exit this window.

Category Element Report Fields

This report prints all of the contents defined within a category. The following information prints on the report.

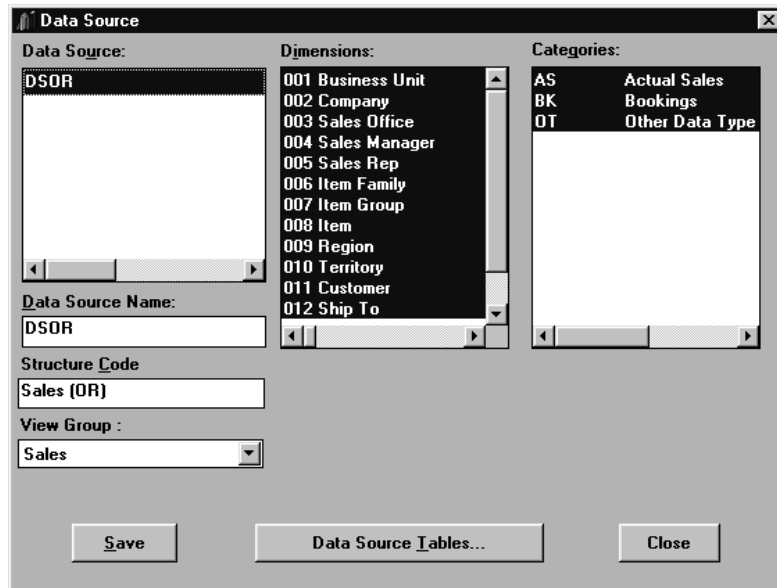
- Basetype Code
- Basetype Short Description
- Basetype Medium Description
- Basetype Long Description
- Currency
- Expression formula
- Datasource (only displays if the category is not a calculated category)
- Lowest level DSL
- Calculated check box (only displays if the category was saved as a calculated category)
- Category

Viewing Data Sources

A data source is a group of categories that contain the same Dimensions and values that reside in the same database files. A category can only be assigned to a single data source.

Note: Data sources are pre-defined for *MMA* customers.

All data sources are DS + Structure Code. For example, DSOR, DSBO, DSOO.



Data Source window

To view data sources:

1. Click File | Data Source. The Date Source window displays.
2. Click **Close** to exit the window.

Data Source Maintenance Fields

Data Source

All valid data source names display in the Data Source selection box.

Data Source Name

The name of the active data source displays in the Data Source Name field. This field cannot be modified.

Structure Code

Displays the table structure code associated with the selected data source. Structure codes are defined in the Table Structure Sets function within *Database Install*. This field cannot be modified. If you need to add or remove a Dimension for a particular data source, you must add or remove it from the structure code. See Chapter 3 in this *Systems Administrator Guide* for more information about structure codes and their Dimensions.

ViewGroup

Displays the ViewGroup associated with the data source.

Dimensions

All valid Dimensions display in the Dimensions selection box. Highlighted Dimensions are associated with the selected structure code. This group box cannot be modified.

Categories

All available categories display along with the categories selected for the active data source. A category can be included in a data source only once. Therefore, as they are selected, they no longer display in the list box for a new data source. This group box cannot be modified.

All selected categories are highlighted. Those not included are not highlighted.

Data Source Command Buttons

Data Source Tables

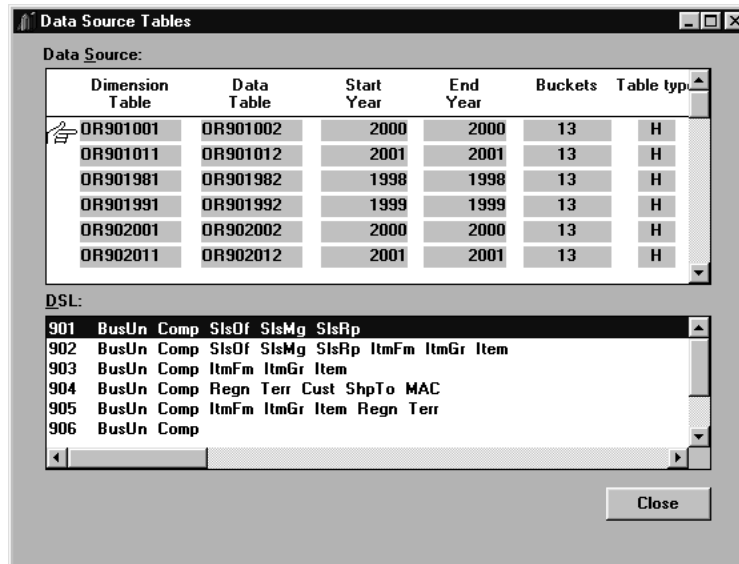
Click **Data Source Tables** to see where data is kept on the server. Data Source Tables is used to identify the start and end years for a specific data source. Information in the window that displays cannot be modified.

Close

Click **Close** to close the window.

Viewing Data Source Tables

Data Source Tables are used to identify where data is stored. They map the data files, the year range, and summary levels. No modifications can be made to the Data Source Tables window. Only a **Close** command button displays for your use.



Data Source Tables window

To view data source tables:

1. Click **Data Source Tables** from the Data Source window.
2. Click **Close** to return to the Data Source window.

Data Source Tables Fields

Dimension Table

Used for Inquiry retrievals. Contains the key Inquiry fields like category, year, and DSL information.

Data Table

Used for Inquiry retrievals. Contains the data buckets like Dollars, Units, and so forth.

Start Year / End Year

The start and end years that were defined in the Database Install window display in these fields.

Buckets

Reflects the number of period buckets defined to the structure code. This information cannot be changed. There can be a maximum of 13 buckets per data source table.

Table Type

This field represents the way in which data is filled into the table.

DSL

All valid DSL's display in the DSL selection box. Use the scroll bars to move through all DSL's. The selected (highlighted) DSL's are included in the active control table. The values displayed here are the DSL's for which the table has been created through the Add DSL | Database Install function.

Data Source Table Command Button

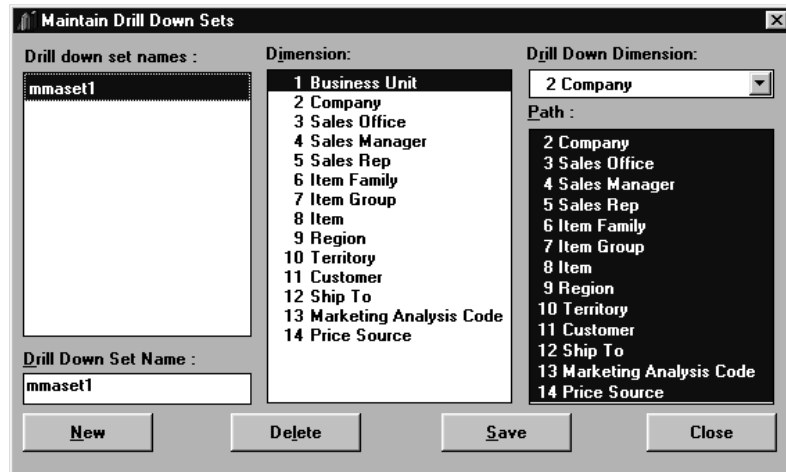
Close

Click **Close** to close the window and redisplay the Data Source window.

Creating Drill-Down Sets

Drill-down sets must be defined to indicate which Dimensions are automatically accessible from other levels of data. Drill-down sets can be created, maintained, or deleted from the Maintain Drill Down Sets window. Each User ID is associated with one drill-down set.

When using the automatic drill-down feature (double-click on a row of data displaying in the View), the drill-down set determines what level automatically displays.



Maintain Drill Down Sets window

To create drill-down sets:

1. Choose File | Drill-Down Sets.
2. Click **New** to clear all of the detail values from the fields.
3. Enter the drill-down set name.
4. Select the first Dimension in the drill-down set by highlighting it while it displays in the Dimension list box.
5. From the Drill Down Dimension drop-down selection list, select the Dimension that the highlighted Dimension automatically drills to.
6. Highlight all of the Dimensions that can be drilled to from the selected Dimension level in the Drill Down Dimension field.
7. Click **Save**.
8. Repeat Steps 4 through 7 until drill-down paths are established for each Dimension level.
9. Click **Close**.

Maintain Drill Down Sets Fields

Drill down set names

All valid drill-down sets display in the Drill down set names selection box. Select a drill-down set for maintenance or deletion by highlighting it while it displays in the selection box.

Drill Down Set Name

The name of the selected drill-down set displays in the Drill Down Set Name field. When creating a new drill-down set, this field is cleared so a new name can be entered.

Dimension

All valid Dimensions display in the Dimension list box. Drill-down paths for each Dimension can be defined by selecting the Dimension from the Dimension list box and then choosing the path levels from the Path list box.

Drill Down Dimension

Choose the Dimension to be the *next level* after the active Dimension from the drop-down selection list. The drill-down Dimension is the Dimension a user drills to by default when automatically drilling through a View.

Example: From Business Unit, Company is the NEXT Dimension in the path, and all other Dimensions are available for a manual drill-down.

Path

All available Dimensions display in the Path list box. Choose the levels that users can drill to from the selected Dimension. Use this to keep users from drilling to a Dimension that does not make sense or to one that may not be in a DSL.

Maintain Drill Down Sets Command Buttons

New

New clears all entries and selections so a new drill-down set can be defined. The drill-down set being created is entered in the Drill Down Set Name field located in the lower-left corner of the window.

Delete

The drill-down set highlighted is deleted when **Delete** is clicked. A delete confirmation window displays to protect you from accidentally deleting a valid drill-down set.

Save

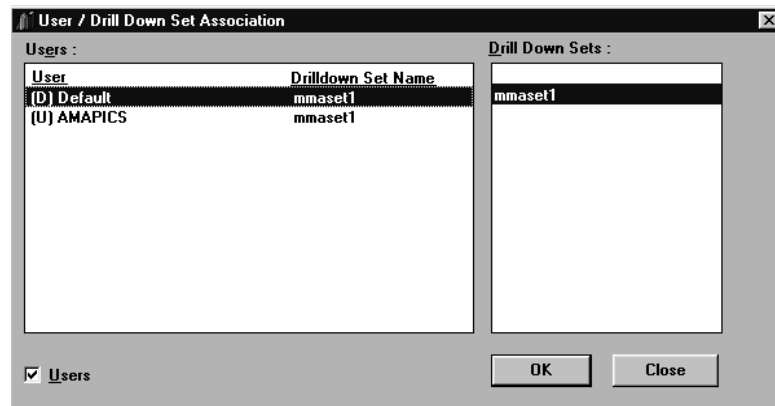
Click **Save** to save any entries or edits made in the window.

Close

Click **Close** to close the Drill Down Sets window. If edits were made and not saved, a warning message displays when **Close** is selected to ensure that you do not accidentally exit without saving your entries.

Creating Drill-Down Sets by User

The Drill Down Set feature allows *DBView* users to drill automatically through different levels based on the user profile. Drill-down sets are assigned to users. If a drill-down set is not assigned to a user, the drill-down set assigned as the default is used.



User/Drill Down Set Association window

To associate a drill-down set with a user:

1. Choose File | Drill Down by User.
2. Highlight the user.
3. Highlight the drill-down set that you want the active user to be associated with.
4. Click **OK**.

User/Drill Down Set Association Fields

User

All valid user profiles display under the User heading. This is a selection field and does not allow entry.

Drilldown Set Name

The drill-down set displays adjacent to the associated User. This is a selection field and does not allow entry. Drill-down sets are defined using File | Drill Down Sets.

If a user is not associated with a drill-down set, the default user is used.

Drill Down Sets

All valid drill-down sets display in the Drill Down Sets selection box. To associate a drill-down set with a user, choose the user from the User box and then select the appropriate drill-down set displaying in the Drill Down Sets list.

Users

Drill-down sets are associated with specific users. Use the check box to indicate whether you want to view users or the default drill-down set. A "U" or "D" displays next to the User labeling it as a User Profile or the Default.

User/Drill Down Set Command Buttons

OK

Click **OK** to save the User/Drill Down Set association and close the User/Drill Down Set Association window.

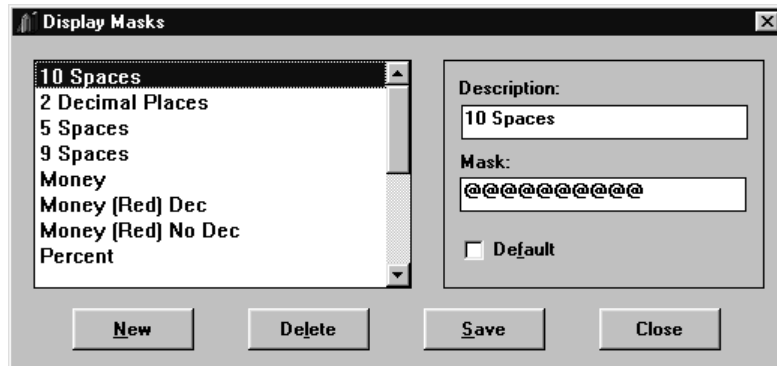
Close

Click **Close** to cancel the User/Drill Down Set Association program and close the window. If edits were made and not saved, a warning message displays when **Close** is selected to ensure that you do not accidentally exit without saving.

Creating a Display Mask

Display Masks are user-defined and are used to enhance the appearance of the data within a View. A default Display Mask is defined for each value and category/value combination. There is no limit to the number of Display Masks that can be defined. Display Masks can be added, deleted, and maintained from the Display Masks window.

A Display Mask can display amounts preceded by a dollar sign, dates that are spelled out, or negative numbers in parenthesis. For example, the numeric display format "\$#,##0" causes positive numbers to display with a dollar sign and no decimal places.



Display Masks window

To create a Display Mask:

1. Choose File | Display Masks.
2. Click **New** to clear all of the detail values from the fields.
3. Enter the description for the Display Mask.
4. Define how the data displays by making an entry in the Mask field.
5. *{Optional}* If you want the active Display Mask to be initially selected in any drop-down selection list for Display Masks, select the Default check box.
6. Click **Save** and then **Close**.

Display Masks Fields

Selection Box

This selection box displays all current Display Masks. A Display Mask is associated with a data value to enable a default Display Mask at Template definition time. Choose a Display Mask for maintenance or deletion by highlighting it while displayed in the Selection Box.

Description

The user-defined Display Mask description displays in this field. The descriptions are maintainable. When **New** is selected, the Description and Mask fields are cleared so a new Display Mask can be created.

Mask

For example; Enter "\$" or "%" as a hard-coded literal labeling money or a percentage. A "%" performs a division of 100 to calculate the percentage.

The mask defines how the data displays, whether the field contains numbers, letters, decimal positions, and so forth. A mask with "@" is replaced with characters in the View, one with # is replaced with numbers, and one with "0's" defines spaces. The valid characters that can be used in a Display Mask are: # @ \$ % . , 0 and /.

If you have multiple currencies defined on your system, you may insert a three-letter description before the Display Mask. For example, if you have Canadian dollars as one of your currencies, the Display Mask would begin with single quote, then CND, and end in single quote followed by the Display Mask you define.

Default

Select the Default check box if you want the active Display Mask to be initially selected in any drop-down list box for Display Masks. By default, no Display Mask is selected as the default. MMA allows only one Display Mask to be designated as the default.

Display Masks Command Buttons

New

Clicking **New** clears the Display Mask fields, and allows you to create a new Display Mask. After creating the new mask, be sure and update the entries by clicking **Save** before closing the window.

Delete

Highlight the Display Mask you want to delete and then click **Delete**. A delete confirmation window displays as a precautionary measure. Verify your selection and click **Yes** to confirm deletion.

Save

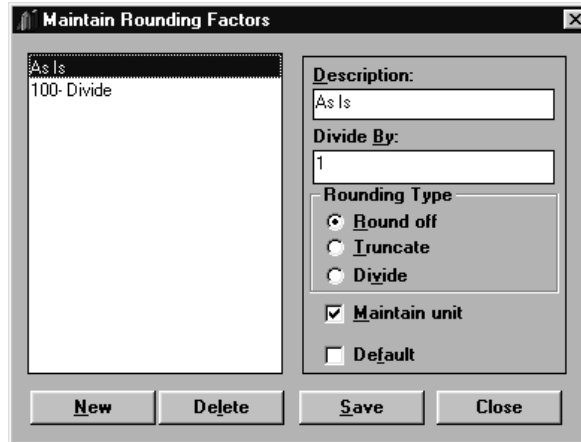
Click **Save** to accept any new Display Masks or any changes made to existing Display Masks.

Close

Click **Close** to close the Display Masks window. A warning message displays if any edits or entries were made, notifying you to save your changes.

Creating Rounding Factors

The data can be rounded in any way you define. A rounding factor is defined for each data column in a Template/View. You can divide by a number, truncate, or round up to the nearest given number. All rounding factors are user-defined.



Maintain Rounding Factors window

To create a rounding factor:

1. Choose File | Rounding Factors.
2. Click **New** to clear all of the detail values from the fields.
3. Enter the rounding factor name in the Description field.
4. Select the appropriate Rounding Type radio button (Round off, Truncate, or Divide). If this rounding type is divide, be sure and enter the divisor in the Divide By field.
5. *{Optional}* If you want MMA to retain the zero place holders when rounding, select the Maintain unit check box.
6. *{Optional}* If you want the active rounding factor to be initially selected in any drop-down selection list for rounding factors, select the Default check box.
7. Click **Save** and then **Close**.

Maintain Rounding Factors Fields

Selection Box

Displays all user-defined rounding factors. Choose a rounding factor for maintenance or delete by highlighting it while displayed.

Description

The description of the selected rounding factor displays in this field. The descriptions are user-defined and maintainable. Up to 26 alphanumeric characters may be used to describe the rounding factor.

Divide By

If Divide is the rounding type selected, the data is divided by the number entered in this field.

Rounding Type

Select whether you want to round up to the nearest unit, cut off the rounding unit, or divide by the amount specified in the Divide By field.

Maintain unit

Select the Maintain unit check box if you want *MMA* to retain the zero place holders when rounding. Not selecting it would drop the zero place holders.

Default

Select the Default check box if you want the active rounding factor to be initially selected in any drop-down selection list for rounding factors.

Round off is the system default.

*999,000,000 displays as 999 if Maintain Unit was **not** selected when rounding to the nearest million.*

Only one rounding factor can be assigned as the default.

Rounding Example:

| Data Amount = \$5,500,000 Dividing Unit = 1,000,000 | Maintain Unit? No | Maintain Unit? Yes |
|--|------------------------------|-------------------------------|
| Round Off | 6 | 6,000,000 |
| Truncate | 5 | 5,000,000 |
| Divide | 5.5 | 5,500,000 |

Maintain Rounding Factors Command Buttons

New

Clicking **New** clears the fields, and allows you to create a new rounding factor.

Delete

Highlight the rounding factor you want to delete and click **Delete**. A delete confirmation window displays as a precautionary measure. Verify your selection and click **Yes** to confirm.

Save

Click **Save** to accept any new rounding factors or any changes made to existing rounding factors.

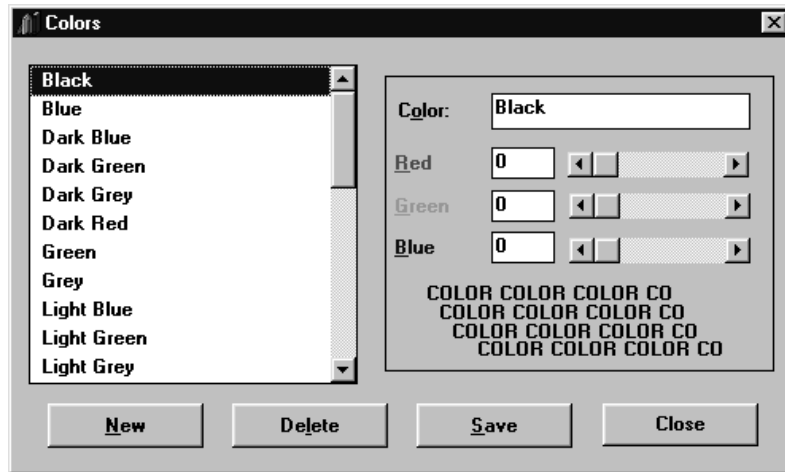
Close

Click **Close** to close the window. A warning message displays if any edits or entries were made, notifying you to save your changes.

Creating Colors

You can control the color of the font, as well as the background color of each field defined in your Template definition by adjusting the three basic colors (Red, Green, and Blue). You may also assign names to your colors.

The first color defined is the foreground and the second is the background default for template definitions. Black is defined as 0 for Red, Green, and Blue. White is defined as 255 for Red, Green, and Blue.



Colors window

To create colors:

1. Choose File | Colors.
2. Click **New** to clear all of the detail values from the fields.
3. Enter the color name in the Color field.
4. Adjust the basic colors to create the color. Key in a number between 0 and 255, or use the scroll bars to indicate color.
5. Click **Save** and then **Close**.

Colors Fields

Selection Box

As part of system setup, the system administrator defines colors and names.

All valid color names display alphabetically in the selection box. A vertical scroll bar is available to allow you to scroll through all colors. To edit or delete a color, highlight it while displayed in the list box and click the appropriate button.

Color

The user-defined name of the highlighted color displays in the Color field. The Color field is maintainable. The color name can be used to reflect the data displaying. For example, Column totals display in Red; therefore, the color name could be TOTALS to aid in the definition of a Template.

Red/Green/Blue

Adjust the basic colors appropriately to create the color. Key in a number between 0 and 255, or use the scroll bars to indicate the color. The four lines of text below display the exact color being created or maintained.

Colors Command Buttons

New

Click **New** to clear all color detail values so you can create a new color.

Delete

All valid colors display in the list box. Highlight the color you want to delete and click **Delete** to delete the color. A confirmation window displays to prevent you from accidentally deleting a color from your database.

Save

To save edits or a newly created color, click **Save**. The Colors window redisplay, with the newly saved color displaying in the alphabetical list.

Close

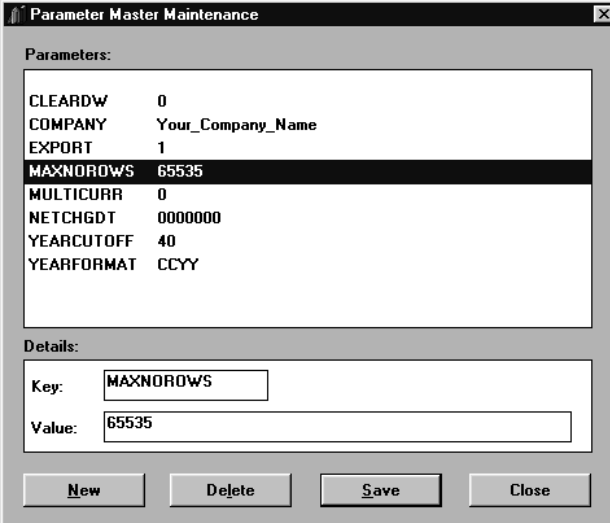
Click **Close** to close the Colors window. If any edits were made without saving, a warning message displays ensuring you do not exit without saving your changes.

Viewing Parameter Master Information

The Parameter Master Maintenance function allows you to view all system wide parameters, such as your company name, maximum number of rows for retrieval during an Inquiry, net change value, multi-currency capability, and year format. Parameters displayed here are updated when you initially install *MMA* and when you perform a net change.

The system administrator can define the maximum number of rows that a user can retrieve during an Inquiry in *DBView*. The setting could also be set on a per user basis. If these settings are populated by the user through User Profile Maintenance, then they override what is stored in the Parameter Master File. The Maximum Number of Rows parameter has a default setting of 65,000. This number is only the default, and may be increased if needed.

It is within Parameter Master Maintenance that the multi-currency function is turned on (Value = 1) and off (Value = 0). By default, multi-currency functionality is turned off.



The screenshot shows a window titled "Parameter Master Maintenance" with a list of parameters and a details section. The parameters list includes:

| Parameter | Value |
|------------|-------------------|
| CLEARDW | 0 |
| COMPANY | Your_Company_Name |
| EXPORT | 1 |
| MAXNOROWS | 65535 |
| MULTICURR | 0 |
| NETCHGDT | 0000000 |
| YEARCUTOFF | 40 |
| YEARFORMAT | CCYY |

The details section shows the following information:

Key: MAXNOROWS
Value: 65535

Buttons: New, Delete, Save, Close

Parameter Master Maintenance window

To change the maximum number of rows available for retrieval for all users:

1. Select File | Parameter Master.
2. Select the MAXNOROWS parameter.
3. In the Value field, type the maximum number of rows available for retrieval by all users.
4. Click **Save**, then **Close**.
5. For the changes to take affect, you must exit *MMA*, then re-open *MMA*.

Note: If you want certain users to have either a higher or lower number of rows available for retrieval, then you can set the number on a per user basis.

To turn on multi-currency functionality:

1. Select File | Parameter Master.
2. Select the MULTICURR parameter.
3. In the Value field, type **1**.
4. Click **Save**, then **Close**.
5. For the changes to take affect, you must exit *MMA*, then re-open *MMA*.

Note: The User Profile for each user that will use multi-currency should also be defined with multi-currency enabled. For each User Profile, select the Multi Currency check box in the User Profile window. See "Creating User Profiles" on page A74 for more information.

To turn off multi-currency functionality:

1. Select File | Parameter Master.
2. Select the MULTICURR parameter.
3. In the Value field, type **0**.
4. Click **Save**, then **Close**.
5. For the changes to take affect, you must exit *MMA*, then re-open *MMA*.

Parameter Master Maintenance Fields

Parameters

Displays a list of parameters defined to your system. There are a number of values that are updated as part of the installation of *MMA*. These values are:

- **COMPANY**
Displays your company name and is used by the Audit Data report.
- **CLEARDW**
This flag must be set to 1 in order to clear any tables that point to a specific structure code, then the AS/400 command DAINZDTA can be run. Once the DAINZDTA command is run, the flag is automatically set back to 0.
- **CURRDATE**
The date that displays in this field is the current system date used.
- **MAXNOROWS**
Displays the maximum number of rows that can be retrieved during a *DBView* Inquiry.
- **MULTICURR**
Multi-currency functionality is either turned on (Value = 1) or off (Value = 0) by this parameter.
- **NETCHGDT**
Displays the value of the net change date for your *MMA* data warehouse.
- **SVERSION**
The version of the server installed.
- **YEARCUTOFF**
Displays the cut-off year for year 2000 processing. Used in conjunction with the YEARFORMAT value to determine the century value (C) when YEARFORMAT is set to CYY.
- **YEARFORMAT**
Displays the year format used to determine how data is stored and retrieved for the data warehouse. This parameter cannot be modified within this screen. The value follows:
CCYY
Data is retrieved using standard CCYY date format. No calculation is required to determine the current century.

Parameter Master Maintenance Command Buttons

New

If you want to add a new parameter to the Parameter Master file, click **New**.

Delete

This button deletes a selected parameter from the Parameter Master File.

Save

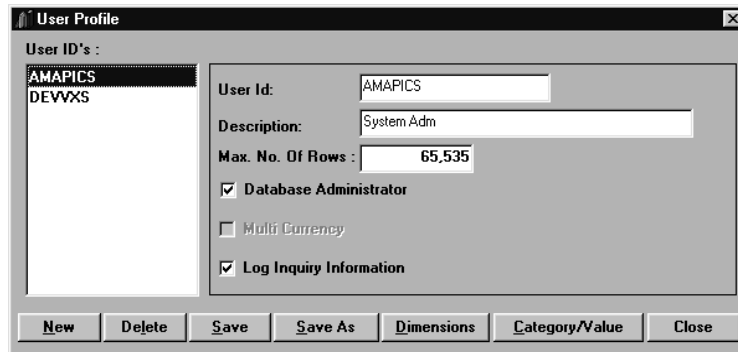
If you have changed information within a parameter or have added a new one, click **Save** to update your system.

Close

Click **Close** to exit the Parameter Master Maintenance function.

Creating User Profiles

The user profiles are used during the Inquiry programs to default values and selection options. Authority to various levels of data is based on the authority assigned to the user profile. If a user profile is created with Database Administrator authority, this individual will have access to all Dimensions, categories, and values.



User Profile window

To create a user profile:

1. Choose Configuration | User Profile.
2. Select **New** to clear all of the fields.
3. In the User Id field, type the ID of the new user.
4. In the Description field, type the description of the User ID.
5. In the Max. No. Of Rows field, type the maximum number of records this User ID will be able to retrieve during a *DBView* Inquiry.

Note: If the Maximum Number of Rows is equal to zero for the user, and the MAXNOROWS parameter in Parameter Master Maintenance is set to zero, then all data will be retrieved. If you attempt to retrieve more records than are specified for your user profile, you will receive a warning message, and the system will retrieve only up to the maximum # of records specified for this user profile. Therefore, the information retrieved may be incomplete.

6. *{Optional}* If you want this user to be identified as the Database Administrator, select the Database Administrator check box.

7. *{Optional}* If you want this user to have the ability to toggle between currencies during *DBView* Inquiries, select the Multi Currency check box.
8. *{Optional}* If you want to log information for this user for Performance Tuning WorkBench, then select the Log Inquiry Information check box.
9. Click **Dimensions** to grant the active user profile authority to various Dimensions.
10. Click **Category/Value** to grant the active user profile authority to various category/value combinations.
11. Click **Save** and then **Close**.

User Profile Maintenance Fields

User ID's

All valid user profiles display in the User ID's list box. Select a user profile for maintenance or delete by clicking on the ID within the selection list. The detail fields for the active User ID are pre-filled when the User ID is selected.

User Id

The active user profile displays in the User Id field. If **New** is selected, this field is blank so the new User ID can be defined. The User ID must match a user profile on the server.

Description

The long description associated with the active user profile displays in the Description field and may be maintained at any time. If **New** is selected, the Description field is blank so the new User ID description can be entered.

Max. No. Of Rows

This field specifies the maximum number of records that this user can retrieve while performing an Inquiry in *DBView*.

Database Administrator

To assign Database Administration authority to the current User ID, select the Database Administrator check box. Database Administrators have access to all Dimensions, values, and categories.

Multi Currency

Allows the user to choose a currency when in *DBView*. The multi-currency parameter must be set to 1 in Parameter Master Maintenance in order for the user to have multi-currency functionality.

Log Inquiry Information

If you want to track information for this specific user profile for use in the Performance Tuning Workbench, select this check box. The default is to not select this check box. You may deselect this check box after you have used it for Performance Tuning reasons.

User Profile Command Buttons

New

Clicking **New** clears the detail fields of the User Profile window, and allows you to create a new user profile. After creating the new user profile definition, be sure to click **Save** to save your entries.

Delete

Highlight the user profile you want to delete and click **Delete**. Verify your selection and click **Yes** to confirm the deletion.

Save/Save As

Click **Save** to process your selections and redisplay the User Profile window. To close the User Profile window, click **Close**. **Save As** can be used to save an existing profile under a new name.

Dimensions

Click **Dimensions** to grant authority to various levels of data assigned to the highlighted User ID. By default, *MMA* assumes a user is authorized to all Dimensions unless it is specifically revoked. For more information, see "Securing Dimensions" on page A77.

Category/Value

Click **Category/Value** to grant authority to various categories and values assigned to the highlighted User ID. By default, a user is authorized to all category/values. For more information, see "Securing Categories/Values" on page A80.

Close

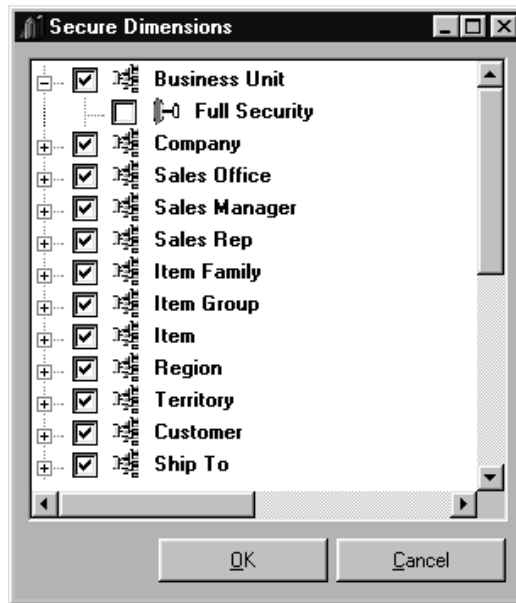
Click **Close** to end the User Profile function and close the active window. Clicking **Close** prior to **Save** displays a warning message indicating that changes were made without saving.

Authorities to Dimensions and category/values are tied to the User ID.

Securing Dimensions

When defining a user profile, you can secure access to specific Dimension values by using a Security User List. If a Security User List has been attached to your user profile, you cannot run a View or Template for all values at that Dimension level. If the View/Template is run at the secured Dimension level, the security user list defaults in the Interactive Drill-Down Path. The Dimensions selected are saved as part of the user profile if **Save** is clicked on the User Profile window. By default, *MMA* grants authority to all Dimensions.

This window is accessed through the Dimension button on the User Profile window.



Securing Dimensions window

To revoke authority to Dimension levels:

1. Click **Dimensions** from the User Profile window to access the Secure Dimensions window.
2. Click the check box to deselect the Dimension level. The active User Profile cannot access those Dimensions that are not selected.

Note: This window can be maximized in order to view all of the information without having to scroll through the window.

3. Click **Close** to return to the User Profile window.
4. From the User Profile window, click **Save** and then **Close**.

To set up authority by User List:

1. Click **Dimensions** from the User Profile window to access the Secure Dimensions window.
2. Click a Dimension level to expand its structure.
3. Click the Full Security check box to indicate you want to assign security to User Lists and to display the name(s) of the User Lists defined for the selected Dimensions.

Note: If no User Lists are defined for a Dimension, you will receive a message indicating that no lists are defined and, therefore, User List security cannot be assigned to that Dimension.

4. Select the check boxes for the User Lists that you want to assign full security to. The active user profile will not be able to run a Template or View without all secured User List values for that Dimension in the Interactive Drill-Down Path for an Inquiry.
5. Click **OK**.
6. Click **Close** to return to the User Profile window.
7. From the User Profile window, click **Save** and then **Close**.

You cannot run a Template or View without all secured Dimensions in your Interactive Drill-Down Path. For example, if Territory is a secured Dimension and you open a Template with Item as the default Dimension, Territory will automatically be added to the top of your drill-down path. If you remove the Territory Dimension and request a new retrieval, Territory will automatically be added back to your drill-down path.

In this View, the Territory Dimension was removed from the drill-down path. When a retrieval is requested, the secured Dimension is automatically inserted by the system. See the screen prints on this page and the next page.

| Item | Description | Actual Sales Feb 00 to Feb 00 | % of Total Current Period | Actual Sales Jan 00 to Feb 00 | % of Total YTD |
|--------|-----------------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BKBBPN | Black stick pen | \$13,270.49 | 5.56% | \$29,815.30 | 5.86% |
| BLBBPN | Blue stick pen | \$18,451.66 | 7.73% | \$41,240.13 | 8.11% |
| BPPMK | Broad tip perm marker | \$8,928.40 | 3.74% | \$19,750.66 | 3.88% |
| BSDEMK | Basic dry erase marker set | \$18,167.05 | 7.61% | \$39,103.68 | 7.69% |
| CFPN | Cartridge fountain pen | \$32,464.58 | 13.59% | \$64,953.28 | 12.77% |
| CTPMK | Combo tip perm marker | \$33.50 | | | 14.48% |
| DSDEMK | Deluxe dry erase marker set | \$49.11 | | | 20.51% |
| FTPMK | Fine tip perm marker | \$4.60 | | | 1.98% |
| HPFC | Hard point plain pencil | \$3.50 | | | 1.33% |
| MPFC | Medium point plain pencil | \$7.11 | | | 2.71% |
| RDBBPN | Red stick pen | \$21,675.84 | 9.08% | \$43,269.58 | 8.51% |
| RFPN | Refillable fountain pen | \$26,760.21 | 11.20% | \$59,652.23 | 11.73% |
| SSPN | Student set colored pencils | \$1,032.45 | .43% | \$2,283.90 | .45% |
| Total | | \$238,834.16 | 100.00% | \$508,614.02 | 100.00% |

View with removed Dimension which is secured for the user

The View cannot be run without the secured Dimension level in the drill-down path.

| Item | Description | Actual Sales Feb 00 to Feb 00 | % of Total Current Period | Actual Sales Jan 00 to Feb 00 | % of Total YTD |
|--------|-----------------------------|-------------------------------|---------------------------|-------------------------------|----------------|
| BKBBPN | Black stick pen | \$13,270.49 | 5.56% | \$29,815.30 | 5.86% |
| BLBBPN | Blue stick pen | \$18,451.66 | 7.73% | \$41,240.13 | 8.11% |
| BPPMK | Broad tip perm marker | \$9,328.40 | 3.74% | \$19,750.66 | 3.88% |
| BSDEMK | Basic dry erase markr set | \$18,167.05 | 7.61% | \$38,103.98 | 7.63% |
| CFPN | Cartridge fountain pen | \$32,464.58 | 13.59% | \$64,959.28 | 12.77% |
| CTPMK | Combo tip perm marker | \$33,578.33 | 14.06% | \$73,638.10 | 14.48% |
| DSDEMK | Deluxe dry erase mkr set | \$49,114.95 | 20.56% | \$104,332.19 | 20.51% |
| FTPMK | Fine tip perm marker | \$4,661.80 | 1.95% | \$10,057.35 | 1.98% |
| HPPC | Hard point plain pencil | \$3,573.35 | 1.50% | \$8,749.65 | 1.33% |
| MPPC | Medium point plain pencil | \$7,155.05 | 3.00% | \$13,762.07 | 2.71% |
| RDBBPN | Red stick pen | \$21,675.94 | 9.09% | \$43,289.98 | 8.51% |
| RFFN | Refillable fountain pen | \$26,760.21 | 11.20% | \$59,652.23 | 11.73% |
| SSPN | Student set colored pencils | \$1,032.45 | .43% | \$2,283.90 | .45% |
| Total | | \$238,834.16 | 100.00% | \$508,614.02 | 100.00% |

View with attached Security User List

Secure Dimensions Fields

Dimensions

A list of all valid Dimensions displays in the window. Authority to specific Dimensions can be revoked by deselecting the check box for a Dimension.

Full Security

If User Lists have been created for the active Dimension, they display when you click a Dimension and then select the Full Security check box. Select the check box for a Security User List to limit the user to certain values within the active Dimension. A User List allows you to limit the access to view only selected values.

If users need access to specific key values (for example, specific Customers or Items), create a User List for only those specific values and attach it to their user profile.

Secure Dimensions Command Button

OK

Click **OK** to close the Secure Dimensions window. When **Save** is clicked from the User Profile window, the Dimension authority is also saved.

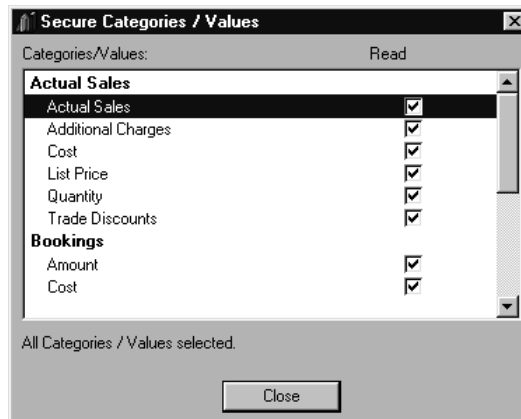
Close

Click **Close** to close the Secure Dimensions window. When **Save** is clicked from the User Profile window, the Dimension authority is also saved.

Securing Categories/Values

Through the User Profile, access to categories and values can be secured and authority to specific category/values can be granted. By default, *MMA* assumes authority to all category/values. The category/values selected are saved as part of the user profile if **Save** is clicked on the User Profile window.

This window is accessed through the Category/Value button on the User Profile window.



Secure Categories / Values window

To revoke authority to categories and values:

1. Click **Category/Value** from the User Profile window to access the Secure Categories/Values window.
2. Click the Read check box to deselect a category/value. The active user profile cannot access those category/values that do not have the Read check box marked.

Note: The system notifies you of the exact number of category/values selected at the bottom of the window.

3. Click **Close** to return to the User Profile window.
4. From the User Profile window, click **Save** and then **Close**.

A salesperson needs access to Sales Dollars and Units, but not Costs. You may revoke authority to Cost and additional charges.

Secure Categories/Values Fields

Categories / Values

A list of all category/values display in the Category/Value selection box. Category/values are defined using File | Category/Values. Authority to specific category/values can be revoked from the active user profile by deselecting the Read check box. Use the scroll bars to maneuver through all category/value combinations. Selected category/values have a checkmark in the Read check box. The system notifies you of the exact number of category/values selected at the bottom of the window.

Read

When the Read check box is selected, the user specified in the User Profile window is granted access to the specific category/value. The default is to have all categories selected.

Secure Categories/Values Command Button

Close

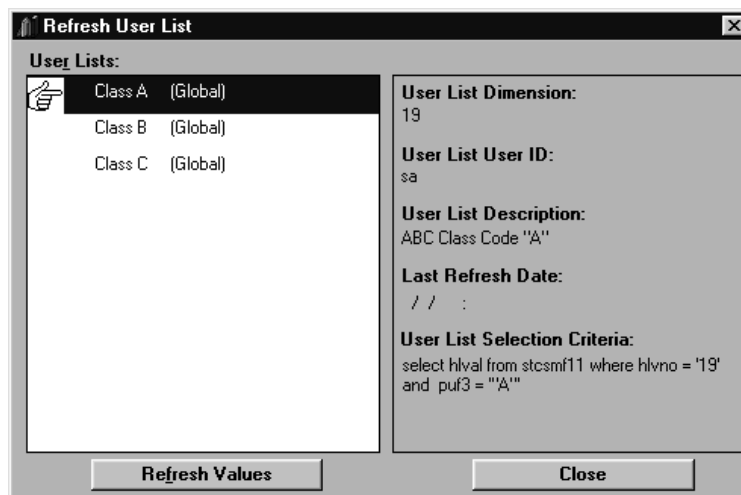
Click **Close** to close the Secure Category/Values window. When **Save** is selected from the User Profile window, the category/value authority is also saved.

Refresh User List

The Refresh User List function is used to refresh the values associated with Dynamic User Lists. Dynamic User List types are defined in the User List Maintenance function.

User Lists must be refreshed anytime you do a refresh or net change to the *MMA* Master File information. For example, if a Customer orders a new Item, an Item is added to a Region, or a Sales Representative gets a new Territory.

Note: Dynamic User Lists must be marked as Batch Refresh to display on the Refresh User List window.



Refresh User List window

To refresh Dynamic User Lists:

1. Choose Configuration | Refresh User List to display the Refresh User List window.
2. Highlight the User List to be refreshed from the list of available User Lists. The corresponding information for the selected User List displays.

Note: Multiple User Lists can be refreshed, but must be selected individually.

3. Click **Refresh Values**. The refresh is run for all selected User Lists.
4. Click **Close** to exit the Refresh User List function.

Refresh User List Fields

Note: All fields in the Refresh User List window are display-only and do not allow entry.

User Lists

List of dynamic User Lists that can be selected for refresh.

User List Dimension

Dimension for the selected User List.

User List User ID

ID of the user who is the owner of the selected User List.

User List Description

Description for the selected User List.

Last Refresh Date

Date that the selected User List was last refreshed.

User List Selection Criteria

Selection criteria for the selected User List.

Refresh User List Command Buttons

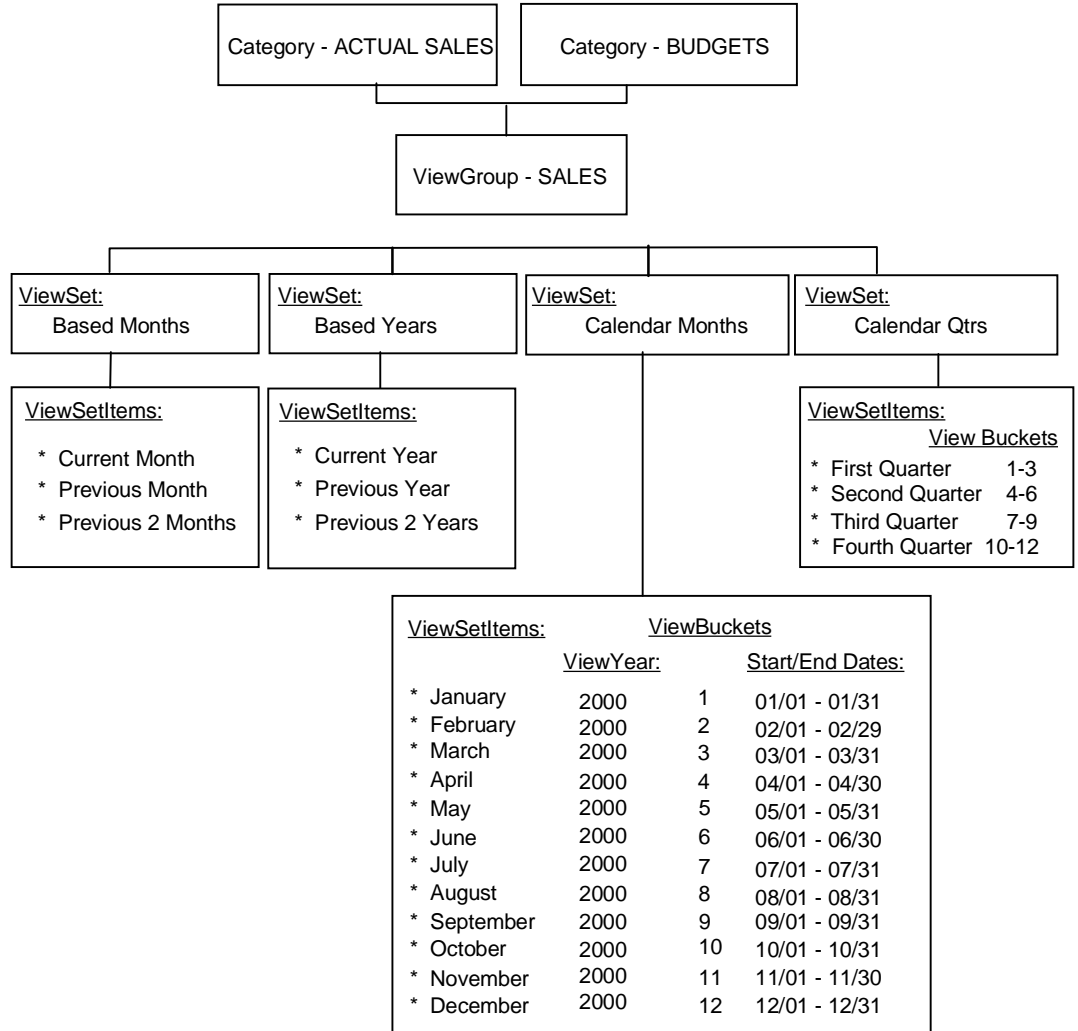
Refresh Values

Click **Refresh Values** to refresh the selected User List.

Close

Click **Close** to close the Refresh User List window.

View Definition Overview



Creating ViewSets

ViewSets outline the year and period definitions that are available during Template and View definitions. A circular category contains periodic data where the buckets are periodically cleared and reused. This would allow a category to be created that contains the seven days of previous sales data and to use that data to roll through the year.

There are two types of ViewSets: Absolute and Based.

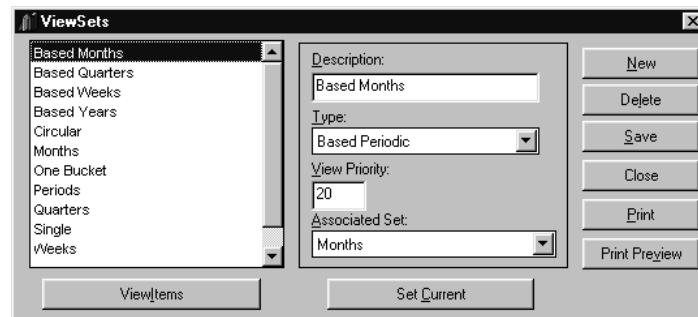
Absolute

Absolute ViewSets are used to create specific periods of time. For example, Weeks, Calendar Months, Fiscal Years, and so forth.

Based

Based ViewSets are based on absolute ViewSets. For example, Based Months would be associated with Calendar Months (January, February, March, and so forth); however, Based Months use Calendar Months to view specific ViewSetItem periods (Current Month, Previous Month, Next Month).

There is no limit to the number of ViewSets you can define on your system.



ViewSets window

To create a ViewSet:

1. Choose DataViews | ViewSets.
2. Click **New** to clear all of the detail values from the fields.
3. Enter the ViewSet in the Description field.
4. Define the type of ViewSet by selecting Periodic, Based Periodic, Year, or Based Year from the Type drop-down selection list.

5. Determine the positioning of the active ViewSet within the To/From Dates selection lists by entering a sequence number in the View Priority field.
6. *{Optional}* Choose an associated set if you are defining a based set.
7. Click **ViewItems** and make the appropriate entries.

Note: Once you create ViewSetItems for a specific ViewSet, be sure to click **Save** on the ViewSet window to update any additions or changes.

8. Click **Save** to update your changes, then **Close** to exit to the ViewSets window.

ViewSets Fields

ViewSet Listing

All available ViewSets display in the list box. ViewSets are used to identify the different levels of time defined within *MMA*. Select a ViewSet from the list box to view the associated detail information.

Description

The description of the ViewSet is entered in the Description field. The description can be a maximum of 30 alphanumeric characters.

Type

The Type field is used to identify the type of ViewSet. Valid types are:

| ViewSet Type | Description |
|----------------|--|
| Periodic | Use with ViewSets that define periodic data that repeats yearly (for example, months, weeks, quarters that span across one year). The dates of a Periodic ViewSet cannot overlap. |
| Based Periodic | Use with a ViewSet that defines relative periods (for example, current month, previous month, current quarter, previous quarter, and so forth) and is associated with a Periodic or Periodic Split Year ViewSet. You can specify one ViewSetItem as the current item with a displacement of 0. |
| Year | Use with a ViewSet that defines valid years within <i>MMA</i> . You can specify one ViewSetItem as the current item. |
| Based Year | Use with a ViewSet that defines relative years (for example, current year, previous year) and is associated with a Year ViewSet. You can specify one ViewSetItem as the current item with a displacement of 0. |

View Priority

You can determine the positioning of the active ViewSet in the To/From Year and Period selection listings when defining a Template within *MMA*. Enter a number to indicate the sequence in which you want the active ViewSet to display. A ViewSet with a view priority of 1 displays before a priority 10 ViewSet. View priority of 0 identifies View items that do not appear on the To/From lists.

Associated Set

Required when defining a based ViewSet. The Associated Set is used to translate based periods and their offsets to an actual period.

ViewSets Command Buttons

New

Click **New** to clear the ViewSet detail field values to create a new ViewSet. After creating the new ViewSet, be sure to click **Save** to update any additions or changes.

Delete

To delete a ViewSet, highlight the ViewSet you want to delete and click **Delete**. A delete confirmation window displays. Verify your selection and click **Yes** to confirm deletion.

Save

Click **Save** to update any additions or changes. You must click **Close** to close the active window. If **Close** is clicked prior to **Save**, the system prompts you to save.

Close

Click **Close** to close the ViewSets window. If any modifications were made without saving, the system prompts you to save.

Print

If connected to a printer, this command button prints the ViewSet Report that lists all of the defined ViewSet information.

Print Preview

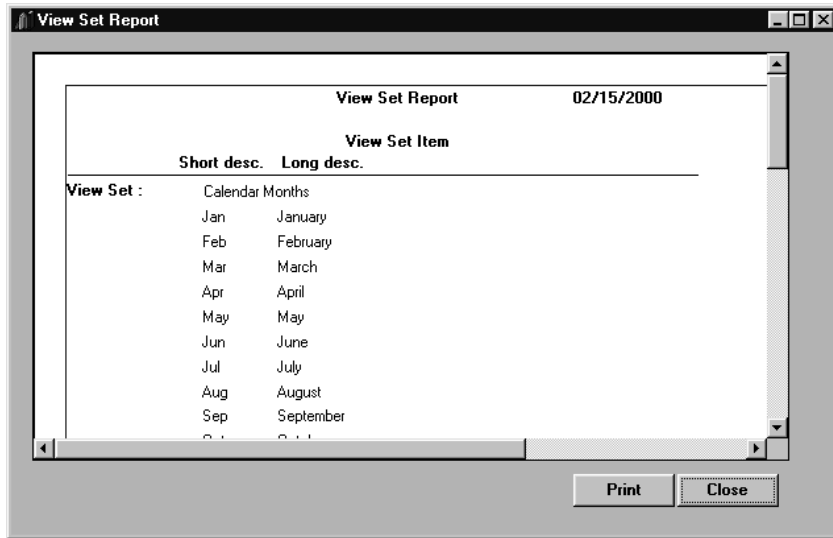
When **Print Preview** is clicked, the report displays on the screen. You can press **Print** from this window to print the report.

ViewItems

Click **ViewItems** to access the ViewSetItems window for the selected ViewSet. ViewSetItems identify the periods of time that make up each ViewSet.

Set Current

Click **Set Current** to access the Change Current ViewSetItems window to adjust the current ViewSetItems and current year for each associated ViewSet. For more information, see "Resetting/Viewing the Current Date" on page A92.



ViewSet Report print preview window

To print the ViewSet Report:

1. Select DataViews | ViewSets.
2. To preview the report before you select to print, click **Print Preview**.
3. To print the report from either the ViewSets window or the Print Preview window, click **Print**.
4. To exit this window, click **Close**.

ViewSet Report Fields

The ViewSet Report prints all of the defined information for each ViewSet. The following information prints on the report:

- Short Description
- Long Description
- ViewSet (each ViewSet and specific information for each display)
- Offset (for example, -1 is one week ago, -2 is two weeks ago, and so forth)

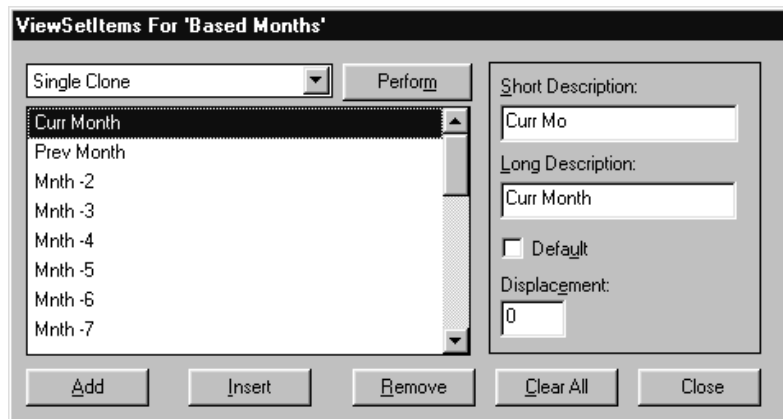
Creating ViewSetItems

ViewSetItems define the periods of time that make up each ViewSet. ViewSetItems are based on the type of ViewSet. For example, Yearly ViewSets are made up of calendar years (1999, 2000, 2001, and so forth), monthly ViewSets are made up of calendar months (January, February, March, and so forth.).

ViewSetItems must be defined for each ViewSet in order for you to establish corresponding ViewGroups.

Note: Corresponding years, start and end buckets, as well as the start and end date for each bucket, are set for each ViewSetItem for any given ViewSet in the ViewGroups function. See "Creating ViewGroups" on page A94 for more information on how to set these values.

This window is accessed through the ViewItems button on the ViewSets window.



ViewSetItems window

To create a ViewSetItem:

1. Click **ViewItems** from the ViewSets window.
2. Click **Add** to clear all of the fields. Enter a short and long description for the current ViewSetItem.
3. *{Optional}* You can use the Perform option to automatically create ViewSetItems based on the selected Perform option. For example, select Calendar and click **Perform** to create the months of the year (January, February, March, and so forth.). Select Quarters to create quarterly ViewSetItems (First Quarter, Second Quarter, and so forth).
4. Click **Close** to return to the ViewSets window.
5. Click **Save** and then **Close**.

ViewSetItems Fields

Perform

Use this function to assist in the creation of additional ViewSetItems by duplicating your current selection.

| Valid Selection | Action |
|---------------------|---|
| Single Clone | Generates items based on the current selection. |
| Multiple Desc Clone | Generates descriptions for all items in the current selection based on the current description. For example, to change January-December descriptions to Month1-Month12. |
| Calendar | Generates Monthly ViewSetItems. |
| Quarters | Generates Quarterly ViewSetItems. |
| Weeks | Generates Weekly ViewSetItems. |
| Weeks within Months | Generates Weekly ViewSetItems where week does not cross Monthly borders. |
| Daily | Generates Daily ViewSetItems. |

ViewSetItems List

All valid ViewSetItems for the current ViewSet display in order of creation. Select a ViewSetItem to maintain or delete by highlighting it while displayed. To create the ViewSetItems, use the Perform function or enter them manually.

Short / Long Description

Descriptions are used in Templates and Views.

Both the short and the long description of the selected ViewSetItem can be maintained when displayed in either Description field. When **Add** is selected, the Description fields are cleared so you can enter a new ViewSetItem.

Displacement

Only displays when creating ViewSetItems for a "based" ViewSet. Displacement identifies the value added to the current period value as maintained in the *Current Year/Period Maintenance* program to identify the placement of the selected period. For example, ViewSetItems for a based month ViewSet could be defined as "Current Month," "Previous Month," and "Next Month." Displacement for "Current Month" is "0" to identify "current," displacement for "Previous Month" is "-1" and displacement for "Next Month" is "1."

Year

Only displays for yearly ViewSet types. Allows you to identify the year associated with each yearly ViewSetItem.

ViewSetItems Maintenance Command Buttons

Add

Click **Add** to clear the Description and Displacement fields to create a new ViewSetItem.

Insert

Click **Insert** to add a ViewSetItem in between existing ViewSetItems. The field is inserted above the selected ViewSetItem.

Remove

Click **Remove** to remove a ViewSetItem. A confirmation window displays to verify deletion. Click **Yes** to delete the selected ViewSetItem. If you remove an item, be sure to **Save** on the ViewSets window.

Clear All

Click **Clear All** to remove all ViewSetItems. The clear is not performed unless **Save** is selected from the ViewSet window.

Close

Click **Close** to close the ViewSetItems window.

Perform

Assists in the creation of additional ViewSetItems by duplicating your current selection when **Perform** is clicked.

Resetting/Viewing the Current Date

You can use the Change Current ViewSetItems window to view all of the ViewSets and associated ViewGroups defined as current on a single window. This window also gives you the ability to change the date identified as current for the active session. It uses the dates defined in ViewSetItems to determine the current ViewSetItem and current ViewYear.

This window is accessed through the Set Current button on the ViewSets window.

| ViewGroup | ViewYearSet/Item | ViewSet/Item |
|-----------------|------------------|----------------------|
| Sales | Years/2000 | Periods/Period33 |
| Sales | Years/2000 | Quarters/3rd Quarter |
| Sales | Years/2000 | Weeks/Week29 |
| Sales | Years/2000 | Months/July |
| Budget-Forecast | Years/2000 | Quarters/3rd Quarter |
| Budget-Forecast | Years/2000 | Months/July |

02/22/2000 Change Original Save Local Save to DB Undo Close

Change Current ViewSetItems window

To change the current ViewSets for the active session:

1. Click **Set Current** from the ViewSets window.
2. Click **Change Current** to display a field allowing date entry.
3. Enter the date you want to be recognized as the current date in the format specified under the Regional Settings within your Control Panel settings.
4. Click **Change** to automatically calculate the new "current" date information.
5. Save the dates to your *MMA* warehouse by clicking **Save to DB**, then click **Close**.

Warning: Changes made to the database cannot be reversed.

Change Current ViewSetItems Fields

ViewGroup

Name of the ViewGroup associated with each of the displaying ViewSets, ViewYears, and ViewSetItems.

ViewYearsSet/Item

Displays the current ViewYear for each ViewSetItem.

ViewSetItem

Current ViewSet and ViewSetItem for the associated ViewGroup.

Change Current ViewSetItems Command Buttons

Change Current

Click **Change Current** to define the current date. A field displays allowing you to make the adjustment. For example, the current date is June 1, and you want the system to determine current period based on May 31. Enter the current date in the format specified under the Regional Settings within the Control Panel. The year format can be two or four digits, depending on the selection made within the Control Panel. Click **Change Current** and the system uses that date to determine the current period.

Original

Select **Original** to refresh the information from the database.

Save Local

If **Change Current** is executed, **Save Local** saves your date entries to the current session of the Inquiry.

Save to DB

If **Change Current** is executed, click **Save to DB** to save your date entries to the database whether it is local or a Server.

Undo

Click **Undo** to retract any changes made to this window based on **Change Current**.

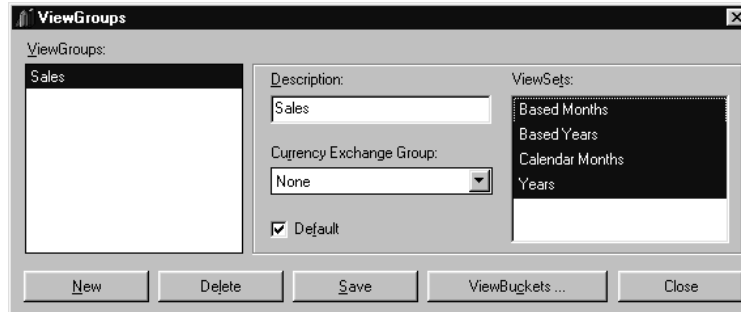
Warning: Changes made to the database cannot be reversed.

Close

Click **Close** to close the window.

Creating ViewGroups

ViewGroups are used to group together ViewSets and map ViewSetItems to the warehouse bucket numbers. A ViewGroup is tied to a data source that determines the ViewSetItems that are available for a category. Once ViewSets are selected for a specific ViewGroup, click **ViewBuckets** to access the ViewBuckets window and setup bucket information for each valid ViewSet and associated ViewSetItems. See "Mapping ViewBuckets" on page A96 for more information about creating ViewBuckets.



ViewGroups window

To create a ViewGroup:

1. On the *Administration* main window, choose DataViews | ViewGroups. The ViewGroups window displays.
2. Click **New** to clear all currently displayed detail values.
3. Enter a descriptive name for the new ViewGroup in the Description field.
4. Select the ViewSets to be associated with the new ViewGroup by clicking the appropriate values in the ViewSets list box.
5. If multi-currency is enabled, associate a Currency Exchange Group to the ViewGroup. Make a selection from the Currency Exchange Group drop-down selection list.
6. *{Optional}* If the current ViewGroup is to be initially selected in any drop-down selection list for ViewGroups within *MMA Administration*, select the Default check box. Only one ViewGroup can be selected as the default.
7. Click **ViewBuckets** to establish the mapping parameters for each ViewSetItem associated with the selected ViewSets for the current ViewGroup. See "Mapping ViewBuckets" on page A96 for more information on how to use this function.

Note: To deselect ViewSets, press CTRL+left mouse click.

ViewGroups Fields

ViewGroups Listing

All available ViewGroups display in the list box. Select a ViewGroup to edit or delete.

Description

The description of the ViewGroup. The description can be a maximum of 30 alphanumeric characters. Click **New** to clear this field to enter a new ViewGroup name.

ViewSets

ViewSets available to be associated with a specific ViewGroup. ViewBucket information must be entered for each selected ViewSet. To create this information, click **ViewBuckets** once all required ViewSets are selected.

Currency Exchange Group

If multi-currency is enabled, users need to associate a Currency Exchange Group to the Viewgroup by making a selection from this drop-down selection list.

Default

Select the Default check box if you want the active ViewGroup to be initially selected in any drop-down list box for ViewGroups. *MMA* allows only one ViewGroup to be assigned as the default.

ViewGroups Command Buttons

New

Click **New** to clear the ViewGroup detail field values to enter a new ViewGroup. After creating the new ViewGroup, be sure to click **Save** to update any additions or changes.

Delete

Use to delete a ViewGroup. To delete a ViewGroup, highlight the ViewGroup you want to delete and click **Delete**. A delete confirmation window displays. Verify your selection and click **Yes** to confirm deletion.

Save

Click **Save** to save your entries and redisplay the ViewGroups window. You must click **Close** to close the active window and return to the *Administration* main window. If you click **Close** prior to **Save**, the system prompts you to save.

ViewBuckets

Click **ViewBuckets** to select the buckets of time for the active ViewGroup. For more information, see "Mapping ViewBuckets" on page A96.

Close

Click **Close** to close the ViewGroups window. If any modifications were made, the system prompts you to save.

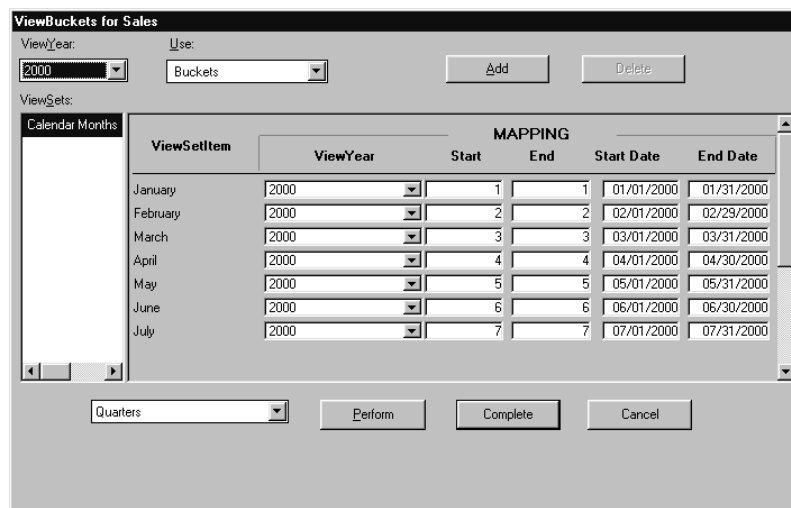
Mapping ViewBuckets

See "ViewBucket Examples" on page A102 for some examples of how to set up various types of ViewBuckets.

A bucket of time must be associated with each ViewSetItem for the ViewSets that are part of a ViewGroup. The ease of use functions in the ViewBuckets function can be used to help you automatically calculate your mapping parameters by selecting the type of mapping for each ViewSet and how you want to calculate them. For example, if you select Use Buckets to perform your mapping, you must specify the start and end buckets and corresponding dates. If you choose to create mapping using a previously defined ViewSet, the system automatically calculates the mapping and sets the current to and from bucket and date values.

Note: Only the absolute ViewSets that are selected on the ViewGroups window display for mapping purposes. Based ViewSets do not display because they are associated to, or based on, an absolute ViewSet in the ViewSets function and do not require bucket mappings.

This window is accessed by clicking the ViewBuckets button on the ViewGroups window.



ViewBuckets window

To define mapping parameters for a ViewGroup:

1. From the ViewGroups window, click **ViewBuckets**. The ViewBuckets window displays.

All Years can be specified if the Start and End dates are the same regardless of the year.

2. Select the ViewYear for which you need to establish mapping parameters by clicking the ViewYear down arrow and selecting the required year from the list of available years. Use All Years if bucket information is the same for each selected ViewYear. For example, each year begins on January 1st and ends on December 31st.
3. Select the type of period you need to use to set up your mapping parameters by clicking the Use down arrow and selecting the type of period you want.
4. Calculate the mapping parameters for each ViewSetItem. This can be done in one of two ways:
 - Select the type of calculation you want to use to automatically perform the calculation-- OR --
 - Manually enter the mapping parameter information for each ViewSetItem.

Note: Manual setup allows you to control the date ranges for each ViewSetItem. For example, you can set up periods for split years or other specific period tracking you may need for your individual processing requirements.

5. Once you set up all possible period combinations for each displaying ViewSet, click **OK** to return to the ViewGroups window. Click **Save** to update your changes.

ViewBuckets Maintenance Fields

ViewYear

Use to identify the year associated with the listed ViewSets and on which to base mapping for ViewSetItems. You can select All years if the date information is the same for all years. Selecting a year means you select different ViewSets for each year.

ViewSets

All absolute ViewSets selected in the ViewGroups window display in the list box. ViewSets are used to identify the different levels of time defined within MMA. Mapping parameters must be entered for all ViewSetItems associated with the selected ViewSet.

Use

This option can be used with the **Perform** option at the bottom of the window and allows you to select how you want the active ViewSetItem's mapping to be created. Valid options are dependent on the selected ViewSet.

Select "Buckets" when you want to calculate ViewSetItems based on the actual bucket number in the *MMA* data source tables. This option allows you to manually change Start and End bucket values, as well as the From and To Date ranges. Other selections allow you to use previously defined ViewSets to create bucket mapping. For example, if you defined weekly ViewSets (the lowest periods of time) when you define mapping for your monthly ViewSet, you can use actual bucket numbers and manually enter start and end dates or define months based on the weekly ViewSet definitions. In this case, you could define your monthly ViewSetItems in terms of your weekly ViewSetItems (January as bucket 1 - 5 or as week 1 - 4).

Note: If your year starts on a date other than January 1, be sure to enter the start date and start bucket information to use for the Perform function calculation.

ViewSetItems

Displays the ViewSetItems that relate to the selected ViewSet. For example, if you select the calendar month ViewSet, ViewSetItems January through December display. Mapping information must be established for each ViewSetItem listed.

Mapping

ViewYear

The year for the corresponding ViewSetItem found in the DataSource Tables and selected for the current ViewSet.

Start

The start bucket for the corresponding ViewSetItem. This value is dependent on the type of ViewSetItem. For example, Calendar Period January starts on bucket 1 and ends on bucket 1, Calendar Period February starts on bucket 2 and ends on bucket 2. Calendar Quarter First Quarter (January through March), starts on bucket 1 and ends on bucket 3.

End

Corresponds to the bucket entered in the Start field. See above.

Start Date

Start date for the Buckets entered in the Start and End fields. This date is used by the SetCurrent function to identify the current bucket of time for inquiries.

End Date

End date for the Buckets entered in the Start and End fields. This date is used by the SetCurrent function.

ViewBuckets Command Buttons

Add

Use to add a row for input after the ViewSetItem row currently selected. The information displaying in the added row is the same as the highlighted ViewSetItem row and must be manually maintained. To add a row for input, highlight any field within the ViewSetItem row you want to add the new row *after* and click **Add**.

This option is required when creating a ViewSetItem that span years. For example, Week 1 of 2000 equals bucket number 56 of 1999 plus bucket number 1 of 2000.

Delete

Use to delete a ViewSetItem row of information. Only rows that are added using the **Add** function can be removed using this function. To delete a row, highlight any field within the row and click **Delete**.

Perform

Use to create additional ViewSetItems by duplicating the current selection. Valid selections are:

| Selections | Actions |
|----------------------------|---|
| Quarters | Use to calculate quarterly periods. First quarter calculated as buckets 1-3, second quarter as buckets 4-6, and so forth. |
| Calendars | Use to calculate monthly periods. Bucket 1 maps to 01/01/00 through 01/31/009, bucket 2 maps to 02/01/00 through 02/29/00, and so forth. |
| Weeks | Use to calculate weekly periods. Based on a seven-day week. For example, July 6th-12th is one week, July 13th-19th is the next week, and so forth. |
| Daily | Use to calculate daily information. |
| Weeks within Months | Use to calculate weeks within months. Based on each week that falls within a given month. For example, July 27th-31st is one week, August 1st-2nd is the next week, and so forth. |
| Clear ViewSet Definition | Use to clear the definitions for the selected ViewSet. Resets all ViewSetItem mapping information. |
| Clear ViewYear Definition | Use to clear the ViewYear definition. All period information for the selected ViewSet and ViewYear is reset. |
| Clear ViewGroup Definition | Use to clear the current ViewGroup definition. |
| Clone Next Row | Use to calculate the next row of period information based on the selected ViewSetItem. |
| Clone Rest of Rows | Use to calculate remaining lines of period information based on the selected ViewSetItem line. |

Complete

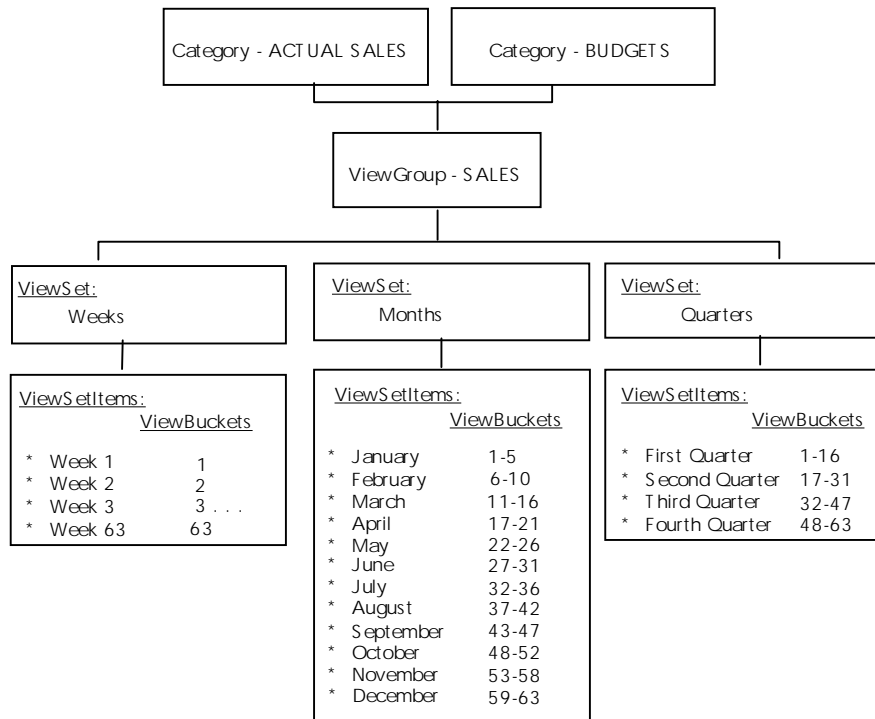
Click **Complete** to return to the previous window and save your changes. Selecting this option also performs an edit check for all ViewSet and ViewYear combinations.

Cancel

Click **Cancel** to return to the ViewGroups window to save your changes or to exit the program.

View Definition for 2000 Weekly Database

- * Define the lowest level bucket
- * Other ViewBuckets can consist of combinations of the lowest level
- * If bucket mapping changes by year, define the ViewYears and the number of buckets used for each



ViewBucket Examples

Daily

The following is an example of Daily ViewBuckets. Notice that each bucket is associated with a single date. For example, Bucket 1 starts and ends on January 1st, Bucket 2 starts and ends on January 2nd, and so forth.

ViewBuckets for Sales

ViewYear: 2000 Use: Buckets [Add] [Delete]

ViewSets: Daily

| ViewSetItem | MAPPING | | | | |
|-------------|----------|-------|-----|------------|------------|
| | ViewYear | Start | End | Start Date | End Date |
| Day 1 | 2000 | 1 | 1 | 01/01/2000 | 01/01/2000 |
| Day 2 | 2000 | 2 | 2 | 01/02/2000 | 01/02/2000 |
| Day 3 | 2000 | 3 | 3 | 01/03/2000 | 01/03/2000 |
| Day 4 | 2000 | 4 | 4 | 01/04/2000 | 01/04/2000 |
| Day 5 | 2000 | 5 | 5 | 01/05/2000 | 01/05/2000 |
| Day 6 | 2000 | 6 | 6 | 01/06/2000 | 01/06/2000 |
| Day 7 | 2000 | 7 | 7 | 01/07/2000 | 01/07/2000 |

Quarters [Perform] [Complete] [Cancel]

Daily ViewBuckets

Monthly

The following is an example of Monthly ViewBucket definitions. Notice that each bucket is associated with a calendar month. For example, Bucket 1 starts on 01/01/00 and goes to 01/31/00, Bucket 2 starts on 02/01/00 and goes to 02/29/00, and so forth.

ViewBuckets for Sales

ViewYear: 2000 Use: Buckets [Add] [Delete]

ViewSets: Calendar Months

| ViewSetItem | MAPPING | | | | |
|-------------|----------|-------|-----|------------|------------|
| | ViewYear | Start | End | Start Date | End Date |
| January | 2000 | 1 | 1 | 01/01/2000 | 01/31/2000 |
| February | 2000 | 2 | 2 | 02/01/2000 | 02/29/2000 |
| March | 2000 | 3 | 3 | 03/01/2000 | 03/31/2000 |
| April | 2000 | 4 | 4 | 04/01/2000 | 04/30/2000 |
| May | 2000 | 5 | 5 | 05/01/2000 | 05/31/2000 |
| June | 2000 | 6 | 6 | 06/01/2000 | 06/30/2000 |
| July | 2000 | 7 | 7 | 07/01/2000 | 07/31/2000 |

Quarters [Perform] [Complete] [Cancel]

Monthly ViewBuckets

Quarterly

The following example displays Quarterly ViewBuckets. Notice that each bucket represents a quarter. For example, Bucket 1 starts on January 1, 2000 and ends on March 31, 2000.

The screenshot shows a software interface titled "ViewBuckets for Sales". At the top, there are controls for "ViewYear" (set to 2000) and "Use:" (set to Periods), along with "Add" and "Delete" buttons. On the left, a "ViewSets:" list includes "Months", "Periods", "Quarters" (which is selected), and "Weeks". The main area contains a table with the following data:

| ViewSetItem | MAPPING | | | | |
|-------------|----------|----------|----------|------------|------------|
| | ViewYear | Start | End | Start Date | End Date |
| 1st Quarter | 2000 | Period1 | Period16 | 01/01/2000 | 03/31/2000 |
| 2nd Quarter | 2000 | Period17 | Period31 | 04/01/2000 | 06/30/2000 |
| 3rd Quarter | 2000 | Period32 | Period47 | 07/01/2000 | 09/30/2000 |
| 4th Quarter | 2000 | Period48 | Period63 | 10/01/2000 | 12/31/2000 |

At the bottom of the dialog, there is a "Quarters" dropdown menu and "Perform", "Complete", and "Cancel" buttons.

Quarterly ViewBuckets

Defining a Currency Code

Whether or not you have multi-currency enabled, you must define a currency code in *Administration* for the currency you are using. The Currency function within the Currency menu is enabled even if you have not turned multi-currency on within Parameter Master Maintenance.

When new records are created by Data Entry functions, the currency code field within those records is filled with the currency information defined in the Maintain Currencies window.



Currency menu when multi-currency is turned off

See Chapter 8 of this *Systems Administrator Guide* for detailed information on how to define your currency in the Maintain Currencies window.

Notes

CHAPTER 5 • USING UTILITIES

QuickLook

Use this chapter to learn how to:

- Create/Maintain/Remove Data Summary Levels
- Clear Detail Data
- Create Indexes
- Create Change Sets
- Apply Change Sets
- Perform Relationship Change
- Perform Data Entry
- Perform Data Copy
- Define/Maintain Business Units
- Define/Maintain Companies
- Define/Maintain Sales Offices
- Define/Maintain Sales Managers
- Define/Maintain Sales Reps
- Define/Maintain Import Calendar
- Defining/Maintaining Period End Dates
- Define Master File Extract Control
- Create Bucket Definitions

Adding/Maintaining DSL's

The Add New Data Summary Levels window creates the new DSL records on the server. Select the data source and category for the new DSL being created. The DSL definition must exist before this program can be run.

| Data | Data Source | Data Summary Level |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 901 BusUn Comp SlsOf SlsMg SlsRp |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 902 BusUn Comp SlsOf SlsMg SlsRp ItmFm ItmGr Item |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 903 BusUn Comp ItmFm ItmGr Item |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 904 BusUn Comp Regn Terr Cust ShpTo MAC |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 905 BusUn Comp ItmFm ItmGr Item Regn Terr |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 906 BusUn Comp |

Add New Data Summary Levels window

To add a new DSL:

1. Select MMA Utilities | Add New DSL.
2. Select the data source by highlighting it.

Note: All categories are automatically selected. Deselect a category to exclude it from the DSL.

3. Select the year for the data source selected by highlighting it.
4. Select the DSL representing the Dimensions to be created by highlighting it. DSL's with a check mark in the Data check box cannot be selected.
5. Click **OK**.

Note: Once the DSL is created, it is also attached to a data source.

Add New Data Summary Levels Fields

Data Source

All valid data source names display in the Data Source selection box. A data source can be selected from the Data Source selection box when adding a data summary level. Data sources are created automatically when structure codes are created using the *Database Install* application.

Category

All categories attached to the data source are selected by default and display in this group box. Categories are pre-defined for *MMA* customers. Click a category to deselect it.

Year

This field contains the start years for the data source selected from the Data Source Table (STCSDT12).

Data Summary Level List

Data

If the Data checkbox is selected, it means that the DSL contains data. If it is unchecked, there is no data within the specified DSL.

Data Source

If the Data Source checkbox is selected, it means that the DSL is attached to a specific data source. If it is unchecked, there is no data source attached to the specified DSL.

Data Summary Level

Select the DSL that represents the Dimensions to be created for the selected data source and category. DSL's are created using the *Administration* application of *MMA*.

Add New Data Summary Levels Command Buttons

OK

Click **OK** to create the DSL creation job request on the server.

Run/View Log

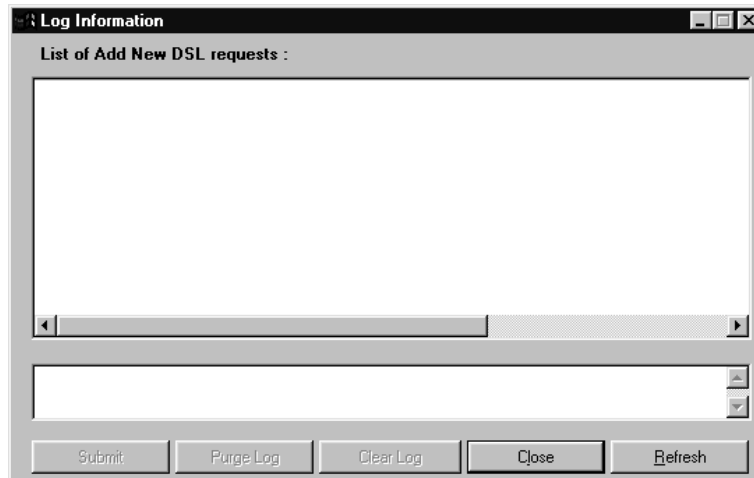
Any processed requests can be purged or cleared. This window shows all DSL creation requests. Log displays the following details: Status at request, category to be processed, years processed, the DSL to be created, and the DSL that is used to update. Click **Submit** from the Log window to submit the job to batch.

Close

Click **Close** to exit this window without adding any DSL's.

Running and Viewing the Log

The Log Information window is accessed from **Run/View Log** in the Add New Data Summary Levels window.



Log Information window

To view log information and submit a job:

1. Click **Run/View Log** from the Add New Data Summary Levels or the Remove Data Summary Levels windows.
2. View the log information and click **Close** to close the window, **Purge Log** to delete the log, or **Clear Log** to clear the log.
3. Click **Submit** to submit the job to batch. The DSL levels are created or deleted, depending on the window you are in.

Log Information Fields

List of Add New DSL requests

All requests are displayed in this display-only listing.

Log Information Command Buttons

Submit

To submit the job for Adding DSL's, Removing DSL's, Creating Indexes, or Clearing Detail Files, click **Submit**.

Purge Log

Any processed requests can be purged by clicking **Purge Log**.

Clear Log

Any unwanted requests can be cleared by clicking **Clear Log**.

Close

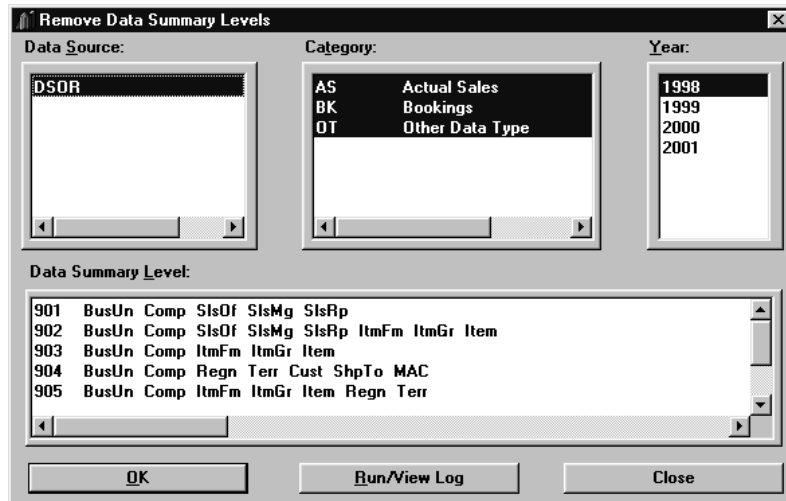
Click **Close** to close the window without processing any requests.

Refresh

Click **Refresh** to refresh the log with updated information about requests.

Removing DSL's

The Remove Data Summary Levels window is used to remove DSL's that are not being used in the Inquiry process. The Remove Data Summary Levels window is similar to the Add Data Summary Levels window.



Remove Data Summary Levels window

To delete a DSL:

1. Select MMA Utilities | Remove DSL.
2. Highlight the data source.
3. Highlight the category.
4. Select the year for the data source selected.
5. Select the DSL representing the Dimensions to be removed.
6. Click **OK**.

Clearing Detail Data

The Clear Detail Data window is used to clear data in the selected category and elements (values) for a selected time period. The Clear Data Detail function can be used in a situation where data needs to be cleared and then re-imported.

You can clear data for a selected category for all years, all periods, and all elements; for a selected year and all period and elements; or a selected year, selected periods, and selected elements.

| Data Source: | Category: | Year: | Period: | Elements: |
|--------------|---|--|---|--|
| DSOR | AS Actual Sales BK Bookings OT Other Data Typ | 1998 1999 2000 2001 <input type="checkbox"/> All Years | 01 January 02 February 03 March 04 April 05 May <input type="checkbox"/> All Periods | F01 ActSales F02 Quantity F03 List Price F04 Cost F05 Add Charges <input type="checkbox"/> All Elements |

Clear Detail Data window

To clear detail data:

1. Select MMA Utilities | Clear Detail Data.
2. Select the data source to be cleared.
3. Select the category to be cleared.
4. Select the year(s), period(s), and element(s) to be cleared. Press the CTRL key while making selections to select multiple years, periods, and elements.
5. Click **OK**.

Clear Detail Data Fields

Data Source

All valid data source names display in the Data Source selection box. Select a data source from this selection box when clearing a sales detail file.

Category

Select the category from which the data is to be cleared.

Year

Select the year to clear, or choose the ALL Years check box to clear all years.

All Years

Select the All Years check box to clear data for all years for the selected category, period(s), and element(s). By default, this check box is not selected.

Period

Select the period to clear, or select the All Periods check box to clear all periods. If this list box is blank, periods are not defined.

Note: Period represents the actual bucket number in the corresponding data source table.

All Periods

Select the All Periods check box to clear data for all periods for the selected category, year(s), and element(s). By default, this check box is not selected.

Elements

Select the element(s) to be cleared, or select the All Elements check box to clear all elements for the selected year and periods.

All Elements

Select the All Elements check box to clear data for all elements for the selected category, year(s), and period(s). By default, this check box is not selected.

Clear Detail Data Command Buttons

OK

Click **OK** to process your entries.

Close

Click **Close** to close the window without processing any entries.

Run/View Log

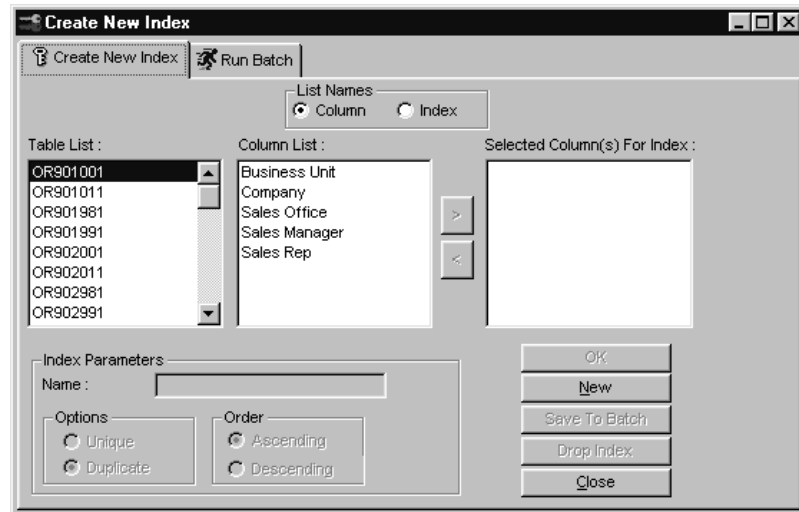
Run/View Log shows all requests. Click **Submit** from this window to submit the job to clear the specified data from the sales file.

Creating Indexes

Indexes are created to aid in *MMA* retrieval performance. The proper tuning of DSL's and Indexes results in optimal system performance. Although the Create New Index function is part of the *Administration* application, it runs as an individual application. When you begin the application, either through *MMA Utilities | Maintain Indexes* or through the Create New Index application icon, a window stating that the application is starting briefly displays. While you are processing a new Index, your system is still available for other *MMA* functions.



You can create Indexes by accessing the Create New Index window from *MMA Utilities | Maintain Indexes in Administration*, or from the *MMA* program group using the Create Index icon.



Create New Index window - Create New Index tab

When you run a Performance Tuning Workbench analysis on your system, the workbench makes suggestions for additional Indexes that should be created to enhance system performance. It can also make suggestions for Indexes that should be removed. When you need to create or remove an Index, you must access the Create New Index function.

Note: If you are using the Performance Tuning Workbench, there may be times when the workbench prompts you to create or add Dimensions to DSL Tables. For more information about Performance Tuning Workbench functionality, see Chapter 6 in this *Systems Administrator Guide*.

Create New Index Fields

List Names

Identifies the name of the column or the name of the Index to be listed in the Column List data window. By default, the Column radio button is selected. If you select Index, then all of the existing indexes that have been created display in the Index List data window.

Table List

Displays all of the data header tables from STCSDT12 and all of the Master tables. You can select one table and display all of the columns of the selected table in the Column List data window. If the Index radio button is selected, then all of the existing Index names and their columns display for that table.

Column List

If you selected a data table from the Table List, then only the column names with HLEVEL1, HLEVEL2, and HLEVEL display. If you selected the STCSMF10 table from the Table List then only the description columns display. If you selected the STCSMF11 or STCSMF35 tables from the Table List, then only the description and pickup field columns display.

Selected Column(s) For Index

To move a column to the Selected Column(s) For Index Field, either double-click the column name, drag and drop the columns name, or use the right arrow button to select.

Note: The Index Parameters fields are for the use of the software installer only. These fields are inaccessible to all other users.

Create New Index Command Buttons

OK

Once the columns have been selected, click **OK** to generate the Index.

New

Click **New** to create a new Index.

Save to Batch

This function will validate all necessary values and save the Index you create to batch.

Drop Index

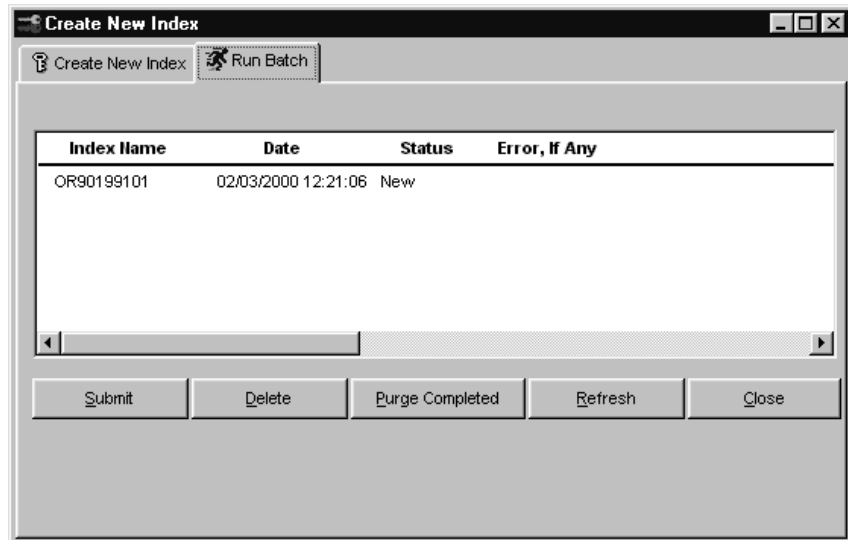
Drop the selected Index from the Index list box with confirmation.

Close

Click **Close** to exit the Create New Index function. Changes or additions made to the Index file are not saved.

Selecting Index Tables

After you have saved an Index to batch, click the **Run Batch** tab. This window lists all of the entries you saved in the Create New Index window.



Create New Index window - Run Batch tab

Run Batch Fields

Index Names

The names of the newly created Indexes display in this field.

Date

The date and time the Indexes were created display in this field.

Status

The status of the newly created Index displays in this field. The following are the different statuses that display:

| | |
|------------|--|
| New | New Index ready to be submitted. |
| Submitted | The request is sent to the server. |
| Processing | The Index creation is running. |
| Completed | Index creation successfully completed. |
| Error | Not successful, check the error text for an explanation. |

Error, If Any

If an error occurred during the batch process, the error message will display in this field.

Run Batch Command Buttons

Submit

You can submit one or more selected items if the status is listed as New. Do not submit if the status is listed as Complete or Processing.

Delete

You can delete one or more selected items if the status is listed as New, Error, or Completed.

Purge Completed

This function deletes all of the completed jobs from the STCSIN10 table.

Refresh

This function retrieves information from the STCSIN10 table.

Close

To close this window click **Close**, a confirmation window displays, prompting you to save your changes.

Creating Change Sets

This program is used to define relationship changes in your data warehouse data. For example, if a Sales Representative's Territory changes, you can use Change Sets to replace the old Territory value with the Representative's new Territory value. Once you determine the type of changes you want, you must run Apply Change Sets to realign the data. See "Applying Change Sets" on page A125 for more information about this function.

The screenshot shows the 'Change Sets' window with the following details:

- Change Set:** SAMPLESET
- Description:** Sample change set
- Last Updated:** 01/01/2001
- Last Applied:** (empty)
- Search Dimensions:**
 - 1 Business Unit
 - 3 Sales Office
 - 6 Item Family
 - 7 Item Group
- Replace Dimensions:**
 - 1 Business Unit
 - 3 Sales Office
 - 6 Item Family
 - 7 Item Group

Buttons on the right include: New, Save, Delete, Data, and Close.

Change Sets window

To create a change set:

1. Select MMA Utilities | Change Sets.
2. Click **New** to clear all fields.
3. Key in a Change Set name and description.
4. Select the Search and Replace Dimensions.
5. Click **Save**.
6. Click **Data** to define the Search and Replace values. See "Defining Change Set Data" on page A123 for detailed steps.

Change Sets Fields

Change Set Listing

All available Change Sets are displayed in the list box. Change Sets are used to define relationship changes between Dimensions. Selecting a Change Set in the list box causes the detail of that Change Set to display in the right side of the window.

Change Set

The name of the Change Set highlighted in the list box displays here. This field may be maintained and is cleared when **New** is clicked. The name may be a maximum of ten alphanumeric characters.

Description

The description associated with the Change Set highlighted in the list box displays here. This field may be updated and is cleared when **New** is clicked.

The description may be a maximum of 50 alphanumeric characters.

Last Updated

MMA tracks the last update date for the Change Set data. If the Last Updated Date is greater than the Last Applied Date, you may need to apply the Change Set again because data in the Change Set was modified since last applied to the MMA database.

This field is system generated and cannot be maintained.

Last Applied

MMA tracks the last applied date for the Change Set data. This field is system generated and is not maintainable.

Search Dimensions

This field contains Dimension values that can be searched for. For example, if the Sales Manager for a Sales Representative changed, you would search on Sales Representative and replace the Sales Manager. The left column contains a list of Dimensions available for selection. The right column contains the selected Dimensions.

Replace Dimensions

This field contains the Dimension values that can replace the selected Search Dimensions. The left column contains a list of Dimensions available for selection. The right column contains the selected Dimensions.

Change Sets Command Buttons

Close

Click **Close** to close the window without processing any entries.

Save

Click **Save** to process your entries.

New

Click **New** to clear the Change Set detail field values, allowing you to create a new Change Set. Be sure and click **Save** to save your entries.

Delete

Highlight the Change Set you want to delete and then click **Delete**. Verify your selection and click **Yes** to confirm.

Data

Data displays the Search and Replace data. See "Defining Change Set Data" on page A123 for more information on how to define Change Set data.

Select

To select a Search or Replace Dimension, highlight the Dimension and then click **Select**, or double-click on the Dimension. The Dimension is removed from the listing of available Search or Replace Dimensions and placed in the appropriate box to the right.

Remove

To remove a Search or Replace Dimension, choose the Dimension from the right Search or Replace box and then click **Remove**, or double-click on the Dimension. The Dimension is removed from the box to the right of the Search and Replace Dimensions sections.

Search and Replace Dimensions cannot be changed if Change Set data exists.

Double-clicking with the left mouse button also removes the Dimension.

Defining Change Set Data

Change Sets realign unrelated levels based on a small subset of manually entered changes. When using the Change Sets function, define your search and replace Dimensions or key values to reflect historical sales across a restructuring.

This window is accessed by clicking the Data button in the Change Sets window.

| Search Values | Company | Sales Manager | Sales Rep |
|----------------|---------|---------------|-----------|
| | a | b | c |
| Replace Values | Company | Sales Manager | Sales Rep |
| | a | b | c |

Change Set Data window

To define the search and replace values within a Change Set:

1. Click **Data** from the Change Sets window.
2. Click **New** to clear all fields.
3. Enter the Search Values. Double-click on any Value field to search for available Values from a list of valid Values.
4. Enter a Replace Value. Double-click on any Value field to replace the Value from the list of valid Values.
5. Click **Save**.
6. Click **Close** to redisplay the Change Sets window. Be sure to save the Change Set from that window.

Change Set Data Fields

Search Values

This field contains the key values that are searched. Double-click on any Search Values fields to access the Search window.

Replace Values

This field contains the key values that will replace searched for values. Double-click on any Replace Values fields to access the Search window.

Change Set Data Command Buttons

New

Click **New** to create the new Search and Replace data.

Save

Click **Save** to save your changes.

Delete

Click **Delete** to delete the active Search and Replace data.

Close

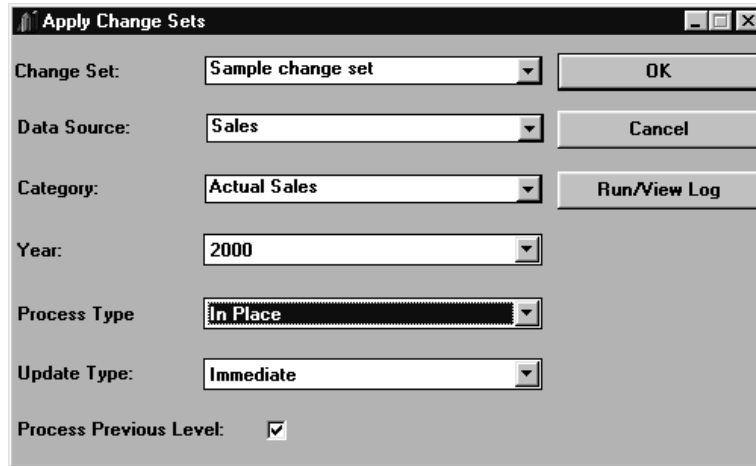
Click **Close** to close the Change Set Data window. If any modifications were made, the system prompts you to save.

Delete All

Click **Delete All** to delete all of the Search and Replace data.

Applying Change Sets

The Apply Change Sets function is used to apply database changes. Change Sets must be defined in order for data to be realigned using this function. Apply Change Sets can be run periodically to promote changes to the database to ensure that the most current data is used to create Inquiries.



The screenshot shows a dialog box titled "Apply Change Sets". It contains the following fields and controls:

- Change Set:** A dropdown menu with "Sample change set" selected. To its right is an "OK" button.
- Data Source:** A dropdown menu with "Sales" selected. To its right is a "Cancel" button.
- Category:** A dropdown menu with "Actual Sales" selected. To its right is a "Run/View Log" button.
- Year:** A dropdown menu with "2000" selected.
- Process Type:** A dropdown menu with "In Place" selected.
- Update Type:** A dropdown menu with "Immediate" selected.
- Process Previous Level:** A checkbox that is checked.

Apply Change Sets window

To apply Change Sets:

1. Select MMA Utilities | Apply Change Sets to realign the defined Change Set.
2. Select a predefined Change Set from the drop-down selection list.
3. Select the data source from the Data Source drop-down selection list.
4. Choose the category that is affected from the Category drop-down selection list.
5. Choose the year that is affected from the Year drop-down selection list.
6. Select whether to process a Reverse transaction or an Inplace transaction by selecting from the Process Type drop-down selection list.

7. Select whether the update is to be written to the sales file directly or to the Extract Pending File by selecting an Update Type from the drop-down selection list.
8. If previous level information should be processed with this change set, select the Process Previous Level check box.
9. Click **OK**.
10. *{Optional}* Click Run/View Log to view information about submitted change sets jobs.

Note: Multiple Change Sets should not be executed at the same time.

Apply Change Sets Fields

Change Set

Select the Change Set to be applied from the drop-down selection list.

Data Source

The data source associated with this Change Set.

Category

Select the two-character code identifying the category that the Change Set is applied to from the drop-down selection list. You may also select All Categories.

Year

Choose the year from the drop-down selection list to apply the Change Set to.

Process Type

There are two valid selections for the Process Type: Reverse Transaction and Inplace Transaction. A Reverse Transaction changes all existing specified data to a negative amount and creates a new record reflecting the changed amount. An Inplace Transaction replaces header information rather than writing out a new record. You would use the Inplace option when changing a mass amount of data. When you choose an Inplace Transaction, you do not have the option of viewing the results in a pending file before running it. When you select a Reverse Transaction, you can view the results in a pending file before continuing with the change.

Immediate is the default Update Type.

Update Type

There are two valid selections for the Update Type: Immediate and Pending. If the selection is *Immediate*, the update is performed to the sales file directly. If the selection is *Pending*, the update will be written to the EXTCHGxx file.

Process Previous Level

By selecting this check box, the previous level information will be processed for this change set.

Apply Change Sets Command Buttons

OK

Click **OK** to apply the requested Change Set. A confirmation window displays before the Change Set is applied.

Cancel

Click **Cancel** to close the window without processing any entries.

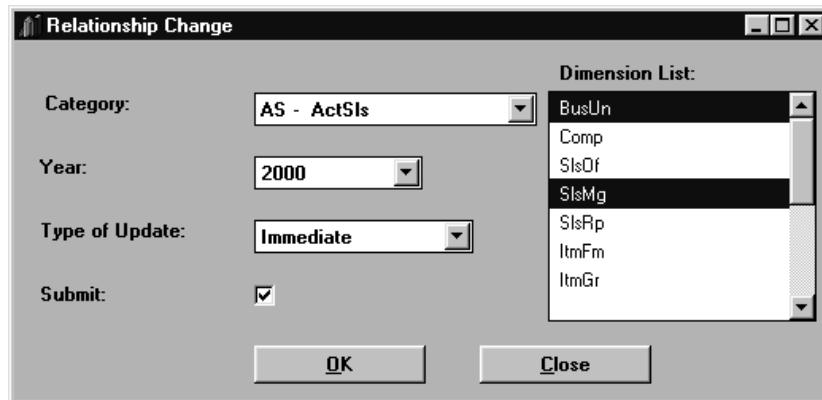
Run/View Log

Click **Run/View Log** to open the Log Information window and view the log of change sets you have requested. From this window, you can submit change sets that have a requested status by using the **Submit** button.

Relationship Change

Relationship Change is used to realign the relationships (previous levels) in the Summary History files. When you execute Relationship Change, all records are reviewed for the designated category and year; therefore, running Relationship Change may take some time, as relationships are checked for all records.

Note: If numerous changes are made, it is recommended that this function be run in batch mode.



Relationship Change window

To apply a relationship change:

1. Choose MMA Utilities | Relationship Change from the *Administration* window.
2. Select the category that is affected from the drop-down selection list.
3. Select the year that is affected from the drop-down selection list.
4. Select the Dimensions to realign from the Dimension List selection box.
5. Select whether the update is to be written to the summary files directly or to the pending file by selecting a Type of Update from the drop-down selection list.
6. Select if you want this job to run immediately or in batch mode by checking the Submit check box.
7. Click **OK**. The Confirm Relationship Change window displays.
8. Click **OK** on the Confirm Relationship Change window to process the Relationship Change.

Relationship Change Fields

Category

Select the two character code identifying the category that the Change Set is applied to from the drop-down selection list.

Year

Choose the year from the drop-down selection list to apply the Relationship Change.

Type of Update

There are two valid selections for the Update Type: Immediate, and Pending. If the selection is *Immediate*, the update is performed directly to the sales file. If the selection is *Pending*, the results are written to the Change Set definition. From that point, the Relationship Change Set can be run as a Change Set.

Submit

Select the Submit check box if you want to submit the Relationship Change job to batch.

Dimensions List

Select the Dimensions to realign from the Dimension List selection box. You can select multiple Dimensions by pressing the CTRL or SHIFT key as you click selections with the mouse.

Relationship Apply Command Buttons

OK

Click **OK** to apply the Relationship Change. A confirmation window displays before the Relationship Change is applied.

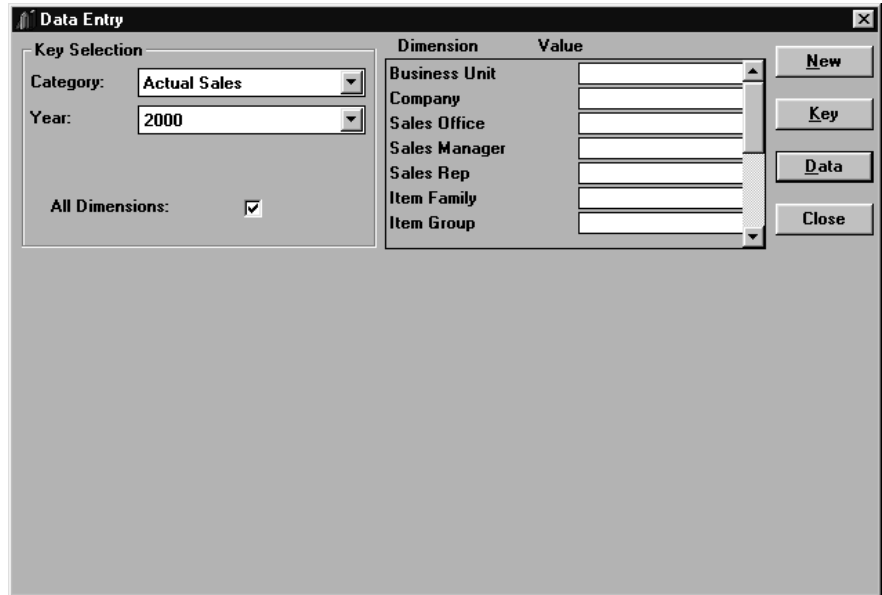
Close

Click **Close** to close the window without processing any entries.

Performing Data Entry

The Data Entry program is used to create/maintain data for the selected category and year.

Note: Only one person can access low level data. A message displays if more than one person is trying to access the same low level data to perform data entry.



Data Entry window

To identify Dimension values to receive manual data:

1. Select MMA Utilities | Data Entry.
2. Select the category that is affected from the drop-down selection list.
3. Select the year from the drop-down selection list.
4. If this affects all Dimensions, select the All Dimensions checkbox. All Dimensions then display in the Dimension and Value group box.
5. Enter the key value for each Dimension affected.

Note: You can also double-click on any Value field to access the Search window. This allows you to search for and select values from a list of currently available values.

6. Click **Data** to key in the actual data. See "Maintaining Data Entry" on page A132 for more information.

Data Entry Fields

Category

Select the two-character code identifying the category to be maintained from the drop-down selection list. Categories are defined using the *Administration* application of *MMA*.

Year

Select the year to be maintained from the drop-down selection list. Years are defined using the *Administration* application of *MMA*.

All Dimensions

If the All Dimensions check box is selected, entry of all Dimension values is allowed. If this is not selected, only primary levels are available for entry and previous levels are filled from the primary levels.

Dimension/Value

Enter the key value for each Dimension level, maximum of 25 alphanumeric characters. Double-click on any Value field to access the Search window. This allows you to perform a search for a specific Dimension value from a list of currently valid values.

Data Entry Command Buttons

New

Click **New** to clear the Dimension detail field values, allowing you to enter new data.

Key

Maintains the key data.

Data

Maintains the data. When clicked, the screen displays all detail values. See "Maintaining Data Entry" on page A132 for more information.

Close

Click **Close** to close the window without processing any entries.

Maintaining Data Entry

The detail of the active category displays for maintenance when **Data** is selected on the Data Entry window. Enter the data broken down by period. Make each entry manually or use the provided functions such as **Fill Across**, **Fill Down**, **Allocate Across**, and **Allocate Down**.

The screenshot shows the 'Data Entry' window. It has a 'Key Selection' section with 'Category' set to 'Actual Sales' and 'Year' set to '2000'. There is an 'All Dimensions' checkbox which is unchecked. To the right is a 'Dimension Value' list with items like 'Business Unit', 'Company', 'Sales Office', etc. Below this is a table titled 'Actual SalesData (NEW)' with columns for 'Data', 'Actual Sales', 'Quantity', 'List Price', and 'Ct'. The table has five rows labeled 'Bucket 1' through 'Bucket 5', each with numerical values. At the bottom are buttons for 'Fill Across', 'Allocate', 'Allocate Across', 'Fill Down', 'Save', 'Clear All', 'Refresh', and 'Allocate Down'.

| Dimension | Value |
|---------------|-------|
| Business Unit | DOM |
| Company | 12 |
| Sales Office | LA |
| Sales Manager | LA1 |
| Sales Rep | 402 |
| Item Family | PENC |
| Item Group | CPC |

| Data | Actual Sales | Quantity | List Price | Ct |
|----------|--------------|----------|------------|----|
| Bucket 1 | 0.000 | 0.000 | 0.000 | |
| Bucket 2 | 0.000 | 0.000 | 0.000 | |
| Bucket 3 | 0.000 | 0.000 | 0.000 | |
| Bucket 4 | 0.000 | 0.000 | 0.000 | |
| Bucket 5 | 0.000 | 0.000 | 0.000 | |

Data Entry window

To key data into your database:

1. Click **Data** from the main Data Entry window to expand the window to enter data.
2. The data can be keyed in several ways:
 - Key data in for each period, each category, and each field definition.
 - Key data in for the first period, category and field definition, and click **Fill Down**.
 - Key data in for each period and click **Fill Across**.
 - Enter a total amount in the Allocate field and click **Allocate Down** or **Allocate Across**.
3. Click **Save**.

Data Entry Fields

Actual Sales Data

Data for the selected category can be entered in the fields provided at the bottom of the window. Different amounts can be keyed in for each user-defined period, or the command buttons can be used to automatically fill the fields for you.

All Dimensions

If the All Dimensions check box is selected, entry of all Dimension values is allowed. If this is not selected, only primary Dimension values are available for entry and their corresponding previous levels are filled automatically.

Allocate

Enter a numeric amount that you want to spread across all periods for a value (Allocate Down) or all values for a period (Allocate Across).

Data Entry Command Buttons

See "Data Entry Command Buttons" on page A131 for descriptions of the New, Key, and Close buttons that are also on the main Data Entry window. Other command buttons are described below.

Data

When **Data** is clicked, the entry into the key selection and Dimension value boxes are disabled. It enables and displays all values for the selected category, year, and dimensions.

Fill Across

Click **Fill Across** to duplicate the value that is in focus across the remaining value columns.

Fill Down

Click **Fill Down** to duplicate the value that is in focus down the remaining period rows.

Save

Click **Save** to save changes made to the values back to the database.

Clear All

Click **Clear All** to clear all periods for all values.

Refresh

Click **Refresh** to refresh all values from the database.

Allocate Across

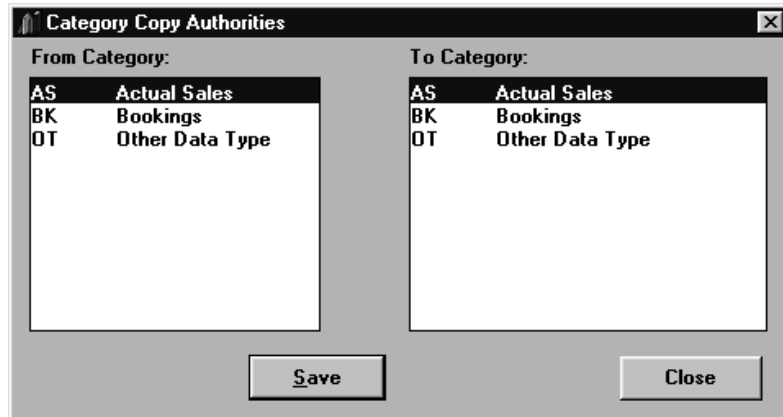
Click **Allocate Across** to divide the Allocate amount by the total number of values defined for the category selected and place the result in all values for the period in focus.

Allocate Down

Click **Allocate Down** to divide the Allocate amount by the total number of periods and place the result in all periods for the value in focus.

Creating Category Copy Authorities

The Data Copy utility is used to copy data from one category to another. Before a copy can successfully occur, you must identify which categories can be copied into which. This prevents Forecasts or Budgets from being copied over historical sales data.



Category Copy Authorities window

To create data copy authorities:

1. Select MMA Utilities | Data Copy Authority.
2. In the From Category list box, highlight the category you want to authorize copying from.
3. In the To Category list box, highlight the category you want to authorize copying to.
4. Click **Save**.

Category Copy Authorities Fields

From Category

All categories defined to the system are displayed in the From Category selection list. Select the category from which you want to allow data to be copied from by highlighting it within this list box.

To Category

All categories that are authorized to receive data from the From Category display in the To Category selection list. Select the category to which you want to allow data to be copied into by highlighting it within this list box.

Category Copy Authorities Command Buttons

Save

Click **Save** to save the newly created data copy authorities.

Close

Click **Close** to close the window without saving any entries.

Performing Data Copy

The Data Copy utility is used to copy data from one category to another. The copy function allows for a direct copy, or for the factoring of the data before it is copied to a new category. All values or a specified value can be copied to the new category.

This function is primarily used during the budget process. At the start of the budget process, the data for last year's budget or from last year's actual sales are copied to become the rough cut budget for the new year.

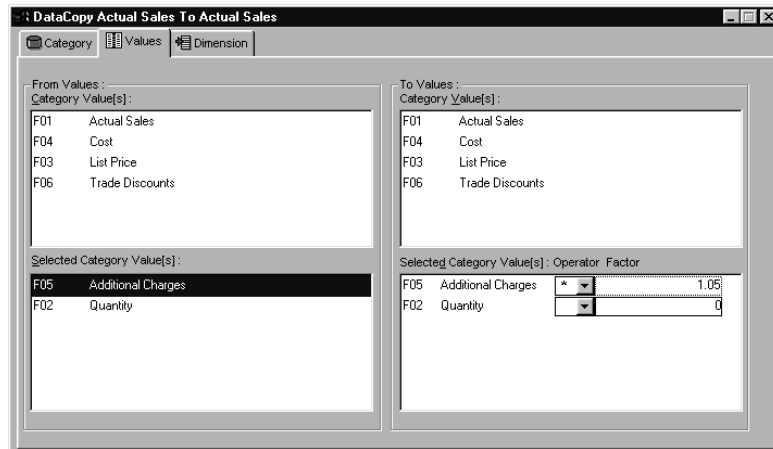


Data Copy window - Category tab

To copy data from one category to another:

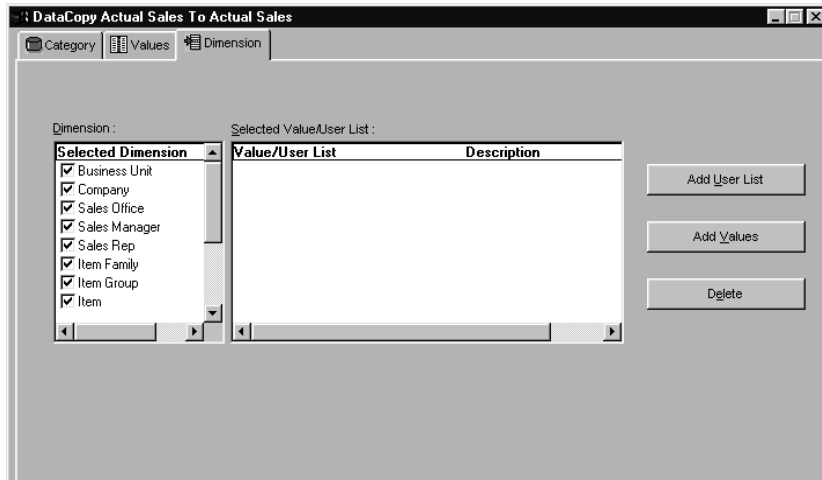
1. Select MMA Utilities | Data Copy. The Category tab displays by default.
2. Select the category from which you want to copy data from by highlighting it in the From Category drop-down selection list.
3. Select the category to which you want to copy data into by highlighting it in the To Category drop-down selection list.
4. Select the From and To Years from the drop-down selection list.
5. Select the periods after each year selected from the period drop-down selection list.
6. If you have multi-currency capability, the Currency All check box is selected by default. If you deselect this check box, you must select at least one currency to copy.
7. From within the Update Options selection box, select whether you want the information you specify in the Category tab to be added or replaced when you have updated.

8. From the Update Type drop-down selection list, select either Immediate or Pending as the update option.
9. Click the Values tab to continue the data copy process.



Data Copy window – Values tab

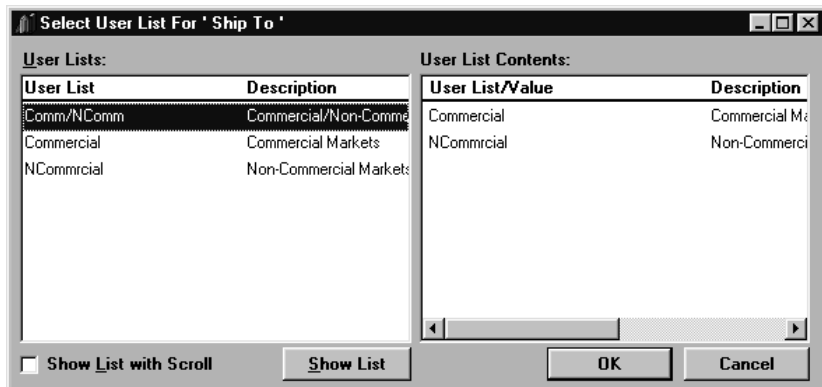
10. The values from the categories you specified in the Category tab display in the From Values and To Values group boxes. Select the categories/values you want to copy from and the categories/values you want to copy into.
 - You may either double-click or drag-and-drop the values from the Categories Value(s) group box in the From Values area to the Selected Category Value(s) group box in that area.
 - You may either double-click or drag-and-drop the values from the Categories Value(s) group box in the To Values area to the Selected Category Value(s) group box in that area.
 - You may either double-click or drag-and-drop values you just selected to remove them by double-clicking them or dragging-and-dropping them from the appropriate Selected Category Value(s) group box to the appropriate Category Value(s) group box.
11. If you selected to copy a category/value, you can specify the arithmetic operation from the drop-down list box and then specify the factor.
12. Click the Dimension tab to continue the data copy process.



Data Copy window – Dimension tab

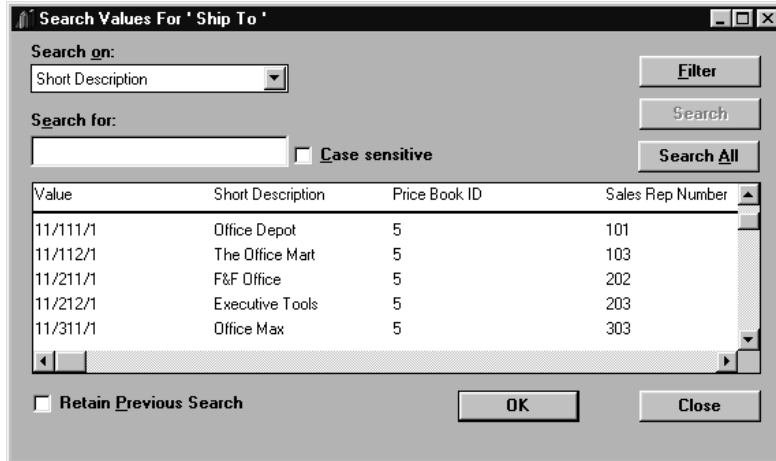
13. From within the Dimension tab, you can choose select values for a Dimension. The left side of this window tab displays the list of Dimensions available for the Selected From Category. By default, all Dimensions are selected to copy. If you do not want to copy a specific Dimension, deselect the associated check box.

14. Click **Add User List** to display the Select User List window.



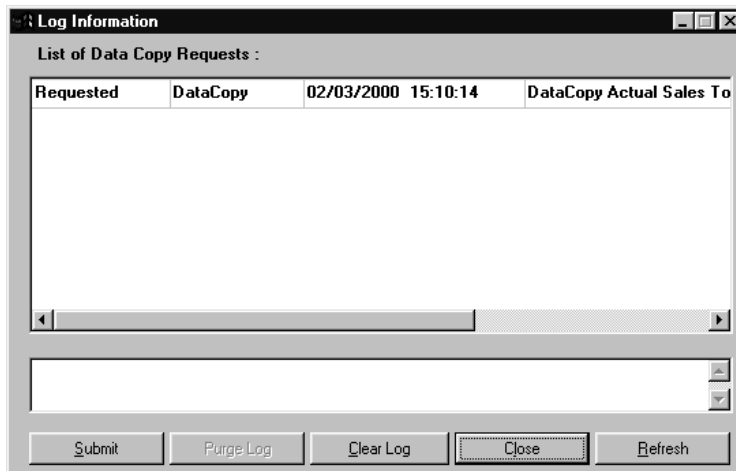
Select User List window

15. Select a User List and then click **Show List** to see the User List values in the User List Contents group box.
16. Select the User List to be included in the copy for the selected Dimension by double-clicking or clicking once and then clicking **OK** to return to the Data Copy window - Dimension tab. The selected User List displays on the tab.
17. Repeat Steps 14-16 for other User Lists in the selected Dimension or for other Dimensions as needed.
18. Click **Add Values** to use the Search Values window and select values from a Dimension to include in the copy.



Search Values window

19. Select a value by double-clicking it or clicking it once and then clicking the **OK** button. You can also select multiple values by highlighting them and then clicking the **OK** button. You will be returned to the Data Copy window - Dimension tab and selected values will display on the tab.
20. Repeat Steps 18-19 for other Dimensions as needed.
21. Select the Category tab and then click **OK**.
22. If you selected Extract Pending as the Update Type, click **Run/View Log** to submit the Data Copy job.



Log Information window

Data Copy Fields

Category (From/To)

Data Copy allows you to copy last year's sales data into a new category and apply a factor to create next year's forecast.

Select the category to copy data from and the category to copy data to. *MMA* validates the data copy authority before performing the copy. When the From Category is selected, only the valid To Categories display.

Year (From/To)

Select the year data that is to be copied from, and the year in which the data is to be copied.

Period

Select the period that corresponds to the year chosen.

Currency All

By default, the All check box is selected. If you deselect the All check box, you must highlight at least one currency to copy.

Values (Type, Description, Operator, Factor)

Defines the category/values and their descriptions to be copied and the operator and factor that is applied to the data that is copied.

Update Options

Add is the default Update Option.

There are two valid selections for the Update Options: Add and Replace. If *Add* is selected, then the values are added to the existing data values. If *Replace* is selected, then the data is replaced with the new values specified.

Update Type

Immediate is the default Update Type.

There are two valid selections for the Update Type: Immediate and Pending. If the selection is *Immediate*, the update is performed to the sales file directly. If the selection is *Pending*, the update will be written to the EXTPNDxx file.

Data Copy Command Buttons

Run/View Log

Click **Run/View Log** to access the Log Information window. You can then view the status of a data copy job or submit a pending job to batch.

OK

Click **OK** to process your data copy from one category to another.

Cancel

Click **Cancel** to close the window without processing any entries.

Add User List

Click **Add User List** from the Dimension tab of the Data Copy window to specify the selected values/User Lists for each Dimension.

Add Values

Click **Add Values** from within the Dimension tab of the Data Copy window to use the Search Values window to select the list of values and user lists that will fill the Selected Value/User List group box within the Dimension tab -- and thus be included in the data copy.

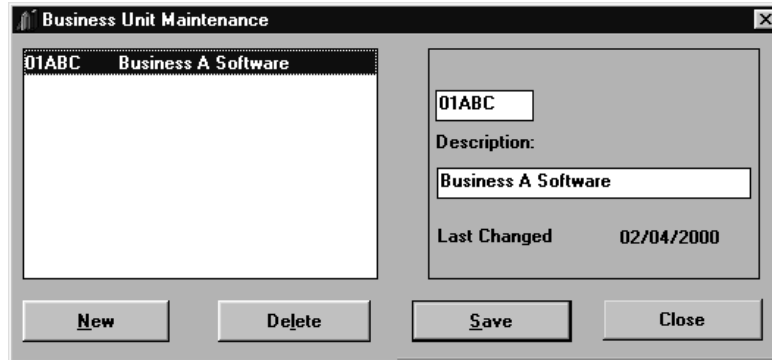
Delete

Click **Delete** to delete a selected item from the Selected Values/User List selection box. A confirmation window displays before deleting the selection.

Defining/Maintaining Business Units

A function is provided in *MMA* to define and maintain all entities to be used at the Business Unit Dimension since there is not a corresponding table or file within MAPICS XA. The Business Unit Maintenance program is used to enter the ID and Description for entities at the Business Unit level.

The AMOXMFOR01 program retrieves the Business entity details from the BEMASTER file.



Business Unit Maintenance window

To add a Business Unit:

1. Select MMA Utilities | Business Entity.
2. Click **New**.
3. Enter a Business Unit ID using up to five alphanumeric characters.
4. *{Optional}* Enter a description using up to 30 alphanumeric characters.
5. Click **Save** to save the addition and then **Close** to close the window.

Business Unit Fields

Business Unit Listing

All valid Business Unit values are displayed in the selection list box. The detail of the selected business unit displays in the Business Unit ID and Description fields. If more business units exist than will fit within the box, a scroll bar will display; allowing you to scroll through all available business units. Business Units can be deleted by simply highlighting the desired value and then clicking on **Delete**. A Delete Confirmation window displays as a precautionary measure.

Business Unit ID

The five-character Business Unit ID resides in this field. The Business Unit ID field is required and there are no previous levels.

Description

The user-defined Business Unit description is displayed in this field and is maintainable. The Description field is optional and supports up to 30 alphanumeric characters. When **New** is selected, the Description and ID fields are cleared so a new Business Unit can be created.

Last Changed

MMA tracks the last edit date for the Business Unit Maintenance program. This field is system generated and is not maintainable.

Business Unit Maintenance Command Buttons

New

Click **New** to clear the Business Unit detail field values, allowing you to create a new Business Unit. After creating the new Business Unit, be sure to click **Save** to save your entries.

Delete

Highlight the Business Unit you want to delete and then click **Delete**. A Delete Confirmation window displays. If you have made a correct deletion choice, click **Yes** to confirm the deletion.

Save

Click **Save** to save your entries and redisplay the Business Unit Maintenance window. You must click **Close** to close the active window. If **Close** is selected prior to **Save**, the system will prompt you to save.

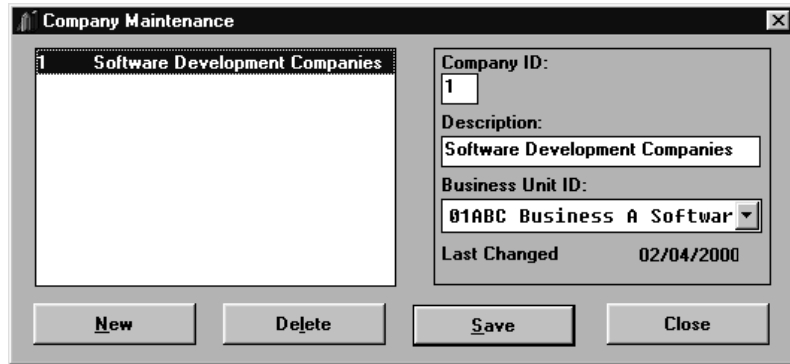
Close

Click **Close** to close the Business Unit Maintenance window. If any modifications or additions were made to the Business Unit Records, the system will prompt you to save.

Defining/Maintaining Companies

A function is provided in *MMA* to define and maintain all entities to be used at the Company Dimension since there is not a corresponding table or file within MAPICS XA. The Company Maintenance program is used to enter the ID of the Company and Associated Business Unit, and the Description for entities at the Company level.

The AMOZMFOR02 program retrieves the Company entity details from the COMASTER file.



Company Maintenance window

To add a Company:

1. Select MMA Utilities | Company.
2. Click **New**.
3. Enter a Company ID using up to two alphanumeric characters.
4. *{Optional}* Enter a description using up to 30 alphanumeric characters.
5. From the Business Unit ID drop-down selection list, select the Business Unit ID and description for the Company. Business Unit is a previous level of Company.
6. Click **Save** to save the addition and then **Close** to close the window.

Company Maintenance Fields

Company Listing

All valid Company values display in the selection list box. The detail of the selected Company displays in the fields on the right-hand side. If more Companies exist than will fit within the box, a scroll bar will display; allowing you to scroll through all available Companies. Companies can be deleted by simply highlighting the desired value and then clicking **Delete**. A Delete Confirmation window displays as a precautionary measure.

Company ID

The two-character Company ID resides in this field. The Company field is required.

Description

When **New** is selected, the Description and ID fields are cleared out so a new Company can be created. The user-defined Company description displays in this field and is maintainable. The Description field is optional and supports up to 30 alphanumeric characters.

Business Unit ID

The five-character ID and description resides in this field because Business Unit is a previous level of Company.

Last Changed

MMA tracks the last edit date for the Company Maintenance program. This field is system generated and is not maintainable.

Company Maintenance Command Buttons

New

Click **New** to clear the Company detail field values, allowing you to create a new Company. After creating the new Company, be sure and click **Save** to save your entries.

Delete

Highlight the Company you want to delete and then click **Delete**. A Delete Confirmation window displays. If you have made a correct deletion choice, click **Yes** to confirm the deletion.

Save

Click **Save** to save your entries and redisplay the Company Maintenance window. You must click **Close** to close the active window. If **Close** is selected prior to **Save**, the system will prompt you to save.

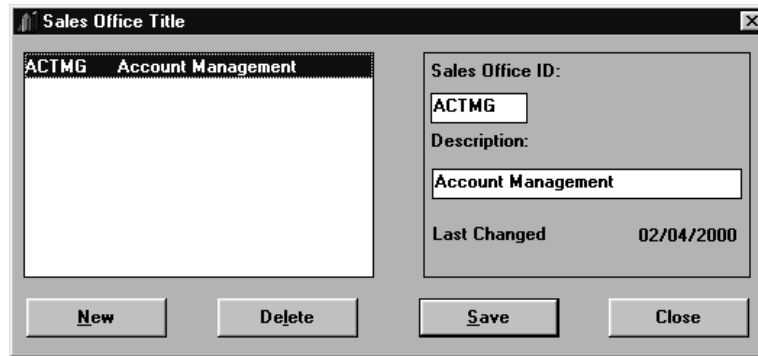
Close

Click **Close** to close the Company Maintenance window. If any modifications or additions were made to the Company Records, the system will prompt you to save.

Defining/Maintaining Sales Offices

A function is provided in *MMA* to define and maintain all entities to be used at the Sales Office Dimension since there is not a corresponding table or file within MAPICS XA. The Sales Office Maintenance program is used to enter the ID and Description for entities at the Sales Office level.

The AMOXMFOR03 program retrieves the Sales Office details from the SOMASTER file.



Sales Office Maintenance window

To add a Company:

1. Select MMA Utilities | Sales Office.
2. Click **New**.
3. Enter a Sales Office ID using up to five alphanumeric characters.
4. *{Optional}* Enter a description using up to 30 alphanumeric characters.
5. Click **Save** to save the addition and then **Close** to close the window.

Sales Office Maintenance Fields

Sales Office Listing

All valid Sales Office values display in the selection list box. The detail of the selected Sales Office displays in the Sales Office ID and Description fields on the right-hand side. If more Sales Offices exist than will fit within the box, a scroll bar will display; allowing you to scroll through all available Sales Offices. Sales Offices can be deleted by simply highlighting the desired value and then clicking **Delete**. A Delete Confirmation window displays as a precautionary measure.

Sales Office ID

The five-character Sales Office ID resides in this field. The Sales Office ID field is required and there are no previous levels.

Description

When **New** is selected, the Description and ID fields are cleared so a new Sales Office can be created. The user-defined Sales Office description displays in this field and is maintainable. The Description field is optional and supports up to 30 alphanumeric characters.

Last Changed

MMA tracks the last edit date for the Sales Office Maintenance program. This field is system generated and is not maintainable.

Sales Office Maintenance Command Buttons

New

Click **New** to clear the Sales Office detail field values, allowing you to create a new Sales Office. After creating the new Sales Office, be sure and click **Save** to save your entries.

Delete

Highlight the Sales Office you want to delete and then click **Delete**. A Delete Confirmation window displays. If you have made a correct deletion choice, click **Yes** to confirm the deletion.

Save

Click **Save** to save your entries and redisplay the Sales Office Maintenance window. You must click **Close** to close the active window. If **Close** is selected prior to **Save**, the system will prompt you to save.

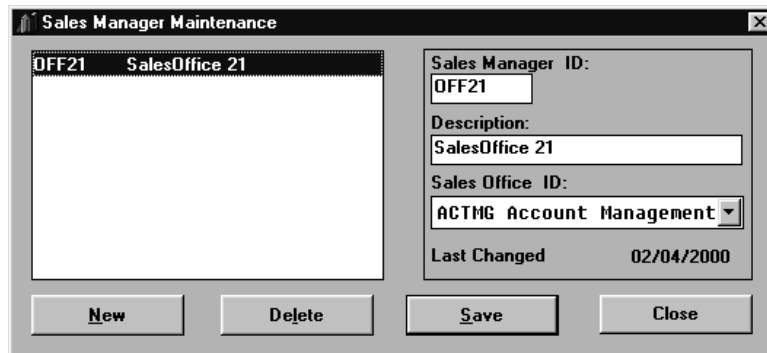
Close

Click **Close** to close the Sales Office Maintenance window. If any modifications or additions were made to the Sales Office Records, the system will prompt you to save.

Defining/Maintaining Sales Managers

A function is provided in *MMA* to define and maintain all entities to be used at the Sales Manager Dimension since there is not a corresponding table or file within MAPICS XA. The Sales Manager Maintenance program is used to enter the ID of the Sales Manager and associated Sales Office, and the Description for entities at the Sales Manager level.

The AMOXMFOR04 program retrieves the Sales Manager details from the SMMASTER file.



Sales Manager Maintenance window

To add a Sales Manager:

1. Select MMA Utilities | Sales Manager.
2. Click **New**.
3. Enter a Sales Manager ID using up to five alphanumeric characters.
4. *{Optional}* Enter a description using up to 30 alphanumeric characters.
5. From the Sales Office ID drop-down selection list, select the Sales Office ID and description for the Sales Manager. Sales Office is a previous level of Sales Manager.
6. Click **Save** to save the addition, and then **Close** to close the window.

Sales Manager Maintenance Fields

Sales Manager Listing

All valid Sales Manager values are displayed in the selection list box. The detail of the selected Sales Manager displays in the fields on the right-hand side. If more Sales Managers exist than will fit within the box, a scroll bar will display; allowing you to scroll through all available Sales Managers. Sales Managers can be deleted by simply highlighting the desired value and then clicking **Delete**. A Delete Confirmation window displays as a precautionary measure.

Sales Manager ID

The five-character Sales Manager ID resides in this field. The Sales Manager ID field is required and Sales Office is the previous level.

Description

When **New** is selected, the Description and ID fields are cleared so a new Sales Manager can be created. The user-defined Sales Manager description is displayed in this field and is maintainable. The Description field is optional and supports up to 30 alphanumeric characters.

Sales Office ID

The five-character ID and description resides in this field because Sales Office is a previous level of Sales Manager.

Last Changed

MMA tracks the last edit date for the Sales Manager Maintenance program. This field is system generated and is not maintainable.

Sales Manager Maintenance Command Buttons

New

Click **New** to clear the Sales Manager detail field values, allowing you to create a new Sales Manager. After creating the new Sales Manager, be sure and click **Save** to save your entries.

Delete

Highlight the Sales Manager you want to delete and then click **Delete**. A Delete Confirmation window displays. If you have made a correct deletion choice, click **Yes** to confirm the deletion.

Save

Click **Save** to save your entries and redisplay the Sales Manager Maintenance window. You must click **Close** to close the active window. If **Close** is selected prior to **Save**, the system will prompt you to save.

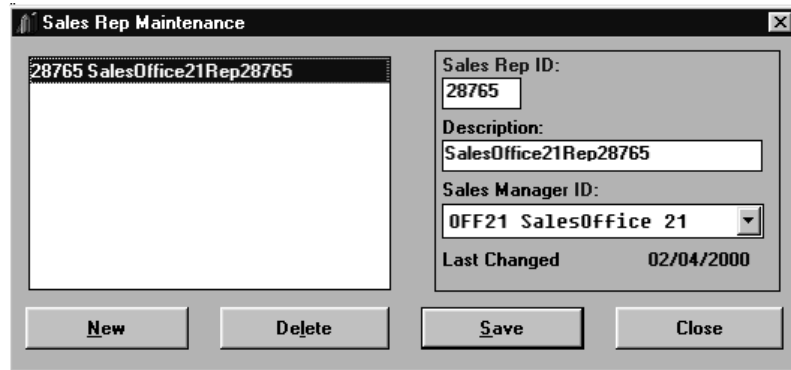
Close

Click **Close** to close the Sales Manager Maintenance window. If any modifications or additions were made to the Sales Manager Records, the system will prompt you to save.

Defining/Maintaining Sales Reps

A function is provided in *MMA* to define and maintain all entities to be used at the Sales Representative Dimension since there is not a corresponding table or file within MAPICS XA. The Sales Rep Maintenance program is used to enter the ID of the Sales Representative and associated Sales Manager, and the Description for entities at the Sales Representative level.

The AMOXMFOR05 program retrieves the Sales Rep details from the SRMASTER file.



Sales Rep Maintenance window

To add a Sales Representative:

1. Select MMA Utilities | Sales Rep.
2. Click **New**.
3. Enter a Sales Rep ID using up to five alphanumeric characters.
4. *{Optional}* Enter a description using up to 30 alphanumeric characters.
5. From the Sales Manager ID drop-down selection list, select the Sales Manager ID and description. Sales Manager is a previous level of Sales Representative.
6. Click **Save** to save the addition and then **Close** to close the window.

Sales Rep Maintenance Fields

Sales Rep Listing

All valid Sales Representative values display in the selection list box. The detail of the selected Sales Representative display in the fields on the right hand side. If more Sales Representatives exist than will fit within the box, a scroll bar will display; allowing you to scroll through all available Sales Representatives. Sales Representatives can be deleted with confirmation by simply highlighting the desired value and then clicking on **Delete**.

Sales Rep ID

The five-character Sales Representative ID resides in this field. The Sales Rep ID field is required and Sales Manager is the previous level.

Description

When **New** is selected, the Description and ID fields are cleared so a new Sales Representative can be created. The user-defined Sales Representative description is displayed in this field and is maintainable. The Description field is optional and supports up to 30 alphanumeric characters.

Sales Manager ID

The five-character ID and description resides in this field because Sales Manager is a previous level of Sales Representative.

Last Changed

MMA tracks the last edit date for the Sales Representative Maintenance program. This field is system generated and is not maintainable.

Sales Rep Maintenance Command Buttons

New

Click **New** to clear the Sales Rep detail field values, allowing you to create a new Sales Representative. After creating the new Sales Representative, be sure and click **Save** to save your entries.

Delete

Highlight the Sales Representative you want to delete and then click **Delete**. A Delete Confirmation window displays. If you have made a correct deletion choice, click **Yes** to confirm the deletion.

Save

Click **Save** to save your entries and redisplay the Sales Rep Maintenance window. You must click **Close** to close the active window. If **Close** is selected prior to **Save**, the system will prompt you to save.

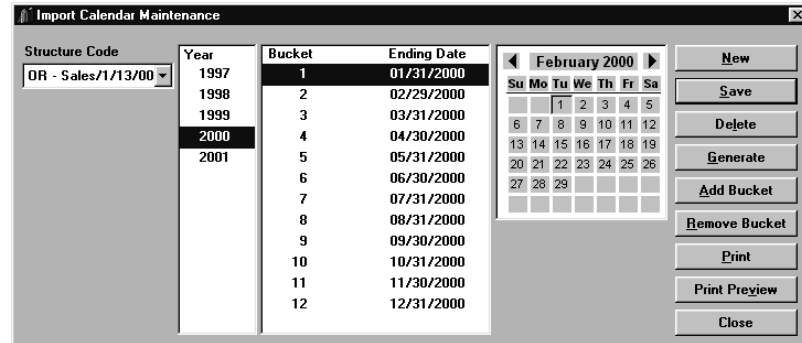
Close

Click **Close** to close the Sales Rep Maintenance window. If any modifications or additions were made to the Sales Rep Records, the system will prompt you to save.

Defining/Maintaining Import Calendars

The Import Calendar Maintenance program is used to determine what period and year the imported sales data falls into based on the transaction date.

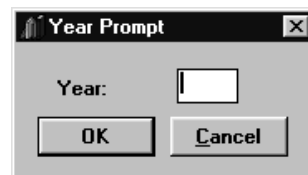
Import Calendar is maintained for each structure code. Non-periodic structure codes are not included in the list of structure codes.



Import Calendar Maintenance window

To identify the import years:

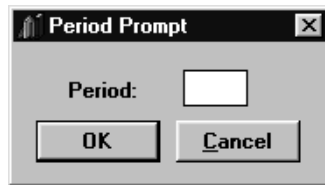
1. Select MMA Utilities | Import Calendar.
2. Select the structure code for which you want to create a calendar.
3. Click **New** to create a new year in the structure code. The Year Prompt window displays.



Year Prompt window

4. Enter the four-digit year code in CCYY format (for example, 1999, 2000).
5. Click **OK** or press **Enter** to close the Year Prompt window.
6. Enter the starting dates if you want to use the Generate function to generate ending dates. The Generate function is an ease of use function that automatically generates ending dates. Be sure to verify that the generated information is correct if using this function.

7. Instead of the Generate function, you can enter new buckets by clicking **Add Bucket** to access the Period Prompt window to enter each period. Then select ending dates for each bucket.



Period Prompt window

8. Whether using the Generate or Add Bucket function, click **Save** to update the newly created information.

Import Calendar Maintenance Fields

Structure Code

Displays the table structure code selected on the Import Calendar Maintenance window. The selected structure code determines the number of buckets that appear in the Bucket/Ending Date list box.

Year

All pre-defined years display in this selection list box. To create a new year, click **New** and a dialog box requesting the four-digit year code displays.

Bucket/Ending Date

The periods with the associated ending dates display in this list box. To maintain a period, highlight the period while displayed in this listing and then edit the calendar that displays to the right.

Import Calendar Maintenance Command Buttons

New

Click **New** to create a new year. A Year Prompt displays requesting the four-digit year code.

Save

Click **Save** to save any edits made in this window.

Delete

Click **Delete** to delete the selected year with confirmation.

Generate

A starting date must be entered to generate ending dates. Ending dates are generated based on the total buckets entered for a structure code and the type of structure code.

If the structure code is periodic, then the total # of buckets is defined as follows:

| | |
|-------|--------------------|
| 12 | Calendar months |
| 13-64 | Weeks within year |
| >64 | Weeks within month |

Add Bucket

Click **Add Bucket** to add a new bucket. A Bucket Prompt displays requesting the bucket number. Enter the period number and press ENTER to close the window.

Remove Bucket

Click **Remove Bucket** to remove a bucket with confirmation.

Print

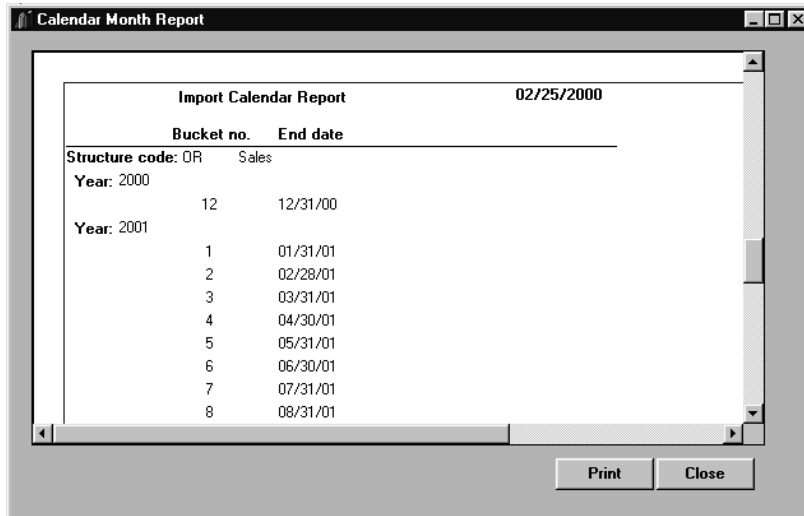
Click **Print** to print the Calendar Month Report without previewing the report.

Print Preview

Click **Print Preview** to view the Calendar Month Report before you print. Once in the Print Preview window, click **Print** to print the report.

Close

Click **Close** to close this window without saving any entries made in this window.



Calendar Month Report print preview window

To print the Calendar Month Report:

1. Select MMA Utilities | Import Calendar.
2. To preview the report before you select to print, click **Print Preview**.
3. To print the report from either the Import Calendar window or the Print Preview window, click **Print**.
4. To exit this window, click **Close**.

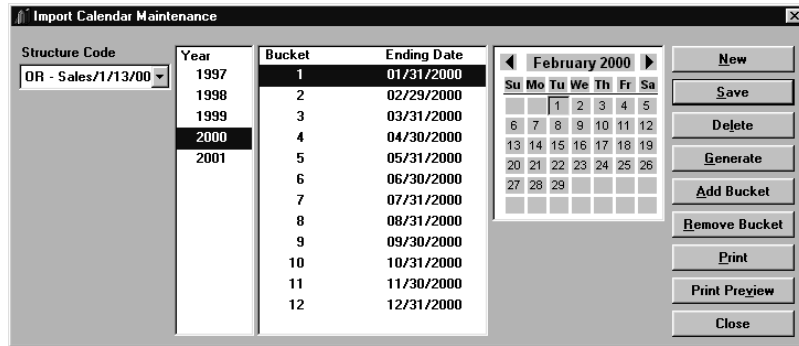
Calendar Month Report Fields

The Calendar Month Report prints all of the defined import calendar information. The following information prints on the report:

- Bucket number
- End date
- Structure code
- Year

Defining/Maintaining Period End Dates

When defining a new year with new periods or maintaining existing periods, the calendar is an easy way to manage the start and end dates of each period.



Import Calendar Maintenance window

To create or maintain the ending date within a period:

1. Click on the period to define or maintain to access the selected period's calendar.
2. Click on the last day of the active period.

To automatically create or maintain ending dates within a year:

1. Enter the Starting Date.
2. Click **Generate**.

See "Defining/Maintaining Import Calendars" on page A153 for descriptions of the Import Calendar Maintenance window fields and command buttons.

Notes

CHAPTER 6 • PERFORMANCE TUNING WORKBENCH

QuickLook

Use this chapter to learn how to:

- Use the Load Information function for the Performance Tuning Workbench.
- Establish the configuration required to create a workbench analysis.
- Determine the type of analysis to run for your individual processing requirements (Initial Analysis or Log based Analysis).
- Identify drill-down paths required to run the analysis.
- Select optimization criteria for Initial and Log based Analysis.
- Use optional selection criteria to identify specific users, data sources or years on which to run the analysis.
- Identify date and time ranges for Log based Analysis.
- Run the analysis to review DSL's and Indexes using the established Performance Tuning Workbench parameters.

What is the Performance Tuning Workbench?

The Performance Tuning Workbench provides you with suggestions on how to best tune your *MMA* data warehouse for optimum system performance. The workbench allows you to base your analysis on actual system usage or on your own user-defined parameters. The workbench then analyzes the data in your database, and makes recommendations about DSL's and Indexes that can be created or that can be removed to help enhance your system's performance.

The workbench bases its suggestions on the average number of records associated with each of your Dimension levels and the average ratio between the available Dimensions and their related Dimensions.

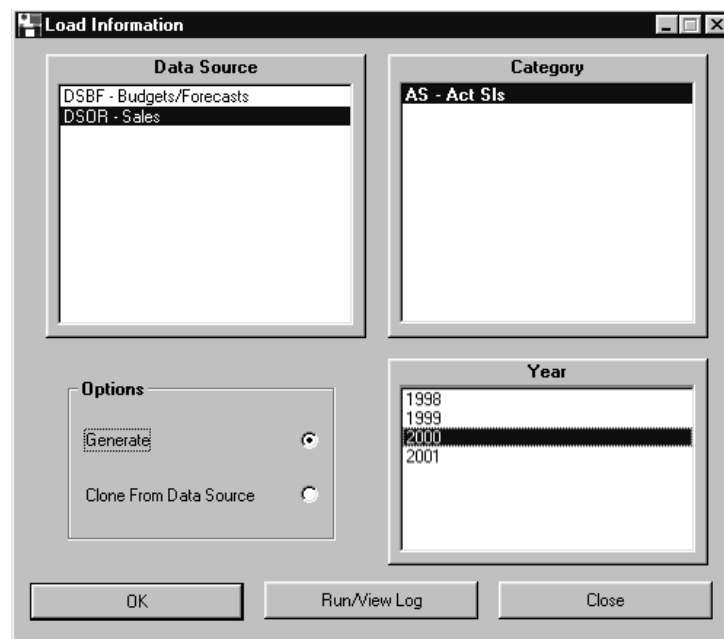
Loading the Information

The Load Information function integrates the database and performs three processes:

- Primary Record Count
- Primary Dimension value combinations
- All ratios

The results of the load information process can be reviewed in the Configuration window. See "Setting Workbench Configuration" on page A165 for more information about that window.

Note: Prior to loading the information, you must define the previous level relationships in Performance Tuning Workbench using File | Configuration | Previous Level tab.

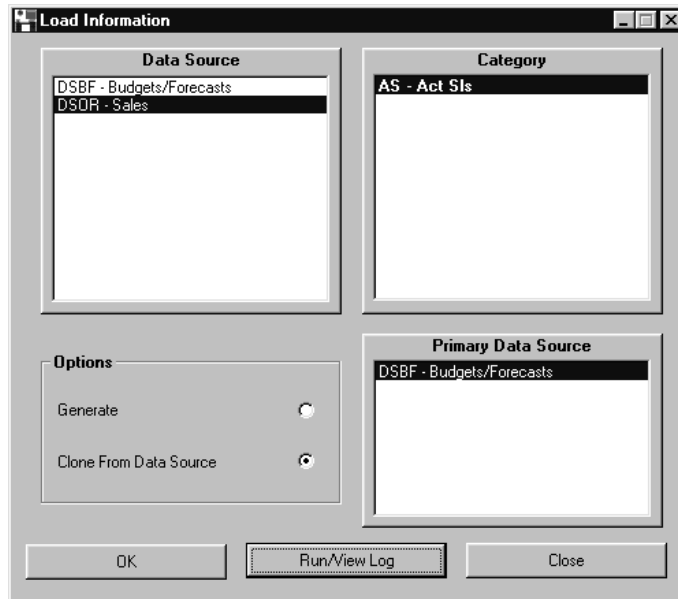


Load Information window

To load the information:

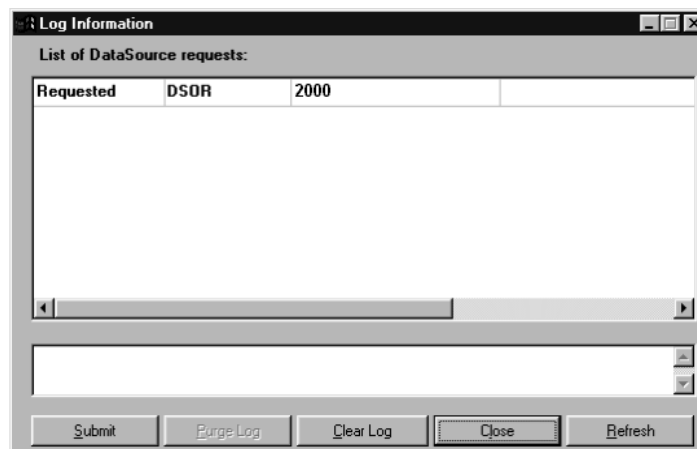
1. From within the Performance Tuning Workbench module, select File | Load Information.
2. Select the data source. The corresponding categories for the selected data source display in the Category list box.
3. Select the year to be used to generate the configuration numbers.

4. *{Optional}* If you want to copy information from another data source, select the Clone From Data Source check box. The Load Information window is modified to display the Primary data source rather than the Year list box showing which Data Source is being used for the clone.

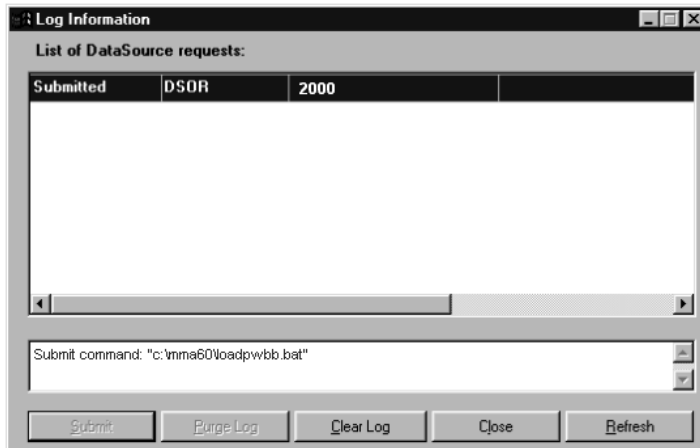


Load Information window

5. Once you have made your selections, click **OK**.
6. Click **Run/ViewLog**.
7. The data source you selected to load information for is listed in the Log Information window as Requested.



Log Information window



Log Information window

8. Click **Submit** from the Log Information window. The status is changed to Submitted.
9. You can click **Refresh** periodically to check on the status of the load process. Once the load process is finished, the status in the Log Information window changes to Complete.

Note: The time it takes to load the information depends on the amount of information being loaded and the previous level relationships you defined.

10. Click **Close** to exit this window.

Note: Closing this window will not stop the load information process. You can come back into this window to check the status.

Load Information Fields

Data Source

This list box displays all data sources defined for this database. Once you select the data source, the corresponding categories display in the Category list box.

Category

This list box is view-only. The categories for the data source selected in the Data Source list box display here.

Year

Select the year for which to load information. Multiple years may be selected.

Primary Data Source

This list box only displays if the Clone From Data Source check box is selected. The list box displays the data source that will be used for the clone.

Generate

When this radio button is selected, the Workbench will generate Performance Tuning Workbench records from historical data. This check box is selected by default when loading information.

Clone From Data Source

Select this radio button if you want to clone information from another data source. The clone data source displays in the Primary Data Source list box.

Load Information Command Buttons

OK

Once you have made your selections in the Load Information window, click **OK**.

Run/View Log

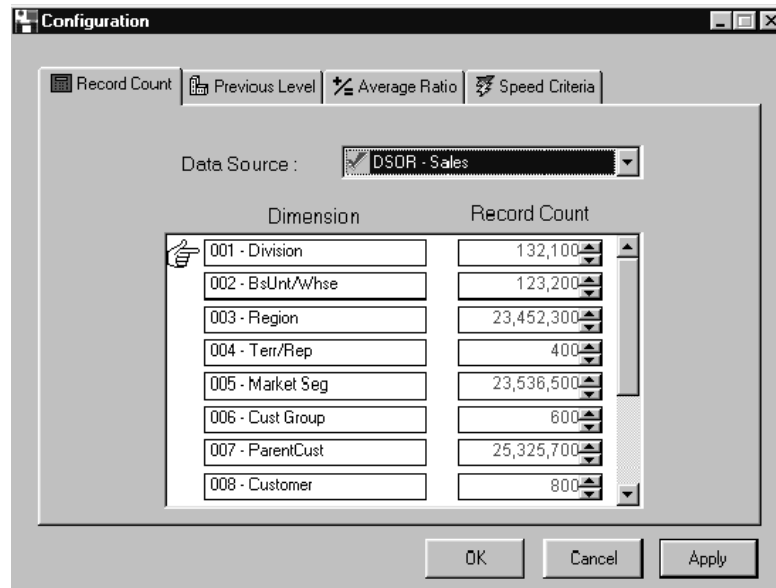
By clicking this button, the Log Information window displays. From within this window, you can submit or clear the log, as well as check on the status.

Close

Click **Close** to close the Load Information window.

Setting Workbench Configuration

The Workbench Configuration function is used to review and modify the related Dimension parameters.

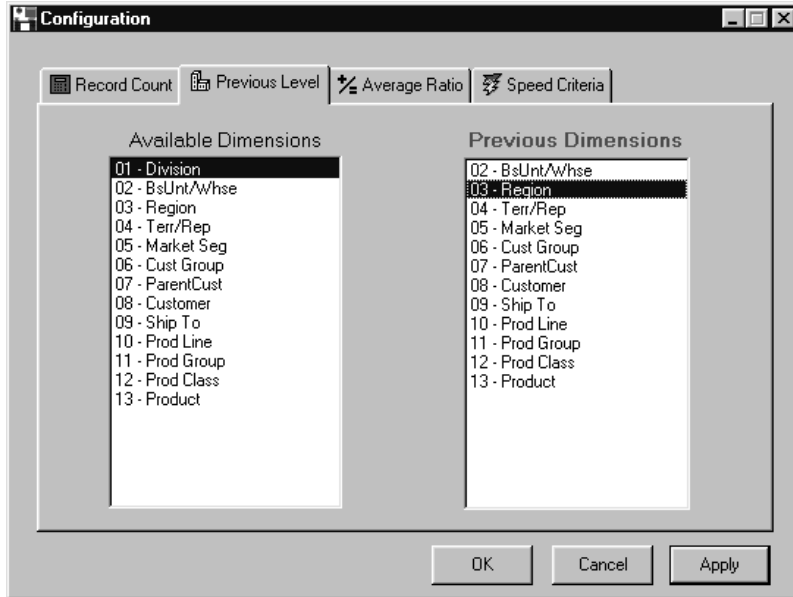


Configuration window - Record Count tab

Note: The Record Count tab is populated by the Load Information process.

To set up configuration parameters:

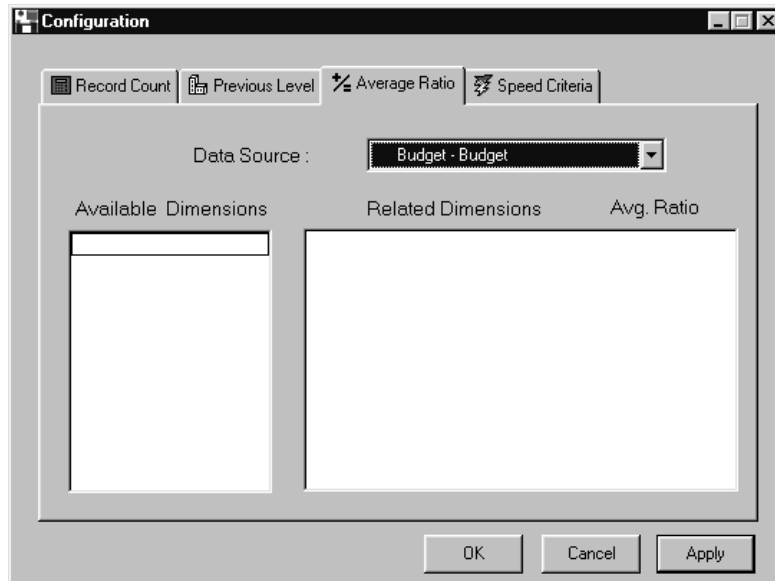
1. From the Performance Workbench main window, select File | Configuration. The Configuration window displays with the Record Count tab displayed as default.
2. Highlight the first Dimension displayed in the Dimensions list box.
3. Review the average number of records for the selected Dimension in the Record Count box. You can modify the number manually or use the arrows to scroll to the appropriate number.
4. Continue to review your average record information for each available Dimension.



Configuration window - Previous Level tab

Note: Previous level definitions must be completed prior to running the Load Information process. The Load process uses these definitions when determining Average Ratios.

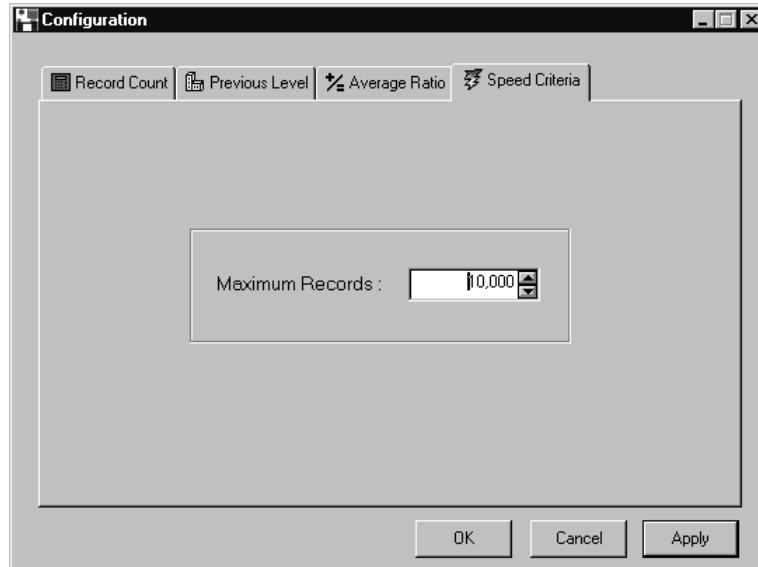
- Click the Previous Level tab within the Configuration window. Establish the previous level Dimension association with the available Dimensions. Highlight the first Available Dimension, then highlight the first Previous Dimension displayed in the Previous Dimensions list box.



Configuration window - Average Ratio tab

Note: The Average Ratio tab is populated by the Load Information process.

6. Click the Average Ratio tab within the Configuration window. Review the average ratio between the Available Dimension and the Related Dimension in the Average ratio box. You can enter the number manually or use the arrows to scroll to the appropriate number.
7. Continue selecting each related Dimension for the selected available Dimension, and review the average ratio information. When you enter the information for the first available Dimension and all its related Dimensions, continue to the second available Dimension and enter all related Dimension information. Continue this process until all available Dimensions and their related Dimensions are reviewed.



Configuration window - Speed Criteria tab

8. Click the Speed Criteria tab within the Configuration window. Specify the maximum number of records to be processed. You may either enter this number manually or use the arrows.
9. Click **OK** to update your changes and return to the Performance Workbench window. If you want to update changes, but do not want to exit the Configuration window, click **Apply**.

Note: Now you need to enter the drill-down path information on which you run your Inquiries. The drill-down paths are analyzed based on the information entered on the Configuration window.

Configuration Fields

Record Count Tab

Data Source

Select a data source from the drop-down selection list box to be used for the analysis. All of the available Dimensions within that Data Source display in the Available Dimensions list box.

Dimensions

Displays a list of the available Dimensions defined for the selected data source. Use the scroll arrows to display available Dimensions. Load Information establishes an average record number for *each* Dimension displayed in this list box.

Record Count

The average number of records for the Dimensions selected in the Available Dimensions list box. An average record number is calculated for *each* Dimension listed in the Available Dimensions list box by the Load Information process.

Note: This information is used during the Initial Analysis to estimate the number of records in a DSL. It can also be used by the Log based Analysis when actual DSL counts are not available.

Previous Level Tab

Available Dimensions

Displays a list of Dimensions that are defined to the data source. These Dimensions are user-defined and are used by the Load Information process when calculating average ratios.

Previous Dimensions

Displays the previous level Dimensions relating to a Dimension selected on the Available Dimensions list box.

Average Ratio Tab

Data Source

Select a data source from the drop-down selection list box to be used for the analysis. All of the available dimensions within that data source display in the Available Dimensions list box.

Available Dimensions

Displays a list of Dimensions that are defined to the data source. Load Information establishes an average ratio for *each* Dimension relationship to a selected available Dimension.

Related Dimensions

Displays the Dimensions relating to a Dimension selected in the Available Dimensions list box.

Avg. Ratio

This function is used to review the average ratio available for each Dimension relating to Dimensions selected in the Available Dimensions list box. A value is calculated for *each* related Dimension by the Load Information process. For example, if the average number of records for Business Unit is 1 and the average ratio for each Division is 3, then, on average, each Business Unit relates to 3 Divisions. Or, if the average number of records for Business Unit is 1 and the average ratio for Products is 10,000, each Business Unit relates to 10,000 Products. In other words, the Business Unit on average sells 10,000 different products.

Note: This information is used during the Initial Analysis to estimate the number of records in a DSL. It can also be used by the Log based Analysis when actual DSL counts are not available.

Maximum Records

Maximum records is used during the Run Analysis. Maximum records sets the threshold used by Initial Analysis in determining when a new DSL is required. The default is 10,000. For example, if Maximum Records is set to 10,000, Initial Analysis will try to recommend a DSL if more than 10,000 records must be read.

Configuration Command Buttons

OK

Click **OK** to update changes to the Configuration window and return to the Performance Workbench window.

Cancel

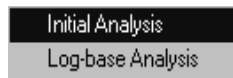
Click **Cancel** to exit the Configuration window without accepting edits.

Apply

Click **Apply** to update changes made to the Configuration window without closing the window.

Selecting the Workbench Analysis

Once you set up your configuration parameters for the number of records for each available Dimension and related Dimensions, you can run the workbench analysis based on actual system usage or based on your own user-defined drill-down parameters. It is through the Log based Analysis that the workbench makes suggestions about DSL's and Indexes that can either be added or removed to help enhance your system's performance.



File | New Menu

There are two types of analyses that can be selected. They are:

Initial Analysis

Use the Initial Analysis when there is no current log information, such as when you are initially setting up your MMA database. This allows you to setup drill-down information prior to establishing DSL's and Indexes on your database. You can also use the Initial Analysis when you do not have appropriate information in the log file to run your analysis. For example, run the Initial Analysis after the initial installation of the database to get some suggestions on what DSL's and Indexes you may want to create.

Log based Analysis

Use Log based Analysis to analyze usage based on the log information found in the Inquiry Log (STCSIL10). This analysis is similar to the Initial Analysis, however, it allows you to specify DSL and Index utilization and retrieving thresholds (maximum rows of data and compile time per column of information), as well as the date and time range within the log to be used for analysis.

Note: The Inquiry Log (STCSIL10) is populated by Inquiries that are run in *DBView*. The Log Inquiry Info check box within User Profile Maintenance must be selected in order for the log to be populated.

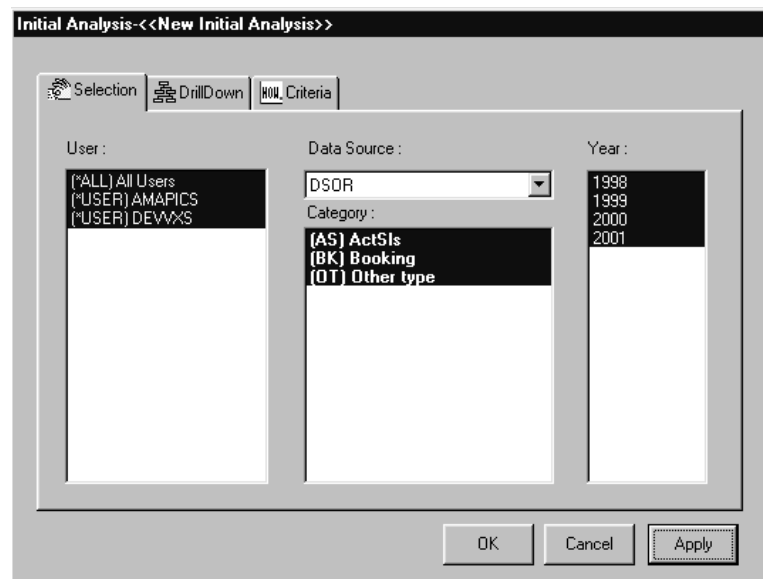
To begin the setup of either Initial or Log based Analysis, you must first enter the drill-down paths that are used to run the analysis.

You must be running Inquiries in DBView to perform Log based Analysis.

Setting Initial Analysis

The Selection function is used to select the data source, category value, and year to be used during the performance tuning analysis. The system defaults to all users, the first data source listed, all categories, and years for that data source.

Note: The system defaults to the first data source on the list of available data sources. Because data sources are listed in alphabetical order, it is a good idea to check this window to verify that the correct data source is selected, even if you do not need to establish different user or year parameters.



Initial Analysis window - Selection tab

To determine selection options:

1. In the Performance Workbench window, select File | New | Initial Analysis. The Initial Analysis window displays.
2. Click the Selection tab.
3. *{Optional}* By default, the system selects all selection parameters.
 - To select a specific user, click the user ID in the User list box.
 - To select a specific data source, click the down arrow to display a list of available data sources, and select the one you want to use. The categories associated with the selected data source are displayed in the Category list box and cannot be changed.
 - To select a specific year, click on the year in the Year list box.
4. Click **OK** to accept your selections and return to the Performance Workbench window, or click **Apply** to apply your changes and continue with the set up of analysis options.

If you are using Log based Analysis, you can identify the date and time information required to run your analysis. See "Setting the Log Range for Analysis" on page A184 for more information on how to set these parameters.

Selection Fields

User

Displays a list of users that exist on your database. Any number of users can be selected for analysis. The default is to select all users.

Data Source

The drop-down selection list accessed from the down arrow, displays a list of data sources that currently exist on your database. The system defaults to the first data source on the list of available data sources.

Category

Displays the categories associated with the selected data source. Selected categories are highlighted.

Year

Displays a list of years that currently exist on your database. Any number of years can be selected for analysis. The default is to select all years. Selected years are highlighted.

Selection Command Buttons

OK

Click **OK** to accept your selections and return to the Performance Workbench window.

Cancel

Click **Cancel** to exit the current function and return to the Performance Workbench window. Changes made to the current window are not updated.

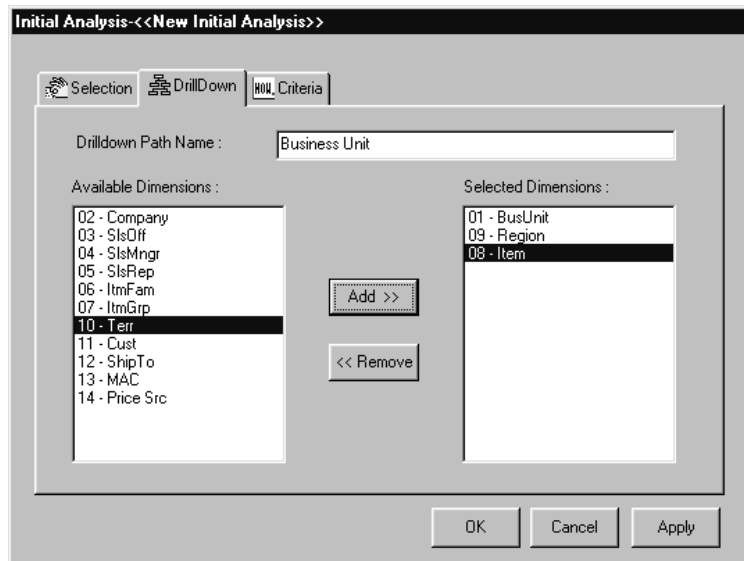
Apply

Click **Apply** to apply your changes and continue with the set up of analysis options.

Setting DrillDown Analysis Criteria

The DrillDown Analysis function is used to identify the most commonly used drill-down paths. This information is then used by the system to help make suggestions on additional DSL's and Indexes that could be created to help enhance system performance. For example, if the *DBView* user runs an Inquiry by Business Unit first, then drills down to Region, then to Item; enter the drill-down path as Business Unit, Region, and Item.

Note: The system will tune all steps of the drill-down path. For example, Business Unit, Business Unit | Region, Business Unit | Region | Item.



Initial Analysis window - DrillDown tab

To create an analysis:

1. In the Performance Workbench window, select File | New | Initial Analysis. The Initial Analysis window displays.
2. Click the **DrillDown** tab. This function is used to identify all possible drill-down paths used to run inquiries in *DBView*.
3. Enter a descriptive name to identify the drill-down path or accept the system default.

4. Enter the Dimensions associated with the drill-down path. To select Dimensions, click the associated Dimensions in the Available Dimensions list box and click **Add**. You can also double-click a Dimension to select it or click and drag it to the Selected Dimensions list box.

Note: Drill-down paths must be defined for Initial and Log based Inquiries.

5. Click **Apply** to update the drill-down path information.
6. Continue to add additional information for each drill-down path you want to analyze. The system automatically adds new drill-down paths numerically in ascending order (DrillDown_1, DrillDown_2, and so forth).
7. Once you enter all drill-down path information for each drill-down path you want to analyze, you can select the type of optimization for the analysis. See "Setting Initial Analysis Criteria" on page A176 for more information on how to use this function. If you are running a Log based Analysis, go to "Setting Log based Criteria" on page A180.

To add a drill-down path to an existing analysis:

1. Select the analysis you want to add a drill-down path to in the Performance Workbench window and right-click the mouse button.
2. Select **Add Drilldown Path** from the drop-down menu. The DrillDown Analysis window displays.
3. Create the new drill-down path using the steps from the previous To Create an Analysis task.

To remove a drill-down path from an existing analysis:

1. Select the analysis you want to remove a drill-down path from on the Performance Workbench window.
2. Highlight the drill-down path to be removed from the selected analysis and right-click the mouse button.
3. Select **Remove Drilldown Path** from the drop-down menu. The selected drill-down path is removed.

Drill Down Fields

Drill Down Path Name

Enter the name of the current drill-down path for analysis or accept the system default name (DrillDown_1, DrillDown_2, and so forth). The system automatically numbers the drill-down paths in ascending order.

Available Dimensions

Displays a list of available Dimensions used to create drill-down paths in *DBView* Inquiries.

Selected Dimensions

Lists the Dimensions that make up the current drill-down path.

Drill Down Command Buttons

OK

Click **OK** to accept your selections and return to the Performance Workbench window.

Cancel

Click **Cancel** to close the window without saving any changes.

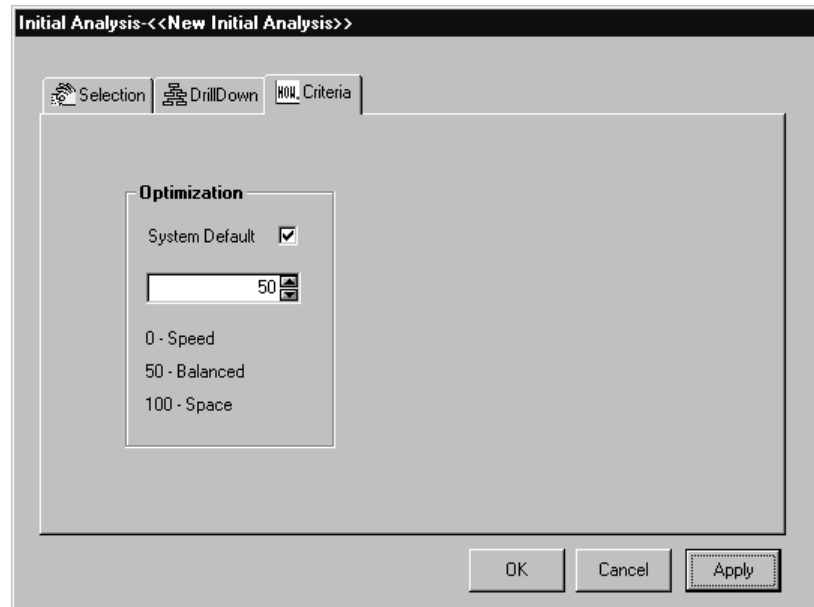
Apply

Click **Apply** to apply your changes and continue with the set up of analysis options.

Setting Initial Analysis Criteria

The Criteria function allows you to determine the type of optimization you want to base the analysis on. For example, if you are more concerned with disk space, you would set Optimization to 100-Space. If space is not a concern, but you want to decrease the amount of time it takes to run a drill-down, you would set the Optimization to 0-Speed. See "Analysis Criteria Optimization Examples" on page A178 for more information about how to select your optimization criteria.

Note: Balanced is the system default and recommended optimization option.



Initial Analysis window - Criteria tab

To set Initial analysis optimization levels:

1. In the Performance Workbench window, select File | New | Initial Analysis. The Initial Analysis window displays.
2. Click the **Criteria** tab. The Criteria window displays.

3. Select the type of optimization required for your analysis by clicking the up or down arrows. If space or speed is not a consideration, you can leave the optimization to 50 - Balanced, which is the system default.
4. Click **OK** to accept your selection and return to the Performance Workbench window, or click **Apply** to apply your changes and continue with the set up of analysis options.

Now you can verify the data source for the analysis and setup optional selection criteria. See "Setting Initial Analysis" on page A171 for more information on how to use this function. If you are creating a Log based Analysis, additional utilization and retrieving thresholds parameters are available for input. See "Setting Log based Criteria" on page A180 for more information on how to use these additional parameters.

Criteria Fields

System Default

Use to select the default value for system optimization. 50-Balanced is the system default and applies to all drill-down paths for the analysis. It is highly recommended that the System Default check box always be selected.

Optimization

Use to determine DSL and Index recommendations. See "Analysis Criteria Optimization Examples" on page A178 for more information on how to select the optimization that is best suited for your implementation.

- | | |
|----------------------|--|
| 0 - Speed | Select 0 - Speed when the amount of time it takes to run an Inquiry is the only consideration. Selecting 0-Speed produces suggestions to add more DSL's and Indexes without regard to space. |
| 50 - Balanced | 50 - Balanced balances speed and disk space giving equal weight to both. Balanced is the system default and recommended optimization option. |
| 100 - Space | Select 100 - Space when disk space is the only consideration. Selecting 100 - Space recommends creating DSL's and Indexes without regard to speed. |

Criteria Command Buttons

OK

Click **OK** to accept your selections and return to the Performance Workbench window.

Cancel

Click **Cancel** to exit the current function and return to the Performance Workbench window. Changes made to the current window are not updated.

Apply

Click **Apply** to apply your changes and continue with the set up of analysis options.

Analysis Criteria Optimization Examples

The optimization rules for Balanced, Speed, and Space are based on the following definitions.

Terms

Low Count DSL

DSL with less than the Maximum Records defined in Configuration.

High Count DSL

DSL with greater than the Maximum Records defined in Configuration.

Primitive DSL

DSL that contains only the Dimension specified on the drill-down path.

Non-Primitive DSL

DSL that contains the Dimension specified in the drill-down path, as well as all previous levels to the Dimension of the drill-down path.

Example of Primitive versus Non-Primitive DSL

- Drill-down Path = Division, Product
- Primitive DSL = Division, Product
- Non-Primitive DSL = Division, Product Group, Product

Note: In this example, Product Group is a previous level of Product.

Optimization Rules

0 - Speed

| |
|--|
| If a high record count DSL without an Index exists, the system suggests that you create a new non-primitive DSL and Index. |
| If a low record count DSL exists without an Index, the system suggests that you create an Index. |
| If a high record count DSL and Index exists, the system suggests the you create a non-primitive DSL with Index. |
| If a low count DSL with an Index exists, no suggestions are made. |
| If no DSL or Index exists, the system suggests that you create a non-primitive DSL with an Index. |

50 -Balanced

| |
|---|
| If a high record count DSL without an Index exists, the system prompts you to create a new non-primitive DSL and Index. |
|---|

| |
|---|
| If a low record count DSL exists without an Index, the system prompts you to create an Index. |
|---|

| |
|---|
| If a high record count DSL exists with an Index, no suggestions are made. |
|---|

| |
|---|
| If a low count DSL with an Index exists, no suggestions are made. |
|---|

| |
|--|
| If no DSL or Index exists, the system prompts you to create a non-primitive DSL with an Index. |
|--|

100 - Space

| |
|---|
| If a high record count DSL without an Index exists, the system prompts you to create a new primitive DSL and Index. |
|---|

| |
|---|
| If a low record count DSL exists without an Index, the system prompts you to create an Index. |
|---|

| |
|---|
| If a high record count DSL exists with an Index, no suggestions are made. |
|---|

| |
|---|
| If a low count DSL with an Index exists, no suggestions are made. |
|---|

| |
|--|
| If no DSL or Index exists, the system prompts you to create a primitive DSL with an Index. |
|--|

Setting Log based Criteria

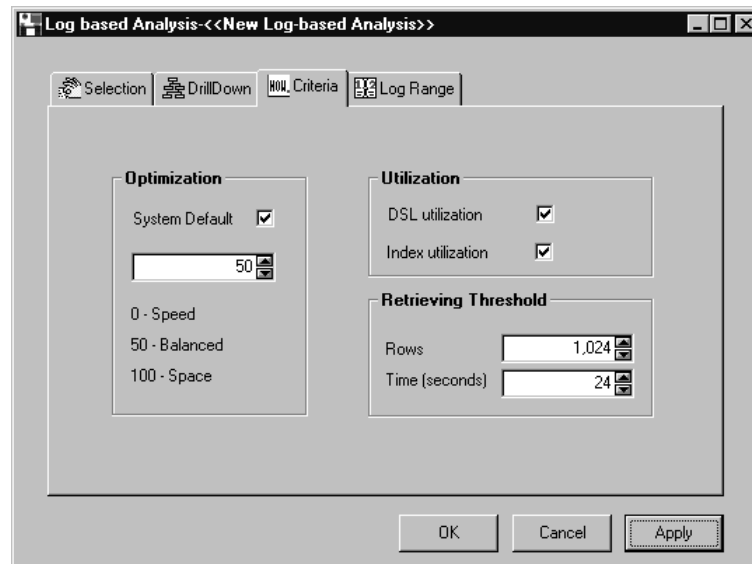
The analysis uses system data from the Inquiry Log (STCSIL10).

The Log based Analysis allows you to use actual system data on which to base your analysis. Log based is highly recommended for users who are generating inquiries in *DBView*, and have a good log base of information to work from. Running the analysis over actual log data verifies that your DSL's and Indexes are correct or makes suggestions on what ones should be added or removed.

The first step in creating a Log based Analysis is to enter the selection and drill-down paths you want to analyze. This process is the same as the Initial Analysis function.

Because you are working with actual data for a Log based Analysis, you have the options to identify the type of utilization and retrieving thresholds associated with the log information. For example, you can select to run the analysis for utilization of DSL's only, Indexes only, or both DSL's and Indexes. You can also stipulate the maximum number of rows of data for an Inquiry and the maximum time it takes to run a row of data for a drill-down path to perform analysis on those DSL's and/or Indexes that are at or above the maximum threshold numbers.

Tip: You may want to run analyses for different drill-down paths. For example, you can define different Retrieving Thresholds for those who typically do high levels of analysis (do not drill-down to multiple levels of detail), and run separate analysis for those drill-down paths that typically retrieve more detailed data.



Log based Analysis window - Criteria tab

To set Log based criteria levels:

1. In the Performance Workbench window, select File | New | Log Based Analysis. The Log based Analysis window displays.
2. Click the **Criteria** tab. The Criteria window displays.
3. Select the type of optimization required for your analysis by clicking the up or down arrows. If space or speed is not a consideration, you can leave the optimization to 50-Balanced, which is the system default.

Note: It is recommended that the System Default box always be checked. This is especially important when you are analyzing a large number of drill-down paths.

4. Select the type of utilization you want to analyze by clicking the appropriate check box. The default is both DSL and Index utilization.
5. Specify the retrieving thresholds required for your analysis or accept the system defaults.
6. Click **OK** to accept your selection and return to the Performance Workbench window, or click **Apply** to apply your changes and continue with the set up of analysis options.

Now you can set up your selection criteria for the current analysis. See "Setting Initial Analysis" on page A171 for more information on how to use this function. If you already established your selection criteria, you can access the Log Range window to identify date and time ranges on which to center your Log based analysis. See "Setting the Log Range for Analysis" on page A184 for more information about this function.

Log based Analysis - Criteria Fields

Optimization

Use to determine the type of optimization on which to base the current analysis. See "Analysis Criteria Optimization Examples" on page A178 for more information on how to select the optimization that is best suited for your individual situation.

- | | |
|----------------------|---|
| 0 - Speed | Select 0-Speed when the amount of time it takes to run an Inquiry is the only consideration. Selecting 0-Speed can produce suggestions to add more DSL's and Indexes without regard to space. |
| 50 - Balanced | Select 50 - Balanced balances speed and disk space giving equal weight to both. Balanced is the system default and the recommended optimization option. |
| 100 - Space | Select 100 - Space when disk space is the only consideration. Selecting 100 - Space can produce suggestions on DSL's and Indexes without regard to speed. |

System Default

Use to identify the number of drill-downs applied to the analysis. Select the System Default check box to identify that optimization is at a system level. All drill-down paths entered in the DrillDown window are considered for analysis.

Note: This check box should always be selected to guarantee that the maximum number of records is checked for each analysis.

DSL utilization

Use to determine utilization of DSL's. Select this check box for the analysis to identify DSL's that are under-utilized and that can be removed. An under-utilized DSL is one that is used less than 64 times in the analysis period.

Important: It is highly recommended that you do not immediately remove DSL's that are designated as under-utilized. Instead, run the analysis over a period of a few months, then make your decision as to which DSL's to remove.

Index utilization

Use to determine utilization of Indexes. Select this check box for the analysis to identify Indexes that are under-utilized and that can be removed. This analysis is an estimate only. An under-utilized Index is one that is potentially used less than 64 times.

Important: It is highly recommended that you do not immediately remove Indexes that are designated as under-utilized. Instead, run the analysis over a period of a few months, then make your decision as to which Indexes to remove.

Retrieving Thresholds

Retrieving Thresholds are used to define the maximum number of rows or time the system uses to determine when to attempt to optimize a drill-down. Optimization is attempted only if the retrieving threshold is exceeded.

Rows

Use to analyze the number of summarized rows per column that are retrieved by the selection statement. This allows you to identify inquiries that create an unusually high number of rows of data for any given drill-down path. For example, if the selection statement creates an inquiry with 2000 rows of data, the system attempts to optimize the drill-down path. If either threshold is exceeded for a particular drill-down path, the system attempts to optimize the drill-down path based on the speed algorithm.

Time (seconds)

Use to analyze the amount of time it takes to select a column of information for an inquiry. The analysis makes suggestions based on the amount of time entered here. For example, if a selection for a drill-down column takes longer than 30 seconds to generate, an exception is found by the analysis and the system attempts to optimize by speed. The time is estimated based on data captured in the Inquiry Log file.

Note: The time threshold is based on a single column of data. If a *DBView* Inquiry contains five data columns, the approximate retrieval time is 5 x (retrieval time for one column).

Criteria Command Buttons

OK

Click **OK** to accept your selections and return to the Performance Workbench window.

Cancel

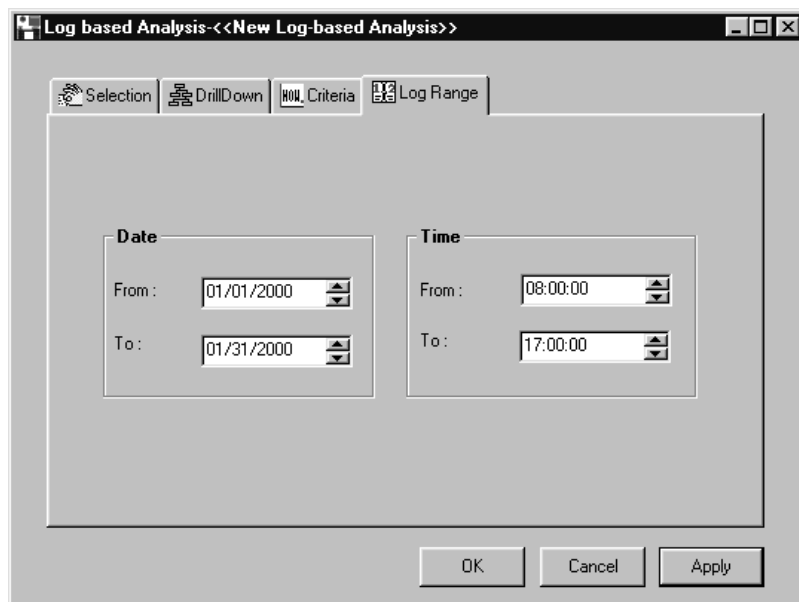
Click **Cancel** to exit the current function and return to the Performance Workbench window. Changes made to the current window are not updated.

Apply

Click **Apply** to apply your changes and continue with the setup of analysis options.

Setting the Log Range for Analysis

When running a Log based Analysis, you can set the date and time on which to base the analysis of Inquiry Log data to create your analysis. These options allow you to analyze inquiry processing based on a specific date and time range. For example, you can run the analysis for the month of January, for all inquiries run between 8:00 A.M. and 5:00 P.M.



Log Based Analysis window - Log Range tab

Setting log range parameters:

1. In the Performance Workbench window, select File | New | Log-based Analysis. The Log based Analysis window displays.
2. Click the **Log Range** tab. The Log Range window displays.
3. Select the From and To dates to run the Log based Analysis. Use the arrow buttons to scroll to the appropriate date or enter the date manually in MM/DD/CCYY format.
4. Select the time range to be included in the analysis. This is entered in military time. For example, 5:00 P.M. is entered as 17:00:00. Use the arrow buttons to scroll to the appropriate time, or enter the time parameters manually.
5. Click **OK** to accept your selection and return to the Performance Workbench window, or click **Apply** to apply your changes and continue with the set up of analysis options.

If you set up all the Log based Analysis parameters, you are ready to run the analysis. See "Running the Analysis" on page A186 for more information on how to run and view the final analysis.

Log Range Fields

Date From

Enter the log date to begin the analysis of system data. Enter in MM/DD/CCYY format. The system default is 01/01/CCYY, with CCYY being the value for the current century and year (1999, 2000, and so forth).

Date To

Enter the log date to end the analysis of system data. If you only need to run the analysis for a single day, this date is the same as the Date From value. Entered in MM/DD/CCYY format. The default is the current date.

Time From

Enter the log time to begin the analysis of system data. Entered in military time (00:00:00 to 24:59:59). The system default is 09:00:00.

Time To

Enter the log time to end the analysis of system data. Entered in military time (00:00:00 to 24:59:59). The system default is 17:00:00.

Log Range Command Buttons

OK

Click **OK** to accept your selections and return to the Performance Workbench window.

Cancel

Click **Cancel** to exit the current function and return to the Performance Workbench window. Changes made to the current window are not updated.

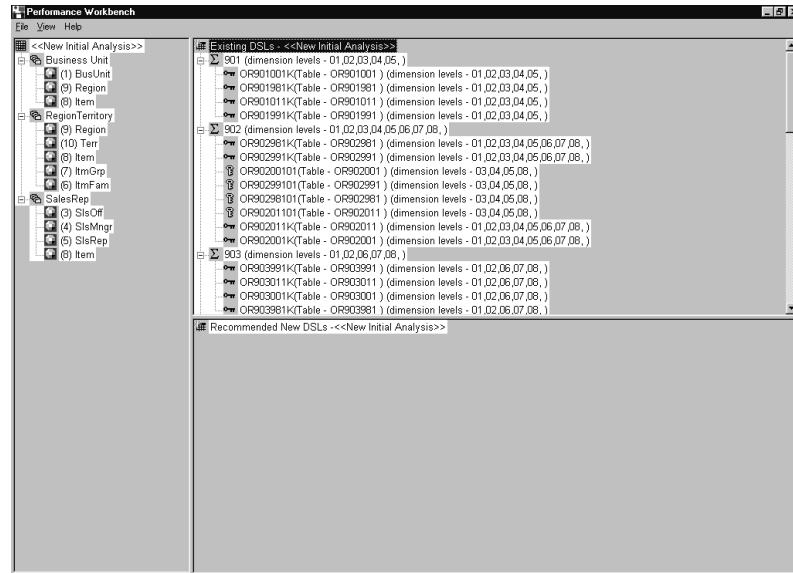
Apply

Click **Apply** to apply your changes and continue with the setup of analysis options.

Running the Analysis

Once you establish the parameters required for the analysis, you can select to run the analysis. The final analysis lists current DSL's and Indexes and makes suggestions on additional DSL's and Indexes that could be created to help enhance system performance. The Log based analysis identifies Indexes that are no longer required and can be removed.

Use this analysis to review the DSL's and Indexes suggested for creation or removal.



Performance Workbench window

To run an analysis:

1. From the Performance Workbench window, select File | Open. The File Open window displays.
2. Select the file name of the analysis you want to run and click **OK**. The drill-down paths associated with the selected analysis file display.
3. Place the cursor on the list of drill-down paths, and click the right mouse button. This displays the options available to run the analysis. Select **Run Analysis** to perform the analysis.
4. The analysis displays a list of existing DSL's and a list of new DSL's recommended for consideration. Click the + box to display a list of associated or recommended Indexes.

A black key identifies existing Indexes, a highlighted key identifies suggested Indexes, and a trash can identifies Indexes recommended for removal.

5. Make note of the suggested DSL's and Indexes or print a copy of the analysis for later review. See Chapter 5 of this *Systems Administrator Guide* for more information about creating Indexes for your analysis.

To print a copy of the analysis:

1. From the Performance Workbench window, select File | Print.
2. The report briefly displays on the screen while it is being sent to the printer.

To save the analysis:

1. From the Performance Workbench window, select File | SaveAs.
2. Type the file name for the analysis and click **Save**.

Note: The Analysis report includes Index information for each high level and low level DSL and recommended suggestion for additions as well as drill-down parameters and analysis criteria selections.

Analysis Results - DSL



New DSL Needed - Selected

A new DSL is suggested. Highlight the suggested DSL and select File | Add DSL to add the DSL definition. You will still need to perform the Add DSL function from the MMA Utilities menu in *Administration*.



New DSL Needed - Not Selected

A new DSL is suggested, but has not yet been selected to be added.

Keep Existing DSL

Recommendation:

1. If the DSL is required based on the defined drill-down path.
2. If Initial Analysis and if DSL are not needed based on the drill-down path. The system will recommend that DSL be kept.
3. Log based Analysis - Keep the DSL if not underutilized and not needed based on the drill-down path.

Existing DSL Underutilized

This pertains to Log based Analysis only. The system will indicate when the DSL is used less than 64 times.

Analysis Results - Index



Existing Index Underutilized

This pertains to Log based Analysis only. The system will indicate when the Index is used less than 64 times.



Keep Existing Index

Recommendation:

1. If the Index is required based on the defined drill-down path.
2. If Initial Analysis and if Index are not needed based on the drill-down path. The system will recommend that Index be kept.



New Index Needed

A new Index is suggested.

Analysis Options

To display the Analysis Options window, click the right mouse button.

Add Drilldown Path

Select **Add Drilldown Path** to access the DrillDown Analysis window to enter additional drill-down paths to the current analysis file.

Remove Drilldown Path

Select **Remove Drilldown Path** to access the DrillDown Analysis window to remove a drill-down path from the current analysis file.

Run Analysis

Select **Run Analysis** to view the existing and suggested DSL's and Indexes for the selected analysis file.

Properties

Select **Properties** to access the Analysis Criteria and Selection windows to reset your optimization for the current analysis or to specify Users, Data sources or Years to compile the analysis information. See "Setting Initial Analysis Criteria" on page A176 if you are working with an Initial Analysis, "Setting Log based Criteria" on page A180 if you are working with a Log based Analysis, or "Setting Initial Analysis" on page A171 for more information about these functions.

Best Fit Analysis Logic

The Best Fit Analysis Logic in the Performance Tuning Workbench is used to make DSL and Index recommendations. It does this by reviewing all available DSL's and Indexes, then determines the corresponding weight of the DSL. The DSL with the lowest weight is selected as the best fit for the corresponding Inquiry.

For each DSL with an Index that can be used for retrieval, the weight for the DSL equals the record count divided by 10. If an Index is not available for a DSL, the DSL weight equals the record count.

An available DSL is one that includes all the Dimensions from the Inquiry Interactive Drill-Down Path. For an index to be available, it must contain all the Dimensions in the same order as those found in the drill-down path and the left most Dimension on the index must match the first Dimension in the drill-down path. For example, using the following drill-down path scenario, the corresponding examples would be true:

Drill-Down Path: **Business Unit** **001**
 Customer ***ALL**

Example 1 for DSL 999

Using the following, the Index Business Unit, Customer can be used.

| Dimensions | Index |
|---|-------------------------|
| Business Unit Item Sales Group Item Customer Ship-to | Business Unit, Customer |

Example 2 for DSL 999

Using the following, the Index Customer, Business Unit cannot be used.

| Dimensions | Index |
|---|-------------------------|
| Business Unit Item Sales Group Item Customer Ship-to | Customer, Business Unit |

Example 3 for DSL 999

Using the following, the Index Item, Business Unit, Customer cannot be used.

| Dimensions | Index |
|---|----------------------------------|
| Business Unit Item Sales Group Item Customer Ship-to | Item, Business Unit, Customer |

Example 4 for DSL 999

Using the following, the Index Business Unit, Item, Customer can be used.

| Dimensions | Index |
|---|----------------------------------|
| Business Unit Item Sales Group Item Customer Ship-to | Business Unit, Item, Customer |

The following is another example of how the system uses available DSL's and Indexes to identify the lowest weight on which to base the Best Fit Logic.

| | Dimensions | Record Count | Available Indexes |
|----------------|--|--------------|---|
| DSL 10 | Business Unit Item Customer | 200,000 | Business Unit, Item, Customer |
| DSL 20 | Business Unit Item Sales Group Item | 75,000 | Business Unit, Item Sales Group, Item |
| DSL 999 | Business Unit Item Sales Group Item Customer Ship To | 400,000 | Business Unit, Item Sales Group, Item, Customer, Ship To ----- Customer, Business Unit |

Example 1 - Drill-Down Path = Business Unit

1. Determine available DSL's

Each of the available DSL's contain Business Unit.

DSL 10

DSL 20

DSL 999

2. Determine the weight of each DSL

Remember, the weight is determined by dividing the total DSL count by 10.

| | Index Available | Weight |
|---------|-----------------|--------|
| DSL 10 | Y | 20,000 |
| DSL 20 | Y | 7,500 |
| DSL 999 | Y | 40,000 |

3. Select Best Fit

The system selects the DSL with the lowest weight as the best fit.

DSL 20 = lowest weight (7,500)

Example 2 - Drill-Down Path = Customer

1. Determine available DSL's

Only DSL 10 and DSL 999 contain Customer.

DSL 10

DSL 999

2. Determine the weight of each DSL

| | Index Available | Weight |
|---------|-----------------|---------|
| DSL 10 | N | 200,000 |
| DSL 999 | Y | 40,000 |

3. Select Best Fit

The system selects the DSL with the lowest weight as the best fit.

DSL 999 = lowest weight (40,000)

Example 3 - Drill-Down Path = Item

1. Determine available DSL's

Each of the available DSL's contain Item.

DSL 10

DSL 20

DSL 999

2. Determine the weight of each DSL

| | Index Available | Weight |
|----------------|-----------------|---------|
| DSL 10 | N | 200,000 |
| DSL 20 | N | 75,000 |
| DSL 999 | N | 400,000 |

3. Select Best Fit

The system selects the DSL with the lowest weight as the best fit.

DSL 20 = lowest weight (75,000)

Example 4 - Drill-Down Path = Customer, Business Unit

1. Determine available DSL's

DSL 10

DSL 999

2. Determine the weight of each DSL

Because no Index is available for DSL 10, its total weight is not divided by 10.

| | Index Available | Weight |
|----------------|-----------------|---------|
| DSL 10 | N | 200,000 |
| DSL 999 | Y | 40,000 |

3. Select Best Fit

The system selects the DSL with the lowest weight as the best fit.

DSL 999 = lowest weight (40,000)

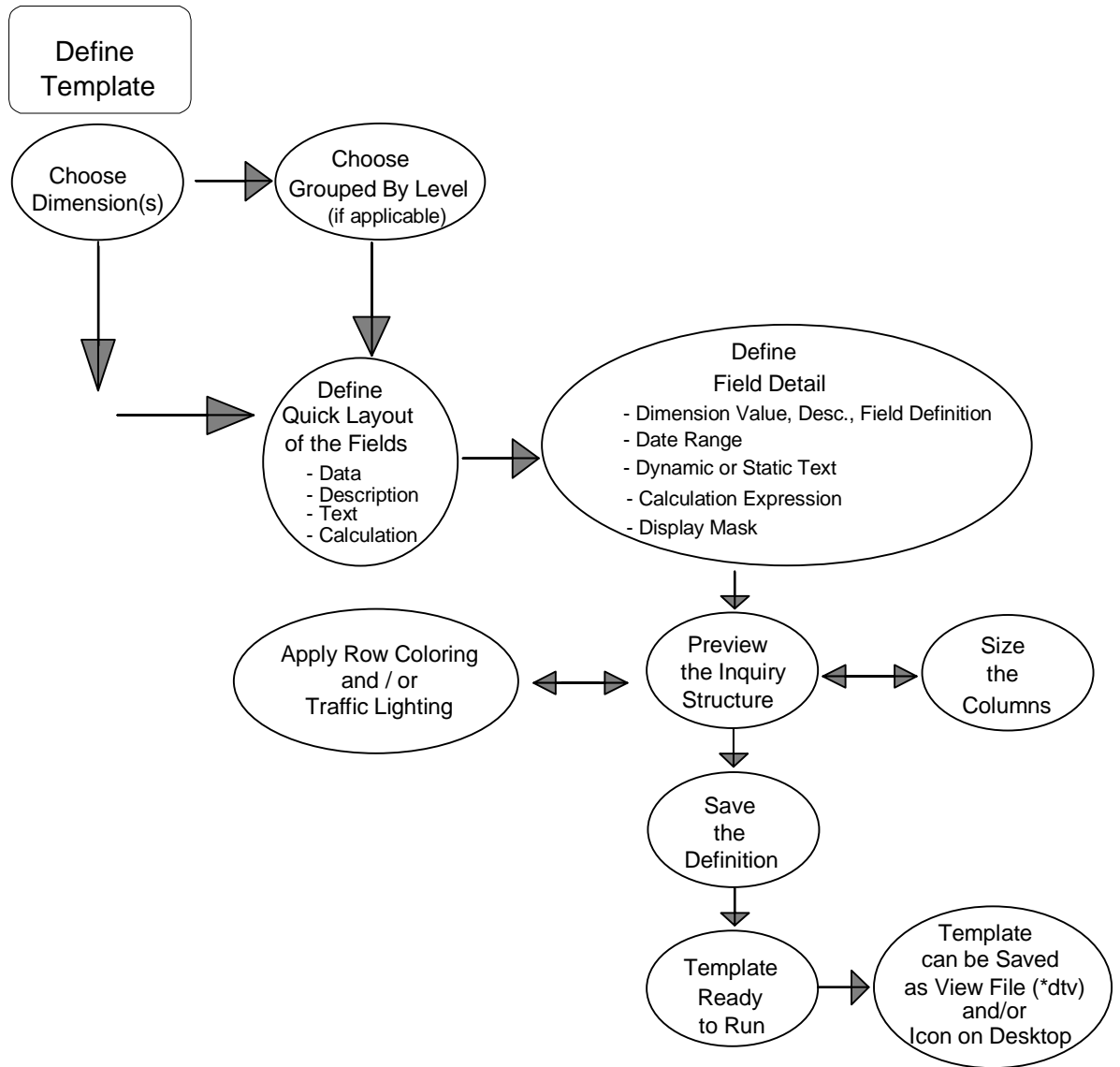
CHAPTER 7 • DEFINING TEMPLATES

QuickLook

Use this chapter to learn how to:

- Recognize the three *DBView* Template types.
- Know the format of the *DBView* window.
- Create a Template definition.
- Choose a Dimension as a place-holder within the definition.
- Select the default values using Quick Layout.
- Define a description field type (Dimension value, description, field definition).
- Define a text field (labels columns or rows within the View).
- Define a data field (type of historical data over a date range).
- Define a calculated field (user-defined calculation between data fields).
- Define a total line.
- Construct the Template structure using a Preview.
- Define Template Authority.

Template Definition Process



Template Types Overview

When defining a Template, there are three formats available within *MMA DBView* (*DBView*). Each Template type supports different functionality.

Regular

A Regular Template type is the system default. It displays data for one or more Dimension levels with the option of grouping. When looking at a Regular Template, you can automatically drill through all levels of data.

The Dimension values and associated descriptions display in the rows of the View. The categories/values display in the columns.

Drill Down Path Taken

Dimension Level 1

Dimension Level 2

Dimension Level 3

General Sort Filter Top N Traffic Light

Updated

Visible

Filtered

Summarized

Hidden

Mode

| Dimension Values | Category | Category | Calculation |
|------------------|-------------------|-------------------|-------------|
| Customer | Sales \$ | Cost \$ | Variance % |
| Customer | Sales \$ | Cost \$ | Variance % |
| Customer | Sales \$ | Cost \$ | Variance % |
| Totals | \$ 9999.99 | \$ 9999.99 | 99 % |

| Item Group | Description | Actual Sales Jan 00 to Jan 00 | % of Total Current Period | Actual Sales Jan 00 to Feb 00 | % of Total YTD |
|--------------|-------------------|-------------------------------|---------------------------|-------------------------------|----------------|
| BBPN | Ball point pens | \$39,333.28 | 14.58% | \$71,095.43 | 13.97% |
| CPC | Colored pencils | \$1,251.45 | 45% | \$2,283.30 | 45% |
| DEMK | Dry erase markers | \$76,153.77 | 28.23% | \$143,436.77 | 28.20% |
| FPN | Fountain pens | \$86,980.46 | 32.24% | \$167,881.09 | 33.01% |
| PMK | Permanent markers | \$56,277.58 | 20.86% | \$103,446.11 | 20.34% |
| PPC | Plain Pencils | \$5,763.32 | 3.63% | \$20,511.72 | 4.03% |
| Total | | \$269,779.86 | 100.00% | \$508,614.02 | 100.00% |

Regular Template format

Period Based

A Period Based Template displays data that is broken down by user-defined periods.

The Dimension information is displayed in the Header area of the window. The periods display in the rows of the first column, and the categories/values display in the remaining columns.

Only one Dimension value's information is displayed at a time; the page buttons ">" or "<" scroll through all values, and the Sum All icon displays data for all key values added together.

Automatic drill-down is not available. You can, however, drill-down by adding a Dimension level to the Interactive Drill-Down Path.

| Dimension Value and Description | General <input checked="" type="checkbox"/> Sort <input type="checkbox"/> Filter <input type="checkbox"/> Top N <input type="checkbox"/> Traffic Light Updated Visible <input type="checkbox"/> Filtered <input type="checkbox"/> Summarized <input type="checkbox"/> Hidden <input type="checkbox"/> Mode | | |
|---------------------------------|---|----------------|----------------|
| | Category/Value | Category/Value | Category/Value |
| Period 1 | Sales \$ | Cost \$ | Quantity |
| Period 2 | Sales \$ | Cost \$ | Quantity |
| Period 3 | Sales \$ | Cost \$ | Quantity |

| Actual Sales | | Actual Sales | | Variance Amount |
|------------------|------------------|------------------|------------------|--------------------|
| Jan 00 to Sep 00 | Jan 99 to Sep 99 | Jan 00 to Sep 00 | Jan 99 to Sep 99 | |
| Jan | \$173,016.77 | \$115,731.23 | \$57,285.54 | |
| Feb | \$151,805.01 | \$102,532.73 | \$49,272.28 | |
| Mar | \$311,919.59 | \$208,900.68 | \$103,118.91 | |
| Apr | \$448,446.99 | \$299,971.49 | \$148,475.50 | |
| May | \$521,341.28 | \$347,454.47 | \$173,886.81 | |
| Jun | \$918,184.76 | \$610,440.58 | \$307,744.18 | |
| Jul | \$2,583,610.71 | \$1,715,538.72 | \$868,071.99 | |
| Aug | \$2,986,420.22 | \$1,992,968.02 | \$1,003,452.20 | |
| Sep | \$2,456,069.45 | \$1,634,229.47 | \$821,839.98 | |
| SubTotal | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 | |
| Grand Total | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 | |

Period Based Template format

Cross Tab

The Cross Tab Template displays data for two Dimension levels. The values of one Dimension level displays in the rows and the other displays in the columns.

The first Dimension selected at runtime is the column Dimension, and the second is the row Dimension. These can easily be transposed by selecting the View | Transpose Crosstab command on the menu bar.

Automatic drill-down is not available. You can, however, drill-down by adding a Dimension level to the Interactive Drill-Down Path.

Column Dimension: 1st Dimension Selected

Row Dimension: 2nd Dimension Selected

General Sort Filter Top N Traffic Light

Updated

Visible

Filtered

Summarized

Hidden

Mode

| Dimension #2 | Dimension #1 | Value/Desc. | Category Value |
|--------------|--------------|-------------|----------------|
| Value/Desc. | | Sales \$ | Quantity |
| Value/Desc. | | Sales \$ | Quantity |
| Value/Desc. | | Sales \$ | Quantity |

The screenshot shows the 'Market Monitoring and Analysis' application window. The main window title is 'Cross Tab Template - Item'. It features a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. Below the menu is a control panel with 'Company' and 'Item' dropdowns, both set to '*All Values*'. To the right of this panel is a settings area with 'General' checked, 'Sort' checked, and 'Filter', 'Top N', and 'Traffic Light' unchecked. It also shows 'Updated' as 01/14/2000 23:00, 'Visible Rows' as 13, 'Filtered' as 0, 'Summarized' as 0, and 'Hidden' as 0. The main data area is a table with columns for 'Company', 'Description', and sales data for three categories: '11 Wholesale', '12 Retail', and '13 Franchise'. Each category has sub-columns for 'Actual Sales' for 'Jan 00 to Sep 00' and 'Jan 99 to Sep 99'. The table lists various pen and marker items like BKBBFN, BLBBFN, BPPMK, BSDEMK, CFPN, CTPMK, DSDEMK, FIPMK, HPPC, MPPC, RDBBPN, RFPN, and SSPN, along with a 'Total' row. The status bar at the bottom indicates '[13] Rows Found...

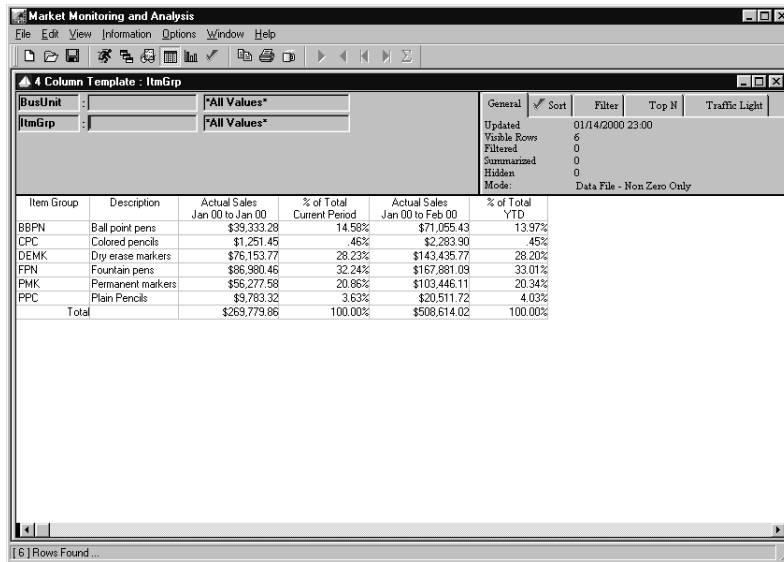
Cross Tab Template format

Template Definition Overview

Templates are the generic format of the data displayed. They are saved globally to the server, so they can be shared among users. A Template can be created at one Dimension level, customized to fit your individual needs, and then saved as a View to your desktop.

Once created, a Template can be opened without retrieving data, customized to fit your analysis needs, and then run to retrieve data.

Note: A Template definition cannot contain more than ten Dimensions.



The screenshot shows a software window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. Below the toolbar is a "Column Template : ItmGrp" window. It has a "General" tab with options for Sort, Filter, Top N, and Traffic Light. The "Updated" date is 01/14/2000 23:00. The "Visible Rows" count is 6. The "Filtered", "Summarized", and "Hidden" counts are all 0. The "Mode" is "Data File - Non Zero Only".

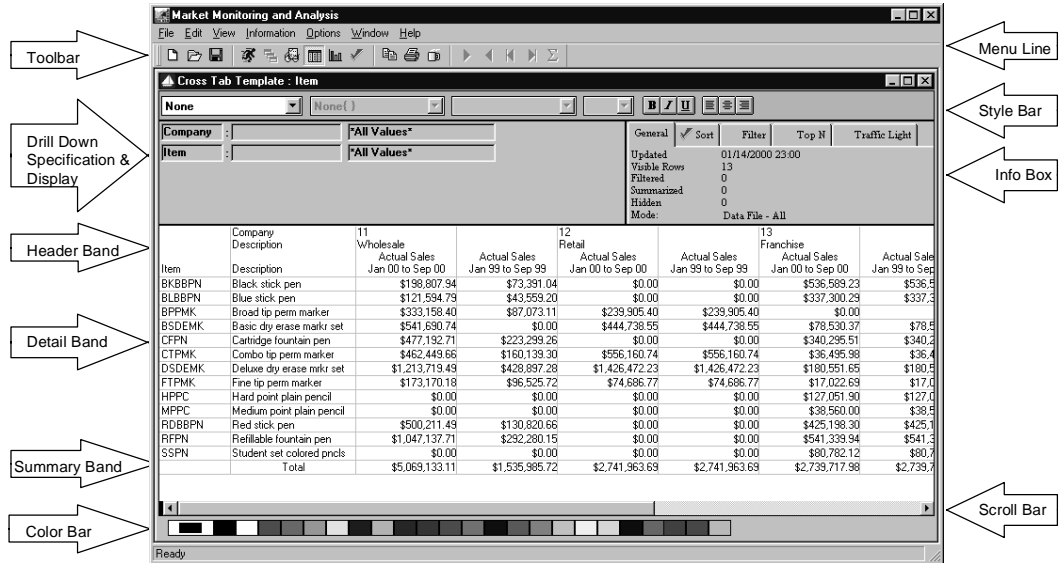
| Item Group | Description | Actual Sales | | % of Total | |
|------------|-------------------|------------------|----------------|------------------|----------------|
| | | Jan 00 to Jan 00 | Current Period | Jan 00 to Feb 00 | % of Total YTD |
| BBPN | Ball point pens | \$39,333.28 | 14.58% | \$71,055.43 | 13.97% |
| CPC | Colored pencils | \$1,251.45 | 46% | \$2,283.90 | 45% |
| DEMK | Dry erase markers | \$76,153.77 | 28.23% | \$143,435.77 | 28.20% |
| FPN | Fountain pens | \$86,980.46 | 32.24% | \$167,881.09 | 33.01% |
| PMK | Permanent markers | \$56,277.58 | 20.86% | \$103,446.11 | 20.34% |
| PPC | Plain Pencils | \$3,783.32 | 3.63% | \$20,511.72 | 4.03% |
| | Total | \$269,773.86 | 100.00% | \$508,614.02 | 100.00% |

[6] Rows Found...

Opened Template for which data has been retrieved

MMA Window Format

A definition of all the screen areas follows.



Screen Area Definitions

Menu Line

Choosing a command tells *DBView* what to do next -- open a Template definition, run a Template, print a View display, exit the *DBView* application, and so on. Commands that perform related actions are grouped together on a menu. The menus are listed on the menu line at the top of the *DBView* screen.

Toolbar

The toolbar display can be turned on and off using the window menu. If you use a mouse, the toolbar gives you instant access to the most frequently used functions. By simply clicking a button, you can open, save, and print a Template, drill-down to another Dimension, graph a View display, and so forth.

Style Bar

The style bar gives you the ability to customize your View. Choose specific fields to italicize, bold, underline, and so forth. The style bar can be turned on and off using View | Change View.

Interactive Drill Down Specification & Display Area

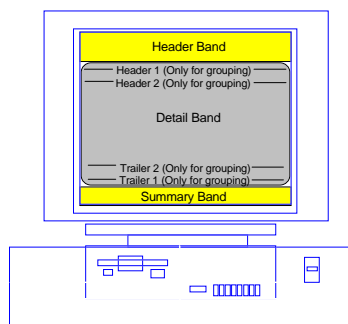
The top section of the *MMA* window displays the path taken to access the data that is currently displayed in the Detail band. The Dimension(s) and their key values and descriptions can be changed and the window refreshed with the newly requested data. A Dimension can also be removed from the drill-down path and the data refreshed to reflect the change in Dimension filters.

Information Box

When a View is displayed, the user can look at the top right corner to see the date that the data was last updated, any sorting or filtering that is applied, as well as the number of rows that are summarized or hidden. The Information Box is display-only and does not allow any entry. The information displayed depends on the tab selected; General, Sort, Filter, Top/Bottom N, or Traffic Light. If a check mark displays immediately to the left of the tab, that indicates that data exists on the tab.

Band

There are normally three main band types. When grouping, there are additional band types. For every Dimension grouped, two additional bands are introduced: Header N and Trailer N where N is the sequence number of the grouped Dimension.



Header Band

The Header band is the section of the *DBView* window that usually contains the column titles. In a Cross Tab View, one of the Dimensions displays in the Header band. If a Template contains subtotaling, the subtotal level displays in the Header 1 band. There are 3 to 6 different display bands: Header, Header 1 or 2, Detail, Summary, Trailer 1 or 2.

Detail Band

The Detail band is the middle section of the *DBView* window. This area displays the historical *MMA* data in the format defined by the user.

Summary Band

The Summary band is the final row of the *DBView* window. This area displays any summarization performed for the data. For example, summarize all sales in a column, calculate the average in a column, and so forth.

Scroll Bar

Clicking the scroll bar or dragging the box in the scroll bar brings other parts of the View into the display. There are vertical and horizontal scroll bars displayed when applicable.

Color Bar

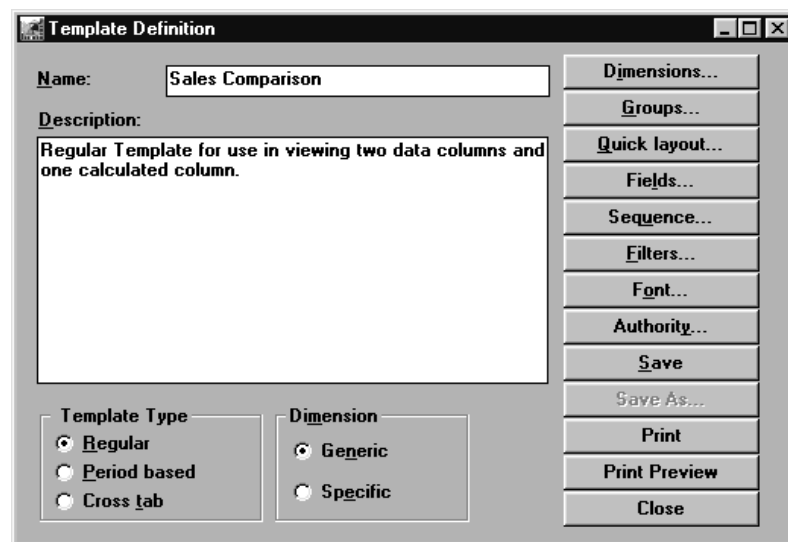
The color bar gives you the ability to customize your View. Choose specific fields to be identified by colors by selecting the field and then the appropriate color on the color bar. The text color can be changed by selecting the color with a single click of the left mouse button. The background color of a field can be changed by selecting the color with a single click of the right mouse button. The color bar can be turned on and off using View | Change View.

Initial Steps of Template Definition

When creating a Template, it should be as generic as possible. With the installation of *DBView*, the idea is to create a few Templates and many customized Views. The generic format of the Template can be created and saved by the system administrator or any other "power users" with authority. Users can then run a Template as it exists, or make adjustments and save it as a View to their desktop. For example, a Template with four data columns and two calculated columns.

The following pages present all of the windows and processes of creating a Regular Template definition.

The Template Definition window is accessed using Edit | Templates | New on the main *MMA* menu.



Template Definition window

Template definition minimal entries

To define a Regular Template, you must complete the following steps:

1. Enter a name for the Template. Verify that the Regular Template Type radio button is selected.
2. *{Optional}* Enter a description.
3. Choose a Dimension level to be the place-holder during definition using **Dimensions**.
4. Choose the field types (For example, data, text, description, calculation) using **Quick layout**.

Note: Once the Quick Layout function is exited, it is disabled from the Template definition process.

5. Access the windows to define the field details (Steps 6 - 10) by clicking **Fields**.
6. *{Optional}* Define date range(s) for the data fields, if other than the default. This can be changed at runtime.

7. *{Optional}* Choose to summarize the data fields. This system-generated calculation can be changed at runtime.
8. *{Optional}* Define column titles for the calculated fields and the other fields, if other than the default.
9. *{Optional}* Define the calculation expressions for the calculated fields. This can be done at runtime.
10. Preview the definition and adjust any column widths using **Preview** on the Fields window.
11. *{Optional}* Limit other users from editing or deleting your Template definition by selecting **Authority**.
12. **Close** the fields window and **Save** the definition.
13. **Close** the Template Definition window and the Template is available and ready to run.

Template Definition Fields

Name

The name cannot be changed when editing an existing Template. The name can be up to 30 alphanumeric characters, including blanks. Enter a unique, user-defined name, which display along with other template definition names in the Template Listing window.

Description

Enter a long description that displays on the Template Listing window and on the initial Template Definition windows. The Description is maintainable when editing a Template.

Template Type

Use the radio button to select one of the following types of Template formats: Regular, Periods Based, or Cross Tab.

Regular

A Regular Template is the system default. It displays data for one or more Dimensions with the option of level breaks (grouping). The Dimension values and descriptions display in the rows and the categories/values display in the columns.

The screenshot shows the 'Market Monitoring and Analysis' application window. The main window title is '4 Column Template - ItmGrp'. Below the title bar, there are fields for 'BusUnit' and 'ItmGrp', both set to 'All Values*'. To the right, there are checkboxes for 'General', 'Sort', 'Filter', 'Top N', and 'Traffic Light'. Below these are statistics: 'Updated: 01/14/2000 23:00', 'Visible Rows: 6', 'Filtered: 0', 'Summarized: 0', 'Hidden: 0', and 'Mode: Data File - Non Zero Only'. The main data area is a table with the following structure:

| Item Group | Description | Actual Sales | | % of Total | |
|------------|-------------------|------------------|----------------|------------------|---------|
| | | Jan 00 to Jan 00 | Current Period | Jan 00 to Feb 00 | YTD |
| BBFN | Ball point pens | \$39,333.28 | 14.58% | \$71,055.43 | 13.97% |
| CPC | Colored pencils | \$1,251.45 | 46% | \$2,283.90 | 45% |
| DEMK | Dry erase markers | \$76,153.77 | 28.23% | \$143,435.77 | 28.20% |
| FPN | Fountain pens | \$86,980.46 | 32.24% | \$167,881.09 | 33.01% |
| PMK | Permanent markers | \$56,277.58 | 20.86% | \$103,446.11 | 20.34% |
| PPC | Plain Pencils | \$3,783.32 | 3.63% | \$20,511.72 | 4.03% |
| Total | | \$263,779.86 | 100.00% | \$508,614.02 | 100.00% |

At the bottom of the window, it says '[6] Rows Found...'

Regular Template format

Period Based

A Period Based Template is similar to the Regular Template, except the data is broken down by user-defined Periods. In the Period Based Template, the Dimension is displayed in the header, the periods are displayed in the rows of the first column, and the category/values are in the remaining columns. A Period Based Template must be Dimension-*Generic* because the Dimension level is selected at runtime. See "Defining a Period Based Template" on page A252 for more information on how to define a Period Based Template. You can add a Dimension to drill-down. After adding the Dimension, request a retrieval.

| BusUnit : DOM | | Domestic | | General | Sort | Filter | Top N | Traffic Light |
|---------------|----------------------------------|----------------------------------|--------------------|--------------|---------------------------|--------|-------|---------------|
| | | | | Updated | 01/14/2000 23:00 | | | |
| | | | | Visible Rows | 9 | | | |
| | | | | Filtered | 0 | | | |
| | | | | Summarized | 0 | | | |
| | | | | Hidden | 0 | | | |
| | | | | Mode: | Data File - Non Zero Only | | | |
| | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Variance Amount | | | | | |
| Jan | \$173,016.77 | \$115,731.23 | \$57,285.54 | | | | | |
| Feb | \$151,805.01 | \$102,532.73 | \$49,272.28 | | | | | |
| Mar | \$311,919.59 | \$208,800.68 | \$103,118.91 | | | | | |
| Apr | \$448,446.99 | \$299,971.49 | \$148,475.50 | | | | | |
| May | \$521,341.28 | \$347,454.47 | \$173,886.81 | | | | | |
| Jun | \$918,184.76 | \$610,440.58 | \$307,744.18 | | | | | |
| Jul | \$2,583,610.71 | \$1,715,538.72 | \$868,071.99 | | | | | |
| Aug | \$2,986,420.22 | \$1,982,968.02 | \$1,003,452.20 | | | | | |
| Sep | \$2,456,069.45 | \$1,634,229.47 | \$821,839.98 | | | | | |
| SubTotal | \$10,950,814.78 | \$7,017,667.39 | \$3,933,147.39 | | | | | |
| Grand Total | \$10,950,814.78 | \$7,017,667.39 | \$3,933,147.39 | | | | | |

Period Based Template format

Cross Tab

A Cross Tab Template displays data for two Dimensions. One is displayed in the rows, and the other is displayed in the columns. The first Dimension level selected at runtime is the column Dimension, and the second is the row Dimension. See "Defining a Cross Tab Template" on page A247 for more information on how to define a Cross Tab Template. You can achieve a drill-down by adding a Dimension to the View and requesting a retrieval.

The screenshot shows a window titled "Market Monitoring and Analysis" with a sub-window "Cross Tab Template : Item". The main data table is as follows:

| Item | Company Description | 11 Wholesale | | 12 Retail | | 13 Franchise | | Actual Sale Jan 99 to Sep |
|--------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|---------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | |
| BKBBPN | Black stick pen | \$198,807.94 | \$73,391.04 | \$0.00 | \$0.00 | \$536,589.23 | \$536.5 | |
| BLBBPN | Blue stick pen | \$121,594.79 | \$43,959.20 | \$0.00 | \$0.00 | \$337,300.29 | \$337.3 | |
| BIPMK | Broad tip perm marker | \$333,159.40 | \$87,073.11 | \$239,905.40 | \$239,905.40 | \$0.00 | \$0.00 | |
| BSDEMK | Basic dry erase markr set | \$541,690.74 | \$0.00 | \$444,738.95 | \$444,738.95 | \$78,530.37 | \$78.5 | |
| CFPN | Cartridge fountain pen | \$477,192.71 | \$223,299.26 | \$0.00 | \$0.00 | \$340,295.51 | \$340.2 | |
| CTPMK | Combo tip perm marker | \$462,449.66 | \$160,139.30 | \$556,160.74 | \$556,160.74 | \$36,495.98 | \$36.4 | |
| DSDEMK | Deluxe dry erase mkr set | \$1,213,719.49 | \$428,897.28 | \$1,426,472.23 | \$1,426,472.23 | \$180,551.65 | \$180.5 | |
| FTPMK | Fine tip perm marker | \$173,170.18 | \$96,525.72 | \$74,686.77 | \$74,686.77 | \$17,022.69 | \$17.0 | |
| HPFC | Hard point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$127,051.90 | \$127.0 | |
| MPFC | Medium point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$38,560.00 | \$38.5 | |
| RDBBPN | Red stick pen | \$500,211.49 | \$130,820.86 | \$0.00 | \$0.00 | \$425,199.30 | \$425.1 | |
| RFPN | Refillable fountain pen | \$1,047,137.71 | \$292,280.15 | \$0.00 | \$0.00 | \$541,339.94 | \$541.3 | |
| SSPN | Student set colored pencils | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$80,782.12 | \$80.7 | |
| | Total | \$5,069,133.11 | \$1,535,985.72 | \$2,741,963.69 | \$2,741,963.69 | \$2,739,717.98 | \$2,739.7 | |

Cross Tab Template format

Dimension

A Template definition can be related to Dimensions in two different ways. Use the radio button to identify the current Template as *Generic* or *Specific*.

Generic

The system default is *Generic*. If the Template definition is Dimension *Generic*, the Dimension(s) selected at Template definition are only used as place-holders, allowing different Dimensions to be selected at runtime. When *Generic*, the View can be run and saved for different Dimension levels. Period Based definitions must be *Generic* because field definitions are not allowed in Period Based definitions.

Specific

When *Specific*, the View can be run and saved for only the Dimension selected as part of the definition. This prevents users from running a Template at other Dimension levels.

Template Definition Command Buttons

The Template Definition functions should be completed in the order that they are displayed. (For example, Define **Dimensions** first; **Close** the window last.)

Dimensions

Dimensions opens the Dimension Selection window. If the Template definition is Dimension *Generic*, the selections made during the Template definition are only place-holders for when the definition is being created. At runtime, you specify the Dimension to begin the template retrieval. If the definition is Dimension *Specific*, the selections made during the definition defaults at runtime and cannot be adjusted. See "Selecting Dimension Level(s) for Definition" on page A209 for more information about this function.

Groups

Subtotaling of data can be done using **Groups**. Grouping is based on a subset of the selected Dimensions. Choose the Dimension(s) you want to subtotal from the Selected Dimensions box. Grouping is available only for Regular Template definitions. See "Defining the Grouped by Dimension" on page A211 for more information about this function. For example, a list of all item sales grouped by customer.

Quick layout

The **Quick layout** function, which allows you to quickly define the fields, is available only when creating a new definition. Selections made on the Quick Layout window determine various default values based on the field type selected. Once the Quick Layout function is exited, it cannot be re-entered for the Template definition. See "Defining Quick Layout of Fields" on page A213 for more information about this function.

Fields

Use **Fields** to format the details of your Template; add/change/delete or align columns, color of text, period(s), year(s), and so forth. Information that defaults on the Field detail window depends on the field type selected using the Quick Layout. There are four different field types: Data, Calculation, Description, and Text.

Sequence

Sequence specifies the sorting performed. The implicit sort is performed on the Dimension values. Data can be displayed in ascending or descending order; sorting on the key value, the short description, a field definition within the Dimension, or a calculated column. A sequential sort can be included as part of the definition, or it can be applied at runtime.

Filters

The **Filter** function allows you to define the conditions that the data must satisfy in order to display on the View. Filter criteria eliminates display of unwanted data. A filter can be performed on any data column within the Template Definition. A filter can be included as part of the definition or it can be applied during runtime. For example, you could set up a Template to display data only for Regions with sales greater than \$50,000.

Font

The user controls the font type and size for the full Template display using **Font**. The default is MS Sans Serif, 8 point.

Authority

Authority displays the User Object Authority window where the creator can limit users from editing or deleting Template definitions. If authority is not specified, all users are authorized to the Template. See "Defining Template Authority" on page A254 for more information about this function.

Save / Save As

To save a new definition or an existing one under the same name, click **Save**. **Save As** can be used to save an existing definition under a new name. A dialog box requesting the Save As name displays when **Save As** is clicked. When creating a new definition, **Save As** is disabled. *DBView* does not allow you to save a definition over an existing definition when using the **Save As** feature.

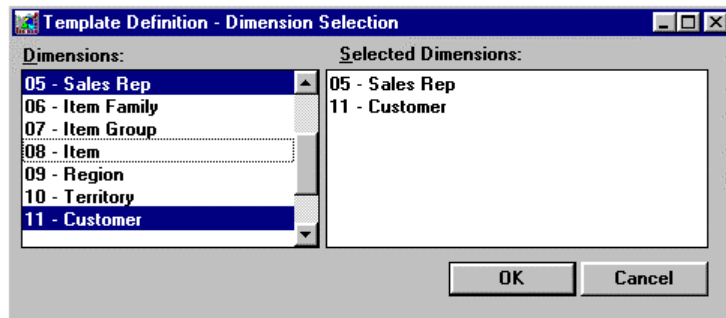
Close

Close exits the Template Definition function and redisplay the initial *DBView* window. A pop-up window asking if you want to save the definition displays when **Close** is clicked prior to saving the definition. This ensures that you do not accidentally exit without saving a definition.

Selecting Dimension Level(s) for Definition

The Dimension that is selected at Template definition is just a place-holder for definition, unless the definition is *Dimension Specific*. Selection is made with a single-click on the required Dimension. Once selected, the level is displayed in the Selected Dimensions box.

The system prompts you to choose two Dimensions when defining a Cross Tab Template. When defining a Period Based Template, this option is not available because Dimensions are not included in a Period Based Template.



Template Definition - Dimension Selection window

To select Dimension(s) during Template definition:

1. Click **Dimensions** on the main Template Definition window.
2. Choose the Dimension(s) to be included in the Template by single clicking on each one while displayed in the Dimensions list box. Once selected, the Dimension displays in the Selected Dimensions list box.
3. If an incorrect Dimension was selected, single-click on the Dimension name while displayed in the Dimensions list box to deselect it.
4. Click **OK** to save your selections and close the window.

Template Definition - Dimension Selection Fields

Dimensions

All valid Dimensions are displayed in the Dimensions list box. A vertical scroll bar allows you to scroll through the complete listing. Choose a level from the list by single clicking on it. A selected level then displays in the Selected Dimensions list box.

If the Template is defined as *Dimension Generic*, the Dimension selected is only a place-holder for the definition. If the Template is defined as *Dimension Specific*, the dimension selected is the only Dimension available for the Template/View. The user cannot modify the Dimension or drill-down to other Dimensions if the Template is *dimension Specific*.

Selected Dimensions

The level(s) selected is listed in the Selected Dimensions list box. To remove a level from the selection, simply click on the level displayed in the Dimensions list box. Once deselected, the level no longer displays in the Selected Dimensions list box.

Template Definition - Dimension Selection Command Buttons

OK

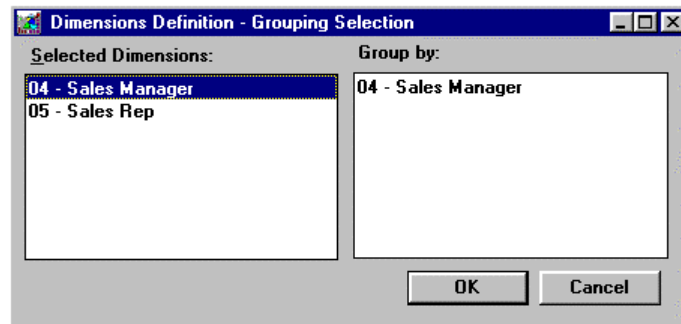
Click **OK** to process the Dimension selection(s) and close the Dimension Selection window.

Cancel

Click **Cancel** to close the Dimension Selection window without saving any entries. The *DBView* Template Definition window redisplay when **Cancel** is clicked.

Defining the Grouped by Dimension

A Template can be defined to include a list of Dimension values subtotaled by another Dimension. For example, a list of all Sales Representatives subtotaled by Sales Managers. This step is not required when defining a Template without grouping or subtotaling.



Dimension Definition - Grouping Selection window

To select a Grouped by Dimension:

1. Click **Groups** on the main Template Definition window.
2. Choose the Dimension to be the grouped by (subtotaled) by single clicking on it while displayed in the Selected Dimensions list box. Once selected, the Dimension displays in the Group by list box.
3. If an incorrect Dimension was selected, single-click on the Dimension name while displayed in the Selected Dimensions list box to deselect it.
4. Click **OK** to save your selections and close the window.

Dimensions Definition - Grouping Selection Fields

Selected Dimensions

The level(s) selected from the Dimension Selection window is listed in the Selected Dimensions list box. To choose the Group by level from the listing, simply click on the level that displays in the Selected Dimensions list box. Once selected, the level displays in the Group by list box.

Group by

The Dimension selected to be the subtotaling level is displayed in the Group by box. To deselect the grouping Dimension, simply click on the level that displays in the Selected Dimensions list box and to remove it from the Group by box.

Dimensions Definition - Grouping Selection Command Buttons

OK

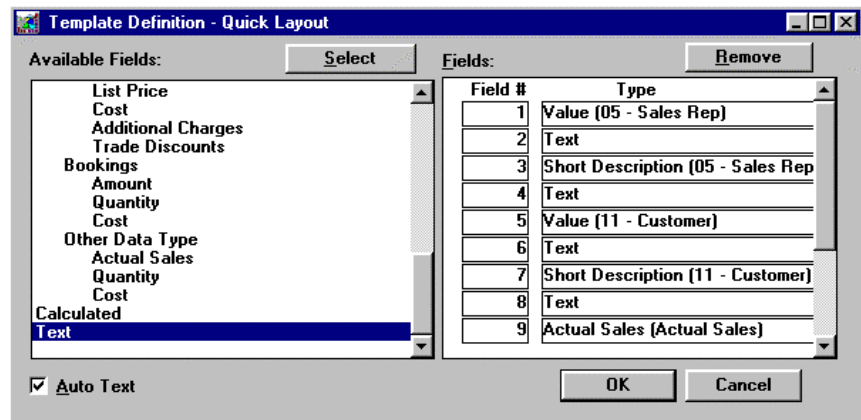
After selecting the subtotaling Dimension, click **OK** to process your selection and redisplay the main Template Definition window.

Cancel

Click **Cancel** to exit the Grouped By function without accepting any entries.

Defining Quick Layout of Fields

The Quick Layout feature determines default field values depending on the field type selected. Once a definition is saved, you must use **Insert** and **Remove** located on the various Field Definition detail windows to add or delete fields because the Quick Layout feature is only available when defining a new Template definition. Once the definition is saved, the **Quick layout** button on the Template Definition window is disabled.



Quick Layout window

To use the Quick Layout feature:

1. Click **Quick layout** on the main Template Definition window.
2. If Auto Text is selected, a text field is automatically inserted after each data, description, or calculation field. The default is selected. Text fields are usually necessary to label each data, calculation, or description fields.
3. Choose the fields to be included in the Template definition by double-clicking on each one while displayed in the Available Fields list box. Once selected, the fields display in the Fields list box.

There are four different field types: Data, Description, Calculation, and Text. The field type selected determines the default Values on the field detail windows.

4. If an incorrect Dimension is selected, double-click on the field while displayed in the Fields list box to deselect it or click **Remove**.
5. Click **OK** to save your selections and close the window.

Warning: Verify that the fields are correct, because once you exit the Quick Layout function, you cannot access it again for this definition. You can, however, insert and remove fields from the definition using command buttons on the field detail windows.

Quick Layout Fields

Available Fields

Choose the data you want to display in your Template from the Available Fields box. Selections are made by double-clicking on the required field or by highlighting it then clicking **Select**. The selected Dimension(s), any associated field definitions, all of the defined categories and values, along with the terms Calculated and Text display in the Available Fields selection box.

Note: Dimension values must be included in the definition if you want the ability to drill-down. The field can be hidden, but it must be included in the definition.

Fields

As fields are selected to be included in the Template, the system sequentially numbers them and they are displayed in the Fields box. Fields can be removed by highlighting them in the Fields box and clicking **Remove**, or by double-clicking on the field while displayed in the Fields list box.

Auto Text

When the Auto Text check box is selected, a text field is automatically inserted when a Category/Value, any Dimension related information, or a calculated field is selected. The default value is ON. A single-click of the left mouse button turns Auto Text ON and OFF. The Auto Text feature makes it easier to identify your column headings because they are automatically inserted after each field selection except for a Text field type.

Quick Layout Command Buttons

Select

Highlight a field displayed in the Available Fields box, then click **Select** to choose it to display as a field in the Template. Once a field type is selected, it displays in the Fields box. Double-clicking on an available field also Selects it.

Remove

Highlight a field displayed in the Fields box, then click **Remove** to deselect it as a field in the Template. Double-clicking on a selected field also Removes it.

OK

After selecting all fields that you want to display in the Template, click **OK** to process your selections and redisplay the main Template Definition window.

Cancel

Click **Cancel** to exit the Quick Layout function without accepting any entries and redisplay the main Template Definition window.

Note: Quick Layout is available for the current definition if **Cancel** is selected instead of **OK**.

Quick Layout Defaults

A Template can be successfully created with all Quick Layout default Values with the following exceptions:

Text Field:

Static Text for non-associated fields (Calculation fields or Summarization fields)

Calculated Field:

Display Mask or Calculation Expression

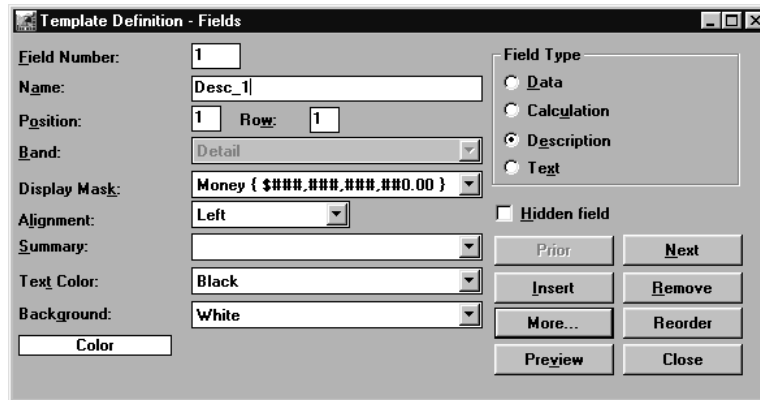
Preview:

Sets the margins of the View

Defining Description Field Types

Information defaults in the Fields windows based on the selections made on the Quick Layout window. There are four field types that can be defined: Description, Data, Calculation, and Text. See the following information to define Description field. For more information about defining a Text field, see "Defining a Text Field" on page A223. For more information about defining a Data field, see "Defining Data Fields" on page A228. And for more information about defining a Calculated field, see "Defining a Calculated Field" on page A232.

This window is accessed using **Fields** on the initial window of Template Definition.



Template Definition - Fields window

If the Quick Layout feature is used, there are no required entries for a description field type because all necessary fields contain default settings. A description field would be the Dimension Value, short/long description, or any static/pickup information defined for the Dimension.

To define a Description field:

1. Click **Fields** on the main Template Definition window.
2. If Quick Layout was used, all of the necessary field values contain default values. Verify that the Description radio button is selected.
3. *{Optional}* Change the field name to be something meaningful to you. Remember that spaces are not supported.
4. Verify that the Detail band is selected.
5. *{Optional}* Description field types default as left aligned. You can change the alignment by selecting right, center, or left from the drop-down selection list.
6. Summarization cannot be performed on a Description field, so leave the Summary field blank.

7. Make the text color and background color anything you like by selecting a value from the drop-down selection list. By default, the first color defined for your implementation is the text color; and the second one defined is the background color.
8. Click **More** to verify the detail behind the description field.

A description field type is anything relating to the Dimension level, such as the Dimension value, short description, or any associated field definitions. The default values are determined by selections made on the Quick Layout window. A Template definition can contain a maximum of 100 fields.

Template Definition - Fields

Field Number

The field number is used for sequencing. You can insert or remove fields from the Template definition by using **Insert** and **Remove**. Verify that the field number reflects such changes. As you scroll through all fields using **Prior** and **Next**, the value in the Field Number field changes. Use the Field Number field to go directly to a field by entering the number and pressing TAB to display the definition.

Name

A field name defaults in the Name field based on the field type, the Dimension level, and the field number. It is recommended that a meaningful, generic name be entered during definition. This is invaluable during runtime modification to the Template and assists during definition of Text fields. The Name field supports alphanumeric entries and underscores for spaces.

Position

Position reflects the physical column location on the template. If the Quick Layout was used, a valid value defaults in this field. Within a Period Based Template, the periods display in the 0 position.

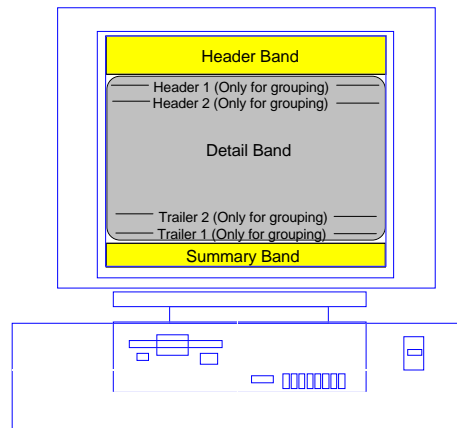
Row

The Row field is used for defining line positioning of data within all field types. The number entered here determines the line that the text or data displays in the cell of the View. There is no limit to the number of rows available within a cell.

Band

Choose the area of the window where the data is to display from the drop-down selection list. The value that defaults is based on the field type selected within Quick Layout. Selection is not available for description or data fields within a Regular Template because those values must be in the detail band.

There are normally three main band types. When grouping, there are additional band types. For every Dimension grouped, two additional bands are introduced: Header N and Trailer N where N is the sequence number of the grouped Dimension.



Header

The Header band is positioned in the top portion of the window and usually contains the column descriptions. Within a Cross Tab Template, the header band contains description, data, and text fields.

Summary

The Summary band is positioned in the bottom portion of the window and contains totaling information if the definition requested any type of summarization.

Detail

The Detail band displays the historical data in the center of the window.

Header N

Additional header bands are only available when subtotaling is being performed by selecting a Grouped By Dimension level within the Template definition.

Trailer N

Additional trailer bands are only available within a Period Based Template spanning multiple years. It contains the subtotals between each year.

Display Mask

Display Masks determine how data is formatted for display (for example, percentage, money, decimals). Display Masks are user-defined and established in the *Administration* application of *MMA*. Valid selections display in the drop-down list box when you click on the down arrow next to the Display Mask field. Data fields can contain default Display Masks. Display Masks labeling calculation fields, however, must be selected at the field detail level of Template definition. Display Mask is not an available field when defining text fields.

Alignment

Select the positioning of the data in the field. Valid selections display in the drop-down list box when you click on the down arrow next to the Alignment field. The default value is based on the field type selected within Quick Layout, but it can be changed. Valid alignment choices are: Center, Left, and Right justified.

Summary

Ability to summarize the data in the fields and display the summarization in the bottom row of the Template display. Valid selections display in the drop-down list box when you click on the down arrow next to the Summary field. Valid choices are: Average, Count, Maximum, Standard Deviation, Sum, and Variance.

Text Color

Choose the text color from the drop-down selection list. Text colors are user-defined using the *Administration* application. *MMA* is supplied with basic colors, but the flexibility exists for you to create and name your own colors. For example: All budget data is to display in red, so name this color Budget.

Background

Choose the background color for each field using the drop-down selection list. The background colors available are the same as those defined by the user for text colors in the *Administration* application of *MMA*. The first color defined defaults as the text color, and the second color defined defaults as the background color.

Field Types

There are four different types of fields that are mutually exclusive of one another. Use the field type radio buttons to identify the field type. If the Quick Layout was completed, these values default for each field selected. Many of the field defaults depend on the **Field Type** selected.

Data

Data downloaded from your *MMA* database. Types of data fields are sales dollars, sales units, budget dollars or units, and so forth. See "Defining Data Fields" on page A228 for more information about this function. Defaults to the Detail band and are right justified.

Calculation

A calculation between data fields. You can add, subtract, multiply, or divide fields or groups of fields to achieve the information you need. See Chapter 10 in this *Systems Administrator Guide* for a complete list of the available functions. Use a Display Mask to identify the calculation as a percent, dollars, and so forth.

Example: Actual Sales Dollars / Units = Average Selling Price. Defaults to the Detail band and are right justified.

Description

Information relating to the Dimension level selected. Types of description fields are Dimension Value, description, and field definitions. See "Defining Description Field Types" on page A216 for more information about this function. Defaults to the Detail band and are left justified.

Text

User defined text usually used to label a row or column of data. Text can be keyed in by the user, or codes can be selected so the "dynamic text" changes as the Dimensions or dates change. See "Defining a Text Field" on page A223 for more information about this function. Defaults to the Header band and are center justified.

Hidden field

If a field is tagged as hidden, it is not displayed on the View. For example, a field is necessary for a calculation but contains data you don't want to display. The Dimension Value field is necessary to drill-down within any View, but you may choose to not display it on the View - make it hidden. The Hidden field is a check box and can be turned ON and OFF by clicking the check box. By default, this field is not selected.

Template Definition Command Buttons

Prior

Click **Prior** to return to a previous field definition. **Prior** is disabled once you reach the first field of the definition.

Next

Click **Next** to maneuver forward through all of the fields. **Next** is disabled once you reach the last field of the definition.

Insert

Use **Insert** to add a field of data when maintaining a definition. The system automatically resequences your fields for you. Therefore, if you add or delete a field, the field number adjusts appropriately. An inserted field is labeled INS in the Name field. The inserted field assumes the same default values as the field following it. When inserting or removing a column within your definition, adjust the Position numbers appropriately.

Remove

Use **Remove** to delete a field when maintaining a definition. The field is deleted without confirmation and the field numbers adjusted appropriately.

More

Use **More** to define additional information for each field. The information maintained on the More window depends on the field type. (For example, Data fields request date range information, Calculation fields request the calculation expression.)

Reorder

Reorder is useful to view all of the data and associated text on one display window. Re-sequence the defined fields using **Reorder**.

Preview

A successful Preview should be performed before saving a definition. A warning message prompting you to do so it displays when **Save** is clicked prior to **Preview**. **Preview** displays a sample of the Template format and actually constructs the Template structure for use at runtime. If a Preview is not performed, formatting is not saved. Columns can be sized during the Preview. Necessary modifications should be made to the Template preview so they are absorbed into the structure of the Template. See "Previewing a Definition" on page A240 for more information about this function.

Close

Clicking **Close** redisplay the initial Template Definition window.

Defining Additional Information for Description Field

The Description Field window is displayed when **More** is selected when defining a description field type. This window allows you to view or maintain the dimension level selected. If the Quick Layout is used, this window can be bypassed because all values default for you. Verify the Dimension selected and the description (Dimension value, description, or field definition).



Description Field window

Description Fields

Dimension

The Dimension level number and associated description selected from the Quick Layout window displays in the Dimension field. You can change your selection to any other Dimension included in the definition using the drop-down selection list. Only the Dimensions selected on the Dimension Selection window during Template definition are available for selection in the window.

Description

The description of the master field selected for the Dimension level displays in the Description field. Master field options are value, short and long description, and any associated pickup field definitions. The valid values are available for selection using the drop-down selection list.

Description Field Command Buttons

OK

Click **OK** to accept your entries and close the Description Field window.

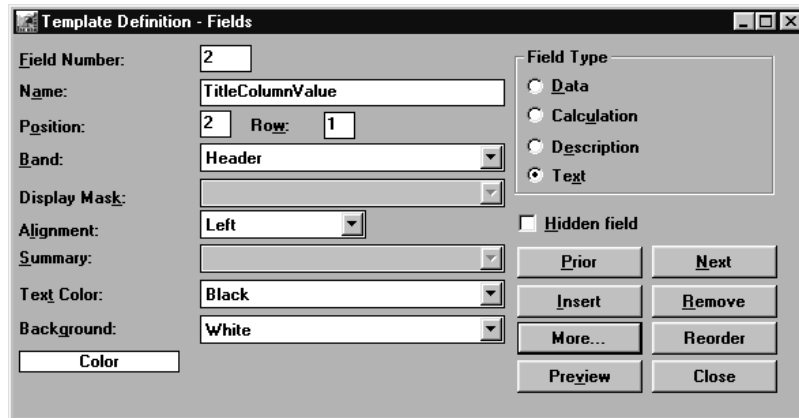
Cancel

Click **Cancel** to close the Description Field window without accepting any entries.

Defining a Text Field

A text field is used to label a row or column of data. Text fields can be static or codes can be used so the text dynamically changes as the requested data changes.

Note how the default values are different for different field types. For example, Text fields default to the Header band and are Center aligned; while Description fields default to the Detail band and are Left justified.



Template Definition - Fields window

To define a Text field:

1. Click Fields on the main Template Definition window. If Quick Layout was used, all of the necessary field values contain default values.
2. Verify that the Text radio button is selected.
3. *{Optional}* Change the field name to be something meaningful to you. Remember that spaces are not supported.

Note: In most cases, the text field is in the Header band. If this is a text field labeling the summarization performed, it could be in the Summary or the Trailer band. If this is a text field labeling a dimension level within a Grouped By Template, it could be in the Header 1 or 2 band.

4. *{Optional}* Text field types default as center aligned. You can change the alignment by selecting either right, center, or left from the drop-down selection list.
5. Summarization cannot be performed on a Text field, so leave this field blank.
6. Make the text color and background color anything you like by selecting a value from the drop-down selection list. By default, the first color defined for your implementation is the text color; and the second one defined is the background color.

7. Click **More** to verify the dynamic codes used to create the text or to key in the static text.

Note: Dynamic codes are not available for Calculated Fields; therefore, static text must be keyed in to label the calculation.

If the Quick Layout was used, all default values can be accepted on the first window for defining a text field type.

The additional window accessed using **More** requires any static text to be entered. When defining a text field that labels a description field, the default values on the second window of the text field can be accepted. *DBView* uses codes for the Dimension number and the Dimension long description as default Values. Dynamic text uses variable codes. When a text field is associated with a data or description field, variable codes can be used so the text is flexible.

Recommendation: Use the text and background colors to make the text fields stand out on your View.

See "Defining Description Field Types" on page A216 for a detailed explanation of each field on the above window.

Creating Dynamic Text

The Text Field window containing information that defaulted from the Quick Layout selections displays when **More** is clicked. Codes default so the text labeling the description field is dynamic. It automatically adjusts when the Dimension level changes during the View retrieval.

The Text Field window is displayed when **More** is clicked from a Text Field definition window.

The screenshot shows a dialog box titled "Text Field \"TitleColumnValue\"". It contains several sections: "Text:" with a text area containing "[HLD]" and a "Default" button; "Evaluate:" with a text area containing "Business Unit" and an "Evaluate" button; "Variables:" with a list of variables including "Dimension", "[HN] Dimension number", "[HSD] Dimension short description", "[HMD] Dimension medium description", and "[HLD] Dimension long description", along with a "Select" button; and "Associated Field:" with a dropdown menu showing "#1 - ColumnValue". At the bottom right are "OK" and "Cancel" buttons.

Text Field window

If the Quick Layout feature was used, there are no required entries for a text field labeling a description because all necessary Values default from Quick Layout.

To define dynamic or static text:

1. From the Template Definition - Fields window, click **More** to verify the dynamic codes used or to key in text.
2. *{Optional}* Adjust the variables used to create the dynamic text.
3. *{Optional}* Key static text into the Text field.
4. Verify that the field association is correct. Remember that if this is a text field labeling a calculation or a summarization, this value should be defined as None, and variable codes cannot be used.
5. *{Optional}* Click **Evaluate** to view the text as it appears within the View.
6. Click **OK** to close the window and accept your entries.

Text Field Definition Fields

Text

The variable's code and any static text should be entered in the Text box. When variable codes are used, the text is dynamic and changes as the Dimension level, category/value, or date change. Press CTRL+ENTER to create a new line of text.

Variables

All valid Dimension variables display in the Variables box. Double-click on the required variable(s) to select them. The codes that display in the Variables box depend on the selected associated field. A variable is the Dimension number and description(s).

Evaluate

The text as it appears on the Template displays in the Evaluate box after **Evaluate** is clicked. The Evaluate box does not allow any entries. If you want to change the text, maintain it in the Text box and then click **Evaluate**.

Associated Field

The field that the text is associated with must be chosen from the drop-down list on the Associated Field. Only Data and Description fields can contain text. If the Quick Layout function was used, the correct Value defaults in this field. Calculated fields use static text because there is no associated field. Template text fields can use the dynamic text function. That means as the variables change, the text automatically changes as well.

Text Field Command Buttons

Default

If the text is changed and you want to return it to the default values, click **Default**. The Description and Data field code defaults display below with the exact default Values shown in bold text:

| | |
|-------------------|--|
| Description field | [HN] Dimension number - [HLD] Dimension long desc. |
| Data field | [DELD] Category/Value Long Description [FPSD] From Period Short Description [FY2] From Year to [TPSD] To Period Short Description [TY2] To Year |

Select

Variables can be selected by highlighting them and clicking **Select** or by double-clicking on the required variable in the Variables box.

Evaluate

Click **Evaluate** to process your entries in the Text box and display the text exactly as it appears on the View during runtime.

OK

Click **OK** to accept your entries and close the Text Field detail window.

Cancel

Click **Cancel** to close the window without saving any entries.

Defining Data Fields

A data field is defined to retrieve data such as the Actual Sales Amount, Budget Sales Amount, and so forth. Data fields retrieve data for a user-specified length of time and can be changed at runtime. For example, if a Template is defined to retrieve Actual Sales for the current month, you can change it during runtime to retrieve data for year-to-date.

Note how the default Values are different for different field types. For example, Data fields default to the Detail band and are right justified, while Text fields default to the Header band and are center aligned; and Description fields default to the Detail band and are left justified. Data fields default a Display Mask based on the category/value selected using Quick Layout.

The screenshot shows the 'Template Definition - Fields' dialog box. The 'Field Number' is 9, 'Name' is 'Data_1', 'Position' is 3, 'Row' is 1, 'Band' is 'Detail', 'Display Mask' is 'Money (#####,###,###,##0.00)', 'Alignment' is 'Right', 'Summary' is 'Sum - Sum', 'Text Color' is 'Black', and 'Background' is 'White'. The 'Field Type' section has 'Data' selected. There are buttons for 'Prior', 'Next', 'Insert', 'Remove', 'More...', 'Reorder', 'Preview', and 'Close'.

Template Definition - Fields window

To define a data field:

1. Click **Fields** on the main Template Definition window.
2. If Quick Layout was used, all of the necessary field values default for you.
3. Verify that the Data radio button is selected.
4. *{Optional}* Change the field name to be something meaningful to you. Remember that spaces are not supported.
5. Verify that the Detail band and the correct Display Mask are selected.
6. *{Optional}* Data field types default as right aligned. You can change the alignment by selecting either right, center, or left from the drop-down selection list.
7. Summarization can be performed by selecting a value from the drop-down selection list.

Note: Choose Sum-Sum from the Summary field to calculate a total to display in the Summary band.

8. *{Optional}* Make the text color and background color anything you like by selecting a value from the drop-down selection list. By default, the first color defined for your implementation is the text color; and the second one defined is the background color.

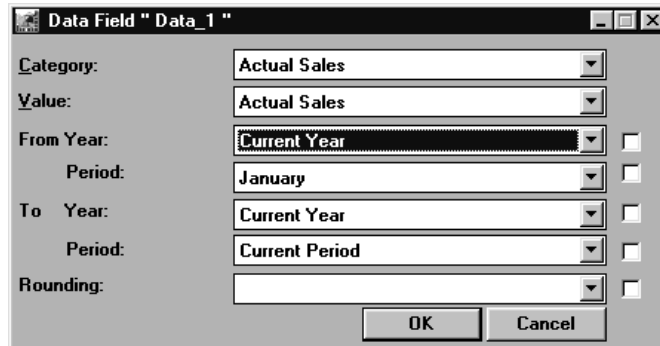
9. Click **More** to verify the detail behind the data field.

See "Defining Description Field Types" on page A216 for a detailed explanation of each field on the above window.

Defining Additional Information for Data Fields

Additional detail can be specified in a Data Field detail window when defining a Data field type. The user can adjust the category and value selected determined by the Quick Layout, the default date range for which to retrieve the data, and any rounding to be performed.

The Data Field window is accessed when **More** is clicked from the Data Field Definition window.



| | | |
|------------|----------------|--------------------------|
| Category: | Actual Sales | <input type="checkbox"/> |
| Value: | Actual Sales | <input type="checkbox"/> |
| From Year: | Current Year | <input type="checkbox"/> |
| Period: | January | <input type="checkbox"/> |
| To Year: | Current Year | <input type="checkbox"/> |
| Period: | Current Period | <input type="checkbox"/> |
| Rounding: | | <input type="checkbox"/> |

Data Field detail window

If Quick Layout is used, there are no required entries for a data field type because all necessary values default from Quick Layout.

To define the detail behind a data field:

1. Click **More** on the Template Definition - Fields window.
2. *{Optional}* Change the category, value, From and To Year and period, and rounding factor by selecting the value from the appropriate drop-down selection list.
3. *{Optional}* If you want the change to be reflected throughout the Template definition, click the propagate check box located to the right of the field.
4. Click **OK** to accept your entries and close the window.

Note: This window displays with additional fields if multi-currency is turned ON. Please refer to the multi-currency chapter, Chapter 8 in this *Systems Administrator Guide*, for definitions of the currency fields.

Data Field Definition Fields

Category/Value

A selection defaults from the selection made on the Quick Layout window. You can change the selection by selecting a valid category and value combination from the drop-down selection list. The category and value combinations are defined in the *Administration* application of *MMA*. If a calculated value has been defined based upon category and value selection, then the calculated function is available in the Template being defined. For example: Sales Amount, Sales Units, Costs, Returns, and so forth.

From Year

The From Year field is used to identify what year to begin the data retrieval. The valid years are available using the drop-down selection list. Years and periods are defined by the system administrator within the *Administration* application of *MMA*. The system defaults the current year and period for the year range, but that can be changed at any time. The check box located immediately to the right of a field is a propagate check box. If you make a selection that you want to default for all following data fields, select the propagate check box. By default, the propagate check box is not selected. For example: Current Year, Previous Year, and Next Year.

From Period

The From Period field is used to identify the Period to begin the data retrieval. The valid Periods are available using the drop-down selection list. For example: Current month, Next month, January, and so forth.

To Year

Identify the year that the year span is to end by selecting the To Year from the drop-down selection list.

To Period

Identify the period that the period span is to end by selecting the To Period from the drop-down selection list.

Rounding

The Rounding Unit identified as the default in the *Administration* application defaults in the Rounding field, but that can be changed if necessary.

Data Field Command Buttons

OK

Click **OK** to save your selections, then close the window.

Cancel

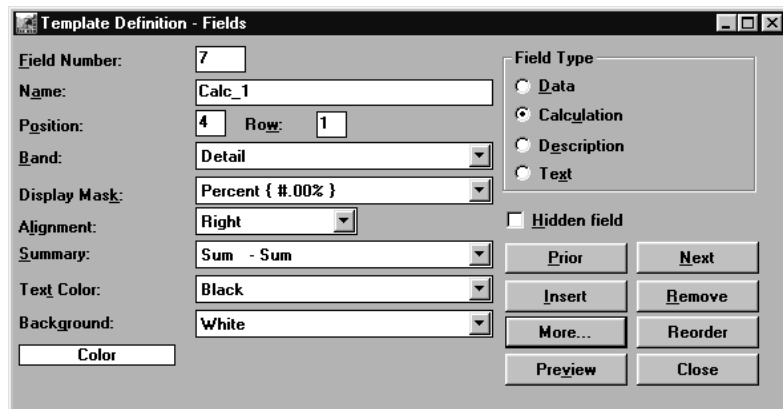
Click **Cancel** to close the Data Field detail window without saving any entries.

Defining a Calculated Field

A calculated field is a user-defined calculation between data fields. Calculated fields can be completely defined as part of the definition, or it can be left undefined until runtime.

The calculation expression is defined in a Calculated Field detail window when **More** is selected. A Display Mask can be attached to further define the calculation. The calculation field does not contain a default Value for the Display Mask because the calculation could be in many different forms. For example: Percentage, Dollar Amount, Quantity.

Note the different default values for the different field types. For example, Calculation fields default to the Detail band and are right justified. See "Defining Data Fields" on page A228 for other default values.



Template Definitions - Fields window

To define a calculated field:

1. Click **Fields** on the main Template Definition window.
2. If Quick Layout was used, all of the necessary field values default for you.
3. Verify that the Calculation radio button is selected.
4. *{Optional}* Change the field name to be something meaningful to you. Remember that spaces are not supported.
5. Verify that the Detail band is selected.
6. *{Optional}* Choose a Display Mask from the drop-down selection list.
7. *{Optional}* Calculation field types default as right aligned. You can change the alignment by selecting either right, center, or left from the drop-down selection list.
8. *{Optional}* Summarization can be performed by selecting a value from the drop-down selection list.

9. *{Optional}* Change the text and background colors to anything you like by selecting a value from the drop-down selection list. By default, the first color defined for your implementation is the text color; and the second one defined is the background color.
10. *{Optional}* Click **More** to define the calculation expression. See "Defining a Calculation Expression" on page A234 for more information.

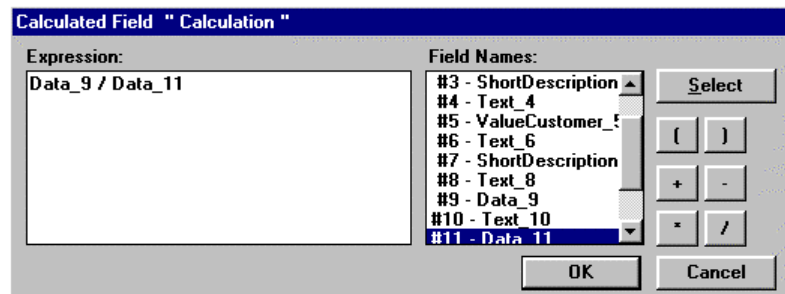
See "Defining Description Field Types" on page A216 for a detailed explanation of each field on the above window.

Defining a Calculation Expression

The calculation expression must be specified on the Calculated Field detail window when defining a Calculation field type. The calculated expression can be defined as part of the definition, or it can be left undefined until runtime. If it is not included in the definition, the column containing the calculation is empty when the Template is run and stays empty until the expression is defined.

A calculated expression is defined by selecting any fields included in the definition and using any of the functions supported by *MMA*. The user can define any calculation using the addition, subtraction, multiplication, division, and grouping functions. It is recommended that field names be given user-recognizable names during definition so they can be easily identified when creating a calculation. A Display Mask can be attached to label the calculation as a percentage, dollar amount, and so forth.

The Calculated Field window is accessed when **More** is clicked from the calculation Template Definition window. The calculation below is Data 9 (Actual Sales Dollars) divided by Data 11 (Actual Sales Units) to calculate the Average Selling Price.



Calculated Field detail window

To define a calculation expression:

1. Click **More** on the Template Definition - Fields window.
2. Choose the calculation expression by double-clicking a field displayed in the Field Names selection list and choosing the appropriate function button.
3. Continue building the expression by selecting fields and functions until the calculation is complete.
4. Click **OK** to accept your calculation and close the window. **OK** also performs a verification of the calculation expression. A message displays if the calculation is invalid or incomplete.

Note: Refer to Chapter 10 in this *Systems Administrator Guide* for an overview of the calculation functions available within *MMA*.

Calculated Field Definition Fields

Expression

You can create your own calculation between database fields using any combination of the functions defined by *MMA*. Refer to the Chapter 10 in this *Systems Administrator Guide* for a complete listing of available calculation functions.

Note: The expression does not need to be included in the Template definition. You could define the calculation at runtime and then save it with the View.

Field Names

The sequential numbers and associated names for each field are displayed in the Field Names selection box. Fields can be included in the calculation by selecting them from the Field Names box and clicking **Select** or by double-clicking on a specific field. The field names are easily recognizable if a user-defined name replaced the default field names.

Calculated Field Definition Command Buttons

Select

Select allows you to select an individual field or a group of fields to include in the calculation expression. The selected field displays in the Expression field. A double-click on the required field name also works as a **Select**.

Calculation Symbols

| Symbol | Function |
|---------|----------------|
| (and) | Grouping |
| + | Addition |
| - | Subtraction |
| * | Multiplication |
| / | Division |

OK

Click **OK** to save your selections and close the Calculated Field detail window.

Cancel

Click **Cancel** to close the Calculated Field detail window without accepting any entries.

Defining Text for a Calculated Field

The text created to label rows and columns within a Template display is different for each field type. Description and Data fields can use variable codes that dynamically adjust for the Template retrieval. Calculated fields cannot use these codes because a calculated field is not associated with any other field. Therefore, text labeling a calculated field is static and cannot be adjusted dynamically.

This is an example of a text field definition labeling a calculated field.

The screenshot shows a dialog box titled "Text Field ' TitleCalc_1 '". It has a "Text:" section with a "Default" button and a text area containing "% of Total Current Period". To the right is an "Evaluate:" section with an "Evaluate" button and a preview area showing the same text. Below the "Text:" section is a "Variables:" section with a "Select" button and a text area that says "Supporting field not selected.". To the right of the "Variables:" section is an "Associated Field:" dropdown menu set to "None". At the bottom right are "OK" and "Cancel" buttons.

Text Field window

To define static text labeling a Calculated field:

1. Click **More** on the Template Definitions - Fields window.
2. Enter the static text in the Text box. If necessary, press CTRL+ENTER to create a new line of text.
3. Verify the Associated Field is None.
4. *{Optional}* Click **Evaluate** to view the text as it appears within the View.
5. Click **OK** to close the window and accept your entries.

Defining Text for the Total Line

Create a Text field to label the summarization performed by *MMA* for the selected data and calculation fields. This Text field cannot use the variable codes because it is not associated with any other field, therefore the text does not adjust dynamically.

Note the band for this text field. The Summary band displays as the last row of the View after the detail.

The screenshot shows the 'Template Definition - Fields' dialog box. The 'Field Number' is 7, 'Name' is 'Grand_Total', 'Position' is 1, 'Row' is 1, 'Band' is 'Summary', 'Display Mask' is blank, 'Alignment' is 'Right', 'Summary' is blank, 'Text Color' is 'Dark Blue', and 'Background' is 'White'. The 'Field Type' section has 'Text' selected. Buttons include 'Prior', 'Next', 'Insert', 'Remove', 'More...', 'Reorder', 'Preview', and 'Close'.

Template Definition - Fields window

To define a Text field in the Summary band:

1. Click **Fields** on the main Template Definition window.
2. Verify that the Text radio button is selected.
3. The Position of this field should be 1 so it displays in the first column. If you are working with a Period Based Template, the Position of this field should be 0.
4. *{Optional}* Change the field name to be something meaningful to you. Remember that spaces are not supported.
5. Since this is a text field labeling the summarization performed, choose the Summary band.
6. *{Optional}* Text field types default as center aligned. You can change the alignment by selecting either right, center, or left from the drop-down selection list.
7. Summarization cannot be performed on a Text field, so leave this field blank.

8. Make the text color and background color anything you like by selecting a value from the drop-down selection list. By default, the first color defined for your implementation is the text color; and the second one defined is the background color.
9. Click **More** to key in the static text.

Defining Text Labeling a Summarization Row

The text created to label rows and columns within a Template display is different for each field type. A text field that labels the summarization performed should display in the last row of the View.

The screenshot shows a dialog box titled "Text Field - GrandTotal". It is divided into four quadrants. The top-left quadrant is labeled "Text:" and contains a text box with "Grand Total" and a "Default" button. The top-right quadrant is labeled "Evaluate:" and contains a text box with "Grand Total" and an "Evaluate" button. The bottom-left quadrant is labeled "Variables:" and contains a text box with "Supporting field not selected." and a "Select" button. The bottom-right quadrant is labeled "Associated Field:" and contains a dropdown menu with "None" selected. At the bottom right of the dialog are "OK" and "Cancel" buttons.

Text Field detail window

To define static text labeling summarized rows of data:

1. Click **More** on the Template Definition - Fields window to key in static text.
2. Enter the static text in the Text box. If necessary, press CTRL+ENTER to create a new line of text.
3. Verify that the Associated Field is None.
4. *{Optional}* Click **Evaluate** to view the text as it appears within the View.
5. Click **OK** to close the window and accept your entries.

Previewing a Definition

The Preview function displays a sample of the Template format and actually constructs the Template structure for use at runtime. The data you see in a Preview is not your MMA data. Column sizing can be saved during the Preview, but not during the runtime of a Template. Necessary modifications should be made to the Template preview so they are absorbed into the structure of the Template. The fields can be deleted, added, or repositioned.

You can re-enter the Preview as many times as needed. Be sure to Preview a definition before you save it, or a warning message displays prompting you to do so. Drill-down is not allowed if a Preview was not completed as part of the Template definition.


| Business Unit | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|---------------|---------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| value-1 | description-1 | \$950.00 | 8.19% | \$1,050.00 | 7.95% |
| value-1 | description-1 | \$550.00 | 4.74% | \$650.00 | 4.92% |
| value-1 | description-1 | \$1,050.00 | 9.05% | \$1,150.00 | 8.71% |
| value-1 | description-1 | \$650.00 | 5.60% | \$750.00 | 5.68% |
| value-1 | description-1 | \$450.00 | 3.88% | \$550.00 | 4.17% |
| value-1 | description-1 | \$850.00 | 7.33% | \$950.00 | 7.20% |
| value-1 | description-1 | \$350.00 | 3.02% | \$450.00 | 3.41% |
| value-1 | description-1 | \$750.00 | 6.47% | \$850.00 | 6.44% |
| value-2 | description-2 | \$1,000.00 | 8.62% | \$1,100.00 | 8.33% |
| value-2 | description-2 | \$900.00 | 7.76% | \$1,000.00 | 7.58% |
| value-2 | description-2 | \$600.00 | 5.17% | \$700.00 | 5.30% |
| value-2 | description-2 | \$800.00 | 6.90% | \$900.00 | 6.82% |
| value-2 | description-2 | \$1,100.00 | 9.48% | \$1,200.00 | 9.09% |
| value-2 | description-2 | \$700.00 | 6.03% | \$800.00 | 5.86% |
| value-2 | description-2 | \$500.00 | 4.31% | \$600.00 | 4.55% |
| value-2 | description-2 | \$400.00 | 3.45% | \$500.00 | 3.79% |
| Total | | \$11,600.00 | 100.00% | \$13,200.00 | 100.00% |

Template Preview window

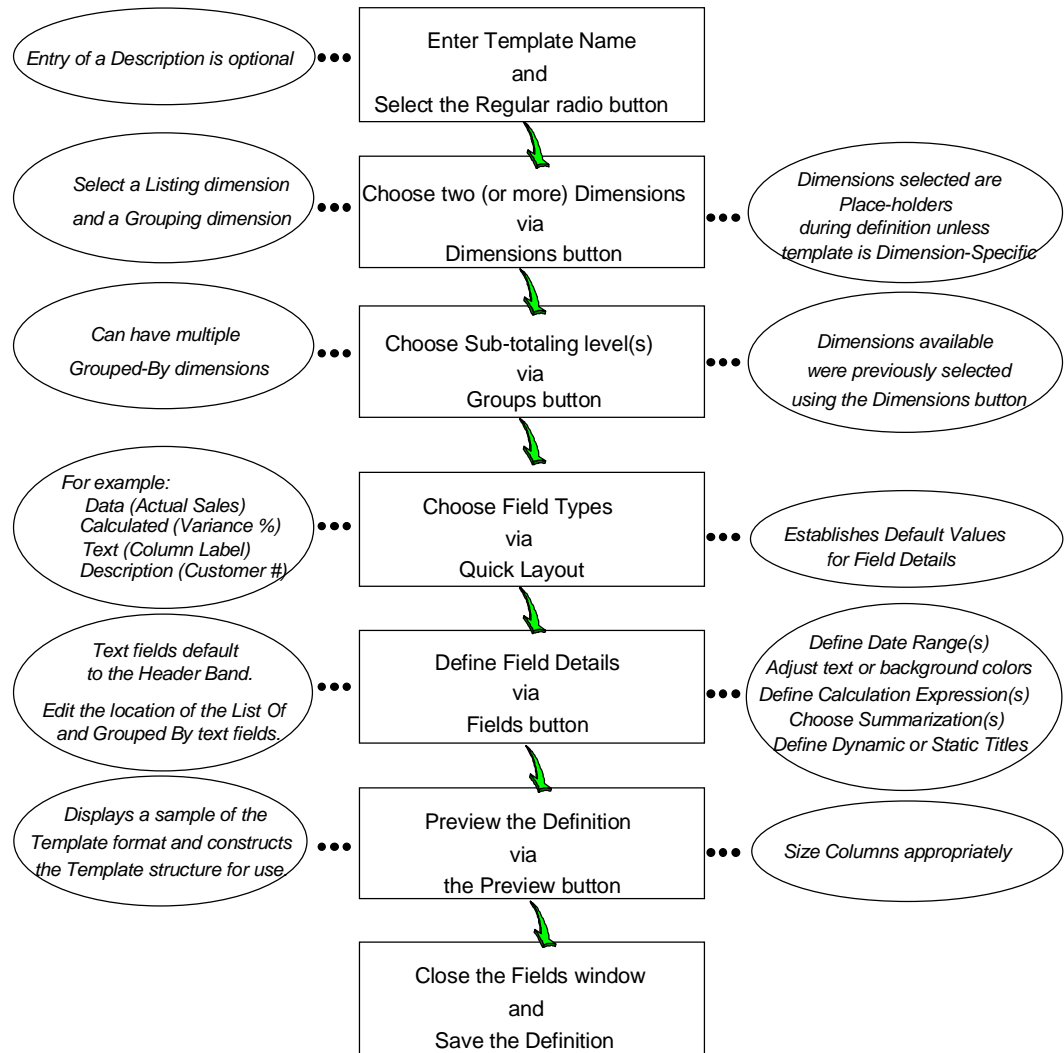
Note: Anytime during the definition, you can **Preview** the display to verify that it is correct. Data displayed while in Preview mode is not the *real* data that is retrieved during runtime of your Template. The calculations, however, are correctly performed within the Preview.

To Preview the structure of a Template definition:

1. Click **Preview** from the main Template Definition - Fields window.
2. *{Optional}* Size the columns appropriately by positioning the mouse cursor on the column line in the header area of the Template. When the cursor becomes a -||- sign, click and drag the cursor to size the column as desired.
3. *{Optional}* Reposition any columns by selecting the column then dragging and dropping it to the required position.

4. *{Optional}* Row Coloring and Traffic Lighting may be assigned to the Template definition during the Preview by selecting the item from the pop-up menu displayed when you right click anywhere on the Preview window. Please refer to Chapter 5 in the *User Guide* or online Help for more information.
5. Make adjustments to the fields within the Template definition and then perform another Preview.
6. Close the Preview window by clicking the close symbol  in the upper right-hand corner of the window.

Grouped By Template Definition Process



Defining a Grouped By Template

A Regular Template definition can contain grouping (or subtotaling) Dimension levels. Each subtotal is originally displayed on one window, but this can be changed using the Toggle New Page feature. Use the vertical scroll bar to maneuver through all subtotaling. Automatic drill-down is not available when the Template contains a grouping Dimension. You can modify the two Dimensions in the View, however, using the Interactive Drill-down Path. After adding the Dimension, request a retrieval.

The screenshot shows the 'Market Monitoring and Analysis' application window. The main data table is titled '4 Data Column / 2 Calculations - ItmFam'. The table is grouped by the 'Region' dimension, with the current view showing 'EURW' (Eastern Europe). The table has columns for Region, Description, ActSales Sep 00, Quantity Sep 00, Variance, ActSales Jan to Sep 00, Quantity Jan to Sep 00, and Variance. The data is summarized by Item Family (MARK, PENC, PENS) and a Total row.

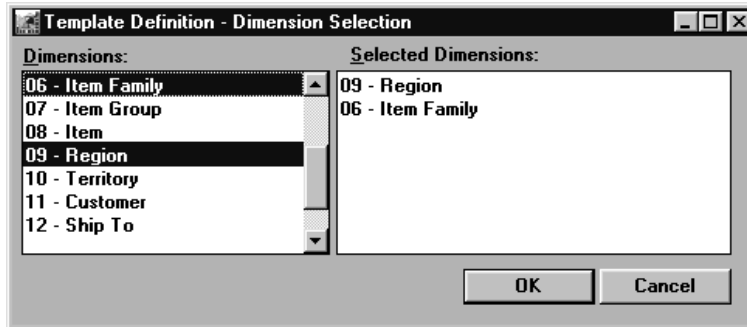
| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|--------|----------------|-----------------|-----------------|--------------|------------------------|------------------------|----------------|
| EURW | Eastern Europe | | | | | | |
| | Item Family | | | | | | |
| | MARK Markers | \$272,897.03 | 18,832 | \$254,065.00 | \$1,173,936.03 | 81,011 | \$1,092,924.34 |
| | PENC Pencils | \$23,302.50 | 14,126 | \$15,176.25 | \$125,023.95 | 60,272 | \$64,751.97 |
| | PENS Pens | \$161,534.67 | 25,352 | \$136,182.60 | \$685,687.01 | 107,374 | \$573,313.47 |
| | Total | \$463,734.20 | 58,310 | \$405,423.84 | \$1,984,646.05 | 248,656 | \$1,735,989.78 |

Grouped by Template displaying Eastern Europe Region

The screenshot shows the same 'Market Monitoring and Analysis' application window, but the data table is now grouped by the 'Region' dimension, showing 'EURW' (Western Europe). The table structure and columns are identical to the previous screenshot, but the data is summarized for the Western Europe region.

| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|--------|----------------|-----------------|-----------------|--------------|------------------------|------------------------|----------------|
| EURW | Western Europe | | | | | | |
| | Item Family | | | | | | |
| | MARK Markers | \$328,541.53 | 23,288 | \$305,243.15 | \$1,407,095.54 | 99,708 | \$1,307,387.15 |
| | PENC Pencils | \$23,539.90 | 11,770 | \$11,769.95 | \$99,670.90 | 49,835 | \$49,835.44 |
| | PENS Pens | \$372,231.76 | 42,326 | \$329,906.04 | \$1,575,652.28 | 178,639 | \$1,397,013.75 |
| | Total | \$724,313.19 | 77,394 | \$646,919.14 | \$3,082,418.72 | 328,182 | \$2,754,236.35 |

Same Grouped by Template after scrolling to the next Region



Dimensions Definition - Grouping Selection window

Template Definition Minimal Entries

To define a Grouped by Template, complete the following steps:

1. On the Template Definition window, enter a name and verify that the Regular Template Type radio button is selected.
2. Choose two Dimensions to be the place-holders during definition using **Dimensions**. One Dimension is the listing Dimension and the other is the subtotaling level. To create the Template pictured on the previous page, Item Family and Region were selected.
3. Choose the subtotaling Dimension using **Groups**. In this example, Region was selected.
4. Choose the field types (for example, data, text, description, calculation) using **Quick layout**.
5. *{Optional}* Choose text fields for the subtotal and grand total rows and then click **OK**.

Note: Once the Quick Layout function is exited, it cannot be re-entered for the Template definition.

6. Make the proper field association for the Grouped by Dimension's text by clicking **Fields** from the Template Definition window.
 - For example, the description field for Grouped by Dimension should be in Row 2 of the Header1 band (Position 1, Row 2), and the text labeling it should be in Row 1 of the Header1 band (Position 1, Row 1).
 - If the text fields are left justified, the display is more attractive.
 - Use the **Next** and **Prior** buttons in the Fields window to view information about each field and if necessary, click **More** to make additional changes to the field. See "Positioning of Text Field Tips" in Chapter 9 of this *Systems Administrator Guide* for more information.
7. *{Optional}* Define date range(s), if other than the default.
8. *{Optional}* For each data field, choose Sum-Sum from the drop-down selection list available on the Summary field to summarize the data within each column.

9. *{Optional}* Define column titles, if other than the default. Key in static text for the subtotal and grand total text fields. They should be in the first or second position of the Trailer 1 and Summary bands respectively.
10. Preview the definition and adjust any column widths using **Preview** on the Fields window.

Note: The Template format for a Grouped by Template needs minor adjustments to get the grouping level to stand out on the display. It is recommended that colors be applied to the text and description fields. You can also apply a coloring scheme to the rows and columns. You can apply row and column coloring while previewing a definition. Right-click during the preview to display a pop-up menu, and then select Row Colors.

The screenshot shows the 'Market Monitoring and Analysis' application window. The main data area displays a table with the following structure and data:

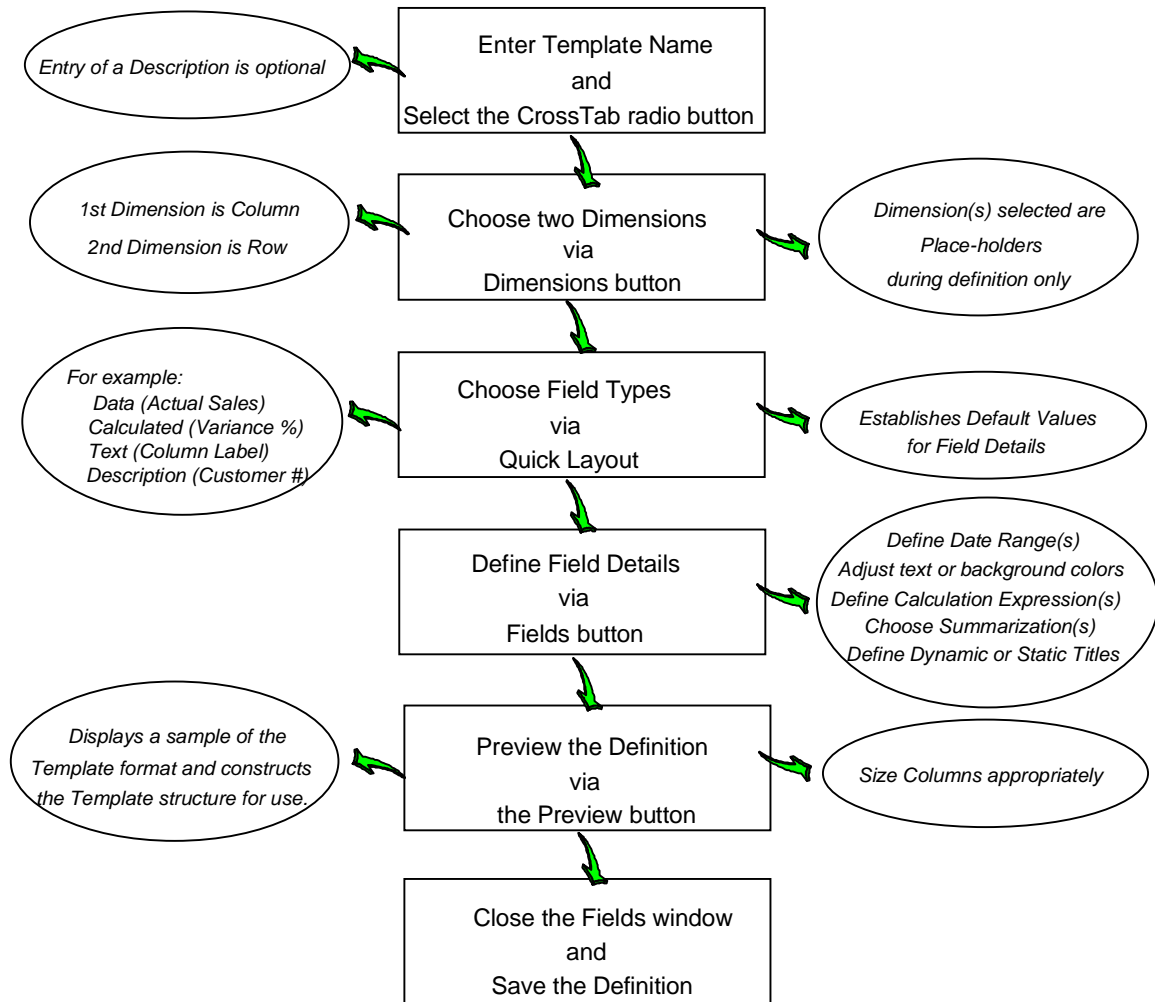
| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|--------------|----------------|--------------------|--------------------|--------------|---------------------------|---------------------------|----------------|
| EURE | Eastern Europe | | | | | | |
| Item Family | Markers | \$272,897.03 | 18,832 | \$254,065.00 | \$1,173,935.09 | 81,011 | \$1,092,924.34 |
| MARK | Pencils | \$29,302.50 | 14,126 | \$15,176.25 | \$125,023.95 | 60,272 | \$64,751.97 |
| PENC | Pens | \$161,534.67 | 25,352 | \$136,182.60 | \$685,687.01 | 107,374 | \$578,313.47 |
| PENS | | | | | | | |
| Total | | \$463,734.20 | 58,310 | \$405,423.84 | \$1,984,646.05 | 248,656 | \$1,735,989.78 |

Grouped by Template with row coloring applied and text colors changed


11. **Close** the Fields window and **Save** the definition.
12. **Close** the Template Definition window. The Template is now available and ready to run.

Note: A Template definition with subtotaling can have up to nine subtotal levels.

Cross Tab Template Definition Process



Defining a Cross Tab Template

A Cross Tab Template displays data for two levels of summarization (Dimensions) in a matrix format. One level is displayed in the rows and the other is displayed in the columns. A Cross Tab Template can be saved as a View. You can reselect the Dimensions or transpose the row and column Dimensions at runtime. The Template format is easily identified within the listing by the descriptive icon displayed to the left of the Template name.  = Cross Tab Template.

Column Dimension: 1st Dimension Selected

Row Dimension: 2nd Dimension Selected

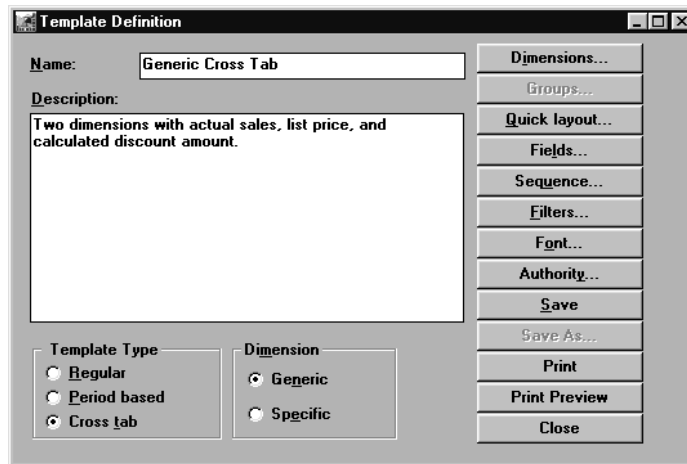
General Sort Filter Top N Traffic Light
 Updated
 Visible
 Filtered
 Summarized
 Hidden
 Mode

| <i>Dimension #2</i> | <i>Dimension #1</i> | <i>Value/Desc.</i> | <i>Category/Value</i> | <i>Category Value</i> |
|---------------------|---------------------|--------------------|-----------------------|-----------------------|
| <i>Value/Desc.</i> | | | Sales \$ | Quantity |
| <i>Value/Desc.</i> | | | Sales \$ | Quantity |
| <i>Value/Desc.</i> | | | Sales \$ | Quantity |

Cross Tab Template diagram

To define a Template with minimal entries:

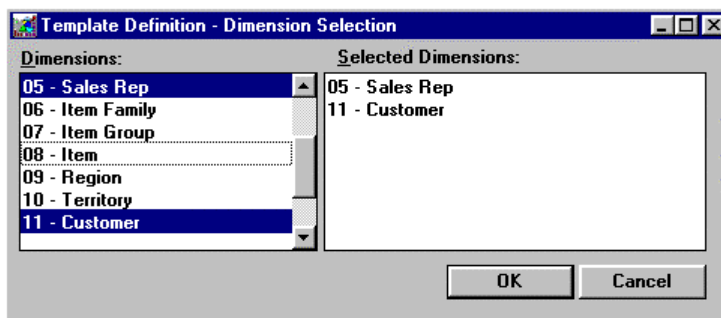
The only difference between defining a Cross Tab and a Regular Template is that TWO Dimensions need to be selected on the Dimension Selection window.



Cross Tab Template Definition window

To define a Cross Tab Template, you must complete the following steps:

1. Select Edit | Template from the main *DBView* window.
2. Click **New** on the Template listing window.
3. Enter a generic name and select the Cross Tab radio button.
4. *{Optional}* Enter a description to further define the Template.
5. *{Optional}* The definition can be Dimension *Generic* or *Specific*. If specific, the Dimensions cannot be changed during runtime. Leave the default value of *Generic* to allow the Dimensions to be modified during runtime.
6. Click **Dimensions** to select two Dimensions as place holders for the definition. A Dimension is selected by single clicking on it while it is displayed in the Dimensions list box. Once selected, it is displayed in the Selected Dimensions list box of the window. Select two Dimensions.



Template Definition - Dimension Selection window

7. Choose the field types (for example, data, text, description, calculation) using **Quick layout**.

Note: Once the Quick Layout function is exited, it cannot be re-entered for the Template definition.

8. *{Optional}* Define date range(s), if other than the default.
9. *{Optional}* Define the calculation expression(s) and their Display Masks, if known. The calculations can be left blank during definition and then defined at runtime.
10. *{Optional}* Define column titles, if other than the default.
11. Preview the definition and adjust any column widths using **Preview** on the Fields window.
12. **Close** the Fields window and **Save** the definition.
13. **Close** the Template Definition window. The Template is now available and ready to run.

Positioning of Dimensions within Cross Tab Templates

Two Dimensions must be included in a Cross Tab Template definition. The first selected Dimension displays across the columns, and the second down the rows. By selecting the Cross tab radio button, the positioning of the dimensions and their associated text defaults differently. You can keep the default values, or you can fine tune the Template to suit your needs.

The first Dimension included in the Template defaults in the Position 2 of the Header band. The text associated with this description field defaults in Position 1 of the Header band.

The 'Template Definition - Fields' dialog box is used to configure a field in a cross-tab template. It includes the following fields and options:

- Field Number:** 1
- Name:** ColumnValue
- Position:** 2, **Row:** 1
- Band:** Header
- Display Mask:** [Dropdown]
- Alignment:** Left
- Summary:** [Dropdown]
- Text Color:** Black
- Background:** White
- Field Type:** Description (selected)
- Hidden field:** [Checkbox]
- Action Buttons:** Prior, Next, Insert, Remove, More..., Preview, Close

The 'Text Field " TitleColumnValue "' dialog box is used to define the text and evaluation for a field. It includes the following fields and options:

- Text:** [HLD]
- Evaluate:** Business Unit
- Variables:** [HN] Dimension number, [HSD] Dimension short description, [HMD] Dimension medium description, [HLD] Dimension long description
- Associated Field:** #1 - ColumnValue
- Action Buttons:** OK, Cancel

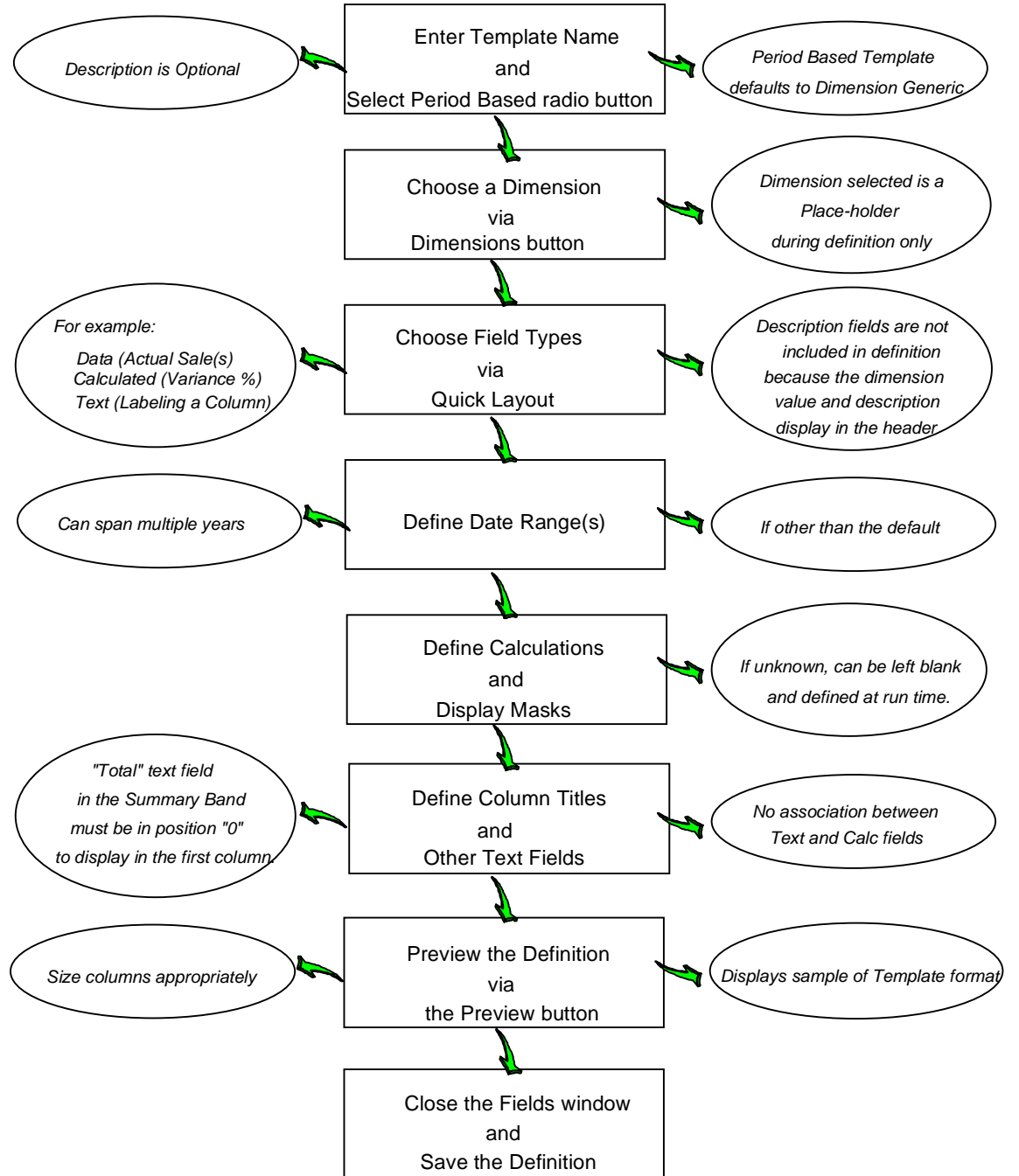
Cross Tab Template Definitions - Field window and Text Field window

To enhance the appearance of a CrossTab View:

Note: These are only suggestions to enhance the CrossTab View.

1. Click **Fields** from the main Template Definition window to edit the default Values for the dimension Values and associated text.
2. Change the color of the Dimension and its associated text that displays in the first row of the header band.
3. Add some special characters to the text field to help identify the Dimension values that display across the columns.
4. Move the text field labeling the row Dimension values from the second to the third row of the Header band. This makes the text easier to recognize.

Period Based Template Definition Process



Defining a Period Based Template

A Period Based Template displays data broken down into user-defined period buckets. The Dimension information is displayed in the header area of the screen. The periods are displayed in the rows of the first column, and the categories/values are in the remaining columns. A Period Based Template can span multiple years with a subtotal after each year and a grand total for all periods across all years.

Data displays for only one Dimension value at a time. You can scroll through all Dimension values by clicking the forward and backward page buttons. All values can be added together to display on one window by clicking the Sum All icon.

Automatic drill-down is not available within a Period Based Template, but you can add a Dimension and specify a refresh to achieve a drill-down.

| Dimension Value and Description | General <input checked="" type="checkbox"/> Sort <input type="checkbox"/> Filter <input type="checkbox"/> Top N <input type="checkbox"/> Traffic Light Updated Visible Filtered Summarized Hidden Mode | | |
|---------------------------------|---|----------------|----------------|
| | Category/Value | Category/Value | Category/Value |
| Period 1 | Sales \$ | Cost \$ | Quantity |
| Period 2 | Sales \$ | Cost \$ | Quantity |
| Period 3 | Sales \$ | Cost \$ | Quantity |

Period Based Template diagram

To define a Period Based Template:

The only differences between defining a Period Based Template and defining a Regular Template are that the detail is not defined for the description fields (Dimension value and description), and Period Based Templates must be Dimension *Generic*. All other areas of definition are the same. Please refer to "Initial Steps of Template Definition" on page 202 for detailed definitions of each window and field involved in the Template creation process.

To define a Period Based Template, complete the following steps:

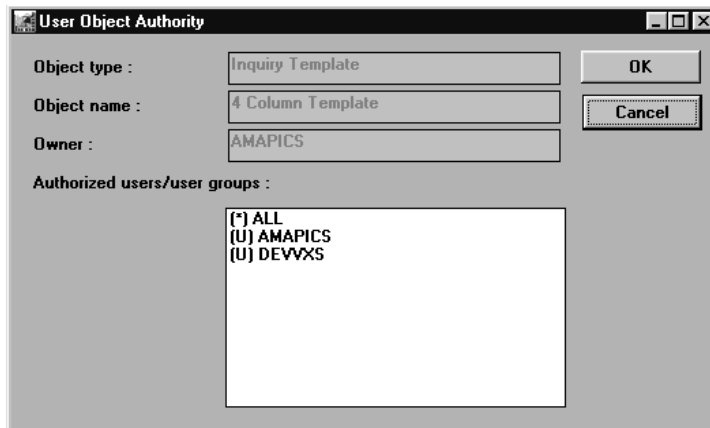
1. Enter a Template name and choose the Period Based radio button.
2. Choose a Dimension to be the place-holder during definition using **Dimensions**.
3. Choose the field types (for example, data, text, calculation) using **Quick layout**. Description fields are not included in the definition of a Period Based Template because the dimension value and description display in the header area of the screen.

Note: Once the Quick Layout function is exited, it is disabled from the Template definition process.

4. *{Optional}* Choose **Fields** to define date range(s), if other than the default.
5. *{Optional}* Choose **Fields** to define the calculation expression(s) and their Display Masks, if known. The calculations can be left blank during definition and then specified at runtime.
6. *{Optional}* Choose **Fields** to define column titles if other than the default. If you are defining a "Total" field, the position must be "0" in a Period Based Template. The position "0" is the first column where the periods are displayed. The text labeling the subtotal should be in the Trailer Band, and the text labeling the grand total should be in the Summary Band.
7. Preview the definition and adjust any column widths using **Preview** on the Fields window.
8. **Close** the Fields window and **Save** the definition.
9. **Close** the Template Definition window, and the Template is available and ready to run.

Defining Template Authority

The User Object Authority window limits users from editing or deleting Template definitions. If the creator of a Template definition does not define authority to it, all users can edit or delete the definition. If the creator goes into the User Object Authority and selects specific users, or *ALL, only those selected can edit or maintain the Template definition.



User Object Authority window

To secure users to Template maintenance or deletion:

1. From the Template Definition window (Edit | Templates), click Authority to access the User Object Authority window.
2. Verify the correct Template name displays in the Object name field. If this is not the correct Template, click **Cancel**. **Close** the Template Definition window and start over by selecting a different Template.
3. The user profile of the person who created the Template defaults in the Owner field. Selecting **OK** at this point allows only the creator to edit or delete the Template.
4. Select specific users or ALL from the listing.
5. Click **OK** to accept your selection(s) and close the window.

User Object Authority Fields

Object Type

The type of object to be secured displays in the Object Type field.

Object Name

The name of the active Template definition displays in the Object Name field. This field is display only. If this is not the correct Template, close the window and select a different one from the Template Listing window.

Owner

The user profile of the person who created the Template.

Authorized Users/User Groups

Users and user groups are defined by the system administrator in the *MMA Administration* application. A listing of all valid users and user groups displays here. All users are authorized to Templates by default. If no selections are made on this window and it is not saved, all users are still able to edit or delete the active Template definition. If no selections are made but **OK** is clicked, only the Template owner can edit or maintain the active Template definition.

User Object Authority Command Buttons

OK

Click **OK** to accept the user authority selection(s) and close the window.

Cancel

Click **Cancel** to return to the Template Definition window without accepting any entries.

Notes

CHAPTER 8 • USING MULTI-CURRENCY

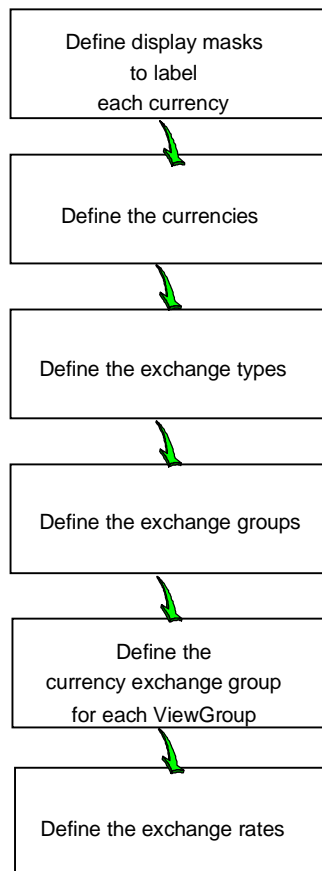
QuickLook

Use this chapter to learn how to:

- Define Currency Display Masks.
- Define Currencies.
- Define Exchange Types.
- Define Exchange Groups.
- Define ViewGroups.
- Define Exchange Rates.
- Define and run a Template/View with Multiple Currencies.

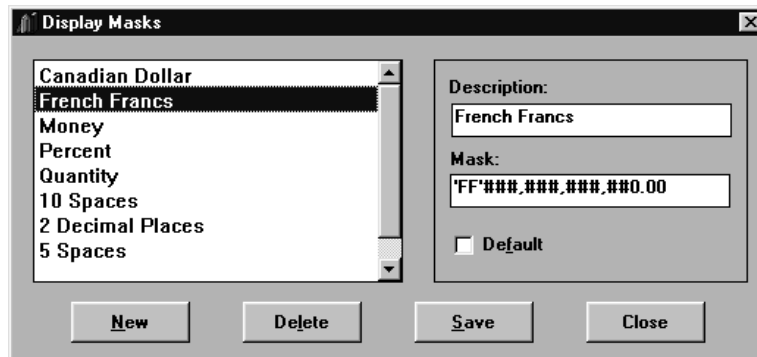
Defining Multiple Currencies Process

MMA supports multiple currencies. You can keep your data in any combination of currencies and view it in any predefined currency. Multi-currency is turned on in the Parameter Master Maintenance window. The parameter MULTICURR should be selected. If you want multi-currency turned on, the value should be "1." Also, each applicable User Profile should be defined with multi-currency enabled (for each User Profile, select the Mult Currency check box in the User Profile window). If you do not want multi-currency functionality, the parameter MULTICURR value in the Parameter Master Maintenance window should be "0." Once the value is changed, click **Save**, then **Close**. Exit the *Administration* application, and then open it again in order for the changes to take effect. For more information on the Parameter Master Maintenance window and setting up User Profiles, see Chapter 4 in this *Systems Administrator Guide*.



Defining a Currency Display Mask

Display Masks are user-defined and are used to enhance the appearance of the data within a View. A default Display Mask is defined for each value, category/value combination, and currency code. There is no limit to the number of Display Masks that can be defined for your system. Display Masks can be added, deleted, and maintained from the Display Masks window.



Display Masks window

To define a currency Display Mask:

1. Choose File | Display Masks.
2. Click **New** to clear all of the fields.
3. Enter the name of this Display Mask in the Description field.
4. Define how the data should display by entering the format in the Mask field.

Note: A hard coded literal could enhance the format of your currency. For example, when creating a Display Mask to label French Francs, enter 'FF' so the money amount is preceded by an FF label.

5. If this Display Mask is to be the default, check the Default check box.
6. Click **Save** to save your entries and then **Close** to close the Display Masks window.

Display Masks Fields

Selection Box

This Selection box displays all current Display Masks. A Display Mask is associated with a data value to enable a default Display Mask at Template definition time. Choose a Display Mask for maintenance, or delete by highlighting it while displayed in the Selection box.

Description

The user-defined Display Mask description displays in this field. The descriptions are maintainable. When **New** is selected, the Description and Mask fields are cleared so a new Display Mask can be created.

Mask

The mask defines how the data displays, whether the field contains numbers, letters, decimal positions, and so forth. Enter a label for the currency in single quotes. For example, when creating a Display Mask to label Canadian Dollars, enter **CND** in single quotes so the money amount is preceded by a CND label.

Default

Select the Default check box if you want the active Display Mask to be initially selected in any drop-down selection list for Display Masks. By default, no Display Masks are selected as the default. *MMA* allows only one Display Mask to be assigned as the default. The default Display Mask should be currency symbol void, as it is used for a currency drill-down.

Display Masks Command Buttons

New

Click **New** to clear the Display Mask fields, which allows you to create a new Display Mask. After creating the new mask, be sure to update the entries by clicking **Save** before closing the window.

Delete

Highlight the Display Mask you want to delete and click **Delete**. A Confirmation window displays as a precautionary measure. Verify your selection, and click **Yes** to confirm deletion.

Save

Click **Save** to accept any new Display Masks you created or any changes made to existing Display Masks.

Close

Click **Close** to close the window. A warning message notifying you to save your changes displays if any edits or entries were made.

Maintaining Currencies

The Currency Code maintenance function is used to enter currency codes within *MMA*. This function is used to identify the currency code found in your data, as well as those currencies in which you need to view your data.

Whether or not you have multi-currency enabled, you must define a currency code in *Administration* for the currency you are using. The Currency function within the Currency menu is enabled even if you have not turned multi-currency on within Parameter Master Maintenance.

When new records are created by the Data Entry functions, the currency code field within those records is filled with the currency information defined in the Maintain Currencies window.



Currency menu when multi-currency has been turned off

Maintain Currencies window

To define a currency:

1. Choose Currency | Currency.
2. Click **New** to clear all of the fields.
3. Enter the name of the currency in the Description field.
4. Enter the currency code mapped to the data file in the Code field.

Note: Currency codes defined through this Maintain Currency function and those defined within transaction records must match. Currency codes are used during record checking for all data warehouse loads, as well as by Data Entry when new records are created. If currency codes in transaction records do not match codes set up through the Maintain Currency function, associated records will not be loaded into or added to the *MMA* data warehouse. See the "Checking Currency Codes" on page A264 for more information.

5. Associate a Display Mask to this currency by selecting one from the drop-down selection list.
6. Choose any rounding to be performed from the drop-down selection list.
7. If this currency is to be the default, check the Default check box.
8. Click **Save** to save your entries and then **Close**.

Maintain Currencies Fields

Selection List

This Selection box displays all current currencies in alphabetic order. Choose a currency for maintenance or deletion by highlighting it while it displays in the Selection box and then clicking the appropriate button.

Description

The user-defined currency description displays in this field. The descriptions are maintainable. When **New** is selected, the fields are cleared so a new currency can be created.

Code

Enter the currency code. Up to three alphanumeric characters may be used to define the currency code.

Display Mask

The Display Mask defines the format of the data, whether the field contains numbers, letters, decimal positions, and so forth. Select your Display Mask labeling the active currency from the drop-down selection list.

Rounding

Select a rounding code from the drop-down selection list. Rounding codes must be previously defined to be available for selection. This is the default rounding code associated with the currency and may be overridden in the Inquiry.

Default

Select the Default check box if you want the active currency to be the default View Currency for Template definition. By default, no currency is selected as the default. *MMA* allows only one currency to be assigned as the default.

Maintain Currencies Command Buttons

New

Click **New** to clear the currency fields and create a new currency. After creating the new currency, be sure to update the entries by clicking **Save** before closing the window.

Delete

Highlight the currency you want to delete and click **Delete**. A delete confirmation window displays as a precautionary measure. Verify your selection and click **Yes** to confirm deletion.

Save

Click **Save** to accept any new currencies you created or any changes made to existing currencies.

Close

Click **Close** to close the Maintain Currencies window. A warning message displays if any edits or entries were made, notifying you to save your changes.

Checking Currency Codes

Currency codes defined in *Administration* through the Maintain Currency function and those defined within transaction records must match. If they do not match, associated records will not be loaded into or added to the *MMA* data warehouse.

For example, when transaction records are loaded into the data warehouse, *MMA* always performs a check for invalid records. This load time check scans for invalid categories, categories/values, Dimensions, years, and currency codes in transaction records. *MMA* performs the check based on the categories, categories/values, Dimensions, years, and currency codes defined in the data warehouse. (The currency code check only occurs if a currency code has been defined.)

Invalid records found during the load time check will not be loaded into the warehouse. Invalid records will be skipped, and the load time process will continue as normal. An invalid record is a record that has no associated data source entry for a transaction record's category, category/value, Dimension, year, or currency code.

If any invalid records are found, a message similar to the example below will display in the load time process log.

Example message: 02-29-10.05.12 Skipped records: 0 DataType, 0 Year, 1000 Currency, 0 Blank.

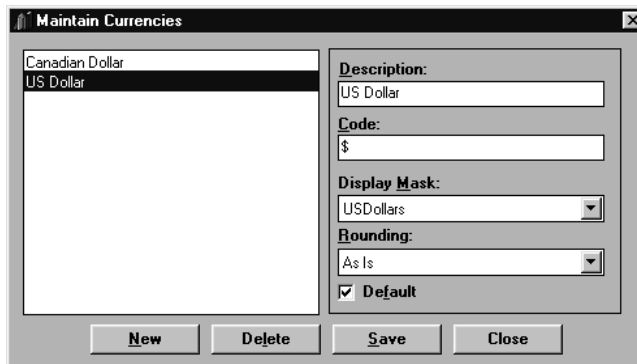
The message indicates how many invalid records were found and thus not loaded (skipped) during load time. In the example above, there were 1,000 invalid currency records that were not loaded.

Using Matching Currency Codes

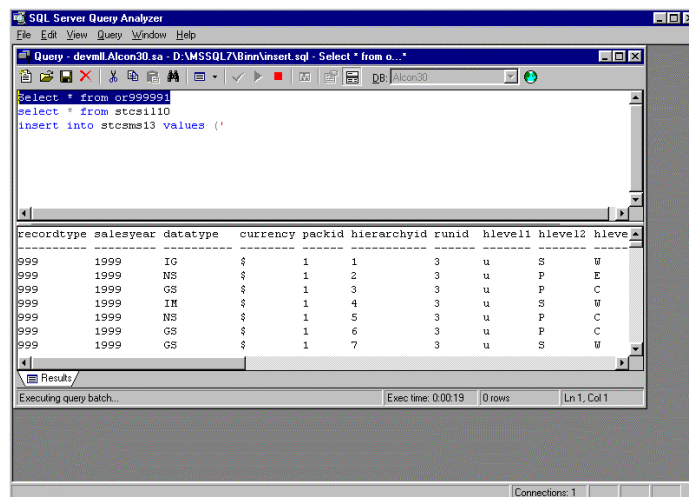
Check that currency codes defined in *Administration* through the Maintain Currency function and those defined within transaction records being loaded, entered, or created for the data warehouse match.

In the example below, the USDollars currency has a code defined as "\$." The code was set up by selecting Currency | Currency in *Administration*. The following SQL retrieval done through *SQL Server Query Analyzer* shows the currency column for the data warehouse is also "\$." The "\$" code was defined on the transaction records that were loaded into the data warehouse. If codes in these two locations do not match, records will not be loaded.

Important: Define your currency code definition to match whatever currency code (even blanks) is currently in your data warehouse. Whichever code is used, make sure they match in the two locations described above.



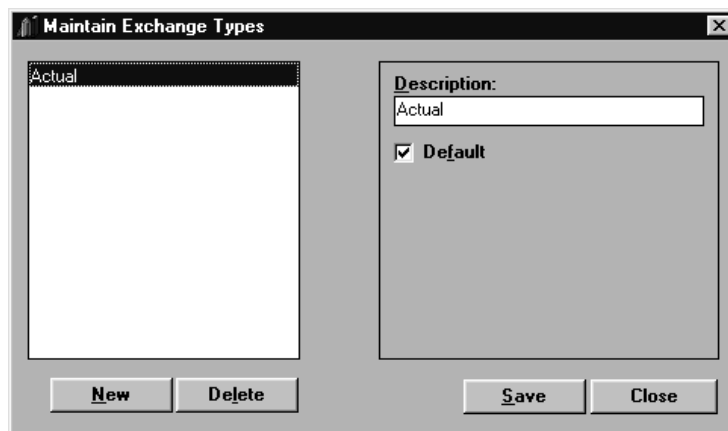
Sample currency code set up through Maintain Currency function



SQL Server Query Analyzer window displaying currency column

Maintaining Exchange Types

The Exchange Type maintenance function is used to define the different types of exchange rates maintained on your system. You may create an exchange rate based on the forecasted exchange rate and also on the actual exchange rate. The Maintain Exchange Types window allows you to maintain multiple sets of exchange rates for a single currency.



Maintain Exchange Types window

To define an exchange rate:

1. Choose Currency | Exchange Types.
2. Click **New** to clear all of the fields.
3. Enter the name of the exchange type in the Description field.
4. If this exchange type is to be the default, check the Default check box.
5. Click **Save** to save your entries, and then click **Close**.

Maintain Exchange Types Fields

Selection List

This Selection box displays all predefined exchange types. An exchange type can be selected for maintenance or deletion by highlighting it while it displays in the Selection list and clicking the appropriate button.

Description

The user-defined exchange type description displays in this field. You can maintain the description. When **New** is selected, the Description field is blanked out so a new exchange type can be created.

Default

Select the Default check box if you want the active exchange type to be the default. By default, no exchange type is selected as the default. *MMA* allows only one exchange type to be assigned as the default.

Maintain Exchange Types Command Buttons

New

Click **New** to clear the exchange type fields, allowing you to create a new exchange type. After creating the new exchange type, be sure to update the entries by clicking **Save** before closing the window.

Delete

Highlight the exchange type you want to delete, then click **Delete**. A delete confirmation window displays as a precautionary measure. Verify your selection and click **Yes** to confirm deletion.

Save

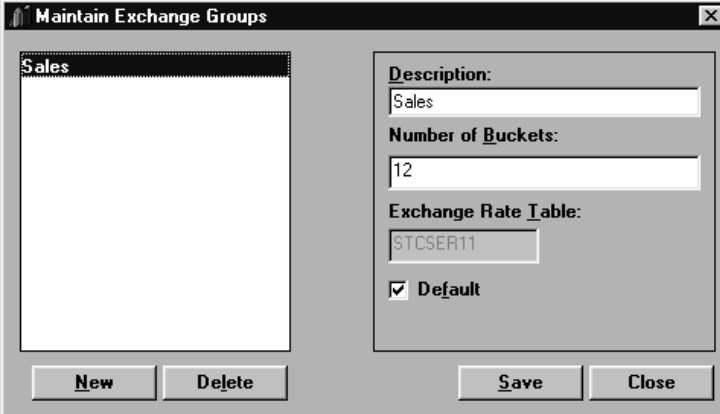
Click **Save** to accept any new exchange types you created or any changes made to existing exchange types.

Close

Click **Close** to close the Maintain Exchange Types window. A warning message displays if any edits or entries were made, notifying you to save your changes.

Maintaining Exchange Groups

The Exchange Group maintenance function is used to define the exchange rate table and the number of buckets in the exchange rate table. There must be a one-to-one relationship between the number of buckets in the data file and the exchange rate table. Data files can contain a variable number of buckets for MMA to maintain in an exchange rate table. Different buckets can be associated with different years and assigned to ViewGroups.



Maintain Exchange Groups window

To define an exchange group:

1. Choose Currency | Exchange Groups.
2. Click **New** to clear all of the fields.
3. Enter the name of exchange group in the Description field.
4. Enter the number of buckets maintained in the exchange rate table in the Number of Buckets field.

Note: The name of the exchange rate table displays in the Exchange Rate Table field. The field is not maintainable because the table will always be STCSER11.

5. If this exchange group is to be the default, check the Default check box.
6. Click **Save** to save your entries and then **Close**.

Maintain Exchange Groups Fields

Selection List

This Selection box displays all predefined exchange groups. An exchange group can be selected for maintenance or deleted by highlighting it and then clicking the appropriate button.

Description

The user-defined exchange group description displays in this field. The descriptions are maintainable. A drop-down selection list is available on the View Groups window containing all predefined exchange groups. When multi-currency is valid, a currency exchange group must be associated with a ViewGroup.

Number of Buckets

Enter the number of buckets maintained in the exchange rate table. There must be a one-to-one relationship between the number of buckets in the data file and the exchange rate table.

Exchange Rate Table

The name of the Exchange Rate Table displays in this field. For more information about the exchange rate tables, see Chapter 3 in the *Technical Reference Manual*.

Default

Select the Default check box if you want the active exchange group to be the default. *MMA* allows only one exchange group to be assigned as the default.

Maintain Exchange Groups Command Buttons

New

Click **New** to clear the exchange group fields, allowing you to create a new exchange group. After creating the new exchange group, be sure to update the entries by clicking **Save** before closing the window.

Delete

Highlight the exchange group you want to delete and click **Delete**. A Confirmation window displays as a precautionary measure. Verify your selection and click **Yes** to confirm deletion.

Save

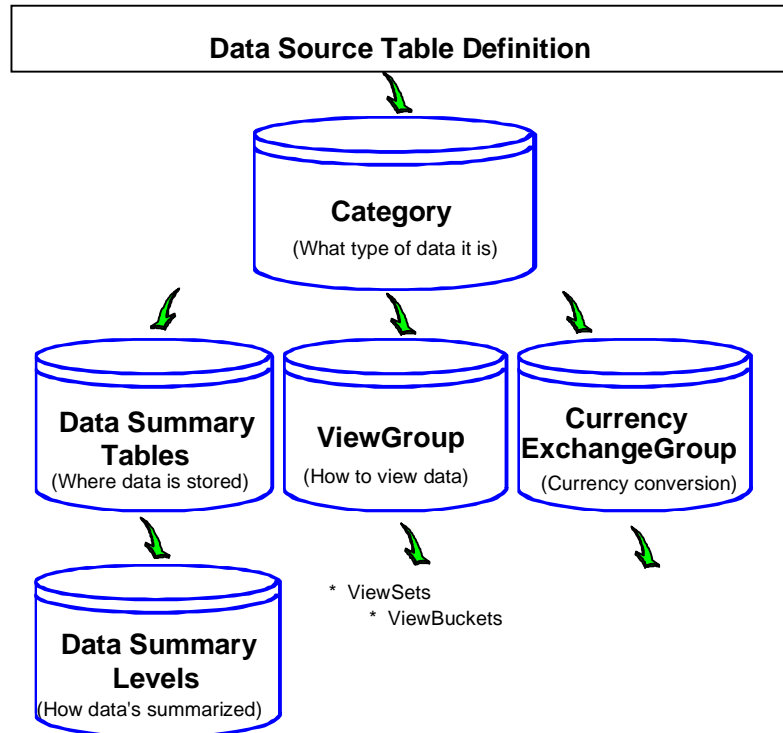
Click **Save** to accept any new exchange groups you created or any changes made to existing exchange groups.

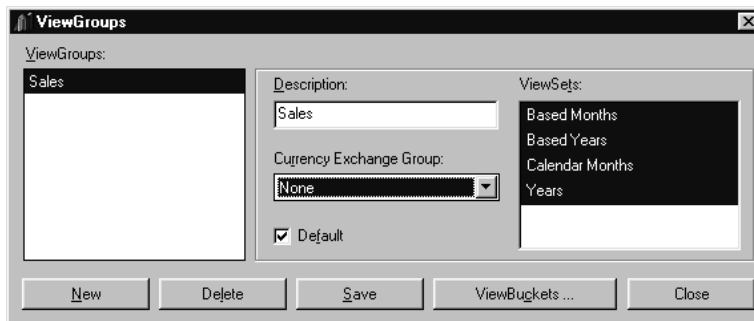
Close

Click **Close** to close the Maintain Exchange Groups window. A warning message displays if any edits or entries were made, notifying you to save your changes.

Defining Currency Exchange View Groups

ViewGroups are used to group together ViewSets and map ViewSetItems to the corresponding data source tables. A ViewGroup is tied to a data source, which determines how the buckets in the identified data source tables are to be interpreted. When using multiple currencies, you must associate a Currency Exchange Group with a ViewGroup to enable correct currency conversions. The ViewGroups are then mapped to a *MMA* data source table.





ViewGroups window

To associate a currency exchange group with a ViewGroup:

1. Choose DataViews | ViewGroups.
2. Highlight the ViewGroup.
3. Select a currency exchange group from the drop-down selection list.
4. Click **Save** to save your entries and then **Close**.

ViewGroups Fields

ViewGroups Listing

All available ViewGroups display in the list box. Selecting a ViewGroup in the list box causes the detail of that ViewGroup to display in the window on the right side.

Description

The description of the ViewGroup should be entered in the Description field. The description can be up to 30 alphanumeric characters. When **New** is clicked, this field is empty so you can create a new ViewGroup.

Currency Exchange Group

Select the currency exchange group from the drop-down selection list. This field only displays if your implementation supports multi-currency.

Default

Select the Default check box if you want the active ViewGroup to be initially selected in any drop-down selection list for ViewGroups. *MMA* allows only one ViewGroup to be assigned as the default.

ViewSets

Displays the ViewSets associated with the selected ViewGroup.

View Groups Command Buttons

New

Click **New** to clear the ViewGroup detail field values, which allows you to create a new ViewGroup. After creating the new ViewGroup, be sure to click **Save** to save your entries.

Delete

Highlight the ViewGroup you want to delete, then click **Delete**. A delete confirmation window displays. Verify your selection and click **Yes** to confirm deletion.

Save

Click **Save** to save your entries and redisplay the ViewGroups window. You must click **Close** to close the active window. If **Close** is clicked prior to **Save**, the system prompts you to save.

ViewBuckets

Click **ViewBuckets** to select the buckets of time for the active ViewGroup.

Close

Click **Close** to close the ViewGroups window. If any modifications were made, the system prompts you to save.

Defining Exchange Rates

The Exchange Rate maintenance function is used to define exchange rates between currencies.

| Period | Rate |
|----------|------|
| January | 1. |
| February | 1. |
| March | 1. |
| April | 1. |
| May | 1. |

Maintain Exchange Rates window

To create an exchange rate:

1. Choose Currency | Exchange Rates.
2. Select an exchange group from the drop-down selection list.
3. Select the exchange type from the drop-down selection list.
4. Enter the four-digit year in the Year field.
5. Select the From and To currency from the drop-down selection lists.
6. If you are going to automatically generate the exchange rate, select the Generated rates check box. With this check box selected, the exchange rates are not maintainable.
7. Select the appropriate rate type.
8. Select the ViewGroup and the ViewSet for the active exchange rate from the drop-down selection lists.

Note: Only one ViewSet can be specified for each ViewGroup selected.

9. Enter the amount in the rate field. Click **Generate** to automatically generate the exchange rates, or choose one of the following.
 - Click **Replicate** to replicate the exchange rates from the current position down.
 - Enter a rate amount for each pre-defined period.
10. Click **Save** to save your entries, and then click **Close**.

Maintain Exchange Rates Fields

Group

Select the Exchange Group from the drop-down selection list. If there is only one Exchange Group defined for your implementation, the drop-down arrow is disabled.

Type

Select the Exchange Type from the drop-down selection list.

Year

Enter the four-digit year for which you are creating the exchange rate.

From Currency

Select the From Currency from the drop-down selection list. This is the currency you are pulling your data from. You are responsible for defining every combination of conversion rates you may need.

To Currency

Select the To Currency from the drop-down selection list. This is the currency you are converting to. The currency identified as the default on the Maintain Currencies window defaults in both the From Currency and To Currency fields.

Generated rates

If the Generate button was used to automatically generate the exchange rates, the Generated rates check box is selected. With this box selected, the exchange rates are not maintainable.

Rate Type

Use the radio buttons to select the appropriate rate type for the active exchange rate. If Multiplier is selected, the From Currency is multiplied by the exchange rate to get the value of the To Currency. If Divider is selected, *MMA* divides the From Currency by the exchange rate to get the value of the To Currency. All rates are stored as a Multiplier in the database. The Divider option is only for ease of use.

View Groups

Select the ViewGroup for the active exchange rate from the drop-down selection list.

View Sets

Select the ViewSet for the active exchange rate from the drop-down selection list. The selection made in this field determines the period formats at which the exchange rates are maintained.

Period/Rate

The period format display is dependent on the ViewSet selected. The exchange rates can be maintained at any predefined period level. For accuracy, it should be defined at the most granular level. (For example, monthly or quarterly). If 12 buckets with months and quarters are defined, it is most accurate to define an exchange rate for each month.

Maintain Exchange Rates Command Buttons

Generate

Click **Generate** to automatically generate the exchange rate. *MMA* informs you of the best conversion path before it processes the exchange rate. Rates that are generated cannot be maintained unless the Generated rates check box is deselected.

Clear

Click **Clear** to clear all of the exchange rates for the active conversion. This allows you to create new exchange rates.

Replicate

Replicate sets the exchange rates from the current position down. For example, if the cursor is positioned at May and you want the exchange rate to be constant at that point, click **Replicate**.

Save

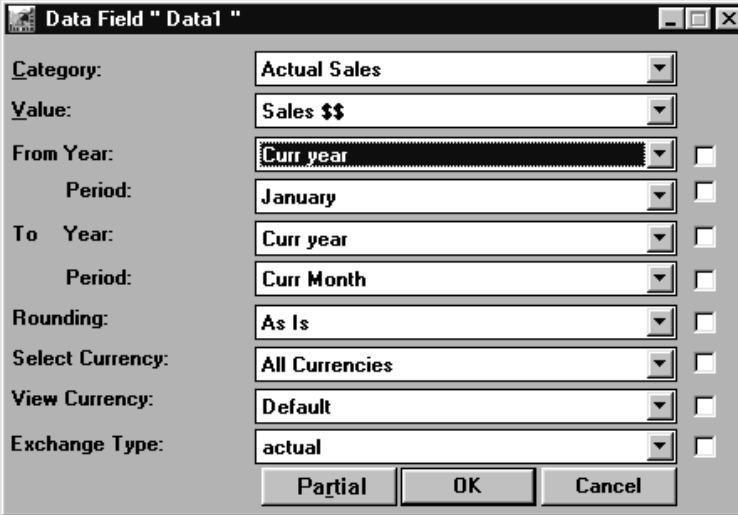
Click **Save** to save any entries you made on the Maintain Exchange Rates window.

Close

Click **Close** to close the window. If edits were made prior to a **Save**, *MMA* warns you that a save needs to be performed.

Defining a Data Field with Multiple Currencies

When using multiple currencies, three additional fields display in the Data Field definition window. You can retrieve data for any combination of currencies and view it in a predefined currency. Refer to the Defining Templates section for a complete definition of all fields on the Data Field window.



The screenshot shows a dialog box titled "Data Field 'Data1'". It contains several fields with drop-down menus and checkboxes:

- Category:** Actual Sales
- Value:** Sales \$\$
- From Year:** Curr year (checkbox)
- Period:** January (checkbox)
- To Year:** Curr year (checkbox)
- Period:** Curr Month (checkbox)
- Rounding:** As Is (checkbox)
- Select Currency:** All Currencies (checkbox)
- View Currency:** Default (checkbox)
- Exchange Type:** actual (checkbox)

At the bottom are three buttons: Partial, OK, and Cancel.

Data Field Definition with multi-currency enabled

To define a data field with multiple currencies:

When defining a data field with multiple currencies, three additional fields display in the window.

1. Select a Select Currency from the drop-down selection list.
2. Select a View Currency from the drop-down selection list.
3. Select an Exchange Type from the drop-down selection list.
4. Click **OK** to save your entries and close the window.

Data Field Currency Fields

Select Currency

Select the currency code for which you want to retrieve data from the drop-down selection list. See "Maintaining Currencies" on page A261 for additional information. You must select a single currency or all currencies. If you specify a single currency code, *MMA* retrieves only those data records with that currency. If you specify all currencies, all records, regardless of the currency, are selected. All Currencies is the default.

Note: You must define all exchange rates in order to use the All Currencies option.

View Currency

Select the currency that you want the data to display in from the drop-down selection list. All valid currencies are available for selection.

Note: For example, you may require US Dollars, British Pounds, and Canadian Dollars in your database, but you want to view all data in Canadian Dollars for this field. Choose **All Currencies** for the Select Currency and **Canadian Dollars** for the View Currency.

Exchange Type

Choose the Exchange Type from the drop-down selection list. See "Maintaining Exchange Types" on page A266 for additional information regarding exchange types.

Data Field Command Buttons

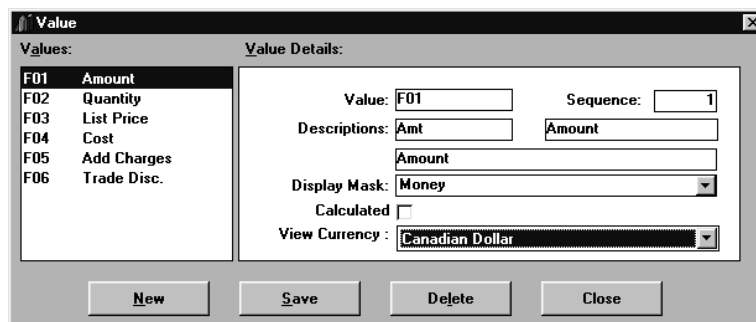
Partial/Full

When multi-currency is turned ON, an extra command button displays. It displays as **Partial** when the three additional fields display. If you don't want to view the Exchange Type, Select Currency, and View Currency fields, click **Partial** and the button name changes to **Full**.

Defining a Value in a Multiple Currency Environment

When you select to run multi-currency, the View Currency field displays in the Value window. This field indicates the categories that are or are not available for currency conversion and defines the default View Currency for the values. For example, values that contain unit amounts typically would contain a view currency of No Currency Conversion.

Note: Values are pre-defined for *MMA* customers but calculated values may still be set up by *MMA* customers. See Chapter 4 in this *Systems Administrator Guide* for more information about values. Also note that in a multi-currency environment, a valid view currency is associated with each value.



The screenshot shows a window titled "Value" with a close button (X) in the top right corner. The window is divided into two main sections: "Values:" on the left and "Value Details:" on the right. The "Values:" section contains a list of values with their corresponding descriptions:

| Value | Description |
|-------|-------------|
| F01 | Amount |
| F02 | Quantity |
| F03 | List Price |
| F04 | Cost |
| F05 | Add Charges |
| F06 | Trade Disc. |

The "Value Details:" section contains the following fields and controls:

- Value: F01
- Sequence: 1
- Descriptions: Amt, Amount
- Amount: Amount
- Display Mask: Money (dropdown menu)
- Calculated:
- View Currency: Canadian Dollar (dropdown menu)

At the bottom of the window, there are four buttons: New, Save, Delete, and Close.

Value window

To access the Values window:

1. Choose File | Values from the *Administration* main window.
2. Click **Close** to exit this window.

Value Fields and Command Buttons

Descriptions of Value window fields and command buttons appear in the "Values" section in Chapter 4 of in this *Systems Administrator Guide*.

Defining a Category in a Multiple Currency Environment

The View Currency field in the Category Maintenance function is used to determine which Categories are available for currency conversion and sets the default currency. For example, values that contain unit amounts typically would contain a view currency of No Currency Conversion.

Note: Categories are pre-defined for *MMA* customers, but customers can create calculated categories. See Chapter 4 in this *Systems Administrator Guide* for more information about categories. Also note that in a multi-currency environment, a valid View currency is associated with each category/value for *MMA* customers, as required by the application.

| Category | Description |
|----------|-------------|
| AS | ActSls |
| BK | Booking |
| OT | Other type |

| Selected Values |
|-----------------|
| F01 Amount |
| F02 Quantity |
| F03 List Price |
| F04 Cost |
| F05 Add Charges |
| F06 Trade Disc. |

Category Definition window

To access the Category Maintenance window:

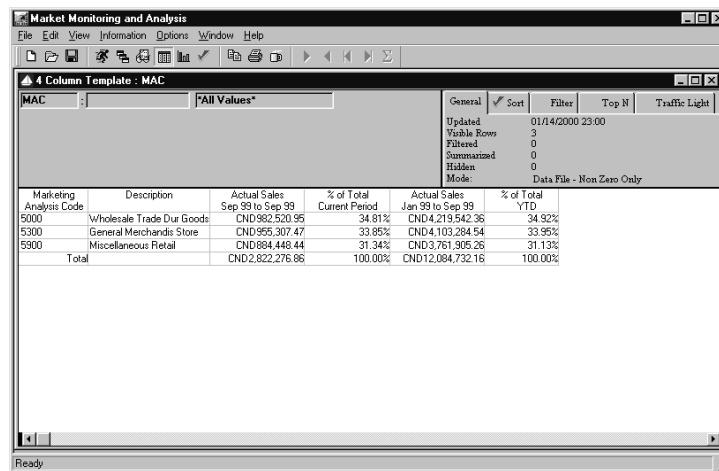
1. Choose File | Categories from the *Administration* main window.
2. Click **Close** to exit the window.

Category Maintenance Fields and Command Buttons

Descriptions of Category Maintenance window fields and command buttons appear in the "Categories" section in Chapter 4 of in this *Systems Administrator Guide*.

Running a View with Multiple Currencies

With multi-currency turned ON, you can view your data in any combination of currencies. The first column can display the data in US Dollars, the next column can display the data in British Pounds, and so forth. Display Masks are used to enhance the appearance of the data within a View. The View and selected currencies can be changed on the fly during runtime.



The screenshot shows the 'Market Monitoring and Analysis' application window. The main window title is '4 Column Template - MAC'. Below the title bar, there is a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. The main area displays a data table with columns for Marketing Analysis Code, Description, Actual Sales (Sep 99 to Sep 99), % of Total Current Period, Actual Sales (Jan 99 to Sep 99), and % of Total YTD. The data is displayed in Canadian Dollars (CND). A 'General' tab is active, showing statistics like 'Updated: 01/14/2000 23:00', 'Visible Rows: 3', 'Filtered: 0', 'Summarized: 0', and 'Hidden: 0'. The status bar at the bottom indicates 'Ready'.

| Marketing Analysis Code | Description | Actual Sales Sep 99 to Sep 99 | % of Total Current Period | Actual Sales Jan 99 to Sep 99 | % of Total YTD |
|-------------------------|---------------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| 5000 | Wholesale Trade Dur Goods | CND982,520.95 | 34.81% | CND4,219,542.36 | 34.92% |
| 5300 | General Merchandise Store | CND955,307.47 | 33.85% | CND4,103,284.54 | 33.95% |
| 5900 | Miscellaneous Retail | CND884,448.44 | 31.34% | CND3,761,905.26 | 31.13% |
| Total | | CND2,822,276.86 | 100.00% | CND12,084,732.16 | 100.00% |

View with multi-currency turned on and Canadian dollars displayed

To run a View with multiple currencies:

1. Multi-currency must be turned on in the Parameter Master Maintenance and User Profile windows. See Chapter 4 in this *Systems Administrator Guide* for more information about those windows and turning on multi-currency.
2. An Exchange Type, Select Currency, and View Currency must be selected for the data field(s) within the Template. Double-click a data column to display the Data Field detail window and make your adjustments accordingly.
 - The Select Currency determines which records are selected for display.
 - The View Currency and Exchange Type determine which exchange rate is used.
3. *{Optional}* Associate a Display Mask with the currency to clearly indicate the type of currency the data is being displayed as (for example, set up a Display Mask so that the letters "CND" display before Canadian Dollar values. To access the Display Masks window, right-click a cell in a data column and select Display Mask from the pop-up menu that displays. The Display Mask must first be set up in *Administration*. For details about setting up a Display Mask, see "Defining a Currency Display Mask" on page A259.

CHAPTER 9 • MMA TIPS

QuickLook

Use this chapter to learn how to:

- Reposition the columns within a View.
- Use the propagate check boxes to change time periods.
- Duplicate calculation/filter expressions.
- Position text labeling a total line.
- Position Grouped by column headings.
- Add a total line to a View.
- Define a % of total calculation.
- Define a forecast amount using data columns.
- Define a total calculation for a calculated column.
- Define a calculation for cumulative percent of total.
- Define a calculation for running total.
- Define a calculation for subtotaling.
- Rank values.
- Display the number of rows retrieved in the Summary band.
- Display key values beginning with a specific letter.
- Display Dimension descriptions with a certain string of characters.

Miscellaneous MMA Tips

Every now and then you may want to do something out of the ordinary when defining a Template or running a View. This section explains quick answers to frequently asked questions.

To reposition columns:

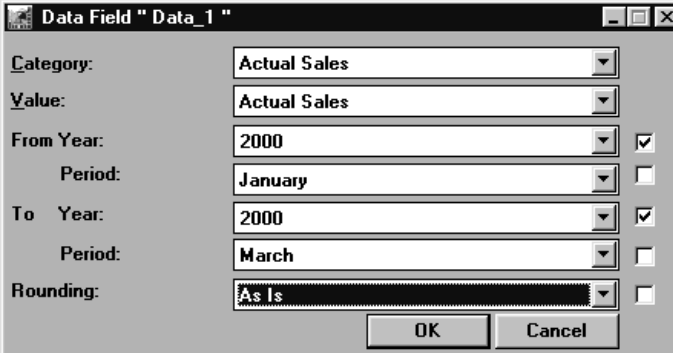
When **Previewing** a Template Definition, it appears that you can click and drag a column into a new position and it is saved as part of the active definition. This is true, but the next time you Preview the column re-positioning is lost. If you want to change the position of a column after Previewing it, you should do it as part of the definition.

- The Position field on the Template Definition window controls the column positioning of the View.
- When a position is adjusted, verify that all the fields before and after are manually adjusted as well.
- MMA does not automatically re-sequence the positioning.

To change the time periods using the Propagate check boxes:

You can change the time periods within an active View that contains several Data fields by making just one entry.

1. Double-click in the header band of the first data field that needs to be changed to access the Data Field detail window.
2. Change the From Year, From Period, To Year, and/or To Period and select the Propagate check box located to the immediate right of the field.
3. The adjusted date is reflected through all data fields.



| | | |
|------------|--------------|-------------------------------------|
| Category: | Actual Sales | |
| Value: | Actual Sales | |
| From Year: | 2000 | <input checked="" type="checkbox"/> |
| Period: | January | <input type="checkbox"/> |
| To Year: | 2000 | <input checked="" type="checkbox"/> |
| Period: | March | <input type="checkbox"/> |
| Rounding: | As Is | <input type="checkbox"/> |

Data Field detail window

To easily duplicate calculation/filter expressions:

To save you from re-keying a commonly used expression, highlight the calculation or filter expression, and press CTRL+C to copy it to the Clipboard. Go to the field where you want to duplicate the expression and press CTRL+V to paste it.

Positioning of Text Fields Tips

To correctly position text labeling totals in Period Based Template/View:

Follow the steps for creating a Total label except the Position should be 0. This way the static text created displays in the same column as the user-defined periods.

To position Grouped by column headings:

By default, text fields default in the Header band. Because of this default, the text labeling the Grouped by Dimension (the Dimension the Template is grouped by) is overwritten by the List of Dimension (the other Dimension in a Grouped by Template).

Note: For information about setting up a Grouped by Template, see Chapter 7 in this *Systems Administrator Guide*.

To get both text fields to display, make the adjustment as follows:

1. Make sure the description field for the Grouped by Dimension is in Row 2 of the Header1 band (Position 1, Row 2), and the text field for it is in Row 1 of the Header1 band (Position 1, Row 1).
2. Make sure the text field for the List of Dimension is in Row 3 of the Header1 band (Position 1, Row 3).
3. Make sure a text field for the total is set up. It should be placed in Position 1 or 2 in the Trailer1 band.
4. The List of/Grouped by Dimensions in a Template can be further customized so related values display more effectively in a View. See the following example with the instructions on the steps taken to achieve the View on the next page.
5. Steps 1 through 3 above were followed during the set up of the Template used for this example.
6. This text was set up to display in red:
 - Data for the Grouped by Dimension (Region) value and short description; text was also centered.
 - Text labeling data for the Grouped by Dimension value and description.
 - Text for the Total valued text. The text was also positioned in the Trailer1 band and right justified.
 - Text labeling the calculated columns.

7. Text labeling the List of Dimension description was set up as a hidden field on Position 2, Row 3. Hidden fields are part of the Template definition but display as blank cells in the View that displays once the Template is run.
8. The Template was ran and then the style bar was used to underline the List of Dimension's title and the text labeling the Header1 band of all the columns. Text in red was also bolded.

| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|--------------------|----------------|--------------------|--------------------|--------------|---------------------------|---------------------------|----------------|
| EURE | Eastern Europe | | | | | | |
| Item Family | | | | | | | |
| MARK | Markers | \$272,897.03 | 18,832 | \$254,065.00 | \$1,173,935.09 | 81,011 | \$1,092,924.34 |
| PENC | Pencils | \$29,302.50 | 14,126 | \$15,176.25 | \$125,023.95 | 60,272 | \$64,751.97 |
| PENS | Pens | \$181,534.67 | 25,352 | \$136,182.60 | \$685,687.01 | 107,374 | \$578,313.47 |
| Total | | \$463,734.20 | 58,310 | \$405,423.84 | \$1,984,646.05 | 248,656 | \$1,735,989.78 |

Customized Grouped by View

Defining Special Calculations

To add a total line to a View:

The data can be summarized and text labeling the data can easily be created by completing the following steps:

1. When defining a Template, choose *Sum-Sum* from the drop-down selection list in the Summary field of the data and calculation fields to be summarized.
2. Create a text field to contain the static text (for example, totals). The text field should be in Position 1 and not associated with any other fields.
3. Average, Count Max, and Min are also available for the Total Line.

Template Definition - Fields

Field Number: 1

Name: Data1

Position: 1 Row: 1

Band: Detail

Display Mask: Money (Red) No Dec (\$#,###,##0)

Alignment: Right

Summary: Sum - Sum

Text Color: Black

Background: White

Field Type: Data Calculation Description Text

Hidden field

Prior Next

Insert Remove

More... Reorder

Preview Close

Summary performed on Data Field

To define a % of total calculation:

The percent of total can easily display by creating the following expression for the calculated field:

field "x" / sum (field "x" for all)

Calculated Field " Calc1 "

Expression: Data1 / Data2

Field Names: #1 - Data1 #2 - Data1Hdr #3 - Data2 #4 - Data2Hdr #5 - Calc1 #6 - Calc1Hdr #7 - Data3 #8 - Data3Hdr #9 - Data4

Summary:

Select { } + - * /

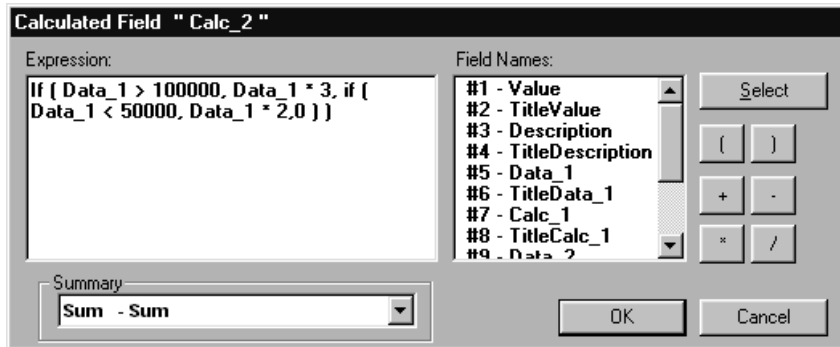
OK Cancel

Percent of total calculation expression

To define a forecast amount using data columns:

For forecasting information, an existing data field could be used in an 'If/Then' calculation to create a forecast amount:

```
If(Data field > dollar amount, Data field  
*3, if (Data field > dollar amount, Data  
field *2,0))
```



Forecast amount calculation expression

Note: The above calculation will create a column to be used as forecasts. If the data field is greater than \$100,000, the forecasted amount will be the historical data amount multiplied by 3. If the data field is less than \$50,000, the forecasted amount will be the historical data amount multiplied by 2.

To define a total calculation for a calculated column:

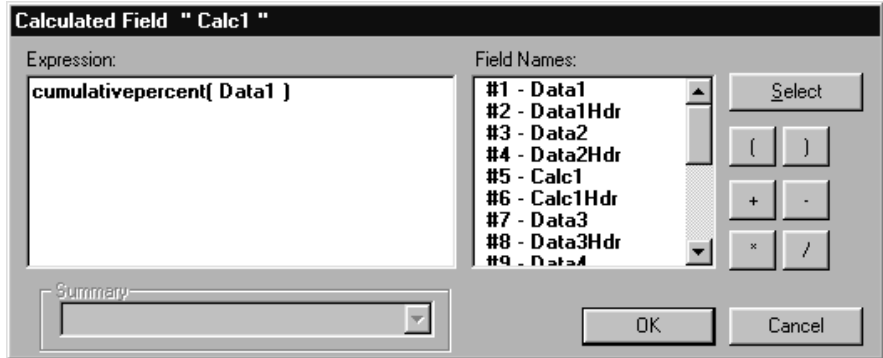
Create a calculated field and place it in the Summary band. Duplicate the calculated expression with "Sum for all" for each field included in the calculation.

```
Achievement %  
Data Column Calculation = Data 1/Data 2  
Column Total = Sum(Data 1 for all) /  
Sum(Data 2 for all)
```

To define a calculation for a cumulative percent of total:

A cumulative total can display by creating the following expression for the calculated field:

`cumulativepercent(field "x")`

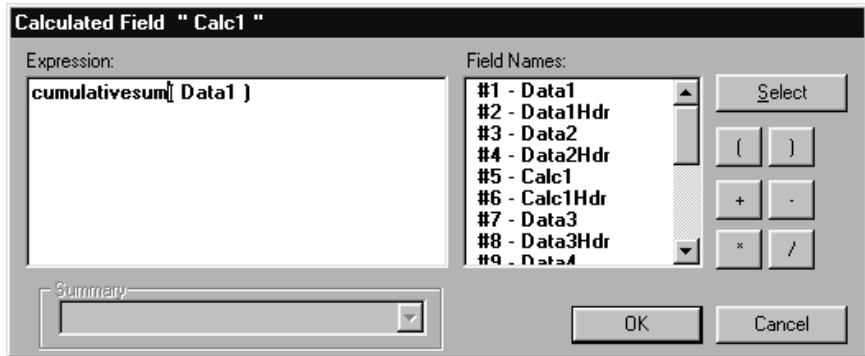


Cumulative percent of total calculation expression

To define a calculation for a running total:

A running total can display by creating the following expression for the calculated field:

`cumulativesum(field "x")`

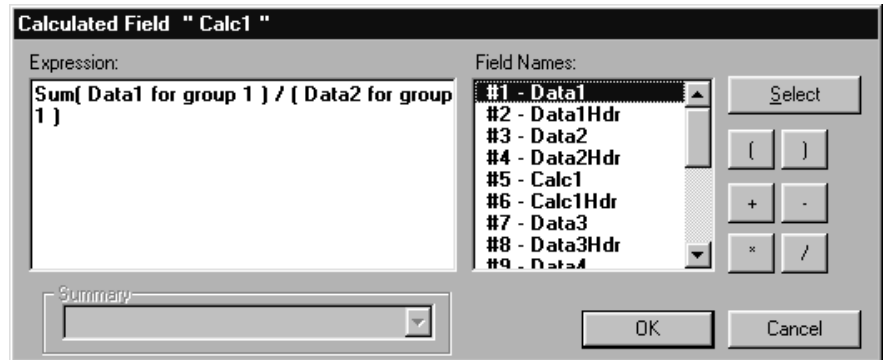


Running total calculation expression

To define a calculation for subtotaling:

Create a calculated field and place it in the Trailer1 band. Duplicate the calculated expression with Sum for group 1 for each field included in the calculation.

```
Sum(Data 1 for group 1)/Sum(Data 2 for  
group 1)
```



Subtotaling calculation expression

To rank values within a View:

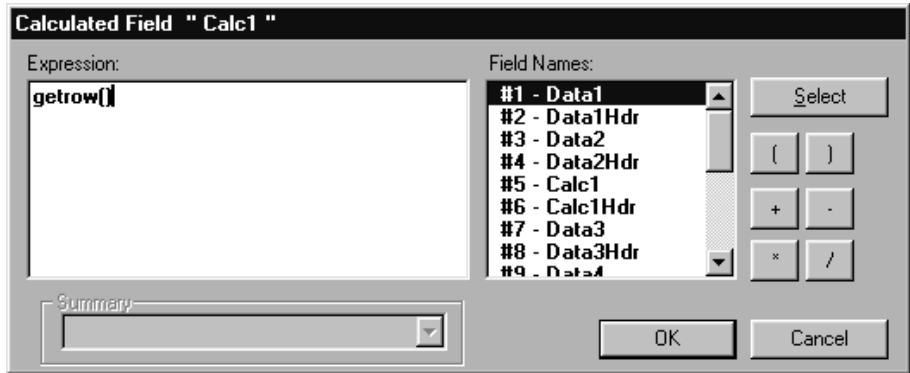
You could easily assign ranking numbers to your Products, Customers, and so forth, by sorting on an Actual Sales data field and using the getrow function available within MMA.

1. Define a Template with a minimum of a Dimension value and a calculation field.
2. Run the Template.
3. Perform a sort on a data column and display the rows in descending order.
4. Double-click the calculated column and define the calculation expression as:

```
getrow( )
```

Adjust the column title as needed.

Note: For more information about adding a column, see Chapter 5 in this *User Guide*.



Ranking calculation expression

Column sorted in descending order.

Added calculated column with ranking calculation.

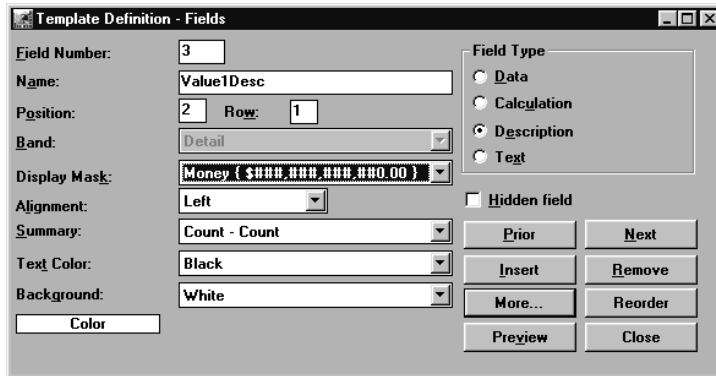
| 3 - Region | Ranking | Sales Dollars Jan 00 to Oct 00 | Units Jan 00 to Oct 00 | ASP | Sales Dollars Jan 99 to Oct 99 | Units Jan 99 to Oct 99 | ASP | % Change |
|---------------|---------|-----------------------------------|---------------------------|----------|-----------------------------------|---------------------------|----------|----------|
| South America | 1 | \$396,427.69 | 1,646 | \$240.81 | \$304,438.15 | 1,708 | \$178.24 | 35.10% |
| Asia | 2 | \$105,843.84 | 601 | \$176.11 | \$74,712.23 | 524 | \$142.58 | 23.52% |
| Canada | 3 | \$208,830.61 | 2,013 | \$103.74 | \$153,741.01 | 1,792 | \$85.79 | 20.92% |
| Europe | 4 | \$405,041.28 | 2,406 | \$168.35 | \$297,999.42 | 2,103 | \$141.70 | 18.80% |
| Australia | 5 | \$76,003.83 | 1,426 | \$53.30 | \$58,724.74 | 1,253 | \$46.87 | 13.72% |
| Midwest | 6 | \$1,380,204.88 | 10,174 | \$135.65 | \$879,841.05 | 6,984 | \$125.98 | 7.68% |
| South Central | 7 | \$639,973.81 | 5,709 | \$112.10 | \$315,476.81 | 2,934 | \$107.52 | 4.25% |
| Mexico | 8 | \$105,447.90 | 1,296 | \$81.36 | \$108,081.38 | 999 | \$108.19 | -24.79% |
| TOTAL | 36 | \$3,317,773.83 | 25,272 | \$131.28 | \$2,193,014.79 | 18,297 | \$119.86 | 9.53% |

View with ranked values

To display the number of rows within the View:

The number of rows retrieved automatically display in the status bar on the bottom of the window. You may want it to also display within the View.

1. While defining a Template, choose Count-Count from the drop-down selection list within the Summary field of the Template Definition window for the Dimension value or description.



Count performed for number of rows within View

2. The row count displays in the Summary band within the selected column of data.

| 3 - Region | Sales Dollars Jan 00 to Oct 00 | Units Jan 00 to Oct 00 | ASP | Sales Dollars Jan 99 to Oct 99 | Units Jan 99 to Oct 99 | ASP | % Change |
|---------------|-----------------------------------|---------------------------|-----------------|-----------------------------------|---------------------------|-----------------|--------------|
| South America | \$396,427.69 | 1,646 | \$240.81 | \$304,438.15 | 1,708 | \$178.24 | 35.10% |
| Asia | \$105,843.84 | 601 | \$176.11 | \$74,712.23 | 524 | \$142.58 | 23.52% |
| Canada | \$208,830.61 | 2,013 | \$103.74 | \$153,741.01 | 1,792 | \$85.79 | 20.92% |
| Europe | \$405,041.28 | 2,406 | \$168.35 | \$297,999.42 | 2,103 | \$141.70 | 18.80% |
| Australia | \$76,003.83 | 1,426 | \$53.30 | \$58,724.74 | 1,253 | \$46.87 | 13.72% |
| Midwest | \$1,380,204.88 | 10,174 | \$135.65 | \$879,841.05 | 6,984 | \$125.98 | 7.68% |
| South Central | \$639,973.81 | 5,709 | \$112.10 | \$315,476.81 | 2,934 | \$107.52 | 4.25% |
| Mexico | \$105,447.90 | 1,296 | \$81.36 | \$108,081.38 | 999 | \$108.19 | -24.73% |
| 8 | \$3,317,773.83 | 25,272 | \$131.28 | \$2,193,014.79 | 18,297 | \$119.86 | 9.53% |

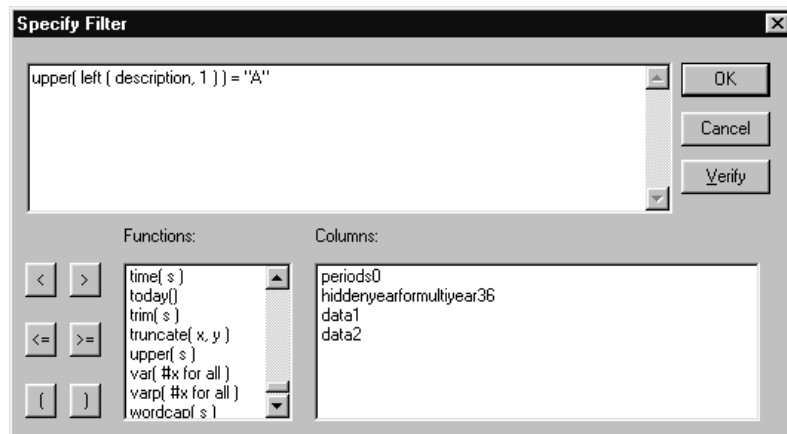
View with row count

To display only Dimension descriptions beginning with a specific letter:

You could easily view Customers or Products beginning with an "A" by applying a filter to the active View.

1. Run a View, click the Filter icon and define the filter expression as:
`upper (left(description, 1))="A"`
2. Click **OK** to return the View with only those Products that begin with an "A."

This same thing can be done using any letter and any column within the Template definition.

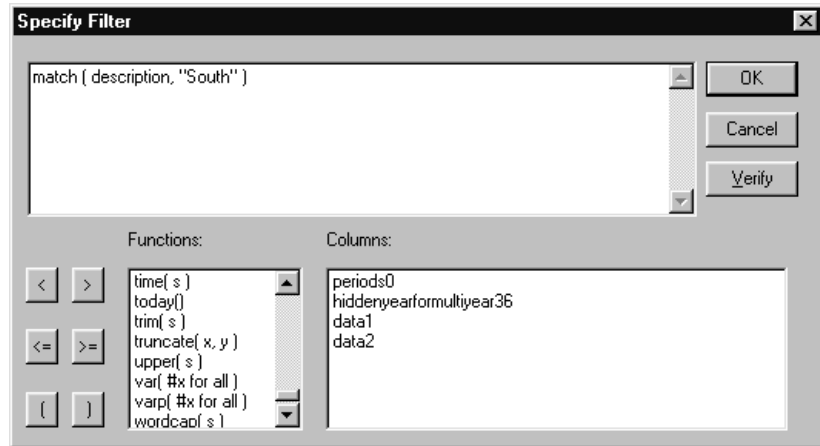


Specify Filter window

To display only Dimension descriptions containing a certain string of characters:

You could easily view Regions that contain the word South by applying a filter to the active View.

1. Run a View, click the filter button and define the filter expression as:
`Match (description, "South")`
2. Click **OK** to return the View with only those Regions where the string "South" is found.



Specify Filter window

Notes

CHAPTER 10 • CALCULATION FUNCTIONS

QuickLook

Use this chapter to learn how to:

- Use the calculation functions provided by *MMA*.

Note: The functions available in *MMA* were provided by PowerBuilder, the application used to develop *MMA*. If you need additional detail pertaining to each function, refer to the PowerBuilder section of the *MMA DBView* online Help.

MMA Calculation Functions

The following table describes all of the calculation functions available for filtering data and creating calculated fields within Template definitions.

| Function | Definition |
|----------------------------------|---|
| abs | Calculates the absolute value of a number. |
| asc | Converts the first character of a string to its ASCII integer value. |
| ave | Calculates the average of the values of the column. |
| bitmap | Displays the specified bitmap in the DataWindow. |
| ceiling | Determines the smallest whole number that is greater than or equal to a specified limit. |
| char | Converts an integer to a character. |
| cos | Calculates the cosine of an angle. |
| count | Calculates the total number of rows in a specified column. |
| crosstabavg (Not available) | Calculates the average of the values returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabAvg can also calculate averages of the expression's values for groups of column values. |
| crosstabcount (Not available) | Counts the number of the values returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabCount can also count the number of the expression's values for groups of column values. |
| crosstabmax (Not available) | Calculates the maximum value returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabMax can also calculate the maximum of the expression's values for groups of column values. |
| crosstabmin (Not available) | Calculates the minimum value returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabMin can also calculate the minimum of the expression's values for groups of column values. |
| crosstabsum (Not available) | Calculates the sum of the values returned by an expression in the values list of the Cross Tab. |
| cumulativePercent | Calculates the total values of the rows up to and including the current row in the specified column as a percentage of the total value of the column (a running percentage). |
| cumulativeSum | Calculates the total values of the rows up to and including the current row in the specified column (a running total). |
| date | Converts DateTime, string, or numeric data to data of type data. It also extracts a date value to a Binary Large Object (BLOB). You can use one of several syntaxes, depending on the data type of the source data. |
| Datetime | Combines a date and a time value into a DateTime value. |
| Day | Obtains the day of the month in a date value. |

| | |
|---------------|--|
| Dayname | Determines the day of the week in a date value and returns the weekday name. |
| daynumber | Determines the day of the week of a date value and returns the number of the weekday. |
| daysafter | Determines the number of days one date occurs after another. |
| dec | Converts a string to a decimal number or obtains a decimal value stored in a blob. |
| describe | Reports the values of the attributes of a DataWindow object(s) within the DataWindow object. |
| double | Converts a string to a double or obtains a double value that is stored in a blob. |
| exp | Raises e to the specified power. |
| fact | Determines the factorial of a number. |
| fill | Builds a string of the specified length by repeating the specified characters until the result string is long enough. |
| first | Determines the value in the first row in the specified column. |
| getrow | Reports the number of a row associated with a band in a DataWindow control or a report. |
| gettext | Obtains the text the user entered in a column in a DataWindow or form. |
| hour | Obtains the hour in a time value. The hour is based on a 24-hour clock. |
| if | Evaluates a condition and returns a value based on that condition. |
| int | Determines the largest whole number less than or equal to a number. |
| integer | Converts the value of a string to an integer. |
| isDate | Tests whether a string value is a valid date. |
| isNull | Reports whether a value of a column or expression is valid or NULL. |
| isNumber | Reports whether a value of a string is a number. |
| isRowModified | Reports whether the row is modified in the DataWindow or form.. |
| isRowNew | Reports whether the row is newly inserted in the DataWindow or form. |
| isSelected | Determines whether the row is selected. A selected row is highlighted using reverse video. |
| isTime | Reports whether the value of a string is a valid time value. |
| large | Finds a large value at a specified ranking in a column (for example, third largest, fifth, largest) and returns the value of another column or expression based on the result. |
| last | Determines the value in the last row of a specified column. |
| left | Obtains a specified number of characters from the beginning of the string. |
| leftTrim | Removes spaces from the beginning of a string. |
| len | Reports the length of a string or a Binary Large Object (BLOB). |
| log | Determines the natural logarithm of a number. |
| logten | Determines the base 10 of a logarithm of a number. |
| long | Converts the value of a string to a long. |

| | |
|-----------------|--|
| lookup display | Obtains the display value in the code table associated with the data value in the specified column. |
| lower | Converts all the characters in a string to lower case. |
| match | Determines whether a string's value contains a particular pattern of characters. |
| max | Determines the maximum value in a specified column. |
| median | Calculates the median of the values of a column. The median is the middle value in the set of values, for which there is an equal number of values greater and smaller than the median. |
| mid | Obtains a specified number of characters from a specified position in a string. |
| min | Determines the minimum value in a specified column. |
| minute | Obtains the number of minutes in the minutes portion of a time value. |
| mod | Obtains the remainder (modules) of a division operation. |
| mode | Calculates the mode of the values of a column. The mode is the most frequently occurring value. |
| month | Determines the month of a date value. |
| now | Obtains the current time based on the system time of the client machine. |
| number | Converts a string to a number. |
| page | Determines the number of the current page. |
| pageCount | Determines the total number of pages when viewing a DataWindow in Print Preview or when previewing a report. This number is also the number of printed pages if the DataWindow or report is not wider than the preview window. |
| PageAcross | Determines the number of the current horizontal page. |
| PageCountAcross | Determines the number of horizontal pages when a report or DataWindow is wider than the preview window. |
| percent | Determines the percentage that the current value is of the total of the values in the column. |
| pi | Multiplies <i>pi</i> by a specified number. |
| pos | Finds one string within another string. |
| profileint | Obtains the integer value of a setting in the specified profile file. |
| profilestring | Obtains the string value of a setting in the specified profile file. |
| rand | Obtains a random whole number between 1 and a specified upper limit. |
| randomize | Initialize the random number generation so that the rand function begins a new series of pseudo-random numbers. |
| real | Converts a string value to a real data type or obtains a real value that is stored in a Binary Large Object (BLOB). |
| relativedate | Obtains the date that occurs a specified number of days after or before another date. |
| relativetime | Obtains a time that occurs a specified number of seconds after or before another time within a 24-hour period. |

| | |
|-------------|--|
| replace | Replaces a portion of one string with another. |
| right | Obtains a specified number of characters from the end of the string. |
| rightTrim | Removes a space from the end of the string. |
| round | Rounds a number to the specified number of decimal places. |
| rowcount | Obtains the number of rows that are currently available for display in a DataWindow control, in other words, the number of rows in the DataWindow's primary buffer. |
| rowheight | Reports the height of a row associated with a band in a DataWindow control. |
| second | Obtains the number of seconds in the seconds portion of a time value. |
| secondafter | Determines the number of seconds one time occurs after another. |
| sign | Determines the sign of a number. Sign reports whether a number is negative, zero, or positive. |
| sin | Calculates the sine of an angle. |
| small | Finds a small value at a specified ranking in a column (for example, third smallest, fifth smallest) and returns the value of another column or expression based on the result. |
| space | Builds a string of the specified length whose value consists of spaces. |
| sqrt | Calculates the square root of a number. |
| stdev | Calculates an estimate of the standard deviation for the specified column. Standard deviation is a measurement of how widely values vary from average. |
| stdevp | Calculates the standard deviation for the specified column. Standard deviation is a measurement of how widely values vary from average. |
| string | Formats data as a string according to a specified display format mask. You can convert and format date, DateTime, numeric, and time data. You can also apply a display format to a string. |
| sum | Calculates the sum of the values in the specified column. |
| tan | Calculates the tangent of an angle. |
| time | Converts a string to a time data type. |
| today | Obtains the system date. |
| trim | Removes leading and trailing spaces from a string. |
| truncate | Truncates a number to the specified number of decimal places. |
| upper | Converts all the characters in a string to uppercase. |
| var | Calculates an estimate of the variance for the specified column. The variance is the square of the standard deviation |
| varp | Calculates the variance for the specified column. The variance is the square of the standard deviation. |
| wordcap | Sets the first letter of each word in a string to a capital letter and all other letters to lowercase (for example, ROBERT E. LEE would be Robert E. Lee). |
| year | Determines the year of a date value. |

Notes

GLOSSARY OF TERMS

Administration

The *MMA* application used to define and maintain the Master Files and other vital setup information.

Authority

Access to levels of data and types of data are dependent on the user profile. For example, if Sales Representatives should not be viewing Item information, do not give them authority to that category when defining their user profile.

Automatic Drill-Down

When a row is double-clicked on within a View and a retrieval is processed for the next defined Dimension.

Background

The area behind and outside the active window, including the desktop. The second color defined defaults as the background color.

Band

The physical positioning of data on the *DBView* screen. The three main bands are the Header, Detail, and Summary bands.

Calculated Field

A field type that contains a calculation between data fields. The ability exists to Add, Subtract, Multiply, or Divide fields or groups of fields.

Category

Identifies the comparative information stored in *MMA*. For example, Actual Sales.

Change Sets

Define the realignment information that allows history data to be changed based on search and replace data.

Check Box

A small square box that can be selected or cleared. This box is a toggle that turns options ON and OFF.

Click

To press and release a mouse button quickly.

Clipboard

A temporary storage location used to transfer text or graphics from one application to another. Data can be transferred to the Clipboard by using the Cut or Copy command and inserted from the Clipboard by using the Paste command. Items put into the Clipboard remain there until the Cut or Copy command is selected again.

Color Bar

A bar of colors located at the bottom of any *DBView* window. The color bar can be used to change the color of any field by selecting the field and then selecting the required color on the color bar. The user determines whether or not the color bar displays on the window.

Cross Tab Template

A Template format that displays data for two levels of summarization in a matrix format. One level displays down the rows and the other in the columns.

Data Field

A field type that is downloaded from your MAPICS XA database. For example, Sales Dollars, Sales Units, Cost, and so forth.

Data Source

A group of categories that contain the same Dimensions and values that reside in the same AS/400 server files.

Data Summary Levels (DSL's)

Definitions of how data is to be summarized in the history files and are used to tune your system for better performance.

Default Drill Down Path

The automatic drill-down path specific to each user. When a row is double-clicked, the defined default drill-down path determines the next Dimension to display.

Default Settings

Settings that are supplied with *MMA* and are specific to each user. For example, if you turn the color bar ON, it always displays by default.

Description Field

A field type that contains information relating to the dimension level selected. For example, Dimension value, short description, and pickup fields.

Desktop

The local PC that contains and displays Views that are associated with an icon.

Detail Band

The center area of the *DBView* window that usually contains the historical data. For example, Quantity, Cost, and so forth.

Dimension

Identifies a level of summarization in *MMA* that you can use to view and analyze your business. For example, Customer and Item.

Display Mask

Determine how data is formatted for display. For example, Percentage and Money.

Double-Click

To rapidly press and release a mouse button twice without moving the mouse. Double-clicking carries out an action, such as starting an application.

Drag

To move an item on the screen by selecting the item and then pressing and holding down the mouse button while moving the mouse. For example, you can move a column within a View from one position to another by dragging it to a specific position.

Drill-Down

A way to navigate through summary levels of data. Drilling can actually be up, down, or lateral. The more you drill, the more detailed the information becomes.

Drill Down Path

The area of *DBView* that indicates the Dimension levels that are drilled through to access the data currently displayed.

dtv

The file format of *MMA*'s Views.

Field Definitions

Additional Master File information related to a Dimension level. *MMA* allows a maximum of 35 additional field definitions per Dimension. For example, Address, Zip Code, and Contact are Customer field definitions. Field Definitions are also called pickup fields.

Field Type

There are four different types of fields that are mutually exclusive of one another. When defining a Template, the field type must be selected. For example, Data, Calculation, Description, and Text.

Font

A set of letters, numbers, punctuation marks, and symbols that are a given size and design. The default font for a View is MS Sans Serif, but this can be changed by the user.

Function Button

In a dialog box, a button that carries out an action. A function button has a label that describes the action it carries out. For example, Save, Close, Filter, and Sort.

Header Band

The top area of the *DBView* window that usually contains the column titles of the data displayed in the Detail band.

Hidden field

A field that is necessary for the Template definition but not needed to be viewed by users.

Highlighted

Indicates that the data is selected and will be affected by your next action. Highlighted text appears in reverse video on the monitor.

Icon

Pictorial representations of frequently used *DBView* functions. Icons are displayed on the toolbar within *DBView*.

Icon-ized View

A View file associated with an icon and saved to the desktop. Double-click on an icon-ized View to automatically run the View and display the data in the customized format.

In Place Drill-down

A check box on the User Defaults window that controls the manner in which windows open as you drill through Dimensions. When "In Place Drilldown" is turned ON (the system default), the current window is updated with each new window.

Indexes

Aid in performance tuning of *MMA*. A commonly taken drill-down path is recorded so it processes faster.

Information Box

Information displayed in the upper right corner of the *DBView* window informing you of any sorting or filtering that has been applied to the View, as well as the number of rows that are summarized or hidden from the display.

Master File Information

Information specific to each Dimension value which comes from the STCSMF10, STCSMF11, and STCSMF35 tables. For example, Dimension key value, short and long descriptions, and additional field definitions.

Multi-currency

MMA can store and display your data in any previously defined currency format.

Notepad

A *DBView* feature that allows you to keep detailed information regarding a value within a Dimension. When within a View, the additional information kept in the Notepad is accessed from a command on the Menu.

Period Based Template

A Template format that displays data broken down into user-defined period buckets. The periods display down the rows of the first column.

Periods

The user-defined time slices used to accumulate data within *MMA*. *MMA* can have up to 13 period buckets.

Pickup Fields

Additional Master File information related to a Dimension level. *MMA* allows a maximum of 35 additional field definitions per Dimension. For example, Address, Zip Code, and Contact are Customer field definitions. Pickup field are also called field definitions.

Preview

The final step of Template definition. The Preview displays a sample of the Template format and constructs the Template structure for use at run time.

Radio Button

A small round circle that can be selected. This circle identifies an item that is selected over the other available mutually exclusive items.

Regular Templates

A Template format that displays data for one or more levels of summarization with the option of subtotalling.

Run

A command that retrieves the requested data. Click on the Runner icon or choose File, Run to retrieve data and display it in the customized View.

Server

A computer that provides disk space, printers, or other services to computers over a network.

Smart Text

Text labeling data within a View can be created using variable codes so it dynamically changes as the data changes.

Status Line

A line of information located on the bottom of the *DBView* window displaying the status of the active function. For example, request a retrieval and the number of rows retrieved displays in the Status Line.

STCS.INI file

A text file that contains configuration commands used within *MMA*. Commands in the STCS.INI file enable or disable system features and set limits on various items.

Style Bar

An interactive bar on the View that aids in the customization of a View. The style bar contains the field name, font style and size, icons for bolding, italicizing, underlining, and positioning the text displayed in a cell of the View. The user can determine whether or not the style bar displays on the View.

Summary Band

The bottom area of the *DBView* window that usually contains any requested summarization's being performed by *DBView*. For example, Totals or Averages of the data displayed down the rows.

Template

The generic format of data that is saved globally so all users can access. Only authorized users can create and maintain Template definitions.

Text Field

A type of field that contains user-defined text used to label a row or column of data. Static text can be keyed in or dynamic variables can be used to allow the titles to change as the requested data changes.

Tile

A way of arranging open windows so that no windows overlap but all windows are visible. Each window takes up an equal portion of the screen.

Toolbar

Area of the *DBView* window that displays the various icons that are used to complete frequently taken actions.

User Lists

A user-defined list of Dimension values. User lists offer the flexibility of retrieving data for a specific list of values. For example, you are a Sales Manager and only want to view your Sales Representatives. Create a User List that contains only your Sales Representatives.

Values

Identifies a value in *MMA* that you can use to track, compare, and analyze your business information. For example, Cost and Quantity.

View

Customized Template format that resides on your local PC. Views can be opened as a file and then ran, or associated with an icon on your desktop.

View Buckets

Define an amount of time associated with a ViewSet. For example, January = bucket 1, First Quarter = buckets 1 - 3.

ViewGroups

The higher level of grouping for ViewSets. For example, Sales.

View Icon

Represents a View that is associated with a customized View saved to your desktop. When you choose a View Icon, the associated View starts and loads the data in the saved format.

View Items

Define the time periods for a ViewSet to make Template definition more flexible. For example, Current Month, Previous Month, and Previous 2 Months.

View Sets

The defined available time periods and years used in Template definition. For example, Based Months and Years, Calendar Months, and Calendar Quarters.

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MMA User's Guide

Part 2 - User Guide

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CHAPTER 1 • BEFORE YOU BEGIN

QuickLook

Use this chapter to learn how to:

- Identify who should be reading this book.
- Recognize document conventions.
- Navigate through *DBView* using the keyboard and the mouse.

Who Should Read this Book

DBView is a Microsoft Windows® based data analysis tool designed to provide a quick and effective response to data trends. This manual is intended for any user responsible for using *DBView*. This list includes:

- Sales Representatives and other end-users who use *DBView* to analyze data.
- Users responsible for defining *DBView* Templates/Views.
- Users responsible for customizing desktop Templates/Views

What to Know Before Using this Product

Windows 95, Windows 98, and Windows NT

You should be able to use all of the basic Windows features and functions, for example:

- **Windows Desktop** - Perform all actions on a window, such as sizing, scrolling, selecting, maximizing, minimizing, opening, closing, and using the mouse or keyboard keys.
- **Icons** - Double-click on icons to open windows, applications, folders, documents or files using the mouse.
- **Menus** - Click on menu titles located on the menu bar to access drop-down menus.
- **Start Menu** - Method of starting applications and programs.
- **Command buttons** - Click on command buttons that are labeled with text, an icon, or both to perform an action.
- **List box** - Use a list box to select an item from the list of choices displayed. If available, scroll up and down to view the entire list.
- **Text box** - Use a text box to type or edit a text value.
- **Dialog box** - Use a dialog box to exchange information or dialog with Windows or the application. Also, use to enter additional information needed to perform a task. Typically includes **OK** and **Cancel** command buttons.
- **Clipboard** - Use the Clipboard to cut and copy information (text or graphics). Windows stores copied information in the clipboard and then lets you paste it into another place.
- **Control Panel** - Use the Control Panel to customize Windows' options, such as screen colors, fonts, mouse, desktop pattern, keyboard rate, date and time, network options, and so forth.
- **Explorer** - Use Explorer to handle administrative tasks, such as locating, copying, moving, and deleting files.

Document Conventions

Text, keyboard and mouse conventions are employed to help you learn and use *DBView*.

Text Conventions

The following text conventions are used:

| | |
|---------------------|--|
| <i>Product Name</i> | Italics indicates <i>MAPICS</i> product names, references to other manuals, new terms and variables. |
| a:\setup | Bold type indicates information you type. |
| Close | Arial bold type indicates command buttons you click. |
| File Run | The symbol indicates the sequence you use to select the menu items listed. In this example, you would select the File menu and then select the Run item. |
| ENTER | Capital letters indicate keys you press or programs, files, directory names, or drive letters. |

[Note, Recommendation, Tip]: Notes containing important information are bordered by lines on the top and bottom.

| |
|--|
| Caution: Caution messages are bold and enclosed in a box. |
|--|

Keyboard Conventions

Keys you press on the keyboard are shown in capitals (ENTER, ALT, and so forth). Other keyboard conventions addressed here may differ depending on the type of keyboard you are using.

| | |
|----------------------------|--|
| Shortcut keys | Press ALT and the underlined letter of a menu to access the menu. For example, for the menu command: <u>F</u> ile, press ALT+F to display the File Menu. |
| TAB key | Press TAB to move from field to field. |
| ENTER key | Press ENTER to perform an action. |
| KEY+KEY | Use key combinations to perform an action. Press and hold down the first key, and then press the second key. For example, press SHIFT+ENTER. |
| ESC Key | Press ESC to stop a function in process or to cancel an operation. |
| Navigation keys | Press arrow keys, HOME, END, PAGE UP or PAGE DOWN to move around. |
| Numeric keypad keys | Use the numeric keypad on your keyboard to enter numeric values. Be sure the NUM LOCK key on your keyboard is turned on. |

Mouse Conventions

The following terms explain how you use the mouse to access or process information.

| | |
|----------------------|--|
| Click | Use the mouse to place the arrow over an item, such as an icon, button, file or field. Click the left mouse button one time to select (or highlight) the item. Press the right mouse button to select a field and display a pop-up menu. |
| Double-click | Use the mouse to place the arrow over an item. Click the left mouse button <i>two times</i> in rapid succession to select the item, or start an action. |
| Drag and drop | Use the mouse to place the arrow over an item. Click the left mouse button and continue to hold down the left mouse button as you move the item to a new position on the screen. Release the left mouse button to drop the item into the new position. |

CHAPTER 2 • GETTING STARTED

QuickLook

Use this chapter to learn how to:

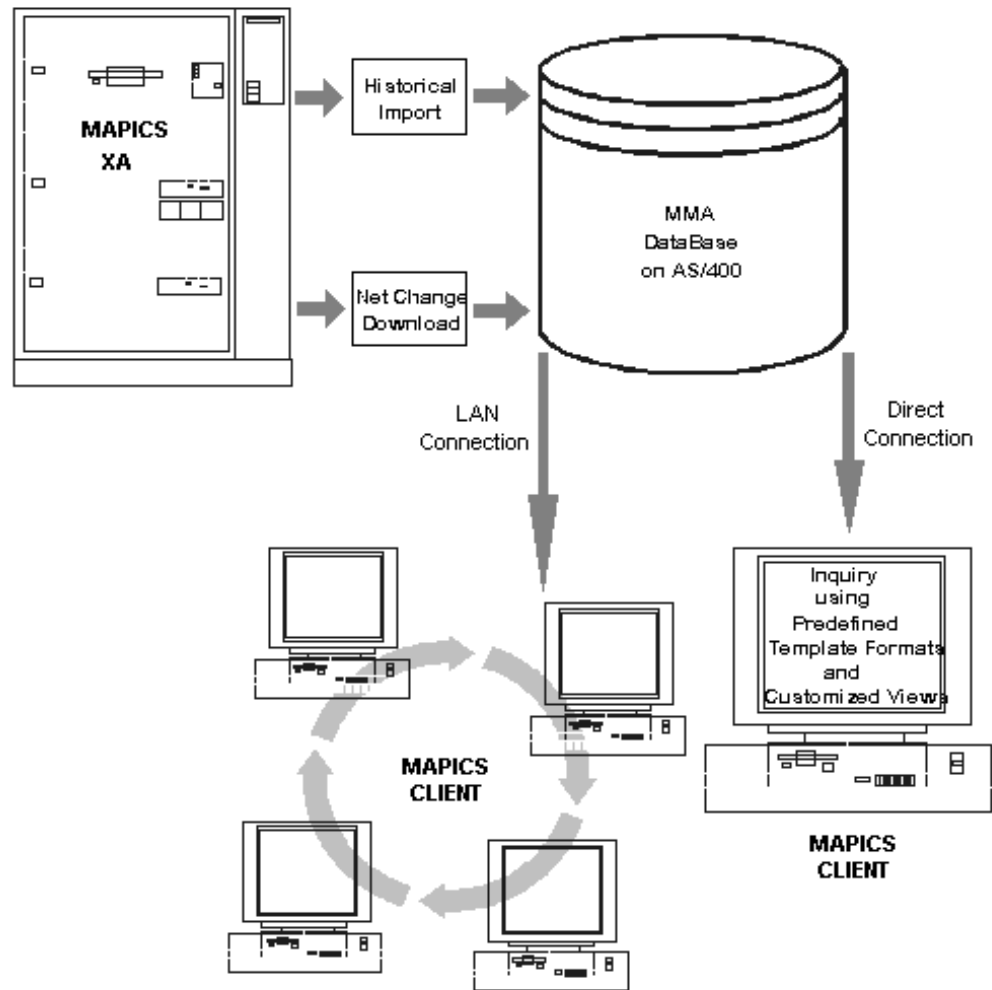
- Familiarize yourself with *DBView* features.
- Work with the menu bar, toolbar, status bar, and online Help.

What is *MMA / DBView*?

MAPICS XA Market Monitoring and Analysis (MMA) is a client server application that combines a multi-dimensional data warehouse with powerful analysis tools. Through the use of user-definable levels of analysis and flexible definition of data types, *MMA* captures data from your primary business systems and combines it into a single data warehouse. The *DBView* analysis tools allow you to then analyze and compare your data based on your unique business structure. Features include:

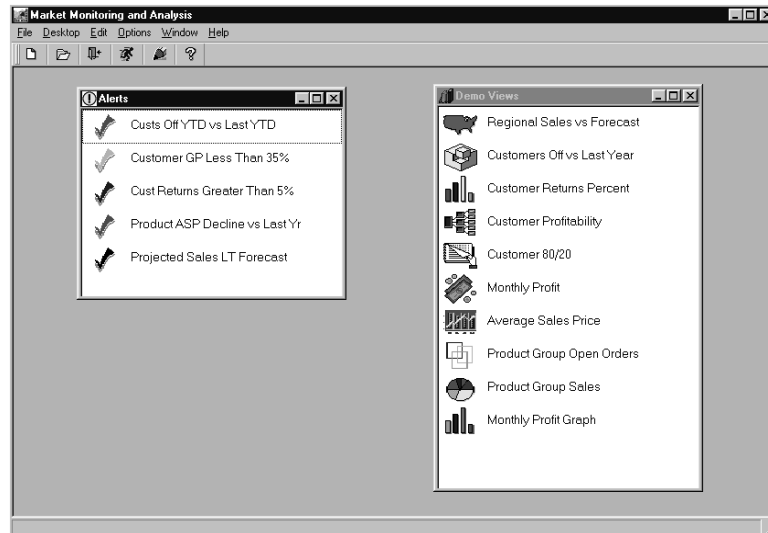
- Best Fit Analysis
- Customized Desktop
- File Export Capabilities
- Multi-currency
- Variable Periods
- Security/Authority
- Data Entry
- Data Copy
- Realignments

MMA Functional Overview



What's on the *DBView* Main Window?

When you initially open *DBView*, you will view the main *DBView* window. This section describes graphical user interface (GUI) features unique to the *DBView* main window.



DBView main window

The main *DBView* window can be customized to suit your needs. The View items and ViewGroups are created by the user. From the *DBView* main window, you can create or maintain ViewGroups, run an icon-ized View, open and run a Template, or if authorized, create a new Template definition.

Title Bar

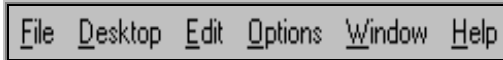
The title bar is located at the top of the *DBView* main window. The title bar displays the name of the product; for example, *Market Monitoring and Analysis*. The name displayed in the title bar is maintained in the STCS.INI file under the following command line:

```
inqTitle = Market Monitoring and Analysis
```

Menu Bars

The menu bar is located directly below the title bar on the *DBView* main window. There are two menu bars available within *DBView*. The menu bar that displays depends on whether or not a View is displayed.

The menu bar displays the *menu titles* available for the product, such as File, Desktop, Edit, Options, Window, or Help. A drop-down list of *menu items* is provided for each menu. Illustrated below are the main menu bar and the View menu bar used in *DBView*.



Main menu bar



View menu bar

To select a menu, click on the menu title to display the menu items. For example, click on the File menu title to display the drop-down File menu. Or alternatively, use the keyboard and press ALT+F to display the drop-down File menu.

To select a menu item, click on the item. In some instances, key combinations are available for a menu item. For example, you can use the ALT+F,S to save a file instead of the menu sequence File | Save.

Toolbar

The toolbar is the bar located directly below the menu bar. The toolbar contains toolbar buttons (labeled with icons and/or text) that identify and activate frequently used menu items. To perform an action using the toolbar, click on the toolbar icon. To display a tool tip (a small pop-up window that provides text to explain an action), place the mouse arrow over the toolbar icon. The tool tip appears after a short time-out and automatically disappears when the arrow is moved off the icon. Illustrated below are the toolbars used in *DBView*.



Main toolbar



View toolbar

Status Bar

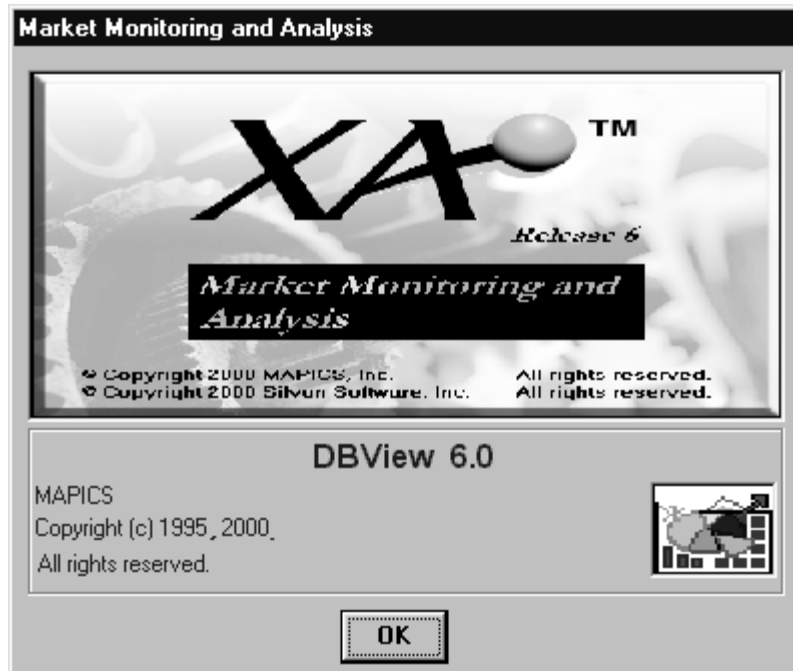
The status bar is located at the bottom of the *DBView* main window. The status bar displays information about the current state of the window. The status bar is illustrated below.



Status bar

Viewing Information about *MMA*

The About *Market Monitoring and Analysis* command displays the product name, version number, and copyright dates.



About MMA window

To view MMA version information:

1. Choose Help | About *Market Monitoring and Analysis* to view the information regarding your version of the *MMA* product.
2. Click **OK** to close the window.

Using *DBView's* Online Help

Online Help is provided with *MMA's DBView*. To access online Help, choose Help | Help Index. *DBView* Help uses standard Windows Help techniques, such as Contents, Search, Bookmark, History, and Index to navigate through online Help.

The Help table of contents is available from the Help menu to quickly locate information you need. *DBView's* online Help contains step-by-step instructions for using each command and window in the *DBView* product. Topics that are highlighted and underlined can be selected to view specific information pertaining to the topic.

The various Help options support standard Help functionality. An example of how to use the Help Index follows to illustrate the basic selection and display functionality.



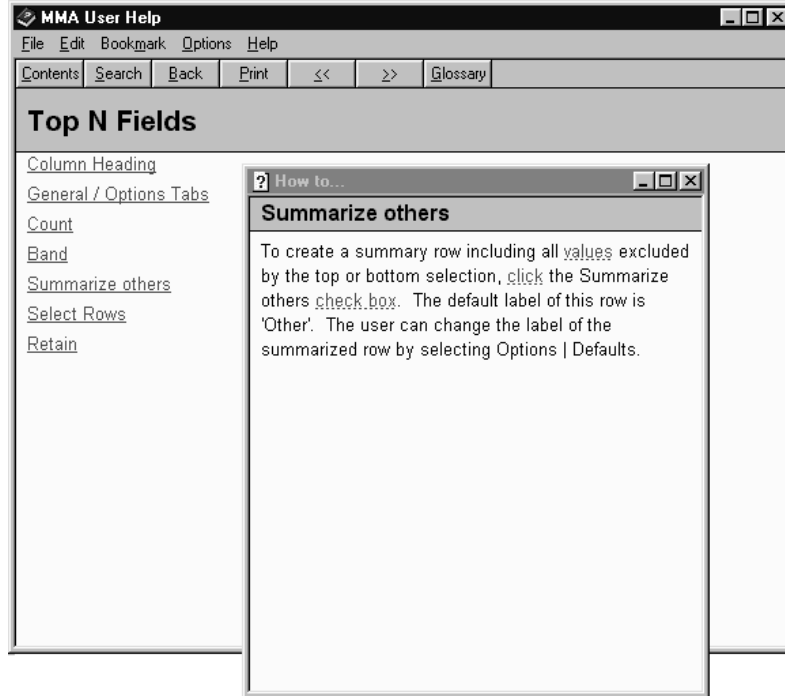
Help table of contents window

To use *MMA's* online Help:

The following example walks you through the steps required to view the Help text associated with the displaying the top or bottom values in *DBView*.

1. Access the Help Index by selecting Help | Help Index.
2. Click on a topic (for example, Running Templates and Views).
3. If applicable, you can click on a subtopic (for example, Displaying Top or Bottom Values). Use the vertical scroll bar to maneuver through the topic.

4. Click on a Related Topic (for example, Top N Fields).
5. The window displays basic information about the selected topic. You can click on any highlighted word or phrase to display the corresponding definition. A pop-up window is displayed with additional text pertaining to the green text. See the window below:



Viewing Top N information via online Help

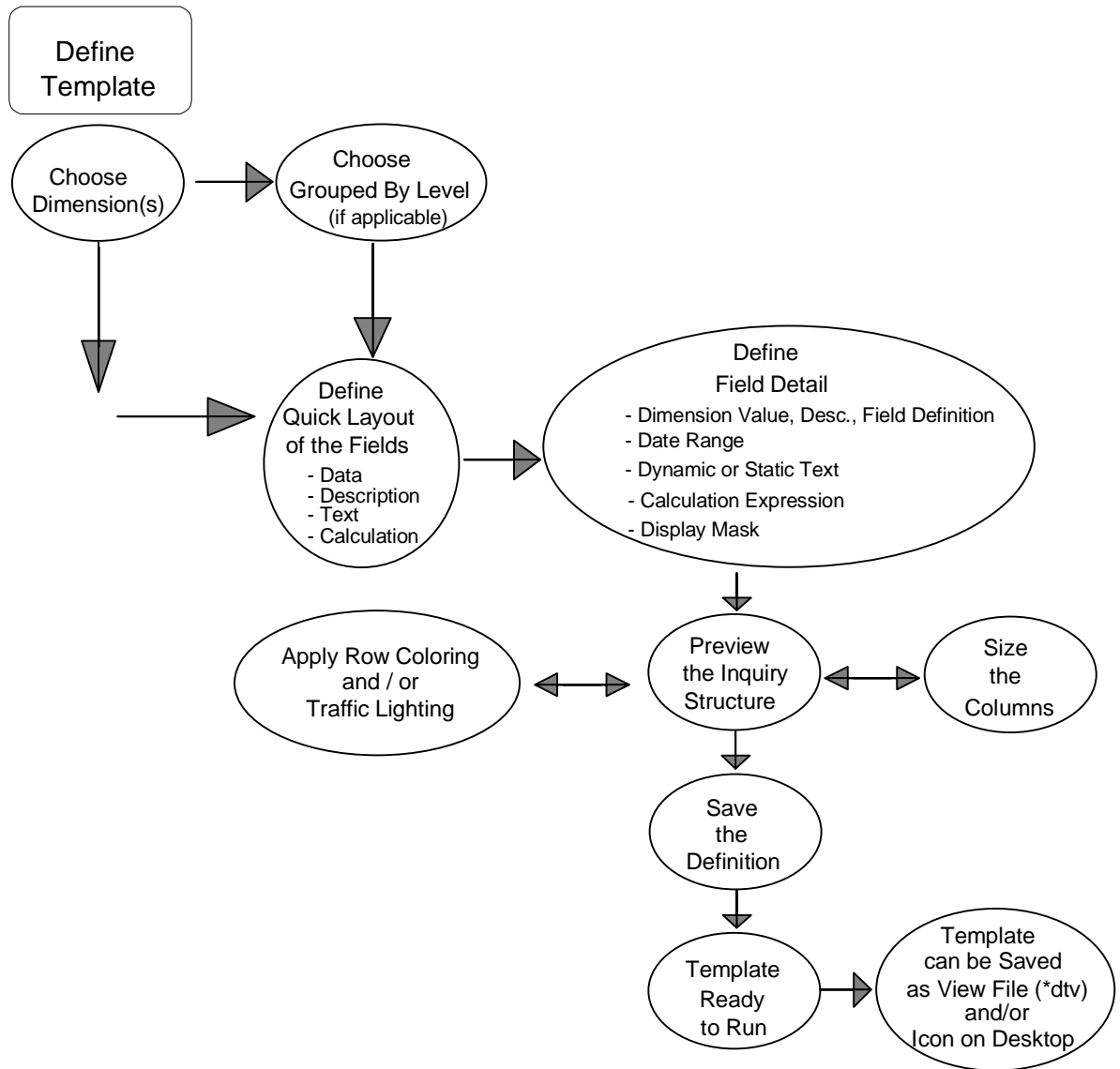
CHAPTER 3 • DEFINING REGULAR TEMPLATES

QuickLook

Use this chapter to learn how to:

- Recognize the three *DBView* Template types.
- Know the format of the *DBView* window.
- Create a Regular Template definition.

Template Definition Process



Template Types Overview

When defining a Template, there are three formats available within *DBView*. Each Template type supports different functionality.

Regular

A Regular Template type is the system default. It displays data for one or more Dimension levels with the option of grouping. When looking at a Regular Template, you can drill through all levels of data.

The Dimension values and associated descriptions display in the rows of the View. The categories/values display in the columns.

A Regular Template can contain subtotaling or grouping. For example, you need to see a listing of all Items sold to each Customer. Customer is the grouping Dimension level.

Drill Down Path Taken

Dimension Level 1

Dimension Level 2

Dimension Level 3

General Sort Filter Top N Traffic Light

Updated

Visible

Filtered

Summarized

Hidden

Mode

| Dimension Values | Category | Category | Calculation |
|------------------|-------------------|-------------------|-------------|
| Customer | Sales \$ | Cost \$ | Variance % |
| Customer | Sales \$ | Cost \$ | Variance % |
| Customer | Sales \$ | Cost \$ | Variance % |
| Totals | \$ 9999.99 | \$ 9999.99 | 99 % |

| Item Group | Description | Actual Sales Jan 00 to Jan 00 | % of Total Current Period | Actual Sales Jan 00 to Feb 00 | % of Total YTD |
|--------------|-------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BBPN | Ball point pens | \$39,333.28 | 14.58% | \$71,095.43 | 13.97% |
| CPC | Colored pencils | \$1,251.45 | 46% | \$2,283.90 | 45% |
| DEMK | Dry erase markers | \$76,153.77 | 28.23% | \$143,435.77 | 28.20% |
| FPN | Fountain pens | \$86,360.46 | 32.24% | \$167,881.09 | 33.01% |
| PMK | Permanent markers | \$56,277.59 | 20.86% | \$103,446.11 | 20.34% |
| PPC | Plain Pencils | \$9,783.32 | 3.63% | \$20,511.72 | 4.03% |
| Total | | \$269,779.86 | 100.00% | \$508,614.02 | 100.00% |

Regular Template format

Period Based

A Period Based Template type displays data that is broken down by user-defined buckets of time. A Period Based Template can span multiple years with a subtotal amount for each year of data.

The Dimension information is displayed in the Header area of the window. The periods are displayed in the rows of the first column, and the categories/values are in the remaining columns.

Only one Dimension value's information is displayed at a time; the page buttons > or < scroll through all values, and the Sum All icon displays data for all key values added together.

| Dimension Value and Description | | <input checked="" type="checkbox"/> General Sort Filter Top N Traffic Light <input type="checkbox"/> Updated <input type="checkbox"/> Visible <input type="checkbox"/> Filtered <input type="checkbox"/> Summarized <input type="checkbox"/> Hidden <input type="checkbox"/> Mode | |
|---------------------------------|----------------|---|----------------|
| | Category/Value | Category/Value | Category/Value |
| Period 1 | Sales \$ | Cost \$ | Quantity |
| Period 2 | Sales \$ | Cost \$ | Quantity |
| Period 3 | Sales \$ | Cost \$ | Quantity |

| | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Variance Amount |
|-------------|----------------------------------|----------------------------------|--------------------|
| Jan | \$173,016.77 | \$115,731.23 | \$57,285.54 |
| Feb | \$151,805.01 | \$102,532.73 | \$49,272.28 |
| Mar | \$311,919.59 | \$208,800.68 | \$103,118.91 |
| Apr | \$448,446.99 | \$299,971.49 | \$148,475.50 |
| May | \$521,341.28 | \$347,454.47 | \$173,886.81 |
| Jun | \$918,184.76 | \$610,440.58 | \$307,744.18 |
| Jul | \$2,583,510.71 | \$1,715,538.72 | \$868,071.99 |
| Aug | \$2,386,420.22 | \$1,962,968.02 | \$1,003,452.20 |
| Sep | \$2,456,063.45 | \$1,634,228.47 | \$821,839.98 |
| SubTotal | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 |
| Grand Total | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 |

Period Based Template format

Cross Tab

The Cross Tab Template type displays data for two Dimension levels. The values of one Dimension display in the rows and the other displays in the columns.

The first Dimension selected at runtime is the column Dimension, and the second is the row Dimension. These can easily be transposed by selecting the View | Transpose Crosstab command on the menu bar.

Column Dimension: 1st Dimension Selected

Row Dimension: 2nd Dimension Selected

General Sort Filter Top N Traffic Light
 Updated
 Visible
 Filtered
 Summarized
 Hidden
 Mode

| <i>Dimension #2</i> | <i>Dimension #1</i> | <i>Value/Desc.</i> | <i>Category/Value</i> | <i>Category Value</i> |
|---------------------|---------------------|--------------------|-----------------------|-----------------------|
| <i>Value/Desc.</i> | | | Sales \$ | Quantity |
| <i>Value/Desc.</i> | | | Sales \$ | Quantity |
| <i>Value/Desc.</i> | | | Sales \$ | Quantity |

Market Monitoring and Analysis

File Edit View Information Options Window Help

Cross Tab Template : Item

Company : [All Values*]
 Item : [All Values*]

General Sort Filter Top N Traffic Light
 Updated 01/14/2000 23:00
 Visible Rows 13
 Filtered 0
 Summarized 0
 Hidden 0
 Mode: Data File - All

| Item | Company Description | 11 Wholesale | | 12 Retail | | 13 Franchise | | Actual Sales Jan 99 to Sep 99 |
|--------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | |
| BKBBPN | Black stick pen | \$198,807.94 | \$73,391.04 | \$0.00 | \$0.00 | \$536,589.23 | \$536,589.23 | \$536,589.23 |
| BLBBPN | Blue stick pen | \$121,594.79 | \$43,569.20 | \$0.00 | \$0.00 | \$337,300.29 | \$337,300.29 | \$337,300.29 |
| BPPMK | Broad tip perm marker | \$333,158.40 | \$87,073.11 | \$239,905.40 | \$239,905.40 | \$0.00 | \$0.00 | \$0.00 |
| BSDEMK | Basic dry erase marker set | \$541,690.74 | \$0.00 | \$444,738.55 | \$444,738.55 | \$78,530.37 | \$78,530.37 | \$78,530.37 |
| CFPN | Cartridge fountain pen | \$477,192.74 | \$223,299.26 | \$0.00 | \$0.00 | \$340,295.51 | \$340,295.51 | \$340,295.51 |
| CTPMK | Combo tip perm marker | \$462,449.66 | \$160,139.30 | \$556,160.74 | \$556,160.74 | \$36,495.98 | \$36,495.98 | \$36,495.98 |
| DSDEMK | Deluxe dry erase marker set | \$1,213,719.49 | \$428,897.28 | \$1,426,472.23 | \$1,426,472.23 | \$180,551.65 | \$180,551.65 | \$180,551.65 |
| FTPMK | Fine tip perm marker | \$173,170.18 | \$96,525.72 | \$74,686.77 | \$74,686.77 | \$17,022.69 | \$17,022.69 | \$17,022.69 |
| HPPC | Hard point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$127,051.90 | \$127,051.90 | \$127,051.90 |
| MPPC | Medium point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$38,560.00 | \$38,560.00 | \$38,560.00 |
| RDDBPN | Red stick pen | \$500,211.49 | \$130,820.66 | \$0.00 | \$0.00 | \$425,198.30 | \$425,198.30 | \$425,198.30 |
| RFFPN | Refillable fountain pen | \$1,047,137.71 | \$292,280.15 | \$0.00 | \$0.00 | \$541,339.94 | \$541,339.94 | \$541,339.94 |
| SSPN | Student set colored pencils | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$80,782.12 | \$80,782.12 | \$80,782.12 |
| | Total | \$5,069,133.11 | \$1,535,985.72 | \$2,741,963.69 | \$2,741,963.69 | \$2,739,717.98 | \$2,739,717.98 | \$2,739,717.98 |

[13] Rows Found...

Cross Tab Template format

Template Definition Overview

Templates are the generic format of the data displayed. They are saved globally, so they can be used by all users. The creator of the Template controls who can edit or delete the Template. A Template can be created at one Dimension level, customized to fit your individual needs, and then saved as a View to your desktop.

Note: A Template definition cannot contain more than ten Dimensions.

Once created, a Template can be opened without retrieving data, customized to fit your analysis needs, and then run to retrieve the data.

Template Example (see picture on following page):

Columns 1 and 2 contain Dimension information.

- Item # and Description.

Columns 3 and 5 contain historical data.

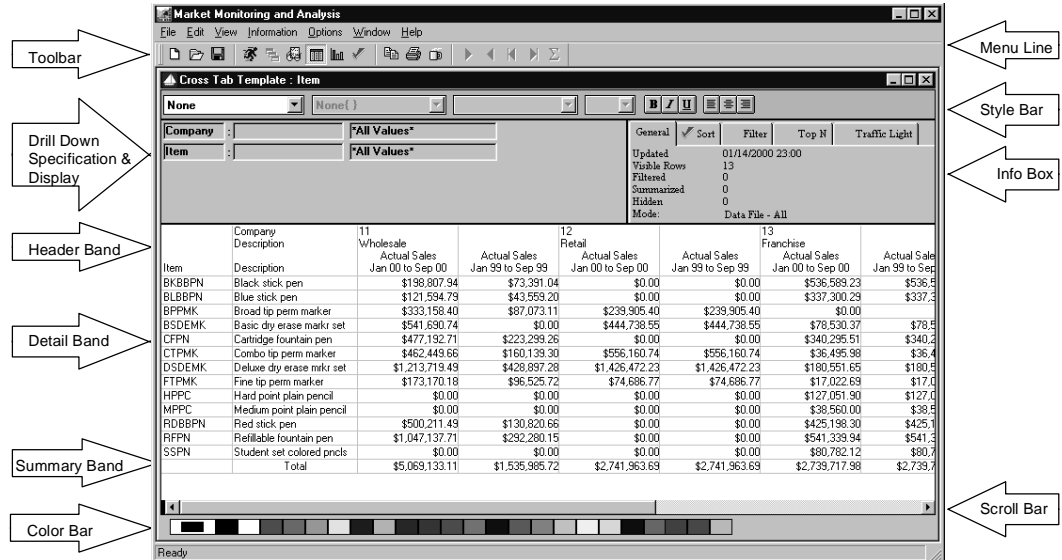
- Actual Sales.

Columns 4 and 6 contain user-defined calculations.

- % of Total Current Period and % of Total YTD

DBView Window Format

A definition of all the screen areas follows:



Screen Area Definitions

Parts of a View Window

Menu Line

Choosing a command tells *DBView* what to do next -- open a Template definition, run a Template, print a View display, exit the *DBView* application, and so forth. Commands that perform related actions are grouped together on a menu. The menus are listed on the menu line at the top of the *DBView* window.

Toolbar

The toolbar gives you instant access to the most frequently used functions. By simply clicking a button, you can open, save, and print a Template; drill-down to another Dimension; graph a View display, and so forth. The toolbar display can be turned on and off using the Window menu, and can be repositioned to a familiar location

Style Bar

The style bar gives you the ability to customize your View. Choose specific fields to italicize, bold, underline, and so forth. The style bar can be turned on and off using View | Change View.

Interactive Drill-down Specification & Display Area

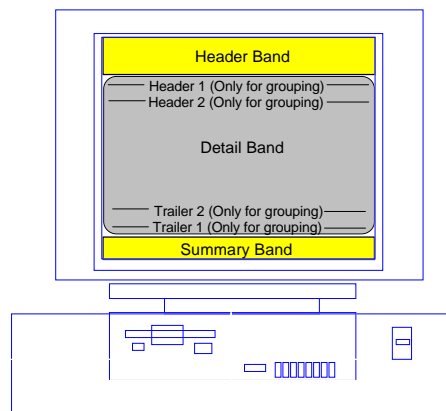
The top section of the *DBView* window displays the path taken to access the data that is currently displayed. The Dimension(s) and their key values, descriptions, and User Lists can be changed and the window refreshed with the newly requested data. A Dimension can also be added or removed from the drill-down path and then the data refreshed to reflect the change in Dimension filters.

Information Box

When a View is displayed, the user can look at the top right corner to see the date that the data was last updated, any sorting or filtering that has been applied, the number of rows that are summarized or hidden, as well as the View mode. The information displayed depends on the tab selected: General, Sort, Filter, Top/Bottom N, or Traffic Light. If a check mark is displayed immediately to the left of the tab that indicates that data is displayed on the tab. The Information Box is display-only and does not allow any entry.

Band

There are normally three main band types. When grouping, there are additional band types. For every Dimension grouped, two additional bands are introduced: Header N and Trailer N where N is the sequence number of the grouped Dimension.



Header Band

The Header band is the section of the *DBView* window that usually contains the column titles. In a Cross Tab View, one of the Dimensions displays in the Header band. If a Template contains subtotaling, the subtotal level displays in the Header 1 band, which is directly below the Header band on the View display. There are three to six different display bands: Header, HeaderN, Detail, Summary, TrailerN.

Detail Band

The Detail band is the middle section of the *DBView* window. This area displays the historical *MMA* data in the format you defined.

Summary Band

The Summary band is the final row of the *DBView* window. These area displays any summarization performed for the data. For example, summarize all sales in a column, calculate the average in a column, and so forth. If the View contains subtotal levels, those totals display in the Trailer band, which display directly above the Summary band.

Scroll Bar

Clicking the scroll bar or dragging the box in the scroll bar brings other parts of the View into the display. Vertical and horizontal scroll bars display when applicable.

Color Bar

The color bar gives you the ability to customize your View using different colors. Choose a field by right-clicking on it and then select the appropriate color on the color bar. The text color can be changed by selecting the color with a single click of the left mouse button. The background color can be changed by selecting the color with a single click of the right mouse button. The color bar can be turned on and off using View | Change View.

Reviewing the Information Box

When a View is displayed, you can look at the top right corner to see statistics relating to the information displayed. You can determine the sorting or filtering that has been applied, the number of rows that have been filtered, hidden, or summarized, as well as any traffic lighting that has been applied. The Information Box is always displayed in the upper right-hand corner of the window.

The screenshot shows a window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. Below the toolbar is a "Column Template : Item" section with fields for "BusUnit" and "Item", both set to "All Values*". To the right of this section is an "Information Box" with tabs for "General", "Sort", "Filter", "Top N", and "Traffic Light". The "General" tab is selected, showing "Item - Ascending" and "Description - Ascending". Below the information box is a data table with columns: Item, Description, Actual Sales Sep 00 to Sep 00, % of Total Current Period, Actual Sales Jan 00 to Sep 00, and % of Total YTD. The table lists various stationery items and their sales data. At the bottom of the window, it says "[13] Rows Found...".

| Item | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|--------|-----------------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BKBBFN | Black stick pen | \$224,829.96 | 6.16% | \$360,490.41 | 6.15% |
| BLBBFN | Blue stick pen | \$268,855.32 | 7.38% | \$1,140,801.39 | 7.30% |
| BPPMK | Broad tip perm marker | \$162,393.87 | 4.46% | \$698,577.52 | 4.47% |
| BSDEMK | Basic dry erase marker set | \$306,589.93 | 8.41% | \$1,316,468.15 | 8.43% |
| CFPN | Cartridge fountain pen | \$381,436.60 | 10.47% | \$1,634,645.37 | 10.47% |
| CTPMK | Combo tip perm marker | \$598,885.30 | 16.43% | \$2,574,489.73 | 16.48% |
| DSDEMK | Deluxe dry erase mkr set | \$800,631.10 | 21.97% | \$3,434,190.01 | 21.93% |
| FTPMK | Fine tip perm marker | \$78,218.29 | 2.15% | \$336,058.07 | 2.15% |
| HPFC | Hard point plain pencil | \$29,777.72 | .82% | \$127,051.90 | .81% |
| MPPC | Medium point plain pencil | \$61,879.90 | 1.70% | \$263,254.65 | 1.63% |
| RDDBFN | Red stick pen | \$241,914.99 | 6.64% | \$1,034,463.36 | 6.62% |
| RFPN | Refillable fountain pen | \$470,124.93 | 12.90% | \$2,016,600.69 | 12.91% |
| SSPN | Student set colored pencils | \$18,778.93 | .52% | \$80,782.12 | .52% |
| Total | | \$3,644,116.84 | 100.00% | \$15,617,879.55 | 100.00% |

View with sort applied

To review the display information:

1. With a View in display, look at the Information Box located in the upper right corner of the window. This is display-only and does not allow any maintenance.
2. Choose the General tab. This is selected by default.
3. The Information Box displays the date and time that the data was last updated, the number of rows that are currently displayed, the number of rows that have been filtered out, the number of rows that have been summarized to make up the "Summarized" row, the number of rows that have been hidden, and the mode in which the data currently displays.

To review the sort information:

1. With a View in display, look at the Information Box located in the upper right corner of the window. This is display-only and does not allow any maintenance.
2. If a sort on a column within the View has been requested, a check mark displays immediately to the left of the Sort tab. Click the Sort tab.
3. The Information Box displays the sort currently applied to the View. By default, the data is sorted on the Dimension value and displayed in ascending order. Any column within the View can be sorted and displayed in ascending or descending order.

To review the filter expression:

1. With a View in display, look at the Information Box located in the upper right corner of the window. This is display-only and does not allow any maintenance.
2. If a filter has been applied, a check mark displays immediately to the left of the Filter tab. Click the Filter tab.
3. The Information Box displays the filter currently applied to the View. Any column within the View can have a filter applied to it.

To review the Top/Bottom count:

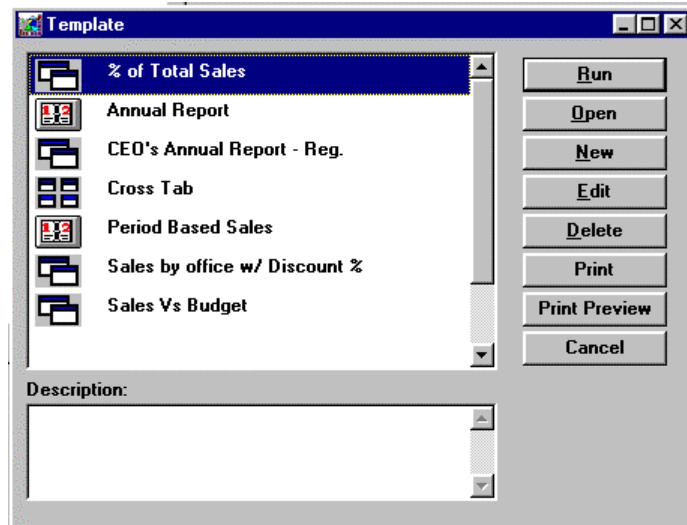
1. With a View in display, look at the Information Box located in the upper right corner of the window. This is display-only and does not allow any maintenance.
2. If a Top or Bottom count has been applied, a check mark displays immediately to the left of the Top N tab. Click the Top N tab.
3. The Information Box displays the top/bottom count, the field to which it has been applied, and if the excluded rows have been summarized and displayed in a "Summarized" row.

To view details of traffic lights applied:

1. If traffic lighting has been applied, a check mark displays on the Traffic Light tab. Click on the Traffic Light tab to view the titles of the columns/rows with traffic lights applied.
2. Double-click on the desired traffic light to display the detail behind the traffic light conditions applied.
3. The Traffic Light window displays for your viewing, but the traffic light expressions and colors are not maintainable through the Information Area of the View.
4. Click **Close** to close the window and redisplay the View.

Using the Template Listing Window

Templates are the generic format of the View, and only authorized users can create Template definitions. If you have authority to this window, you can create a new Template, edit an existing one, delete one, or print one. The command buttons available on this window depend on whether you accessed it by selecting Edit | Template or File | New. The window looks the same, but **New**, **Edit**, and **Delete** are commands only available when editing a Template definition.



Template listing window

To open a Template:

- Choose the Template name by highlighting it. Click **Open** to open this Template.

Note: The Template definition will just be opened; the data will not display until you request it to be retrieved by selecting **Run**.

To run a Template:

- Choose a Template name by highlighting it. Click **Run** to run this Template and retrieve data for the Dimension(s) and format defined in the Template. You can also double-click on the Template name to run it because **Run** is the active button.

To delete a Template:

- Choose a Template name by highlighting it. Click **Delete** to delete this Template definition with confirmation.

To preview a Template Definition report:

1. If you want to see how the Template Definition report will print before submitting it, highlight the name click **Print Preview**.
2. Review the Preview and **Close** the window or **Print** the report.

To print a Template Definition report:

1. If you want to print the Template Definition, highlight the name and click **Print**.
2. If your PC is connected to a printer, it will be submitted as soon as **Print** is clicked.

Template Listing Fields

Template List

Select the Template to open, run, edit, or delete from this listing. A vertical scroll bar is available so you can view all of the predefined templates. The Template type is indicated in the list box by the icon located to the left of the Template name.



Regular Template



Cross Tab Template



Period Based Template

Description

The description of the selected Template, if one exists, displays in the Description field. This field is maintainable. A vertical scroll bar is available so you can view the entire description.

Template Listing Command Buttons

Run

Click **Run** to run the selected Template and retrieve data for the Dimension included in the Template definition. Double-clicking on the Template name will also run the definition.

Open

Click **Open** to open the selected Template and display the format of the Template without retrieving any data.

New

Click **New** to create a new Template definition. This command button is available only when Edit | Templates is selected. If you are not authorized, you cannot create, edit, or delete Template definitions.

Edit

Click **Edit** to edit an existing Template definition. This command button is available only when Edit | Templates is selected.

Delete

Click **Delete** to delete the selected Template with confirmation. This command button is available only when Edit | Templates is selected.

Print

If you are connected to a printer, clicking **Print** will print the Template Definition Report of the selected Template.

Print Preview

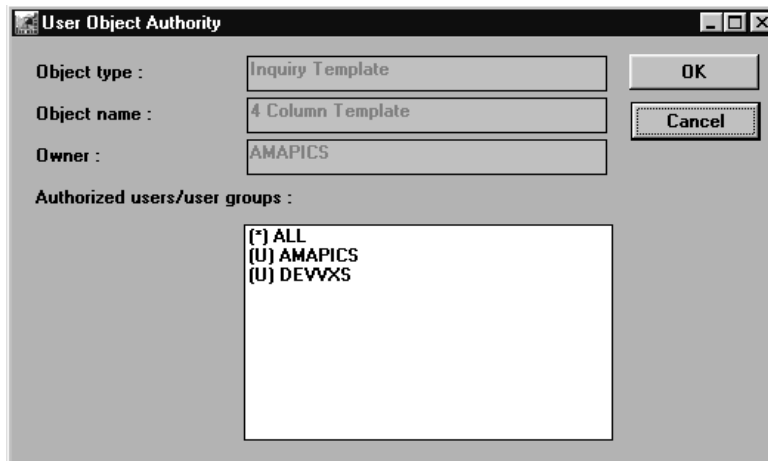
Clicking **Print Preview** from the Template Definition window will display the report so you can review it before printing it.

Cancel

Click **Cancel** to close the window without opening, running, maintaining, or deleting any Templates.

Securing Template Definition

DBView has the ability to limit users from editing or deleting Template definitions. Only authorized users can delete and edit existing Template definitions. If authority is not specified, all users have authority to all Templates. If the creator goes into the User Object Authority and selects specific users, or *ALL, only those selected can edit or maintain the Template definition.



User Object Authority window

To secure users to Template maintenance or deletion:

1. From the Template Definition window, click **Authority** to access the User Object Authority window.
2. The Template name displays in the Object name field. Verify that this is the correct name. If this is not the correct template, click **Cancel**. **Close** the Template Definition window, and start over by selecting a different Template.
3. The user profile of the person who created the Template defaults in the Owner field. If you select **OK** at this point, only the creator can edit or delete the Template.
4. Select the desired users or ALL from the listing.
5. Click **OK** to accept your selection(s) and close the window.

User Object Authority Fields

Object Type

The type of object to be secured displays in the Object Type field.

Object Name

The name of the active Template definition displays in the Object Name field. This field is display only. If this is not the correct Template, close the window and select a different one from the Template Listing window.

Owner

The user profile of the person who created the Template displays in the Owner field.

Authorized Users/User Groups

Users and user groups are defined by the system administrator in the *Administration* application. A listing of all valid users and user groups displays here. All users are authorized to Templates by default. If no selections are made on this window and it is not saved, all users will still be able to edit or delete the active Template definition. If no selections are made but **OK** is clicked, only the Template owner can edit or maintain the active Template definition.

User Object Authority Command Buttons

OK

Click **OK** to accept the user authority selection(s) and close the window.

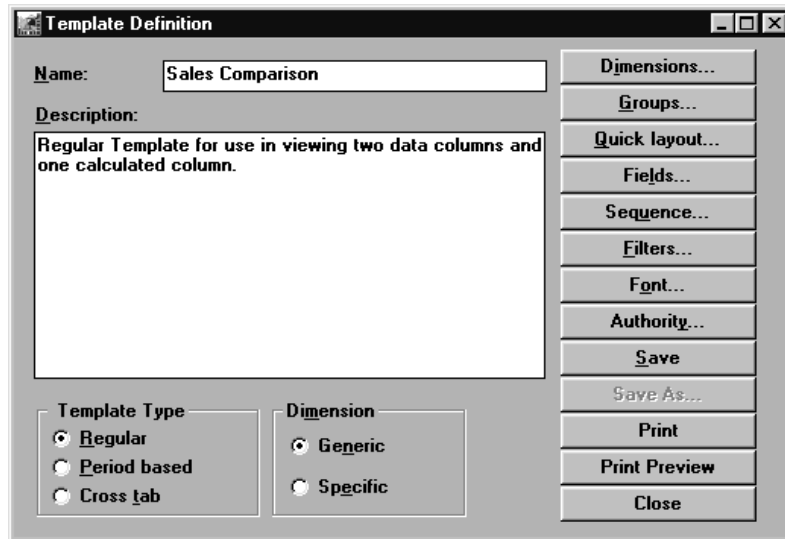
Cancel

Click **Cancel** to return to the Template Definition window without accepting any entries.

Initial Steps of Template Definition

When creating a Template, it should be as generic as possible. For example, four data columns and two calculated columns. With the installation of *MMA* and *DBView*, the idea is to have few Templates and many customized Views. The generic format of the Template can be created and saved by the system administrator or any other power users with Template definition authority. Users can then run a Template as it exists, or make adjustments and save it as a View to their desktop. The creator of the Template controls whether or not other users have authority to edit or delete their Template definition.

The following pages present the processes of creating a Regular Template definition. If you have any questions or want to see detailed definitions of each window involved, please refer to Chapter 7 in the *Systems Administrator Guide* for more information.



Template Definition main window

Template definition minimal entries

To define a regular Template, you must complete the following steps:

1. Access the Template Definition window by choosing Edit | Templates | New on the main window.
2. Enter a name.
3. *{Optional}* Enter a description.
4. Verify that the Regular Template Type radio button is selected.
5. Choose the Generic Dimension radio button if this Template can be run at any Dimension level, or choose Specific if this Template can be run for only the selected Dimension level.
6. Choose a Dimension level to be the place-holder during definition using **Dimensions**.

7. Choose the field types (For example: data, text, description, calculation) using **Quick layout**.

Note: Once the Quick Layout function is exited, it is disabled from the Template definition process.

8. Access the windows to define the field details by clicking **Fields**.
9. *{Optional}* Define date range(s) for the data fields, if other than the default. This can be changed at runtime.
10. *{Optional}* Choose to summarize the data fields. This system-generated calculation can be changed at runtime.
11. *{Optional}* Define column titles for the calculated fields and the other fields, if other than the default.
12. *{Optional}* Define the calculation expressions for the calculated fields. This can be done at runtime.
13. Preview the definition and adjust any column widths using **Preview** on the Fields window.
14. *{Optional}* Define Row Coloring and/or Traffic Lighting by right-clicking within the Preview and selecting the correct option from the pop-up menu. Please refer to Chapter 5 in this *User Guide* or online Help for more information.
15. *{Optional}* Limit other users from editing or deleting your Template definition by selecting **Authority**.
16. **Close** the fields window and **Save** the definition.
17. **Close** the Template Definition window and the Template is available and ready to run.

Template Definition Fields

Name

The name may be up to 30 alphanumeric characters, including blanks. Enter a unique, user-defined name, which will display along with other Template definition names in the Template Listing window. The name cannot be changed when editing an existing Template.

Description

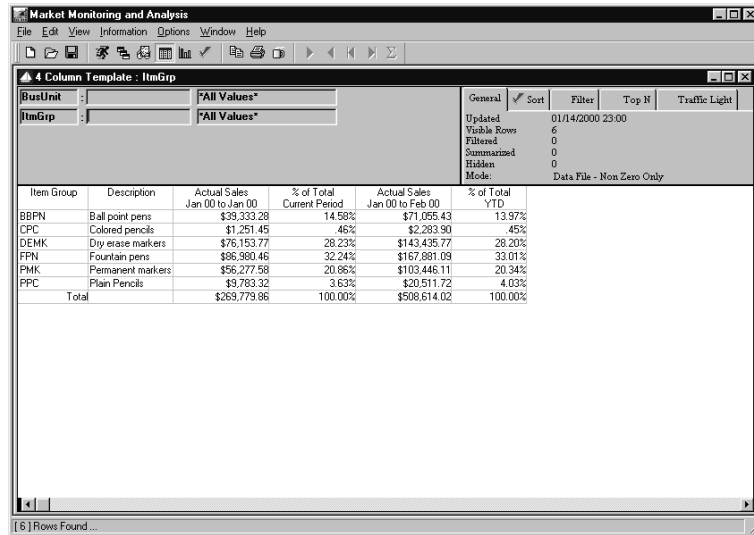
You can optionally enter a long description that will display on the Template Listing and on the initial Template Definition windows. The description is maintainable when editing a Template.

Template Type

Use the radio button to select one of the three types of Template formats:

Regular

A Regular Template is the system default. It displays data for one or more Dimensions with the option of level breaks (grouping). The Dimension values and descriptions display in the rows and the categories/values display in the columns.



The screenshot shows a software window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. The main window displays a report titled "4 Column Template - ItmGrp". The report includes a header section with fields for "BusUnit" and "ItmGrp", both set to "All Values*", and a "General" section with options for "Sort", "Filter", "Top N", and "Traffic Light". The main data table has columns for "Item Group", "Description", "Actual Sales Jan 00 to Jan 00", "% of Total Current Period", "Actual Sales Jan 00 to Feb 00", and "% of Total YTD". The data rows include categories like BBFN (Ball point pens), CPC (Colored pencils), DEMK (Dry erase markers), FPN (Fountain pens), PMK (Permanent markers), and PPC (Pian Pencils), along with a "Total" row. A status bar at the bottom indicates "[6] Rows Found...".

| Item Group | Description | Actual Sales Jan 00 to Jan 00 | % of Total Current Period | Actual Sales Jan 00 to Feb 00 | % of Total YTD |
|------------|-------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BBFN | Ball point pens | \$39,333.28 | 14.58% | \$71,065.43 | 13.97% |
| CPC | Colored pencils | \$1,251.45 | 46% | \$2,283.90 | 45% |
| DEMK | Dry erase markers | \$76,153.77 | 28.23% | \$143,435.77 | 28.20% |
| FPN | Fountain pens | \$86,980.46 | 32.24% | \$167,881.09 | 33.01% |
| PMK | Permanent markers | \$56,277.58 | 20.86% | \$103,446.11 | 20.34% |
| PPC | Pian Pencils | \$3,783.32 | 3.63% | \$20,511.72 | 4.03% |
| Total | | \$269,779.86 | 100.00% | \$508,614.02 | 100.00% |

Regular Template format

Period Based

A Period Based Template is similar to the Regular Template, except the data is broken down by user-defined periods. In the Period Based Template, the Dimension is displayed in the header, the periods are displayed in the rows of the first column, and the category/values are in the remaining columns. A Period Based Template must be Dimension *Generic* because the Dimension level is selected at runtime. Automatic drill-down is not available. You can, however, drill-down by adding a Dimension level. After adding the Dimension, request a retrieval.

The screenshot shows a software window titled "Market Monitoring and Analysis" with a sub-window "Period Based Template : BusUnit". The main window has a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. The sub-window has a header with "BusUnit : DOM" and "Domestic". To the right of the header is a control panel with fields for "General", "Sort", "Filter", "Top N", and "Traffic Light". Below this is a status area showing "Updated: 01/14/2000 23:00", "Visible Rows: 9", "Filtered: 0", "Summarized: 0", "Hidden: 0", and "Mode: Data File - Non Zero Only".

| | Actual Sales | | Variance Amount |
|-------------|------------------|------------------|-----------------|
| | Jan 00 to Sep 00 | Jan 99 to Sep 99 | |
| Jan | \$173,016.77 | \$115,731.23 | \$57,285.54 |
| Feb | \$151,805.01 | \$102,532.73 | \$49,272.28 |
| Mar | \$311,919.59 | \$208,800.68 | \$103,118.91 |
| Apr | \$448,446.99 | \$299,971.49 | \$148,475.50 |
| May | \$521,341.28 | \$347,454.47 | \$173,886.81 |
| Jun | \$918,184.76 | \$510,440.58 | \$307,744.18 |
| Jul | \$2,583,610.71 | \$1,715,538.72 | \$868,071.99 |
| Aug | \$2,986,420.22 | \$1,982,958.02 | \$1,003,462.20 |
| Sep | \$2,456,063.45 | \$1,534,223.47 | \$921,839.98 |
| SubTotal | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 |
| Grand Total | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 |

[9] Rows Found ...

Period Based Template format

Cross Tab

A Cross Tab Template displays data for two Dimensions. One is displayed in the rows, and the other is displayed in the columns. The first Dimension level selected at runtime is the column Dimension, and the second is the row Dimension.

Automatic drill-down is not available in Cross Tab Templates. You can, however, drill-down by adding a Dimension level. After adding the Dimension, request a retrieval.

| Item | Company Description | 11 Wholesale | | 12 Retail | | 13 Franchise | | Actual Sale Jan 99 to Sep |
|--------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|---------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | |
| BKBBPN | Black stick pen | \$198,807.94 | \$73,391.04 | \$0.00 | \$0.00 | \$536,599.23 | \$536.5 | |
| BLBBPN | Blue stick pen | \$121,594.79 | \$43,559.20 | \$0.00 | \$0.00 | \$337,300.29 | \$337.3 | |
| BPPMK | Broad tip perm marker | \$333,158.40 | \$87,073.11 | \$239,905.40 | \$239,905.40 | \$0.00 | \$0.00 | |
| BSDEMK | Basic dry erase marker set | \$541,630.74 | \$0.00 | \$444,738.55 | \$444,738.55 | \$78,530.37 | \$78.5 | |
| CFPN | Cartridge fountain pen | \$477,192.71 | \$223,299.26 | \$0.00 | \$0.00 | \$340,295.51 | \$340.2 | |
| CTPMK | Combo tip perm marker | \$462,449.66 | \$160,139.30 | \$556,160.74 | \$556,160.74 | \$36,495.98 | \$36.4 | |
| DSDEMK | Deluxe dry erase marker set | \$1,213,713.49 | \$428,897.28 | \$1,426,472.23 | \$1,426,472.23 | \$180,551.65 | \$180.5 | |
| FIPMK | Fine tip perm marker | \$173,170.18 | \$36,525.72 | \$74,686.77 | \$74,686.77 | \$17,022.63 | \$17.0 | |
| HPFC | Hard point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$127,051.90 | \$127.0 | |
| MPFC | Medium point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$38,560.00 | \$38.5 | |
| RDBBPN | Red stick pen | \$500,211.49 | \$130,820.66 | \$0.00 | \$0.00 | \$425,199.30 | \$425.1 | |
| RFPN | Refillable fountain pen | \$1,047,137.71 | \$292,280.15 | \$0.00 | \$0.00 | \$541,339.94 | \$541.3 | |
| SSPN | Student set colored pencils | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$80,782.12 | \$80.7 | |
| | Total | \$5,069,133.11 | \$1,535,985.72 | \$2,741,963.69 | \$2,741,963.69 | \$2,739,717.98 | \$2,739.7 | |

Cross Tab Template format

Dimension

A Template definition can be related to Dimensions in two different ways. Use the radio button to identify the template as *Generic* or *Specific*.

Generic

The system default is *Generic*. If the Template definition is Dimension *Generic*, the Dimension(s) selected at Template definition are used only as place-holders, allowing different Dimensions to be selected at runtime. When *Generic*, the View can be run and saved for different Dimensions. Period Based definitions must be *Generic* because the Dimension is selected at runtime.

Specific

When *Specific*, the View can be run and saved for only the Dimension selected as part of the definition. Drill-down is not allowed within Templates that are Dimension *Specific*. This prevents users from running a Dimension then drilling down to other Dimension levels.

Template Definition Command Buttons

The Template Definition functions should be completed in the order that they are displayed. (For example, define **Dimensions** first and **Close** the window last.)

Dimensions

Dimensions opens the Dimension Selection window. If Dimension *Generic*, the selections made during the Template definition are only place-holders for when the definition is being created. At runtime, you specify which Dimension to begin the Template retrieval. If the definition is Dimension *Specific*, the selections made during the definition will default at runtime and cannot be adjusted. If the Template contains subtotaling, two or more Dimensions are selected using the **Dimensions** button.

Groups

Subtotaling of data can be done using **Groups**. Grouping is based on a subset of the selected Dimensions. For example, list of all Item sales grouped by Customer. Choose the Dimension(s) you want to subtotal from the Selected Dimensions box. Grouping is available only for Regular Template definitions.

Quick layout

The **Quick layout** function, which allows you to quickly define the fields, is available only when creating a new definition. Selections made on the Quick Layout window determine various default values based on the field type selected. Once the Quick Layout function is exited, it is disabled from the Template definition process.

Fields

Use **Fields** to format the details of your Template; add/change/delete or align columns, color of text, period(s), year(s), and so forth. Information that defaults on the Field detail window depends on the field type selected using the Quick Layout. There are four different field types: Data, Calculation, Description, and Text.

Sequence

Sequence specifies the sorting performed. The implicit sort is performed on the Dimension values. Data can be displayed in ascending or descending order; sorting on the key value, the short description, a field definition within the Dimension, or a calculated column. A sequential sort can be included as part of the definition, or it can be applied at runtime.

Filters

The **Filter** function allows you to define the conditions that the data must satisfy in order to display on the View. Filter criteria eliminates display of unwanted data. A filter can be performed on any data or calculated column within the Template definition. A filter can be included as part of the definition or it can be applied during runtime. For example, you could set up a Template to display data only for Regions with sales greater than \$50,000.

Font

The user has control of the font type and size for the full Template display using **Font**. The default is MS Sans Serif, 8 point. The font can be maintained here or during runtime using the style bar.

Authority

Authority displays the User Object Authority window that limits users from editing or deleting the Template definition. Security is backward compatible, which means that if authority is not specified, all users have authority to all Templates.

Save / Save As

To save a new definition or an existing one under the same name, click **Save**. **Save As** can be used to save an existing definition under a new name. A dialog box requesting the Template name displays when **Save As** is clicked on. When creating a new definition, **Save As** is disabled. If you are not the creator of the Template, and access authority has been assigned, **Save** will not be allowed from this window.

Note: *DBView* does not allow you to save a definition over an existing definition when using the **Save As** feature.

Print

If you are connected to a printer, clicking **Print** will print the Template Definition Report of the selected Template.

Print Preview

Clicking **Print Preview** from the Template Definition window will display the report so you can review it before printing it.

Close

Close exits the Template definition function prompting you to save the definition is displayed when **Close** is clicked prior to saving the definition. This ensures that you do not accidentally exit without saving a definition.

Previewing a Definition

The Preview function displays a sample of the Template format and constructs the Template structure for use at runtime. The data you see in a Preview is not your *MMA* data. Column sizing can be saved during the Preview, but not during the runtime of a Template. Necessary modifications should be made to the Template preview so they are absorbed into the structure of the Template. The fields can be deleted, added, or repositioned.

You can re-enter the Preview as many times as needed. Be sure to Preview a definition before you save it, or a message displays prompting you to do so. Drill-down is not allowed if a Preview was not completed as part of the Template definition.

| Template - Preview | | | | | |
|--------------------|---------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| Business Unit | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
| value-1 | description-1 | \$950.00 | 8.13% | \$1,050.00 | 7.95% |
| value-1 | description-1 | \$550.00 | 4.74% | \$650.00 | 4.92% |
| value-1 | description-1 | \$1,050.00 | 9.05% | \$1,150.00 | 8.71% |
| value-1 | description-1 | \$650.00 | 5.60% | \$750.00 | 5.68% |
| value-1 | description-1 | \$450.00 | 3.88% | \$550.00 | 4.17% |
| value-1 | description-1 | \$850.00 | 7.33% | \$950.00 | 7.20% |
| value-1 | description-1 | \$350.00 | 3.02% | \$450.00 | 3.41% |
| value-1 | description-1 | \$750.00 | 6.47% | \$850.00 | 6.44% |
| value-2 | description-2 | \$1,000.00 | 8.62% | \$1,100.00 | 8.33% |
| value-2 | description-2 | \$500.00 | 4.31% | \$600.00 | 4.55% |
| value-2 | description-2 | \$600.00 | 5.17% | \$700.00 | 5.30% |
| value-2 | description-2 | \$800.00 | 6.90% | \$900.00 | 6.82% |
| value-2 | description-2 | \$1,100.00 | 9.48% | \$1,200.00 | 9.09% |
| value-2 | description-2 | \$700.00 | 6.03% | \$800.00 | 6.06% |
| value-2 | description-2 | \$500.00 | 4.31% | \$600.00 | 4.55% |
| value-2 | description-2 | \$400.00 | 3.45% | \$500.00 | 3.79% |
| Total | | \$11,600.00 | 100.00% | \$13,200.00 | 100.00% |

Template Preview window

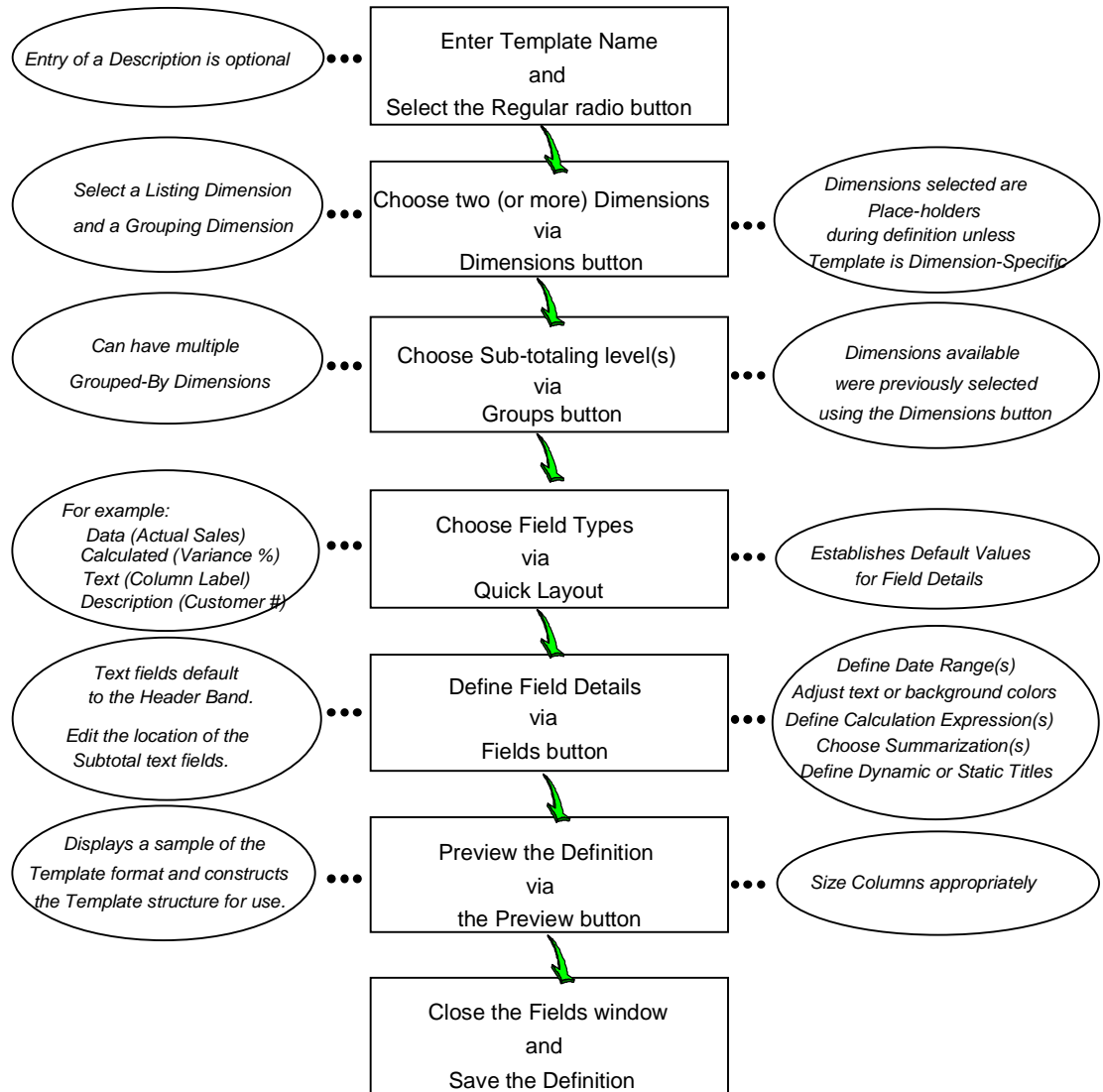
Note: Any time during the definition, you can **Preview** the display to verify that it is correct. Data displayed while in Preview mode is not the *real* data that will be retrieved during runtime of your Template. The calculations, however, are correctly performed within the Preview.

To preview the structure of a Template definition:

1. Click **Preview** from the main Template Definitions - Fields window.
2. *{Optional}* Size the columns appropriately by positioning the mouse cursor on the column line in the header area of the Template. When the cursor becomes a -||- sign, click and drag the cursor to size the column as desired.
3. *{Optional}* Reposition any columns by selecting the column and then dragging and dropping it to the required position.
4. *{Optional}* Row Coloring and Traffic Lighting may be assigned to the Template definition during the Preview by selecting the item from the pop-up menu displayed when you right-click anywhere on the Preview window. Please refer to Chapter 5 in this *User Guide* or online Help for more information.

5. Make adjustments to the fields within the Template definition and then perform another Preview.
6. Close the Preview window by choosing Close from the drop-down menu accessed from the command button in the upper-left corner of the window.

Grouped By Template Definition Process



Defining a Grouped By Template

A Regular Template definition can contain grouping (or subtotaling) Dimension levels. Each subtotal level displays on one window, but this can be changed using the Toggle New Page feature. Use the vertical scroll bar to maneuver through all subtotaling. Automatic drill-down is not available when the Template contains a grouping Dimension. You can modify the two Dimensions in the View, however, using the Interactive Drill-Down Path. After adding the Dimension, request a retrieval.

The screenshot shows the 'Market Monitoring and Analysis' application window. The main data table is titled '4 Data Column / 2 Calculations : ItmFam'. The table is grouped by 'Region' and 'Item Family'. The current view is for the 'EURE' region (Eastern Europe). The data is as follows:

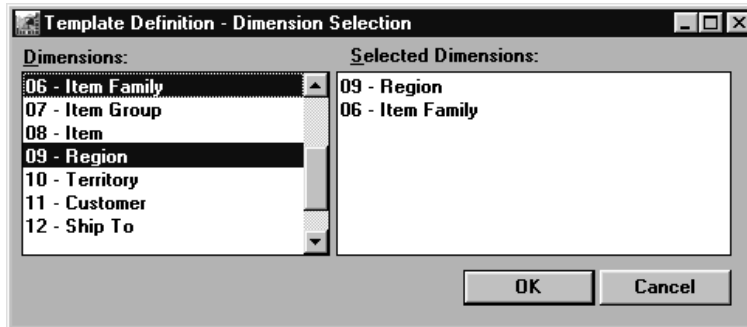
| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|-------------|----------------|--------------------|--------------------|--------------|---------------------------|---------------------------|----------------|
| EURE | Eastern Europe | | | | | | |
| Item Family | | | | | | | |
| MARK | Markers | \$272,897.03 | 18,832 | \$254,065.00 | \$1,173,935.09 | 81,011 | \$1,092,924.34 |
| PENC | Pencils | \$29,302.50 | 14,126 | \$15,176.25 | \$125,023.95 | 60,272 | \$64,751.97 |
| PENS | Pens | \$161,534.67 | 25,352 | \$136,182.60 | \$685,687.01 | 107,374 | \$578,313.47 |
| Total | | \$463,734.20 | 58,310 | \$405,423.84 | \$1,984,646.05 | 248,656 | \$1,735,989.78 |

Grouped by Template displaying Eastern Europe Region

The screenshot shows the same 'Market Monitoring and Analysis' application window, but the data table is now grouped for the 'EURW' region (Western Europe). The data is as follows:

| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|-------------|----------------|--------------------|--------------------|--------------|---------------------------|---------------------------|----------------|
| EURW | Western Europe | | | | | | |
| Item Family | | | | | | | |
| MARK | Markers | \$328,541.53 | 23,298 | \$305,243.15 | \$1,407,095.54 | 99,708 | \$1,307,397.15 |
| PENC | Pencils | \$23,539.90 | 11,770 | \$11,769.95 | \$59,670.90 | 49,895 | \$49,835.44 |
| PENS | Pens | \$372,231.76 | 42,326 | \$329,906.04 | \$1,575,652.28 | 178,639 | \$1,397,013.75 |
| Total | | \$724,313.19 | 77,394 | \$646,919.14 | \$3,062,418.72 | 328,182 | \$2,754,236.35 |

Same Grouped by Template after scrolling to the next Region



Dimensions Definition - Grouping Selection window

Template Definition Minimal Entries

To define a Grouped by Template, complete the following steps:

1. On the Template Definition window, enter a name and verify that the Regular Template Type radio button is selected.
2. Choose two Dimensions to be the place-holders during definition using **Dimensions**. One Dimension is the listing Dimension and the other is the subtotaling level. To create the Template pictured on the previous page, Item Family and Region were selected.
3. Choose the subtotaling Dimension using **Groups**. In this example, Region was selected.
4. Choose the field types (for example, data, text, description, calculation) using **Quick layout**.
5. *{Optional}* Choose text fields for the subtotal and grand total rows and then click **OK**.

Note: Once the Quick Layout function is exited, it cannot be re-entered for the Template definition.

6. Make the proper field association for the Grouped by Dimension's text by clicking **Fields** from the Template Definition window.
 - For example, the description field for Grouped by Dimension should be in Row 2 of the Header1 band (Position 1, Row 2), and the text labeling it should be in Row 1 of the Header1 band (Position 1, Row 1).
 - If the text fields are left justified, the display is more attractive.
 - Use the **Next** and **Prior** buttons in the Fields window to view information about each field and if necessary, click **More** to make additional changes to the field. See "Positioning of Text Field Tips" in Chapter 9 of this *User Guide* for more information.
7. *{Optional}* Define date range(s), if other than the default.
8. *{Optional}* For each data field, choose Sum-Sum from the drop-down selection list available on the Summary field to summarize the data within each column.

9. *{Optional}* Define column titles, if other than the default. Key in static text for the subtotal and grand total text fields. They should be in the first or second position of the Trailer 1 and Summary bands respectively.
10. Preview the definition and adjust any column widths using **Preview** on the Fields window.

Note: The Template format for a Grouped by Template needs minor adjustments to get the grouping level to stand out on the display. It is recommended that colors be applied to the text and description fields. You can also apply a coloring scheme to the rows and columns. You can apply row and column coloring while previewing a definition. Right-click during the preview to display a pop-up menu, and then select Row Colors.

The screenshot shows the 'Market Monitoring and Analysis' application window. The main data table is titled '4 Data Column / 2 Calculations - ItmFam'. The table has columns for Region, Description, ActSales Sep 00, Quantity Sep 00, Variance, ActSales Jan to Sep 00, Quantity Jan to Sep 00, and Variance. The data is grouped by Region (EURE) and Item Family (MARK, PENC, PENS). The table is styled with row coloring and text changes.

| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|--------------|----------------|-----------------|-----------------|--------------|------------------------|------------------------|----------------|
| EURE | Eastern Europe | | | | | | |
| Item Family | Markers | \$272,897.03 | 18,832 | \$254,065.00 | \$1,173,935.09 | 81,011 | \$1,092,924.34 |
| PENC | Pencils | \$29,302.50 | 14,126 | \$15,176.25 | \$125,023.95 | 60,272 | \$64,751.97 |
| PENS | Pens | \$161,534.67 | 25,352 | \$136,182.60 | \$685,687.01 | 107,374 | \$578,313.47 |
| Total | | \$463,734.20 | 58,310 | \$405,423.84 | \$1,984,646.05 | 248,656 | \$1,735,989.78 |

Grouped by Template with row coloring applied and text colors changed

11. **Close** the Fields window and **Save** the definition.
12. **Close** the Template Definition window. The Template is now available and ready to run.

Note: A Template definition with subtotaling can have up to nine subtotal levels.

Notes

CHAPTER 4 • RUNNING TEMPLATES & VIEWS

QuickLook

Use this chapter to learn how to:

- Understand the differences between a Template and a View.
- Open and run a Template.
- Print a report of the Template definition.
- Run Desktop View from your PC, or open a View file.
- Run a View which exceeds the maximum number of rows.
- Drill-down within a View.
- Run a View with a single Dimension value.
- Search for a key Dimension value.
- Run a View with a User List.
- Create a User List.
- Filter and Sort the data displayed.
- Perform Exclusion Reporting.
- Run a View with daily transactions.
- Display Master File data with zero data.
- Display Top/Bottom values.
- Hide and summarize rows.
- Save the View to your desktop.

Introduction to Views

DBView offers the functionality of taking generically constructed Templates and customizing them and saving them to your desktop as a file or an icon.

- **Templates** are the generic format of the data displayed. They are saved globally so they can be shared among users. Template owners can limit access to their Template definitions so other users cannot delete or edit their Template definition.
- **Views** are user-customized Inquiries. Start with a Template and configure it to fit your needs. Views are saved locally to your PC or on a shared drive (LAN). They are accessed via an icon on your desktop or by opening a .DTV file. Individual View items can be grouped together into ViewGroups.

Template vs. View

| Template | View |
|---------------------------------------|---|
| Resides on server | Resides on PC |
| Defines the generic format | User-customized format |
| Can be run to retrieve data | Run by opening .DTV file or clicking on an icon on your desktop |
| Only power users can create Templates | All <i>DBView</i> users can create their own Views |


Features of a View

- Accessible via an icon
- Views can be grouped together in the same manner programs or applications are grouped together. ViewGroups are separate windows inside *DBView* which contain icons that start Views. There can be more than one ViewGroup window, and when minimized, they display along the lower edge of the *DBView* window. You can control how the groups are arranged on your desktop.
- Change the positioning of any column in View
- Change the color or font size of any data or text in View
- Drill-down to another Dimension automatically
- Drill-down to a different Dimension manually
- Filter the data displayed
- Sort the data displayed
- Display the top or bottom values
- Hide selected rows from the View
- Search for a particular Dimension value
- Adjust the data requested
- Adjust the calculated columns

- Adjust the text labeling any column
- Display a graph
- Drill-down on the graph
- Print the View as a report
- Export the data to a file or to the printer

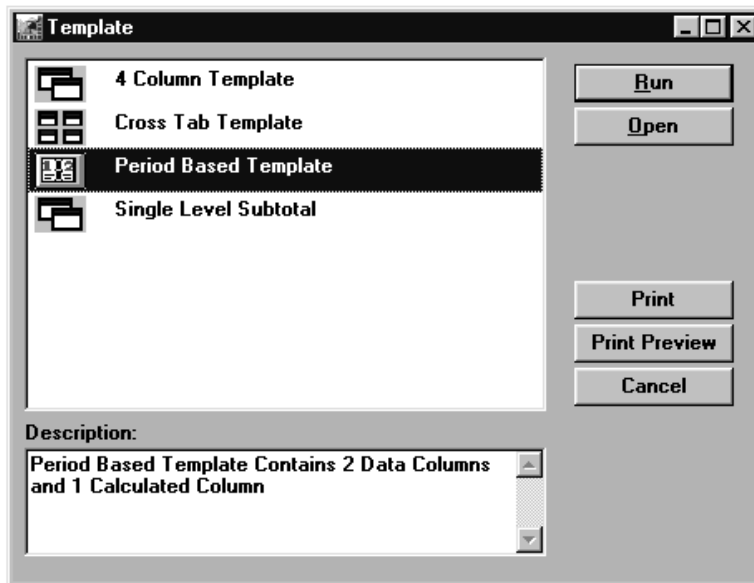
Opening and Running a Template

Templates are the generic format of the data displayed. A listing of all Template definitions can be accessed via File | New or the New View icon. From the Template Listing window, the Templates can be opened or run for the Dimension(s) included in the definition, and the Template definition can be printed. The Template type (Regular, Cross Tab, Period Based) is indicated in the list box by the icon located to the left of the Template name.

 = Regular

 = Cross Tab

 = Period Based



Template Listing window

The Template definition can be opened to View the format of the Template. A retrieval can be requested for the current Dimension, or the Dimension can be changed before the retrieval is requested. Columns can be moved around, but not deleted or added to the existing definition.

To open a Template:

1. Choose the Template name by highlighting it.
2. Click **Open** to open this Template. Remember the Template definition will just be opened; the data will not display until you request it to be retrieved.

To run a Template:

1. Choose a Template name by highlighting it.
2. Click **Run** to run this Template and retrieve data for the Dimension(s) and format defined in the Template. You can also double-click on the definition to run it because **Run** is the active command button on this window.

To preview a Template Definition report:

1. If you want to see how the Template Definition report will print before submitting it, highlight a Template name within the Template Definition window and click **Print Preview**.
2. Review the Print Preview and **Close** the window or **Print** the report.

To print a Template Definition report:

- Click **Print** from the Print Preview window
- OR--
- Click **Print** from the Template Listing window.

Template Fields

Template Listing

Select the Template you want to open, run, or print from this listing. A vertical scroll bar is available so you can View all of the predefined Templates.

Description

The user-defined description of the selected Template, if one exists, displays in the Description field. This field is maintainable. A vertical scroll bar is available so you can view the entire description.

Template Command Buttons

Run

Click **Run** to run the selected Template and retrieve data in the format defined. Double-clicking on the Template name will also run the definition.

Open

Click **Open** to open the selected Template. This allows you to adjust the Dimension level(s), the Interactive Drill-Down Path, the column positioning, and so forth before requesting a retrieval.

Print

If you are connected to a printer, clicking **Print** will print the Template Definition report of the selected Template.

Print Preview

Clicking **Print Preview** from the Template Definition window will display the report so you can review it before printing it.

Cancel

Click **Cancel** to close the Template listing without opening or running any Templates.

Administration Setup Report

This feature allows you to print an Administrative report containing details of the Template definition. These include Category Elements, DSL Dimension, ViewSet, and Template Definition reports.

This feature is available within the *DBView* application for the following sections:

- Template definition
- Audit Trail printout

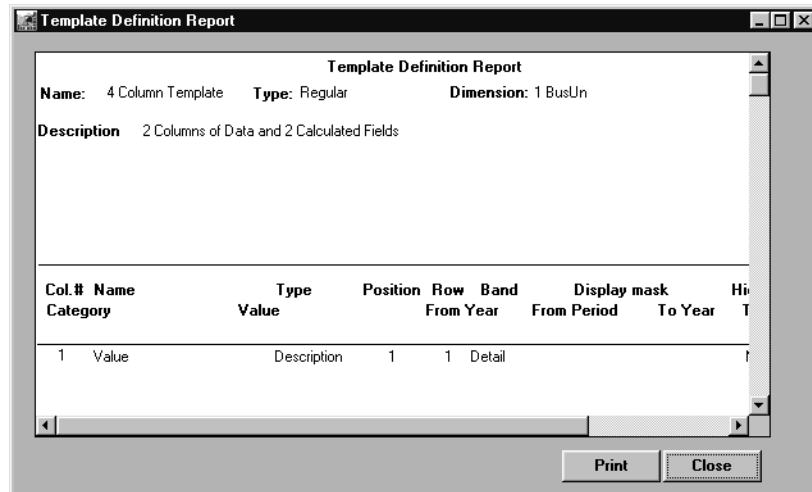
Note: Please refer to the *Systems Administrator Guide* for more information about the reports available within the *Administration* application.

To preview a Template Definition report:

1. If you want to see how the Template Definition report will print before submitting it, highlight a Template name within the Template Definition window and click **Print Preview**.
2. Review the Print Preview and **Close** the window or **Print** the report.

To print a Template Definition report:

- Click **Print** from the Print Preview window
- OR--
- Click **Print** from the Template Listing window.



Template Definition Report print preview window

Below is a sample of a Template Definition Report

| Template Definition Report | | | | | | | | 12/3 |
|-------------------------------|-----------------------------|---------------|--------------------|-------------|---------|--------------|------------|------------|
| Name: Sales, Profits, Margins | | Type: Regular | Dimension: 6 ItmFm | | | | | |
| Description | | | | | | | | |
| Col.# | Name | Type | Position | Row | Band | Display mask | Hidden | SelectCurr |
| Category | Value | | From Year | From Period | To Year | To Period | View Curre | |
| 1 | ValueItemFamily_1 | Description | 1 | 1 | Detail | | No | |
| 2 | dimvalTitle | Text | 1 | 1 | Header | | No | |
| 3 | ShortDescriptionItemFamily_ | Description | 2 | 1 | Detail | | No | |
| 4 | DimDescTitle | Text | 2 | 1 | Header | | No | |
| 5 | Data_5 | Data | 3 | 1 | Detail | Money | No | 0 |

Template Definition Report

Template Definition Report

The report prints all of the contents of the Template definition so a user can easily duplicate a report, or see what is contained in the report. The following information prints on the report:

- Template Name
- Template Type (Regular, Period Based, or Cross Tab)
- Dimension selected as place-holder during definition
- Template Description
- Column Number(s) and Name(s)
- Field Type (Data, Text, Calculation, or Description)
- Position and row on View
- Band within the View (Header, HeaderN, Detail, TrailerN, Summary)
- Date range selected
- Display Mask used to label data
- Are the fields hidden? (Yes or No)
- Category/value
- Currency

Ability to Open View Items

Choose Desktop | Open to open the selected View item. The View does not display data when it is opened using this command. You must inform the system that you want to retrieve data for the open View by choosing File | Run or by clicking the Runner icon. This option allows you to open the View, make adjustments, and then request a retrieval.

Note: The Open command is also available on the pop-up menu displayed by right-clicking on the View.



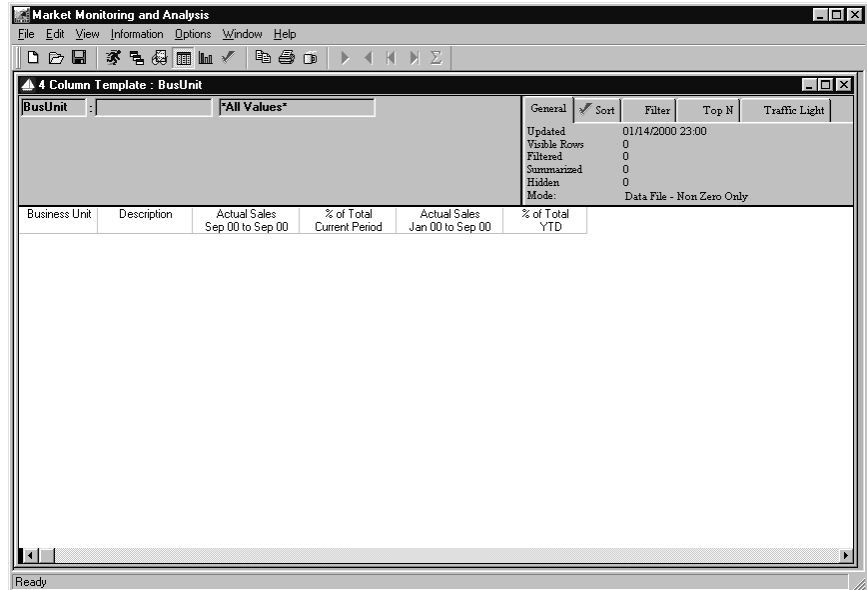
Desktop menu

To open a View item:

1. Open the View item by highlighting it and choosing Desktop | Open, or right-click on a View item and then select Open from the pop-up menu. The View does not display data when it is opened using this command. You must inform the system that you want to retrieve data for the open View by choosing File | Run.

Note: Double-clicking on the View item will request a retrieval and data will display in the user-defined format.

The saved View format is displayed when the View item is opened. To display the data, you must specify a retrieval by choosing File | Run or clicking the Runner icon.



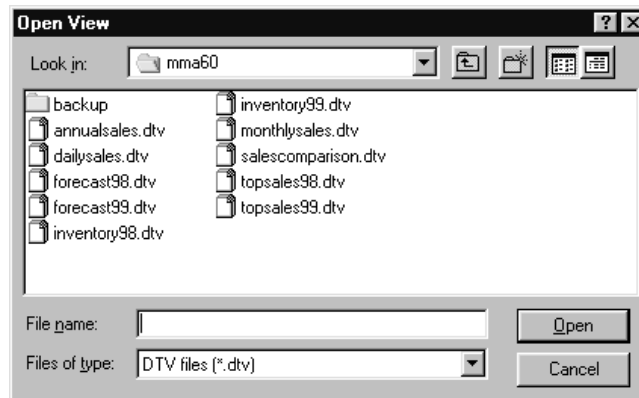
Opened View item

To run an opened View item:

1. Choose File | Run or click the Runner icon to retrieve the selected data for the open View item.
2. From the View, all functionality such as drilling, graphing, sorting, filtering, and so forth is available.

Opening a View (.DTV) File

Choose File | Open from the *DBView* Main Menu to access a listing of all previously saved View files. *DBView* View files must be saved with a .DTV extension. The file is not run (data not retrieved) when the file is opened from this listing. You must inform the system that you want to retrieve data for the open View by choosing File | Run or by clicking the Runner icon.



Open View window

To open a View file:

1. Open the View file listing by selecting File | Open.
2. Choose a saved View file from the listing.
3. Click **Open** to open this file.
 - You can also double-click on the file name to open it. Remember, the View file will just be opened; the data will not display until you specify a retrieval.

Note: A View can be saved two different ways: as a .DTV file or as an icon on your desktop. When the icon is used, the data is automatically retrieved. When the file is opened, the data is not automatically retrieved.

Open View Fields

Look in

Lists the folders, directories, and drives available on your system. Use the drop down selection list to change the directory or drive.

File name

The file name of the selected View displays here. The View can be selected from a list or typed in this box. The View files saved to the active drive and directory display in the list box above the File name field.

Files of type

Lists the file formats supported by *DBView*. *DBView* View files must be in a .DTV format; however, you can export the data into many other formats. See Chapter 8 in this *User Guide* for additional information regarding exporting data.

Open View Command Buttons

Open

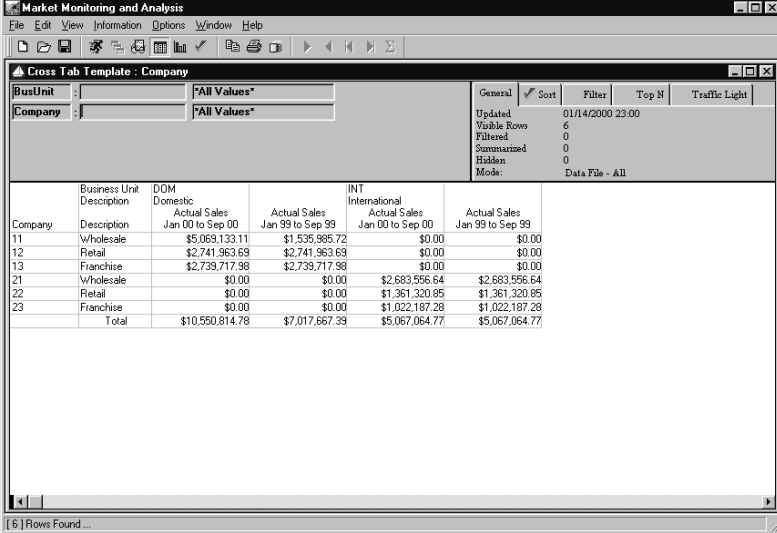
To open a View file, highlight it while displayed in the listing and click **Open** or simply double-click on the file name.

Cancel

Click **Cancel** to close the Open View window without opening the selected View file.

Running a View Item

A View that has been saved as an icon on your desktop can be executed by simply double-clicking on the icon. From the View, all functionality, such as drilling, graphing, adjusting the columns, and so forth, exists. See the following pages for detailed information relating to running a View or Template.



The screenshot shows the 'Market Monitoring and Analysis' application window. The main window title is 'Cross Tab Template : Company'. It features a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar with various icons. Below the toolbar, there are fields for 'BusUnit' and 'Company', both set to '*All Values*'. To the right, there are options for 'General', 'Sort', 'Filter', 'Top N', and 'Traffic Light'. A status bar at the bottom indicates '[6] Rows Found...'. The main data area is a table with the following structure:

| Company | Business Unit Description | DOM Domestic | | INT International | |
|---------|---------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 |
| 11 | Wholesale | \$5,083,133.11 | \$1,535,585.72 | \$0.00 | \$0.00 |
| 12 | Retail | \$2,741,963.69 | \$2,741,963.69 | \$0.00 | \$0.00 |
| 13 | Franchise | \$2,739,717.98 | \$2,739,717.98 | \$0.00 | \$0.00 |
| 21 | Wholesale | \$0.00 | \$0.00 | \$2,683,556.64 | \$2,683,556.64 |
| 22 | Retail | \$0.00 | \$0.00 | \$1,361,320.85 | \$1,361,320.85 |
| 23 | Franchise | \$0.00 | \$0.00 | \$1,022,187.28 | \$1,022,187.28 |
| | Total | \$10,550,814.78 | \$7,017,667.39 | \$5,067,064.77 | \$5,067,064.77 |

View accessed from icon

To run a View item:

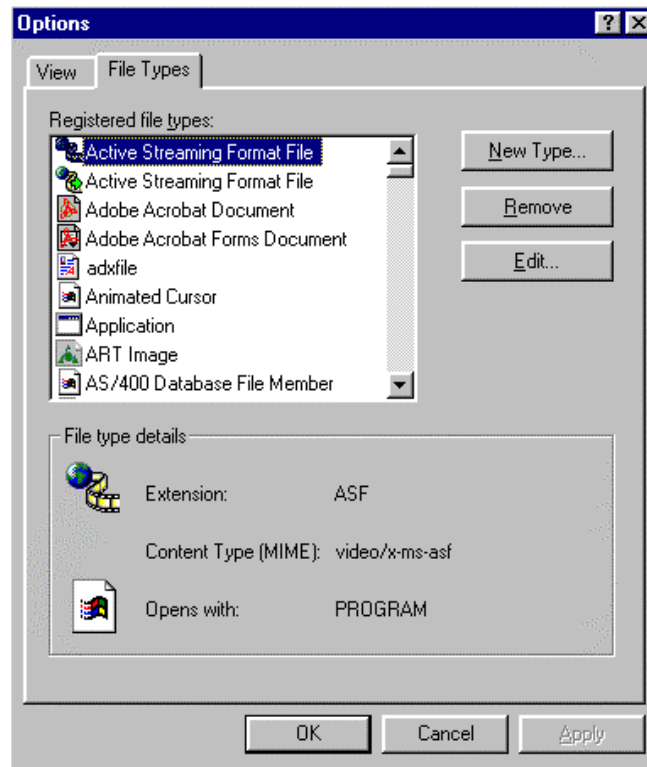
- Double-click with the left mouse button on the View item displayed in a ViewGroup. The retrieval is executed and the window displays a View for the Dimension(s) saved.

To run an opened View file:

- Choose File | Run to retrieve the selected data for the open View. The data is also retrieved by clicking the Runner icon. From the View, all functionality, such as drilling, graphing, adjusting the columns, and so forth, exists. See "Drilling Down within a View" on page U59 and the sections following that page for detailed information relating to features available when running a View.

Defining .DTV Files Through Windows™ Explorer

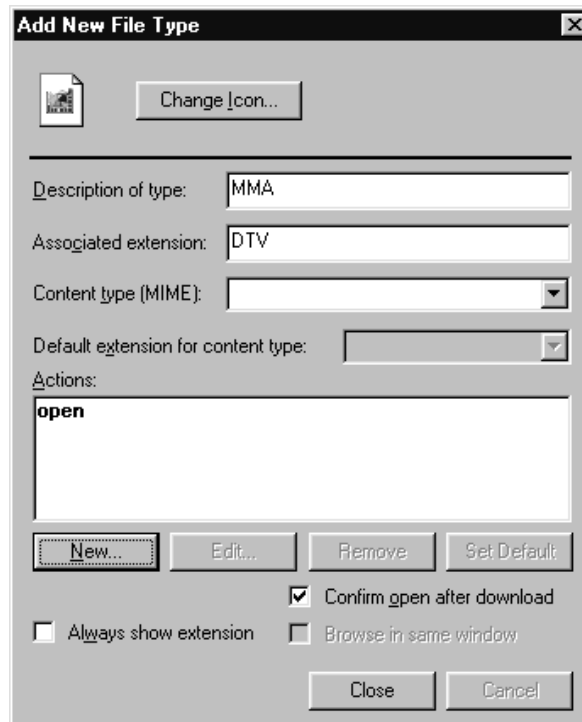
By creating a File Type definition through Explorer, you can simply double-click on the desktop icon of an *MMA* DTV file to run the *MMA* View.



Options window - File Types tab

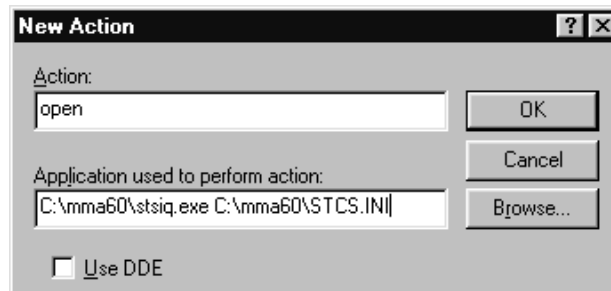
To define the .DTV file extension through Explorer:

1. Activate Explorer and choose View | Options.
2. Select the File Types tab, and then click the **New Type** command button.



Add New File Type window

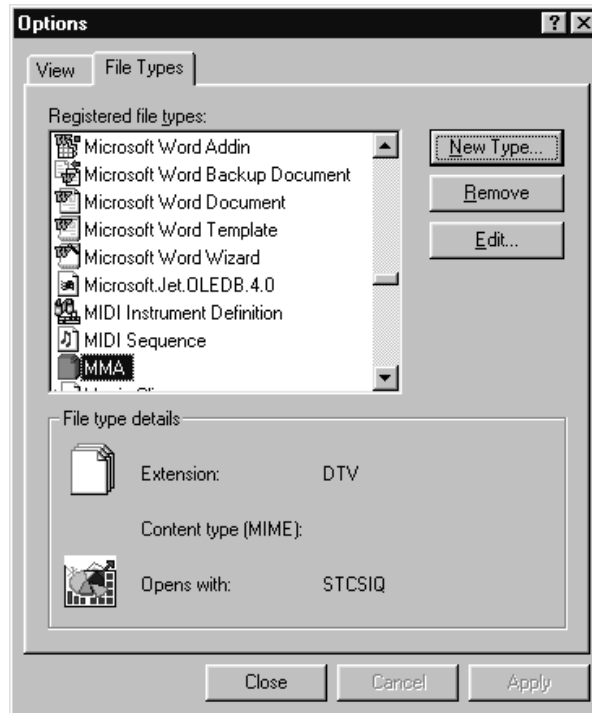
3. From the Add New File Type window, key in a description and enter **DTV** as the associated extension.
4. Click **New** to define an open action.



New Action window

5. In the Action field, key in **open**.
6. Click **Browse**. Locate and highlight the stsiq.exe file in your *MMA 6.0* directory. Click **Open**, or double-click on the file name to select it.
7. The selected file will display in the Application used to perform action field; key in a space and the path name plus **STCS.INI**. See window above for an example.

8. Click **OK** to complete the definition.
9. Click **Close** and the Options | File Types window will redisplay with the newly created file type highlighted.



Options window - File Types tab

10. The definition is now complete, click **Close**. With the *MMA View* file type defined in Explorer, you can now simply double-click on any .DTV file to launch *DBView* and execute the View.



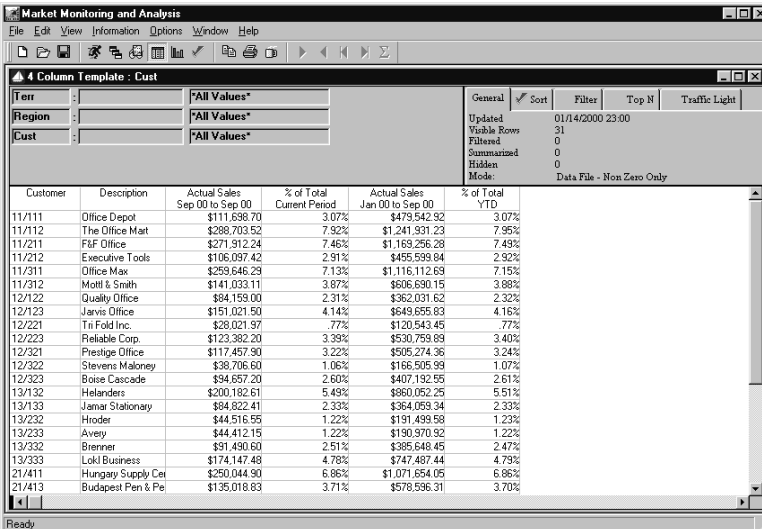
Explorer window

Drilling Down within a View

DBView gives you the ability to examine the data on the window, letting the results of one Inquiry lead you to the next logical question or further level of detail. The extensive drill-down capability provided within *DBView* allows you to access supporting detail information by double-clicking on the item of interest and automatically drilling down one layer. From there, another layer of detail can be revealed in a similar manner or by accessing a drill-down window from which you can select any Dimension level to drill to.

The Interactive Drill-Down Path informs you of the exact path taken to access the data currently displayed on the window. The drill-down area is interactive because you *interact* with *DBView* to tell the system exactly what data to retrieve.

For example, you are looking at sales for a particular Region and discover that one is below expectations. Drill-down to the Territory level to see which ones are causing the Region to be below forecasts. Once at the Territory level, you can look at sales by Sales Representative or Customer, whichever path you choose to take.



| Customer | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|----------|-------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| 11/111 | Office Depot | \$111,638.70 | 3.07% | \$479,542.92 | 3.07% |
| 11/112 | The Office Mart | \$288,703.52 | 7.92% | \$1,241,931.23 | 7.95% |
| 11/211 | F&F Office | \$271,912.24 | 7.46% | \$1,169,256.28 | 7.49% |
| 11/212 | Executive Tools | \$106,097.42 | 2.91% | \$495,599.84 | 2.92% |
| 11/311 | Office Max | \$259,646.29 | 7.13% | \$1,116,112.69 | 7.15% |
| 11/312 | Mott & Smith | \$141,033.11 | 3.87% | \$606,690.15 | 3.88% |
| 12/122 | Quality Office | \$84,159.00 | 2.31% | \$362,031.62 | 2.32% |
| 12/123 | Jarvis Office | \$151,021.50 | 4.14% | \$649,655.83 | 4.16% |
| 12/221 | Tri Fold Inc. | \$28,021.97 | .77% | \$120,543.45 | .77% |
| 12/223 | Reliable Corp. | \$123,382.20 | 3.39% | \$530,759.09 | 3.40% |
| 12/321 | Prestige Office | \$117,457.90 | 3.22% | \$505,274.36 | 3.24% |
| 12/322 | Stevens Maloney | \$38,706.60 | 1.06% | \$166,505.99 | 1.07% |
| 12/323 | Boise Cascade | \$94,657.20 | 2.60% | \$407,192.55 | 2.61% |
| 13/132 | Helanders | \$200,182.61 | 5.49% | \$860,052.25 | 5.51% |
| 13/133 | Jamar Stationary | \$84,822.41 | 2.33% | \$364,059.34 | 2.33% |
| 13/232 | Hroder | \$44,516.55 | 1.22% | \$191,459.58 | 1.23% |
| 13/233 | Aveej | \$44,412.15 | 1.22% | \$190,970.92 | 1.22% |
| 13/332 | Brenner | \$91,490.60 | 2.51% | \$385,648.45 | 2.47% |
| 13/333 | Loki Business | \$174,147.48 | 4.78% | \$747,487.44 | 4.79% |
| 21/411 | Hungary Supply Co | \$250,044.90 | 6.86% | \$1,071,654.05 | 6.86% |
| 21/413 | Budapest Pen & Pe | \$135,018.83 | 3.71% | \$578,596.31 | 3.70% |

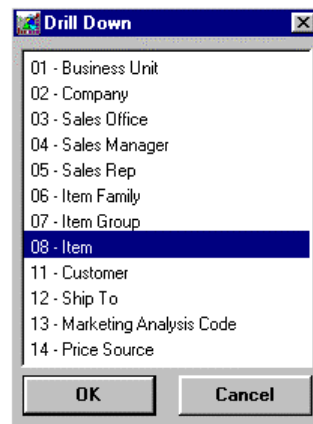
View with automatic drill-down

To automatically drill to the next defined Dimension:

1. Double-click with the left mouse button on a row of data for a particular Dimension value.
2. The retrieval is executed and the window displays a View for the next defined Dimension.
 - The automatic drill-down is performed for the next Dimension defined on the system. Default Interactive Drill-Down Paths can be specific for each user. The default Interactive Drill-Down Path is available for review by selecting Information | Default Drilldown.

To manually drill to another Dimension:

1. Highlight a row containing data for a specific value within another Dimension and click the Drill-down icon or choose View | Drilldown.
2. The Drill Down window displays. Choose a Dimension level to drill to by highlighting it.
3. With the Dimension selected, click **OK**. The View is executed and the window displays a View for the selected Dimension level.



Manual Drill Down window

Drill Down Field

Dimensions Listing

You can drill to any Dimension that you are authorized. All valid Dimensions are listed in the Drill Down window. To select a Dimension, click on that Dimension while displayed in the listing and click **OK** or double-click on the Dimension.

Drill Down Command Buttons

OK

Click **OK** to drill to the selected Dimension.

Cancel

Click **Cancel** to close the Drill Down window without drilling to another Dimension level.

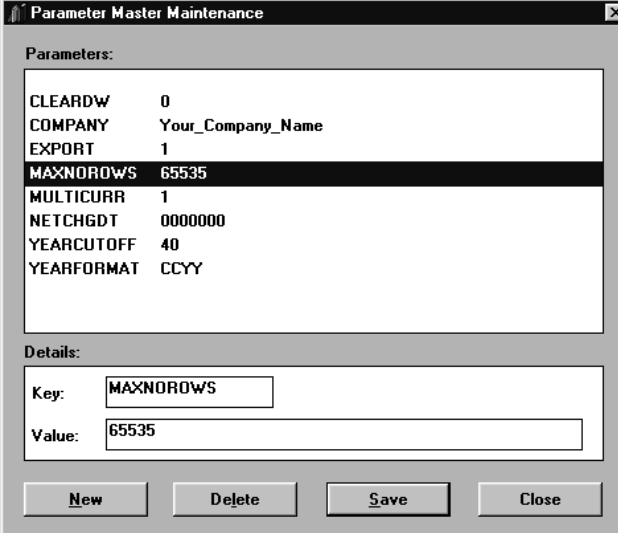
To return to a previous level in a View:

1. Remove any Dimension from the Interactive Drill-Down Path by positioning the cursor on that Dimension value or description and clicking Edit | Dimensions | Remove.
2. The Dimension is removed from the Interactive Drill-Down Path without confirmation. A retrieval must be selected in order to reflect the change.

Maximum Number of Rows for Retrieval

The system administrator can define the maximum number of rows that a user can retrieve during an Inquiry in *DBView*. The setting can be set on a per user basis or a system wide basis. Please refer to Chapter 4 in the *Systems Administrator Guide* for detailed information regarding the definition of the maximum number of rows/records.

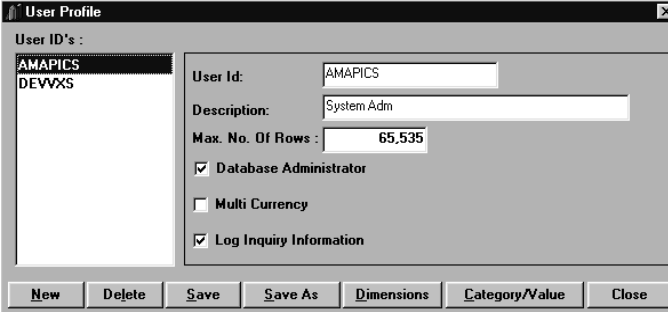
Note: For customers upgrading from *MMA 4.0*, the *STCS.INI* file no longer contains the *maxrecords* parameter.



The screenshot shows the 'Parameter Master Maintenance' window. It features a 'Parameters:' section with a list of system parameters. The 'MAXNOROWS' parameter is highlighted in black. Below this is a 'Details:' section with input fields for 'Key:' (containing 'MAXNOROWS') and 'Value:' (containing '65535'). At the bottom, there are four buttons: 'New', 'Delete', 'Save', and 'Close'.

| Parameter | Value |
|------------------|-------------------|
| CLEARDW | 0 |
| COMPANY | Your_Company_Name |
| EXPORT | 1 |
| MAXNOROWS | 65535 |
| MULTICURR | 1 |
| NETCHGDT | 0000000 |
| YEARCUTOFF | 40 |
| YEARFORMAT | CCYY |

Parameter Master Maintenance window



The screenshot shows the 'User Profile' window. It has a list of 'User ID's' on the left, with 'AMAPICS' and 'DEWXS' visible. The 'AMAPICS' user is selected. The right side of the window contains fields for 'User Id:' (AMAPICS), 'Description:' (System Adm), and 'Max. No. Of Rows:' (65,535). There are three checkboxes: 'Database Administrator' (checked), 'Multi Currency' (unchecked), and 'Log Inquiry Information' (checked). At the bottom, there are seven buttons: 'New', 'Delete', 'Save', 'Save As', 'Dimensions', 'Category/Value', and 'Close'.

User Profile window

Note: If you attempt to retrieve more records than are specified for your user profile, you will receive a warning message, and the system will retrieve only up to the maximum number of rows. Please contact your system administrator to increase the number of rows/records you are allowed to retrieve.

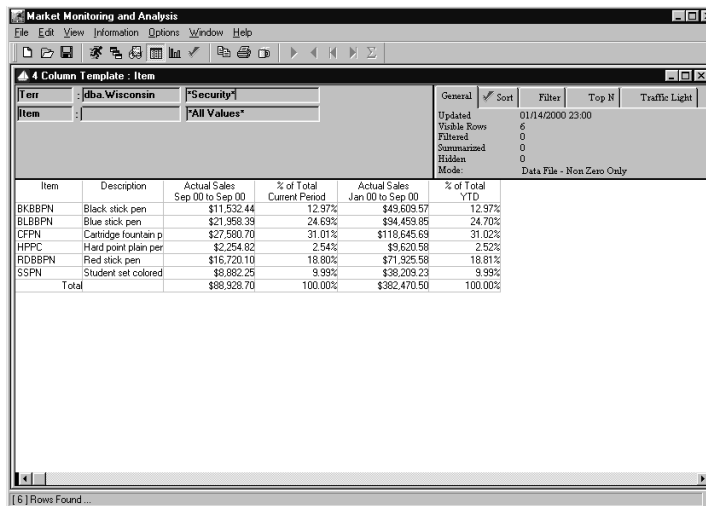
Security User Lists and Drill Down

When defining a user profile, you can secure access to specific Dimension values by using a Security User List. If a Security User List has been attached to your user profile, you cannot run a View or Template for **all values** at that Dimension level. If the View/Template is run at the secured Dimension level, the Security User List defaults in the Interactive Drill-Down Path.

The functionality for Security User Lists is listed below:

- Blank out the Security User List and run the View, the Security User List will redisplay in the Interactive Drill-Down Path.
- Select a value using the Search window or enter it directly. That value must be on your Security User List.
- Run an Inquiry for other User Lists, you will only see the values on the User List that you are authorized to.
- You cannot run a Template or View without all secured Dimensions in your Interactive Drill-Down Path.

For example: If Territory is a secured Dimension and you open a Template with Item as the default Dimension, Territory will automatically be added to the start of your drill-down path. If you remove the Territory Dimension and request a new retrieval, Territory will automatically be added back to your Interactive Drill-Down Path.



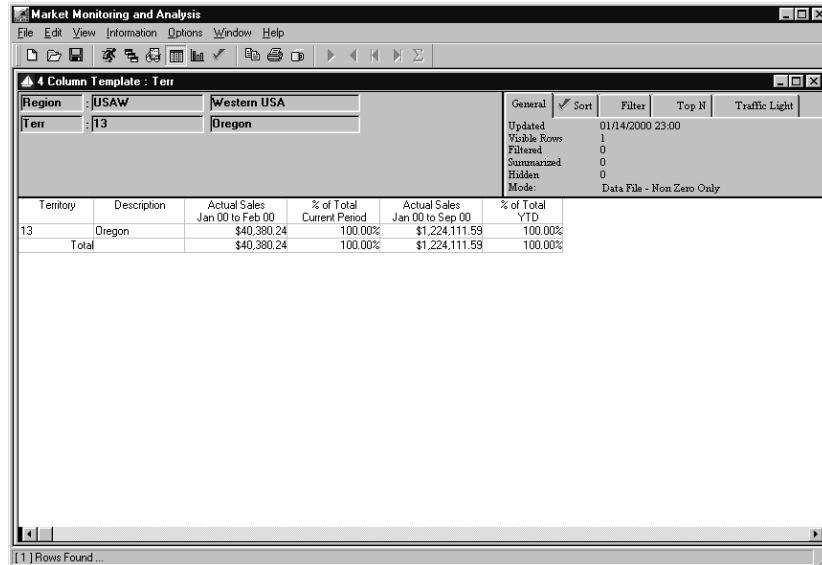
| Item | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|--------|----------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BKBBPN | Black stick pen | \$11,532.44 | 12.97% | \$49,609.57 | 12.97% |
| BLBBPN | Blue stick pen | \$21,958.39 | 24.63% | \$94,459.85 | 24.70% |
| CFPN | Cartridge fountain p | \$27,590.70 | 31.01% | \$118,645.69 | 31.02% |
| HPFC | Hard point plain pen | \$2,254.02 | 2.54% | \$9,620.98 | 2.52% |
| RDDBPN | Red stick pen | \$16,720.10 | 18.80% | \$71,925.58 | 18.81% |
| SSPN | Student set colored | \$8,882.25 | 9.93% | \$38,209.23 | 9.93% |
| Total | | \$89,928.70 | 100.00% | \$382,470.50 | 100.00% |

View with attached Security User List

Note: In this example, the Territory Dimension was removed from the Interactive Drill-Down Path. When a retrieval is requested, the secured Dimension is automatically inserted by the system. The View cannot be run without the secured Dimension level.

Running a View with a Single Value

By default, a View is run for ALL values within the last selected Dimension. You also have the ability to run a retrieval for a single value, either known or unknown, or attach a user-defined list of values to filter for the exact data you are looking for. If the single value is unknown, the *DBView* Search feature allows you to find the single value you wish to filter on. A search can be performed on incomplete or blank entries.



Running a View for known specific value

To retrieve data for a known single Dimension value:

1. Enter the known Dimension value or description, using the TAB key to complete your entry.
2. The dialog box in the center of the window informs you that the data you are looking at needs to be refreshed.
3. If an invalid or incomplete entry is made, the Search window is automatically displayed so you can make a correct choice.
4. Choose File | Run or click the Runner icon to refresh your screen with the data for the specific key value entered.

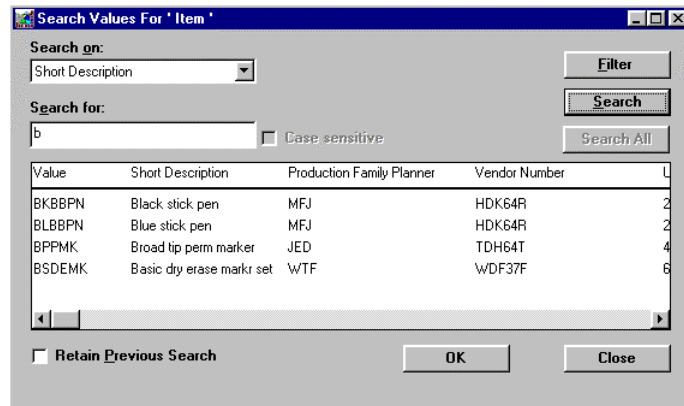
To activate the search feature:

The Search window can be accessed in three different ways:

- Double-click with the left mouse button on any Dimension value or short description displayed in the Interactive Drill-Down Path.
- Make a partial entry (value or description) and press TAB.
- Choose Edit | Dimensions | Search Values from the menu.

Searching for a Dimension Value

DBView allows you to easily search for particular Dimension values and then refresh the data during runtime. You can use the Search function to locate data based on a specific Dimension value, the short description, long description, or field definition.



Search Values window

To retrieve data for an unknown Dimension value:

1. Access the Search window in any of the three ways: double-click on any Dimension value or short description displayed in the Interactive Drill-Down Path, make a partial or invalid entry in the Dimension value or short description field and press TAB, or choose Edit | Dimensions | Search Value.
2. Choose whether you want to perform the search on the value, short description, long description, or any field definition by selecting the item from the Search on drop-down selection list.
3. Remove any value in the Search for field to perform the search on ALL values and click **Search All**. All values within the active Dimension level will be displayed.
4. Enter a value in the Search for field and click **Search** to locate the desired value. Any or all matched values will be displayed.

Note: When an entry is made in the Search for field, the **SearchAll** command button is disabled. When the Search for field is blank, the **Search** command button is disabled.

5. Highlight the desired value and click **OK** to return to the View.
6. You must request a retrieval to refresh the View with the value selected via the search.

To change the sort order on the search window:

1. By default, an ascending sort is performed on the Dimension value. Double-click on the Short Description title to perform a sort on the short description. The data in the selection box is displayed in ascending order based on the short description.
2. Double-click on any field definition (pickup field) title to display all of the values in ascending order based on the selected field definition.

To search for Dimensions beginning with a "b":

1. Access the Search window in any of the three previously described ways.
2. Leave the default value of Short Description in the Search on drop-down selection list.
3. Enter a "b" in the Search for field. This field is not case sensitive unless the Case sensitive check box is selected.
4. Click **Search**. All short descriptions beginning with an upper or lower case "b" are retrieved.
5. Highlight the desired value and click **OK** to return to the View.
6. You must request a retrieval to refresh the View with the value selected via the search.

Search Values Fields

Search on:

A search can be performed on the value, short description, long description, or any field definitions (additional static information relating to a Dimension value) for the active Dimension. A selection box displays when the down arrow is clicked. By default, the search is performed on the short description since that is usually what you are searching on.

Search for:

The Search for field works in conjunction with the Search on field. Enter the specific value you are looking for in the Search for field and click **Search**. The Search for field works with partial entries. A wildcard search can be performed using %. Enter %Mid and click **Search**. All values beginning with "Mid" are displayed. If this field is left blank, and **Search** is clicked, you will receive a warning message.

Value/Short Description/Long Description/Field Definitions

The selection box contains the active Dimension level's values, short descriptions, long description, and field definitions (if available). Use the scroll bars to maneuver through all values within the active Dimension. A search can be performed on any of these items. This box is display-only; selections can be made but no entry is allowed. The sort order can be changed by double-clicking on the title of the values, short description, long description, or field definitions. By default, the display is sorted in ascending order on the Values field.

Retain Previous Search

Select the Retain Previous Search check box to keep the retrieved values after the Search window is closed. The values will display the next time the window is opened, and you do not have to perform another search unless the search criteria changes.

Case Sensitive

The Case sensitive check box allows you to perform a search that differentiates between upper and lower case. If the search is case sensitive, an entry of a lower case "a" does not retrieve values beginning with a capital "A." If the Case sensitive check box is not selected, an entry of "a" retrieves Values beginning with "a" and "A". This check box is enabled only if the case sensitive option was selected during *MMA* installation. Known case sensitivity will expedite the search process.

Search Values Command Buttons

Filter

Click **Filter** to access the Select Filter window allowing you to specify a logical filter for the search being performed. A filter can be applied to the Dimension value, short description, or any field definition when performing a search. See "Applying Filtered Logic to Search" on page U68 for additional information.

Search

A Search can be performed on the Dimension value, short description, long description, or field definition. Click **Search** to perform the search on the entries made in the Search on and Search for fields. The items which fit the specified criteria are displayed after the search is complete. If the system cannot find values to match the search criteria, a dialog box informs you that no rows were found. The Search feature retrieves values based on partial entries. For example: all values beginning with "b" are retrieved if "b" was entered in the Search for field.

Search All

If you want to retrieve all values within the active Dimension level, click **Search All**. If a value has been entered in the Search for field, this button is disabled.

Note: The value you enter to be searched can be a full or partial value. For example, if you want to search for all Customer Types that begin with 01, you can enter "01" in the Search for field. This displays all Customer Types whose values begin with 01. For example, 01111, 01221, 01333, and so forth. All Wildcard functionality is also available. For example, enter %**Los** to search and return all values containing Los anywhere in the description. For example, Los Angeles, Lostly, Los Rebos, and so forth.

OK will not refresh the display. Run must be specified from the View.

OK

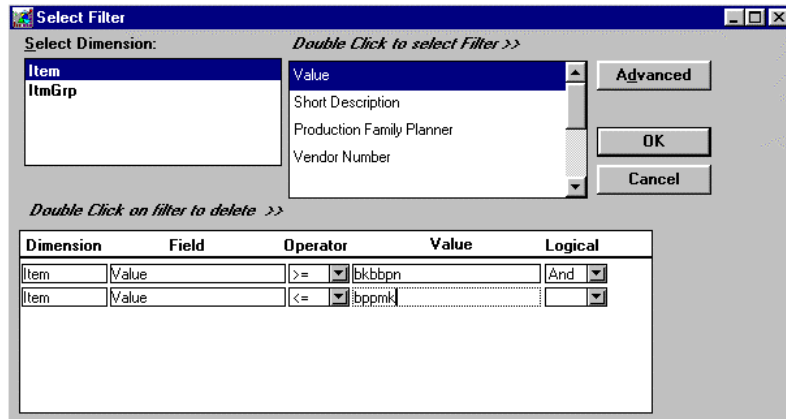
Click **OK** to redisplay the View with the selected Dimension value displayed in the Interactive Drill-Down Path of the window. Clicking **OK** will not refresh the display. The View must be Run to actually retrieve data for the value selected via the Search.

Cancel

Click **Cancel** to close the window without selecting any Dimension values.

Applying Filtered Logic to Search

Additional filtering can be applied to the Master File search retrieval by applying a filter to the search. A filter can be applied to the Dimension value, short description, long description, or any predefined field definition via **Filter**.



Select Filter window

To apply a filter to the search:

1. Click **Filter** on the Search Values window.
2. Choose the Dimension value, short description, or field definition by double-clicking on it.
3. Choose the operator and the specific value.
4. If the filter is a range or more than one specific value, choose the Logical from the drop-down selection list.
5. Click **OK** to return to the Search window.
6. **Search** must be performed. Only those values which meet your filter criteria are displayed when the Search is complete.

Select Filter Fields

Select Dimension

The short description of the active Dimension level, along with any previous levels of the active Dimension, are displayed in the Select Dimension box. This field is display-only. If you want to change the Dimension level, the Search must be accessed for the desired Dimension level from the View display window.

Double-Click to select Filter

The filter can be performed on the Dimension value, short description, long description, and any valid field definitions (if any exist). To select the filter, double-click on the name while displayed in this selection box. The selected item displays below in the logical condition box.

Dimension/Field/Operator/Value/Logical

The logical condition is specified in this box by making selections from all of the available drop-down selection lists. To deselect a filter value, double-click it while it is displayed under the Pickup Field title.

Select Filter Command Buttons

Advanced

Advanced allows you to specify the filter condition or maintain an existing filter condition on a pop-up window. This feature is for users who do not need guidance when specifying a filter condition. All selections on the Select Filter window can be bypassed via **Advanced**.

OK

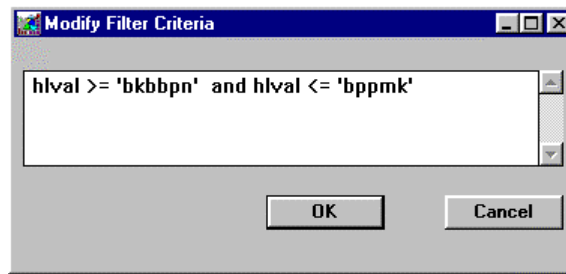
Click **OK** to accept your filter condition and redisplay the Search window. **OK** does not perform the Search.

Cancel

Click **Cancel** to return to the Search window without accepting any filter conditions.

Applying Filtered Logic to Search via Advanced Feature

Additional filtering can be applied to the search retrieval by applying a filter to the search. **Advanced** on the Select Filter window allows you to specify the filter condition or maintain an existing filter condition on a pop-up window. All selections on the Select Filter window can be bypassed via **Advanced**. This feature is for users who do not need the guidance that *DBView* provides when specifying a filter condition.



Modify Filter Criteria window

To modify the filter criteria:

1. Enter a valid filter condition on the window accessed via **Advanced**.
2. Click **OK** to accept your filter criteria and close the window.

Modify Filter Criteria Field

Filter Expression

The logical condition is maintainable in the list box on this window.

Modify Filter Criteria Command Buttons

OK

Click **OK** to accept your entry or edits and close the window.

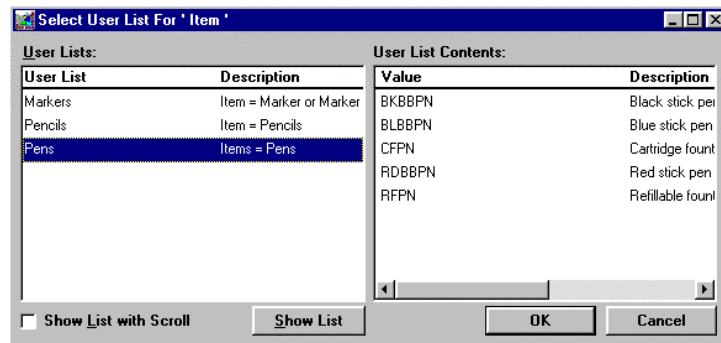
Cancel

Click **Cancel** to close the window without accepting any entries.

Running a View with a User List

User Lists offer the flexibility of retrieving data for a user-defined list of Dimension values. When attaching a User List to a View, only the key values included in the list are retrieved. Selection of the User List is available from Edit | Dimensions | Search User List.

By default, a retrieval is performed for ALL values within the Dimension level. If the retrieval is to be performed for a group of key values, use a User List. If a valid list of the necessary key values does not exist, a Dimension specific User List can be created on the fly via a menu command or an icon on the toolbar.



Select User List window

To attach a User List to a View:

1. With a View displayed, position the cursor on the Dimension level displayed in the drill-down path area header and choose Edit | Dimensions | Search User List.
2. Highlight a User List from the selection menu.
3. *{Optional}* To view all of the values included in the selected User List, click **Show List**.
4. If this is the User List you want, click **OK** to return to the current View.
5. A retrieval must be performed to access only the values included in the selected User List. Select File | Run or click the Runner icon.

Select User List Fields

User Lists

All valid User Lists created for the current Dimension are available for selection from the list. A scroll bar allows you to view the entire long description of the User List.

User List Contents

The key values included in the active User List display in this area when **Show List** is clicked. If fields have been defined for the active Dimension level, they are displayed after the short description. A scroll bar allows you to view all of the additional fields associated with the value.

Show List with Scroll

Select this check box to automatically retrieve values as they are selected. This check box works automatically while the **Show List** button does a retrieval manually. This check box is not selected by default as it has an impact on system performance.

Select User List Command Buttons

Show List

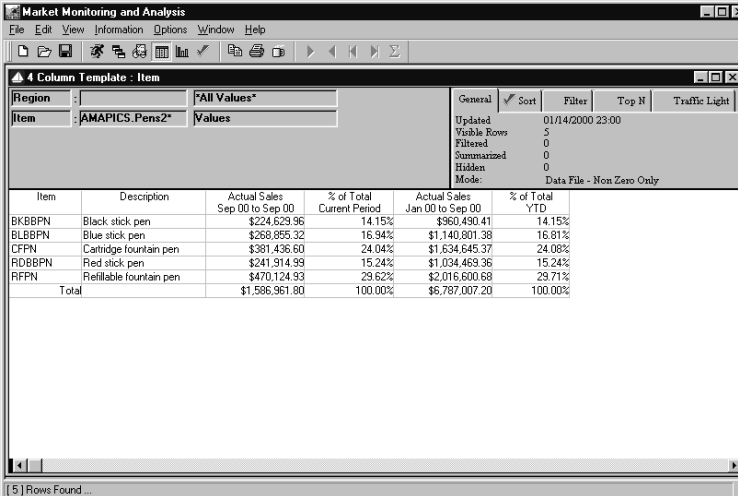
Click **Show List** to display the values included in the selected User List.

OK

Click **OK** to select the highlighted User List and return to the View.

Cancel

Click **Cancel** to close the window without selecting any User List.



The screenshot shows a window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. Below the toolbar is a "4 Column Template : Item" section with fields for "Region" (set to "All Values*") and "Item" (set to "AMAPICS.Pens2*"). To the right of these fields are checkboxes for "General", "Sort", "Filter", "Top N", and "Traffic Light". Below this is a table with the following data:

| Item | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|--------|-------------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BKBBPN | Black stick pen | \$224,629.96 | 14.15% | \$360,490.41 | 14.15% |
| BLBBPN | Blue stick pen | \$268,855.32 | 16.94% | \$1,140,801.38 | 16.81% |
| CFPN | Cartridge fountain pen | \$381,436.60 | 24.04% | \$1,634,645.37 | 24.08% |
| RDDBPN | Red stick pen | \$241,914.39 | 15.24% | \$1,034,469.36 | 15.24% |
| RFPN | Refillable fountain pen | \$470,124.33 | 29.62% | \$2,016,600.68 | 29.71% |
| Total | | \$1,586,961.80 | 100.00% | \$6,787,007.20 | 100.00% |

At the bottom of the window, it says "[5] Rows Found ...".

View run with User List

The View above contains only the Dimension values included in the User List "Pens2." To run a View with a User List, choose the User List from the Search User List window and then click the Runner icon to refresh the data. The name of the User List displays in the Dimension Value field and the text "Values" displays in the Dimension description field to inform you that the data you are looking at is filtered on a User List. See "Dimension Description" on page U86 for more information relating to these labels.

Creating a User List from Selected Rows

User Lists offer the flexibility of retrieving data for specific Dimension values instead of retrieving data for all values. A User List is a user-defined list of Dimension values, a range of Dimension values based on user-defined selection criteria, or a combination of Dimension values and other User Lists.

By default, a retrieval is performed for ALL values within the Dimension level. If the retrieval is to be performed for a group of key values, use a User List. A list of all valid User Lists for the active Dimension level is displayed and available for selection in the list box. If a valid list of the necessary key values does not exist, a User List can be created on the fly using Options | Save As User List.

| User List/Value | Description |
|-----------------|----------------------|
| BKBBPN | Black stick pen |
| BLBBPN | Blue stick pen |
| CFPN | Cartridge fountain p |
| RDBBPN | Red stick pen |

User List Maintenance window

To create a Static User List on the fly:

1. Select specific values to be included by highlighting them and pressing CTRL+left mouse click to make multiple selections. If you make no selections, all Dimension values currently displayed are included in the User List.
2. Choose Options | Save As User List to access the User List Maintenance window.
3. Enter a User List name in the User List field. This field supports ten alphanumeric characters, including blanks.
4. *{Optional}* Enter a description for the User List in the Description field.
5. Verify that the correct Dimension is displayed in the Dimension field.
6. If the rows selected are all values, leave the User List Type default of Static. If the rows selected are values *and* other user lists, the User List Type is Nested.
7. *{Optional}* Check Global so this User List is available for all users.
8. Click **Save**.
9. Click **Close**.

User List Maintenance Fields

Display Dimensions

To filter the display of User Lists, select a Dimension from the drop down selection list. Only the User Lists for that Dimension are displayed. The default is ALL, which displays all User Lists regardless of the Dimension level for which they were created.

Display User Id's

The Global and User check boxes work as additional filters for the display of User Lists. If you want to view the User Lists that are available for all users, check Global. If you want to view the User Lists that are available for only your User ID, check User. By default, both Global and User check boxes are selected.

User List Selection

All available User Lists display in this selection listing. To maintain or delete a User List, highlight it while it is displayed in this listing. If a Display Dimension is selected from the drop-down selection list, only those User Lists created at that Dimension are available. Global User Lists display if the Global check box is selected, and user specific User Lists display if the User check box is selected.

User List

The name of the active User List displays here. The User List name can be up to 10 alphanumeric characters, including blanks. Double or single quotes are not valid entries in the User List name. This field is not maintainable when editing an existing User List.

Description

The user-defined description of the active User List displays here. The User List description can be up to 30 alphanumeric characters, including blanks. This field is optional and can be maintained when editing an existing User List.

Dimensions

The Dimension at which the User List resides is displayed in this field. All valid Dimension levels are available for selection.

User List Type

There are three valid types of User Lists: Static, Dynamic, and Nested. Select the type for the active User List from the drop-down selection list. A Static User List contains a list of specific Dimension values. Static is the default User List type. A Dynamic User List contains Dimension values which meet the user-defined selection criteria based on Master File values and fields. A Nested User List contains specific Dimension values and/or other User Lists. The Command buttons available on the User List Maintenance window depend on the User List Type selected.

Key value

If the key value is known, enter it in the Key Value field and click **AddValues** to add it to the User List. This field allows you to make quick entries without using the Search feature.

Global

If the User List is to be available to all users, click the Global check box. Only the owner of a Global User List can maintain or delete that User List. All users have access to Global User Lists, but they cannot delete or edit them. This check box is not selected by default.

Batch Refresh

If the User List is dynamic and you want it to be available to run in batch mode, select the Batch Refresh check box. All User Lists with the Batch Refresh check box selected will retrieve new values when an *Administration* function is selected. This check box is not selected by default. This check box is not displayed unless the active User List is Dynamic or Nested Dynamic.

Note: Please refer to the *Systems Administrator Guide* for information on the Batch Refresh function.

User Id

The User ID of the user who created the active User List displays in the User Id field. This field is generated by the system and does not allow any entry.

Last Refreshed

The date that the Dimension values were last retrieved is displayed in this field. This field is generated by the system, applies only to Dynamic User Lists, and does not allow any entry. The Last Refreshed date is compared to the Master File Last Refresh date to determine if the Dynamic User List needs to be refreshed.

Levels

The Levels field relates to Nested User Lists. If the active User List contains three levels of other User Lists, this field displays a "3." This field is generated by the system and does not allow any entry.

Value/Description/Field Definitions

The key values and their descriptions which are to be included in the active User List display in this area of the window. These fields are display only. To select key values, click **Add Values**.

User List Maintenance Command Buttons

New

Click **New** to clear all fields to allow a new User List to be created.

Delete

Click **Delete** to delete the selected User List with confirmation. You can delete only those User Lists created by you. If a user list is attached to a User Id other than your own, you cannot delete it.

Save

Click **Save** to save the User List under the identified User List name. Edits made to the active User List are not saved unless a **Save** is done prior to closing the window.

Save As

Click **Save As** to access the Save As window and identify a different User List name.

Print

Click **Print** to print the User List header information along with the key values included in the User List. This button is disabled if you are not connected to a printer.

Close

Click **Close** to close the User List Maintenance window. Edits made to the active User List are not saved unless a **Save** is done prior to closing the window.

Add User List

If the key value is known, enter it in the Key Value field and click **AddValues** to add it to the User List. This field and button combination allows you to make quick entries without using the Search feature.

Search

The **Search** button is only available if the User List is Nested. Click **Search** to display a listing of valid User Lists for the active Dimension level. From the Selected User Lists window, select the User List(s) to be included in the Nested User List you are creating or editing.

Add Values

The **Add Values** button is available for Nested and Static User Lists. **Add Values** displays the Search Values window that contains all Dimension key values that are not selected for the active User List. Values can be selected from this listing window by highlighting them.

Remove

Click **Remove** to remove the selected key value from the User List without confirmation. This option is not available for Dynamic User Lists.

Select Criteria

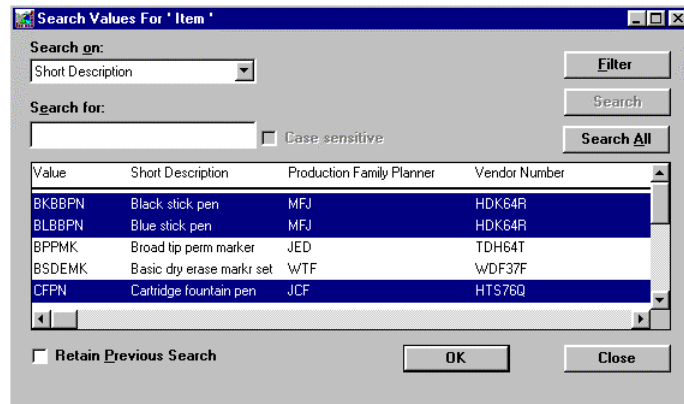
The **Select Criteria** button is only available for Dynamic User Lists. Click **Select Criteria** to access the Select Criteria window and define the range for the Dimension key values or fields.

Refresh Values

The **Refresh Values** button is only available for Dynamic User Lists. Click **Refresh Values** to retrieve the key values that fall within the defined range.

Creating Static User Lists

Static User Lists contain a specific list of Dimension values. They can be saved globally so they can be shared among all users. If a Security User List has been tied to your user profile, only those values that you are authorized to display and are available for selection.



Search Values window

To create a Static User List:

1. Choose Options | Edit User List to access the User List Maintenance window.
2. Click **New** to clear the detail fields.
3. Enter a User List name in the User List field. This field supports ten alphanumeric characters, including blanks.
4. *{Optional}* Enter a description for the User List in the Description field.
5. Click the down arrow next to the Dimension field, and select the Dimension level from the drop-down selection list.
6. Leave the User List Type default of Static.
7. *{Optional}* Check the Global check box so the active User List can be used by all users.
8. Click **Search** to access the Search Values window.
9. Click **SearchAll** to retrieve all values within the active Dimension level.
10. Highlight the values to include in the User List. CTRL+ENTER allows you to make multiple selections. Click **OK**.
11. The User List Maintenance window redisplay with the selected values displayed.
12. Click **Save**, and then **Close**.

Creating Dynamic User Lists

Dynamic User Lists allow the user to specify criteria that must be met in order to be included in a User List. This eliminates the need to manually maintain User Lists.

| Dimension | Field | Operator | Value | Logical |
|-----------|------------|----------|-------|---------|
| Item | Item Class | >= | A | And |
| Item | Item Class | <= | B | And |

Select Criteria window

To create a Dynamic User List:

1. Choose Options | Edit User List to access the User List Maintenance window.
2. Click **New** to clear the detail fields.
3. Enter a User List name in the User List field. This field supports ten alphanumeric characters, including blanks.
4. *{Optional}* Enter a description for the User List in the Description field.
5. Choose the Dimension level the User List is created at from the drop-down selection list.
6. Change the User List Type to Dynamic.
7. *{Optional}* Click the Global check box so all users have access to this User List.
8. *{Optional}* Check the Batch Refresh check box so this User List can be updated in batch mode from the *Administration* application.
9. Click **Select Criteria** to access the Select Criteria window.
10. Define your selection range. The range can be on the Dimension value, short or long description, or any predefined static fields. Click **OK**.
11. From the User List Maintenance window, click **Refresh Values**.
12. The Dimension values that meet the defined range display in the Key Value area of the window.
13. Click **Save**.
14. Click **Close**.

Select Criteria Fields

Field Listing

A filter can be performed on the Dimension value, short or long description, and any valid static field (if any exist). To select the filter, double-click on the name while it is displayed in this selection box, or highlight it and click **Select**. The selected item then displays in the right side of the window under the Field title.

Dimension/Field/Operator/Value/Logical

The logical condition is specified in this box by making selections from the Operator and Logical drop down selection listings and keying a valid value in the Value field. If more than ten lines are included, a scroll bar displays. To deselect a filter value, double-click on it while it is displayed under the Field title; or highlight it and click **Delete**.

Select Criteria Command Buttons

Select

Click **Select** to select the value currently highlighted in the Dimension listing. The selected Dimension field is displayed under the Field title.

Delete

Click **Delete** to delete the selected Field from the range condition.

OK

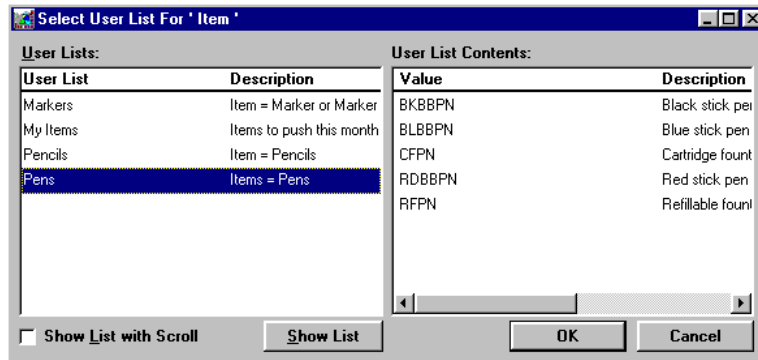
Click **OK** to accept your range condition statement and close the window.

Cancel

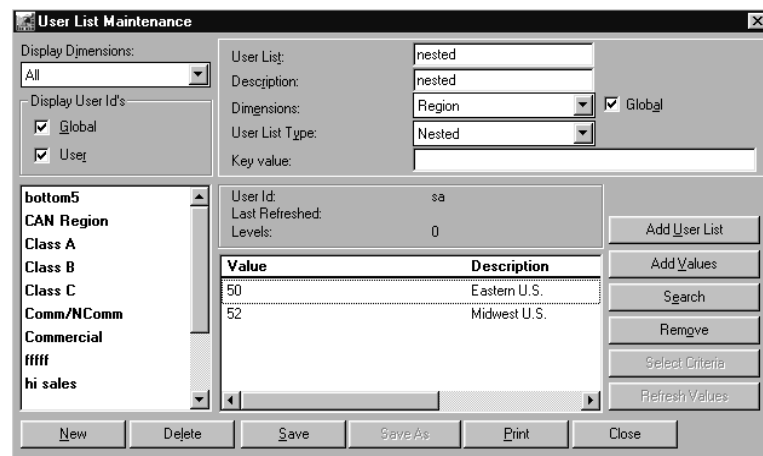
Click **Cancel** to return to the User List Maintenance window without accepting any entries.

Creating Nested User Lists

Nested User Lists include Dimension values as well as other User Lists. You can drill-down on a row that contains a User List to see the values within that User List.



Select User List window



Nested User List Maintenance window

Note: The User List values and the other User Lists included in the active Nested User List display in the User List/Value area of the window.

To create a nested User List:

1. Choose Options | Edit User List to access the User List Maintenance window.
2. Click **New** to clear the detail fields.
3. Enter a User List name in the User List field. This field supports ten alphanumeric characters, including blanks.
4. *{Optional}* Enter a description for the User List in the Description field.
5. Choose the Dimension level the User List is created at from the drop-down selection list.

6. Change the User List Type to Nested.
7. *{Optional}* Click the Global check box so all users have access to this User List.
8. Click **Add User List**.
9. Highlight the desired User List(s) for the active Dimension level. If you want to see the values included in the User List, click **Show List**. After your selections are complete, click **OK**.

Note: Only one User List can be selected at a time. You must re-enter the Add User List feature for each User List to be included.

10. From the User List Maintenance window, click **Search**. From the Search window, click **SearchAll**.
11. Highlight the values to be included in the User List and click **OK**.
12. The Dimension values and the user lists that are to be included in the Nested User List display in the Value area of the window
13. Click **Save**.
14. Click **Close**.

Select User Lists For Fields

User List

All valid User Lists, along with the user-defined description, display in this listing. To select a previously defined User List to be included in the active Nested User List, click on the name while displayed in this selection box. Detail for the selected User List can be displayed by clicking the **Show List** button.

User List Contents

The Dimension values and short descriptions of the selected User List display in this field when the **Show List** button is clicked. This area is display-only and maintenance of the User List cannot be done from here.

Show List with Scroll

The values included in the User List are retrieved and displayed as you scroll through the list if the Show List with Scroll check box is selected. This check box is not selected by default.

Select User Lists For Command Buttons

Show List

Show List displays the Dimension values included in the selected User List.

OK

Click **OK** to accept User List selection(s) and redisplay the User List Maintenance window.

Cancel

Click **Cancel** to return to the User List Maintenance window without accepting any entries.

Drilling Down on a Nested User List

Nested User Lists include Dimension values as well as other User Lists. You can drill-down on a row which contains a User List to see the values within that User List.

| Item | Value | Bookings Sep to Sep '98 | Actual Sales Sep to Sep '98 | Book / Bill Ratio | Bookings Jan to Sep '98 | Actual Sales Jan '98 to Sep '98 | Book / Bill Ratio |
|-------------|--------------------------|----------------------------|--------------------------------|----------------------|----------------------------|------------------------------------|----------------------|
| BSDEMK | Basic dy erase markr set | \$328,883.83 | \$298,985.30 | 110.00% | \$1,399,538.88 | \$1,272,308.07 | 110.00% |
| dbaPencils | Item = Pencils | \$122,194.93 | \$111,086.30 | 110.00% | \$509,251.14 | \$462,955.58 | 110.00% |
| Grand Total | | \$451,078.76 | \$410,071.60 | 110.00% | \$1,908,790.02 | \$1,735,263.65 | 110.00% |

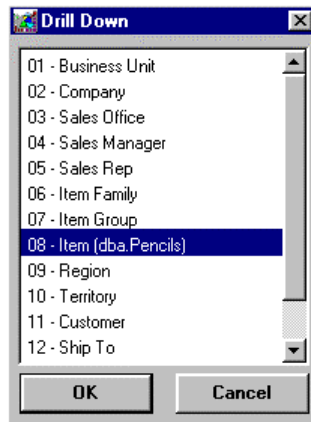
View with Nested User List

| Item | Value | Bookings Sep to Sep '98 | Actual Sales Sep to Sep '98 | Book / Bill Ratio | Bookings Jan to Sep '98 | Actual Sales Jan '98 to Sep '98 | Book / Bill Ratio |
|-------------|-----------------------------|----------------------------|--------------------------------|----------------------|----------------------------|------------------------------------|----------------------|
| HPFC | Hard point plain pencil | \$46,952.07 | \$42,683.70 | 110.00% | \$195,288.14 | \$177,534.67 | 110.00% |
| MPFC | Medium point plain pencil | \$60,951.78 | \$55,319.80 | 110.00% | \$252,561.09 | \$229,600.99 | 110.00% |
| SPFN | Student set colored pencils | \$14,391.08 | \$13,082.80 | 110.00% | \$61,401.91 | \$55,819.92 | 110.00% |
| Grand Total | | \$122,194.93 | \$111,086.30 | 110.00% | \$509,251.14 | \$462,955.58 | 110.00% |

View with drill-down on Nested User List

To automatically drill-down on a User List:

1. Run a View with a Nested User List and double-click on a row containing the User List to display the values included in that User List.



Drill Down window

To manually drill-down on a User List:

1. Run a View with a Nested User List. Highlight a row containing a User List and choose View | Drill-down or click the drill-down icon to access the Drill Down window.
2. The Drill Down window contains all valid Dimension Levels and the active User List. From the Drill Down window, select the User List and click **OK** to drill-down and display all values included in the selected User List.

| Item Value | Item Desc | Bookings Sep to Sep 98 | Actual Sales Sep to Sep 98 | Book / Bill Ratio | Bookings Jan to Sep 98 | Actual Sales Jan 98 to Sep 98 | Book / Bill Ratio |
|-------------|-----------------------------|------------------------|----------------------------|-------------------|------------------------|-------------------------------|-------------------|
| HPPC | Hard point plain pencil | \$46,352.07 | \$42,683.70 | 110.00% | \$195,288.14 | \$177,534.67 | 110.00% |
| MPPC | Medium point plain pencil | \$60,851.78 | \$55,319.80 | 110.00% | \$252,561.09 | \$229,600.99 | 110.00% |
| SSPN | Student set colored pencils | \$14,391.08 | \$13,082.80 | 110.00% | \$61,401.91 | \$55,819.92 | 110.00% |
| Grand Total | | \$122,194.93 | \$111,086.30 | 110.00% | \$509,251.14 | \$462,955.58 | 110.00% |

View with drill-down on Nested User List

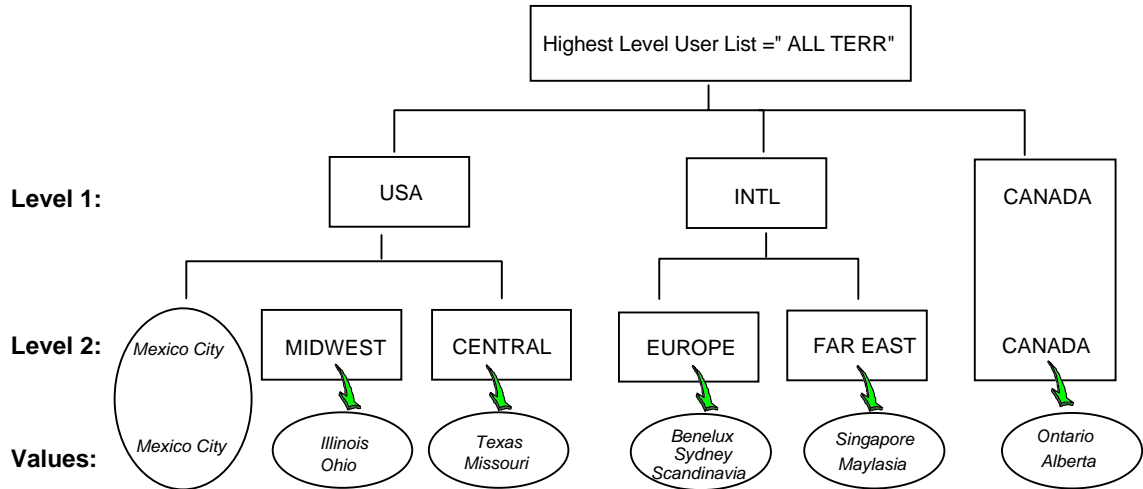
When a View contains a Nested User List, the Dimension value and description informs you whether you are looking at the combined User Lists, the Values included in all User Lists, OR the broken down values included in one of the User Lists that was a row within the View.

View with Nested User Lists Fields

The following field usually displays the medium description of the Dimension level displayed. If the View contains a Nested User List, the field works as follows:

Dimension Description

If the View contains a Nested User List, the word "Values," "Level 1," "Level 2," and so forth., displays in the Description field in the Interactive Drill-Down Path of the window. A left mouse click in this field drops down a selection list containing all valid values. If you want to view the values within the User List, choose values from this list box. If the User List contained more than one level of User Lists, you can see the other levels by selecting Level 2, Level 3, and so forth from the drop-down selection list.

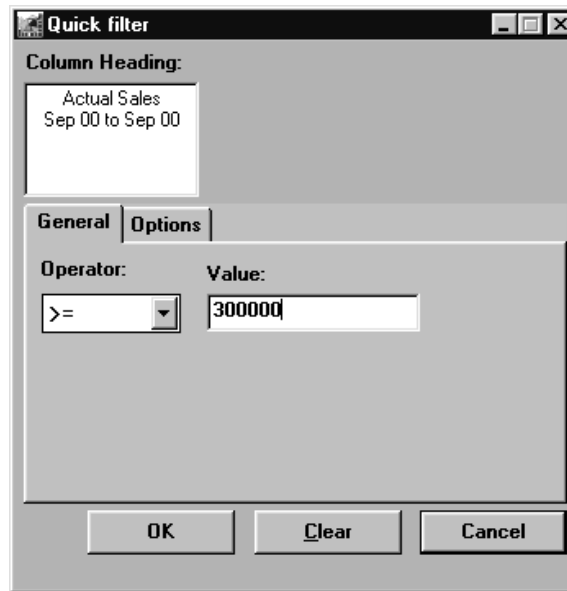


A Nested User List can contain both other Nested User Lists as well as Dimension values. See Mexico City within the USA user list in the diagram above.

A Nested User List can be unbalanced, which means that not all Nested User Lists end at the same level. See Canada in the diagram above.

Performing a Quick Filter

Data can be filtered during runtime to display only the information you are looking for. A simple filter can be performed on any column displayed on the View by right-clicking on the desired column and selecting Quick Filter from the drop down menu. This quick filter is in addition to the full filter function supported by choosing Edit | Filter. Quick Filter is not allowed in a Period Based View.



Quick filter window - General tab

Note: Filters can also be applied to calculated fields.

To filter data based on a column within a View:

1. Right-click the desired column and choose Quick Filter from the pop-up menu.
2. Under the General tab, choose the operator from the drop-down selection list and enter a value.
3. Click **OK** to perform the filter on the active View.

Quick filter Fields

Column Heading

The heading of the selected column displays here. The column heading is created as part of the Template definition and is not maintainable on the Quick Filter window.

General / Options Tabs

The fields that display depend on the tab selected:

Operator

Choose an operator from the drop-down selection list. Valid options are:

| | | | |
|----|--------------------------|----|-----------|
| >= | Greater Than or Equal To | < | Less Than |
| <= | Less Than or Equal To | = | Equal To |
| > | Greater Than | <> | Subset |

Value

Enter the filter amount in the Value field. This field allows a maximum of 35 characters and does not support commas. The value entered remains for future Quick Filters unless **Clear** is selected.

Note: If SHIFT+Right mouse click is used to access the pop-up menu, the value of the selected field defaults in the Value field when Quick Filter is selected.

Summarize filtered

To create a summary row including all rows excluded by the filter selection, click the Summarize filtered check box. This option is not selected by default.

Quick filter Command Buttons

OK

Click **OK** to process the filter selections and display the filtered View.

Clear

Click **Clear** to clear any filtering applied. Clicking **Clear** also removes the amount entered in the Value field.

Cancel

Click **Cancel** to close the window. If selections were made, they will not be processed and displayed on the active View.

When filtering data within a View, it is common to want to see the total of all of those excluded values. This is easily done by selecting the Summarize filtered check box on the Quick filter Options window. A row containing the excluded total is displayed as the last row within the View. The label of the Summarized row defaults as "Other." This can be changed by entering the User Defaults option.



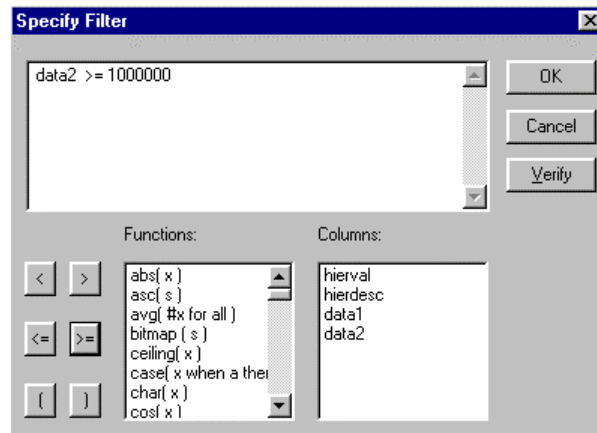
Quick Filter window - Options tab

To summarize all filtered Values:

1. Right-click the desired column and choose Quick Filter from the pop-up menu.
2. Under the Options tab, click the Summarize filtered check box.
3. Click **OK** to redisplay the View with a Summarized row containing the total of all the values that were excluded by the applied filter.

Filtering Data to Display

Data can be filtered on-the-fly during runtime or as part of the Template definition to display only the information you are looking for. To create a manual filter, open the Filter window by choosing Edit | Filter.



Specify Filter window

To filter data based on a data column:

1. Choose Edit | Filter to access the Specify Filter window.
2. Enter your filter expression by selecting the column(s) and the appropriate Command Buttons.
3. Click **OK** to perform the filter and redisplay the View.

Note: In the above example, the data is filtered to display only YTD sales (data field #2) over \$1,000,000.

Specify Filter Fields

Expression Box

You can create your own filter criteria or calculation between data or description fields using any combination of the functions defined by *DBView*.

Functions

Use any of the functions provided to create your filter criteria. A scroll bar allows you to scroll through all available functions. Refer to Appendix A in this *User Guide* for calculation function definitions.

Columns

The user-defined description and data fields are displayed in the Columns selection box. Data can be filtered on any data or description fields. Fields can be included in the filter expression by selecting them from the Columns box. The columns are easily recognizable if a user-defined name replaced the default name.

Calculation Symbols

- < Less Than
- > Greater Than
- <= Less Than or Equal To
- >= Greater Than or Equal To
- () Grouping

Specify Filter Command Buttons

OK

Click **OK** to save your selections and refresh the active View with the applied filter.

Cancel

Click **Cancel** to close the window without performing any filtering.

Verify

Click **Verify** to confirm if the filter expression is valid. Clicking **OK** also verifies the filter expression.

Performing a Quick Sort

Data can be sorted in two different ways during runtime to display the information in ascending or descending order based on a column within the View. A simple sort can be applied to any column displayed on the View without accessing the manual sort window. The detailed sort is defined by clicking the Sort icon or by choosing Edit | Sort. Quick Sort is not allowed within a Period Based View.

The Information Box indicates that a sort has been performed by the check mark on the tab. To view the details behind the sort, click on the Sort tab.

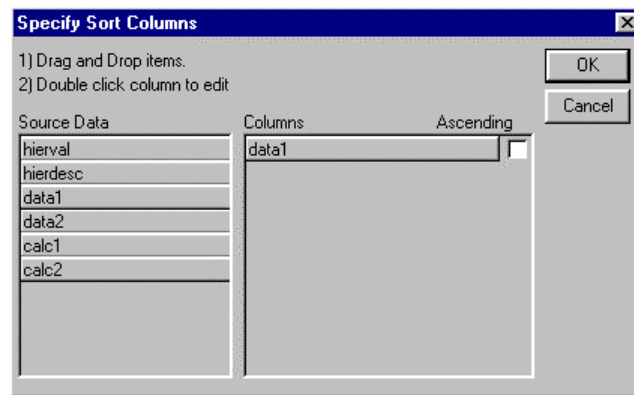
To quickly perform a sort on a column:

1. Right-click the column you want to sort.
2. Choose Sort-Ascending or Sort-Descending from the pop-up menu, and the sort is automatically performed. Any column displayed on the View can be sorted using the Quick Sort feature.
3. *{Optional}* To sort on multiple columns, CTRL+right-click to select each additional column.

Note: If you press CTRL while selecting a column and then apply a sort on it, the sort is appended to the previous existing sort.

Sorting the Displayed Data

Data can be sorted on-the-fly during runtime or as part of the Template definition to display the information in ascending or descending order based on a column of the View. To define a detailed sort, open the Specify Sort Columns window by choosing Edit | Sort. The sort can be performed on any column defined in the Template. Click on the desired column while displayed in the Source Data area and drag it under the Columns area and release.



Specify Sort Columns window

To manually sort data based on a data column:

1. Choose Edit | Sort to access the Specify Sort Columns window.
2. Remove any fields displayed in the Columns area by clicking and dragging them into the Source Data area. Choose to sort the data based on any field in the Source Data area by clicking on the field and dragging it to the Columns area.
3. *{Optional}* Deselect the Ascending check box to display the data in descending order.
4. Click **OK** to display the View with the data sorted as specified.

Specify Sort Columns Fields

Source Data

The data can be sorted in ascending or descending order on any field type other than text fields. Choose the field you want to perform the sort on from the Source Data list box by clicking and dragging it into the Columns list box on the right side of the window. By default, the sort is performed on the Dimension value in ascending order.

Columns

The fields sorted are displayed in the Columns list box. To deselect a field, simply click and drag it into the Source Data listing. Data can be sorted on any non-text field type, including calculated fields.

Ascending

The data within the fields can be sorted in ascending or descending order. By default the data is sorted in ascending order, but can be changed by deselecting the ascending check box.

Specify Sort Columns Command Buttons

OK

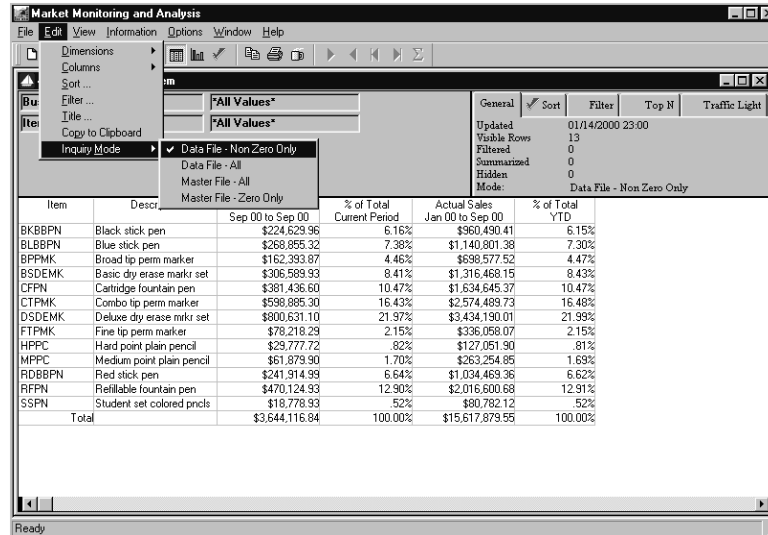
Click **OK** to close the Specify Sort Columns window and refresh the View with your sorting specifications.

Cancel

Click **Cancel** to close the Specify Sort Columns window without performing any sort other than the default.

Selecting the View Mode

The Inquiry Mode commands available on the Edit | Inquiry Mode menu allows you to define the data that appears on the View. For example, you want to see only those Customers who are not buying, select the Master File - Zero Only mode.



Inquiry Mode pop-up menu

To change to View mode of the Inquiry:

1. Select Edit | Inquiry Mode.
2. Select the mode you want your MMA data to display in.
3. Re-run your View by clicking the Runner icon or choosing File | Run.

Inquiry Mode Menu Options

Data File - Non Zero Only

The Data File - Non Zero Only mode is the default View mode. The MMA Data (Transaction) File is used to determine which rows are displayed for a View. Rows that contain all zeros are not displayed. See "Running a View Excluding Zero Records" on page U97 for an example.

This mode is not available for Cross Tab Templates.

Data File - All

The *MMA* Data (Transaction) File is used to determine which rows are displayed for a View. If Data File - All is selected, all rows from the transaction file are displayed (including rows containing all zeros). A row could contain all zeros if sales were made, and then the exact same amount was returned. Records would exist in the file because transactions occurred, but the net amount is zero.

When running Cross Tab Templates, this option and the Master File - All option are the only modes available.

Master File - All

The *MMA* Master File is used to determine which rows are displayed for a View. If Master File - All is selected, all values from the Master File are displayed. See "Running a View with All Master File Data" on page U98 for an example.

When running Cross Tab Templates, this option and the Data File - All option are the only modes available. The other two menu options are disabled.

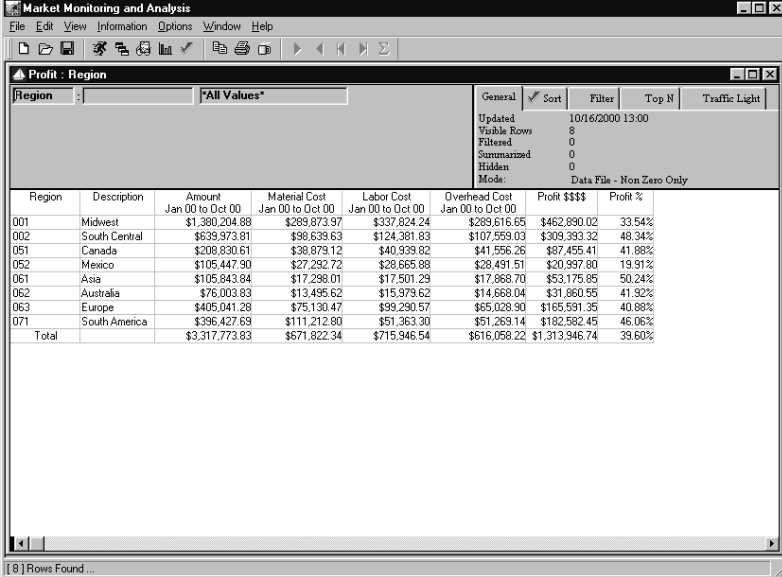
Master File - Zero Only

The *MMA* Master File is used to determine which rows are displayed for a View. If Master File - Zero Only is selected, only values from the Master File containing all zeros are displayed. See "Running a View with Only Zero Master File Data" on page U100 for an example. This is the mode to use when you want to see which products are not selling or the customers who are not making any purchases.

This mode is not available for Period Based and Cross Tab Templates.

Running a View Excluding Zero Records

If you leave the default mode selection of Data File - Non Zero Only, rows of data containing all zeros are excluded from the View.



The screenshot shows the 'Market Monitoring and Analysis' application window. The main window title is 'Profit - Region'. The 'Region' field is set to 'All Values'. The 'Mode' is set to 'Data File - Non Zero Only'. The data table below shows the following information:

| Region | Description | Amount Jan 00 to Oct 00 | Material Cost Jan 00 to Oct 00 | Labor Cost Jan 00 to Oct 00 | Overhead Cost Jan 00 to Oct 00 | Profit \$\$\$\$ | Profit % |
|--------|---------------|----------------------------|-----------------------------------|--------------------------------|-----------------------------------|-----------------|----------|
| 001 | Midwest | \$1,300,204.98 | \$288,873.97 | \$337,824.24 | \$289,616.65 | \$462,890.02 | 33.54% |
| 002 | South Central | \$639,973.91 | \$98,638.63 | \$124,381.83 | \$107,959.03 | \$309,393.32 | 48.34% |
| 051 | Canada | \$208,830.61 | \$38,879.12 | \$40,939.82 | \$41,556.26 | \$87,455.41 | 41.88% |
| 052 | Mexico | \$105,447.90 | \$27,292.72 | \$28,665.88 | \$28,491.51 | \$20,997.80 | 19.91% |
| 061 | Asia | \$105,843.84 | \$17,298.01 | \$17,501.29 | \$17,868.70 | \$53,175.85 | 50.24% |
| 062 | Australia | \$76,003.83 | \$13,495.62 | \$15,379.62 | \$14,668.04 | \$31,860.55 | 41.92% |
| 063 | Europe | \$405,041.28 | \$75,130.47 | \$99,290.57 | \$65,028.90 | \$165,591.35 | 40.88% |
| 071 | South America | \$396,427.63 | \$111,212.80 | \$51,363.30 | \$51,263.14 | \$182,582.45 | 46.06% |
| Total | | \$3,317,773.83 | \$671,822.34 | \$715,946.54 | \$616,068.22 | \$1,313,946.74 | 39.60% |

View run in Data File - Non Zero Only mode

To run an Inquiry excluding data containing zeros:

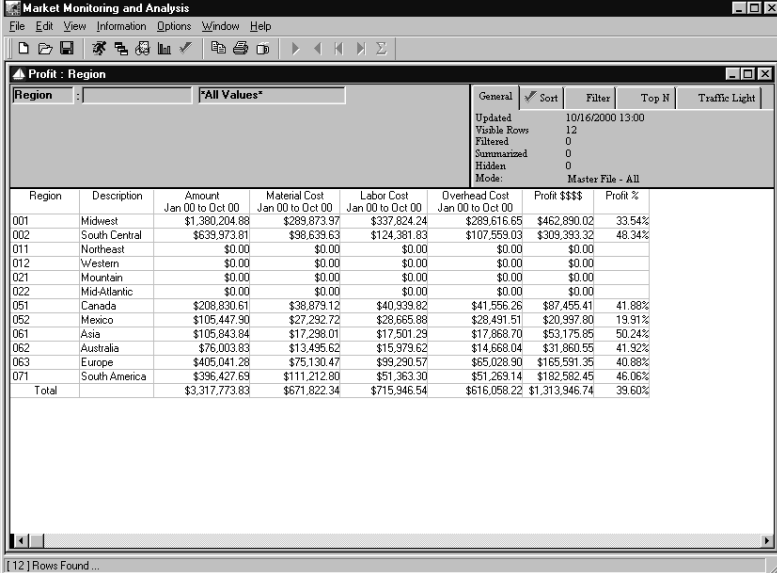
1. Leave the default mode of Data File - Non Zero Only.
2. Run a View item or a Template.

To run an Inquiry including data from all transaction files:

1. Run a View item or a Template.
2. Select Edit | Inquiry Mode.
3. Choose the Data File - All option.
4. Request a retrieval by clicking the Runner icon or selecting File | Run from the menu.
5. The View will display with all transaction file records, regardless of whether there is data or zeros in the file.

Running a View with All Master File Data

If you want to see all Master File data, including those without activity, run the View in Master File - All mode. A row will display for each value within the Master File, regardless of whether or not there is activity.



The screenshot shows the 'Market Monitoring and Analysis' application window. The main window title is 'Profit - Region'. The 'Region' field is set to 'All Values*'. The 'Mode' is set to 'Master File - All'. The table below shows the following data:

| Region | Description | Amount Jan 00 to Oct 00 | Material Cost Jan 00 to Oct 00 | Labor Cost Jan 00 to Oct 00 | Overhead Cost Jan 00 to Oct 00 | Profit \$\$\$\$ | Profit % |
|--------|---------------|----------------------------|-----------------------------------|--------------------------------|-----------------------------------|-----------------|----------|
| 001 | Midwest | \$1,390,204.88 | \$299,873.97 | \$337,824.24 | \$239,616.65 | \$462,890.02 | 33.54% |
| 002 | South Central | \$639,973.81 | \$98,639.63 | \$124,381.83 | \$107,559.03 | \$309,393.32 | 48.34% |
| 011 | Northeast | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 012 | Western | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 021 | Mountain | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 022 | Mid-Atlantic | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 051 | Canada | \$208,830.61 | \$38,879.12 | \$40,939.82 | \$41,556.26 | \$87,455.41 | 41.88% |
| 052 | Mexico | \$105,447.90 | \$27,292.72 | \$29,865.88 | \$29,491.51 | \$20,997.80 | 19.91% |
| 061 | Asia | \$105,843.94 | \$17,298.01 | \$17,501.29 | \$17,898.70 | \$53,175.85 | 50.24% |
| 062 | Australia | \$76,003.83 | \$13,495.62 | \$15,979.62 | \$14,668.04 | \$31,860.55 | 41.92% |
| 063 | Europe | \$405,041.28 | \$75,130.47 | \$99,290.57 | \$65,028.90 | \$165,591.35 | 40.88% |
| 071 | South America | \$396,427.69 | \$111,212.80 | \$51,363.30 | \$51,269.14 | \$182,582.45 | 46.06% |
| Total | | \$3,317,773.83 | \$671,822.34 | \$715,946.54 | \$616,058.22 | \$1,313,946.74 | 39.60% |

View run in Master File - All mode

To run an INQUIRY including all Master File data:

1. Run a View item or a Template.
2. Select Edit | Inquiry Mode.
3. Choose the Master File - All option.
4. Request a retrieval by clicking the Runner icon or selecting File | Run from the menu.
5. The View will display with all Master File records, regardless whether of whether or not there is data.

Running a Filtered View with All Master File Data

If you want to see Master File data above or below a specified amount, run the View in Master File - All mode and apply a filter. This way you can see Customers who have purchased less than a certain amount or no purchases at all, or Products which have sold less than a certain amount or none at all, and so forth. If you want to do exclusion reporting, see "Running a View with Only Zero Master File Data" on page U100 for directions on running a View containing only Master File data without any activity.

| Region | Description | Amount Jan 00 to Oct 00 | Material Cost Jan 00 to Oct 00 | Labor Cost Jan 00 to Oct 00 | Overhead Cost Jan 00 to Oct 00 | Profit \$\$\$ Jan 00 to Oct 00 | Profit % |
|--------|--------------|----------------------------|-----------------------------------|--------------------------------|-----------------------------------|-----------------------------------|----------|
| 011 | Northeast | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 012 | Western | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 021 | Mountain | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 022 | Mid-Atlantic | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 051 | Canada | \$208,830.61 | \$38,879.12 | \$40,939.82 | \$41,556.26 | \$87,455.41 | 41.88% |
| 052 | Mexico | \$105,447.90 | \$27,292.72 | \$28,665.88 | \$28,491.51 | \$20,997.80 | 19.91% |
| 061 | Asia | \$105,843.84 | \$17,298.01 | \$17,501.29 | \$17,868.70 | \$53,175.85 | 50.24% |
| 062 | Australia | \$76,003.83 | \$13,495.62 | \$15,979.62 | \$14,668.04 | \$31,860.55 | 41.92% |
| Total | | \$496,126.18 | \$96,965.46 | \$103,086.60 | \$102,584.51 | \$193,489.60 | 39.00% |

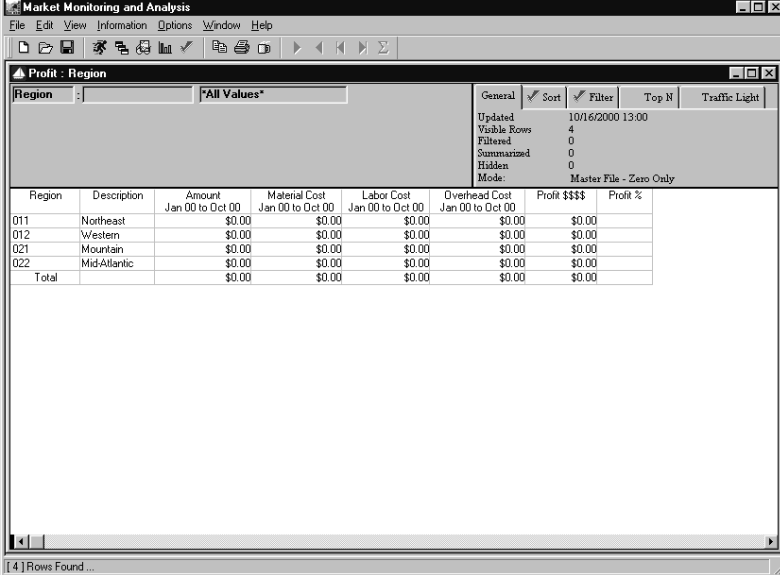
Filtered View run in Master File - All mode

To view something selling below a certain amount:

1. Complete the five steps for running an Inquiry that includes all Master File data, and then right-click on the data column to be filtered and choose Quick Filter from the pop-up menu.
2. On the Filter window, choose <= as the operator and enter an amount in the Value field.
3. Click **OK** and the View will display with the Master File records less than or equal to the specified amount.

Running a View with Only Zero Master File Data

If you want to run a View for only those Master File records with zero activity, run the View in Master File - Zero Only mode. This feature of *DBView* can assist you in identifying those Customers who are not buying, those Products which are not selling, and so forth.



The screenshot shows a software window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. The main window displays a "Profit - Region" view. At the top, there is a search field containing "All Values*" and a "General" tab. Below the search field, a summary box shows: Updated: 10/16/2000 13:00, Visible Rows: 4, Filtered: 0, Summarized: 0, Hidden: 0, and Mode: Master File - Zero Only. The main data area is a table with the following columns: Region, Description, Amount (Jan 00 to Oct 00), Material Cost (Jan 00 to Oct 00), Labor Cost (Jan 00 to Oct 00), Overhead Cost (Jan 00 to Oct 00), Profit \$\$\$\$ (Jan 00 to Oct 00), and Profit %. The table contains four rows of data, all with zero values, and a "Total" row at the bottom. The status bar at the bottom left indicates "[4] Rows Found...".

| Region | Description | Amount Jan 00 to Oct 00 | Material Cost Jan 00 to Oct 00 | Labor Cost Jan 00 to Oct 00 | Overhead Cost Jan 00 to Oct 00 | Profit \$\$\$\$ Jan 00 to Oct 00 | Profit % |
|--------|--------------|----------------------------|-----------------------------------|--------------------------------|-----------------------------------|-------------------------------------|----------|
| 011 | Northeast | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 012 | Western | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 021 | Mountain | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 022 | Mid-Atlantic | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| Total | | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |

View run in Master File - Zero Only mode

To run an Inquiry containing zero and non zero Master File records:

1. Run a View item or a Template.
2. Select Edit | Inquiry Mode.
3. Choose the Master File - Zero Only option.
4. Request a retrieval by clicking the Runner icon or selecting File | Run from the menu.
5. The View will display with only those rows of data where there was no activity (no transactions) during the designated period of time.

Exclusion and Previous Levels

When running a View with no previous level relationship between the selected Dimension levels, the system displays all available Master File values if the View is run in the Master File - All *or* Master File - Zero Only mode. See the *Systems Administrator Guide* for more information regarding previous levels and Dimensions.

To display all Master File values with no previous level relationship between Dimensions:

1. Run a View item or a Template.
2. Drill-down to a Dimension level that does not have a previous level relationship with the active Dimension.
3. Select Edit | Inquiry Mode and choose the Master File - Zero Only or Master File - All option.
4. Request a retrieval by clicking the Runner icon or selecting File | Run from the menu.
5. The View will display with all available Master File Values.

If there is a previous level relationship between the Dimensions included in the View, then the previous level relationship (stored in the STCSMP12 file) is used to determine which values from the Master File are available for the View. In the example below, Region is a previous level to Territory, meaning each Territory belongs to one and only one Region. Therefore for this View, only Territories whose previous level is the Canada Region display in the View. In this example, that is Territory 300, 310, and 320.

| Territory | Description | Amount Jan 00 to Oct 00 | Material Cost Jan 00 to Oct 00 | Labor Cost Jan 00 to Oct 00 | Overhead Cost Jan 00 to Oct 00 | Profit \$\$\$\$ | Profit % |
|-----------|-------------|----------------------------|-----------------------------------|--------------------------------|-----------------------------------|-----------------|----------|
| 300 | Manitoba | \$48,029.80 | \$5,588.90 | \$11,335.96 | \$11,116.33 | \$15,988.62 | 33.29% |
| 310 | Ontario | \$32,280.81 | \$5,965.37 | \$6,279.01 | \$6,403.63 | \$13,632.80 | 42.23% |
| 320 | Alberta | \$128,520.00 | \$23,324.85 | \$23,324.85 | \$24,036.30 | \$57,834.00 | 45.00% |
| Total | | \$208,830.61 | \$38,879.12 | \$40,939.82 | \$41,556.26 | \$87,455.41 | 41.88% |

View with previous level relationship between selected Dimensions

To display Master File Values with previous level relationships between Dimensions:

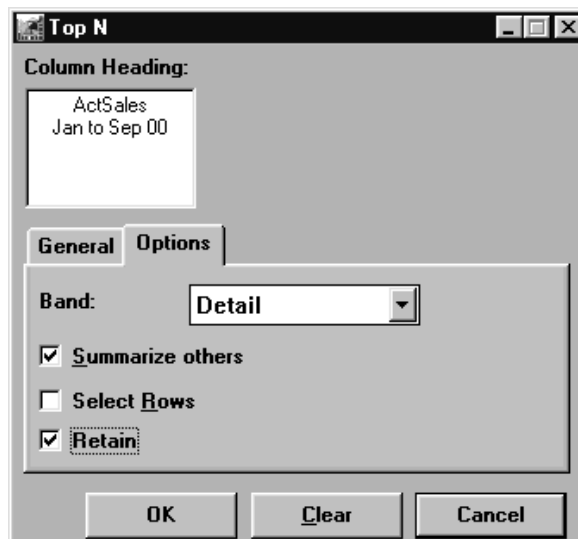
1. Run a View item or a Template.
2. Drill-down to a Dimension level that has a previous level relationship with the active Dimension.
3. Select Edit | Inquiry Mode and choose the Master File - Zero Only or Master File - All option.
4. Request a retrieval by clicking the Runner icon or selecting File | Run from the menu.
5. The View will display with only those values which have a previous level relationship with the first Dimension.

Displaying Top or Bottom Values

You may want to display top selling products or the lowest performing regions. This can be done by using the *DBView* Top/Bottom N feature which is supported in Regular and Cross Tab Templates. Data can be filtered to display the specified number of top or bottom values. The values filtered by identifying the top or bottom count can be excluded from the View, or all values can be displayed with the top/bottom count selected or highlighted.

To display the top five selling items YTD:

1. Position the cursor on the column containing the YTD sales dollars and right-click. Choose Top N from the pop-up menu.
2. From the Top N window, verify that the General tab is selected and enter **5** in the Count field.
3. Click **OK**. The View is displayed with only the top five regions.



Top/Bottom N window - Options tab

To summarize the excluded rows:

1. You can easily display a summary row containing all values that are not part of the top five. From the Top N window, verify that the Options tab is selected and check the Summarize others check box.
2. Click **OK**. The View is displayed with the top five regions plus a row containing all values that are not part of the top five.

Top/Bottom N Fields

Column Heading

The column heading of the selected column which was created as part of the Template definition displays here.

General / Options Tabs

The fields that display depend on the tab selected.

Count

Enter the number of values you want to display. This is either the top number or the bottom number, depending on the menu option selected. The value in the Count field is removed when **Clear** is clicked.

Band

The values available on the Band field depend on whether any grouping is performed. If grouping is not part of the Template definition, the Detail band is the only option available from the drop-down selection list.

Summarize others

To create a summary row including all values excluded by the top or bottom selection, click the Summarize others check box. The default label of this row is "Other." The user can change the label of the summarized row by selecting Options | Defaults.

Select Rows

If the Select Rows check box is selected, the top/bottom number of rows are highlighted and the remaining rows are still displayed in the View. This feature is helpful when creating a User List or when copying to the Clipboard -- the top/bottom values are automatically selected for you.

Retain

If the Retain check box is selected, the top/bottom count is recalculated each time a View is changed. For example, by a drill-down, new filter, and so forth. *DBView* recalculates the top or bottom number based on the filter. This option is selected by default.

Top/Bottom N Command Buttons

OK

Click **OK** to process the top/bottom selections and redisplay the View.

Clear

Click **Clear** to clear any filtering applied by using the top/bottom function. The View is displayed without any top/bottom count filters and the value entered in the Count field is removed.

Cancel

Click **Cancel** to close the window. If selections are made, they are not processed and displayed on the active View unless **OK** is clicked.

The Top/Bottom N window has options in addition to identifying the top or bottom values. You can have the system summarize all values that are excluded because of the top or bottom count and display that summarization in a row within the View. Instead of displaying only the identified number of top or bottom values, you can choose to display all Values with the top or bottom count selected (highlighted). The Retain feature recalculates the top or bottom count each time the View changes.

To select the top or bottom values:

1. From the Top N window, verify that the Options tab is selected and check the Select Rows check box.
2. Deselect the Summarize others check box.
3. Click **OK**. The View is displayed with the top five regions highlighted. You could copy the highlighted rows to the Clipboard, or save them as a User List.

When the filtered amount is changed, those values that are the top or bottom also change. Use the Retain check box to determine if you want *MMA* to consistently recalculate and display the correct top/bottom Values.

To recalculate the top or bottom values:

1. From the Top N window, verify that the Options tab is selected and check the Retain check box. This check box is selected by default.
2. Click **OK**. The View recalculates the top values each time a change is made.

Displaying Top N within a View with Subtotaling

You may want to display top selling Territories within each Region or the top selling Territories across all Regions. This can be done by using the Top/Bottom N feature and specifying a Band within the List of/Grouped by View (a View with subtotaling).

To display the top two Territories within each Region:

1. Position the cursor on the data column containing sales dollars and right-click. Choose Top N from the pop-up menu.
2. From the Top N window, verify that the General tab is selected and enter 2 in the Count field.
3. Click the Options tab and verify that the Detail band is selected.
4. Click **OK**. The View displays with only the top two Territories within each Division (Grouped by level).

| Region | Description | List Price Sep 00 | ActSales Sep 00 | Variance | List Price Jan to Sep 00 | ActSales Jan to Sep 00 | Variance |
|-----------|----------------|----------------------|--------------------|--------------|-----------------------------|---------------------------|--------------|
| EURE | Eastern Europe | | | | | | |
| Territory | | | | | | | |
| 51 | England | \$263,066.99 | \$240,205.92 | \$22,861.07 | \$1,131,649.21 | \$1,033,306.28 | \$98,342.93 |
| 52 | France | \$114,552.63 | \$130,372.41 | \$-15,819.78 | \$492,776.28 | \$560,829.13 | \$-68,052.85 |
| Total | | \$377,619.62 | \$370,578.33 | \$7,041.29 | \$1,624,425.49 | \$1,594,135.41 | \$30,290.07 |
| EURW | Western Europe | | | | | | |
| Territory | | | | | | | |
| 41 | Hungary | \$475,666.62 | \$385,063.73 | \$90,602.89 | \$2,038,583.72 | \$1,650,250.36 | \$388,333.36 |
| 42 | Poland | \$176,065.75 | \$187,528.69 | \$-11,462.94 | \$750,199.23 | \$800,491.72 | \$-50,292.49 |
| Total | | \$651,732.37 | \$572,592.42 | \$79,139.95 | \$2,788,782.95 | \$2,450,742.08 | \$338,040.87 |
| USAC | Central USA | | | | | | |
| Territory | | | | | | | |
| 21 | Illinois | \$424,214.37 | \$378,009.66 | \$46,204.71 | \$1,823,445.54 | \$1,624,856.12 | \$198,589.42 |
| 22 | Indiana | \$188,712.43 | \$151,404.17 | \$37,308.26 | \$811,795.05 | \$651,303.34 | \$160,491.71 |
| Total | | \$612,926.80 | \$529,413.83 | \$83,512.97 | \$2,635,240.59 | \$2,276,159.46 | \$359,081.13 |
| USAE | Eastern USA | | | | | | |
| Territory | | | | | | | |
| 31 | New York | \$469,843.47 | \$400,679.40 | \$69,164.07 | \$2,016,110.08 | \$1,722,802.84 | \$293,307.24 |
| 33 | New Jersey | \$324,434.30 | \$265,638.08 | \$58,856.22 | \$1,384,735.51 | \$1,133,135.89 | \$251,599.62 |
| Total | | \$793,337.77 | \$666,317.48 | \$127,020.29 | \$3,400,845.59 | \$2,855,938.73 | \$544,906.86 |
| USAW | Western USA | | | | | | |
| Territory | | | | | | | |
| 11 | California | \$463,474.01 | \$400,402.22 | \$63,071.79 | \$1,992,595.91 | \$1,721,474.15 | \$271,121.76 |

List of/Grouped by View with top N

Note: When adjusting the sorting performed within a View with subtotaling, choose SHIFT+Sort Ascending or Descending to sort within each group and CTRL+Sort Ascending or Descending to select an appending sort that accumulates each sort sequence.

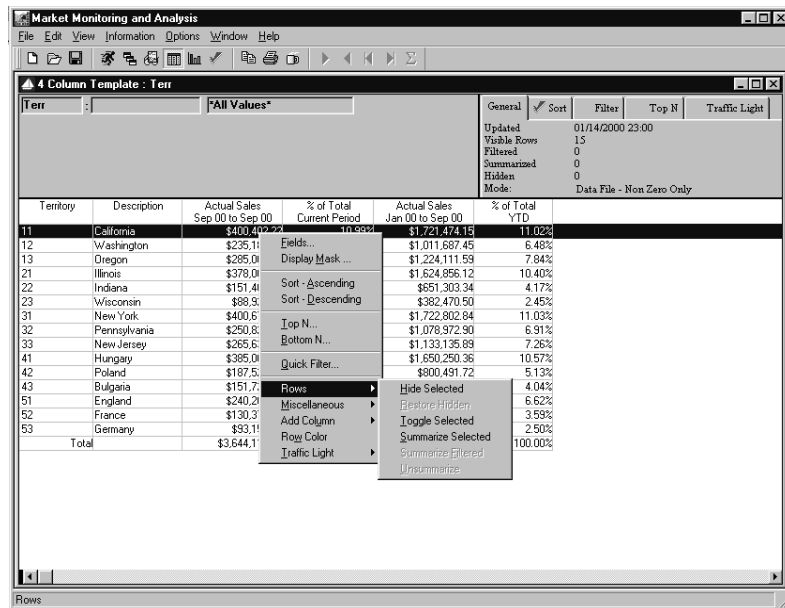
To display the top two Territories across all Regions:

The steps are the same as above except for Step 3:

3. Click the Options tab and select the Group1 band.

Selecting Rows to Hide or Summarize

You can identify a group of rows to be summarized and displayed on a single row within the View. This feature is available when performing a quick filter, displaying the top or bottom Values, and summarizing selected rows. The default label of this row is "Other." You can change this default label to any text description. See Chapter 8 in this *User Guide* for more information on changing the default label of the summarized row.



Rows menu

The rows menu is available on the pop-up menu accessed by right-clicking on a column in the detail band within a View. It contains options pertaining to selecting rows of data and hiding them, summarizing them, and toggling your selection. The options available depend on the actions being performed on the View. For example, if no rows are hidden, the Restore Hidden option is disabled.

Note: Anything done using the Rows option is not saved as part of the View. The changes apply only to the active session of the View displayed.

Hide Selected

Choosing **Hide Selected** hides the highlighted rows. The number of hidden rows is indicated in the Information Box.

Restore Hidden

Choosing **Restore Hidden** redisplay the rows that were selected and hidden. The Hidden field on the Information box indicates that zero rows are hidden.

Toggle Selected

If one or several rows are highlighted and **Toggle Selected** is clicked, the rows that are not selected are selected (highlighted), and the rows that were selected are deselected.

Summarize Selected

Choosing **Summarize Selected** groups all of the highlighted rows together and displays them as the "Summarized" row in the last row of the View. The number of summarized rows is indicated in the Information Box.

Summarize Filtered

This menu option works the same as the Summarize filtered check box on the Quick Filter window. If a filter has been applied, choosing **Summarize Filtered** sums all of the filtered values and displays them in a "Summarized" row. The number of rows that were summarized is indicated in the Information Box.

Unsummarize

This menu option removes any row summarization. Rows can be summarized as part of the Top N, Bottom N, Filter, or Summarized Selected options.

Unsummarize works the same as deselecting the Summarize filtered check box on the Quick Filter window. If a filter and summarization are applied, choosing **Unsummarize** removes the "Summarized" row.

To hide selected rows:

1. Highlight the rows you want to hide from the View. Use CTRL+left-click to select multiple rows.
2. Right-click to display the pop-up menu.
3. Click Rows | Hide Selected.
4. The selected rows are removed from the View. The Information Box indicates the number of hidden rows.

To restore hidden rows:

1. With the cursor displayed anywhere in the Detail band, right-click to display the pop-up menu.
2. Click Rows | Restore Hidden.
3. The hidden rows are placed back in the View. The Information Box notifies you that zero rows are hidden.

To toggle the selected rows:

Note: This feature is handy when you want to create a User List with many values. Instead of selecting all of the rows to be included, highlight the few rows to be excluded from the list and use the toggle feature. Now multiple rows are selected in a fraction of the time.

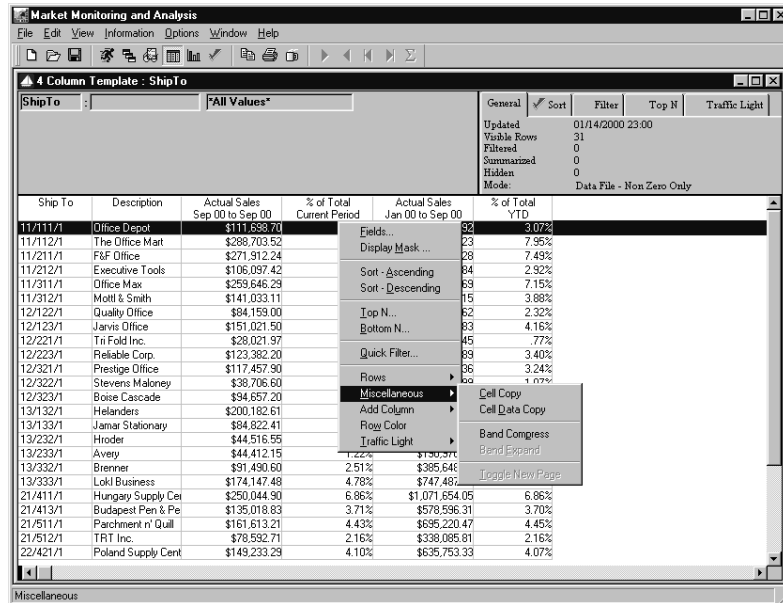
1. Highlight the rows, using CTRL+left-click to select multiple rows.
2. With the cursor displayed anywhere in the grid window, right-click to display the pop-up menu.
3. Click Rows | Toggle Selected.
4. The selection is changed from the selected rows to the rows originally not selected.

To summarize selected rows:

1. Highlight the rows you want to summarize. Use CTRL+left-click to select multiple rows.
2. With the cursor displayed anywhere in the detail band, right-click to display the pop-up menu.
3. Click Rows | Summarize Selected.
4. The "Summarized" row, labeled as "Other," displayed in the second to the last row is a summarization of the selected rows.

Using the Miscellaneous Menu

The Miscellaneous menu is available on the pop-up menu accessed by right-clicking in the View's Detail band. The options available depend on the actions being performed on the View. You can copy data within a single cell to the Clipboard, expand or compress the detail within a View containing subtotalling, and remove page breaks by subtotal.



Miscellaneous menu

Cell Copy

Copies the active cell to the Clipboard so it can be pasted in another *DBView* field or into another application.

Cell Data Copy

Copies the unformatted data from the active cell to the Clipboard.

Band Compress

Compresses the detail behind each subtotal level. If there are multiple subtotal levels, the band compression goes from highest to lowest.

Band Expand

Displays the detail behind each subtotal level. If multiple levels have been compressed, they expand lowest to highest.

Toggle New Page

Inserts or removes the page break for the selected subtotal level.

Compressing/Expanding Rows

You can expand and compress the rows within a View. This is useful on a View containing multiple levels of subtotals. You can also control whether or not the detail or compressed values display on a single page or on multiple pages. You can remove unwanted page breaks for any subtotal level, and you can compress the View to display subtotal information only.

| Region | Description | List Price Sep 00 | ActSales Sep 00 | Variance | List Price Jan to Sep 00 | ActSales Jan to Sep 00 | Variance |
|---------------------|----------------|----------------------|--------------------|--------------|-----------------------------|---------------------------|----------------|
| EURE | Eastern Europe | | | | | | |
| Item Group Total | | \$494,100.27 | \$463,734.20 | \$30,366.07 | \$2,112,980.10 | \$1,984,646.05 | \$128,334.05 |
| EURW | Western Europe | | | | | | |
| Item Group Total | | \$837,870.47 | \$724,313.19 | \$113,557.28 | \$3,564,045.29 | \$3,082,418.72 | \$481,626.57 |
| USAC | Central USA | | | | | | |
| Item Group Total | | \$740,883.39 | \$618,342.53 | \$122,540.86 | \$3,185,529.00 | \$2,658,629.96 | \$526,899.04 |
| USAE | Eastern USA | | | | | | |
| Item Group Total | | \$1,034,847.97 | \$917,139.18 | \$117,708.79 | \$4,439,761.77 | \$3,934,911.63 | \$504,850.14 |
| USAW | Western USA | | | | | | |
| Item Group Total | | \$1,047,279.44 | \$920,587.74 | \$126,691.70 | \$4,501,359.12 | \$3,957,273.19 | \$544,085.94 |
| Grand Total | | \$4,154,981.54 | \$3,644,116.84 | \$510,864.70 | \$17,803,675.28 | \$15,617,879.55 | \$2,185,795.73 |

View with compressed bands

Note: If the Template contains multiple grouping levels, the compression goes from the lowest detail level to the highest.

To compress the bands in a View with grouping:

1. With the cursor displayed anywhere in the grid window, right-click to display the pop-up menu.
2. Click Miscellaneous | Band Compress and the detail rows are summarized and compressed into totals for each subtotal level.

Note: Expanding/Compressing of the rows is saved as part of the View.

toggling New Page

If you prefer the data to display on a single page or on separate pages for each subtotal level, use the Toggle New Page option on the Miscellaneous menu.

| Region | Description | List Price Sep 00 | ActSales Sep 00 | Variance | List Price Jan to Sep 00 | ActSales Jan to Sep 00 | Variance |
|----------------|-------------------|----------------------|--------------------|--------------|-----------------------------|---------------------------|---------------|
| EURE | | | | | | | |
| Eastern Europe | | | | | | | |
| Item Group | | | | | | | |
| BBPN | Ball point pens | \$140,594.83 | \$114,841.97 | \$25,752.86 | \$593,830.07 | \$484,967.40 | \$108,862.67 |
| DEMK | Dry erase markers | \$93,320.56 | \$109,929.79 | \$-16,609.23 | \$401,441.52 | \$472,890.54 | \$-71,449.02 |
| FPN | Fountain pens | \$52,308.59 | \$46,692.70 | \$5,615.89 | \$224,839.34 | \$200,719.61 | \$24,119.73 |
| PMK | Permanent markers | \$169,029.19 | \$162,967.24 | \$6,061.95 | \$727,121.31 | \$701,044.55 | \$26,076.76 |
| PPC | Plain Pencils | \$38,847.10 | \$29,302.50 | \$9,544.60 | \$165,747.85 | \$125,023.95 | \$40,723.90 |
| Total | | \$494,100.27 | \$463,734.20 | \$30,366.07 | \$2,112,980.10 | \$1,984,646.05 | \$128,334.05 |
| EURW | | | | | | | |
| Western Europe | | | | | | | |
| Item Group | | | | | | | |
| BBPN | Ball point pens | \$132,562.69 | \$100,852.63 | \$31,710.06 | \$595,748.99 | \$422,032.14 | \$173,716.85 |
| DEMK | Dry erase markers | \$97,535.70 | \$92,520.34 | \$5,015.36 | \$412,709.56 | \$392,064.59 | \$20,644.97 |
| FPN | Fountain pens | \$330,976.05 | \$271,379.13 | \$59,596.92 | \$1,407,268.43 | \$1,153,620.14 | \$253,648.29 |
| PMK | Permanent markers | \$245,252.45 | \$236,021.19 | \$9,231.26 | \$1,054,689.75 | \$1,015,030.95 | \$39,658.80 |
| PPC | Plain Pencils | \$31,543.58 | \$23,539.90 | \$8,003.68 | \$133,628.56 | \$99,670.90 | \$33,957.66 |
| Total | | \$837,870.47 | \$724,313.19 | \$113,557.28 | \$3,564,045.29 | \$3,082,418.72 | \$481,626.57 |
| USAC | | | | | | | |
| Central USA | | | | | | | |
| Item Group | | | | | | | |
| BBPN | Ball point pens | \$102,675.75 | \$60,594.89 | \$42,080.86 | \$441,110.87 | \$260,221.17 | \$180,889.70 |
| CPC | Colored pencils | \$10,279.80 | \$8,882.25 | \$1,397.55 | \$44,221.09 | \$36,209.23 | \$6,011.86 |
| DEMK | Dry erase markers | \$245,562.50 | \$204,180.90 | \$41,381.60 | \$1,056,351.07 | \$878,336.65 | \$178,014.42 |
| FPN | Fountain pens | \$207,681.80 | \$196,240.80 | \$11,441.00 | \$692,500.97 | \$843,373.34 | \$-149,177.53 |
| PMK | Permanent markers | \$170,380.63 | \$146,189.87 | \$24,190.76 | \$732,936.77 | \$628,968.99 | \$104,067.78 |
| PPC | Plain Pencils | \$4,302.71 | \$2,254.82 | \$2,047.89 | \$18,358.23 | \$9,620.58 | \$8,737.65 |
| Total | | \$740,883.39 | \$618,342.53 | \$122,540.86 | \$3,185,529.00 | \$2,658,629.96 | \$526,899.04 |

List of/Grouped by View with page break removed

To remove the page break between subtotal levels:

1. With the cursor displayed in the Header/TrailerN band, right-click to display the pop-up menu.
2. Click Miscellaneous | Toggle New Page and the subtotal levels with their detail rows are displayed on a single page.

Note: If there are multiple levels of subtotalling, the page break removed depends on the level selected (where the cursor was positioned when the right-click is done).

The Toggle New Page option works as an ON/OFF switch. Choose it once to remove the page breaks, and choose it again to put the page breaks back in.

To return the page break between subtotal levels:

1. With the cursor displayed in the Header1 band, right-click to display the pop-up menu.
2. Click Miscellaneous | Toggle New Page and the subtotal levels with their detail rows are separated by page breaks.

Notes

CHAPTER 5 • CUSTOMIZING VIEWS

QuickLook

Use this chapter to learn how to:

- Customize your View
 - Remove the gridlines from the View
 - Display the color bar and the style bar
 - Display only the detail data in a View
 - Adjust the Dimensions within the View
 - Reposition the columns
 - Change the date range, the type of data, a calculation
 - Change text labeling *MMA* data
- Add a column during runtime.
- Apply row coloring.
- Apply traffic lighting.
- Change the title of the View.
- Group Views together.
- Save the View to your desktop.
- Graph the data displayed.

Customizing the Appearance of your View

Many things can be done to a View to get it in the exact format you want to see:

- Use gridlines to separate the data clearly.
- Change the color of any column(s) to have the data in that column stand out from the rest.
- Display the style bar as part of the View so you can easily identify the field selected when maintaining a View.
- Have the View automatically drill through several Dimension levels, different from the specific one included in the Template.
- Change the positioning of any column within the View.
- Adjust the Text labeling any field.
- Change the type of data requested. (For example, the Template defined column 5 to contain Sales and you want to view Budgets).
- Change the date range specified for the historical data.
- Change the calculation expression of any calculated column.

The automatic display of the color bar and style bar is controlled within the user default settings. If they do not display by default, you can have them display during a View session by choosing View | Change View. The Show Color Bar and Style Bar commands work as an ON/OFF toggle. The items are displayed if a check mark is next to the name. You can use the color bar and the style bar to customize your View even further. For example, select the Total field and **Bold**, Underline or *Italicize* it to have it stand out from the rest of the fields.

To use gridlines to separate the data displayed:

- Choose View | Change View | Show Grid. A check mark to the left of the menu option indicates that grid lines will display.

To display the color bar:

- Choose View | Change View | Show Color Bar and then use the colors to further customize your View. The color bar can also be displayed by default via a check box on the Defaults window.
- Change the color of any field by selecting the field and clicking the desired color on the color bar. You must right-click on the field to select it for color adjustment. When selecting the color from the color bar, a right-click on the color bar selects the background color for adjustment. A left-click selects the text color for adjustment.

Using the *DBView* Style Bar

The *DBView* style bar allows you to further customize your Views. The style bar can be automatically displayed by default, or it can be called up whenever wanted.



Style bar

To display the style bar:

- Choose View | Change View | Show Style Bar and use the styles to further customize your View. The Style Bar can also be displayed by default via a check box on the Defaults window.

Style Bar Fields

Field Name

All of the fields included in the Template definition are displayed in the drop-down selection list. A field can be selected from this listing or by right-clicking on the field within the View. The name of the selected field displays in this field.

Display Mask

A Display Mask can be associated with a description, data or calculation field. The Display Mask of the selected field displays in this field. The Display Mask can be changed by selecting a different Display Mask from the drop-down selection list or by choosing Edit | Columns | Display Mask.

Font Type

Default is MS Sans Serif.

Select a font type from the drop-down selection list to change the font of the selected field.

Font Size

Default is 8 point.

Select the font size from the drop-down selection list to change the size of the selected field. The font size selected at Template definition determines the row height.

Style Bar Icons

Bold, Italic, Underline

Use the appropriate icon to bold, italicize, or underline the selected field. These icons work as a toggle. If a field is bold, you can easily change that by selecting the field and then clicking the bold icon again.

Justification

The positioning of each field can be adjusted by clicking the left, center, or right justification icons. The field type determines the default positioning of the data. For example, data fields are right justified and description fields are left justified.

Displaying only the Detail within a View



The Show Header icon acts as a toggle, switching the View from displaying the Interactive Drill-Down Path and the Information box, to containing only the detailed data. This function is also available from the View | Change View | Show Header menu commands.

The screenshot shows the 'Market Monitoring and Analysis' application window. The main area displays a table with columns for Business Unit, Description, and sales data for Domestic and International markets. Callouts point to the 'Show Header icon' (a small grid icon), the 'Header area (Interactive Drill-Down Path and Information Box)' (the top section of the table), and the 'Detail area' (the main body of the table).

| Company | Business Unit Description | DOM Domestic | | INT International | |
|---------|---------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 |
| 11 | Wholesale | \$5,069,133.11 | \$1,535,985.72 | \$0.00 | \$0.00 |
| 12 | Retail | \$2,741,963.69 | \$2,741,963.69 | \$0.00 | \$0.00 |
| 13 | Franchise | \$2,739,717.98 | \$2,739,717.98 | \$0.00 | \$0.00 |
| 21 | Wholesale | \$0.00 | \$0.00 | \$2,683,556.64 | \$2,683,556.64 |
| 22 | Retail | \$0.00 | \$0.00 | \$1,361,320.85 | \$1,361,320.85 |
| 23 | Franchise | \$0.00 | \$0.00 | \$1,022,187.28 | \$1,022,187.28 |
| | Total | \$10,550,814.78 | \$7,017,667.39 | \$5,067,064.77 | \$5,067,064.77 |

View with Header area displayed

To remove the Header from the View displayed:

1. By default, the Header area containing the Interactive Drill-Down Path and the Information Box displays on the View. Click the Show Header icon to remove the Header from the View currently displayed.

- The Show Header icon is a toggle. Click it again to have the Header area display when it is not currently displayed.

The screenshot shows a window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. The main area displays a cross-tab report titled "Cross Tab Template : Company". The report has columns for Business Unit, Description, Domestic Actual Sales (Jan 00 to Sep 00), Domestic Actual Sales (Jan 99 to Sep 99), International Actual Sales (Jan 00 to Sep 00), and International Actual Sales (Jan 99 to Sep 99). The data is as follows:

| Company | Description | Domestic Actual Sales Jan 00 to Sep 00 | Domestic Actual Sales Jan 99 to Sep 99 | International Actual Sales Jan 00 to Sep 00 | International Actual Sales Jan 99 to Sep 99 |
|---------|-------------|--|--|---|---|
| 11 | Wholesale | \$5,069,133.11 | \$1,535,985.72 | \$0.00 | \$0.00 |
| 12 | Retail | \$2,741,963.69 | \$2,741,963.69 | \$0.00 | \$0.00 |
| 13 | Franchise | \$2,739,717.98 | \$2,739,717.98 | \$0.00 | \$0.00 |
| 21 | Wholesale | \$0.00 | \$0.00 | \$2,683,556.64 | \$2,683,556.64 |
| 22 | Retail | \$0.00 | \$0.00 | \$1,361,320.85 | \$1,361,320.85 |
| 23 | Franchise | \$0.00 | \$0.00 | \$1,022,187.28 | \$1,022,187.28 |
| | Total | \$10,550,814.78 | \$7,017,667.39 | \$5,067,064.77 | \$5,067,064.77 |

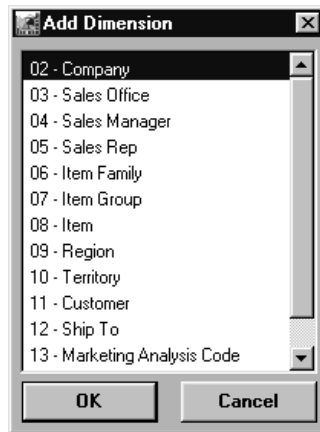
At the bottom of the window, there is a "Show Header" button.

View with Header area not displayed

Adjusting the Dimension Levels

A Template or View is created with a specific Dimension as a place-holder. This level can be adjusted at any time during a *DBView* session. From the Edit | Dimensions menu, you have the ability to *Add* a Dimension to the View; *Remove*, *Insert*, or *Modify* the original Dimension within a View; and *Search* for specific Dimension values or User Lists.

Regardless of the operation you want to perform, the Dimensions window displays so you can select a Dimension to Add, Insert, or Modify. The window title indicates the menu option selected (for example, Add Dimension.)



Add Dimension window

To add a Dimension to the View:

1. Position the cursor at the Dimension where you want to add another Dimension to the Interactive Drill-Down Path.
2. Access the Dimension listing window using any one of the following three methods: Choose Edit | Dimensions | Add, right-click on the Dimension in the Interactive Drill-Down Path to access the pop-up menu, or double-click on the Dimension name within the Interactive Drill-Down Path.
3. *{Optional}* If the key value is known, it can be entered and then other Dimensions can be added. (This feature will save processing time for multiple retrievals if the values are known. If the values are unknown, a drill-down should be performed to achieve the same information.)
4. Click the Runner icon to retrieve the data requested.

The data can be filtered by drilling through the Dimensions, or by using the Add Dimension feature.

To remove a Dimension from the View:

1. Remove any Dimension from the Interactive Drill-Down Path by positioning the cursor on that Dimension value or description and clicking Edit | Dimensions | Remove.
2. The Dimension is removed from the Interactive Drill-Down Path without confirmation. A retrieval must be selected in order to reflect the change.

To insert a Dimension to the View:

1. You may want to insert a Dimension to adjust the filter being applied to the data. Position the cursor where you want to insert the Dimension and select Edit | Dimensions | Insert.
2. Choose a Dimension from the Insert Dimension window and click **OK** to insert a Dimension. A retrieval must be performed to reflect the inserted Dimension.

To modify a Dimension within the View:

1. The Template may have been created with a Dimension level you are not interested in. Position the cursor on the Dimension level you wish to change and select Edit | Dimensions | Modify.
2. Choose a different Dimension from the Modify Dimension window and click **OK** to change the Dimension level. A retrieval must be requested to reflect the change.

Repositioning the Columns on a View

The position of the columns can be adjusted during runtime. Click a column you wish to reposition, drag it to the desired location, and release the mouse button.

To reposition a column within the View:

1. You may want to change some column positions in your View. Place the mouse pointer on the column you wish to move.
2. Press and hold down the mouse button and drag the column to where you want to reposition it.
3. When you are satisfied with the new position of the column, release the mouse button.

Changing the Data Requested

Not only the appearance of the data displayed, but also the actual data requested can be customized for the View. The data requested within any field type can be changed (description, data, calculated, text). The display mask associated with a field can also be changed during runtime and then saved as part of the View.


To change the type of data requested:

You may change the type of data selected and save it as part of the View:

Double-clicking on the Header area of the column will also access the detail window.

1. The Fields command can be accessed via a single right-click with the mouse button and then choose **Fields** from the pop-up menu. Based on the field type, the appropriate detail window is displayed.
2. When changing the date range, a check mark in the propagate check box will make the same change on all subsequent data fields. The propagate check box is located immediately right of the Year and Period fields.
3. Once the changes have been made, a retrieval must be requested via File | Run or by clicking the Runner icon.

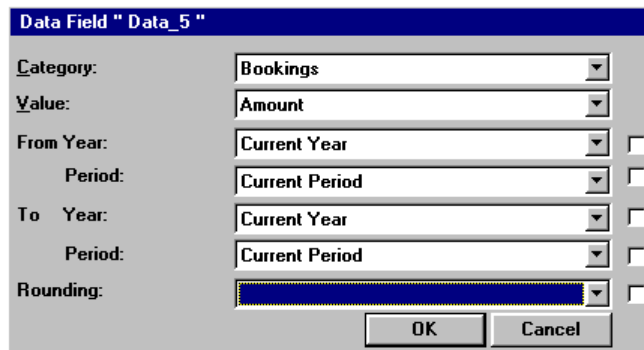
If you want to know how to change the actual Dimension, see "Adjusting the Dimension Levels" on page U121.



The screenshot shows a dialog box titled "Description Field ' ins_desc_6 '". It contains two dropdown menus: "Dimension" with "08 - Item" selected and "Description" with "Vendor Number" selected. At the bottom are "OK" and "Cancel" buttons.

Description Field detail window

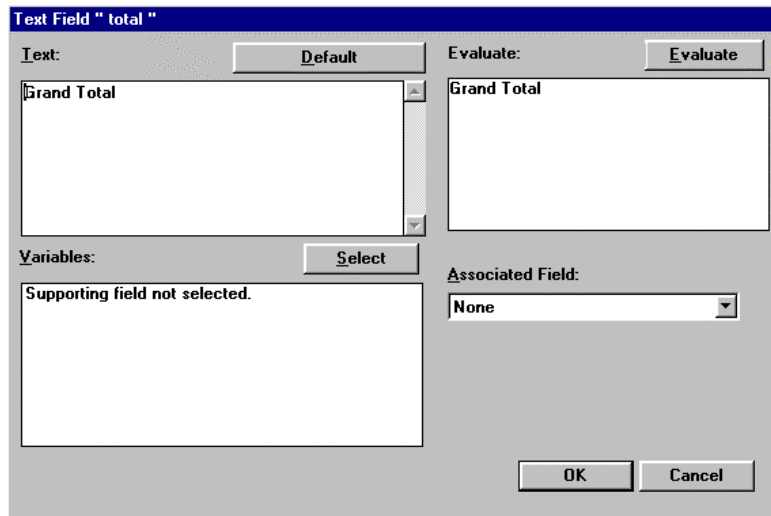
Anything relating to the data field can be changed at runtime and then saved as part of the View.



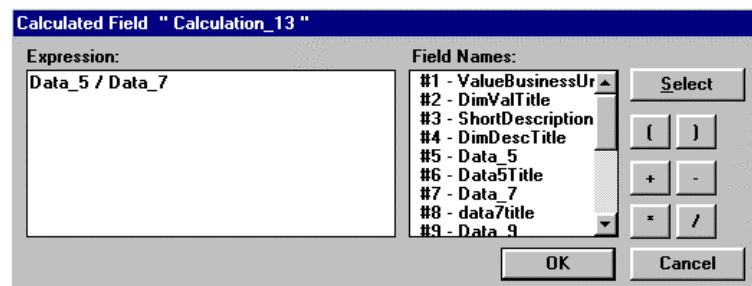
The screenshot shows a dialog box titled "Data Field ' Data_5 '". It contains several dropdown menus and checkboxes: "Category" (Bookings), "Value" (Amount), "From Year" (Current Year), "Period" (Current Period), "To Year" (Current Year), and "Rounding" (empty). Each of the last four items has a checkbox to its right. "OK" and "Cancel" buttons are at the bottom.

Data Field detail window

A text field can be dynamic or static. Dynamic text uses variable codes to create the text. As the data changes, so does the text. Static text remains exactly as it was keyed.



Text Field detail window



Calculation Field detail window

To adjust the summary calculation:

When defining a Template, the Summary field can be used to place a calculation in the Trailer or Summary band of the View. This calculation can do anything from calculating the row average, to summarizing all rows, to calculating the maximum or minimum of all rows. Within a View, you can select and maintain the fields in the Trailer and Summary bands.

1. Access the Calculated Field detail window:
 - Place the cursor on the desired field, right-click, and select Fields from the pop up menu
 - Select the field to be changed, and choose Edit | Columns | Fields
2. The system-generated calculation can be edited. Click **OK** to save the calculation expression as part of the View.

To change the Display Mask:

1. Left-click on the field and choose Edit | Columns | Display Mask.
2. Highlight the Display Mask you want and then click **OK**.
3. A retrieval must be requested to reflect the newly selected Display Mask.

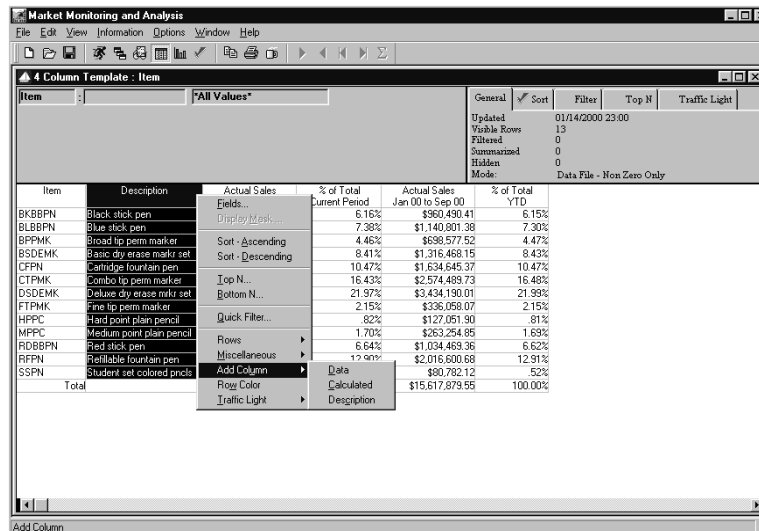
Adding a Column

MMA provides you with the ability to add a column on the fly. The added column is inserted to the right of the selected column. Once you have added a column, you can save it to the View file (.DTV). You can insert three types of columns, they are:

- Data
- Calculated
- Description

All Template types support this feature:

- Regular
- Period Based
- Cross Tab

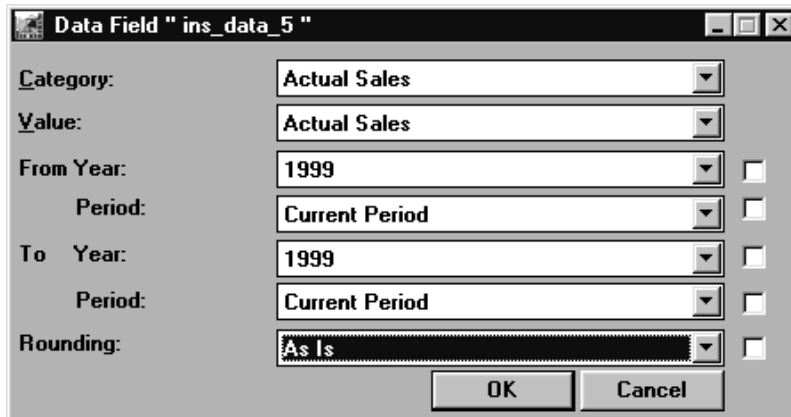


Add Column menu

To add a column:

1. Open or run an existing Template or View.
2. Right-click on any column to access the pop-up menu.
3. Choose Add Column | Column Type (Data, Calculated, or Description).

Note: The inserted column is positioned to the right of the selected column.



Data Field detail window

To add a data column:

1. Select Data as the Column Type from the Add Column pop-up menu.
2. The column is automatically inserted, and the Data Field detail window is displayed.
3. Define the details of the data column you are adding.

Note: By default, if a total line exists, the system will define a [Sum-Sum] total for added data columns.

4. Click **OK** to close the window.
5. *{Optional}* Right-click on the column header and choose Fields to adjust the text labeling the inserted column. Click **OK** to accept the adjusted text and close the window.
6. Click the Runner icon to refresh the View with the data in the added column.

Note: A refresh can be performed after each column is added to the View, or multiple columns can be added before the refresh.

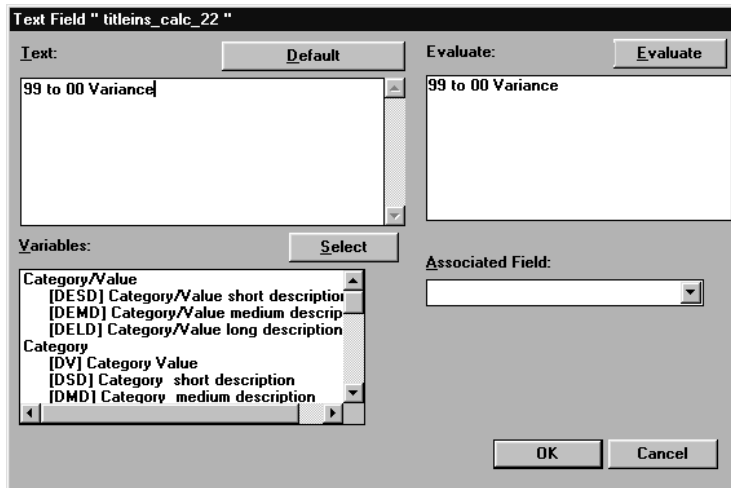


Calculated Field detail window

To add a calculated column:

1. Select Calculated as the Column Type from the Add Column pop-up menu.
2. The column is automatically inserted, and the Calculated Field detail window is displayed.
3. Define the calculation expression of the calculated column you are adding. Columns that have been added can also be included in the calculation expression. They are identified by an “ins” in front of the column name.
4. *{Optional}* In the Summary drop-down selection list, select the summarization type for this column.
5. Click **OK** to close the window.

With inserted calculated columns, the text “New Calculated Column” is automatically inserted in the column header for you.



Text Field detail window

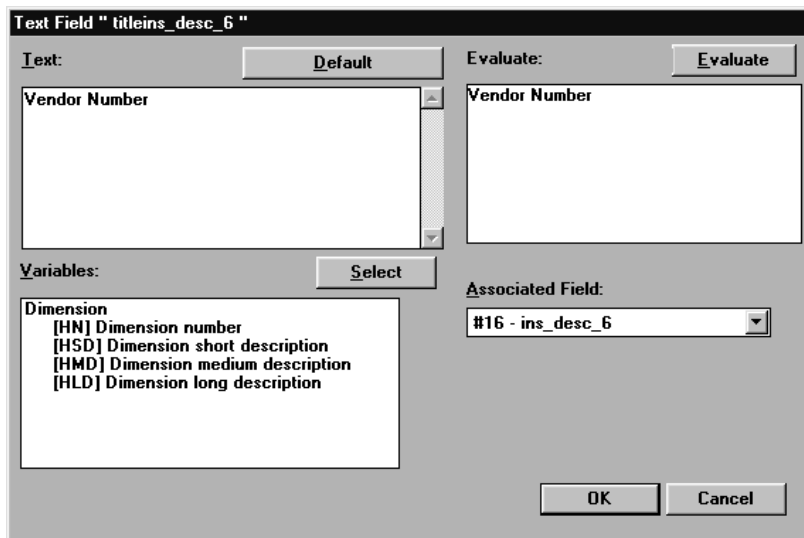
6. *{Optional}* Right-click on the column header and choose Fields to adjust the text labeling the inserted column. Click **OK** to accept the adjusted text and close the window.
7. Click the Runner icon to refresh the View with the data in the added column.



Description Field detail window

To add a description column:

1. Select Description as the Column Type from the Add Column pop-up menu.
2. The column is automatically inserted, and the Description Field detail window is displayed.
3. Select the Dimension level and the Description (Short, Long, or Pick-up Fields) of the description column you are adding.
4. Click **OK** to close the window.



Text Field detail window

5. *{Optional}* Right-click on the column header and choose Fields to adjust the text labeling the inserted column. Click **OK** to accept the adjusted text and close the window.
6. Click the Runner icon to refresh the View with the data in the added column.

Added description column

Added data column

Added calculated column

| Item | Description | Vendor Number | Actual Sales Sep 99 to Sep 99 | Actual Sales Sep 00 to Sep 00 | 99 to 00 Variance | % of Total Current Period | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | 99 to 00 Variance | % of Total YTD |
|--------|-----------------------------|---------------|----------------------------------|----------------------------------|----------------------|------------------------------|----------------------------------|----------------------------------|----------------------|-------------------|
| BKBBPN | Black stick pen | HDK64R | \$195,475.00 | \$224,629.96 | \$29,154.96 | 6.16% | \$835,074.00 | \$960,430.41 | \$125,416.41 | 6.15% |
| BLBBPN | Blue stick pen | HDK64R | \$250,612.00 | \$269,855.32 | \$19,243.32 | 7.38% | \$1,062,766.00 | \$1,140,801.38 | \$78,035.38 | 7.30% |
| BFPNK | Broad tip perm marker | TDH64T | \$105,188.00 | \$162,393.87 | \$57,205.87 | 4.45% | \$452,432.00 | \$686,577.52 | \$234,145.52 | 4.47% |
| BSDEMK | Basic dry erase marker set | WDF37F | \$180,667.00 | \$306,589.93 | \$125,922.93 | 8.41% | \$774,777.00 | \$1,316,468.15 | \$541,691.15 | 8.43% |
| CFPN | Cartridge fountain pen | HTS76Q | \$322,418.00 | \$381,436.60 | \$59,020.60 | 10.47% | \$1,380,752.00 | \$1,634,645.37 | \$253,893.37 | 10.47% |
| CFPMK | Combo tip perm marker | DFG19T | \$229,610.00 | \$599,895.30 | \$370,275.30 | 16.43% | \$2,272,179.00 | \$2,574,483.73 | \$302,310.73 | 16.48% |
| DSDEMK | Deluxe dry erase marker set | HID63P | \$519,185.00 | \$800,631.10 | \$281,446.10 | 21.57% | \$2,649,369.00 | \$3,434,130.01 | \$784,822.01 | 21.58% |
| EFPMK | Eraser tip perm marker | HID63P | \$60,401.00 | \$79,216.29 | \$17,817.29 | 2.15% | \$259,414.00 | \$336,059.07 | \$76,644.07 | 2.15% |
| HPPC | Hard point plan pencil | LSU43H | \$29,778.00 | \$29,777.72 | -\$0.28 | 0.82% | \$127,952.00 | \$127,051.90 | -\$900.10 | 0.81% |
| MPPC | Medium point plan pencil | LSU43H | \$61,880.00 | \$61,879.90 | -\$0.10 | 1.70% | \$263,255.00 | \$263,254.85 | -\$0.15 | 1.69% |
| RDDBPN | Red stick pen | DFG19T | \$155,635.00 | \$241,914.99 | \$86,279.99 | 6.64% | \$650,979.00 | \$1,024,469.36 | \$369,390.36 | 6.62% |
| RFPN | Refillable fountain pen | JF35Y | \$294,648.00 | \$470,124.93 | \$175,476.93 | 12.90% | \$1,251,743.00 | \$2,016,600.68 | \$754,857.68 | 12.91% |
| SSFN | Student set colored pencils | TDH64T | \$18,779.00 | \$18,778.93 | -\$0.07 | 0.52% | \$80,782.00 | \$80,782.12 | \$0.12 | 0.52% |
| Total | | | \$2,822,278.00 | \$3,644,116.84 | \$821,838.84 | 100.00% | \$12,084,733.00 | \$15,617,879.55 | \$3,271,789.50 | 100.00% |

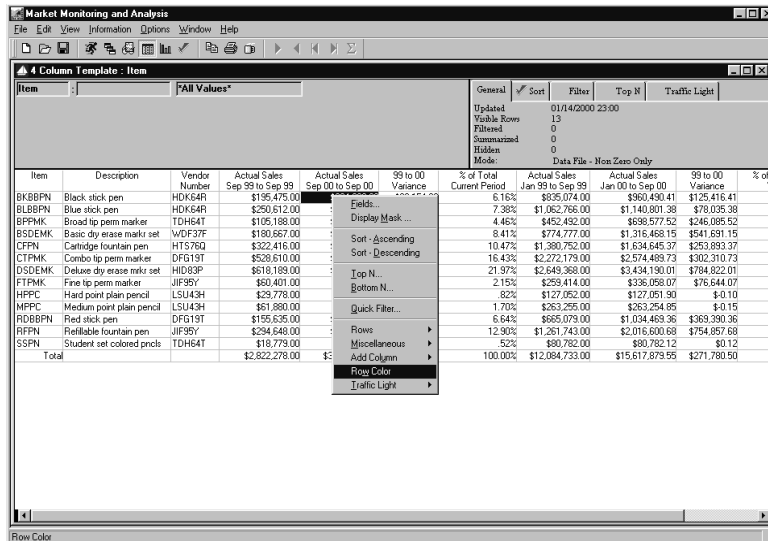
Refreshed View with added columns

Row Coloring

You can specify background and text colors for all of the rows within your Template/View. Row coloring can be applied and saved during Template definition or while running a View.

DBView has multiple levels of row coloring that can be applied. Specific row coloring overwrites any default background and text coloring. Colors are applied using the following priority list:

- Default text and background color. (Defined during the Template Definition process.)
- Specific row color definition. (See “Row Coloring” on page U132 for details.)
- Traffic Light colors. (See “Traffic Lighting” on page U137 for details.)



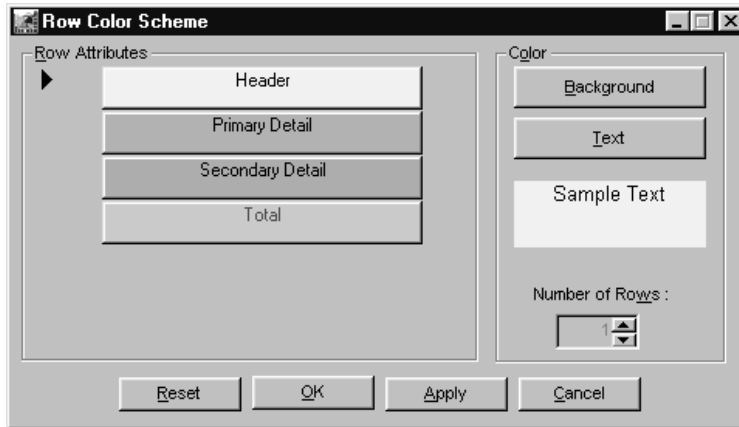
Row Color command

To add colors to rows within a View:

1. Open or run an existing Template or View.
2. Right-click on any column to access the pop-up menu.

3. Choose Row Color to access the Row Color Scheme window.

The number of row attributes will increase in a Grouped by Template/View. There will be an additional Header for the group dimension and an additional Total or Summary for the subtotal amount.



Row Color Scheme window

Note: Any combination of rows can be colored. For example, the text and/or background of the Header, Detail, or Summary bands can have different color combinations.

4. Click on the Header attribute to activate. An arrow (➤) displays immediately to the left of the active row attribute.
5. Select **Background** and choose a background color from the Windows® Color window. Click **OK** from the Color window to accept your selection and close the window. The selected background color displays in the Sample Text area of the window.
6. Select **Text** and choose a text color from the Windows® Color window. Click **OK** from the Color window to accept your selection and close the window. The selected text color displays in the Sample Text area of the window.
7. Repeat Steps 5 and 6 for the Primary Detail, Secondary Detail, and/or Summary row attributes.

Note: When coloring the Primary and Secondary Detail, the Number of Rows field works in conjunction with these areas. You can control the number of rows you want to include in each detail area. The default value of one can be changed by entering a new number or using the up and down arrows to select a number.

8. *{Optional}* Click **Apply** to change the colors on the active View.
9. When the colors meet your satisfaction, click **OK** to accept the colors and close the window.

Row Color Scheme Fields

Header

The Header band is usually where column titles display. Click on the Header row attribute to activate it and define the background and text color scheme. An arrow (➤) displays immediately to the left of the selected row attribute, and the current text and background colors are displayed as well.

Primary Detail

The Detail band is broken down into two sections: primary and secondary. The Number of Rows field controls the amount of rows included in each section of the Detail band. The Primary Detail is the first set of row(s). The Detail band is where the requested rows of data display. Click on the Primary Detail row attribute to activate it and define the background and text color scheme. An arrow (➤) displays immediately to the left of the selected row attribute, and the current text and background colors are displayed as well.

Secondary Detail

The Secondary Detail is the second set of row(s) displayed in the Detail band. The Detail band is broken into two sections: primary and secondary. Click on the Secondary Detail row attribute to select it and define the background and text color scheme. An arrow (➤) displays immediately to the left of the selected row attribute, and the current text and background colors are displayed as well.

Totals

The text labeling the Summary band identifies the last row attribute. If a text field labeling this row was not created, the word “Summary” labels this row attribute. Click on the Totals row attribute to select it and define the color scheme desired. There will be an additional total/summary row attribute for Grouped by Templates.

Sample Text

An example of the background and text colors defined for the active row attribute displays here.

Number of Rows

Row colors in the detail band are maintained using the Primary and Secondary Detail buttons in conjunction with the Number of Rows field. The Number of Rows field determines the number of rows included in the primary and secondary sets. The Number of Rows field is enabled only when maintaining the Primary and Secondary Detail row attributes. The default value is 1. A new value can be keyed in or selected using the up and down arrows.

Row Color Scheme Command Buttons

Background

Click **Background** to access the Windows® Color window and maintain the background color of the selected row attribute (Header, Primary Detail, Secondary Detail, or Summary).

Text

Click **Text** to access the Windows® Color window and maintain the text color of the selected row attribute (Header, Primary Detail, Secondary Detail, or Summary).

Reset

Click **Reset** to return all original background and text coloring selected during this session. A Confirmation window displays before returning the original coloring.

OK

Click **OK** to accept the background and text coloring selected during this session and close the window.

Apply

Apply allows you to make numerous changes before accepting with the **OK** button. All background and text colors made during this session will be applied to the active View displayed behind the Row Color Scheme window.

Cancel

Click **Cancel** to close the window without accepting any edits made to this window.

Primary Detail is two rows with blue background.

Secondary Detail is two rows with pink background.

Header has yellow background coloring applied.

Summary has green background and red text coloring applied.

| Item | Description | Vendor Number | Actual Sales Sep 99 to Sep 99 | Actual Sales Sep 00 to Sep 00 | 99 to 00 Variance | % of Total Current Period | Actual Sales Jan 00 to Sep 99 | Actual Sales Jan 00 to Sep 00 | 99 to 00 Variance | % of Total |
|--------|-----------------------------|---------------|-------------------------------|-------------------------------|-------------------|---------------------------|-------------------------------|-------------------------------|-------------------|------------|
| BKBBPN | Black stick pen | HDK64R | \$195,475.00 | \$224,629.96 | \$29,154.96 | 6.16% | \$836,074.00 | \$960,490.41 | \$125,416.41 | 19.06% |
| BLBBPN | Blue stick pen | HDK64R | \$290,612.00 | \$268,855.32 | -\$21,756.68 | 7.38% | \$1,062,766.00 | \$1,140,801.38 | \$78,035.38 | 7.34% |
| BFFPMK | Broad tip perm marker | TDH64T | \$105,188.00 | \$162,393.87 | \$57,205.87 | 4.46% | \$452,492.00 | \$698,577.52 | \$246,085.52 | 54.41% |
| BSDEMK | Basic dry erase mark set | WDF39F | \$180,667.00 | \$308,588.93 | \$127,921.93 | 8.41% | \$774,777.00 | \$1,316,468.15 | \$541,691.15 | 71.08% |
| CTFN | Cartridge fountain pen | HTS76Q | \$322,416.00 | \$361,436.60 | \$39,020.60 | 10.47% | \$1,380,752.00 | \$1,634,845.37 | \$253,893.37 | 18.32% |
| CTPMK | Combo tip perm marker | DFG19T | \$528,610.00 | \$598,885.30 | \$70,275.30 | 16.43% | \$2,272,179.00 | \$2,574,483.73 | \$302,310.73 | 13.29% |
| DSDEMK | Deluxe dry erase mark set | HID93P | \$618,189.00 | \$800,631.10 | \$182,442.10 | 21.97% | \$2,649,368.00 | \$3,434,190.01 | \$784,822.01 | 29.63% |
| CTPMK | Fine tip perm marker | JIF95Y | \$80,401.00 | \$78,218.29 | -\$2,182.71 | 2.15% | \$259,414.00 | \$336,058.07 | \$76,644.07 | 29.54% |
| HPPC | Hard point plain pencil | LSU43H | \$29,778.00 | \$29,777.72 | -\$0.28 | 0.82% | \$127,052.00 | \$127,051.90 | -\$0.10 | 0.10% |
| NPPC | Medium point plain pencil | LSU43H | \$61,880.00 | \$61,879.90 | -\$0.10 | 1.70% | \$253,255.00 | \$253,254.95 | -\$0.05 | 0.02% |
| BDBBPN | Red stick pen | DFG19T | \$195,635.00 | \$241,914.99 | \$46,279.99 | 6.64% | \$665,079.00 | \$1,034,463.36 | \$369,380.36 | 55.54% |
| RFFN | Retractable fountain pen | JIF95Y | \$294,648.00 | \$470,124.93 | \$175,476.93 | 12.90% | \$1,261,743.00 | \$2,016,600.68 | \$754,857.68 | 59.83% |
| SSPN | Student set colored pencils | TDH64T | \$18,779.00 | \$18,778.93 | -\$0.07 | 0.52% | \$80,782.00 | \$80,782.12 | \$0.12 | 0.12% |
| Total | | | \$2,822,278.00 | \$3,644,116.84 | \$821,838.84 | 100.00% | \$12,094,733.00 | \$15,617,879.55 | \$2,727,146.55 | 22.54% |

View with row coloring applied

You can specify background and text colors for all of the rows within your Template/View. Colors are applied using the following priority list:

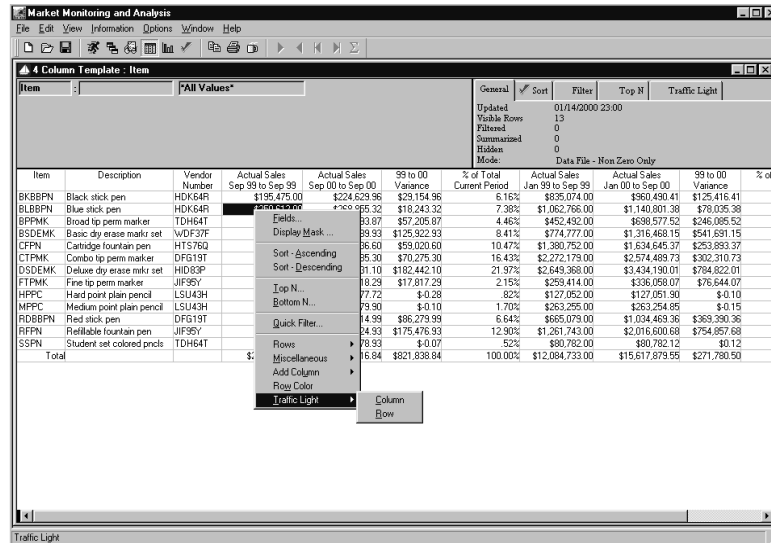
- Default text and background color. (Defined during the Template Definition process.)
- Specific row color definition. (See “Row Coloring” on page U132 for details.)
- Traffic Light colors. (See “Traffic Lighting” on page U137 for details.)

Traffic Lighting

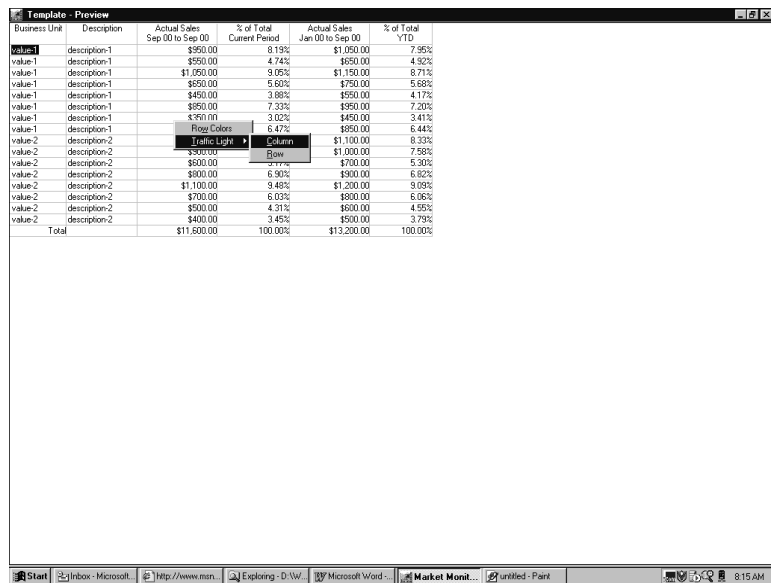
Traffic Lighting is a feature within *DBView* that uses colors to alert the user when the data meets user-defined conditions. For example, the user wants to be alerted when sales fall a certain percentage below forecasts. When this happens, the data will display in the background or text color specified by the user.

The condition expression is created using any column in the Template definition, and can be applied during Template creation or while running a View. You can have multiple conditions applied to each column and row. Traffic Lighting can be applied to columns and/or rows within the Template/View.

Traffic Lighting and Row Coloring can be saved as part of the View file or as part of the Template definition. When defining a Template, right-click within the Preview to define Row Color and/or Traffic Light. When running a View, right-click within the displayed View to select Row Color or Traffic Light from the pop-up menu.



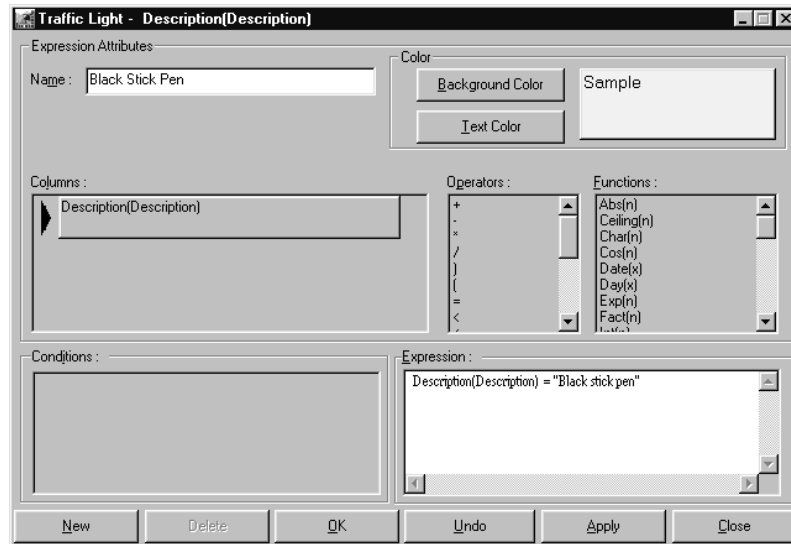
Traffic Light command accessed from a View



Traffic Light command accessed from a Template preview

To add Traffic Light colors to a specific column within a View:

1. Run an existing Template or View.
2. Right-click on the appropriate column to access the pop-up menu.
3. Choose Traffic Light | Column to access the Traffic Lighting window.



Traffic Lighting window - Columns

4. Enter a name for the condition you are defining in the Name field.
5. Define the background and text colors using the **Background Color** and **Text Color** buttons.
6. Define the traffic light expression using the selected column and the operators and functions defined by *DBView*. The column is selected by double-clicking on it, or clicking on it and dragging it into the Expression box.
7. {Optional} Click **Apply** to change the colors on the active View.
8. When the colors and conditions meet your satisfaction, click **OK** to accept the colors and conditions and close the window.

Traffic Light Fields

Name

Enter the user-defined name of the Traffic Light conditions being defined here.

Sample

An example of the background and text colors defined for the active column displays here.

Columns (Rows)

When applying traffic lighting to the rows, all columns are available for selection here. When applying traffic lighting to a column, only the selected column is available for selection here. Double-click on the desired column(s) to include in the expression.

Operators/Functions

When making a selection, drag-and-drop works the same as double-clicking.

Double-click on an operator or function, or drag-and-drop it into the Expression box to select it. Use any valid combination of the operators and functions provided to create your traffic light conditions. A scroll bar allows you to scroll through all available functions. Refer to the Appendix of this *User Guide* for function definitions.

Conditions

Multiple conditions can be applied to each column and row. If applying to the Rows, any column can be included in the expression. If applying to the Column, only the selected column can be included in the expression.

Expressions

You can create your own conditions or calculations between columns using any combination of the functions defined by *DBView*. *DBView* will validate the expression entered here. If the value being traffic lighted is text, it must be included in double quotes in the expression. The value entered is case sensitive, too. See the window on the previous and next page for an example. In this example, the system will search for and traffic light text that is spelled and capitalized the same as "Black stick pen." The system will not traffic light text such as "black stick pen."

Traffic Light Command Buttons

Background Color

Click **Background Color** to access the Windows® Color window and maintain the background color of the expression being defined.

Text Color

Click **Text Color** to access the Windows® Color window and maintain the text color of the expression being defined.

New

Click **New** to clear all the detail within the fields and define a new expression for traffic lighting.

Delete

Click **Delete** to delete the selected traffic light name with confirmation.

OK

Click **OK** to accept the traffic light conditions and coloring selected during this session and close the window.

Undo

Click **Undo** to return all original background and text coloring selected during this session.

Apply

Apply allows you to make numerous changes before accepting with the **OK** button. All background and text colors made during this session will be applied to the active View/Template preview displayed behind the Traffic Light window.

Close

Click **Close** to close the window without accepting any edits made to this window.

When "Black stick pen" is the item description, it will display with a yellow background.

| Item | Description | Vendor Number | Actual Sales Sep 99 to Sep 99 | Actual Sales Sep 00 to Sep 00 | 99 to 00 Variance | % of Total Current Period | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | 99 to 00 Variance | % of Total YTD |
|--------|-----------------------------|---------------|-------------------------------|-------------------------------|-------------------|---------------------------|-------------------------------|-------------------------------|-------------------|----------------|
| BKBBPN | Black stick pen | HDK64R | \$185,475.00 | \$224,630.00 | \$29,154.99 | 6.93% | \$205,073.51 | \$560,490.00 | \$125,416.49 | 8.91% |
| BLBBPN | Blue stick pen | HDK64R | \$250,611.90 | \$268,855.00 | \$18,243.10 | 8.88% | \$1,062,765.79 | \$1,140,801.00 | \$78,035.21 | 8.79% |
| BPFMK | Broad tip perm marker | TDH64T | \$105,188.04 | \$162,394.00 | \$57,205.96 | 3.73% | \$452,492.23 | \$698,578.00 | \$246,085.77 | 3.74% |
| BSDEMK | Basic dry erase marker set | WDF37F | \$180,666.83 | \$306,590.00 | \$125,923.17 | 6.40% | \$774,777.41 | \$1,216,468.00 | \$541,690.59 | 6.41% |
| CFPN | Cartridge fountain pen | H1576Q | \$222,415.00 | \$391,437.00 | \$59,021.40 | 11.42% | \$1,360,751.92 | \$1,634,645.00 | \$253,893.08 | 11.43% |
| CTFMK | Combo tip perm marker | DFG19T | \$528,609.50 | \$598,885.00 | \$70,275.50 | 18.73% | \$2,272,179.37 | \$2,574,490.00 | \$302,310.63 | 18.80% |
| DSDEMK | Deluxe dry erase marker set | HID83P | \$618,188.90 | \$800,631.00 | \$182,442.10 | 21.90% | \$2,649,367.80 | \$3,434,190.00 | \$784,822.20 | 21.92% |
| FTFMK | Fine tip perm marker | JIF95V | \$60,401.19 | \$78,218.00 | \$17,816.81 | 2.14% | \$259,413.61 | \$336,098.00 | \$76,684.39 | 2.15% |
| HPFC | Hard point plain pencil | LSU434 | \$29,777.72 | \$29,776.00 | \$0.38 | 1.06% | \$127,051.90 | \$127,052.00 | \$0.10 | 1.05% |
| MPPC | Medium point plan pencil | LSU434 | \$61,879.90 | \$61,880.00 | \$0.10 | 2.19% | \$263,254.85 | \$263,295.00 | \$40.15 | 2.18% |
| RDBBPN | Red stick pen | DFG19T | \$155,635.29 | \$241,915.00 | \$86,279.71 | 5.51% | \$665,078.53 | \$1,034,469.00 | \$369,390.47 | 5.50% |
| RFPN | Refillable fountain pen | JIF95V | \$294,648.03 | \$470,125.00 | \$175,476.97 | 10.44% | \$1,261,743.12 | \$2,016,601.00 | \$754,857.88 | 10.44% |
| SSPN | Student set colored pencils | TDH64T | \$18,778.33 | \$18,779.00 | \$0.67 | 0.74% | \$80,762.12 | \$80,762.00 | -\$0.12 | 0.74% |
| Total | | | \$2,822,276.86 | \$3,644,117.00 | \$821,840.14 | 100.00% | \$12,084,732.16 | \$15,617,879.00 | \$3,533,146.84 | 100.00% |

View with Column Traffic Lighting applied

Traffic Lights can be applied to any column or to rows within the Template/View. When applying to a column, only that column is available for selection. When applying to rows, all columns are available for selection. Multiple conditions can be applied to a Template/View. In the example below, the data will display in red text on a green background when the variance between 2000 and 1999 sales is greater than \$100,000.

The screenshot shows the 'Market Monitoring and Analysis' window with a '4 Column Template - Item' view. The data table has columns for Item, Description, Vendor, Actual Sales (Sep 99 to Sep 99, Sep 00 to Sep 00), % of Total Current Period, Actual Sales (Jan 99 to Sep 99, Jan 00 to Sep 00), and % of Total YTD. The 'Variance' column shows the difference between 2000 and 1999 sales. The table is filtered to show items where the variance is greater than \$100,000, and these rows are highlighted with a green background and red text.

| Item | Description | Vendor Number | Actual Sales Sep 99 to Sep 99 | Actual Sales Sep 00 to Sep 00 | Variance | % of Total Current Period | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Variance | % of Total YTD |
|--------|-----------------------------|---------------|-------------------------------|-------------------------------|--------------|---------------------------|-------------------------------|-------------------------------|----------------|----------------|
| BKBBPN | Black stick pen | HDK64R | \$195,475.03 | \$224,630.00 | \$29,154.97 | 6.93% | \$835,073.51 | \$960,490.00 | \$125,416.49 | 6.91% |
| BLBBPN | Blue stick pen | HDK64R | \$250,611.90 | \$268,895.00 | \$18,283.10 | 8.88% | \$1,062,765.79 | \$1,140,801.00 | \$78,035.21 | 8.79% |
| BFPBK | Broad tip perm marker | TDH64T | \$105,188.04 | \$162,384.00 | \$57,205.96 | 3.73% | \$452,452.23 | \$698,578.00 | \$246,085.77 | 3.74% |
| BSDEMK | Basic dry erase markr set | WDF3ZF | \$180,866.83 | \$306,950.00 | \$126,083.17 | 6.40% | \$774,777.41 | \$1,316,468.00 | \$541,690.59 | 6.41% |
| CFPN | Cartridge fountain pen | HTS76Q | \$322,415.60 | \$381,437.00 | \$59,021.40 | 11.42% | \$1,380,751.52 | \$1,634,645.00 | \$253,893.08 | 11.43% |
| CTPMK | Combo tip perm marker | DFG19T | \$528,609.50 | \$598,895.00 | \$70,275.50 | 18.73% | \$2,272,179.37 | \$2,574,490.00 | \$302,310.63 | 18.80% |
| DSDEMK | Deluxe dry erase mkr set | HDG83P | \$618,188.90 | \$800,631.00 | \$182,442.10 | 21.90% | \$2,649,367.80 | \$3,434,190.00 | \$784,822.20 | 21.92% |
| FTPMK | Fine tip perm marker | JIF95Y | \$60,401.19 | \$78,218.00 | \$17,816.81 | 2.14% | \$259,413.61 | \$338,058.00 | \$76,644.39 | 2.15% |
| HPCC | Hard point plain pencil | LSU43H | \$29,777.72 | \$29,778.00 | \$0.28 | 1.06% | \$127,051.90 | \$127,052.00 | \$0.10 | 1.05% |
| MPPC | Medium point plain pencil | LSU43H | \$61,879.90 | \$61,880.00 | \$0.10 | 2.19% | \$263,254.85 | \$263,255.00 | \$0.15 | 2.18% |
| RBDBPN | Red stick pen | DFG19T | \$195,635.29 | \$241,915.00 | \$86,279.71 | 5.51% | \$665,078.53 | \$1,034,468.00 | \$369,380.47 | 5.50% |
| RFPN | Reliable fountain pen | JIF95Y | \$294,648.03 | \$470,125.00 | \$175,476.97 | 10.44% | \$1,261,743.12 | \$2,016,601.00 | \$754,857.88 | 10.44% |
| SSPN | Student set colored pencils | TDH64T | \$18,778.93 | \$18,779.00 | \$0.07 | 6.7% | \$80,782.12 | \$80,782.00 | \$-0.12 | 6.7% |
| Total | | | \$2,822,276.86 | \$3,644,117.00 | \$821,840.14 | 100.00% | \$12,084,732.16 | \$15,617,879.00 | \$3,533,146.84 | 100.00% |

Traffic Lighting window - Rows

In the example below, multiple conditions have been applied. When multiple conditions are applied, column traffic lights override any row traffic lights applied.

The screenshot shows the same data table as above, but with a 'Traffic Light Tab' callout box pointing to the 'Variance' column. The callout box contains the text 'Traffic Light Tab'. The table is filtered to show items where the variance is greater than \$100,000, and these rows are highlighted with a green background and red text.

| Item | Description | Vendor Number | Actual Sales Sep 99 to Sep 99 | Actual Sales Sep 00 to Sep 00 | Variance | % of Total Current Period | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Variance | % of Total YTD |
|--------|-----------------------------|---------------|-------------------------------|-------------------------------|--------------|---------------------------|-------------------------------|-------------------------------|----------------|----------------|
| BKBBPN | Black stick pen | HDK64R | \$195,475.03 | \$224,630.00 | \$29,154.97 | 6.93% | \$835,073.51 | \$960,490.00 | \$125,416.49 | 6.91% |
| BLBBPN | Blue stick pen | HDK64R | \$250,611.90 | \$268,895.00 | \$18,283.10 | 8.88% | \$1,062,765.79 | \$1,140,801.00 | \$78,035.21 | 8.79% |
| BFPBK | Broad tip perm marker | TDH64T | \$105,188.04 | \$162,384.00 | \$57,205.96 | 3.73% | \$452,452.23 | \$698,578.00 | \$246,085.77 | 3.74% |
| BSDEMK | Basic dry erase markr set | WDF3ZF | \$180,866.83 | \$306,950.00 | \$126,083.17 | 6.40% | \$774,777.41 | \$1,316,468.00 | \$541,690.59 | 6.41% |
| CFPN | Cartridge fountain pen | HTS76Q | \$322,415.60 | \$381,437.00 | \$59,021.40 | 11.42% | \$1,380,751.52 | \$1,634,645.00 | \$253,893.08 | 11.43% |
| CTPMK | Combo tip perm marker | DFG19T | \$528,609.50 | \$598,895.00 | \$70,275.50 | 18.73% | \$2,272,179.37 | \$2,574,490.00 | \$302,310.63 | 18.80% |
| DSDEMK | Deluxe dry erase mkr set | HDG83P | \$618,188.90 | \$800,631.00 | \$182,442.10 | 21.90% | \$2,649,367.80 | \$3,434,190.00 | \$784,822.20 | 21.92% |
| FTPMK | Fine tip perm marker | JIF95Y | \$60,401.19 | \$78,218.00 | \$17,816.81 | 2.14% | \$259,413.61 | \$338,058.00 | \$76,644.39 | 2.15% |
| HPCC | Hard point plain pencil | LSU43H | \$29,777.72 | \$29,778.00 | \$0.28 | 1.06% | \$127,051.90 | \$127,052.00 | \$0.10 | 1.05% |
| MPPC | Medium point plain pencil | LSU43H | \$61,879.90 | \$61,880.00 | \$0.10 | 2.19% | \$263,254.85 | \$263,255.00 | \$0.15 | 2.18% |
| RBDBPN | Red stick pen | DFG19T | \$195,635.29 | \$241,915.00 | \$86,279.71 | 5.51% | \$665,078.53 | \$1,034,468.00 | \$369,380.47 | 5.50% |
| RFPN | Reliable fountain pen | JIF95Y | \$294,648.03 | \$470,125.00 | \$175,476.97 | 10.44% | \$1,261,743.12 | \$2,016,601.00 | \$754,857.88 | 10.44% |
| SSPN | Student set colored pencils | TDH64T | \$18,778.93 | \$18,779.00 | \$0.07 | 6.7% | \$80,782.12 | \$80,782.00 | \$-0.12 | 6.7% |
| Total | | | \$2,822,276.86 | \$3,644,117.00 | \$821,840.14 | 100.00% | \$12,084,732.16 | \$15,617,879.00 | \$3,533,146.84 | 100.00% |

View with multiple Traffic Lighting conditions applied

Traffic Light Tab Fields

Row Traffic Lights

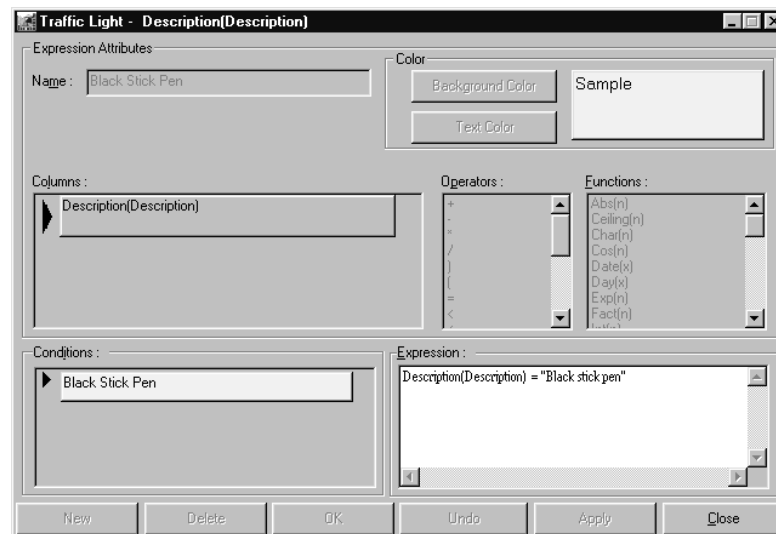
If row traffic lights have been applied to the View, a button containing the Template name with “Row Coloring” in parenthesis displays at the top of the list. See the picture on the bottom of the previous page for an example. Double-click on the button to display the details of the traffic light conditions applied to the Template/View. Multiple row traffic lights applied display under a single button.

Column Traffic Lights

If column traffic lights have been applied to the View, a button containing the column name displays in the Traffic Lights tab list. Double-click on the button to display the details of the traffic light conditions applied to the Template/View. A single button displays for each column traffic light applied.

*Both the user-defined column title **and** the Template definition field name are included in the column name labeling the button.*

The Information Box within a View contains a tab that displays Traffic Light details. Double-click on the field to view details of the traffic light expression and colors.



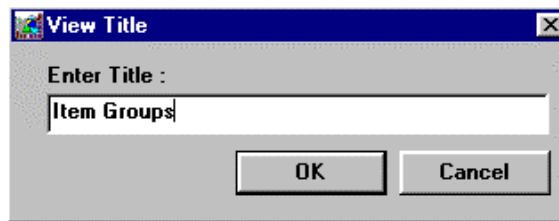
Viewing traffic light details applied

To view details of traffic lights applied:

1. If traffic lighting has been applied, a check mark displays on the Traffic Lights tab. Click on the Traffic Lights tab within the Information Box of the View to view the titles of the columns/rows with traffic lights applied.
2. Double-click on the desired traffic light to display the detail behind the traffic light conditions applied.
3. The Traffic Lighting window displays for your viewing, but the traffic light expressions and colors are not maintainable through the Information area of the View.
4. Click **Close** to close the window and redisplay the View.

Changing the Title of the View

Unless specified otherwise, the name that appears at the top of the View is the Template or active View name. To further customize a View, the title can be changed to specifically label the View. This title change is only valid for the current session. If you want to save the View title as part of the View, you must specify a **Save As** from the View display



View Title window

To change the View title:

- Choose Edit | Title and enter a title in the Enter Title field.
- Click **OK** to accept the new title and redisplay the active View with the new title at the top of the window.

View Title Field

Enter Title

The name of the active View or Template defaults in the Enter Title field. To change the name of the active View, enter a new name here. This field supports up to 99 alphanumeric characters, including blanks.

View Title Command Buttons

OK

To change the name of the active View, click **OK**.

Cancel

Click **Cancel** to close the View Title window without changing the title.

Grouping Views

View items (Views saved by users) can be grouped together in the same manner as applications are grouped together within the Windows Program Manager. ViewGroups are separate windows inside *DBView* which contain icons that start Views. There can be more than one ViewGroup window, and when minimized, they display along the lower edge of the *DBView* window. You can control how the groups are arranged on your desktop.



Group Properties window

To create a new group:

1. From the *DBView* main window, choose Desktop | New | Group to access the Group Properties window.
2. In the Description field, type a description for the group you want to create. The description appears in the title bar of the group window and below the group icon when it is minimized or closed.
3. Enter a group file name or click **Browse**. The file name of ViewGroups must have a .DTG extension.
4. Leave the default icon, or click **Browse Icon** to select an icon to be associated with the group.
5. Click **OK**.

To delete an existing group:

1. Make sure the group you want to delete is reduced to an icon.
2. Select the icon for the group you want to delete and choose Desktop | Delete.
3. A dialog box appears prompting you to confirm that you want to delete the ViewGroup. Click **Yes** to delete the group.

Note: *DBView* deletes the group you selected and any associated ViewItems included in it. The View files, however, are not deleted.

Group Properties Fields

Description

The label for the group icon is entered here. The description appears in the title bar of the group window and below the minimized ViewGroup.

Group File

The file name of the group is entered here. The group file can be typed in this box or selected from a list accessed using the **Browse** button.

Group Icon

An icon can be associated with the ViewGroup. The icon can be selected from a list accessed using the **Browse Icon** button.

Group Properties Command Buttons

OK

Click **OK** to create the group as defined.

Cancel

Click **Cancel** to close the window without creating any ViewGroup.

Browse

Click **Browse** to open the Group File window and select the directory and path of the ViewGroup you are creating.

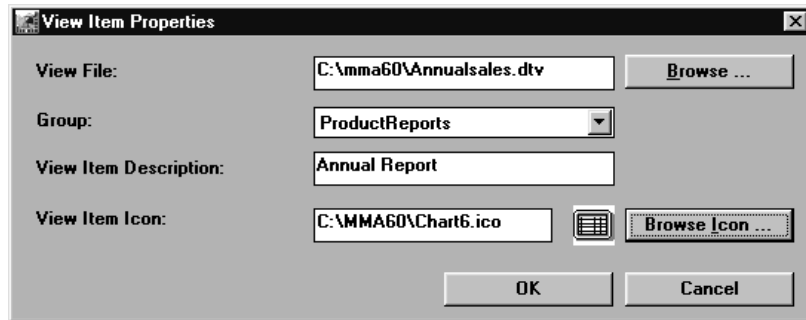
Browse Icon

Click **Browse Icon** to select an icon to be associated with the ViewGroup.

To change the name of a group:

1. Reduce the group name you want to change to an icon.
2. Select the icon for the group whose name you want to change.
3. Choose Desktop | Properties and type a new description in the Group Properties dialog box. Click **OK**.

You can create new View items, copy or move View items from one group to another, or delete View items.



View Item Properties window

To create a View item within a group:

1. Open the group that you want to add an item to and choose Desktop | New | View Item and the View Item Properties dialog box appears.
2. Type in the View File name with a .DTV extension, or use the **Browse** button to select the View file you want.
3. Select the Group this View item is to be included in by clicking on the down arrow located next to the Group field.
4. Enter the user-defined description of the View item in the View Item Description field. This name will display next to the icon in the specified group.
5. Click **Browse Icon** to associate an icon with the View file. Choose an icon and click **Open**.
6. The View Item Properties window will redisplay, if all entries are acceptable, click **OK** to accept this new View item and close the window.

View Item Properties Fields

View File

Key in a View file name or click **Browse** and select a valid path and file name. View files must have a .DTV extension.

Group

Select a ViewGroup from the drop-down selection list.

View Item Description

Enter a description to be associated with the View Item. The name entered is the title that appears next to the icon and in the View title bar.

View Item Icon

The path and icon name of the icon associated with the View file is entered in this field. Click **Browse Icon** to access a listing of all icons.

View Item Properties Command Buttons

Browse

Click **Browse** to open the Open View window and select the directory and path of the View item you are creating. *DBView* View files must have a .DTV extension.

Browse Icon

Click **Browse Icon** to open the Icon File window and select the icon to be associated with the View file being saved as part of the active ViewGroup.

OK

Click **OK** to save the selected View file under the specified name.

Cancel

Click **Cancel** to close the window without creating any View items within the active group.

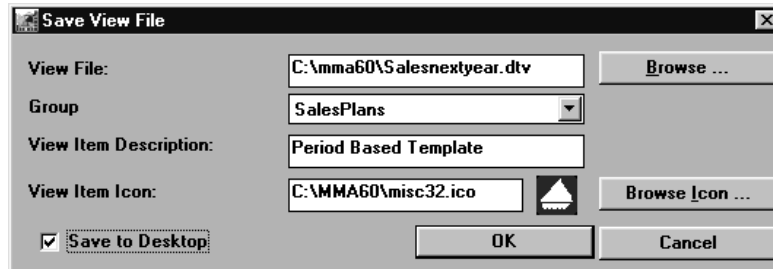
There is no limit to the number of View items that can be included in a group. If there are more View items than will display in the window, a vertical scroll bar appears to allow you to view all available View items.

To run a View from a ViewGroup:

1. Open the group window that contains the View item icon for the View you want to run.
2. Double-click on the icon to retrieve data in the format defined by the View file.

Saving a View as an Icon

Once you have the active Template or View in the exact format that you want, you can save it as a View file and an icon on your desktop. You must include the View file in a Group.



Save View File window

To save a View to your desktop:

1. From the current View display, choose File | Save As.
2. Enter a View file name with a .DTV extension. You can click **Browse** to select a valid path for this View file name.
3. Select a ViewGroup from the Group drop-down selection list.
4. Enter a name to be displayed below the icon in the View Item Description field.
5. Click **Browse Icon** to choose a valid icon to be associated with your View, or leave the default that has been selected for your ID.
6. *{Optional}* Save the View File to the desktop by selecting the Save to Desktop check box.
7. Click **OK**.

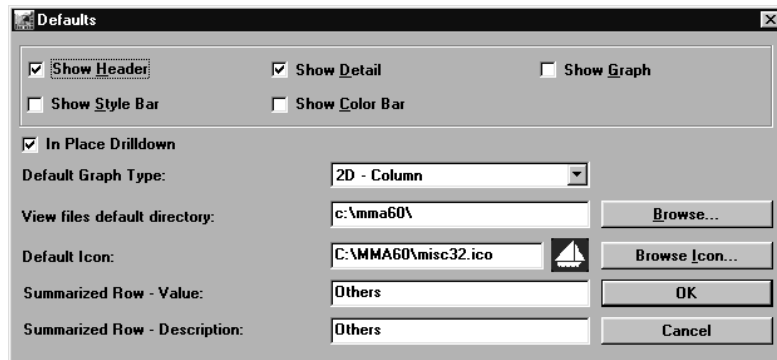
Save View File Field and Command Button Definitions

The Save View File window contains the same fields and buttons as the View Item Properties window, except that the Save View File window has the Save to Desktop check box. Select that check box to save the ViewItem as an icon on your desktop.

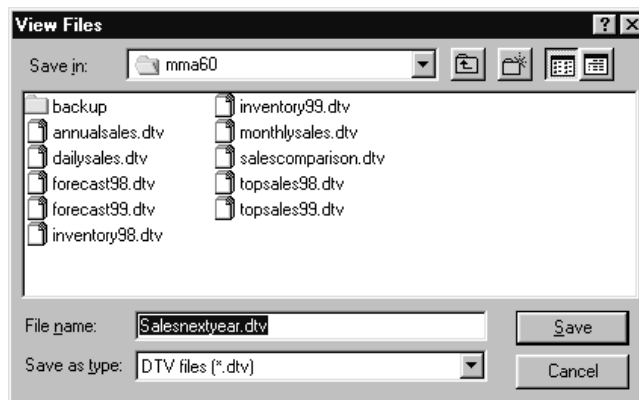
Please refer "View Item Properties Fields" on page U146 for field and command button definitions.

Selecting the Path and File Name for the View File

The View files are saved to your local PC in the directory where the Views files default directory is set up. That directory is set up through the Defaults window in *DBView* (accessed via the Options menu). You can change the directory if desired. View files can be opened and then run, or they can be associated with an icon on your desktop. Double-clicking on the icon-ized View automatically runs it and retrieves data.



Defaults window



View Files Browse window

To select the location of the View file being saved:

1. Click **Browse** from the Save View File window.
2. *{Optional}* Select the appropriate drive and directory from the drop-down listing if other than the default directory.
3. Enter a View file name.
4. Verify that the file type is .DTV.
5. Click **Save** to return to the Save View window with the file name selected on the View Files window.

View Files Fields

Save in

Lists the drives and directories available on your system. The View files should be saved in the directory where *MMA* resides.

File name

The file name of the selected View displays here. The View can be selected from a list or typed in this box. The View files saved to the active drive and directory display below the File Name field.

Save as type

Lists the file formats supported by *DBView*. *DBView* View files must be in a .DTV format; however, you can export the data into many other formats. See Chapter 8 in this *User Guide* for additional information regarding exporting data.

View Files Command Buttons

Save

To specify a View file, key the name in the File name field and click **Save** to redisplay the Save View File window with the selected file name and path displayed in the View File field.

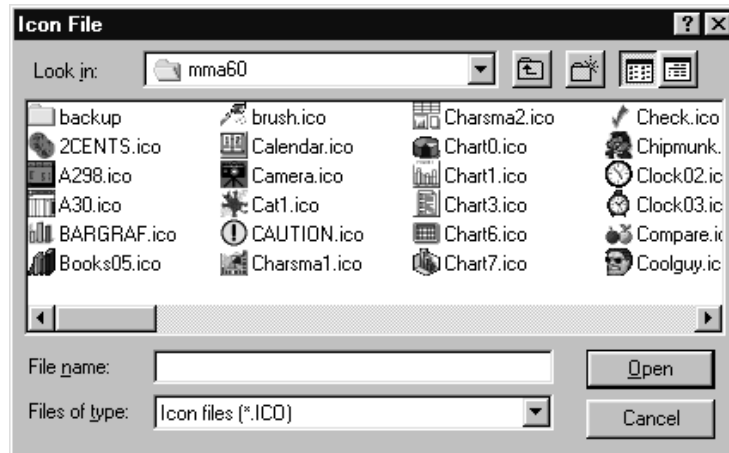
Cancel

Click **Cancel** to close the View Files window without specifying a View file.

Selecting an Icon to be Associated with the View

An icon can be associated with a View file. Double-clicking on the icon runs the View file.

If an icon is not selected, the default icon is used. See Chapter 8 in this User Guide for the User Defaults maintenance information.



Icon File window

To associate an icon with a View file:

1. Select an icon to be associated with the View by clicking **Browse** from the Save View File window.
2. Select any icon from the listing by single clicking on the file name.
3. Click **Open** to redisplay the Save View File window with the selected icon file displayed in the View Item Icon field.

Icon File Fields

Look in

Lists the default directory where *MMA* resides. The icon files are installed as part of the *MMA* application.

File name

The file name of the selected icon displays here. The icon can be selected from a list or typed in this box. The icons that are available in the current directory display below the Look in field.

List Files of type

The drop-down selection list displays all available icon files for your selection. *DBView* icons must be in an .ICO format; however, you can use any .ICO files you have access to. *DBView* does not limit you to only the icons provided.

Icon File Command Buttons

Open

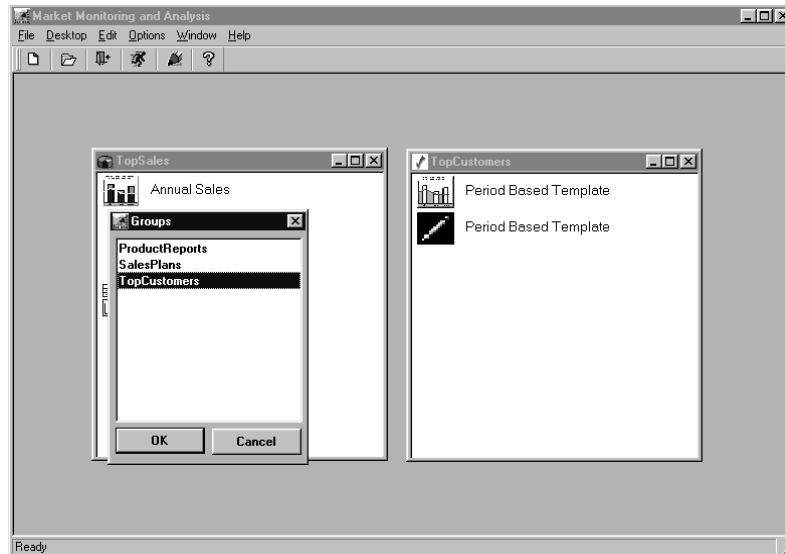
To select an icon, key it in the File name field or select it from the listing and click **Open**. The Save View File window with the selected icon file is displayed in the Icon field, and the actual icon is displayed next to the field.

Cancel

Click **Cancel** to close the Icon File window without specifying an icon to be associated with the View. The default value is used if an icon is not selected.

Copy ViewItems to Another ViewGroup

You can easily copy a View item from one group to another by using the CTRL key and the mouse to drag the View item into another ViewGroup. You can move any group icon within the *DBView* workspace by dragging it with the mouse or by using the Move command on the Desktop menu. The items can be re-sequenced within a group by clicking on the View item and dragging it to the desired location.



Destination Groups window

To copy items from one group to another:

1. Open the groups for both the source and the destination ViewGroups.
 2. Press and hold CTRL while you click and drag the View item icon from its current location to the destination group window. When the copied icon is on the destination group, release the mouse button and the CTRL key.
- OR--
1. Open the group window that contains the View item you want to copy from.
 2. Highlight the View item you want to copy and choose Desktop | Copy and the Groups selection window appears.
 3. Choose the destination View Group and click **OK**.

To move items from one group to another:

1. Open the both the source and destination ViewGroups.
2. Click on the View item you want to move and drag it from its current location to the destination group window. When the moved icon is on the destination group, release the mouse button.

--OR--

1. Open the group that contains the View item you want to move.
2. Highlight the View item you want to move and choose Desktop | Move and the Groups selection window appears.
3. Choose the destination ViewGroup and click **OK**.

To move items and groups from one version of MMA to another:

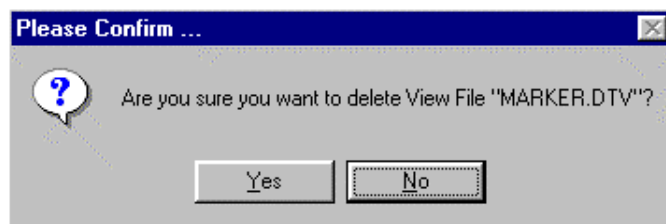
- See Chapter 3 in the *Systems Administrator Guide* for information about the Copy ViewGroup Migration Utility.

Deleting View Files and View Items

You can easily delete a View item from a group. When you delete a View item from a group, the View file can also be deleted with confirmation, if the feature is turned ON. By default, the View files are not deleted. There is a setting in the STCS.INI file controlling this feature. By default, the feature is turned OFF. If you want the system to delete the .DTV file with confirmation when deleting the View Item, make the following change in the [MISC] section of the STCS.INI file:

```
deletedtv=1
```

When this feature is turned ON, the system requires confirmation to delete the file separately from the icon.



Please Confirm window

To delete a View item from a group:

1. Open the group window that contains the item you want to delete and click the View item.
2. Choose Desktop | Delete and the delete confirmation dialog box appears. Click **Yes** to delete the selected View item.
3. *{Optional}* If supported in your implementation, another dialog box displays. This one asks you to confirm the deletion of the View file. If you want to delete the View file as well as the ViewItem, click **Yes**.

Exporting and Importing ViewGroups

ViewGroups can be exported so they can be imported and used by other users. The name of the active group defaults as the file export name, but you can change it when identifying the export.



Group Export window

To export a group:

1. Choose Desktop | Export.
2. The name of the active group defaults in the Export File Name field. Leave the default, enter a different export file name, or select a valid export file by clicking **Browse**.
3. Click **OK**.
4. A Confirmation window displays. If the correct ViewGroup is identified, click **OK**.
5. Click **Close** from the Group Export window. Now the ViewGroup is ready to be imported by other users.

Group Export Field

Export File Name

The name of the active ViewGroup defaults in this field. You can leave the default file, enter a different file name and path, or select an existing file name using the **Browse** button.

Group Export Command Buttons

Browse

Click **Browse** to select a valid path and export file name.

OK

Click **OK** to export the active group under the specified path and name.

Close

Click **Close** to close the window without exporting a group file.

Previously defined ViewGroups can be exported from one desktop, and then they can be imported by other users and used on their desktops. Importing a previously exported group file actually imports the View Group, the View files, and their associated icons.



Group Import window

To import a group:

1. Choose Desktop | Import.
2. Key in the name of the file to be imported in the Import File Name field. If the correct name and path is unknown, click **Browse** to select a valid group file to be imported. Export file names must have a .DTX extension.
3. Click **OK**.

Group Import Field

Import File Name

Enter the file name of the exported ViewGroup to be imported. If the correct file name and path is unknown, use the **Browse** button to select one from a list.

Group Import Command Buttons

Browse

Click **Browse** to select a previously exported group file from a list.

OK

Click **OK** to import the previously exported group file requested. Exported group files have a .DTX extension.

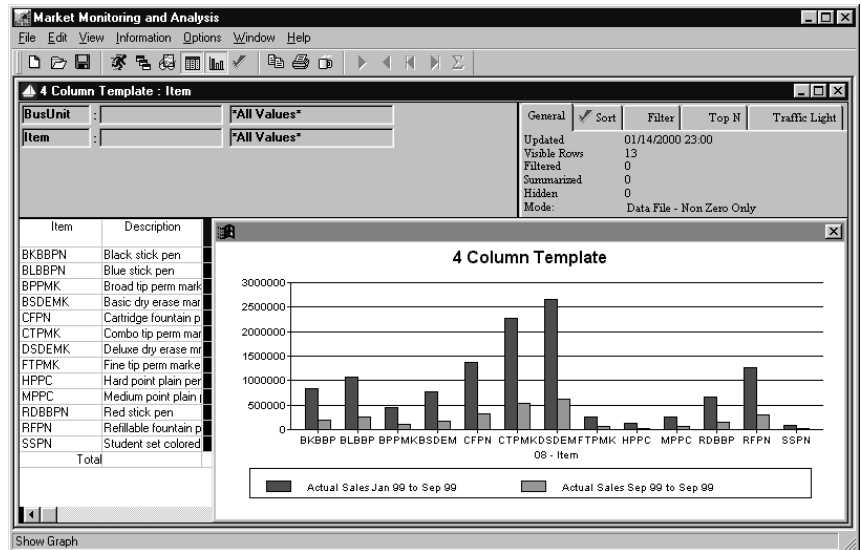
Close

Click **Close** to close the window without importing a group file.

Graphing Views

From any View, you can have a graphical display of the data currently displayed. The graph can display all detail within the View, or you can pick and choose exactly the columns and rows of data you want to display in the graph. The graph type displayed depends on the setting selected under your user defaults. Once a graph is displayed, many areas can be maintained. You can refresh the graph with only select rows or columns. You can change the graph type, size and location. You can adjust the title of the graph along with any of the labels within the graph.

Note: A graph can contain up to 30 columns of data.



View with default graph

To display a graph

- A graph can be displayed in two different ways:
 - Choose View | Change View | Show Graph to graph the data currently on the screen.
 - OR--
 - Click the **Display Graph** icon and all rows and columns will be graphed in the graph type defined as your default.



= Display Graph

Adjusting the Graph

Once the Graph is displayed, you can adjust and refresh the graph or select a different graph format via View | Graph | Setup. The same pop-up menu is available via a single right-click within the graph.

To select a different graph format:

- From the **Graph** menu, select the desired graph type.

To change the rows or columns graphed:

- From the View, highlight the desired rows and/or columns and click the graph refresh icon, or choose View | Graph | Refresh Graph.
--OR--
- Choose View | Graph | Setup and then select only the columns you want to graph by removing columns from the Column Titles area of the window. Click **OK** from the Graph Setup window to refresh the graph.



= Refresh Graph

To adjust the labels and title of the graph:

1. Choose View | Graph | Setup and then adjust the Graph Title and any labels.
2. Click **OK** from the Graph Setup window to refresh the graph.

To size and move the graph:

- Size the graph appropriately by clicking on the graph's margin and dragging it to the desired position. The graph can also be moved to a different position on the window by clicking on the title and dragging it to the desired position and releasing it.

To remove the graph from the active View:

- Choose View | Change View | Show Graph, or click the **Display Graph** icon to remove the Graph from the window.



= Display Graph

Redisplaying a Graph

Graphs can be redisplayed with select data and in different formats.

By default, all columns and rows of data are graphed in a graph type defined under your default options. The default values can be maintained via the Graph Setup window accessed by clicking View | Graph | Setup.

The functionality to drill-down to the next defined level also exists within the Graphs in *DBView*. Double-click on the desired Dimension key value and an automatic drill-down to the next defined level is performed. Click the Drill-down icon and you can select the next Dimension level to drill to.

| Column Name | Column Title |
|--------------------------------|-------------------|
| #5 - data1 : Pos - 3 : Row - 1 | AS Current Period |
| #9 - data2 : Pos - 5 : Row - 1 | AS YTD |

Graph Setup window

Graph Setup Fields

Graph Title

The name of the active View or Template defaults in the Graph Title field and can be maintained. A graph is not saved under this name; the title only displays in the Graph window.

Graph Type

There are several different graph types available with *DBView*. Use the drop-down selection list to choose the desired graph type: 2 and 3 Dimensional Area, Bar, Column, Line, Pie, Scatter, Stacked Bar, and Column.

Values Label

The data values can be labeled on the X or Y axis by entering text in the Values Label field. The default value has no label at all. This field supports up to 30 alphanumeric characters - including blanks.

Dimension Field

The categories graphed by default are labeled by the first defined description field type (For example, the Dimension values). This can be changed to any other description item (value, description, or field definition) via the selection drop-down selection list.

Dimension Text

The Dimension item being graphed can be labeled on the graph. The default value is the Dimension value and the description, but this field can be maintained.

Columns

By default, ALL columns are graphed.

The Columns box lists all data and calculation fields defined for the active Template. To include a field in the graph, highlight it in the Columns box and click **Select** or double-click on the field while displayed in the Columns box. Fields included in the graph are listed under the Column titles area of the window.

Column Titles

The columns that are included in the graph are displayed in the Column Titles list box. To delete a column from the graph, highlight it while displayed in the Column Titles box and then click **Remove**. The text field labeling the column is the default value. These column labels can be maintained here.

Graph Setup Command Buttons

Select

Click **Select** to include the field highlighted in the Columns list box in the graphical display.

Remove

Click **Remove** to delete the field highlighted in the Column Titles list box from the graphical display.

OK

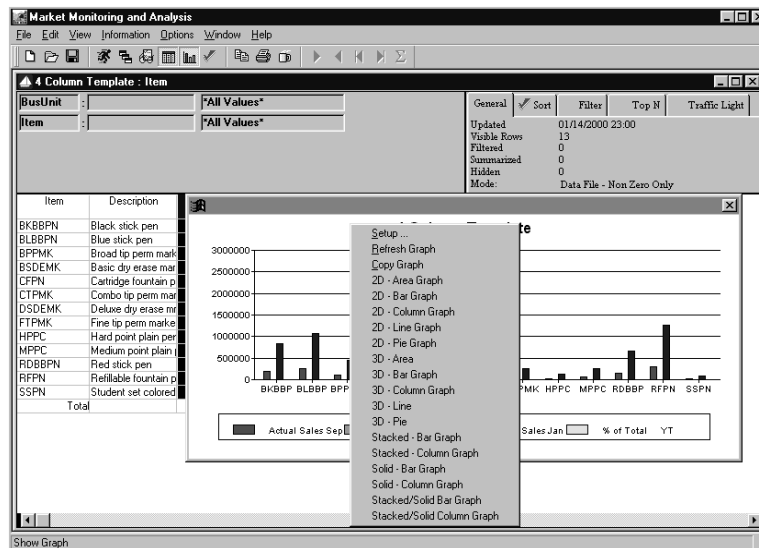
Click **OK** to refresh the graph window with your selections.

Close

Click **Close** to close the window without processing any entries.

Copy Graph Menu

A graph can be copied to the Clipboard and then be copied into another application by making the proper selection on the pop-up menu within the graph.



Graph pop-up menu

To copy the active graph to the Clipboard:

1. With a graph displayed on your View, right-click the graph to display the Graph pop-up menu.
2. Choose Copy Graph from the menu.
3. The graph has now been copied into the Clipboard so you can paste it into another application.


CHAPTER 6 • USING CROSS TAB TEMPLATES

QuickLook

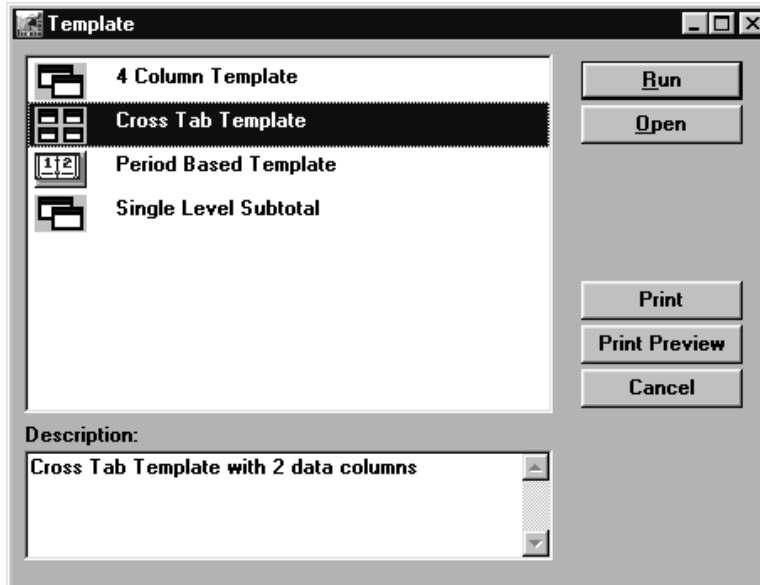
Use this chapter to learn how to:

- Run a Cross Tab View and Template.
- Retrieve the next set of data within a Cross Tab View.
- Anchor columns within a Cross Tab View.
- Transpose the Dimensions within a Cross Tab View.
- Modify the Dimensions within a Cross Tab View.
- Create a Cross Tab Template.

Running Cross Tab Template

 = *Cross Tab Template.*

A Cross Tab Template displays data for two levels of summarization (Dimensions) in a matrix format. One level is displayed in the rows and the other in the columns. You cannot automatically drill-down within a Cross Tab Template, but you can reselect the Dimensions or transpose the row and column Dimensions during runtime. The Template format is easily identified within the listing by the descriptive icon displayed to the left of the Template name.



Template listing window

To run a Cross Tab Template:

1. Choose File | New to access the Template listing window.
2. Highlight the desired Cross Tab Template and click **Run**.
3. The Cross Tab View is displayed. This format has one Dimension value along columns and another down the rows.
 - When running a Template from the listing, the values that were selected during Template definition default. You can edit the Dimensions at runtime, or choose to open the Template and then reselect different Dimensions before retrieving any data.

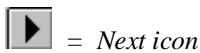
*Highlight the Template and click **Open** to open the file.*

Cross Tab Views are invaluable when you need to view a relationship between two Dimensions in a matrix format. The Dimensions can be switched at runtime, or even modified to other Dimensions. The first Dimension selected is the column Dimension and the second is the row Dimension.

| Item | Description | 101 Andrew Fuller | | 102 Margaret Peacock | | 103 Robert King | |
|--------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 |
| BKBBPN | Black stick pen | \$53,152.07 | \$0.00 | \$0.00 | \$0.00 | \$244,964.06 | \$244.94 |
| BLBBPN | Blue stick pen | \$24,148.67 | \$0.00 | \$0.00 | \$0.00 | \$186,182.16 | \$186.16 |
| BPPMK | Broad tip perm marker | \$98,885.69 | \$0.00 | \$71,707.35 | \$71,707.35 | \$0.00 | \$0.00 |
| BSDEMK | Basic dry erase marker set | \$190,535.17 | \$0.00 | \$202,701.94 | \$202,701.94 | \$0.00 | \$0.00 |
| CFPN | Cartridge fountain pen | \$145,253.03 | \$0.00 | \$0.00 | \$0.00 | \$221,649.82 | \$221.64 |
| CTPMK | Combo tip perm marker | \$138,795.35 | \$0.00 | \$171,148.00 | \$171,148.00 | \$0.00 | \$0.00 |
| DSEMK | Deluxe dry erase marker set | \$480,617.43 | \$0.00 | \$566,130.16 | \$566,130.16 | \$0.00 | \$0.00 |
| FTPMK | Fine tip perm marker | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| HPFC | Hard point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$61,895.35 | \$61.89 |
| MPFC | Medium point plain pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$38,560.00 | \$38.56 |
| RDBBPN | Red stick pen | \$233,733.58 | \$0.00 | \$0.00 | \$0.00 | \$149,722.08 | \$149.72 |
| RFPN | Refillable fountain pen | \$346,353.16 | \$0.00 | \$0.00 | \$0.00 | \$292,411.73 | \$292.41 |
| SSPN | Student set colored pencils | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$28,826.39 | \$28.82 |
| | Total | \$1,721,474.15 | \$0.00 | \$1,011,687.45 | \$1,011,687.45 | \$1,224,111.59 | \$1,224.11 |

Cross Tab View

To retrieve the next set of data:



- Data is processed in sets of five in a Cross Tab View. This gives you faster processing time. To retrieve the next set of data, click the **Next** icon on the toolbar. If there is not another set available, the **Next** icon is disabled.

Note: If more row values exist than will fit on one window, a vertical scroll bar displays to allow you to maneuver through all values.

Anchoring Columns within a Cross Tab View

If you use the horizontal scroll bar to scroll through the Dimension values, the values and descriptions in the first two columns move off of your screen. To have those labels remain on your screen, anchor them when reviewing a Cross Tab View.

The screenshot shows a window titled "Market Monitoring and Analysis" with a "Cross Tab Template : Item" view. The view displays a table with columns for Sales Rep (Andrew Fuller, Margaret Peacock, Robert King) and rows for various items. The first two columns (Item and Description) are anchored, meaning they remain visible even when the horizontal scroll bar is used to view other data.

| Item | Description | 101 Andrew Fuller | | 102 Margaret Peacock | | 103 Robert King | |
|--------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 |
| BKBBPN | Black stick pen | \$63,152.07 | \$0.00 | \$0.00 | \$0.00 | \$244,864.06 | \$244.86 |
| BLBBPN | Blue stick pen | \$24,148.67 | \$0.00 | \$0.00 | \$0.00 | \$186,182.16 | \$186.11 |
| BPPMK | Broad tip perm marker | \$38,895.69 | \$0.00 | \$71,707.35 | \$71,707.35 | \$0.00 | \$0.00 |
| BSDEMK | Basic dry erase marker set | \$130,535.17 | \$0.00 | \$202,701.94 | \$202,701.94 | \$0.00 | \$0.00 |
| CFPN | Cartridge fountain pen | \$145,253.03 | \$0.00 | \$0.00 | \$0.00 | \$221,649.82 | \$221.64 |
| CTPMK | Combo tip perm marker | \$138,795.35 | \$0.00 | \$171,148.00 | \$171,148.00 | \$0.00 | \$0.00 |
| DSDEMK | Deluxe dry erase marker set | \$480,617.43 | \$0.00 | \$566,130.16 | \$566,130.16 | \$0.00 | \$0.00 |
| FTPMK | Fine tip perm marker | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| HPPC | Hard point plan pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$61,895.35 | \$61.89 |
| MPPC | Medium point plan pencil | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$38,560.00 | \$38.56 |
| ROBBPN | Red stick pen | \$233,733.58 | \$0.00 | \$0.00 | \$0.00 | \$143,722.08 | \$143.72 |
| RFPN | Refillable fountain pen | \$346,353.15 | \$0.00 | \$0.00 | \$0.00 | \$232,411.73 | \$232.41 |
| SSPN | Student set colored pencils | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$28,826.39 | \$28.83 |
| | Total | \$1,721,474.15 | \$0.00 | \$1,011,687.45 | \$1,011,687.45 | \$1,224,111.59 | \$1,224.11 |

Cross Tab View with the row Dimensions anchored

To anchor columns within a Cross Tab View:

1. Move the mouse pointer to the small dark area on the left edge of the horizontal scroll bar. Now the pointer becomes "-||-".
2. Click and drag the pointer to the end of the desired column(s). Now the columns are anchored during horizontal scroll bar use.
3. You can page through all values and still see the Dimension values displayed in the first two columns.

Transposing the Row and Column Dimensions

When viewing a Cross Tab View, you can easily switch the row and column Dimensions by choosing View | Transpose Crosstab on the *DBView* menu.

The screenshot shows a software window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. Below the toolbar is a "Cross Tab Template : SisRep" dialog box with fields for "Item" and "SisRep", both set to "All Values*", and various options like "General", "Sort", "Filter", "Top N", and "Traffic Light". The main data area is a table with the following structure:

| Sales Rep | Item Description | BXBBPN Black stick pen | | BLBBPN Blue stick pen | | BFPBK Broad tip perm marker | |
|-----------|--------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| | | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 |
| 101 | Andrew Fuller | \$63,152.07 | \$0.00 | \$24,148.67 | \$0.00 | \$98,885.69 | |
| 102 | Margaret Peacock | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$71,707.35 | \$71.7 |
| 103 | Robert King | \$244,864.06 | \$244,864.06 | \$186,182.16 | \$186,182.16 | \$0.00 | |
| 201 | Phil Eastmont | \$62,264.83 | \$0.00 | \$53,886.92 | \$0.00 | \$147,199.60 | |
| 202 | Janet Black | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$35,677.04 | \$35.6 |
| 203 | Sue Dougherty | \$49,609.57 | \$49,609.57 | \$94,459.85 | \$94,459.85 | \$0.00 | |
| 301 | John Sousa | \$73,391.04 | \$73,391.04 | \$43,559.20 | \$43,559.20 | \$87,073.11 | \$87.0 |
| 302 | Ephraim Zeller | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$132,521.01 | \$132.5 |
| 303 | Elsie Trout | \$242,115.60 | \$242,115.60 | \$56,658.28 | \$56,658.28 | \$0.00 | |
| 401 | Tim Smythe | \$33,450.25 | \$33,450.25 | \$64,633.64 | \$64,633.64 | \$64,143.08 | \$64.1 |
| 402 | Caroline Patterson | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | |
| 403 | Thomas Pike | \$75,611.29 | \$75,611.29 | \$248,336.96 | \$248,336.96 | \$0.00 | |
| 501 | Yolanda Jamnick | \$32,249.83 | \$32,249.83 | \$204,389.37 | \$204,389.37 | \$20,193.28 | \$20.1 |
| 502 | Dave Mueller | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$41,177.36 | \$41.1 |
| 903 | Alexis Andropov | \$83,781.87 | \$83,781.87 | \$164,546.33 | \$164,546.33 | \$0.00 | |
| | Total | \$960,490.41 | \$835,073.51 | \$1,140,801.38 | \$1,062,765.79 | \$698,577.52 | \$452.4 |

At the bottom of the window, it says "[15] Rows Found...".

Cross Tab View with Dimensions transposed

To transpose the row and column Dimensions:

1. Choose View | Transpose Crosstab. The rows of data are what the column Dimension originally was and the columns are now what the rows were.
2. To return to original format, just choose View | Transpose Crosstab again.

Modifying the Dimensions

Even though a Cross Tab Template is created with two specific Dimension levels, that does not mean that only those two levels of data can be analyzed. During runtime, the Dimensions can be modified by selecting Edit | Dimensions | Modify. Both Dimensions or only one Dimension can be changed.

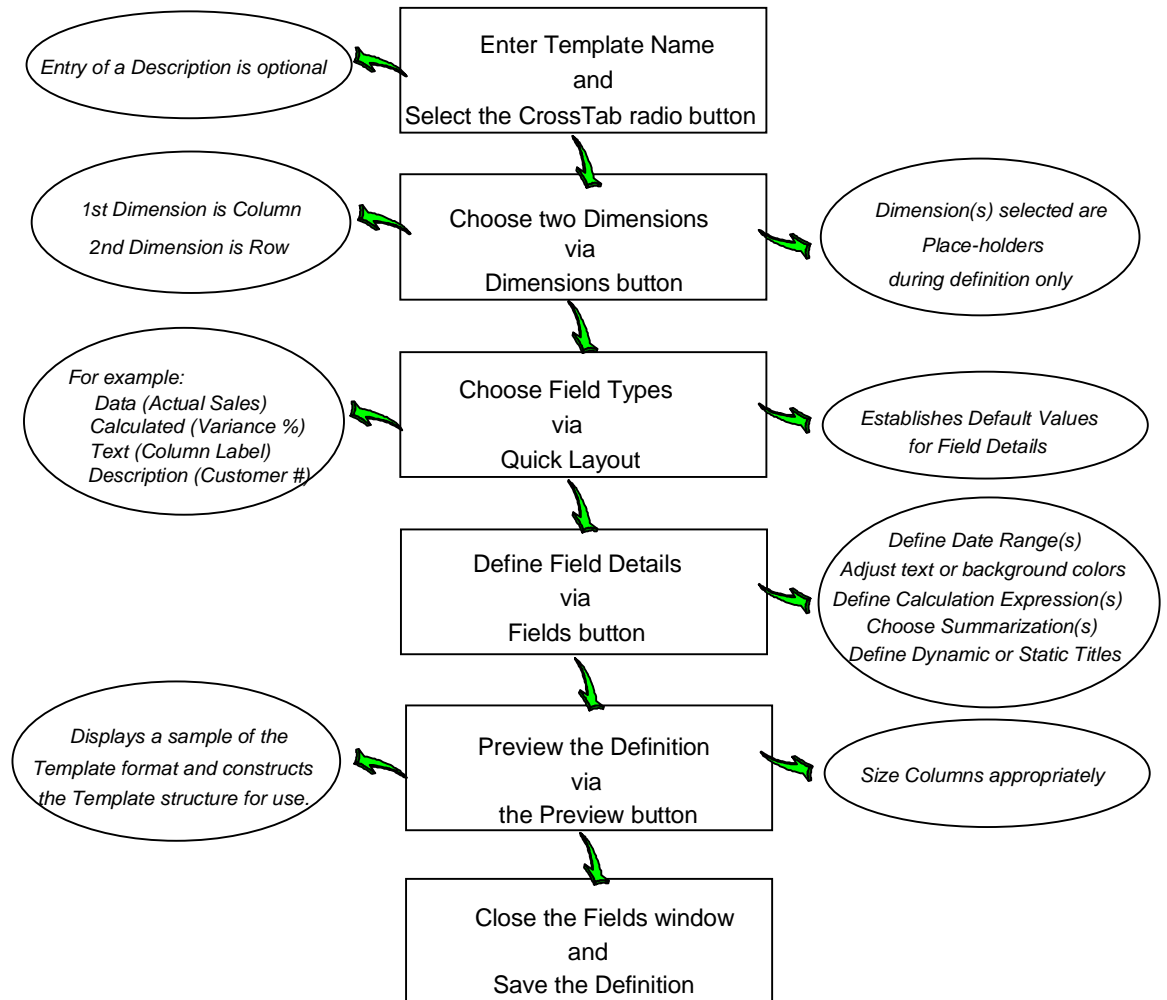
| Territory | | CHI Chicago | Actual Sales Jan 99 to Sep 99 | LA Los Angeles | Actual Sales Jan 00 to Sep 00 | LON London | Actual Sales Jan 00 to Sep 00 |
|-----------|--------------|----------------|----------------------------------|-------------------|----------------------------------|---------------|----------------------------------|
| 11 | California | | \$0.00 | | \$1,721,474.15 | | \$0.00 |
| 12 | Washington | | \$0.00 | | \$1,011,687.45 | | \$0.00 |
| 13 | Oregon | | \$0.00 | | \$1,224,111.59 | | \$0.00 |
| 21 | Illinois | | \$1,624,856.12 | | \$0.00 | | \$0.00 |
| 22 | Indiana | | \$651,303.34 | | \$0.00 | | \$0.00 |
| 23 | Wisconsin | | \$382,470.50 | | \$0.00 | | \$0.00 |
| 31 | New York | | \$0.00 | | \$0.00 | | \$0.00 |
| 32 | Pennsylvania | | \$0.00 | | \$0.00 | | \$0.00 |
| 33 | New Jersey | | \$0.00 | | \$0.00 | | \$0.00 |
| 41 | Hungary | | \$0.00 | | \$0.00 | | \$1,650,250.36 |
| 42 | Poland | | \$0.00 | | \$0.00 | | \$800,491.72 |
| 43 | Bulgaria | | \$0.00 | | \$0.00 | | \$631,676.64 |
| 51 | England | | \$0.00 | | \$0.00 | | \$0.00 |
| 52 | France | | \$0.00 | | \$0.00 | | \$0.00 |
| 53 | Germany | | \$0.00 | | \$0.00 | | \$0.00 |
| Total | | | \$2,658,629.96 | | \$1,033,773.84 | | \$3,957,273.19 |
| | | | | | | | \$2,235,799.04 |
| | | | | | | | \$3,082,418.72 |
| | | | | | | | \$3,082.4 |

Cross Tab View with modified Dimensions


To modify the Dimensions:

1. You can modify one or both Dimensions during runtime. With the cursor positioned at either Dimension in the drill-down path, choose Edit | Dimensions | Modify.
2. Select the desired Dimension.
3. Click **OK**.
4. *{Optional}* Reposition the cursor on the second Dimension and repeat if you want to change this as well.
5. Click the **Runner** icon to perform a retrieval.

Cross Tab Template Definition Process



Defining a Cross Tab Template

 = Cross Tab Template.

A Cross Tab Template displays data for two levels of summarization (Dimensions) in a matrix format. Cross Tab Views are invaluable when you need to view a relationship between two Dimensions in a matrix format. One level is displayed in the rows and the other is displayed in the columns. A Cross Tab Template can be saved as a View. You cannot automatically drill-down within a Cross Tab Template, but you can reselect the Dimensions or transpose the row and column Dimensions at runtime. The Template format is easily identified within the listing by the descriptive icon displayed to the left of the Template name.

Automatic drill-down is not available within a Cross Tab Template.

Column Dimension:
1st Dimension Selected

Row Dimension:
2nd Dimension Selected

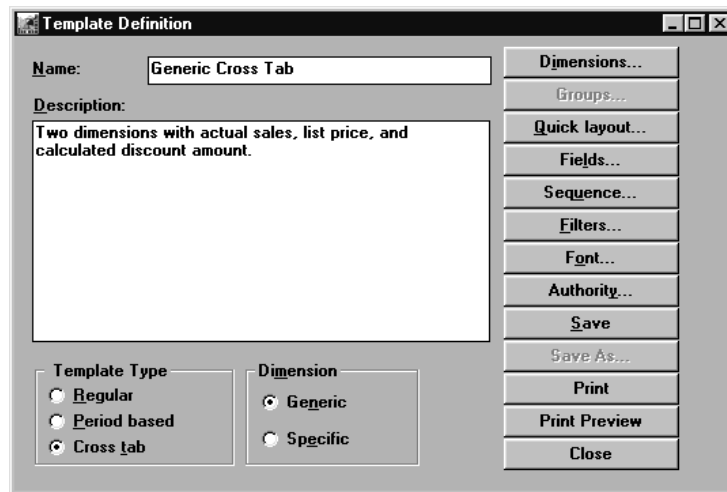
General Sort Filter Top N Traffic Light

Updated
Visible
Filtered
Summarized
Hidden
Mode

| Dimension #2 | Dimension #1 | Value/Desc. | Category/Value |
|--------------|--------------|-------------|----------------|
| Value/Desc. | | Sales \$ | Quantity |
| Value/Desc. | | Sales \$ | Quantity |
| Value/Desc. | | Sales \$ | Quantity |

To define a Template with minimal entries:

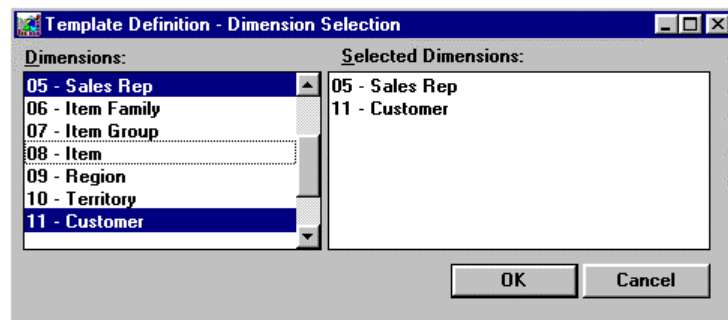
The only difference between defining a Cross Tab and a Regular Template is that TWO Dimensions need to be selected on the Dimension Selection window.



Cross Tab Template Definition window

To define a Cross Tab Template, you must complete the following steps:

1. Select Edit | Template from the main *DBView* window.
2. Click **New** on the Template listing window.
3. Enter a generic name and select the Cross Tab radio button.
4. *{Optional}* Enter a description to further define the Template.
5. *{Optional}* The definition can be Dimension *Generic* or *Specific*. If specific, the Dimensions cannot be changed during runtime. Leave the default value of *Generic* to allow the Dimensions to be modified during runtime.
6. Click **Dimensions** to select two Dimensions as place holders for the definition. A Dimension is selected by single clicking on it while it is displayed in the Dimensions list box. Once selected, it is displayed in the Selected Dimensions list box of the window. Select two Dimensions.



Template Definition - Dimension Selection window

7. Choose the field types (for example, data, text, description, calculation) using **Quick layout**.

Note: Once the Quick Layout function is exited, it cannot be re-entered for the Template definition.

8. *{Optional}* Define date range(s), if other than the default.
9. *{Optional}* Define the calculation expression(s) and their Display Masks, if known. The calculations can be left blank during definition and then defined at runtime.
10. *{Optional}* Define column titles, if other than the default.
11. Preview the definition and adjust any column widths using **Preview** on the Fields window.
12. **Close** the Fields window and **Save** the definition.
13. **Close** the Template Definition window. The Template is now available and ready to run.

Positioning of Dimensions within Cross Tab Template

Two Dimensions must be included in a Cross Tab definition. The first selected Dimension displays across the columns, and the second down the rows. By selecting the Cross tab radio button, the positioning of the Dimensions and their associated text defaults differently. You can keep the default values, or you can fine tune the Template to suit your needs.

The first Dimension included in the Template defaults in Position 2 of the Header band. The text associated with this description field defaults in Position 1 of the Header band.

The screenshot shows the 'Template Definition - Fields' dialog box. The 'Field Number' is set to 2, 'Name' is 'TitleColumnValue', 'Position' is 1, 'Row' is 1, and 'Band' is 'Header'. The 'Field Type' is 'Text'. Other settings include 'Alignment' set to 'Left', 'Text Color' set to 'Black', and 'Background' set to 'White'. There are buttons for 'Prior', 'Next', 'Insert', 'Remove', 'More...', 'Preview', and 'Close'.

Cross Tab Text Field – main window

The screenshot shows the 'Text Field " TitleColumnValue "' detail window. The 'Text' field contains '[HLD]'. There is an 'Evaluate' button. The 'Variables' section lists: Dimension, [HN] Dimension number, [HSD] Dimension short description, [HMD] Dimension medium description, and [HLD] Dimension long description. The 'Associated Field' dropdown is set to '#1 - ColumnValue'. There are 'OK' and 'Cancel' buttons at the bottom.

Cross Tab Text Field – detail window

To enhance the appearance of a Cross Tab View:

Note: These are only suggestions to enhance the Cross Tab View.

1. Click **Fields** from the main Template Definition window to edit the default values for the Dimension values and associated text.
2. Change the color of the Dimension and its associated text displayed in the first row of the Header band.
3. Add some special characters to the text field to help identify the Dimension values displayed across the columns.
4. Move the text field labeling the row Dimension values from the second to the third row of the Header band. This makes the text easier to recognize.

Previewing a Definition

Previewing a Template displays a sample of the Template format and actually constructs the Template structure for use at runtime. Columns can be sized during the Preview.

If a Preview is not performed, a warning message is displayed when the Template definition is saved.

| Business Unit | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|---------------|---------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| value-1 | description-1 | \$950.00 | 8.19% | \$1,050.00 | 7.95% |
| value-1 | description-1 | \$950.00 | 4.74% | \$650.00 | 4.92% |
| value-1 | description-1 | \$1,050.00 | 3.85% | \$1,150.00 | 8.71% |
| value-1 | description-1 | \$650.00 | 5.80% | \$750.00 | 5.68% |
| value-1 | description-1 | \$450.00 | 3.88% | \$550.00 | 4.17% |
| value-1 | description-1 | \$950.00 | 7.33% | \$350.00 | 7.20% |
| value-1 | description-1 | \$350.00 | 3.02% | \$450.00 | 3.41% |
| value-1 | description-1 | \$750.00 | 6.47% | \$850.00 | 6.44% |
| value-2 | description-2 | \$1,000.00 | 8.62% | \$1,100.00 | 8.33% |
| value-2 | description-2 | \$900.00 | 7.75% | \$1,000.00 | 7.68% |
| value-2 | description-2 | \$600.00 | 5.17% | \$700.00 | 5.30% |
| value-2 | description-2 | \$900.00 | 6.90% | \$900.00 | 6.82% |
| value-2 | description-2 | \$1,100.00 | 9.40% | \$1,200.00 | 9.09% |
| value-2 | description-2 | \$700.00 | 6.03% | \$800.00 | 6.06% |
| value-2 | description-2 | \$500.00 | 4.31% | \$600.00 | 4.55% |
| value-2 | description-2 | \$400.00 | 3.45% | \$500.00 | 3.79% |
| value-2 | description-2 | | | | |
| Total | | \$11,600.00 | 100.00% | \$13,200.00 | 100.00% |

Template Preview window

Note: Any time during the definition, you can **Preview** the display to verify that it is correct. Data displayed while in Preview mode is not the *real* data that will be retrieved during runtime of your Template. The calculations, however, are correctly performed within the Preview.

To preview the structure of a Template definition:

1. Click **Preview** from the main Template Definitions - Fields window and size the columns appropriately. Close the Preview window by choosing Close from the drop-down menu accessed from the command button in the upper-left corner of the window.
2. A column can be moved by selecting it and then dragging and dropping it to the correct location.
3. Make adjustments to the fields within the Template definition and then perform another Preview.


CHAPTER 7 • USING PERIOD BASED TEMPLATES


QuickLook


Use this chapter to learn how to:


- Run a Period Based View or Template.
- Summarize all Dimension values on one screen.
- Drill-down in a Period Based Template.
- Maneuver through the Dimension values.
- Apply a Template.
- Graph a Period Based View.
- Create a Period Based Template.

Running a Period Based Template

 = Forward

 = Backward

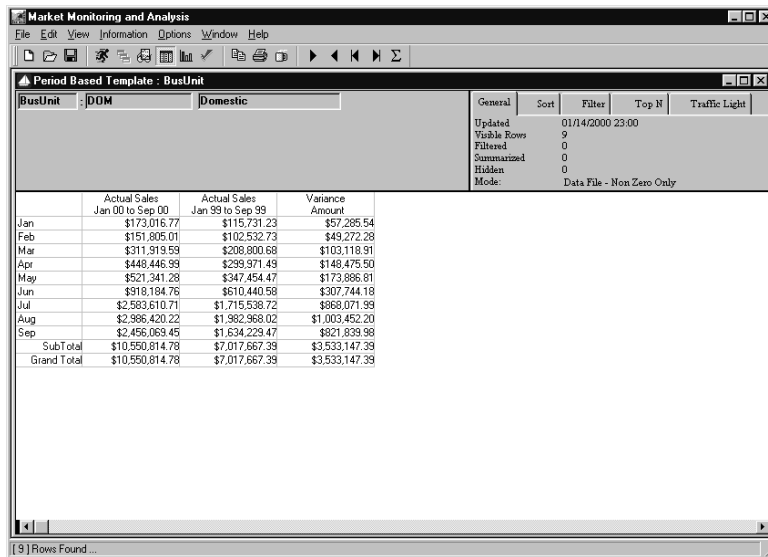
 = First & Last

 = Sum All

A Period Based Template displays data broken down into user-defined period buckets. The periods display down the rows of the View in the first column. A Period Based Template can span multiple years with a subtotal after each year and a grand total for all periods across all years. Data is displayed for only one Dimension value at a time. You can scroll through all Dimension values by clicking the forward and backward icons.

The first and last records can be reached by clicking the First and Last icons on the toolbar. All values can be added together and displayed on one window by clicking the Sum All icon.

A Period Based Template can be saved to your desktop as a View, and you can drill-down to filter your data by adding a Dimension using Edit | Dimensions | Add.



| | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Variance Amount |
|-------------|----------------------------------|----------------------------------|--------------------|
| Jan | \$173,016.77 | \$115,731.23 | \$57,285.54 |
| Feb | \$151,805.01 | \$102,532.73 | \$49,272.28 |
| Mar | \$311,919.59 | \$208,800.68 | \$103,118.91 |
| Apr | \$448,446.99 | \$299,371.49 | \$148,475.50 |
| May | \$521,341.28 | \$347,454.47 | \$173,886.81 |
| Jun | \$918,194.76 | \$610,440.59 | \$307,744.19 |
| Jul | \$2,583,610.71 | \$1,715,538.72 | \$868,071.99 |
| Aug | \$2,986,420.22 | \$1,982,968.02 | \$1,003,452.20 |
| Sep | \$2,456,069.45 | \$1,634,229.47 | \$821,839.98 |
| SubTotal | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 |
| Grand Total | \$10,550,814.78 | \$7,017,667.39 | \$3,533,147.39 |

Period Based View

To run a Period Based Template:

1. Choose File | New to access the Template listing window.
2. Highlight the desired Period Based Template and click **Run**, or double-click on the Period Based Template. Period Based Templates are identified by the calendar icon to the left of the Template title.
3. The Period Based window is displayed. This format has the Periods in the first column of the View.

*Highlight the Period Based Template name and click **OK** to open the file.*

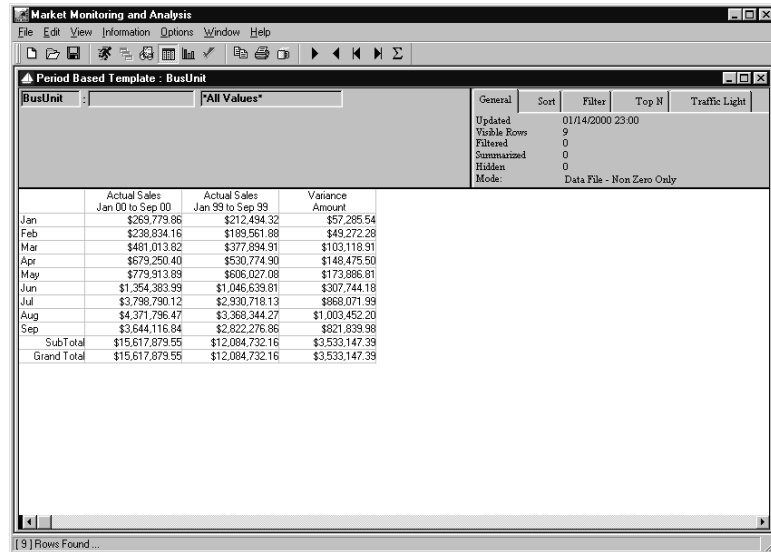
When running a Template from the listing, the value selected at definition defaults. You can edit the Dimension at runtime, or open the Template and then reselect a different Dimension before retrieving any data.

A Period Based View displays only one Dimension Value at a time unless you indicate that you want a summarization of all key Values to display.

To summarize all Dimension values:

 = Sum All icon.

- Click the Sum All icon on the toolbar and *DBView* summarizes all values within the active Dimension and displays the totals on a single screen.
- Notice the Dimension field at the top of the window now states “All Values” instead of a specific item value.



The screenshot shows a software window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. The main window is titled "Period Based Template : BusUnit". At the top, the "BusUnit" field is set to "All Values". To the right, there are tabs for "General", "Sort", "Filter", "Top N", and "Traffic Light". The "General" tab is active, showing settings: Updated (01/14/2000 23:00), Visible Rows (9), Filtered (0), Summarized (0), Hidden (0), and Mode (Data File - Non Zero Only). The main area contains a table with the following data:

| | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Variance Amount |
|-------------|----------------------------------|----------------------------------|--------------------|
| Jan | \$269,779.86 | \$212,494.32 | \$57,285.54 |
| Feb | \$238,834.16 | \$189,561.88 | \$49,272.28 |
| Mar | \$481,013.82 | \$377,894.91 | \$103,118.91 |
| Apr | \$679,250.40 | \$530,774.90 | \$148,475.50 |
| May | \$779,913.89 | \$606,027.08 | \$173,886.81 |
| Jun | \$1,354,383.99 | \$1,046,639.81 | \$307,744.18 |
| Jul | \$3,798,790.12 | \$2,930,718.13 | \$868,071.99 |
| Aug | \$4,371,796.47 | \$3,368,344.27 | \$1,003,452.20 |
| Sep | \$3,644,116.84 | \$2,822,276.86 | \$821,839.98 |
| Sub Total | \$15,617,879.55 | \$12,084,732.16 | \$3,533,147.39 |
| Grand Total | \$15,617,879.55 | \$12,084,732.16 | \$3,533,147.39 |

At the bottom of the window, it says "[9] Rows Found...".

Period Based View with summarized values


| | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Variance Amount |
|-------------|----------------------------------|----------------------------------|--------------------|
| Jan | \$4,771.75 | \$3,793.41 | \$978.34 |
| Feb | \$3,936.69 | \$3,129.57 | \$807.12 |
| Mar | \$8,650.79 | \$6,869.09 | \$1,779.70 |
| Apr | \$12,702.56 | \$10,098.18 | \$2,604.38 |
| May | \$15,020.80 | \$11,941.11 | \$3,079.69 |
| Jun | \$26,897.81 | \$21,383.00 | \$5,514.81 |
| Jul | \$76,082.68 | \$60,483.96 | \$15,598.72 |
| Aug | \$68,340.67 | \$70,226.93 | \$18,112.34 |
| Sep | \$71,602.98 | \$56,321.81 | \$14,680.57 |
| Sub Total | \$308,016.13 | \$244,864.06 | \$63,152.07 |
| Grand Total | \$308,016.13 | \$244,864.06 | \$63,152.07 |

Period Based View with a drill-down


The drill-down concept is also available within a Period Based View. You can accomplish a drill-down by adding a Dimension level. The drill-down is performed on the Dimension value currently displayed.

To drill-down in a Period Based View:

1. With a single Value displayed (for example, Midwest Region), choose Edit | Dimensions | Add.
2. Highlight a Dimension and click **OK**.
3. The View redisplay, but the data needs to be refreshed. Click the **Runner** icon to request a retrieval. The View initially displays with the first Dimension value in the active Dimension, then you can scroll through all Dimension values.

 = Runs to retrieve data

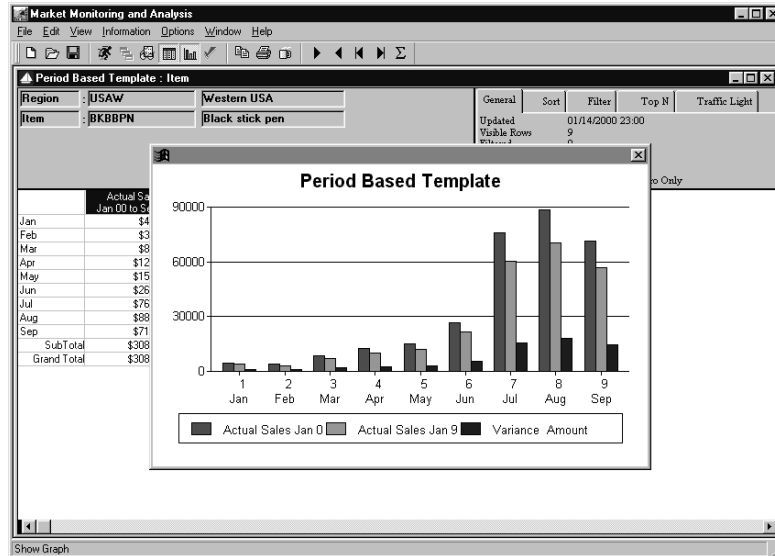
To display the next Dimension value:

 = Next icon

- Data is displayed for one key value at a time in a Period Based View. To view the data for the next Dimension value, press the **Next** icon on the toolbar. The **Next, Prior, First** and **Last** icons allow you to scroll through all available values.


Graphing Period Based Views

When a Period Based View is graphed, the columns display in time sequence.





Period Based graphed View

Applying a Template

 = *Apply Template*

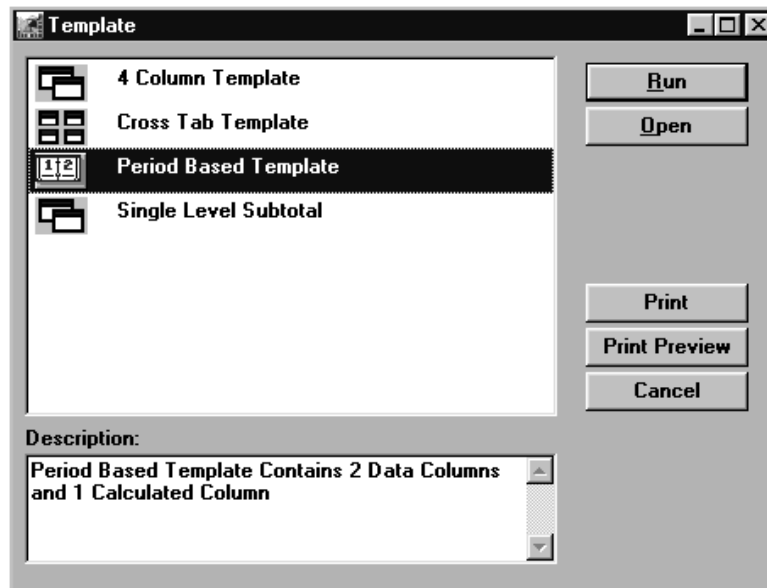
The *Template type* is identified by an icon to the left of the title.

 = *Regular*

 = *Cross Tab*

 = *Period Based*

While looking at filtered data on a current View, you have the ability to apply another Template format using the Template listing window. This feature allows you to look at your data differently, perhaps broken down by period or in a different pre-defined format. The Template window is accessed using the View | Apply Template command or the Apply Template icon on the *DBView* toolbar.



Template listing window

To apply a Template:

 = *Apply Template*

1. After drilling through the desired Dimensions, click the **Apply Template** icon to access the Template listing window.
2. Highlight the desired Template and click **Run** to look at the data differently by applying another Template to the active View.
3. The Template is executed and displays the selected Template with the Dimensions that are included in the active View.
4. The rows of data available in the applied Template are all of the rows currently displayed on the active View or those that were highlighted when the **Apply Template** icon was selected.

Template List Fields

Template List

All Template definitions are displayed in this list. A vertical scroll bar is available to help you locate a Template. Select a Template by highlighting it. The icon immediately to the left of the Template name identifies the Template type: Regular, Cross Tab, Period Based.

Description

The description of the selected Template displays in the Description box and can be changed.

Template List Command Buttons

Run

Highlight the Template name and click **Run** to apply the selected Template to the active View.

Open

Highlight the Template name and click **Open** to open the selected Template over the active View.

Print

Click **Print** to print the selected Template definition.

Print Preview

Click **Print Preview** to view how the Template Definition Report will print. From the Print Preview window, you can actually print the report.

Cancel

Click **Cancel** to close the Template Listing window without applying another Template. The View from which the Template Listing was accessed is redisplayed.

A Period Based Template displays data based on the user-defined time period buckets. The periods display in the rows of the View. Data is displayed for only one Dimension value at a time. A Period Based Template can be saved as a View, and you can drill-down to filter your data by adding a new Dimension level.

Market Monitoring and Analysis
 File Edit View Information Options Window Help

4 Column Template: ShipTo

BusUnit: [All Values*]
 Region: [All Values*]
 Cust: [All Values*]
 ShipTo: [All Values*]

General: Sort Filter Top N Traffic Light
 Updated: 01/14/2000 23:00
 Visible Rows: 31
 Filtered: 0
 Summarized: 0
 Hidden: 0
 Mode: Data File - Non Zero Only

| Ship To | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|------------|--------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| 11/7/11/1 | Office Depot | \$111,898.70 | 3.07% | \$479,542.92 | 3.07% |
| 11/11/12/1 | The Office Mart | \$288,703.52 | 7.92% | \$1,241,931.23 | 7.95% |
| 11/21/1/1 | F&F Office | \$271,912.24 | 7.46% | \$1,169,256.28 | 7.49% |
| 11/21/2/1 | Executive Tools | \$106,097.42 | 2.91% | \$459,599.84 | 2.92% |
| 11/31/1/1 | Office Max | \$259,646.29 | 7.13% | \$1,116,112.63 | 7.15% |
| 11/31/2/1 | Mofft & Smith | \$141,033.11 | 3.87% | \$605,690.15 | 3.88% |
| 12/1/22/1 | Quality Office | \$84,159.00 | 2.31% | \$362,091.62 | 2.32% |
| 12/1/23/1 | Jarvis Office | \$151,021.50 | 4.14% | \$649,655.63 | 4.16% |
| 12/22/1/1 | Tri Fold Inc. | \$28,021.97 | .77% | \$120,543.45 | .77% |
| 12/22/3/1 | Reliable Corp. | \$123,382.20 | 3.39% | \$530,759.89 | 3.40% |
| 12/32/1/1 | Prestige Office | \$117,457.90 | 3.22% | \$505,274.36 | 3.24% |
| 12/32/2/1 | Stevens Maloney | \$38,706.60 | 1.06% | \$165,505.99 | 1.07% |
| 12/32/3/1 | Besse Cascade | \$94,857.20 | 2.60% | \$407,192.95 | 2.61% |
| 13/1/32/1 | Helanders | \$200,182.61 | 5.49% | \$860,052.25 | 5.51% |
| 13/1/33/1 | Jamar Stationary | \$84,822.41 | 2.33% | \$364,059.34 | 2.33% |
| 13/23/1/1 | Hroder | \$44,516.55 | 1.22% | \$191,499.68 | 1.23% |
| 13/23/3/1 | Avery | \$44,412.15 | 1.22% | \$190,970.92 | 1.22% |
| 13/32/1/1 | Brenner | \$91,490.60 | 2.51% | \$385,648.45 | 2.47% |
| 13/33/1/1 | Loki Business | \$174,147.48 | 4.78% | \$747,467.44 | 4.79% |
| 21/41/1/1 | Hungary Supply Co | \$250,044.90 | 6.86% | \$1,071,654.05 | 6.86% |
| 21/41/3/1 | Budapest Pen & Pe | \$135,018.83 | 3.71% | \$578,596.31 | 3.70% |
| 21/51/1/1 | Parchment n' Quill | \$161,613.21 | 4.43% | \$696,220.47 | 4.45% |

[31] Rows Found...

Regular View with several drill-downs

Market Monitoring and Analysis
 File Edit View Information Options Window Help

Period Based Template: ShipTo

BusUnit: [All Values*]
 Region: [All Values*]
 Cust: [All Values*]
 ShipTo: 11/7/11/1 Office Depot

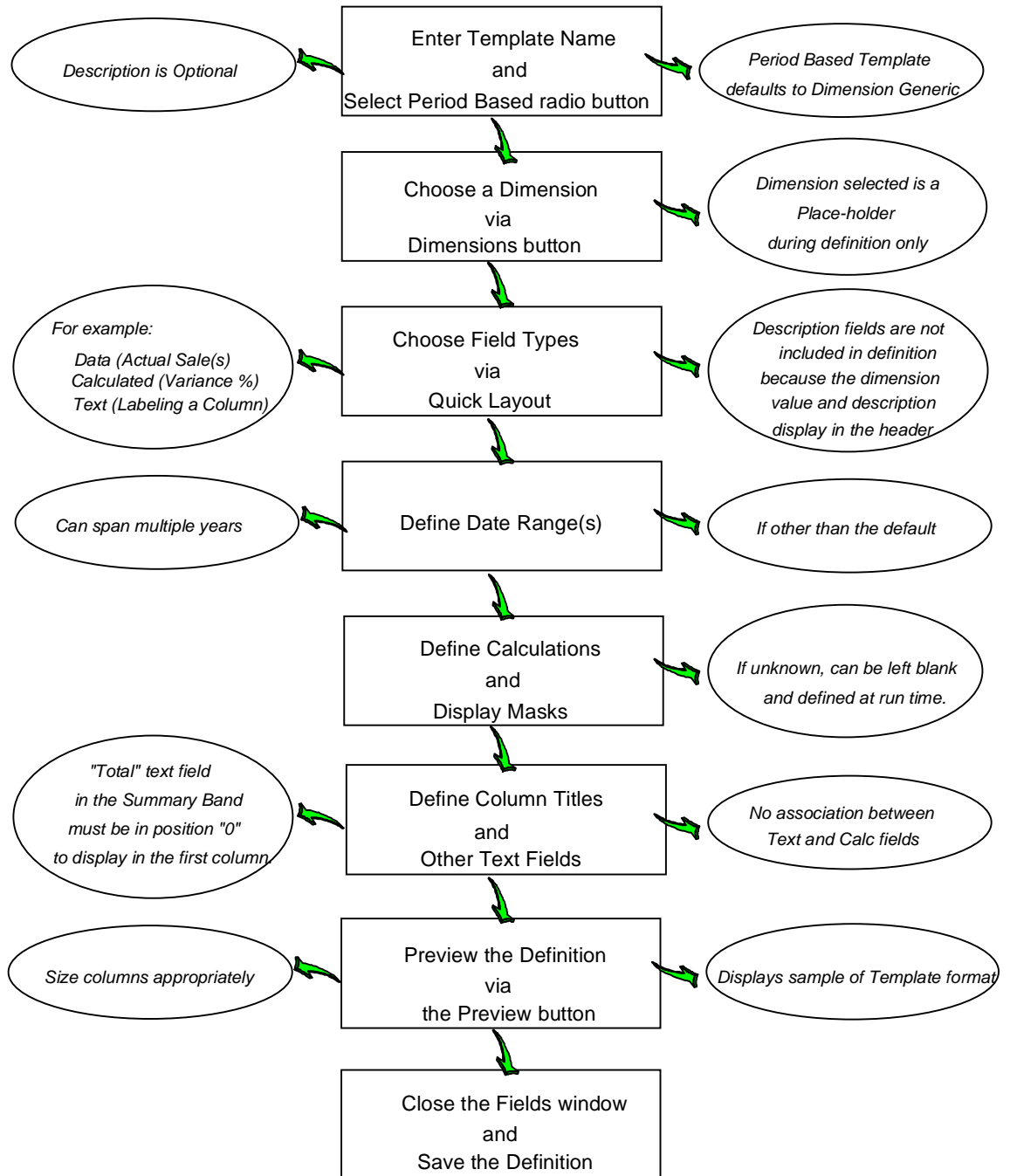
General: Sort Filter Top N Traffic Light
 Updated: 01/14/2000 23:00
 Visible Rows: 9
 Filtered: 0
 Summarized: 0
 Hidden: 0
 Mode: Data File - Non Zero Only

| | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Variance Amount |
|-------------|----------------------------------|----------------------------------|--------------------|
| Jan | \$6,535.59 | \$0.00 | \$6,535.59 |
| Feb | \$7,914.70 | \$0.00 | \$7,914.70 |
| Mar | \$15,121.22 | \$0.00 | \$15,121.22 |
| Apr | \$20,977.63 | \$0.00 | \$20,977.63 |
| May | \$24,074.70 | \$0.00 | \$24,074.70 |
| Jun | \$41,533.15 | \$0.00 | \$41,533.15 |
| Jul | \$116,435.29 | \$0.00 | \$116,435.29 |
| Aug | \$133,251.94 | \$0.00 | \$133,251.94 |
| Sep | \$111,698.70 | \$0.00 | \$111,698.70 |
| SubTotal | \$479,542.92 | \$0.00 | \$479,542.92 |
| Grand Total | \$479,542.92 | \$0.00 | \$479,542.92 |

Ready

View with applied Period Based Template




Period Based Template Definition Process



Defining a Period Based Template

A Period Based Template displays data broken down into user-defined period buckets. The Dimension information is displayed in the header area of the screen. The periods are displayed in the rows of the first column, and the categories/values are in the remaining columns. A Period Based Template can span multiple years with a subtotal after each year and a grand total for all periods across all years.

Data is displayed for only one Dimension value at a time. You can scroll through all Dimension values by clicking the forward and backward page buttons. All values can be added together and displayed on one window by clicking the Sum All icon.

-  = Forward
-  = Backward
-  = Sum All

| Dimension Value and Description | General <input checked="" type="checkbox"/> Sort <input type="checkbox"/> Filter <input type="checkbox"/> Top N <input type="checkbox"/> Traffic Light <input type="checkbox"/> Updated <input type="checkbox"/> Visible <input type="checkbox"/> Filtered <input type="checkbox"/> Summarized <input type="checkbox"/> Hidden <input type="checkbox"/> Mode | | |
|---------------------------------|---|----------------|----------------|
| | Category/Value | Category/Value | Category/Value |
| Period 1 | Sales \$ | Cost \$ | Quantity |
| Period 2 | Sales \$ | Cost \$ | Quantity |
| Period 3 | Sales \$ | Cost \$ | Quantity |

To define a Period Based Template:

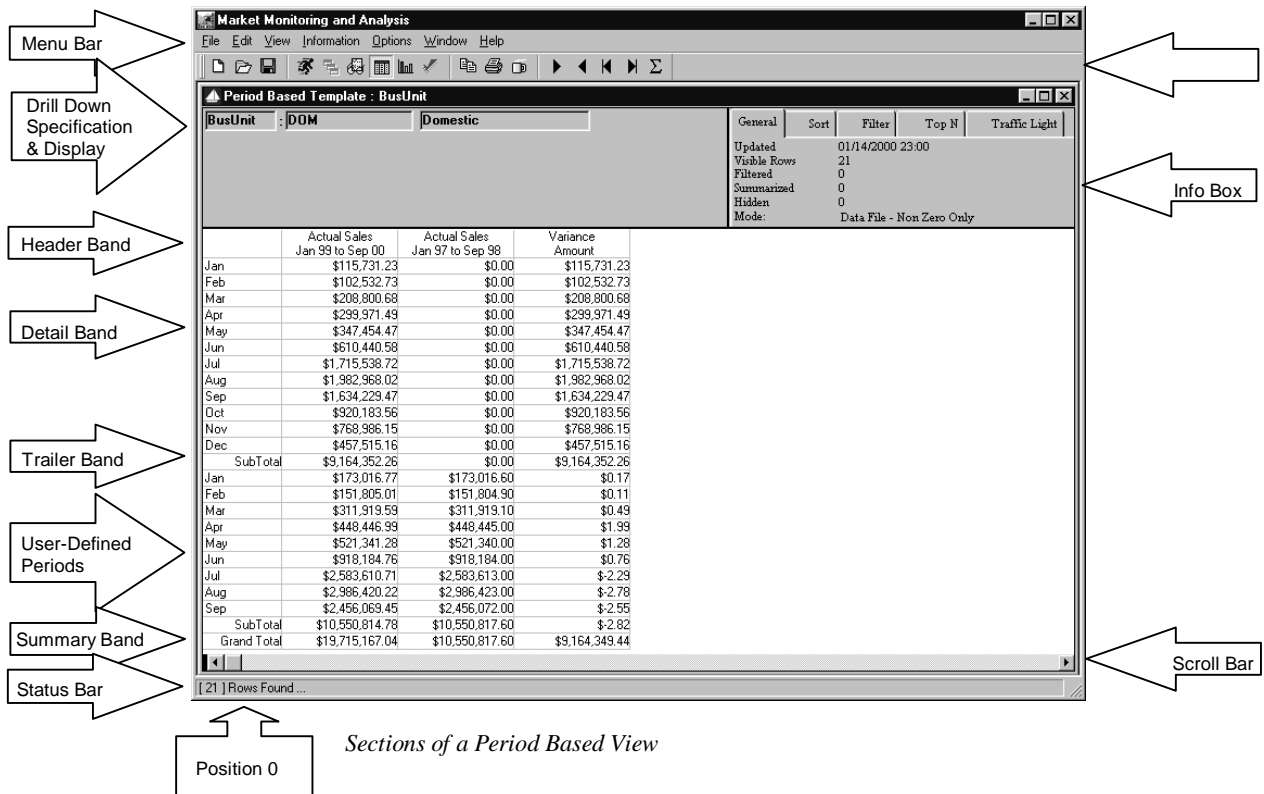
The only differences between defining a Period Based Template and defining a Regular Template are that the detail is not defined for the description fields (Dimension value and description), and Period Based Templates must be Dimension *Generic*. All other areas of definition are the same.

To define a Period Based Template, complete the following steps:

1. Enter a Template name and choose the Period based radio button.
2. Choose a Dimension to be the place-holder during definition using **Dimensions**.
3. Choose the field types (for example, data, text, calculation) using **Quick layout**. Description fields are not included in the definition of a Period Based Template because the Dimension Value and description display in the header area of the screen.

Note: Once the Quick Layout function is exited, it is disabled from the Template definition process.

4. *{Optional}* Choose **Fields** to define date range(s), if other than the default.
5. *{Optional}* Choose **Fields** to define the calculation expression(s) and their Display Masks, if known. The calculations can be left blank during definition and then specified at runtime.
6. *{Optional}* Choose **Fields** to define column titles if other than the default. If you are defining a Total field, the position must be "0" in a Period Based Template. The position "0" is the first column where the Periods are displayed. The text labeling the subtotal should be in the Trailer Band, and the text labeling the grand total should be in the Summary Band.
7. Preview the definition and adjust any column widths using **Preview** on the Fields window.
8. **Close** the fields window and **Save** the definition.
9. **Close** the Template Definition window, and the Template is available and ready to run.



Notes

CHAPTER 8 • USING ADVANCED FEATURES

QuickLook

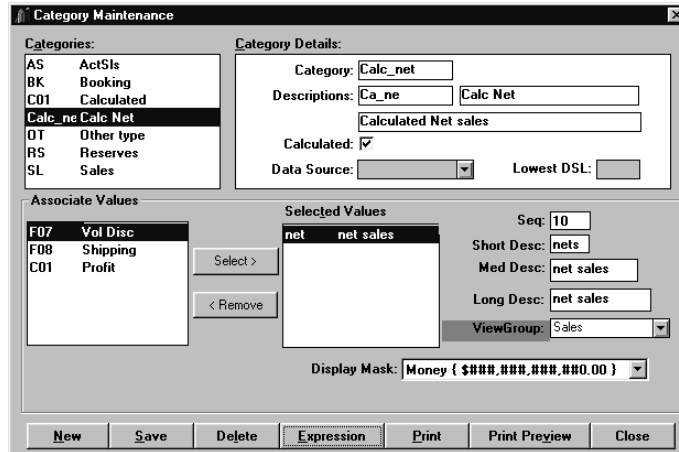
Use this chapter to learn how to:

- Run a View with a Calculated Value.
- Export *MMA* data to another application.
- Export MMA data to a file or printer.
- Print a View as a report.
- Copy the data to the Clipboard to paste into another Windows application.
- Make notes regarding specific values.
- Define and run a Template with multiple currencies.
- Review additional information about a value.
- Preview your default drill-down path.
- View the retrieval time of the last View.
- View miscellaneous system settings.
- Reposition the toolbar.

Calculated Value Support

This feature allows users to create a calculated value and include that value in Templates and Views. Calculated values are not stored as part of the database. The calculation is performed as part of the data retrieval within *DBView*. With calculated value support, users can do the following:

- Create a calculated value and include that value in Templates and Views.
- Create a calculated value from other calculated values.



Category Maintenance window

To define a calculated category:

1. Check the Calculated check box.
2. Select only calculated values to be associated with the calculated category.

Calculated categories must be previously defined in the Administration application.

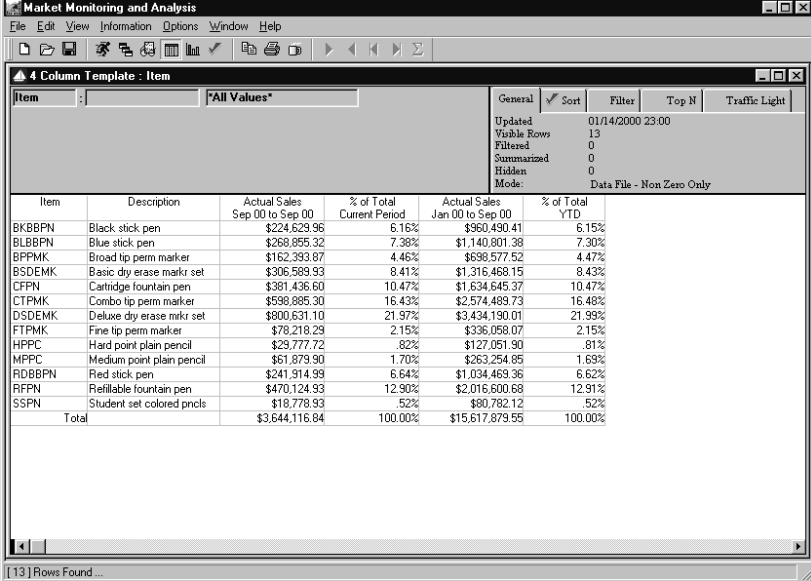


Expression window

3. Click **Expression** and define the calculation within the Expression window.

Running a View with a Calculated Value

A calculated category/value can be included in a Template definition. The calculation is performed as part of the data retrieval within *DBView*. Calculated category/values are treated the same as any other category/value included in a data column within a Template.



The screenshot shows a window titled "Market Monitoring and Analysis" with a menu bar (File, Edit, View, Information, Options, Window, Help) and a toolbar. Below the toolbar is a "4 Column Template : Item" window. This window contains a table with the following data:

| Item | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|--------|-----------------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BKBBPN | Black stick pen | \$224,629.96 | 6.16% | \$960,490.41 | 6.15% |
| BLBBPN | Blue stick pen | \$268,895.32 | 7.38% | \$1,140,801.38 | 7.30% |
| BPPMK | Broad tip perm marker | \$162,393.87 | 4.46% | \$698,577.52 | 4.47% |
| BSDEMK | Basic dry erase marker set | \$306,589.93 | 8.41% | \$1,316,468.15 | 8.43% |
| CFPN | Cartridge fountain pen | \$381,436.60 | 10.47% | \$1,634,645.37 | 10.47% |
| CTPMK | Combo tip perm marker | \$598,885.30 | 16.43% | \$2,574,489.73 | 16.48% |
| DSDEMK | Deluxe dry erase mkr set | \$800,631.10 | 21.97% | \$3,434,190.01 | 21.99% |
| FTPMK | Fine tip perm marker | \$78,218.29 | 2.15% | \$336,058.07 | 2.15% |
| HPPC | Hard point plain pencil | \$29,777.72 | .82% | \$127,051.90 | .81% |
| MPPC | Medium point plain pencil | \$61,879.90 | 1.70% | \$263,254.85 | 1.63% |
| RDDBPN | Red stick pen | \$241,914.99 | 6.64% | \$1,034,469.36 | 6.62% |
| RFPN | Refillable fountain pen | \$470,124.93 | 12.90% | \$2,016,600.68 | 12.91% |
| SSPN | Student set colored pencils | \$18,778.93 | .52% | \$80,782.12 | .52% |
| | Total | \$3,644,116.84 | 100.00% | \$15,617,879.95 | 100.00% |

View with a calculated value

To include a calculated value in a Template definition:

- When defining the Template, choose a previously defined calculated category/value from the Quick Layout.

When running a View, you can change a calculated category/value in a data column to any other calculated category/value combination.

Data Field " calcdata "

Category: Calculated Net sales

Value: net sales

From Year: Current Year

Period: Current Period

To Year: Current Year

Period: Current Period

Rounding: As Is

OK Cancel

Data Field detail window for calculated category/value

To change a calculated category/value in a View:

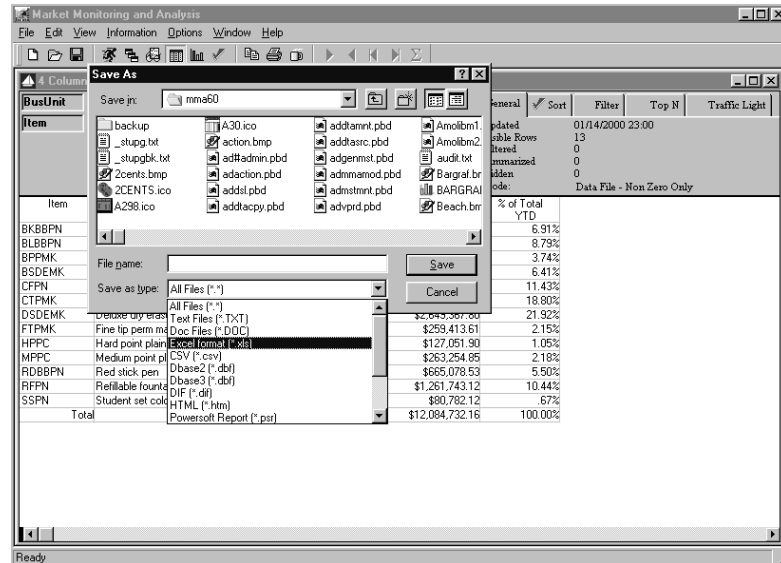
1. In the View, right-click on any calculated category/value in a data column.

Note: Do not right-click in the Header area of a column because that is a Text field, not a data field.

2. From the pop-up menu, choose Fields.
3. Select a new category and value from the drop-down selection lists.
4. Click **OK**.
5. Refresh the View by clicking the Runner icon.

Exporting Header or Detail Data to a File

DBView gives you the ability to export the header or detail within a View into many different file formats. You may be a Microsoft Excel™ user who wants to export the data from *MMA* and put it into a spreadsheet. This is easily done by a menu command within *DBView*.



Save As window

To export MMA data into another file format:

1. Choose File | Export and then select the area of the screen you want to export: Header or Detail.
2. From the Save As window, select the appropriate file format from the drop-down selection list.
3. Enter a file name.
4. Click **Save** and the data will be saved in the selected format under the specified name.

Save As Fields

Save in

Select the directory where the export file is to be saved.

File name

Enter the file name you want to use to save the contents of the View. *DBView* provides the file extension when you select the format. By default, the file will be saved in the *MMA* directory. If you want to save the exported data in a different directory, select the path from the Save in list box.

Save as type

Select the desired file format from the drop-down selection list.

| File Format | Description |
|------------------------|--|
| Clipboard | Save to the Clipboard |
| CSV | Comma separated values |
| Dbase2 (dbf) | dBASE-II format |
| Dbase3 (dbf) | dBASE-III format |
| DIF | Data Interchange format |
| DOC | Microsoft Word format |
| Excel (xls) | Microsoft Excel format |
| HTML Table (htm) | HTML format |
| Powersoft Report (psr) | Data with a PSR extension |
| SQL | Syntax required to recreate the data when run through the database |
| SYLK (xls) | Microsoft Multiplan format |
| Text (txt) | This is the default format. Tab-separated columns with a return at the end of each row |
| WKS | Lotus 1-2-3 format |
| WK1 | Lotus 1-2-3 format |
| WMF | Windows metafile format |

Save As Command Buttons

Save

Click **Save** to save the data in the specified file format.

Cancel

Click **Cancel** to close the Save As window without exporting the data into another file format.

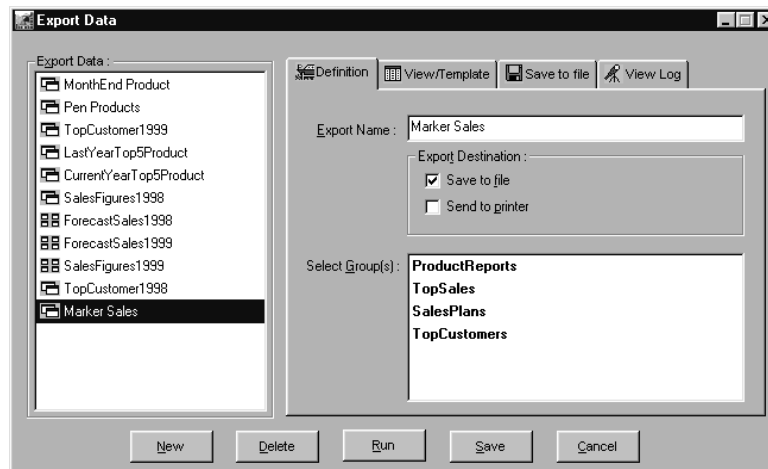
Exporting Data from MMA

You can easily export data from the *MMA* data warehouse into a PC-based file or printed document.

The Export Definition includes the following:

- The export destination (PC-based file or printed document).
- The name, types, and location of the export file to be created.
- The View or Template used to create the export.

The Export Definitions are predefined and can be executed online or run in batch.



Export Data window - Definition tab

Creating an Export Definition

When you create an Export Definition, you must minimally complete the following steps in order to create the Export Definition.

1. Activate the Definition tab.
2. Click **New** to clear all fields.
3. Enter an Export name.
4. Choose one or more destinations.
5. Activate the View/Template tab.
6. Enter a View file name with the complete path destination, or select one after clicking **Browse**, or select a Template from the drop-down selection list.

Note: The selection made last will take precedence over any other selection.

7. Activate the Save to file tab if Save to file was a selected destination.
8. Choose a file type from the drop-down selection list.
9. Enter the file name and path if known, or click **Browse** to select a valid file type.

The following tasks explain how to fill out the Definition and View/Template tabs.

To complete the Definition tab:

1. From within the *DBView* main window, select File | Export Data | Export Data Definition.

Note: Minimize or close any open Views or Templates to access the *DBView* main window.

2. Click **New** to clear all fields so a new Export Definition can be created.
3. In the Export Name field, type the name of the Export Definition.
4. In the Export Destination group box, select if you want to save the data to a file or send the data to a printer. At a minimum, one destination must be selected.

Note: If you select Send to printer as the Export Destination, the Export Data will print when you click **Run**.

5. *{Optional}* Select one or more group(s) in the Select Groups(s) list box. An Export Group allows Export Definitions to be grouped together and run in batch.
6. Click **Save** to save the newly created definition or **Run** to run it.

Export Data Fields

Export Name

This is the name of the Export Definition. This field is mandatory. You may enter up to 32 characters, including spaces, for the export name. If you have selected an existing Export Data name from the Export Data list box, that name displays in this field. When creating a new Export Definition with file as the selected destination, this field must be completed using the Save to file tab.

Export Destination

Save to file

Selecting this check box will enable the Save to file tab, where you specify the file name and type to save the *MMA* View/Template results.

Send to printer

Selecting this check box will print the *MMA* View/Template to the default printer when **Run** is selected.

Select Groups(s)

The Select Groups(s) list box is optional and used to group and run a set of Export Definitions at the same time. One or more groups may be selected.

Export Data Command Buttons

New

When you click **New**, the fields and optional tabs in the Export Data window are cleared/disabled so you can create a new Export Definition.

Delete

The **Delete** button is only enabled when an existing Export Definition is being maintained. When you attempt to delete an Export Definition, a warning message displays confirming deletion. The window is refreshed once the Export Definition has been successfully deleted.

Run

When you click **Run**, the selected Export Definition will be run and saved in the specified format.

Save

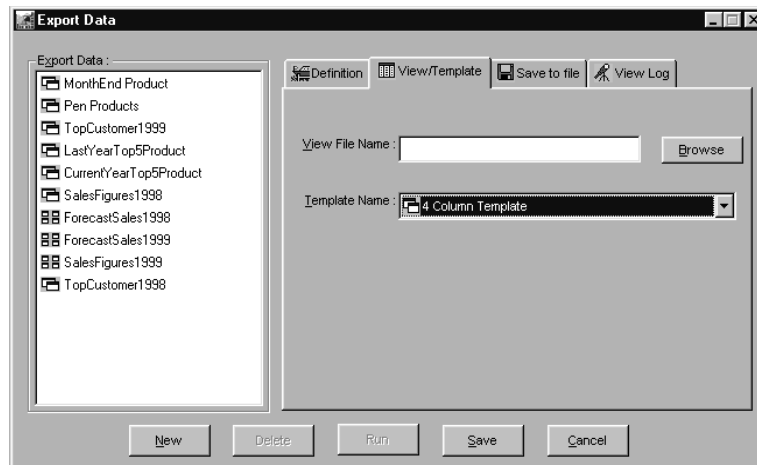
Once you have entered all of the information for the Export Definition, click **Save**. All of the information you entered in the subsequent tabs of the Export Data window will be saved as well.

Cancel

Click **Cancel** to exit the Export Data window without saving any information you may have entered.

Running a View/Template to Export Data

Once you have specified the name, destination, and group for the Export Definition in the Definition tab, click the View/Template tab to further define the definition.



Export Data window – View/Template tab

To complete the View/Template tab:

1. Select the View/Template tab after you have completed Steps 1-6 in the "To complete the Definition tab" section of "Creating an Export Definition" on page U194.
2. In the View File Name field, type the directory path of the saved View, or click **Browse** to select one.

-- OR --
From the Template Name drop-down selection list, select a Template.
3. Click **Save** to save the Export Definition defined. If Save to file was the selected destination, the Save to file tab is activated so a valid file name and type can be identified before the save is completed.

View/Template Fields

View File Name

Up to 100 characters may be entered as the View file (.DTV) name. You can click **Browse** to select a previously saved .DTV file. The file specified in the View File Name field must be saved in .DTV format. When a View file name is entered, the Template field is cleared. Entries are not allowed in both of these fields, and the last entry made takes precedence over any other entries.

Template Name

Select a predefined or blank Template from the Template Name drop-down selection list. If a Template is selected, the View File Name field is cleared.

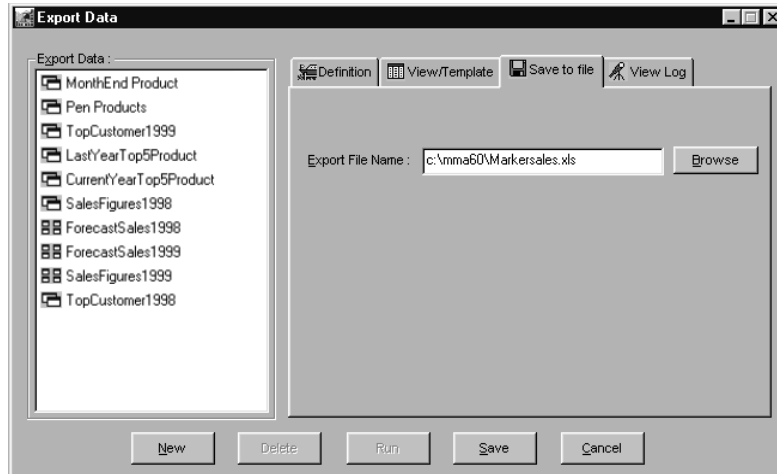
View/Template Command Button

Browse

Use **Browse** to select a saved View file. The View File window displays. Once the file is selected and **Open** is clicked, the file name displays in the View File Name field.

Saving an Export Definition to a File

If you selected the Save to file check box from within the Definition tab, the Save to file tab is activated. This tab is automatically displayed when **Save** is clicked without first having identified a valid export file name in this tab.



Export Data window – Save to file tab

To complete the Save to file tab:

1. If the Export Definition destination is a file, you can select the Save to file tab once you have completed the Definition and View/Template tabs.
2. In the Export File Name field, type the directory path of the export file or click **Browse** to search for the desired file and type.
3. Click **Save**.

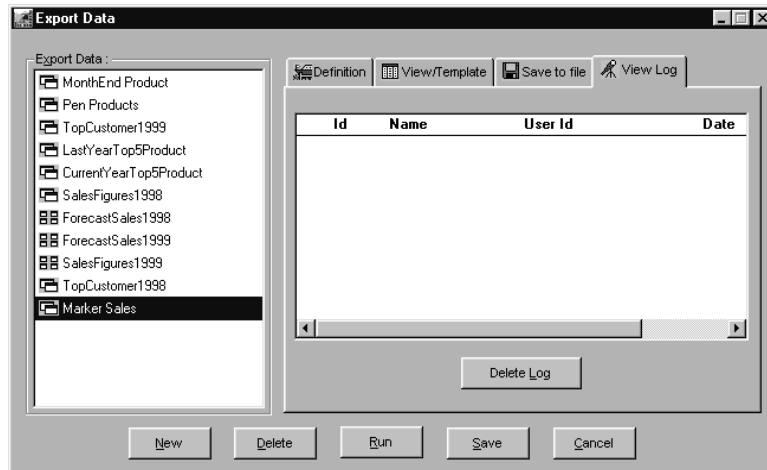
Save to File Fields

Export File Name

Specify the output file name in the Export File Name field. Please see "Save as Type" on page U192 for valid formats supported by *DBView*.

View Log of Export Files

You can view the log of Export Data jobs that have been submitted through the View Log tab of the Export Data window.



Export Data window – View Log tab

To delete a log:

1. From within the Export Data window, click the View Log tab.
2. Highlight the Export Data job and click **Delete Log**.
3. If the correct item was selected, click **Yes** from the delete confirmation window.
4. Click **Cancel** to close the Export Data window. If changes were made, the system will prompt you to save.

View Log Fields

ID

The ID field displays the ID from the respective database table.

Name

This field contains the name of the Template or View.

User Id

This field contains the ID of the user who submitted the job for export.

Date

This field contains the date and time the request was submitted.

View Log Command Button

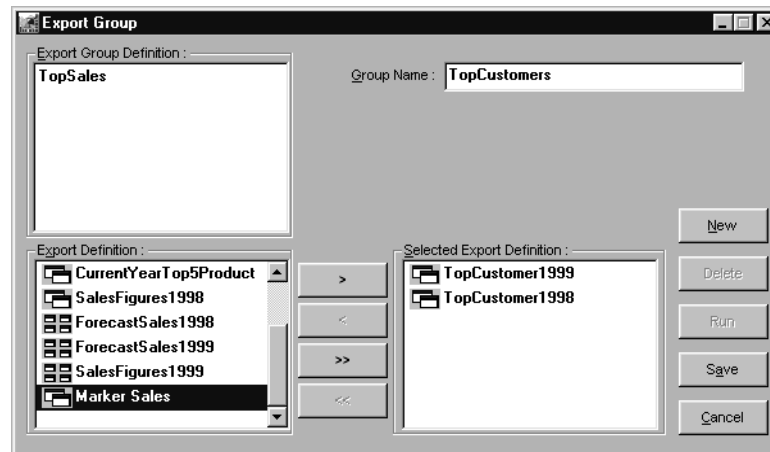
Delete Log

When **Delete Log** is clicked, the highlighted Export Definition will be deleted.

Saving Export Definitions Within a Group

The Export Group window is used to define a collection of Export Definitions, so you can run all of the Export Definitions within the group at the same time. This function will also help you organize all of your Export Definitions.

As with the Export Data window, this window will only display the Export Definitions that you have saved to the system.



Export Group window

To create an Export Group:

1. From within the *DBView* main window, select File | Export Data | Group Definition. The Export Group window displays.

Note: Minimize or close any open Views or Templates to access the *DBView* main window.

2. Any previously defined Export Groups display in the Export Group Definition list box. Click **New** to clear all fields and define a new Export Group.
3. In the Group Name field, type the name for the Export Group. A maximum of 32 characters, including spaces, can be used. The system will verify that the Group Name entered is unique.
4. Previously defined Export Definitions display in the Export Definition list box. To select an Export Definition to be included in the group, double-click on it, or highlight it and click the move button (>). Export Definitions included in the active Export Group display in the Selected Export Definition list box.
5. Once you have selected all of the Export Definitions that you want to include in this group, click **Save**.
6. Click **Cancel** to exit this window, or repeat Steps 2 through 5 to define another Export Group.

To modify an existing Export Group Definition:

1. From within the *DBView* main window, select File | Export Data | Group Definition. The Export Group window displays.

Note: Minimize or close any open Views or Templates to access the *DBView* main window.

2. Select an Export Group Definition by highlighting it while displayed in the Export Group Definition list box.
3. The Group Name field will default with the Export Group Definition selected in Step 2. If you want to change the group name, you can highlight the existing group name and type over it with the new name. A maximum of 32 characters, including spaces, can be used. The system will verify that the Group Name is unique.
4. Export Definitions included in the active Export Group display in the Selected Export Definition list box. To de-select an Export Definition that was included in the group, double-click on it, or highlight it and click the remove button (<).
5. Once you have made all of the necessary modifications for this Export Group, click **Save**.
6. Click **Cancel** to exit this window, or repeat Steps 2 through 5 to maintain another Export Group.

Export Group Fields

Export Group Definition

The names of previously defined Export Groups display in this list box.

Group Name

The user-defined Export Group name displays here. If you select an existing Export Group from the Export Group Definition list box, that name automatically displays in the Group Name field. Up to 32 characters, including spaces, may be used to define the Group Name.

Export Definition

Previously defined Export Definitions display in this list box. To include an Export Definition in the active Group Name, double-click on it, or highlight it and click the move button (>).

Selected Export Definition

Export Definitions included in the active Export Group display in this list box. To de-select Export Definitions included in the active Export Group, double-click on them from within the Selected Export Definitions list box to move them back to the Export Definitions list box, or highlight them use the corresponding remove button (<).

Export Group Command Buttons

New

Click **New** to clear all fields so a new Export Group can be created.

Delete

Highlight an Export Group Definition from the listing and click **Delete** to delete the Group with confirmation. This button is disabled when creating a new Export Group.

Run

All of the Export Definitions included in the selected Export Group will be run when the **Run** button is clicked. This button is disabled when creating a new Export Group.

Save

Click **Save** to save all of the entries and edits made to the Export Group window.

Cancel

Click **Cancel** to exit the Export Group window without saving any edits. If edits were made, the system will ask if you want to save prior to exiting.

>

Highlight an Export Definition displayed in the Export Definition list box to include it in the active Export Group and click this button. The Export Definition will then be included in the Selected Export Definition list box.

<

Highlight an Export Definition displayed in the Selected Export Definition list box to remove it from the active Export Group and click this button. The Export Definition will then be replaced in the Export Definition list box.

>>

Click this button to include all Export Definitions in the active Export Group. All the Export Definitions will be moved from the Export Definition list box to the Selected Export Definition list box.

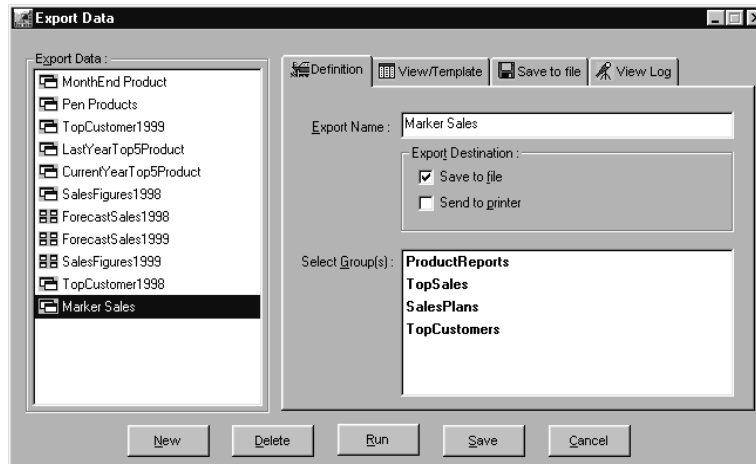
<<

Click this button to remove all Export Definitions from the active Export Group. All the Export Definitions will be moved from the Selected Export Definition list box to the Export Definition list box.

Running Export Definitions

You can run your Export Definitions in one of two ways:

- From within the Export Data window.
- From the Start menu.



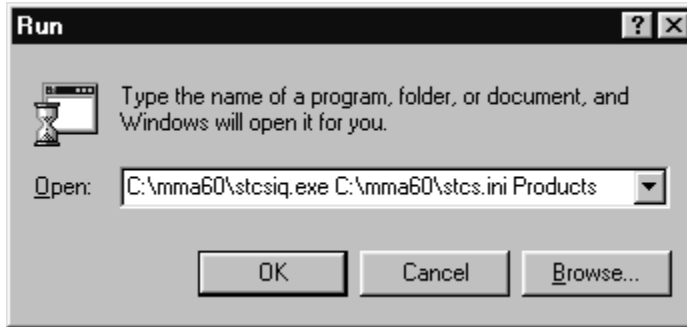
Export Data window – Run Option

To run an export definition from the Export Data window:

1. From within the *DBView* main window, select File | Export Data | Export Data Definition and the Export Data window will display.

Note: Minimize or close any open Views or Templates to access the *DBView* main window.

2. Choose the desired Export Data definition by highlighting it from within the listing.
3. Click **Run**.
4. The View/Template selected for this Export will run and when complete, the Export Data window will redisplay. The Export will be processed for the selected destination(s): file and printer.



Run window

To run an Export Definition group from the Start menu:

1. Select Start | Run.
2. Enter the path name for *DBView* and the corresponding .INI file.

Note: If this is not known, view the properties of your *DBView* installation. Under the Shortcut tab, the Target field contains the correct path of the *DBView* application and the corresponding *MMA* .INI file. Press CTRL+C to copy the path to the Clipboard. Toggle back to the Run command and press CTRL+V to paste the path into the Open field.

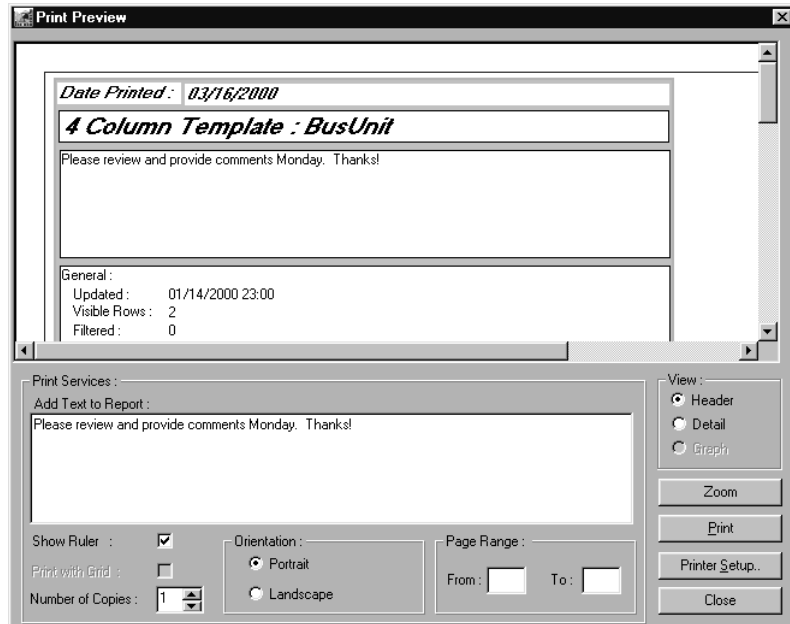
3. Enter a space after the .INI file and key in the user-defined name of the desired Export Group.
4. Click **OK** to initialize *DBView* and run the specified Export Definition Group.

Printing a View



= *Printer Icon.*

If your computer is connected to a printer, you can access the Print window by selecting File | Print or simply clicking the Printer icon. From within the Print Preview window, you can adjust the View column widths, the font size, and add text to a report before printing it. You can also specify the number of copies to print, the page orientation (Portrait or Landscape), and a page range.



Print Preview window with the Header area in View

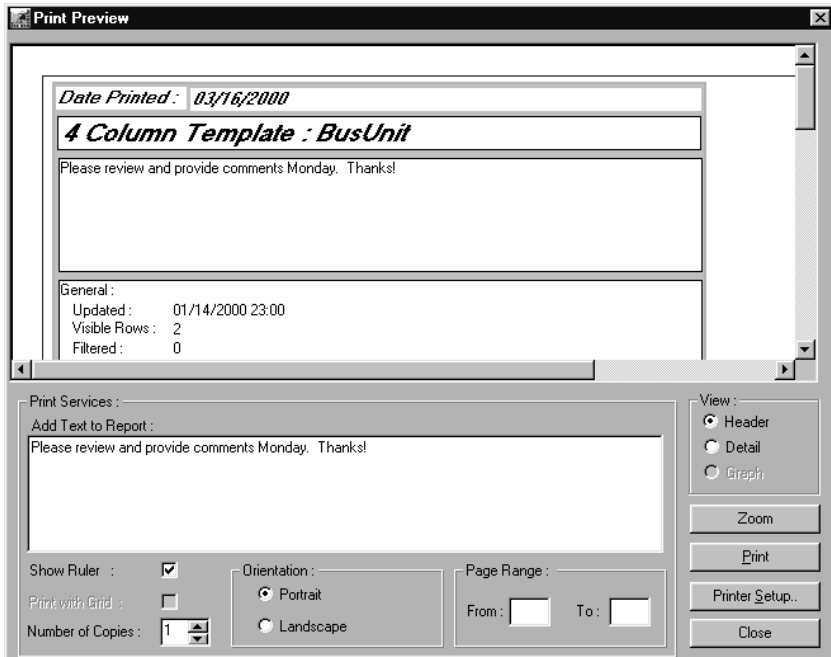
To print a View as a report:

1. If your PC is connected to a printer, the Print option is available from the View window. Choose File | Print or click the Printer icon and the Print Preview window displays.
2. *{Optional}* If you want additional descriptive text to display in the report's Header, enter the text in the Add Text to Report area of the window.
3. Specify the area of the report you want to adjust before printing by selecting the appropriate radio button under the View section. The Header is selected by default; therefore, it actively displays in the top portion of the Print Preview window
4. *{Optional}* If you want to zoom in on the report so it will print larger or smaller, click **Zoom**. The Zoom window displays. Only the area of the report currently in view (Header, Detail, or Graph) is affected by the zoom selections made.
5. Specify the percentage you want to zoom to by selecting the corresponding radio button or by entering a percent in the Percent field.

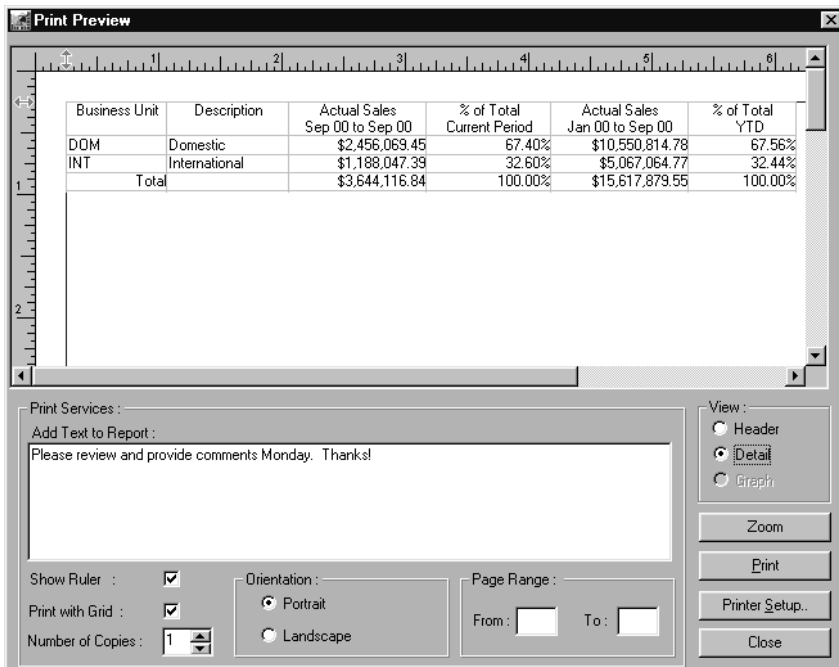
6. The adjusted font size displays appropriately on the Zoom window. When the font is the way you want it, click **OK** to accept your entries and close the Zoom window.

Note: If you want to change the font size of the Header, Detail, and Graph areas, you must select each one individually from the View section and adjust the zoom.

7. *{Optional}* Click the Detail radio button to have the Detail area display in the Print Preview area of the window. Size the columns by clicking on the gridline in the Header and dragging to the desired location.
8. When the Detail area is displayed, the Show Ruler check box is selected by default. The ruler can be used to view the actual size of the report in inches and adjust the margins.
9. When the Detail area is displayed, the Print with Grid check box is selected by default. The gridlines within the Detail area of the View will print on the report if this check box is selected.
10. *{Optional}* If you want more than one copy of the report, select the number of copies by using the arrow buttons in the Number of Copies field.
11. Specify the orientation of the printed report by clicking the respective radio button.
12. If the report is multiple pages, select the page range that you want to print by typing page numbers in the From and To fields. The Header area is always page one, and the Detail pages begin on page two.
13. *{Optional}* Select the printer by clicking Printer Setup. This button is also available from the File | Printer Setup menu.
14. Click **Print** from the Print Preview window.



Print Preview window with the Header area in View



Print Preview window with the Detail area in View

Print Preview Fields

Print Preview

This is the area of the window where you can view how the report will print. Columns can be sized by clicking on the gridline within the column header and dragging it to the desired location. If the ruler is displayed, margins can be adjusted using the ruler displayed on the top and the left of the Print Preview. The View radio button selected (Header, Detail, or Graph) determines the area of the View that displays in the Print Preview area. Edits made to the font size by zooming only apply to the View currently displayed in the Print Preview area.

Add Text to Report

You can enter descriptive text to print in the header box located at the top of the report. Use the vertical scroll bars to view all of the text that has been entered.

View

Use these mutually exclusive radio buttons to specify the area of the report you want to display in the Print Preview window so you can adjust columns or font size. The changes made only apply to the View area displayed. For example, the Header radio button is selected and you zoom the display to 75%. Only the text within the Header area will be zoomed to 75%. When the Print Preview window is initially displayed, the Header area is displayed. The Graph radio button is only available if a graph is displayed on the View when Print is selected.

Show Ruler

Select the Show Ruler check box and use the rulers to size the margins to fit appropriately on a page. This check box is not selected when viewing the Header or Graph area, but it is selected when viewing the Detail area.

Print with Grid

You can control whether or not the gridlines display on the printed report. This check box is available only when viewing the Detail area. It is not available when viewing the Header or Graph area. It defaults based on the current display status of the grid. If the grid is currently displayed in the View, it automatically is selected when printing. If the grid does not display in the View, then this check box is not selected.

Number of Copies

Use the arrows to select the desired number of copies you want to print. By default, only one copy will print. The number of copies specified to print applies to the entire report.

Orientation

You can determine the orientation of the printed report by selecting the appropriate radio button. Portrait orientation prints the page where it is taller than wide. Landscape orientation prints the page where it is wider than tall. The orientation default can be set up in the Printer Setup window. Choose Printer Setup | Setup to define the default value. The orientation that you specify is applied to the entire report.

Page Range

Specify the portion of the document you want to print by entering page numbers in the From and To fields. If there is no entry made in these fields, the entire document will print.

Print Preview Command Buttons

Zoom

Zoom changes must be made to each view area separately.

You can zoom to a higher percentage to get a close-up view of your document and have the font size increase on the printed report. You can also zoom to a lower percentage to decrease the font size within your document. Click **Zoom** to access the Zoom window and specify the zoom size.

Print

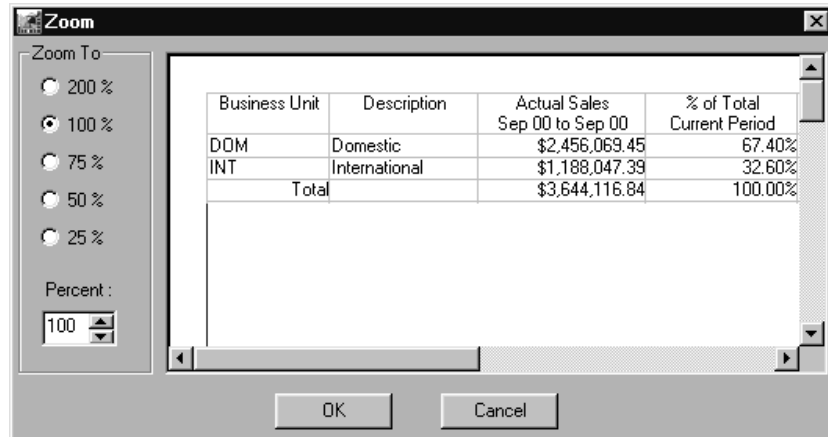
Click **Print** to print the active data window with any descriptive text entered on the Print window.

Printer Setup

Click Printer Setup to access the Printer Setup window and select your default printer.

Close

Click **Close** to close the Print window without printing the active data window.



Zoom window

Zoom Fields

Zoom To

Use the radio buttons to select the zoom size. By default, the print preview displays at 100%. If you want to zoom to a percentage not offered by the radio buttons, enter the zoom value in the Percent field or use the arrow buttons to scroll to the desired zoom percentage.

Preview

The Preview area of the window displays the report as it will print based on the zoom selection.

Zoom Command Buttons

OK

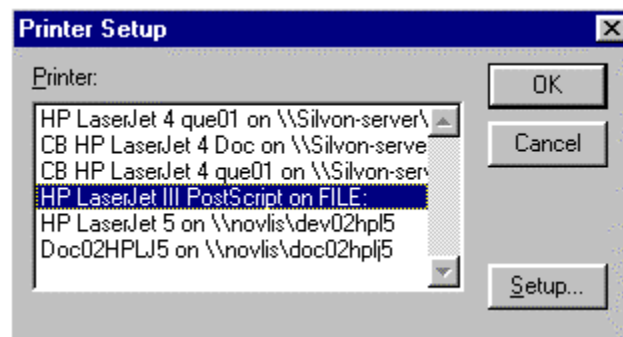
Click **OK** to accept your selections and close the window.

Cancel

Click **Cancel** to close the window without accepting any selections.

Defining the Default Printer

To select the printer to be the *DBView* default printer connected to your PC, choose File | Printer Setup, or click **Configuration** from the Print Preview window and select the printer. Your PC must be connected to a printer for this option to be available.



Printer Setup window

To set up the *DBView* printer:

1. Click **Printer Setup** from the Print Preview window.
2. Highlight the printer you want to be the *DBView* default printer.
3. Click **OK** to accept the default printer selected.

Printer Setup Fields

Printer

To select the printer to be the *DBView* default printer connected to your PC, highlight the printer name displayed in the Printer list and click **OK**. If more printers are available than will fit within the display window, use the scroll bar to move through all available printers.

Printer Setup Command Buttons

OK

Click **OK** to save the selected printer as your *DBView* default printer.

Cancel

Click **Cancel** to close the window without accepting any edits.

Setup

Click **Setup** to specify printer information such as the paper size and source, the number of copies to print, the orientation (portrait or landscape), the resolution (300 or 600 dpi), and so forth.

Printing a View as a Report

The print feature prints all of the information available in the Information Box. The information available on the General, Sort, Filter, and Top N tabs prints on the same page as the print date, the View title, and the user-defined descriptive text, if any was entered. The *MMA* data prints on a separate page from the header information.

| | |
|---|---------------------------|
| Date Printed : 03/16/2000 | |
| 4 Column Template : BusUnit | |
| Please review and provide comments Monday. Thanks! | |
| General : | |
| Updated : | 01/14/2000 23:00 |
| Visible Rows : | 2 |
| Filtered : | 0 |
| Summarized : | 0 |
| Hidden : | 0 |
| Mode : | Data File - Non Zero Only |
| Sort : | |
| Business Unit - Ascending , Description - Ascending | |
| Filter : | |
| Top N : | |
| Action Name : | |
| Traffic Light : | |
| BusUnit | All Values* |

Page 1 of a View print

| Business Unit | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|---------------|---------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| DOM | Domestic | \$2,456,069.45 | 67.40% | \$10,550,814.78 | 67.56% |
| INT | International | \$1,188,047.39 | 32.60% | \$5,067,064.77 | 32.44% |
| | Total | \$3,644,116.84 | 100.00% | \$15,617,879.55 | 100.00% |

MMA data printed

Copying Data from a Cell

The Miscellaneous Menu has two options for copying *MMA* data from a single cell into any other application, including *MMA* itself. Right-click anywhere in the data window to open the Miscellaneous menu and use **Cell Copy** to copy the data with formatting and **Cell Data Copy** to copy the data without any formatting (dollar sign, commas, etc.).

To copy formatted text to the Clipboard:

1. With the cursor displayed on the cell containing the data to be copied, right-click to display the pop-up menu.
2. Click Miscellaneous | Cell Copy and the data is copied to the Clipboard. Display Masks, commas, or any other formatting is copied along with the data to the Clipboard.
3. This formatted text can be copied into any Word Processing application, or any other Windows application.

To copy unformatted text and use it as a filter:

1. With the cursor positioned on the cell containing the data to be copied, right-click to display the pop-up menu.
2. Click Miscellaneous | Cell Data Copy and the data is copied to the Clipboard.
3. Position the cursor over the column you want to apply a filter to, and right-click again to display the pop-up menu.
4. Choose Quick Filter. With the General tab selected, go to the Values field and press SHIFT+INSERT. The unformatted text that was copied to the Clipboard is copied into the Values field.
5. Click **OK** to redisplay the View with the filter applied.

Copying Specific Rows and Columns to the Clipboard

You might want to copy MMA data so you can include it in a Microsoft® Word™ memo, Excel™ spreadsheet, PowerPoint™ presentation, and so forth. The Clipboard can store text and graphics so you can take it from one application and paste it into another. When you cut or copy to the Clipboard, you replace whatever is stored there.

To copy a View to the Clipboard:

Copying to the Clipboard is different from exporting to a specific file format.

- Choose Edit | Copy to Clipboard. The data currently displayed on your window will be copied into the Windows Clipboard so you can paste it into any other Windows application.

| Item | Description | Actual Sales Sep 00 to Sep 00 | % of Total Current Period | Actual Sales Jan 00 to Sep 00 | % of Total YTD |
|--------|----------------------------|----------------------------------|------------------------------|----------------------------------|-------------------|
| BKBBFN | Black stick pen | \$224,823.96 | 6.16% | \$360,430.41 | 6.15% |
| BLBBFN | Blue stick pen | \$269,855.32 | 7.38% | \$1,140,201.36 | 7.30% |
| BPPMK | Broad tip perm marker | \$182,593.87 | 4.46% | \$698,577.53 | 4.47% |
| BSDEMK | Basic dry erase markr set | \$306,589.93 | 8.41% | \$1,316,468.15 | 8.43% |
| CFPN | Cartridge fountain pen | \$381,436.60 | 10.47% | \$1,634,645.37 | 10.47% |
| CTPMK | Combo tip perm marker | \$598,885.90 | 16.43% | \$2,574,489.73 | 16.48% |
| DSDEMK | Deluxe dry erase mkr set | \$800,631.10 | 21.97% | \$3,434,190.01 | 21.99% |
| FTPMK | Fine tip perm marker | \$78,218.28 | 2.15% | \$336,058.07 | 2.15% |
| HPPC | Hard point plain pencil | \$29,777.72 | 82% | \$127,051.90 | 81% |
| MPFC | Medium point plain pencil | \$61,879.50 | 1.70% | \$263,254.85 | 1.69% |
| RDDBFN | Red stick pen | \$241,514.93 | 6.64% | \$1,034,469.35 | 6.62% |
| RFPN | Refillable fountain pen | \$470,124.93 | 12.90% | \$2,015,600.83 | 12.91% |
| SSPN | Student set colored pncils | \$18,778.93 | 52% | \$80,782.12 | 52% |
| Total | | \$3,644,116.84 | 100.00% | \$15,617,879.55 | 100.00% |

View with selected rows and columns

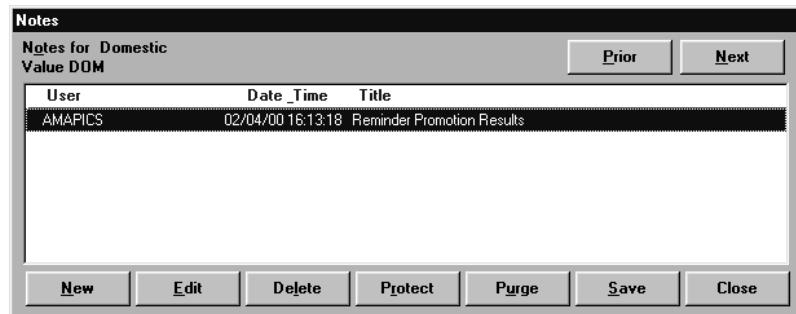
To copy selected rows & columns to the Clipboard:

1. Highlight the row(s) and/or column(s) to copy. Use CTRL+click to make multiple selections.
2. Choose Edit | Copy to Clipboard.

Viewing Notes for a Dimension Key Value

Notes can be attached to a particular Dimension key value so they can be referenced at a later date or by other users. Access Notes by selecting Information | Notepad.

Notes are tied to a Dimension key value and can be viewed by all *MMA* users. Notes are a good way for users to communicate with one another about specific Dimension values' data.



Notes window

To view and create notes:

1. Highlight a row of data within a View and click Information | Notepad. From this window, you can create new notes, and edit or delete existing notes. See the next section of this chapter for more information.
2. Highlight a note and click **Edit** to view the detail information behind the note.

Notes Fields

Notes for

In the upper left corner of the window, the Description and value of the active key Dimension value is displayed so you can tell which key value you are viewing notes for.

User/Date/Time/Title

A selection box displays the ID of the user who created the note, the system date and time the note was created, and the user-defined title of the note. To edit or delete a note, select it from the selection box by highlighting it. A "P" to the left of the User ID indicates that the note has been protected. Protected notes cannot be deleted.

Notes Command Buttons

Prior/Next

The **Prior** and **Next** buttons help you to maneuver through all of the notes for the selected Dimension key values within the active View. **Prior** takes you back and is disabled when positioned on the first Dimension value. **Next** moves you to the next key value and is disabled when positioned on the last key value.

New

Clicking **New** accesses the Notepad-New window so a new note can be created for the highlighted Dimension key value.

Edit

Clicking **Edit** accesses the Notepad-Edit window so the active note can be adjusted. **Edit** accesses the same window as **New** except the Title cannot be maintained when in the Edit mode.

Delete

Clicking **Delete** deletes the active note with confirmation.

Protect

Protected notes cannot be deleted or purged.

If you have a very important note that you do not want accidentally deleted or purged, click **Protect** to indicate that the selected note cannot be deleted or purged. Clicking **Protect** works as a toggle, protecting or not protecting the active note. A "P" to the left of the note title indicates a note is protected.

Purge

Notes can be purged by User ID, for a specific date range, and for a particular Dimension value by clicking **Purge**. Protected notes will not be purged.

Save

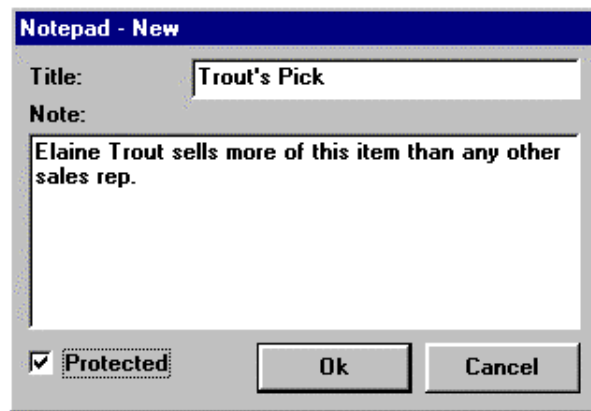
Clicking **Save** saves any changes, additions, or deletions made during the current session of Notes.

Close

Clicking **Close** closes the Notes window without saving any entries unless **Save** is selected prior to the **Close**.

Attaching a Note to a Dimension Key Value

The Notepad window looks the same whether you are creating a new note or editing an existing one. Only the window name is different.



Notepad - New window

To edit or create a note:

1. Highlight a row within the active View and click the appropriate button on the Notes window (**Edit** or **New**) to access the Notepad window.
2. Enter a title and a descriptive Note.
3. If this is a very important Note that you do not want deleted or purged, select the Protected check box.
4. Click **OK** to accept the Note and then click Save in the Notes window.

Notepad - Edit Fields

Title

Enter a user-defined title. This field supports up to 30 alphanumeric characters, including blanks.

Note

Enter the description of the note tied to the active Dimension value.

Protected

The default is NOT protected.

Protected notes cannot be deleted or purged. If the check box is selected, then this note cannot be deleted. Notes can also be identified as protected on the initial Notes window via **Protect**, which works as an ON/OFF toggle.

Notepad - Edit Command Buttons

Ok

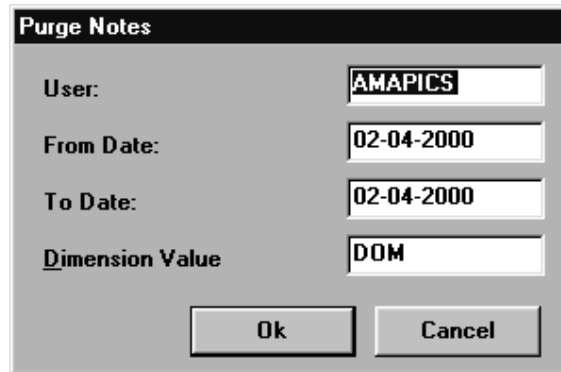
Click **Ok** to save your note and redisplay the initial Notes window.

Cancel

Click **Cancel** to close the Notepad window without saving any entries.

Purging Notes

Notes can be deleted individually or in mass to clean up the Notes database. Any Protected notes will not be deleted or purged. Protected notes have a "P" displayed next to them.



The screenshot shows a dialog box titled "Purge Notes". It has four input fields: "User" containing "AMAPICS", "From Date" containing "02-04-2000", "To Date" containing "02-04-2000", and "Dimension Value" containing "DOM". At the bottom of the dialog are two buttons: "Ok" and "Cancel".

Purge Notes window

To purge notes:

1. Click **Purge** on the Notes window.
2. Specify the range of Notes (based on user, dates, dimension value, or a combination of these values) you want to delete.
3. Click **Ok** to purge.

Purge Notes Fields

User

The ID of the User who entered the notes function defaults in the User field. You can enter a different User ID, or delete the default value from this field to purge notes for ALL users.

From Date / To Date

MM-DD-YYYY format.

Enter the date to begin the purge range in the From Date field and the date to end the date range in the To Date field. The system date defaults in both the From Date and To Date fields.

Dimension Value

The specific Dimension value for which notes are to be purged can be entered in the Dimension Value field. The active Dimension value defaults in this field but can be overridden. If left blank, all key values within the Dimension will be purged.

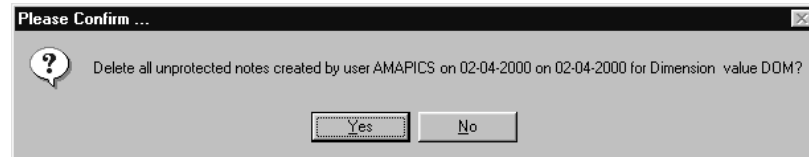
Purge Notes Command Buttons

Ok

Click **Ok** to purge the specified range of notes. A confirmation window displays prior to the purge. If the specified range is correct, click **Yes** to perform the purge.

Cancel

Click **Cancel** to close the window without deleting any notes.



Confirmation of purging notes

To confirm the purge range:

- Verify that the user ID, date range, and Dimension value should be purged as displayed on the dialog box and click **Yes**.

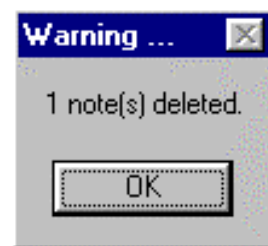
Purge Confirmation Command Buttons

Yes

Click **Yes** to purge the specified range of notes.

No

Click **No** to end the purge for the specified range of notes.

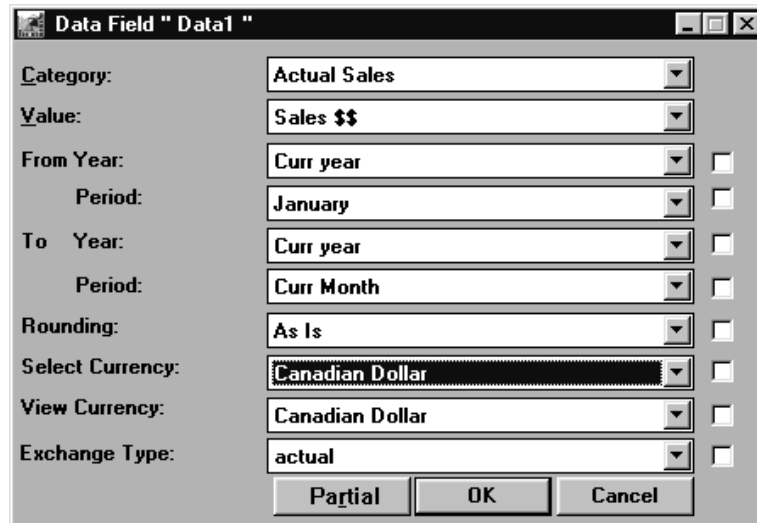


Warning window

A dialog box indicating the number of notes deleted displays for your information. This window is display-only. Click **OK** to close the dialog box.

Defining a Data Field with Multiple Currencies

When using multiple currencies, three additional fields display on the Data Field definition window. You can retrieve data for any combination of currencies and view it in a predefined currency. Refer to the *Systems Administrator Guide* for a complete definition of all fields on the Data Field window.



Data field definition with multi-currency

To define a data field with multiple currencies:

When defining a data field with multiple currencies, three additional fields display on the window.

1. Select a Select Currency from the drop-down selection list.
2. Select a View Currency from the drop-down selection list.
3. Select an Exchange Type from the drop-down selection list.
4. Click **OK** to save your entries and close the window.

Data Field Definition Fields

Please refer to the *Systems Administrator Guide* for further definition of the fields relating to multi-currencies.

Select Currency

All Currencies is the default.

Select the currency code for which you want to retrieve data from the drop-down selection list. You must select either a single currency or all currencies. If you specify a single currency code, *MMA* retrieves only those records with that currency. If you specify all currencies, all records are selected, regardless of the currency.

View Currency

The default value in this field depends on the entry made in the *Administration* application. Data fields containing amounts need to be converted in a multi-currency implementation. However, you would not want to display data fields containing units in anything other than the unit display mask. Therefore, No Currency Conversion should be the value in the View Currency field if the data field is displaying units of data.

Exchange Type

Choose the Exchange Type from the drop-down selection list.

Note: You may have U.S. Dollars, British Pounds, and Canadian Dollars in your database, but you want to view all data in Canadian Dollars for this field. Choose All Currencies for the Select Currency and Canadian Dollars for the View Currency.

Data Field Command Button

Partial/Full

When multi-currency is turned ON, there is an extra command button displayed. It displays as **Partial** when the three additional fields are displayed. If you do not want to view the Exchange Type, Select Currency, and View Currency fields, click **Partial**, and the button name changes to **Full**. These buttons work as a toggle.

Views and Multiple Currencies

With multi-currency turned ON, you have the ability to view your data in any combination of currencies. The first column can display the data in U.S. Dollars, the next column can display the data in British Pounds, and so forth. Display Masks are used to enhance the appearance of the data within a View. The View and selected currencies can be changed on the fly during runtime. The user has the ability to determine if a value should or should not be converted.

To run a view with multiple currencies:

1. Multi-currency must be turned on in the Parameter Master Maintenance and User Profile windows.
2. The data field(s) within the Template must have an Exchange Type selected, as well as a Select and View Currency. Double-click on a data column to display the Data Field detail window and make your adjustments accordingly.
 - The Select currency determines the records selected for display.
 - The View Currency and Exchange Type determine which exchange rate and Display Mask is used.
3. If a currency Display Mask is associated with the data, it will help to clearly display the different currencies. Associate a Display Mask with the currency to clearly indicate the type of currency the data is being displayed as (for example, set up a Display Mask so that the letters “CND” display before Canadian Dollar values). To access the Display Masks window, right-click in a data column and select Display Mask from the pop-up menu.
4. During runtime, the currency can be changed.

To define if a value should be converted:

1. In the Administration application, default View currencies are defined by selecting File | Values. All unit values have No Currency Conversion selected as the default View Currency.

| Value | Description |
|-------|-------------|
| F01 | Amount |
| F02 | Quantity |
| F03 | List Price |
| F04 | Cost |
| F05 | Add Charges |
| F06 | Trade Disc. |

Value: Sequence:

Descriptions:

Display Mask:

Calculated

View Currency:

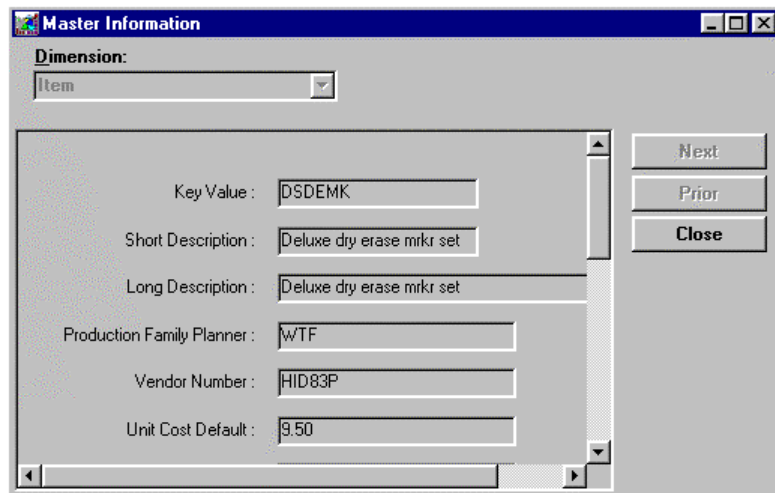
New Save Delete Close

Value window

2. When multi-currency is turned on, additional fields display on the Data Field Detail Definition window.
3. If a data field displaying amounts is changed to units, no currency conversion is necessary. Therefore, No Currency Conversion should be the value in the View Currency field. This will default from the *Administration* application.

Viewing Master Information

Information specific to each Dimension value is available from the Information | Master Information command. Information such as the key value, short and long descriptions, and miscellaneous field definitions can be included in the View, or it can all be seen on a single window as shown below. The values on the Master Information window are for display-only and default from the STCSMF10, STCSMF11, or STCSMF35 tables.



The screenshot shows a window titled "Master Information" with a "Dimension:" dropdown menu set to "Item". Below this are several input fields with the following values:

| Field | Value |
|---------------------------|---------------------------|
| Key Value | DSDMK |
| Short Description | Deluxe dry erase mrkr set |
| Long Description | Deluxe dry erase mrkr set |
| Production Family Planner | WTF |
| Vendor Number | HID83P |
| Unit Cost Default | 9.50 |

On the right side of the window, there are three buttons: "Next", "Prior", and "Close".

Master File Information window

To view Master File information:

1. Highlight one or more rows within the active View and select Information | Master Information.
2. *{Optional}* If more than one row was selected, you can maneuver through them by using the **Next** and **Prior** buttons.
3. *{Optional}* If more than one Dimension is included in the Template definition, you can change Dimensions via the drop-down selection list next to the Dimension field.
4. After you finish viewing the information, click **Close**.

Master Information Fields

Dimension

The Dimension level at which you are viewing the Master Information displays in the Dimension field. If there is more than one Dimension included in the Template/View, you can use the drop-down selection list to change the Master Information Dimension level.

Value/Descriptions/Field Definitions

Field definitions are dimension specific and can be maintained within the Dimension Maintenance function.

The key value, short and long description, and pre-defined field definitions of the selected row display for your information. This area of the window is for display-only and does not allow any entry. The information comes from the STCSMF10, STCSMF11, or STCSMF35 tables.

Master Information Command Buttons

Next

The **Prior** and **Next** buttons help you to maneuver through all of the master information for the selected dimension key values within the active View. **Next** moves you to the next key value and is disabled when positioned on the last key value.

Prior

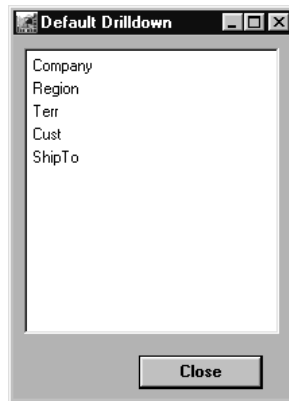
The **Prior** and **Next** buttons help you to maneuver through all of the master information for the selected dimension key values within the active View. **Prior** takes you back to the previous selected Dimension value and is disabled when positioned on the first Dimension value.

Close

Click **Close** to close the Master Information window when you are finished viewing the Master Information for the selected Dimension value(s).

Viewing the Default Drill-Down Path

Your user ID contains a default drill-down path. When you double-click on a row to automatically drill-down to the next defined level, *MMA* looks at the default path defined for your User ID. If you want to know what the next level is without processing a retrieval, the path can easily be viewed in a Default Drilldown window that is displayed at runtime by selecting Information | Default Drilldown.



Default Drilldown window

To view the default drill-down path

- Select Information | Default Drilldown. The path defined as the default for your user profile will display. The path begins at the *next Dimension* after the current Dimension.

Example: The View was looking at all Business Unit, and Company is the next defined level, so the default drill-down listing begins with Company.

Default Drilldown Field

Dimensions Listing

The defined path of all valid Dimensions is displayed in this window, beginning with the Dimension that immediately follows the last Dimension in the active View.

Default Drilldown Command Button

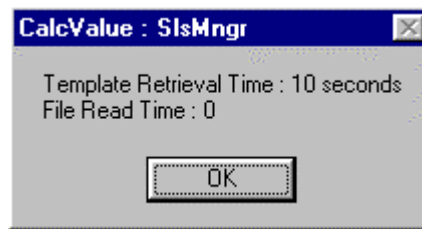
Close

After you are finished viewing the information, click **Close** to close the window and redisplay the active View.

Viewing the Retrieval Time

Within *DBView*, you have access to various information about your authorities and about the processing time within the active View. If a retrieval is frequently run and the length of the retrieval time is not acceptable, you may want to build an Index or create a DSL. Indexes and DSL's are used to tune the system and enhance performance. See Chapter 5 in the *Systems Administrator Guide* for more information about building indexes and DSL's.

To assist your system administrator in tuning *MMA*, you can record the retrieval times of commonly run Views and drill-down paths via the Information menu.



Inquiry Time window

To view the retrieval time

- You may be interested to see how long a retrieval took. This is easily done by selecting Information | Processing Time.
- This window is display-only. After viewing the retrieval processing time, click **OK** to close the window.

Processing Time Fields

Template Retrieval Time

The amount of time, in seconds, it takes to get the data from the database, format it and present it in a View.

File Read Time

The amount of time, in seconds, it takes to access your View file and read it. If you are running a Template, this will be "0" seconds.

Processing Time Command Button

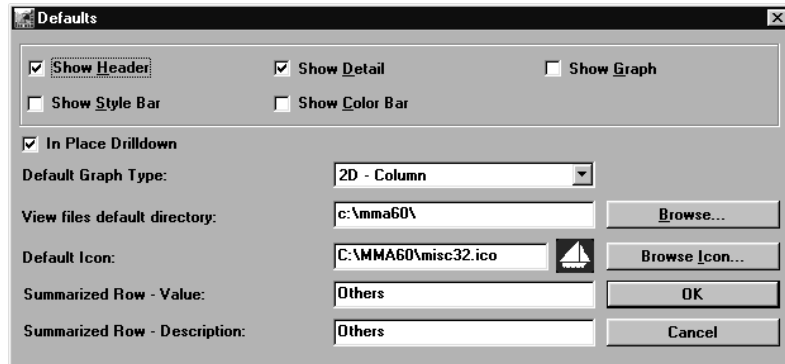
OK

Click **OK** after you are finished viewing the retrieval time to close this window and redisplay the View.

Maintaining User Defaults

The items that default on your View are determined by the User Defaults established from the Options | Defaults command. You can determine whether you want the graph, grid, header, color bar, or style bar to display by default by using the appropriate check boxes. You can determine the type of graph to display and the icon that defaults when saving a View to your desktop.

MMA defaults these values for your ease of use. During runtime, all default values can be adjusted to look at the data in different ways. These adjustments can be saved as part of the View.



Defaults window

To modify the user defaults:

- Items that default on your Views are specific to each user and can easily be maintained via Options | Defaults.
- Make the appropriate selections on the Defaults window and click **OK** to accept your default selections.

To change the default label of the summarized row:

1. Choose Options | Defaults to access the Defaults window.
2. Change the description that labels the summarized row's value and/or description. There is no limit to the length of these fields. The default value is "Other."
3. Click **OK**.

Note: You must close the active View and re-run it to accept the edits. These default values are specific to each user and not to each View.

Defaults Fields

Show Header/Detail/Graph/Style Bar/Color Bar

By default, the Detail and Header are selected to default on all Views.

Use the check boxes to determine if you want the header, detail, graph, color bar, and/or style bar to default on your Views. Once in a View, you can always choose to display any or all of these items. Like all other check box selections, if the check box is selected, that item will default on your Views.

In Place Drilldown

See the following page for an example with "In Place Drilldown" NOT selected.

MMA gives you the option of controlling the manner in which windows open as you drill through Dimensions. By default, you will *drill in place*, which means that the current window is updated with each new window - no new windows are opened. You can change this to have *MMA* open a new window each time you drill to a different Dimension. This would allow you to analyze data in different Views on the same screen by tiling or cascading all the windows on one screen.

Caution: When In Place Drilldown is turned OFF, the overall system performance may be impacted because it is creating multiple windows.

Default Graph Type

Choose a default graph type from the selection listing. Some valid graph types are: 2D and 3D Line, Pie, Scatter, Bar, Area, and Column. The graph type that defaults can easily be changed to any other graph type during runtime and saved as part of the View.

View files default directory

Enter the name of the directory where the View files default. A valid path can be selected from a list accessed by clicking **Browse**.

Default Icon

Choose the icon you want to set as the default that is displayed when saving a View from the Icon File window accessed via **Browse Icon**. Like all other values selected on the Defaults window, *this is the default value only*. When you are saving a View, you can specify an icon other than the default.

Summarized Row - Value

The default value is "Other."

Enter descriptive text that displays as a user-defined label of the summarized row within a View. You can enter a label for the Dimension value and a different one for the description. These labels also apply to the "Values and Others" and "Level N and Others" options available within a View containing grouping and a Nested User List.

The default value is "Other."

Summarized Row - Description

Enter descriptive text that displays as a user-defined label of the summarized row within a View. You can enter a label for Dimension value and a different one for description.

Defaults Command Buttons

Browse

Click **Browse** to select a valid default directory for your View files.

Browse Icon

You can use .ICO files from any Icon Editor.

Click **Browse Icon** to access the Icon File window to select any icon file as your default when saving a View to your desktop. The selected icon displays immediately to the right of the Default Icon field.

OK

Click **OK** to accept your entries and close the Defaults window.

Cancel

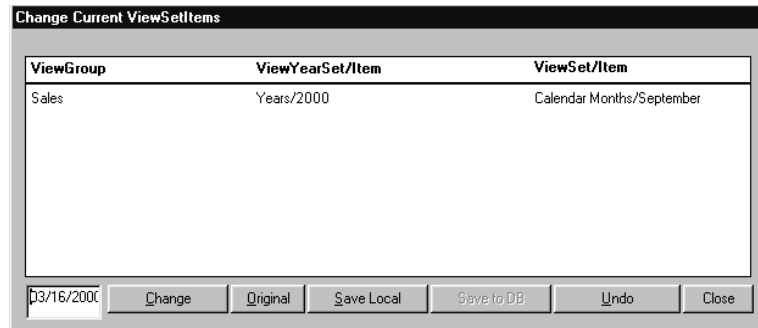
To close the Defaults window without accepting any entries, click **Cancel**.

To create a new window when drilling:

- Deselect the In Place Drilldown check box to create a new window in *DBView* each time a drill-down is performed.
- You can return to previous Views by closing the top window. This is useful when drilling down through several layers of data and then wanting to return to previous Views.
- After you have drilled through several Dimension levels, you can adjust the display from the Window menu. You can Tile, Layer, or Cascade the open *DBView* windows.

Viewing/Maintaining the Current Dates

The Change Current ViewSetItems window is accessed by selecting Options | Current Date from the menu. All of the currently set items can easily be viewed and modified from one window via Options | Current Date.



Change Current Date window

All of the ViewSets have one item defined as "current" as part of the definition. If you want to view your data with a different set of current dates, you can save the dates to your local PC by clicking **Save Local**.

To modify the MMA current dates:

All of the ViewSets have one item defined as *current* as part of the definition. All of the View Sets can be easily set to the system date via a button. If you want to view your data with a different set of current dates, you can save the dates to your local PC.

1. Choose Options | Current Date.
2. Click **Change Current** and a date field displays to the left of the **Change Current** button.
3. Enter the date you want to be recognized as the current date in the format specified under the Regional Settings within your Control Panel settings.
4. Click **Change** and the changes are automatically calculated and displayed on the window for you.
5. Save the dates to your local PC by clicking **Save Local**.

Note: For the changes to be viewed, rerun the current View.

Change Current ViewSetItems Fields

ViewGroup/ViewYearSet/ViewItem

If you want to adjust the current sets, use the command buttons displayed.

All of the ViewGroups , Years and Set items defined as current display in the list box. This area is for display only and does not allow you to make any entries.

Change Current ViewSetItems Command Buttons

Change Current

The year format can be two or four digits, depending on the selection made within the Control Panel.

A field that allows you to define the current date displays when **Change Current** is selected. Enter the current date in the format specified under the Regional Settings within the Control Panel, and then click **Change** to propagate your entry.

Original

Click **Original** to set all of the View Sets to the current database status.

Save Local

Save Local saves the current status to the session on your PC.

Save to DB

Save to DB saves the current status information to the database. This button is only available when the Change Current ViewSetItems window is accessed through the *Administration* application.

Undo

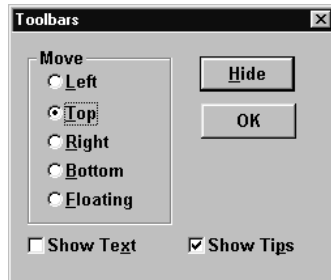
Click **Undo** to remove any changes made to the current session.

Close

Click **Close** to close the Change Current ViewSetItems window and redisplay the window from which you accessed the Change Current ViewSetItems window. The values currently displayed when **Close** is selected are saved.

Changing the Position of the Toolbar

By default, the *DBView* toolbar displays at the top of the window. You can adjust the positioning by choosing Window | Toolbars.



Toolbars window

To change the position of the *DBView* toolbar:

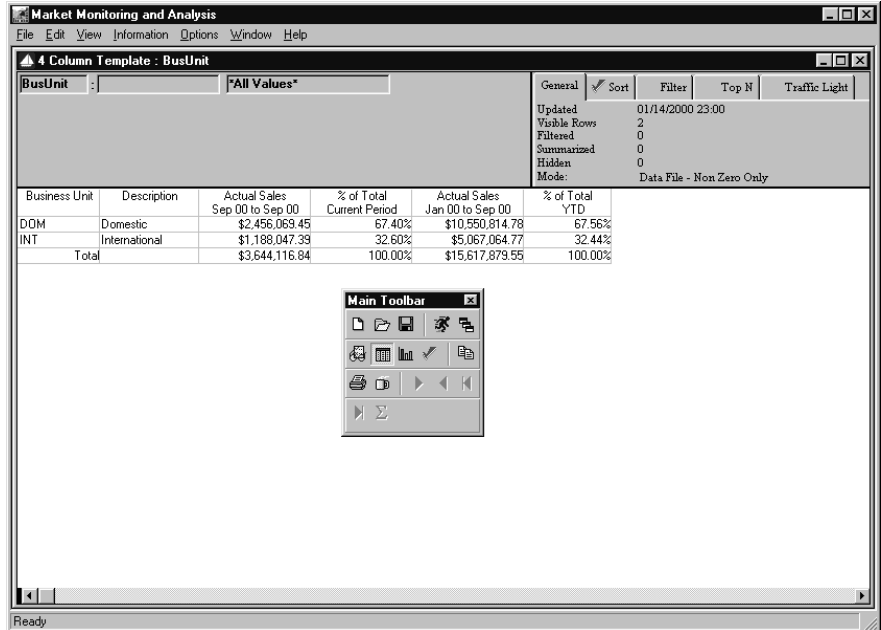
- Choose Window | Toolbars and then select the appropriate radio button.
- The toolbar can be on the Top, Bottom, Left, Right, or even Floating on the screen.
- After making your selections, click **OK** to redisplay the active View with the selection applied.

Toolbars Radio Buttons and Check Boxes

Left/Top/Right/Bottom/Floating

By default, the toolbar displays on the top of the window.

Choose the appropriate radio button to determine the positioning of the *DBView* toolbar. If you choose *Floating*, the toolbar will be its own window. You can size it and position it exactly the way you want.



Floating toolbar

Show Text

Choose the Show Text check box to have the description of the icon displayed along with the icon. By default, this is not selected.



Toolbar with text

Show Tips

Choose Show Tips check box to have the definition of the icon display as the cursor moves across the icons on the toolbar. By default, this is selected.

Toolbars Command Buttons

Hide

Click **Hide** if you do not want to see the toolbar at all. This will give you more workspace. This is beneficial to users who do not use the toolbar because they prefer the menus on the command line.

OK

Click **OK** when you have finished your selections and want to close the Toolbars window. The active View displays with your Toolbar selection applied to the View.

CHAPTER 9 • MMA TIPS

QuickLook

Use this chapter to learn how to:

- Reposition the columns within a View.
- Use the propagate check boxes to change time periods.
- Duplicate calculation/filter expressions.
- Add grouping to an existing Regular Template.
- Drill-down within a Period Based View.
- Drill-down within a Grouped by View.
- Drill-down within a Cross Tab View.
- Position text labeling a total line.
- Position Grouped by column headings.
- Add a total line to a View.
- Define a % of total calculation.
- Define a forecast amount using data columns.
- Define a total calculation for a calculated column.
- Define a calculation for cumulative percent of total.
- Define a calculation for running total.
- Define a calculation for subtotaling.
- Rank values.
- Display the number of rows retrieved in the Summary band.
- Display key values beginning with a specific letter.
- Display Dimension descriptions with a certain string of characters.

Miscellaneous MMA Tips

Every now and then you may want to do something out of the ordinary when defining a Template or running a View. This section explains quick answers to frequently asked questions.

To reposition columns:

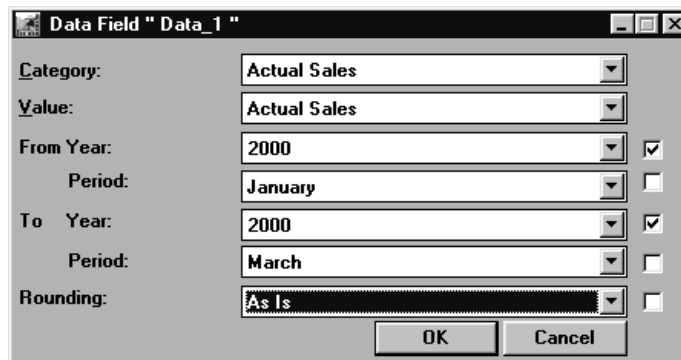
When **Previewing** a Template Definition, it appears that you can click and drag a column into a new position and it will be saved as part of the active definition. This is true, but the next time you Preview, the column re-positioning is lost. If you want to change the position of a column after Previewing it, you should do it as part of the definition.

- The Position field on the Template Definition window controls the column positioning of the View.
- When a position is adjusted, verify that all the fields before and after are manually adjusted as well.
- MMA does not automatically re-sequence the positioning.

To change the time periods using the Propagate check boxes:

You can change the time periods within an active View that contains several Data fields by making just one entry.

1. Double-click in the header band of the first data field that needs to be changed to access the Data Field detail window.
2. Change the From Year, From Period, To Year, and/or To Period and select the Propagate check box located immediately to the right of the field.
3. The adjusted date is reflected in all data fields.



The screenshot shows a dialog box titled "Data Field 'Data_1'". It contains several fields for configuration:

| | | |
|------------|--------------|-------------------------------------|
| Category: | Actual Sales | <input type="checkbox"/> |
| Value: | Actual Sales | <input type="checkbox"/> |
| From Year: | 2000 | <input checked="" type="checkbox"/> |
| Period: | January | <input type="checkbox"/> |
| To Year: | 2000 | <input checked="" type="checkbox"/> |
| Period: | March | <input type="checkbox"/> |
| Rounding: | As Is | <input type="checkbox"/> |

At the bottom of the dialog are "OK" and "Cancel" buttons.

Data Field detail window

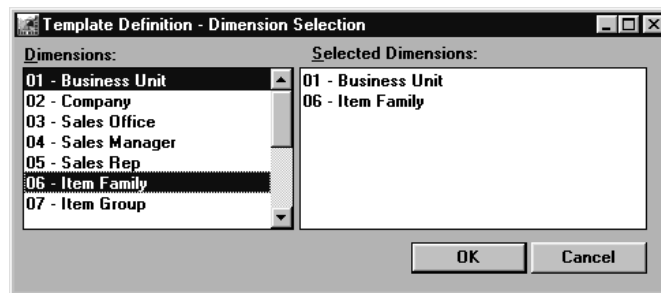
To easily duplicate calculation/filter expressions:

To save you from re-keying a commonly used expression, highlight the calculation or filter expression, and press CTRL+C to copy it to the Clipboard. Go to the field where you want to duplicate the expression and press CTRL+V to paste it.

To add subtotaling (grouping) to an existing Regular Template.

You can change a Regular Template type to contain subtotaling or grouping by following the steps below:

1. Open an existing Template definition. Choose **Dimensions** and select a second Dimension level.
2. Choose **Groups**, and select the Grouped by Dimension. Click **OK** to accept your selection and close the window.



Template Definition - Dimension Selection window

3. Click **Fields** and **Insert** two new fields: a description field to contain the grouped by Dimension and a text field to label it.
4. For the Grouped by Dimension, verify that the Description radio button is selected, click **More**, and select the Group by Dimension and description from the drop-down selection lists.
5. Verify that the data will display in the Header1 band and in Row 2. Make sure that the Hidden check box is not selected.
6. Click **Next**, and change the Field Type to Text. The text field labeling the Grouped by Dimension should be in the Header1 band, Row 1.
7. Click **More** to define the text. Click **OK**.
8. Refer to "Positioning of Text Fields Tips" on page U243 for more information on enhancing the display of a Grouped by View.
9. **Preview** and **Save** the Template definition.

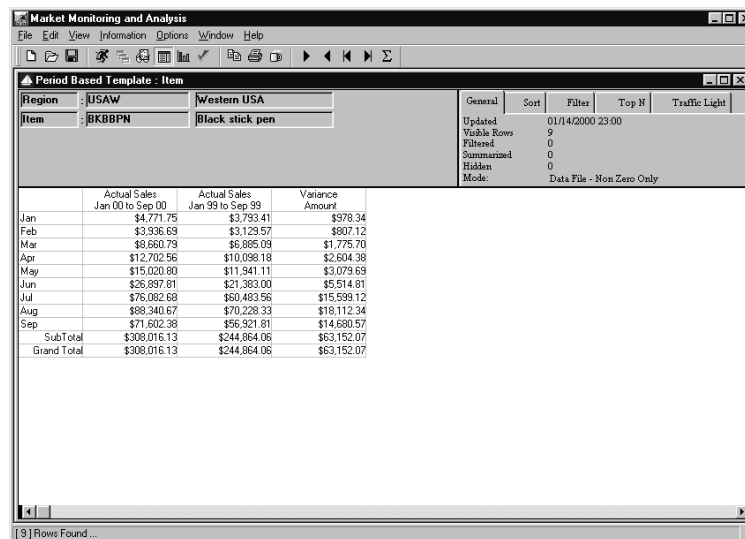
Drill-Down Tips

To drill-down within a Period Based View:

The Drill Down button and command are not available within a Period Based View. An easy way to perform a drill-down is as follows:

1. With a single value in the Dimension path, choose Edit | Dimensions | Add.
2. Choose a Dimension and click **OK**.
3. Refresh the data by clicking the **Runner** button or choosing File | Run.

The values included in the added Dimension can be scrolled through using the Next arrow buttons located on the *MMA* toolbar.



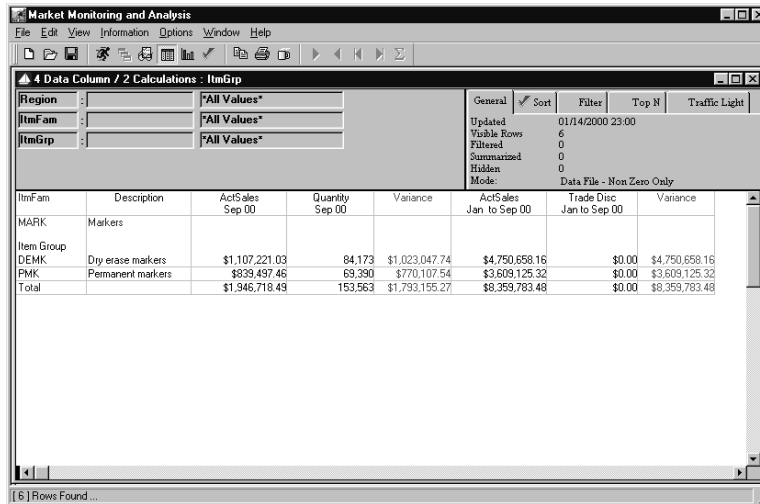
| | Actual Sales Jan 00 to Sep 00 | Actual Sales Jan 99 to Sep 99 | Variance Amount |
|-------------|----------------------------------|----------------------------------|--------------------|
| Jan | \$4,771.75 | \$3,753.41 | \$578.34 |
| Feb | \$3,936.69 | \$3,129.57 | \$807.12 |
| Mar | \$9,660.79 | \$6,885.09 | \$1,775.70 |
| Apr | \$12,702.56 | \$10,098.18 | \$2,604.38 |
| May | \$15,020.80 | \$11,941.11 | \$3,079.69 |
| Jun | \$26,897.81 | \$21,383.00 | \$5,514.81 |
| Jul | \$76,082.68 | \$60,483.56 | \$15,599.12 |
| Aug | \$88,340.67 | \$70,228.33 | \$18,112.34 |
| Sep | \$71,602.38 | \$56,921.81 | \$14,680.57 |
| Sub Total | \$308,016.13 | \$244,864.06 | \$63,152.07 |
| Grand Total | \$308,016.13 | \$244,864.06 | \$63,152.07 |

Period Based View with a drill-down

To drill-down within a Grouped by View:

You can drill-down through Dimension levels within a Grouped by View in a similar manner in which you can drill-down within a Period Based View:

1. Enter a value for the Grouped by Dimension level and press TAB to complete your entry.
2. Position your cursor in the value field of the List of Dimension level and choose Edit | Dimensions | Add.
3. Select a Dimension level and click **OK** to close the Dimension listing window. Request a retrieval by choosing File | Run or clicking the Runner button.



The screenshot shows the 'Market Monitoring and Analysis' application window. The main data table is grouped by 'Item Group'. The table has columns for 'Item Group', 'Description', 'ActSales Sep 00', 'Quantity Sep 00', 'Variance', 'ActSales Jan to Sep 00', 'Trade Disc Jan to Sep 00', and 'Variance'. The data is as follows:

| Item Group | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Trade Disc Jan to Sep 00 | Variance |
|------------|-------------------|-----------------|-----------------|----------------|------------------------|--------------------------|----------------|
| MARK | Markers | | | | | | |
| Item Group | | | | | | | |
| DEMK | Dry erase markers | \$1,107,221.03 | 84,173 | \$1,023,047.74 | \$4,750,658.16 | \$0.00 | \$4,750,658.16 |
| PMK | Permanent markers | \$839,497.46 | 69,390 | \$770,107.54 | \$3,609,125.32 | \$0.00 | \$3,609,125.32 |
| Total | | \$1,946,718.49 | 153,563 | \$1,793,155.27 | \$8,359,783.48 | \$0.00 | \$8,359,783.48 |

Grouped by View with a drill-down

To drill-down within a Cross Tab View:

Double-clicking on a row of data to automatically drill-down to the next defined level is not available within a Cross Tab View. An easy way to perform a drill-down can be accomplished by doing the following:

1. Run a Cross Tab Template.
2. Position your cursor in the value field of the second Dimension level and choose Edit | Dimensions | Insert.
3. Choose a Dimension and click **OK**.
4. Enter a specific value for the first Dimension. Use the Search feature if values are unknown.
5. Refresh the data by clicking the **Runner** button or choosing File | Run.
6. The values included in the added Dimension can be scrolled through using the horizontal scroll bar located on the bottom of the window.
7. The first two columns can be anchored so they do not move when scrolling across columns. Move the mouse pointer to the small dark area on the left edge of the horizontal scroll bar. Now the pointer becomes --| . Click and drag the pointer to the end of the second column. Now the first two columns are anchored during horizontal scroll bar use. You can page through all values and still see the Dimension values displaying in the first two columns.

| Ship To | | BKBBFN | BLBBFN | BPPMK | BSC |
|----------|--------------------|------------------|------------------|-----------------------|------------------|
| Item | Description | Black stick pen | Blue stick pen | Broad tip perm marker | Basic |
| Ship To | Description | Actual Sales | Actual Sales | Actual Sales | Actual Sales |
| | | Jan 00 to Sep 00 | Jan 00 to Sep 00 | Jan 00 to Sep 00 | Jan 99 to Sep 99 |
| 12/221/1 | Tri Fold Inc. | \$0.00 | \$0.00 | \$0.00 | \$35,677.04 |
| 12/223/1 | Reliable Corp. | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 12/321/1 | Prestige Office | \$0.00 | \$0.00 | \$0.00 | \$48,085.10 |
| 12/322/1 | Stevens Maloney | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 12/323/1 | Rose Cascade | \$0.00 | \$0.00 | \$0.00 | \$84,435.91 |
| 13/132/1 | Helanders | \$222,680.38 | \$222,680.38 | \$121,643.21 | \$121,643.21 |
| 13/133/1 | Jamar Stationary | \$22,183.68 | \$22,183.68 | \$64,538.95 | \$64,538.95 |
| 13/232/1 | Hroder | \$20,984.17 | \$20,984.17 | \$23,238.96 | \$23,238.96 |
| 13/233/1 | Avey | \$28,625.40 | \$28,625.40 | \$71,220.89 | \$71,220.89 |
| 13/332/1 | Brenner | \$17,323.51 | \$17,323.51 | \$26,163.21 | \$26,163.21 |
| 13/333/1 | Loki Business | \$224,792.09 | \$224,792.09 | \$30,495.07 | \$30,495.07 |
| 21/411/1 | Hungary Supply Co | \$33,450.25 | \$33,450.25 | \$64,633.64 | \$64,633.64 |
| 21/413/1 | Budapest Pen & Pe | \$0.00 | \$0.00 | \$0.00 | \$64,143.08 |
| 21/511/1 | Parchment n' Quill | \$22,180.19 | \$22,180.19 | \$193,656.28 | \$193,656.28 |
| 21/512/1 | TRT Inc. | \$10,069.64 | \$10,069.64 | \$10,733.09 | \$20,133.28 |
| 22/421/1 | Poland Supply Cen | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 22/422/1 | Warsaw Office Sup | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 22/521/1 | Paris Paper Outlet | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| 22/522/1 | Carlsby Business I | \$0.00 | \$0.00 | \$0.00 | \$41,177.36 |
| 23/431/1 | Old Gaurd Office | \$54,564.69 | \$54,564.69 | \$196,270.86 | \$196,270.86 |
| 23/432/1 | New Gaurd Office | \$21,046.60 | \$21,046.60 | \$52,066.10 | \$52,066.10 |
| 23/531/1 | Franfurt Supplies | \$61,589.63 | \$61,589.63 | \$65,398.08 | \$65,398.08 |
| 23/532/1 | Rhine Paper & Pen | \$22,192.24 | \$22,192.24 | \$99,148.25 | \$99,148.25 |
| | Total | \$960,490.41 | \$835,073.51 | \$1,140,801.38 | \$1,062,765.79 |

Cross Tab View with a drill-down

Positioning of Text Fields Tips

To correctly position text labeling totals in Period Based Template/View:

Follow the steps for creating a Total label except the Position should be 0. This way the static text created displays in the same column as the user-defined periods.

To position Grouped by column headings:

By default, text fields default in the Header band. Because of this default, the text labeling the Grouped by Dimension (the Dimension the Template is grouped by) is overwritten by the List of Dimension (the other Dimension in a Grouped by Template).

Note: For information about setting up a Grouped by Template, see Chapter 7 in the *Systems Administrator Guide*.

To get both text fields to display, make the adjustment as follows:

1. Make sure the description field for the Grouped by Dimension is in Row 2 of the Header1 band (Position 1, Row 2), and the text field for it is in Row 1 of the Header1 band (Position 1, Row 1).
2. Make sure the text field for the List of Dimension is in Row 3 of the Header1 band (Position 1, Row 3).
3. Make sure a text field for the total is set up. It should be placed in Position 1 or 2 in the Trailer1 band.
4. The List of/Grouped by Dimensions in a Template can be further customized so related values display more effectively in a View. See the following example with the instructions on the steps taken to achieve the View on the next page.
5. Steps 1 through 3 above were followed during the set up of the Template used for the example.
6. This text was set up to display in red:
 - Data for the Grouped by Dimension (Region) value and short description; text was also centered.
 - Text labeling data for the Grouped by Dimension value and description.
 - Text for the Total valued text. The text was also positioned in the Trailer1 band and right justified.
 - Text labeling the calculated columns.

7. Text labeling the List of Dimension description was set up as a hidden field on Position 2, Row 3. Hidden fields are part of the Template definition but display as blank cells in the View that displays once the Template is run.
8. The Template was ran and then the style bar was used to underline the List of Dimension's title and the text labeling the Header1 band of all the columns. Text in red was also bolded.

The screenshot shows a software window titled "Market Monitoring and Analysis". Below the menu bar, there's a toolbar and a status bar. The main area displays a data table with the following structure:

| Region | Description | ActSales Sep 00 | Quantity Sep 00 | Variance | ActSales Jan to Sep 00 | Quantity Jan to Sep 00 | Variance |
|--------------------|----------------|--------------------|--------------------|--------------|---------------------------|---------------------------|----------------|
| EURE | Eastern Europe | | | | | | |
| Item Family | | | | | | | |
| MARK | Markers | \$272,897.00 | 10,832 | \$254,065.00 | \$1,173,935.09 | 01,011 | \$1,092,924.34 |
| PENC | Pencils | \$29,302.50 | 14,126 | \$15,176.25 | \$125,023.95 | 60,272 | \$64,751.97 |
| PENS | Pens | \$161,534.67 | 25,352 | \$136,182.60 | \$685,687.01 | 107,374 | \$578,313.47 |
| Total | | \$463,734.20 | 58,310 | \$405,423.84 | \$1,984,646.05 | 248,656 | \$1,735,983.78 |

Customized Grouped by View

Defining Special Calculations

To add a total line to a View:

The data can be summarized and text labeling the data can easily be created by completing the following steps:

1. When defining a Template, choose *Sum-Sum* from the drop-down selection list in the Summary field of the data and calculation fields to be summarized.
2. Create a text field to contain the static text (for example, totals). The text field should be in Position 1 and not associated with any other fields.
3. Average, Count Max, and Min are also available for the Total Line.

The screenshot shows the 'Template Definition - Fields' dialog box. The 'Field Number' is set to 1, 'Name' is Data1, 'Position' is 1, and 'Row' is 1. The 'Band' is set to Detail. The 'Display Mask' is Money (Red) No Dec { ##,###,##0}. The 'Alignment' is Right. The 'Summary' is Sum - Sum. The 'Text Color' is Black and the 'Background' is White. The 'Field Type' is Data. There are buttons for Prior, Next, Insert, Remove, More..., Reorder, Preview, and Close.

Summary performed on data field

To define a % of total calculation:

The percent of total can easily display by creating the following expression for the calculated field:

`field "x" / sum (field "x" for all)`

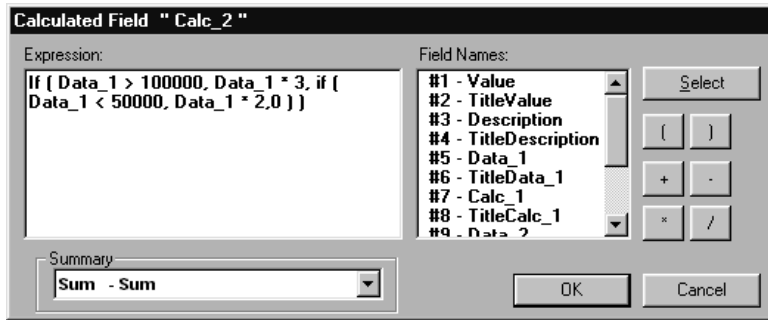
The screenshot shows the 'Calculated Field - Calc1' dialog box. The 'Expression' is Data1 / Data2. The 'Field Names' list includes #1 - Data1, #2 - Data1Hdr, #3 - Data2, #4 - Data2Hdr, #5 - Calc1, #6 - Calc1Hdr, #7 - Data3, #8 - Data3Hdr, and #9 - Data4. There are buttons for Select, { }, +, -, *, /, OK, and Cancel.

Percent of total calculation expression

To define a forecast amount using data columns:

For forecasting information, an existing data field could be used in an 'If/Then' calculation to create a forecast amount:

```
If(Data field > dollar amount, Data field
*3, if (Data field > dollar amount, Data
field *2,0))
```



Forecast amount calculation expression

Note: The above calculation will create a column to be used as forecasts. If the data field is greater than \$100,000, the forecasted amount will be the historical data amount multiplied by 3. If the data field is less than \$50,000, the forecasted amount will be the historical data amount multiplied by 2.

To define a total calculation for a calculated column:

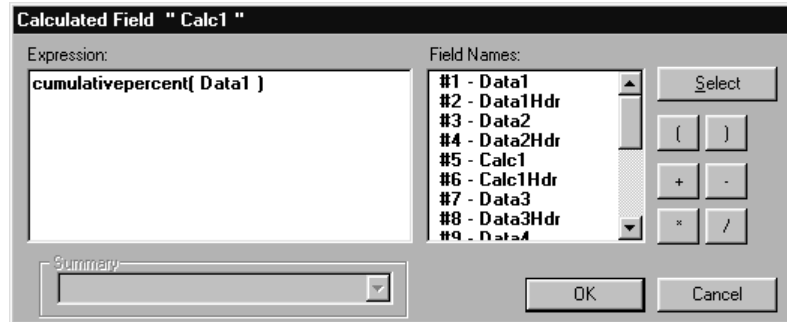
Create a calculated field and place it in the Summary band. Duplicate the calculated expression with "Sum for all" for each field included in the calculation.

```
Achievement %
Data Column Calculation = Data 1/Data 2
Column Total = Sum(Data1 for all) /
Sum(Data 2 for all)
```

To define a calculation for cumulative percent of total:

A cumulative total can display by creating the following expression for the calculated field:

```
cumulativepercent(field "x")
```

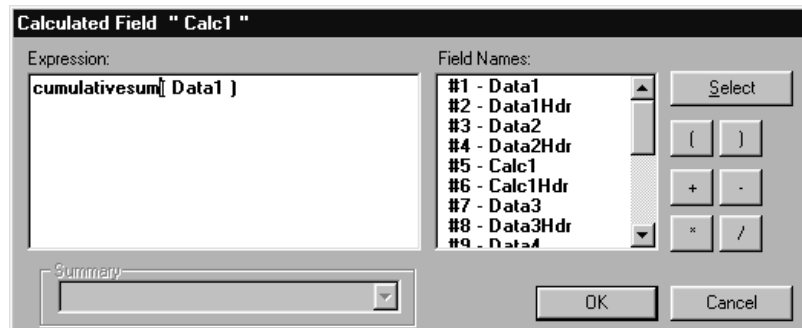


Cumulative percent of total calculation expression

To define a calculation for running total:

A running total can display by creating the following expression for the calculated field:

```
cumulativesum(field "x")
```

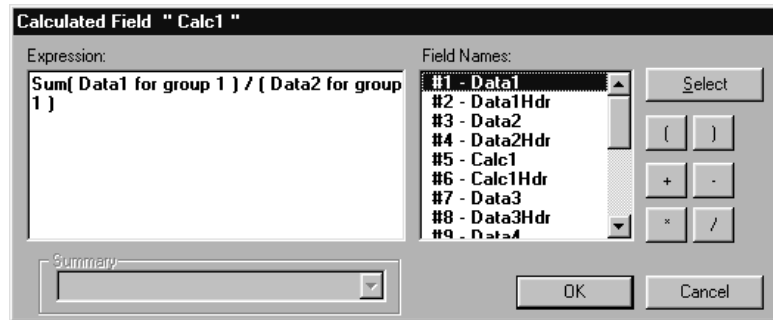


Running total calculation expression

To define a calculation for subtotaling:

Create a calculated field and place it in the Trailer1 band. Duplicate the calculated expression with Sum for group 1 for each field included in the calculation.

Sum(Data 1 for group 1)/Sum(Data 2 for group1)



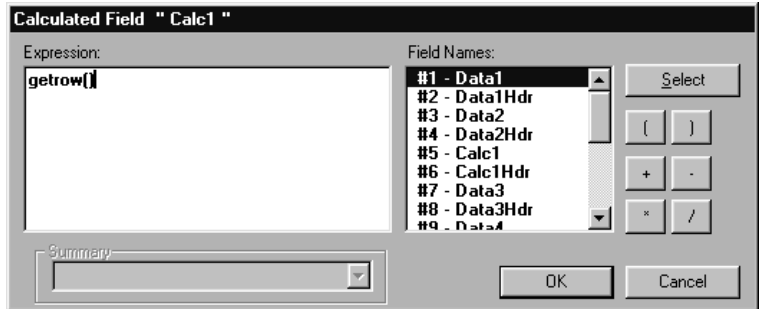
Subtotaling calculation expression

To rank values within a View:

You could easily assign ranking numbers to your Items, Customers, and so forth, by sorting on an Actual Sales data field and using the getrow function available within MMA.

1. Define a Template with a minimum of a Dimension value and a calculation field.
2. Run the Template.
3. Perform a sort on a data column and display the rows in descending order.
4. Double-click the calculated column and define the calculation expression as:
`getrow()`
 Adjust the column title as needed.

Note: For more information about adding a column, see Chapter 5 in this *User Guide*.



Ranking calculation expression

Column sorted in descending order.

Added calculated column with ranking calculation.

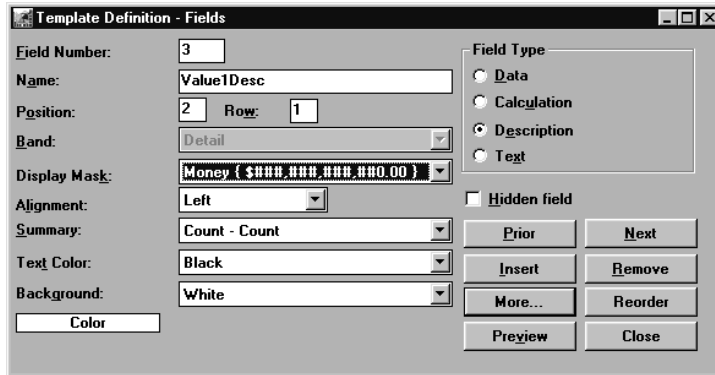
| 3 - Region | Ranking | Sales Dollars Jan 00 to Oct 00 | Units Jan 00 to Oct 00 | ASP | Sales Dollars Jan 99 to Oct 99 | Units Jan 99 to Oct 99 | ASP | % Change |
|---------------|---------|-----------------------------------|---------------------------|----------|-----------------------------------|---------------------------|----------|----------|
| South America | 1 | \$396,427.69 | 1,646 | \$240.81 | \$304,438.15 | 1,708 | \$178.24 | 95.10% |
| Asia | 2 | \$105,843.84 | 601 | \$176.11 | \$74,712.23 | 524 | \$142.58 | 23.52% |
| Canada | 3 | \$208,830.61 | 2,013 | \$103.74 | \$153,741.01 | 1,792 | \$85.79 | 20.92% |
| Europe | 4 | \$405,041.28 | 2,406 | \$168.35 | \$297,999.42 | 2,103 | \$141.70 | 18.80% |
| Australia | 5 | \$76,003.83 | 1,426 | \$53.30 | \$58,724.74 | 1,253 | \$46.87 | 13.72% |
| Midwest | 6 | \$1,380,204.88 | 10,174 | \$135.65 | \$879,841.05 | 6,984 | \$125.98 | 7.68% |
| South Central | 7 | \$639,973.81 | 5,709 | \$112.10 | \$315,476.81 | 2,934 | \$107.52 | 4.25% |
| Mexico | 8 | \$105,447.90 | 1,296 | \$81.36 | \$108,081.38 | 999 | \$108.19 | 24.75% |
| TOTAL | 36 | \$3,317,773.83 | 25,272 | \$131.28 | \$2,193,014.73 | 18,297 | \$119.86 | 9.53% |

View with ranked values

To display the number of rows within the View:

The number of rows retrieved automatically display in the status bar on the bottom of the window. You may want it to also display within the View.

1. While defining a Template, choose Count-Count from the drop-down selection list within the Summary field of the Template Definition window for the Dimension value or description.



Count performed for number of rows within View

2. The row count displays in the Summary band within the selected column of data.

| 3 - Region | Sales Dollars Jan 00 to Oct 00 | Units Jan 00 to Oct 00 | ASP | Sales Dollars Jan 99 to Oct 99 | Units Jan 99 to Oct 99 | ASP | % Change |
|---------------|-----------------------------------|---------------------------|-----------------|-----------------------------------|---------------------------|-----------------|--------------|
| South America | \$396,427.69 | 1,646 | \$240.81 | \$304,438.15 | 1,708 | \$178.24 | 35.10% |
| Asia | \$105,843.84 | 601 | \$176.11 | \$74,712.23 | 524 | \$142.58 | 23.52% |
| Canada | \$208,830.61 | 2,013 | \$103.74 | \$153,741.01 | 1,792 | \$85.79 | 20.92% |
| Europe | \$405,041.28 | 2,406 | \$168.35 | \$297,999.42 | 2,103 | \$141.70 | 18.80% |
| Australia | \$76,003.83 | 1,426 | \$53.30 | \$58,724.74 | 1,253 | \$46.87 | 13.72% |
| Midwest | \$1,380,204.88 | 10,174 | \$135.65 | \$879,841.05 | 6,984 | \$125.98 | 7.68% |
| South Central | \$639,973.81 | 5,709 | \$112.10 | \$315,476.81 | 2,934 | \$107.52 | 4.25% |
| Mexico | \$105,447.90 | 1,296 | \$81.36 | \$108,081.38 | 999 | \$108.13 | -24.79% |
| 8 | \$3,317,773.83 | 25,272 | \$131.28 | \$2,193,014.79 | 18,297 | \$119.86 | 9.53% |

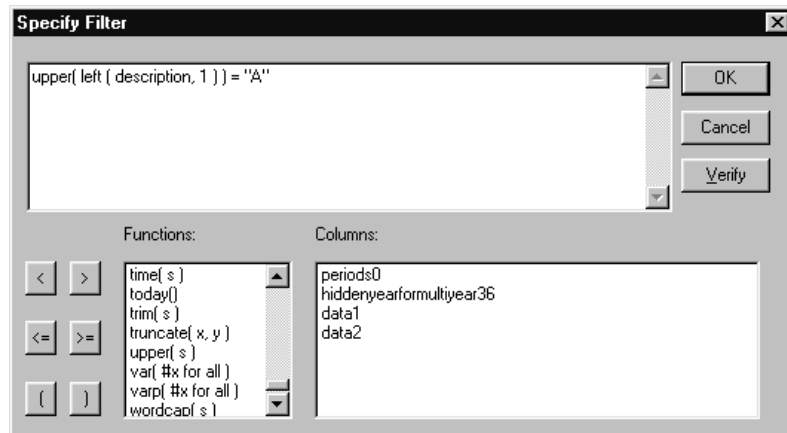
View with row count

To display only Dimension descriptions beginning with a specific letter:

You could easily view Customers or Products beginning with an "A" by applying a filter to the active View.

1. Run a View, click the filter button and define the filter expression as:
`upper (left(description, 1))="A"`
2. Click **OK** to return the View with only those Products that begin with an "A."

This same thing can be done using any letter and any column within the Template definition.

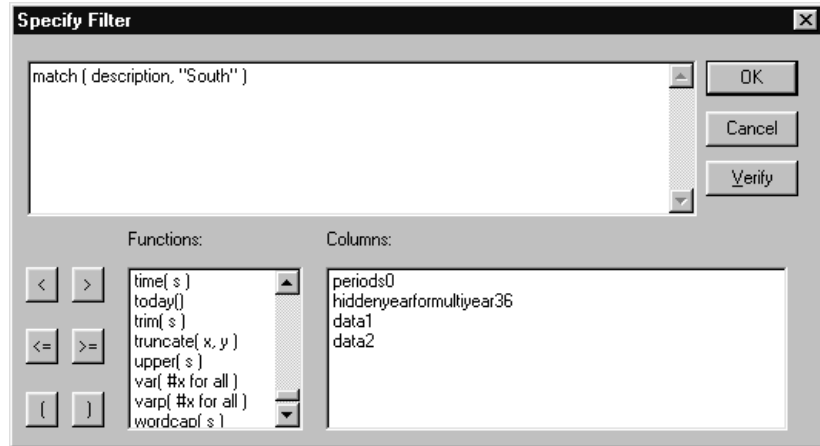


Specify Filter window

To display only Dimension descriptions containing a certain string of characters:

You could easily view Regions that contain the word South by applying a filter to the active View.

1. Run a View, click the filter button and define the filter expression as:
`Match (description, "South")`
2. Click **OK** to return the View with only those Regions where the string "South" is found.



Specify Filter window

APPENDIX A • CALCULATION FUNCTIONS

QuickLook

Use this appendix to learn how to:

- Use the calculation functions provided by *MMA*.

Note: The functions available in *MMA* were provided by PowerBuilder, the application used to develop *MMA*. If you need additional detail pertaining to each function, refer to the PowerBuilder section of *MMA DBView* online Help.

MMA Calculation Functions

The following table describes all of the calculation functions available for filtering data and creating calculated fields within Template definitions.

| Function | Definition |
|----------------------------------|---|
| abs | Calculates the absolute value of a number. |
| asc | Converts the first character of a string to its ASCII integer value. |
| ave | Calculates the average of the values of the column. |
| bitmap | Displays the specified bitmap in the DataWindow. |
| ceiling | Determines the smallest whole number that is greater than or equal to a specified limit. |
| char | Converts an integer to a character. |
| cos | Calculates the cosine of an angle. |
| count | Calculates the total number of rows in a specified column. |
| crosstabavg (Not available) | Calculates the average of the values returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabAvg can also calculate averages of the expression's values for groups of column values. |
| crosstabcount (Not available) | Counts the number of the values returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabCount can also count the number of the expression's values for groups of column values. |
| crosstabmax (Not available) | Calculates the maximum value returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabMax can also calculate the maximum of the expression's values for groups of column values. |
| crosstabmin (Not available) | Calculates the minimum value returned by an expression in the values list of the Cross Tab. When the Cross Tab definition has more than one column, CrosstabMin can also calculate the minimum of the expression's values for groups of column values. |
| crosstabsum (Not available) | Calculates the sum of the values returned by an expression in the values list of the Cross Tab. |
| cumulativePercent | Calculates the total values of the rows up to and including the current row in the specified column as a percentage of the total value of the column (a running percentage). |
| cumulativeSum | Calculates the total values of the rows up to and including the current row in the specified column (a running total). |
| date | Converts DateTime, string, or numeric data to data of type data. It also extracts a date value to a Binary Large Object (BLOB). You can use one of several syntaxes, depending on the data type of the source data. |
| Datetime | Combines a date and a time value into a DateTime value. |
| Day | Obtains the day of the month in a date value. |
| Dayname | Determines the day of the week in a date value and returns the weekday name. |
| daynumber | Determines the day of the week of a date value and returns the number of the weekday. |

| | |
|----------------|--|
| daysafter | Determines the number of days one date occurs after another. |
| dec | Converts a string to a decimal number or obtains a decimal value stored in a blob. |
| describe | Reports the values of the attributes of a DataWindow object(s) within the DataWindow object. |
| double | Converts a string to a double or obtains a double value that is stored in a blob. |
| exp | Raises <i>e</i> to the specified power. |
| fact | Determines the factorial of a number. |
| fill | Builds a string of the specified length by repeating the specified characters until the result string is long enough. |
| first | Determines the value in the first row in the specified column. |
| getrow | Reports the number of a row associated with a band in a DataWindow control or a report. |
| gettext | Obtains the text the user entered in a column in a DataWindow or form. |
| hour | Obtains the hour in a time value. The hour is based on a 24-hour clock. |
| if | Evaluates a condition and returns a value based on that condition. |
| int | Determines the largest whole number less than or equal to a number. |
| integer | Converts the value of a string to an integer. |
| isDate | Tests whether a string value is a valid date. |
| isNull | Reports whether a value of a column or expression is valid or NULL. |
| isNumber | Reports whether a value of a string is a number. |
| isRowModified | Reports whether the row is modified in the DataWindow or form.. |
| isRowNew | Reports whether the row is newly inserted in the DataWindow or form. |
| isSelected | Determines whether the row is selected. A selected row is highlighted using reverse video. |
| isTime | Reports whether the value of a string is a valid time value. |
| large | Finds a large value at a specified ranking in a column (for example, third largest, fifth, largest) and returns the value of another column or expression based on the result. |
| last | Determines the value in the last row of a specified column. |
| left | Obtains a specified number of characters from the beginning of the string. |
| leftTrim | Removes spaces from the beginning of a string. |
| len | Reports the length of a string or a Binary Large Object (BLOB). |
| log | Determines the natural logarithm of a number. |
| logten | Determines the base 10 of a logarithm of a number. |
| long | Converts the value of a string to a long. |
| lookup display | Obtains the display value in the code table associated with the data value in the specified column. |
| lower | Converts all the characters in a string to lower case. |
| match | Determines whether a string's value contains a particular pattern of characters. |

| | |
|-----------------|--|
| max | Determines the maximum value in a specified column. |
| median | Calculates the median of the values of a column. The median is the middle value in the set of values, for which there is an equal number of values greater and smaller than the median. |
| mid | Obtains a specified number of characters from a specified position in a string. |
| min | Determines the minimum value in a specified column. |
| minute | Obtains the number of minutes in the minutes portion of a time value. |
| mod | Obtains the remainder (modules) of a division operation. |
| mode | Calculates the mode of the values of a column. The mode is the most frequently occurring value. |
| month | Determines the month of a date value. |
| now | Obtains the current time based on the system time of the client machine. |
| number | Converts a string to a number. |
| page | Determines the number of the current page. |
| pageCount | Determines the total number of pages when viewing a DataWindow in Print Preview or when previewing a report. This number is also the number of printed pages if the DataWindow or report is not wider than the preview window. |
| PageAcross | Determines the number of the current horizontal page. |
| PageCountAcross | Determines the number of horizontal pages when a report or DataWindow is wider than the preview window. |
| percent | Determines the percentage that the current value is of the total of the values in the column. |
| pi | Multiplies <i>pi</i> by a specified number. |
| pos | Finds one string within another string. |
| profileint | Obtains the integer value of a setting in the specified profile file. |
| profilestring | Obtains the string value of a setting in the specified profile file. |
| rand | Obtains a random whole number between 1 and a specified upper limit. |
| randomize | Initialize the random number generation so that the rand function begins a new series of pseudo-random numbers. |
| real | Converts a string value to a real data type or obtains a real value that is stored in a Binary Large Object (BLOB). |
| relativedate | Obtains the date that occurs a specified number of days after or before another date. |
| relativetime | Obtains a time that occurs a specified number of seconds after or before another time within a 24-hour period. |
| replace | Replaces a portion of one string with another. |
| right | Obtains a specified number of characters from the end of the string. |
| rightTrim | Removes a space from the end of the string. |
| round | Rounds a number to the specified number of decimal places. |
| rowcount | Obtains the number of rows that are currently available for display in a DataWindow control, in other words, the number of rows in the DataWindow's primary buffer. |

| | |
|-------------|--|
| rowheight | Reports the height of a row associated with a band in a DataWindow control. |
| second | Obtains the number of seconds in the seconds portion of a time value. |
| secondafter | Determines the number of seconds one time occurs after another. |
| sign | Determines the sign of a number. Sign reports whether a number is negative, zero, or positive. |
| sin | Calculates the sine of an angle. |
| small | Finds a small value at a specified ranking in a column (for example, third smallest, fifth smallest) and returns the value of another column or expression based on the result. |
| space | Builds a string of the specified length whose value consists of spaces. |
| sqrt | Calculates the square root of a number. |
| stdev | Calculates an estimate of the standard deviation for the specified column. Standard deviation is a measurement of how widely values vary from average. |
| stdevp | Calculates the standard deviation for the specified column. Standard deviation is a measurement of how widely values vary from average. |
| string | Formats data as a string according to a specified display format mask. You can convert and format date, DateTime, numeric, and time data. You can also apply a display format to a string. |
| sum | Calculates the sum of the values in the specified column. |
| tan | Calculates the tangent of an angle. |
| time | Converts a string to a time data type. |
| today | Obtains the system date. |
| trim | Removes leading and trailing spaces from a string. |
| truncate | Truncates a number to the specified number of decimal places. |
| upper | Converts all the characters in a string to uppercase. |
| var | Calculates an estimate of the variance for the specified column. The variance is the square of the standard deviation |
| varp | Calculates the variance for the specified column. The variance is the square of the standard deviation. |
| wordcap | Sets the first letter of each word in a string to a capital letter and all other letters to lowercase (for example, ROBERT E. LEE would be Robert E. Lee). |
| year | Determines the year of a date value. |

Notes

GLOSSARY OF TERMS

Administration

The *MMA* application is used to define and maintain the Master Files and other vital setup information.

Authority

MMA has security on the levels of data, user-defined lists, and Template maintenance. The authority is dependent on the user profile. For example, if Sales Representatives should not be viewing Item information, do not give them authority to that category when defining the user profile.

Automatic Drill-Down

When a row is double-clicked on within a View and a retrieval is processed for the next defined Dimension.

Background

The area behind and outside the active window, including the desktop. The second color defined during your implementation defaults as the background color within *DBView*.

Band

The physical positioning of data on the *DBView* screen. The three main bands are the Header, Detail, and Summary bands. If the View contains subtotaling, there are additional bands: HeaderN and TrailerN.

Calculated Field

A field type that contains a calculation between data fields. You can Add, Subtract, Multiply, or Divide fields or groups of fields.

Cascading

All windows display in a cascading manner on a single screen.

Category

Identifies the comparative information stored in *MMA*, for example, Actual Sales.

Check Box

A small box that can be selected or cleared. This box is a toggle which turns options ON and OFF.

Click

To press and release a mouse button quickly.

Clipboard

A temporary storage location used to transfer text or graphics from one application to another. Data can be transferred to the Clipboard by using the Cut or Copy command and inserted from the Clipboard by using the Paste command. Items put into the Clipboard remain there until the Cut or Copy command is selected again, or until you exit Windows™.

Color Bar

A bar of colors located at the bottom of any *DBView* window. The color bar can be used to change the color of any field by selecting the field and then selecting the desired color on the color bar. The user determines whether or not the color bar displays on the window by selecting View | Change View | Show Color Bar.

Cross Tab Template

A Template format which displays data for two levels of summarization in a matrix format. One level displays down the rows and the other in the columns.

Data Field

A field type which is downloaded from your *MMA* database, for example, Sales Dollars, Sales Units, Cost, and so forth.

Data File

The *MMA* file which contains transaction records. For example, Sales, Quantity, Cost, and so forth.

Data Summary Levels (DSL's)

Definitions of how data is summarized in the history files and are used to tune your system for better performance. DSL's are defined by the system administrator during implementation.

DBView

The Inquiry module used to look at the data stored within *MMA*.

Default Drill-Down Path

The automatic drill-down path specific to each user. When a row is double-clicked on, the predefined default drill down path determines the next Dimension to display.

Default Settings

Settings that are supplied with *DBView* and are specific to each user. For example, if you turn the color bar ON, it will always display by default. The defaults pertaining to the appearance of the View only display when creating a new View from a Template. The customization of the View's appearance can be saved as part of the View.

Description Field

A field type that contains information relating to the Dimension level selected, for example, Dimension value, short description, and additional static fields.

Desktop

The local PC that contains and displays Views which have been associated with an icon.

Detail Band

The center area of the *DBView* window that usually contains the historical data. For example, Sales, Budgets, Forecasts, and so forth.

Dimension

Identifies a level of summarization in *MMA* that you can use to view and analyze your business. For example, Customer and Product.

Display Mask

Determines how data is formatted for display, for example, Percentage, Money, and so forth. Display Masks are defined by the system administrator during implementation.

Double-Click

To rapidly press and release a mouse button twice without moving the mouse. Double-clicking carries out an action, such as starting an application or automatically drilling down on a row of data.

Drag

To move an item on the screen by selecting the item and then pressing and holding down the mouse button while moving the mouse. For example, you can move a column within a View from one position to another by dragging it to the desired position.

Drill-Down

A way to navigate through levels of data. Drilling can actually be up, down, or lateral. The more you drill, the more detailed the information becomes.

Interactive Drill-Down Path

The area of the *DBView* window that indicates the Dimension levels that have been drilled through to access the data currently displayed.

dtg

The file format of *DBView* ViewGroups.

dti

The file format of the *DBView* desktop.

dtv

The file format of *DBView* Views.

Dynamic User List

User specified criteria that must be met in order to be included in a User List. This eliminates the need to manually maintain User Lists.

Field Definitions

Additional Master File information related to a Dimension level. *MMA* allows a maximum of 35 additional field definitions per Dimension. For example, Address, Zip Code, and Contact are Customer field definitions. See also *Pickup Fields*.

Field Type

There are four different types of fields that are mutually exclusive of one another. When defining a Template, the field type must be selected. For example, Data, Calculation, Description, and Text.

Font

A set of letters, numbers, punctuation marks, and symbols that are a given size and design. The default font for a View is MS Sans Serif, but this can be changed by the user.

Function Button

In a dialog box, a button that carries out an action. A function button has a label that describes the action it carries out. For example, Save, Close, Filter, and Sort.

Header Band

The top area of the *DBView* window which usually contains the column titles of the data displayed in the Detail band.

Hidden field

A field which is necessary for the Template definition but not needed to be viewed by users.

Highlighted

Indicates that the data is selected and will be affected by your next action. Highlighted text appears in reverse video on the monitor.

Icon

Pictorial representations of frequently used *DBView* functions. Icons are displayed on the toolbar within *DBView*.

In Place Drilldown

A check box on the User Defaults window which controls the manner in which windows open as you drill through dimensions. When "In Place Drilldown" is turned ON (the system default), the current window is updated with each new window.

Indexes

Aid in performance tuning of *MMA*. A commonly taken drill down path is recorded so it processes faster. Indexes are defined by the system administrator during implementation.

Information Box

Information displayed in the upper right corner of the *DBView* window informing you of any sorting or filtering that has been applied to the View, as well as the number of rows that are summarized or hidden from the display.

Left-click

Single click of the left mouse button selects rows and columns for the purpose of drill down, graphing, copy to Clipboard, and so forth.

Master File Information

Information specific to each Dimension value which comes from the STCSMF10, STCSMF11, and STCSMF35 tables. For example, Dimension key value, short and long descriptions, and additional field definitions.

MMA

The MAPICS application used for tracking all different types of data and storing it in a data warehouse.

Multi-currency

MMA can store and display your data in any previously defined currency format.

Nested User List

Include Dimension values as well as other User Lists. User can drill down on a row that contains a User List to see the values within that User List.

Notepad

A *DBView* feature that allows you to keep detailed information regarding a value within a Dimension. When within a View, the additional information kept in the Notepad is accessed by choosing Information | Notepad.

Period Based Template

A Template format that displays data broken down into user-defined period buckets. The periods display down the rows of the first column.

Periods

The user-defined time slices used to accumulate data within *MMA*. *MMA* can have up to 13 period buckets.

Pickup Fields

Additional Master File information related to a Dimension level. See also *Field Definitions*.

Preview

The final step of Template definition. The preview displays a sample of the Template format and constructs the Template structure for use at runtime.

Propagate

The check box located immediately right of the Year and Period fields on the Data Field Detail Window. If there is a check mark in the propagate check box, all subsequent date fields will have the same edit made to them.

Radio Button

A small round circle that can be selected. This circle identifies an item that is selected over the other available mutually exclusive items.

Regular Template

A Template format which displays data for one or more levels of summarization with the option of subtotalling.

Right-click

A single click of the right mouse button selects a field and displays the miscellaneous pop-up menu.

Run

A command which retrieves the requested data. Click the Runner button or choose File | Run to retrieve data and display it in the customized View.

Security

Only authorized users can delete and edit existing Template definitions, can access certain types of data, and can use User Lists created by other people. Security is backward compatible, which means that if authority is not specified to Templates and data, all users have access to them.

Server

A computer that provides disk space, printers, or other services to computers over a network.

Smart Text

Text labeling data within a View can be created using variable codes so it dynamically changes as the data changes.

Static User List

A user-defined list of static Dimension values. The user specifically includes each Dimension value.

Status Line

A line of information located on the bottom of the *DBView* window displaying the status of the active function. For example, request a retrieval, and the number of rows retrieved will display in the status line.

STCS.INI file

A text file that contains configuration commands used within *MMA*. Commands in the *STCS.INI* file enable or disable system features and set limits on various items.

Style Bar

An interactive bar on the View which aids in the customization of a View. The style bar contains the field name, font style and size, icons for bolding, italicizing, underlining, and positioning the text displayed in a cell of the View. The user can determine whether or not the style bar displays on the View.

Summary Band

The bottom area of the *DBView* window that usually contains any requested summarization being performed by *MMA*, for example; Totals or Averages of the data displayed down the rows.

Template

The generic format of data that is saved globally so all users can have access to them. Only authorized users can create and maintain Template definitions.

Text Field

A type of field that contains user-defined text used to label a row or column of data. Static text can be keyed in, or dynamic variables can be used to allow the titles to change as the requested data changes.

Tile

A way of arranging open windows so that no windows overlap but all windows are visible. Each window takes up an equal portion of the screen.

Toolbar

The area of the *DBView* window that displays the various icons that are used to complete frequently taken actions.

Traffic Lights

A feature within *DBView* that uses colors to alert the user when the data meets user-defined conditions. The traffic light conditions are created using any column in the Template definition, and can be applied during Template creation or while running a View.

Trailer Band

The bottom area of the *DBView* window containing any subtotalling requested.

User List

A user-defined list of Dimension values. User Lists offer the flexibility of retrieving data for a specific or fluctuating list of values. For example, if you are a Sales Manager and only want to view your Sales Representatives, create a User List that contains only your Sales Representatives. There are three types of User Lists: Static, Dynamic, and Nested.

Values

Identifies a value in *MMA* which you can use to track, compare, and analyze your business information; for example; Cost and Quantity.

View

A customized Template format which resides on your local PC. Views can be opened as a file and then run, or associated with an icon on your desktop. The views and their associated icons can then be grouped together and displayed within a user-defined group.

View Groups

Similar ViewItems can be grouped together and displayed in a ViewGroup window on your desktop.

View Item

A View file which has been associated with an icon and saved to the desktop. Double-click on a View item to automatically run the View and display the data in the customized format.

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MMA User's Guide

Part 3 - Technical Reference Manual

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CHAPTER 1 • BEFORE YOU BEGIN

QuickLook

Use this chapter to learn how to:

- Identify who should read this manual.
- Recognize document conventions.
- Navigate through *MAPICS XA Market Monitoring and Analysis (MMA)* using the keyboard and the mouse.

Who Should Read this Book

MMA is a Microsoft Windows® based data analysis tool designed to provide a quick and effective response to sales trends. This manual is intended for any user responsible for implementing or administering *MMA*. This list includes:

- System administrators responsible for the setup and maintenance of the *MMA* database.
- Power users responsible for defining *MMA DBView* Templates/Views.

What to Know Before Using this Product

The instructions for *MMA* assume that you know how to use Windows. Additionally, if you are using *MMA* with the AS/400, you should be familiar with several AS/400 functions.

Windows 95, Windows 98, and Windows NT

You should be able to use all of the basic Windows features and functions, for example:

- **Windows Desktop** - Perform all actions on a window, such as sizing, scrolling, selecting, maximizing, minimizing, opening, closing, and using the mouse or keyboard keys.
- **Icons** - Double-click on icons to open windows, applications, folders, documents, or files using the mouse.
- **Menus** - Click on menu titles located on the menu bar to access drop-down menus.
- **Start Menu** - Method of starting applications and programs.
- **Command buttons** - Click on command buttons that are labeled with text, an icon, or both to perform an action.
- **List box** - Use a list box to select an item from the list of choices displayed. If available, scroll up and down to view the entire list.
- **Text box** - Use a text box to type or edit a text value.
- **Dialog box** - Use a dialog box to exchange information or dialog with Windows or the application. Also, use to enter additional information needed to perform a task. Typically includes **OK** and **Cancel** command buttons.
- **Clipboard** - Use the Clipboard to cut and copy information (text or graphics). Windows stores copied information in the clipboard and then lets you paste it into another place.
- **Control Panel** - Use the Control Panel to customize Windows' options, such as screen colors, fonts, mouse, desktop pattern, keyboard rate, date and time, network options, and so forth.
- **Explorer** - Use Explorer to handle administrative tasks, such as locating, copying, moving, and deleting files.

AS/400

If you are using *MMA* in conjunction with the AS/400, you should be familiar with these AS/400 functions:

- Communications (routers) between the AS/400 and the PC.
- OS/400 operating system.
- Program Development Manager (PDM).
- Source Entry Utility (SEU).
- Control Language (CL) commands.
- Command line.
- AS/400 security.

Document Conventions

Text, keyboard, and mouse conventions are employed to help you learn and use *MMA*.

Text Conventions

The following text conventions are used:

| | |
|---------------------|--|
| <i>Product Name</i> | Italics indicate MAPICS products, references to other manuals, new terms, and variables. |
| a:\setup | Bold type indicates information you type. |
| Close | Arial bold type indicates command buttons you click. |
| File Run | The symbol indicates the sequence you use to select the menu items listed. In this example, you would select the File menu and then select the Run item. |
| ENTER | Capital letters indicate keys you press or programs, files, directory names, or drive letters. |
| ADDLIBLE | Courier New type indicates code-based information, such as system messages, field syntax, macros, or commands. |

[Note, Recommendation, Tip]: Notes containing important information are bordered by lines on the top and bottom.

| |
|--|
| Caution: Caution messages are bold and enclosed in a box. |
|--|

Keyboard Conventions

Keys you press on the keyboard are shown in capitals (ENTER, ALT, and so forth). Other keyboard conventions addressed here may differ depending on the type of keyboard you are using.

| | |
|----------------------------|--|
| Shortcut keys | Press ALT and the underlined letter of a menu to access the menu. For example, press ALT+F to display the <u>F</u> ile Menu. |
| TAB key | Press TAB to move from field to field. |
| ENTER key | Press ENTER in place of a command. |
| KEY+KEY | Use key combinations to perform an action. Press and hold down the first key, and then press the second key. For example, press SHIFT+ENTER. |
| ESC Key | Press ESC to stop a function in process or to cancel an operation. |
| Navigation keys | Press arrow keys, HOME, END, PAGE UP, or PAGE DOWN to move around. |
| Numeric keypad keys | Use the numeric keypad on your keyboard to enter numeric values. Be sure the NUM LOCK key on your keyboard is turned on. |

Mouse Conventions

The following terms explain how you use the mouse to access or process information.

| | |
|----------------------|--|
| Click | Use the mouse to place the arrow over an item, such as an icon, button, file, or field. Click the left mouse button one time to select (or highlight) the item. |
| Double-click | Use the mouse to place the arrow over an item. Click the left mouse button <i>two times in rapid succession</i> to select the item, or start an action. |
| Drag and drop | Use the mouse to place the arrow over an item. Click the left mouse button and continue to hold down the left mouse button as you move the item to a new position on the screen. Release the left mouse button to drop the item into the new position. |

Notes

CHAPTER 2 • GETTING STARTED

QuickLook

Use this chapter to learn how to:

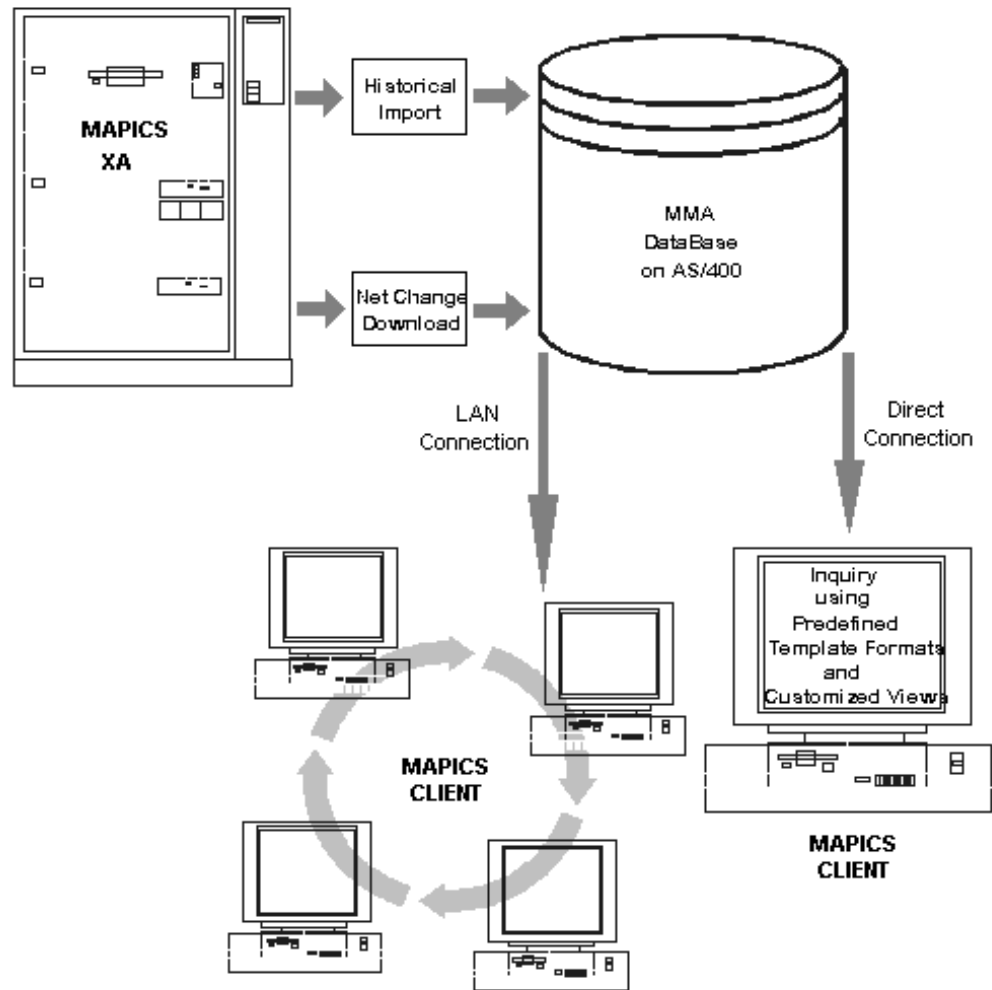
- Familiarize yourself with *MMA* features.

What is *MMA*?

MMA is a client server application that combines a multi-dimensional data warehouse with powerful analysis tools. Through the use of user-definable levels of analysis and flexible definition of categories, *MMA* captures data from your primary business systems and combines it into a single data warehouse. The *MMA* analysis tools allow you to then analyze and compare your data based on your unique business structure. Features are:

- Best Fit Analysis
- Customized Desktop
- File Export Capabilities
- Multi-currency
- Variable Periods
- Security/Authority
- Data Entry
- Data Copy
- Realignments

MMA Functional Overview



CHAPTER 3 • INTERNAL DATABASE

QuickLook

Use this chapter to:

- Learn about base tables.
- Become familiar with the three sections of the Sales Summary Table:
 - Structure Control Key of the Header Table.
 - Dimension Data Key of the Header Table.
 - Values of the Detail Table.
- Determine Data Summary Levels (DSL's) and Indexes.

Base Tables

Table Name: DTFT

Description: Contains table name and types for utility tables by structure code. Includes full pending, extract pending, copy pending, and change set data tables.

| Column Name Long Description | Column Name | Type |
|------------------------------------|-------------|--------------|
| Structure Code | SC | varchar(2) |
| Table ID | TABLEID | varchar(10) |
| Table Name | TABLENAME | varchar(10) |
| File Type Description | FTDESC | varchar(30) |
| Create Date | CRTDATE | decimal(8,0) |

Table Name: DTVBX

Description: View Buckets

Associates a bucket or a range of buckets with each item of a ViewSet for all ViewSets in the ViewGroup. (For example, Bucket 1 = January of month, Bucket 1-3 = Quarter 1 of quarters, Bucket 13 = Week 1 of weeks.)

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-----------|
| ViewGroupID | VGID | smallint |
| ViewSetIDforYearSet | YRVSID | smallint |
| ViewSetYearSeq | YRVSSEQ | smallint |
| ViewSetSubYearSeq | SUBYRVSSEQ | smallint |
| ViewSetID | VSID | smallint |
| ViewSetSeq | VSSEQ | smallint |
| StartBucket | STRBKT | smallint |
| EndBucket | ENDBKT | smallint |
| StartDate | STRDATE | timestamp |
| EndDate | ENDDATE | timestamp |
| RelativeViewSetID | RELVSID | smallint |
| RelativeViewStart | RELVSST | smallint |
| RelativeViewEnd | RELVSEND | smallint |
| Circular Set Number | VSCID | smallint |

Table Name: DTVG

Description: View Groups

Defines a set of ViewSets, often only one set per group. (For example, periods.)

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| ViewGroupID | ID | smallint |
| ViewGroupDescription | LDESC | varchar(30) |
| CurrencyExchangeGroupID | EGID | smallint |

Table Name: DTVS

Description: ViewSets

Defines a contiguous range of buckets called ViewSetItems. (For example, months, weeks, and quarters.)

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| ViewSetID | ID | smallint |
| ViewSetDesc | LDESC | varchar(30) |
| ViewSetDisplaySeq | DSPSEQ | smallint |
| ViewSetType | SETTYPE | smallint |
| AbsoluteViewSetID | ABSSETID | smallint |

Table Name: DTVSCUR

Description: Defines a ViewSetItem to be current.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| ViewGroupID | VGID | smallint |
| ViewSetIDforYearSet | YRVSID | smallint |
| ViewSetYearSeq | YRVSSEQ | smallint |
| ViewSetID | VSID | smallint |
| ViewSetSeq | VSSEQ | smallint |
| ViewSet Current ID | VSCID | smallint |

Table Name: DTVSI

Description: ViewSetItems

Defines the individual members of a ViewSet. (For example, January, Week 1 and Quarter 1.)

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| ViewSetID | VSID | smallint |
| ViewSetSequence | SEQ | smallint |
| ViewSetSequenceShortDesc | SDESC | varchar(10) |
| ViewSetSequenceLongDesc | LDESC | varchar(30) |
| BasedOnCurrentItemOffset | OFFSET | smallint |
| CurrentFlag | FLAG | smallint |
| StartDate | STRDATE | timestamp |
| EndDate | ENDDATE | timestamp |

Table Name: DTSS

Description: Structure Code Definition

Defines structure code descriptions, Dimensions, number of buckets, structure code type, and circular characteristics.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| Structure Code | SC | varchar(2) |
| Description | DESCRIPTION | varchar(30) |
| Hierarchy #1 | HR1 | integer |
| Hierarchy #2 | HR2 | integer |
| Hierarchy #3 | HR3 | integer |
| Hierarchy #4 | HR4 | integer |
| Hierarchy #5 | HR5 | integer |
| # of Buckets | BUCKETS | integer |
| Base Type | BASE | varchar(1) |
| Bucket # Before | BKTSB | integer |
| Bucket # After | BK TSA | integer |
| Bucket # Circular | BKTSC | integer |

Table Name: DTTB

Description: Defines tables by structure code for creation purposes.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|--------------|
| Structure Code | SC | varchar(2) |
| Table Format | TSDESC | varchar(30) |
| DIM Table Name | DIMTABLE | varchar(10) |
| Value Table Name | VALTABLE | varchar(10) |
| Long Prefix For Table | LPREFIX | varchar(10) |
| Short Prefix For Table | SPREFIX | varchar(5) |
| Year For Table | YY | varchar(5) |
| DSL For Table | DSL | varchar(10) |
| Creation Date | CRTDATE | decimal(8,0) |
| Key Table Name | KEYTABLE | varchar(10) |

Table Name: FREORGAN

Description: Lists header and detail files that will have to reorganize physical file member execute.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| File Reorganize Structure Code | FRSC | char(2) |
| File Reorganize Header File | FRHDR | char(10) |
| File Reorganize Detail File | FRDTL | char(10) |

Table Name: MOVMS0PND

Description: Master Extract Descriptions

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|--------------|
| Move Pending Master 0 | TEXTDATA | varchar(105) |

Table Name: MOVMS1PND

Description: Master Extract Pickup Fields

| Column Name Description | Column Name | Type |
|----------------------------|-------------|--------------|
| Move Pending Master 1 | TEXTDATA | varchar(493) |

Table Name: MOVMS2PND

Description: Master Extract Previous Levels

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|---------------|
| Move Pending Master 2 | TEXTDATA | varchar(1848) |

Table Name: MOVMS3PND

Description: Master Extract Pickup Fields

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|---------------|
| Move Pending Master 3 | TEXTDATA | varchar(1113) |

Table Name: STCSAU10

Description: Audit Report File

Contains server information including start and end times, number of records, and total hash values imported.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|---------------|
| Category | CATEGORY | char(2) |
| Pending Start Date | PDSDATE | decimal(7,0) |
| Pending Start Time | PDSTIME | decimal(6,0) |
| Pending End Date | PDEDATE | decimal(7,0) |
| Pending End Time | PDETIME | decimal(6,0) |
| Pending Hash Total | PNDAMT | decimal(22,3) |
| Pending Number Records | PNDNRCD | decimal(13,0) |
| Move Start Date | MVSDATE | decimal(7,0) |
| Move Start Time | MVSTIME | decimal(6,0) |
| Move End Date | MVEDATE | decimal(7,0) |
| Move End Time | MVETIME | decimal(6,0) |
| Active | ACTIVE | char(1) |

Table Name: STCSAU11

Description: DSL Audit Report File

Contains server information by DSL including last update, start and end time, last number of records processed, and last total value processed.

| Column Name Long Description | Column Name | Type |
|------------------------------------|-------------|---------------|
| Category | CATEGORY | char(2) |
| DSL | DSL | char(3) |
| DSL Start Date | DSLSDATE | decimal(7,0) |
| DSL Start Time | DSLSTIME | decimal(6,0) |
| DSL End Date | DSLEDATE | decimal(7,0) |
| DSL End Time | DSLETIME | decimal(6,0) |
| DSL Hash Total | DSLAMT | decimal(22,3) |
| Number of DSL Records | DSLNRCD | decimal(13,0) |
| Active | ACTIVE | char(1) |

Table Name: STCSBT10

Description: Contains value definition.

| Column Name Long Description | Column Name | Type |
|------------------------------------|--------------|-------------|
| Base Type | BASETYPE | varchar(3) |
| Short Description | BTSDESC | varchar(5) |
| Medium Description | BTMDESC | varchar(15) |
| Long Description | BTLDESC | varchar(40) |
| Sequence Number | BTSEQ | smallint |
| Edit ID | BTEDITID | smallint |
| View Currency | VIEWCURRENCY | smallint |
| Calculated Value | CALVALUEFLAG | char(1) |

Table Name: STCSCL10

Description: Import Calendar Files

Contains calendar-processing information that converts transaction date to bucket number.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|--------------|
| End Date | ENDDAT | decimal(7,0) |
| Bucket # | SLSPER | decimal(3,0) |
| Year | SLSYR | decimal(6,0) |
| Structure Code | SCODE | char(2) |
| Start Date | STRDAT | decimal(7,0) |

Table Name: STCSCT10

Description: Utility Control

Client and server communicate the submission of the utility program through this table.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|--------------|
| Control ID | ID | smallint |
| Control Type | CTLTYPE | smallint |
| Status | STATUS | smallint |
| Category | DATATYPE | varchar(10) |
| Year String | YEARSTR | varchar(254) |
| DSL String | DSLSTR | varchar(254) |
| Period String | PERIODSTR | varchar(254) |
| Element String | ELEMSTR | varchar(252) |

Table Name: STCSDATE

Description: Database Create Date

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|---------|
| Database Create Date | DBCRTDATE | integer |

Table Name: STCSDBCRCR
Description: Database Create Date

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|---------|
| Database Create Date | DBCRTDATE | integer |

Table Name: STCSDE10
Description: Contains value information that is specific to each category.

| Column Name Long Description | Column Name | Type |
|---------------------------------|--------------|-----------|
| Category | DATATYPE | char(10) |
| Value | BASETYPE | char(10) |
| Short Description | SDESC | char(5) |
| Medium Description | MDESC | char(15) |
| Long Description | LDESC | char(40) |
| Sequence Number | SEQ | smallint |
| Edit ID | EDITID | smallint |
| Data Source ID | ID | smallint |
| View Currency | VIEWCURRENCY | smallint |
| Formula for Calculated Element | CALFORMULA | char(255) |
| View Group ID | DEVGID | smallint |
| Planning Maintainable | MAINTAINABLE | char(1) |
| Write back capabilities | IUPDATE | char(1) |
| Rounding Factor | RFID | Il6 |

Data Source Tables

Table Name: STCSDT11

Description: Data Sources

Defines Dimensions, number of buckets, and lowest level DSL for a data source.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| DataSourceID | ID | smallint |
| DataSourceDescription | DESCRIPTION | varchar(32) |
| DimensionMap1_31 | HR1 | integer |
| DimensionMap32_62 | HR2 | integer |
| DimensionMap63_93 | HR3 | integer |
| DimensionMap94_124 | HR4 | integer |
| DimensionMap125_156 | HR5 | integer |
| NI_bkts | BKTS | smallint |
| NI_bktype | BKTTYPE | smallint |
| Low Level DSL | LOWLVDSL | char(3) |

Table Name: STCSDT12

Description: Data Source Tables

Associates a list of data warehouse tables to a data source and defines start and end year, number of buckets, associated ViewGroups, and sparse or non-sparse format.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| DataSourceID | ID | smallint |
| DataSourceSequence | SEQ | smallint |
| DimensionTable | HIERTBL | varchar(32) |
| ValueTable | DATATBL | varchar(32) |
| DimensionTableStatisticsTable | HRIDTBL | varchar(32) |
| DimensionTableStartYear | STRYR | smallint |
| DimensionTableEndYear | ENDYR | smallint |
| ViewGroupID | VGID | smallint |
| ValueBuckets | BUCKETS | smallint |
| Value Table Type | DATATBLTYP | char(1) |

Table Name: STCSDT13

Description: Associates a DSL to a data warehouse table.

| Column Name Long Description | Column Name | Type |
|------------------------------------|-------------|-------------|
| DataSourceID | ID | smallint |
| DataSourceSequence | SEQ | smallint |
| DataSummaryLevel | DSL | varchar(10) |

Table Name: STCSDT14

Description: Associates a data source to a structure code.

| Column Name Long Description | Column Name | Type |
|------------------------------------|-------------|------------|
| ID | ID | smallint |
| Structure code | SC | varchar(2) |

Table Name: STCSDT15

Description: Last update dates and counts for header and detail files to a set of data warehouse tables.

| Column Name Long Description | Column Name | Type |
|------------------------------------|-------------|-------------|
| DataSummaryLevel | DSL | varchar(10) |
| YearID | YEARID | smallint |
| Category | CATEGORY | varchar(10) |
| ID | ID | smallint |
| Sequence | SEQ | smallint |
| Count1 | COUNT1 | integer |
| Count2 | COUNT2 | integer |
| LastUpdate Date | LASTUPD | timestamp |

Table Name: STCSDT16

Description: Data Source Control Table

Controls server load type per data source.

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Data Source ID | ID | smallint |
| Load Type (load Add DSL Change Set) | LOADTYPE | char(1) |
| Run Number | RUNID | smallint |
| Segment | SEGMENTNUM | smallint |
| Completion Code | COMPLETE | char(1) |
| Last Update Date | UPDDATE | timestamp |

Used for Categories, Dimensions, Values, and DSL's

Table Name: STCSCD10

Description: Copy Category Authority

| Column Name Long Description | Column Name | Type |
|------------------------------------|-------------|----------|
| From Category | FDATATYPE | char(10) |
| To Category | TDATATYPE | char(10) |

Table Name: STCSDS10

Description: Data Summary Level Maps
Associates a set of Dimensions with a DSL. (For example, 010 = Division,Region.)

| Column Name Long Description | Column Name | Type |
|------------------------------------|-------------|-------------|
| DataSummaryLevel | DSTYPE | varchar(10) |
| DSLMap1_31 | DSMAP1 | integer |
| DSLMap32_62 | DSMAP2 | integer |
| DSLMap63_93 | DSMAP3 | integer |
| DSLMap94_124 | DSMAP4 | integer |
| DSLMap125_156 | DSMAP5 | integer |

Table Name: STCSDT10

Description: Categories

Defines the categories available in the system. (For example, Sales, Budgets, Forecasts, and so forth.)

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| CategoryCode | DATATYPE | varchar(10) |
| CategoryShortDescription | DTSDESC | varchar(5) |
| CategoryMediumDescription | DTMDESC | varchar(15) |
| CategoryLongDescription | DTLDESC | varchar(40) |
| CategoryUpdateID | DTUPDID | varchar(10) |
| NI_dtcostlevel | DTCOSTLEVEL | smallint |
| NI_dtcostflag | DTCOSTFLAG | varchar(1) |
| NI_dtentryflag | DTENTRYFLAG | varchar(1) |
| NI_dtcosthrchy | DTCOSTHRCHY | varchar(1) |
| NI_dtuniteqv | DTUNITEQV | varchar(1) |
| NI_dtcostprov | DTCOSTPROV | varchar(1) |
| NI_dtcosttype | DTCOSTTYPE | varchar(2) |
| CategoryLowLevelDSL | DTLOWLVLSL | varchar(3) |
| DataSourceID | DTID | smallint |
| Calculated Category Flag | CALVALUEFLAG | char(1) |
| Planning Category | PLANNING | char(1) |

Table Name: STCSHR10

Description: Dimensions

Defines all of the Dimensions used by all of the categories in the system.

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Dimension | HRLEVEL | smallint |
| DimensionShortDesc | HRDESC | varchar(5) |
| DimensionMediumDesc | HRMDESC | varchar(10) |
| DimensionLongDesc | HRDESC | varchar(40) |
| DimensionLength | HRLENGTH | smallint |
| DimensionMaster | HRPROGRAM | varchar(32) |
| NI_hrdisplay | HRDISPLAY | varchar(1) |
| NI_hrdefault | HRDEFAULT | varchar(25) |
| Pl_Default | PLDEFAULT | char(25) |
| PreviousDimension1_31 | HRPREV | integer |
| PreviousDimension32_62 | HRPREV2 | integer |
| PreviousDimension63_93 | HRPREV3 | integer |
| PreviousDimension94_124 | HRPREV4 | integer |
| PreviousDimension125_156 | HRPREV5 | integer |

Table Name: STCSIX10

Description: Index Header

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Index Name | INDEXNAME | varchar(64) |
| Index ID | INDEXID | smallint |
| Database Name | DBNAME | varchar(10) |
| Table Name | TABlename | varchar(64) |
| Index Type | INDEXTYPE | smallint |
| Call Type | CALLTYPE | smallint |
| Column Count | COLCOUNT1 | smallint |
| Log Time | LOGTIME | timestamp |

Table Name: STCSIX11

Description: Index Details

| Column Name Long Description | Column Name | Type |
|---|------------------------|-------------|
| Index ID | INDEXID | smallint |
| Column Name | COLNAME | varchar(64) |
| Column Sequence Number | COLSEQ | smallint |
| Collation | COLLATION | smallint |

Table Name: STCSIL10

Description: Inquiry Log

| Column Name Long Description | Column Name | Type |
|---|------------------------|-------------|
| User ID | USERID | varchar(10) |
| User Group | USERGROUP | varchar(10) |
| Data Summary Level | DSL | varchar(10) |
| Year ID | YEARID | smallint |
| Category | CATEGORY | varchar(10) |
| Log ID | LOGID | integer |
| Template ID | TEMPLATEID | varchar(32) |
| Drill Down Path | DDPATH | varchar(64) |
| Best Fit | BESTFIT | smallint |
| Index Usage | INDEXUSAGE | varchar(32) |
| Table Usage 1 | TABLEUSAGE1 | varchar(32) |
| Table Usage 2 | TABLEUSAGE2 | varchar(32) |
| Rows In | ROWSIN | integer |
| Columns In | COLSIN | smallint |
| Retrieve Time | RTVTIME | integer |
| Log Time | LOGTIME | varchar(32) |

Table Name: DTIX02

Description: Index Details

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Table ID | TABLEID | varchar(10) |
| Index Sequence | INDEXSEQ | smallint |
| Column Sequence | COLSEQ | smallint |
| Base | BASE | varchar(1) |
| Column Name | COLNAME | varchar(30) |
| Attribute | ATR | varchar(30) |

Table Name: DTIX01

Description: Index Header

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Table Name | TABLERNAME | varchar(10) |
| Index Sequence | INDEXSEQ | smallint |
| Index Name | INDEXNAME | varchar(10) |
| Table ID | TABLEID | varchar(10) |
| Index Unique | IXUNIQUE | varchar(1) |

Table Name: DTSYNTAX

Description: DT Syntax

Defines the types for fields that *MMA* will create its tables with.

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Table ID | TABLEID | varchar(10) |
| Data Sequence | DTSEQ | smallint |
| Data Base | DTBASE | varchar(1) |
| Data Name | DTNAME | varchar(50) |
| Data Attribute 1 | DTOATR1 | varchar(50) |
| Data Attribute 2 | DTOATR2 | varchar(50) |
| Data Attribute 3 | DTOATR3 | varchar(50) |
| Data Attribute 4 | DTOATR4 | varchar(50) |
| Data Length 1 | DTOLEN1 | varchar(10) |

| | | |
|---------------|---------|-------------|
| Data Length 2 | DTOLEN2 | varchar(10) |
| Data Length 3 | DTOLEN3 | varchar(10) |
| Data Length 4 | DTOLEN4 | varchar(10) |

Table Name: STCSPM10

Description: Parameter Master

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| Parameter Master Key | PMKEY | varchar(10) |
| Parameter Master Value | PMVAL | varchar(30) |

Base Tables Used to Store Dimension Master Table Descriptions and Characteristics

Table Name: STCSMI10
Description: Master File Data Entry
 Contains Master File information without pickup fields that have been entered.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| Hierarchy Number | HLVNO | char(2) |
| Hierarchy Value | HLVAL | char(25) |
| Short Description | SDS | char(25) |
| Long Description | LDS | char(50) |

Table Name: STCSMI11
Description: Master File Data Entry up to 15 Pickup Fields
 Contains Master File information with up to 15 pickup fields that have been entered.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| Hierarchy Number | HLVNO | char(2) |
| Hierarchy Value | HLVAL | char(25) |
| Short Description | SDS | char(25) |
| Long Description | LDS | char(50) |
| DimensionCodePUF1 | PUF1 | char(30) |
| DimensionCodePUF2 | PUF2 | char(30) |
| DimensionCodePUF3 | PUF3 | char(30) |
| DimensionCodePUF4 | PUF4 | char(30) |
| DimensionCodePUF5 | PUF5 | char(30) |
| DimensionCodePUF6 | PUF6 | char(30) |
| DimensionCodePUF7 | PUF7 | char(30) |
| DimensionCodePUF8 | PUF8 | char(30) |
| DimensionCodePUF9 | PUF9 | char(30) |
| DimensionCodePUF10 | PUF10 | char(30) |

| | | |
|--------------------|-------|----------|
| DimensionCodePUF11 | PUF11 | char(30) |
| DimensionCodePUF12 | PUF12 | char(30) |
| DimensionCodePUF13 | PUF13 | char(30) |
| DimensionCodePUF14 | PUF14 | char(30) |
| DimensionCodePUF15 | PUF15 | char(30) |

Table Name: STCSMI12

Description: Previous Level Data Entry
Contains previous level information that has been entered.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| Hierarchy Level Number | HLVNO | char(2) |
| Hierarchy Value | HLVAL | char(25) |
| Previous Level Number | PHLVNO | char(2) |
| Previous Hierarchy Value | PHLVAL | char(25) |

Table Name: STCSMI35

Description: Master File Data Entry
Up to 35 pickup fields contains Master File information with up to 35 pickup fields that have been entered.

| Column Name: | Code | Type |
|------------------------|-------|----------|
| Dimension | HLVNO | char(2) |
| Dimension Value | HLVAL | char(15) |
| DimensionCodeShortDesc | SDS | char(25) |
| DimensionCodeLongDesc | LDS | char(50) |
| DimensionCodePUF1 | PUF1 | char(30) |
| DimensionCodePUF2 | PUF2 | char(30) |
| DimensionCodePUF3 | PUF3 | char(30) |
| DimensionCodePUF4 | PUF4 | char(30) |
| DimensionCodePUF5 | PUF5 | char(30) |
| DimensionCodePUF6 | PUF6 | char(30) |
| DimensionCodePUF7 | PUF7 | char(30) |
| DimensionCodePUF8 | PUF8 | char(30) |
| DimensionCodePUF9 | PUF9 | char(30) |

| | | |
|--------------------|-------|----------|
| DimensionCodePUF10 | PUF10 | char(30) |
| DimensionCodePUF11 | PUF11 | char(30) |
| DimensionCodePUF12 | PUF12 | char(30) |
| DimensionCodePUF13 | PUF13 | char(30) |
| DimensionCodePUF14 | PUF14 | char(30) |
| DimensionCodePUF15 | PUF15 | char(30) |
| DimensionCodePUF16 | PUF16 | char(30) |
| DimensionCodePUF17 | PUF17 | char(30) |
| DimensionCodePUF18 | PUF18 | char(30) |
| DimensionCodePUF19 | PUF19 | char(30) |
| DimensionCodePUF20 | PUF20 | char(30) |
| DimensionCodePUF21 | PUF21 | char(30) |
| DimensionCodePUF22 | PUF22 | char(30) |
| DimensionCodePUF23 | PUF23 | char(30) |
| DimensionCodePUF24 | PUF24 | char(30) |
| DimensionCodePUF25 | PUF25 | char(30) |
| DimensionCodePUF26 | PUF26 | char(30) |
| DimensionCodePUF27 | PUF27 | char(30) |
| DimensionCodePUF28 | PUF28 | char(30) |
| DimensionCodePUF29 | PUF29 | char(30) |
| DimensionCodePUF30 | PUF31 | char(30) |
| DimensionCodePUF32 | PUF32 | char(30) |
| DimensionCodePUF33 | PUF33 | char(30) |
| DimensionCodePUF34 | PUF34 | char(30) |
| DimensionCodePUF35 | PUF35 | char(30) |

Table Name: STCSMF10

Description: Master File Without Pickup Fields
Stores Dimensions, values, and associated short and long descriptions.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| Dimension | HLVNO | char(2) |
| DimensionCode | HLVAL | char(25) |
| DimensionCodeShortDesc | SDS | char(25) |
| DimensionCodeLongDesc | LDS | char(50) |

Table Name: STCSMF10N

Description: Master File Without Pickup Fields

Temporary file used during the upgrade process to convert HLVAL to a length of 25.

| Column Name Long Description | Column Name | Type |
|---|------------------------|-------------|
| DimensionLevelNumber | HLVNO | varchar(2) |
| DimensionValue | HLVAL | varchar(25) |
| ShortDescription | SDS | varchar(25) |
| LongDescription | LDS | varchar(50) |

Table Name: STCSMF11

Description: Master File With up to 15 Pickup Fields Defined
Stores Dimension values and associated short description, long description, and up to 15 pickup fields.

| Column Name Long Description | Code | Type |
|---|-------------|-------------|
| Dimension | HLVNO | char(2) |
| DimensionCode | HLVAL | char(25) |
| DimensionCodeShortDesc | SDS | char(25) |
| DimensionCodeLongDesc | LDS | char(50) |
| DimensionCodePUF1 | PUF1 | char(30) |
| DimensionCodePUF2 | PUF2 | char(30) |
| DimensionCodePUF3 | PUF3 | char(30) |
| DimensionCodePUF4 | PUF4 | char(30) |
| DimensionCodePUF5 | PUF5 | char(30) |
| DimensionCodePUF6 | PUF6 | char(30) |
| DimensionCodePUF7 | PUF7 | char(30) |
| DimensionCodePUF8 | PUF8 | char(30) |
| DimensionCodePUF9 | PUF9 | char(30) |
| DimensionCodePUF10 | PUF10 | char(30) |
| DimensionCodePUF11 | PUF11 | char(30) |
| DimensionCodePUF12 | PUF12 | char(30) |
| DimensionCodePUF13 | PUF13 | char(30) |
| DimensionCodePUF14 | PUF14 | char(30) |
| DimensionCodePUF15 | PUF15 | char(30) |

Table Name: STCSMF11N

Description: Master File With up to 15 Pickup Fields Defined
Temporary file used during the upgrade process to convert HLVAL to 25 in length.

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| DimensionLevelNumber | HLVNO | varchar(2) |
| DimensionValue | HLVAL | varchar(25) |
| ShortDescription | SDS | varchar(25) |
| LongDescription | LDS | varchar(50) |
| PickupField1 | PUF1 | varchar(30) |
| PickupField2 | PUF2 | varchar(30) |
| PickupField3 | PUF3 | varchar(30) |
| PickupField4 | PUF4 | varchar(30) |
| PickupField5 | PUF5 | varchar(30) |
| PickupField6 | PUF6 | varchar(30) |
| PickupField7 | PUF7 | varchar(30) |
| PickupField8 | PUF8 | varchar(30) |
| PickupField9 | PUF9 | varchar(30) |
| PickupField10 | PUF10 | varchar(30) |
| PickupField11 | PUF11 | varchar(30) |
| PickupField12 | PUF12 | varchar(30) |
| PickupField13 | PUF13 | varchar(30) |
| PickupField14 | PUF14 | varchar(30) |
| PickupField15 | PUF15 | varchar(30) |

Table Name: STCSMF35

Description: Master File With up to 35 Pickup Fields Defined
Stores Dimension values and associated short description, long description, and up to 35 pickup fields.

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| HierarchyLevelNumber | HLVNO | char(2) |
| HierarchyValue | HLVAL | char(25) |
| ShortDescription | SDS | char(25) |
| LongDescription | LDS | char(50) |
| PickupField1 | PUF1 | char(30) |
| PickupField2 | PUF2 | char(30) |
| PickupField3 | PUF3 | char(30) |
| PickupField4 | PUF4 | char(30) |
| PickupField5 | PUF5 | char(30) |
| PickupField6 | PUF6 | char(30) |
| PickupField7 | PUF7 | char(30) |
| PickupField8 | PUF8 | char(30) |
| PickupField9 | PUF9 | char(30) |
| PickupField10 | PUF10 | char(30) |
| PickupField11 | PUF11 | char(30) |
| PickupField12 | PUF12 | char(30) |
| PickupField13 | PUF13 | char(30) |
| PickupField14 | PUF14 | char(30) |
| PickupField15 | PUF15 | char(30) |
| PickupField16 | PUF16 | char(30) |
| PickupField17 | PUF17 | char(30) |
| PickupField18 | PUF18 | char(30) |
| PickupField19 | PUF19 | char(30) |
| PickupField20 | PUF20 | char(30) |
| PickupField21 | PUF21 | char(30) |
| PickupField22 | PUF22 | char(30) |
| PickupField23 | PUF23 | char(30) |

| | | |
|---------------|-------|----------|
| PickupField24 | PUF24 | char(30) |
| PickupField25 | PUF25 | char(30) |
| PickupField26 | PUF26 | char(30) |
| PickupField27 | PUF27 | char(30) |
| PickupField28 | PUF28 | char(30) |
| PickupField29 | PUF29 | char(30) |
| PickupField30 | PUF30 | char(30) |
| PickupField31 | PUF31 | char(30) |
| PickupField32 | PUF32 | char(30) |
| PickupField33 | PUF33 | char(30) |
| PickupField34 | PUF34 | char(30) |
| PickupField35 | PUF35 | char(30) |

Table Name: STCSMP12

Description: Previous Levels

Stores Dimension values that are related to other Dimension and Dimension values.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| Hierarchy Level Number | HLVNO | char(2) |
| Hierarchy Value | HLVAL | char(25) |
| Previous Level Hierarchy Number | PHLVNO | char(2) |
| Previous Level Hierarchy Value | PHLVAL | char(25) |

Table Name: STCSPT10

Description: Pickup Field Mappings

Defines information about the pickup fields associated with a Dimension.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| Dimension | HID | smallint |
| PUFColumnNumber | SEQ | smallint |
| PUFColumnLabel | DESCRIPTION | varchar(30) |
| PUFColumnLength | LENGTH | smallint |
| PUFColumnCode | FLDNAME | varchar(13) |
| PUFColumnType | FLDTYPE | smallint |

Used to Control User Access to Information

Table Name: STCSDD10

Description: Drill Down Sets

Drill-down sets are associated with user IDs to control the default drill-down path and also the Dimensions available for drill-down for each of the Dimensions.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| DrillDownSetName | NAME | varchar(32) |
| DrillDownSetID | ID | smallint |
| DefaultOrUserCode | FLAG | varchar(1) |
| UserID | USERGROUP | varchar(32) |

Table Name: STCSDD11

Description: Drill-Down Set Dimension

Detail information associated with a Drill-down set.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| DrillDownSetID | ID | smallint |
| Dimension | DDHRLVL | smallint |
| DefaultDrillDownDimension | DDDEFHRLVL | smallint |
| DrillDownPath1_31 | DDHRPATH1 | integer |
| DrillDownPath32_62 | DDHRPATH2 | integer |
| DrillDownPath63_93 | DDHRPATH3 | integer |
| DrillDownPath94_124 | DDHRPATH4 | integer |
| DrillDownPath125_156 | DDHRPATH5 | integer |

Table Name: STCSES10

Description: Value Security

Associates the categories a user is restricted from using.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| UserID | USERID | varchar(32) |
| RestrictedCategoryValueID | DEID | smallint |

Table Name: STCSHS10

Description: Dimension Security

Defines the Dimensions or the values within a Dimension an individual user can access.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| UserID | USERID | varchar(32) |
| RestrictedDimension | HLEVEL | smallint |
| UserList | ULIST | varchar(10) |

Table Name: STCSUS10

Description: User Ids

Lists the user IDs authorized to sign on to the system.

| Column Name Long Description | Column Name | Type |
|---|---------------|-------------|
| UserID | USERID | varchar(32) |
| UserDesc | USDESC | varchar(50) |
| UserType | USTYPE | smallint |
| NI_usprocperm | USPROCPERM | varchar(50) |
| NI_usservperm | USSERVPERM | varchar(50) |
| NI_loginid | LOGINID | varchar(32) |
| NI_loginpwd | LOGINPWD | varchar(10) |
| Log DBView info | LOGDBVIEW | ll6 |
| NI_userpwd | USERPWD | varchar(10) |
| Maximum Number of Rows for use in <i>DBView</i> | MAXNOOFROWS | integer |
| Multi-Currency Flag | MULTICURRENCY | smallint |

Base Tables Used to Define User Inquiries

Table Name: STCSAA10

Description: Date Transactions Last Updated
Stores the date the summary tables were last changed. This date appears on the Inquiry display to notify users of the timeliness of the data they are viewing.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| LastDateNetChanged | LSTUPDTM | varchar(10) |

Table Name: STCSO10

Description: Color Maps
Used to define custom color combinations for the Inquiries.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| ColorID | ID | smallint |
| ColorDescription | SDESC | varchar(20) |
| RedValue | RED | smallint |
| GreenValue | GREEN | smallint |
| BlueValue | BLUE | smallint |

Table Name: STCSDM10

Description: Display Masks
Stores user-defined Display Masks for use as defaults and overrides in the Inquiries.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| EditMaskDesc | DESCRIPTION | varchar(30) |
| EditMask | MASK | varchar(30) |
| EditMaskID | EDITID | smallint |

Table Name: STCSID10

Description: Templates

Defines the header information for user-defined Templates that define the basic layout of an Inquiry definition.

| Column Name Long Description | Column Name | Type |
|---|--------------------|--------------|
| TemplateID | ID | smallint |
| TemplateName | NAME | varchar(32) |
| TemplateDesc | DESCRIPTION | varchar(250) |
| TemplateType | TYPE | smallint |
| Dimension1 | HIER1 | smallint |
| Dimension2 | HIER2 | smallint |
| Dimension3 | HIER3 | smallint |
| Dimension4 | HIER4 | smallint |
| Dimension5 | HIER5 | smallint |
| Dimension6 | HIER6 | smallint |
| Dimension7 | HIER7 | smallint |
| Dimension8 | HIER8 | smallint |
| Dimension9 | HIER9 | smallint |
| Group1 | GROUP1 | smallint |
| Group2 | GROUP2 | smallint |
| Group3 | GROUP3 | smallint |
| Group4 | GROUP4 | smallint |
| Group5 | GROUP5 | smallint |
| Group6 | GROUP6 | smallint |
| Group7 | GROUP7 | smallint |
| Group8 | GROUP8 | smallint |
| Group9 | GROUP9 | smallint |
| NI_filter | FILTER | varchar(250) |
| NI_sort | SORT | varchar(250) |
| NI_storetable | STORETABLE | varchar(250) |

Table Name: STCSID11

Description: Template Columns

Defines the information for all columns associated with a Template.

| Column Name Long Description | Column Name | Type |
|---|--------------------|--------------|
| TemplateName | ID | smallint |
| ColumnNumber | COLNO | smallint |
| ColumnName | NAME | varchar(30) |
| ColumnAllignment | ALIGNMENT | smallint |
| ColumnDisplayMask | DISPLAYMASK | smallint |
| ColumnFillType | FILLTYPE | smallint |
| ColumnStatus | STATUS | smallint |
| ColumnFromYear | FROMYEAR | smallint |
| ColumnFromPeriod | FROMPERIOD | smallint |
| ColumnToYear | TOYEAR | smallint |
| ColumnToPeriod | TOPERIOD | smallint |
| CalulatedExpression | EXPRESSION | varchar(250) |
| ColumnText | TEXT | varchar(250) |
| ColumnPickupDimension | PICKUPHIERLEVEL | smallint |
| ColumnPickupColumn | PICKUPCOLUMN | smallint |
| ColumnRow1 | ROW1 | smallint |
| Noofchars | NOOFCHARS | smallint |
| ColumnTotalType | TOTALTYPE | smallint |
| ColumnPosition | POSITION | smallint |
| ColumnBandNumber | BANDNO | smallint |
| ColumnWidth | WIDTH | smallint |
| ColumnValueCode | DATAELEMENT | smallint |
| ColumnColorID | COLORID | smallint |
| ColumnBackgroundColorID | BGCOLORID | smallint |
| ColumnDivideByValue | DIVIDEBY | double |
| ColumnRoundingFactor | ROUNDING | smallint |
| Maintainunit | MAINTAINUNIT | smallint |
| ColumnColumnNumber | FLDNO | smallint |
| ColumnAssociatedColumn | ASSOCIATEDFLD | smallint |

| | | |
|----------------------|----------------|-------------|
| ColumnCurrency | CURRENCY | varchar(10) |
| ColumnRoundingType | ROUNDINGTYPE | smallint |
| ColumnExchangeType | EXCHANGETYPE | smallint |
| ColumnSelectCurrency | SELECTCURRENCY | smallint |
| ColumnViewCurrency | VIEWCURRENCY | smallint |
| ColumnFromYear2 | FROMYEAR2 | smallint |
| ColumnFromPeriod2 | FROMPERIOD2 | smallint |
| ColumnToYear2 | TOYEAR2 | smallint |
| ColumnToPeriod2 | TOPERIOD2 | smallint |

Table Name: STCSID13

Description: Template Syntax
Stores the PowerBuilder data window syntax for a Template.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-----------|
| TemplateID | ID | smallint |
| DataWindowSyntaxSequence | SEQ | smallint |
| DataWindowSyntaxString | DWSYNTAX | char(800) |

Table Name: STCSIN10

Description: Batch Index Control Table
Control table of the batch index submit process.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-----------|
| Index Name | INDEX_NAME | char(30) |
| Time | DTIME | timestamp |
| SQL Syntax for Ind. Ex. | SQL_SYNTAX | char(255) |
| Status | STATUS | char(1) |
| Error text | ERROR_TEXT | char(255) |
| Ready flag | READY_TO_GO | char(1) |

Table Name: STCSGI10

Description: Server control table contains information on one or more sets of server requests at various points of the server process.

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Status | STATUS | smallint |
| Set ID | SETID | varchar(32) |
| From File 1 | FROMFILE1 | varchar(80) |
| From File 2 | FROMFILE2 | varchar(80) |
| From File 3 | FROMFILE3 | varchar(80) |
| From File 4 | FROMFILE4 | varchar(80) |
| To File 1 | TOFILE1 | varchar(80) |
| To File 2 | TOFILE2 | varchar(80) |
| To File 3 | TOFILE3 | varchar(80) |
| To File 4 | TOFILE4 | varchar(80) |
| Temporary Work File 1 | TEMPFILE1 | varchar(80) |
| Temporary Work File 2 | TEMPFILE2 | varchar(80) |
| From File Type | FROMFILETYPE | smallint |
| To File Type | TOFILETYPE | smallint |
| Temporary File Types | TEMPFILETYPE | smallint |
| Header Record Inserted | REPROCESSED1 | integer |
| Detail Record updated | REPROCESSED2 | integer |
| Detail Record Inserted | REPROCESSED3 | integer |
| Detail Record Inserted | REPROCESSED4 | integer |
| Total Records Processed | RECTOTAL1 | integer |
| Input File in Size | RECTOTAL2 | integer |
| Records to Process in Segment | RECTOTAL3 | integer |
| Starting Record Number | RECTOTAL4 | integer |

Table Name: STCSGI11

Description: This table contains the log of intermediate files that the server programs are using or have used.

| Column Name Long Description | Column Name | Type |
|---|--------------------|-------------|
| Summarization Preprocess 12->20 | FROMSTATUS | smallint |
| Update Preprocess 22->30 | TOSTATUS | smallint |
| Comments | COMMENTS | varchar(80) |
| Set ID | SETID | varchar(32) |
| Source Header File | FROMFILE1 | varchar(80) |
| Source Detail File | FROMFILE2 | varchar(80) |
| Target Header File | TOFILE1 | varchar(80) |
| Target Detail File | TOFILE2 | varchar(80) |
| Source Key file / Table ID File | TEMPFILE1 | varchar(80) |
| Target Key File | TEMPFILE2 | varchar(80) |
| 1= Text File, 2 = Database table | FROMFILETYPE | smallint |
| 1= Text File, 2 = Database table | TOFILETYPE | smallint |
| 1= Text File, 2 = Database table | TEMPFILETYPE | smallint |
| Number of Header Records Processed so far. | REPROCESSED1 | integer |
| Number of Detail Records Processed so far. | REPROCESSED2 | integer |
| Number of Header Records to be Processed. | RECTOTAL1 | integer |
| Number of Detail Records to be Processed. | RECTOTAL2 | integer |

Table Name: STCSRF10

Description: Rounding Factors
Stores default and override rounding factors used for Inquiries.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| RoundingFactorID | ID | smallint |
| RoundingFactorDesc | LDESC | varchar(30) |
| DivideByFlag | DIVIDEBY | double |
| RoundingFlag | ROUNDING | smallint |
| SameUnitFlag | SAMEUNIT | smallint |

Table Name: STCSUL10

Description: User Lists
User List header information used primarily for Inquiry filters but also for controlling user access to a set of Dimension values.

| Column Name Long Description | Column Name | Type |
|----------------------------------|--------------|-----------|
| User List ID | ULID | char(10) |
| User List Description | ULDESC | char(30) |
| User List Hierarchy Level Number | ULHLVNO | smallint |
| User List User ID | ULUSERID | char(32) |
| User List SQL Script | ULSQL | char(800) |
| User List Retrieved Date | ULRETRVDDATE | char(10) |
| User List Type | ULTYPE | smallint |
| Batch Retrieve | BATCHRETRV | smallint |
| Global Flag | GLOBALFLAG | smallint |
| Levels | LEVELS | smallint |

Table Name: STCSUL11

Description: User List Dimension Codes
The individual Dimension codes associated with a User List.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| User List ID | ULID | char(10) |
| User List Hierarchy Value | ULHLVAL | char(15) |
| User List User ID | ULUSERID | char(32) |

Table Name: STCSUL12

Description: Nested User List
Stores the child lists of a Nested User List.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| User List ID | ULID | char(10) |
| User List User ID | ULUSERID | char(32) |
| Nested User List ID | NULID | char(10) |
| Nested User List ID | NULUSERID | char(32) |

Table Name: STCSUL13

Description: Dynamic User List
Stores the filter criteria of a Dynamic User List.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| User List ID | ULID | char(10) |
| User List User ID | USERID | char(32) |
| Hierarchy Number | HRNO | integer |
| Field Number | FLDNO | integer |
| Filter Condition | FILTERCOND | char(5) |
| Filter Value | FILTERVAL | char(20) |
| Logical Condition | LOGICAL | char(5) |

For Multi-Currency Implementations

Table Name: STCSCR10

Description: Currency Codes

Defines the currency codes available in the system.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| CurrencyID | ID | smallint |
| CurrencyDesc | LDESC | char(30) |
| CurrencyCode | CODE | char(5) |
| CurrencyDisplay Mask | DSPMSKID | smallint |
| CurrencyRoundingFactorID | RNDFACID | smallint |

Table Name: STCSEG10

Description: Currency Exchange Groups

Associates an exchange rate table with a currency exchange group.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|-------------|
| CurrencyExchangeGroupID | ID | smallint |
| CurrencyExchangeGroupDesc | LDESC | varchar(30) |
| CurrencyExchangeGroupBuckets | BUCKETS | smallint |
| CurrencyExchangeRateTable | TBLNAME | varchar(30) |

Table Name: STCSER11

Description: Exchange Rate Header

Associates currency exchange rate definition to an exchange group.

| Column Name Long Description | Column Name | Type |
|---------------------------------|-------------|----------|
| Exchange Group ID | EGRPID | smallint |
| Exchange Type ID | TYPEID | smallint |
| From Currency ID | FROMCRID | smallint |
| To Currency ID | TOCRID | smallint |
| Year | YR | smallint |
| Flag | FLAG | smallint |
| Running Exchange ID | EXCHID | integer |

Table Name: STCSER12

Description: Exchange Rate Detail Table
Retail currency exchange rate data for an exchange rate.

| Column Name Long Description | Column Name | Type |
|---|------------------------|---------------|
| Running Exchange ID | EXCHID | int |
| Bucket Number | BUCKET# | smallint |
| Exchange Rate | RATE | decimal(20,8) |

Table Name: STCSET10

Description: Currency Exchange Type
Defines exchange rate types. (For example, actual, projected, and so forth.)

| Column Name Long Description | Column Name | Type |
|---|------------------------|-------------|
| CurrencyExchangeType | ID | smallint |
| CurrencyExchangeTypeDesc | LDESC | varchar(30) |

Summary Table Concepts

The summary table rows are logically divided into three main sections. The three sections are:

Structure Control Key of the Header Table

This portion of the key is used to identify the category, year, and summary level of the data. It divides the data in the tables into multiple (logically grouped) data sets.

Dimension Data Key of the Header Table

This portion of the key is used to identify the data associated with each Dimension and the currency code. This data is what allows the users to view data according to the Dimension (For example, by Region, by Customer, or by Product).

Values of the Detail Table

The data portion of the row contains the Amounts, Quantities, or Costs associated with the key as defined by the Structure Control and Dimension Data.

Diagram of logical data:

| Structure Control Key | | | Dimension Data Key | Detail Data |
|-----------------------|------|----------------|--------------------|----------------------|
| Actual Sales Category | 1998 | Summary Levels | Dimension Data | Dollars/Units/ Costs |
| | 1999 | Summary Levels | Dimension Data | Dollars/Units/ Costs |
| | 2000 | Summary Levels | Dimension Data | Dollars/Units/ Costs |
| Budget Category | 1999 | Summary Levels | Dimension Data | Dollars/Units/ Costs |
| | 2000 | Summary Levels | Dimension Data | Dollars/Units/ Costs |
| Quotas Category | 1999 | Summary Levels | Dimension Data | Dollars/Units/ Costs |
| | 2000 | Summary Levels | Dimension Data | Dollars/Units/ Costs |

Structure Control Key

The structure control key portion of the summary header tables divides the data into multiple (logically grouped) data sets.

Category

The first way that the summary header table is divided is by Category. The Category is kept in a column called DATATYPE. For example, if there are three categories defined -- Actual Sales, Budgets, and Quotas -- then the complete table is divided into three parts.

| Structure Control Key | Dimension Data Key | Detail Data |
|-----------------------|--------------------|-------------|
| | | |
| Actual Sales Category | | |
| | | |
| | | |
| Budget Category | | |
| | | |
| | | |
| Quotas Category | | |
| | | |
| | | |
| | | |

This means that any reports or Inquiries against the summary table must be set up to read only the required portion of the table. If no selection by category is done, a report of Actual Sales would in fact contain numbers that are the combination of Actual Sales, plus Budget, plus Quotas.

Year

Each category is then divided into years. The year is stored in a column in the structure control key area called SALESYEAR. The number of years of data can be different for each category. For example, for the three categories identified on the previous page, assume the following number of years.

| Category | Number of Years |
|--------------|-----------------|
| Actual Sales | 3 |
| Budget | 2 |
| Quota | 1 |

Based upon the categories being divided by year, the diagram of the summary table now looks as follows:

| Structure Control Key | | Dimension Data Key | Detail Data |
|-----------------------|------|--------------------|-------------|
| Actual Sales Category | 1998 | | |
| | | | |
| | 1999 | | |
| | | | |
| | 2000 | | |
| | | | |
| Budget Category | 1999 | | |
| | | | |
| | 2000 | | |
| | | | |
| Quotas Category | 2000 | | |
| | | | |
| | | | |

Just as with categories, the year division requires that the correct selection (by year and category) must be made when writing reports or Inquiries. If selection is not done by year, then the amounts for Actual Sales would be the sum of all the years in the table.

Data Summary Levels

The structure control key contains a final, third division based upon the DSL. The DSL identifier is stored in a column in the structure control key area called RECORDTYPE. A DSL is an identifier associated with a defined set of columns at which data is to be summarized. The following demonstrates the use and meaning of a DSL.

Assume that the following Dimensions are defined:



Given these Dimensions, data is stored at a lowest DSL that contains key values in each of the Dimensions. This lowest level is usually assigned as a 999 DSL. This is designated as:

| DSL | Region | Territory | Customer | Group | Product |
|------------|---------------|------------------|-----------------|--------------|----------------|
| 999 | X | X | X | X | X |

X - Indicates that these Dimensions contain key values; therefore, the unique Dimension key for the 999 DSL is Region/Territory/Customer/Group/Product.

MMA can work with this one DSL defined. It can show sales at a lowest level of Products within Customer or Customers for a specific Product. If the user wants to see sales by Territory, all Customer, Product combinations for the Territory are read and their amount added together to get the total for the Territory. This calculated number is shown on the screen for the Territory.

Depending on the number of Product/Customer combinations, this process of reading the combinations to get the Territory amount may take a long time. *MMA* offers an alternative -- the DSL. Another DSL can be defined that keeps data already summarized by Territory. When a user needs to see sales by Territory, *MMA* would only need to read the rows with data already summarized -- a much quicker process than reading all the Product/Customer combinations. A DSL with data summarized by Territory would be designated as:

| DSL | Region | Territory | Customer | Group | Product |
|------------|---------------|------------------|-----------------|--------------|----------------|
| 020 | X | X | | | |

X - Only the Region and Territory keys contain values, thereby causing data to be summarized by Territory within Region. The other keys are not used.

The assignment of DSL ID of 020 is arbitrary. By convention, higher levels of summary are defined using lower numbers, and the lower levels (more detailed) of summary are defined using a higher number.

To complete the discussion on this Structure Control Key portion of the header table, let us assume the existence of the following DSL's:

| DSL | Region | Territory | Customer | Group | Product |
|------------|---------------|------------------|-----------------|--------------|----------------|
| 999 | X | X | X | X | X |
| 020 | X | X | | | |
| 030 | | | | X | X |
| 040 | X | X | | X | |
| 050 | | | | X | |

A short description of the meaning of each of the DSL's is given below:

DSL = 999:

This is the lowest level of detail. Data exists for all Dimensions.

DSL = 020:

Data is summarized by Territory and Region.

DSL = 030:

In this case, the data is summarized by Group and Product.

DSL = 040:

Data is being summarized by Group, Territory, and Region.

DSL = 050:

Data is being summarized by Group within the whole organization.

It is also assumed that each of the three categories are kept at different lowest levels. Assume the following lowest level for each category.

| Category | Lowest Level |
|-----------------|---------------------|
| Actual Sales | Customer/Product |
| Budget | Territory/Group |
| Quotas | Territory |

Not all DSL's contain data for each category, because data is being kept at different lowest levels. For example, because Budgets are kept at a lowest level of Territory/Group, the summary levels with Customers and Products need not be updated (a lowest level of Territory/Group assumes that data -- or Budgets -- do not go down to the Product or Customer detail).

Based upon our assumptions, the following DSL's would contain data (be updated) when data is passed in for each category.

| Category | DSL's |
|-----------------|-------------------------|
| Actual Sales | 020, 030, 040, 050, 999 |
| Budgets | 020, 040, 050 |
| Quotas | 020 |

Example of Impact of Adding Data

This section demonstrates, through an example, what happens when data is placed into the summary history tables. The following assumptions are made with regard to the example.

Dimensions:

| Level | Description | Previous Levels |
|-------|-------------|-----------------|
| 01 | Region | |
| 02 | Territory | Region |
| 03 | Customer | Territory |
| 04 | Group | |
| 05 | Product | Group |

Categories:

| Code | Description |
|------|--------------|
| AS | Actual Sales |

Data Summary Levels:

| Summary Level | Key Columns |
|---------------|---|
| 020 | Region/Territory |
| 030 | Group/Product |
| 040 | Region/Territory/Group |
| 050 | Group |
| 999 | Region/Territory/Customer/Group/Product |

Determining Data Summary Levels and Indexes

This section outlines the manual process to define the DSL's and Indexes that are required for your implementation.

Note: The Performance Tuning Workbench automates the process of determining what DSL's and Indexes should be created for maximum system performance. See Chapter 6 in the *Systems Administrator Guide* for more information about the Performance Tuning Workbench.

The list below outlines, in summary, the steps required to determine the number and definition of the DSL's and Indexes:

- Determine the most commonly used paths.
- Define the Indexes based upon common paths.
- Create DSL definition chart.
- Analyze ratios of number of rows between related Dimensions.
- Determine which header tables the Index should be created over.
- Enter data summary definitions using the *Administration* application.
- Enter the Index definitions using the *Create Index* application.

Determine Commonly Used Paths

Commonly used paths are those ways that the users can drill-down through the Dimensions when they are doing their analysis. The determination of the path is normally done for the individual key users and for the key groups of people. Examples of groups or individuals that should be interviewed to determine their common paths include:

- Individuals in sales management
- Marketing management
- Sales Representatives
- Marketing analysts

- Financial management
- Executive management team members
- Other groups using *MMA*

The interviews consist of discussing the types of data and comparisons that the users need to view. One tool that can be used to prompt discussion is to review any existing reports (from either the main system or from a PC).

Path Definition Example

The following is an example of the format that the paths can be expressed:

| Individual/Group | Path |
|-------------------------|---|
| Regional Managers | Region - Territory - Customer Region - Key Customers - Product |
| Sales Representatives | Territory - Customer - Product Territory - Product Line - Customer |

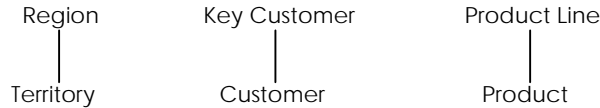
In these examples, the Regional Managers analyze sales first by Region (probably only the Manager's specific Region). In the first case, after looking at the regional numbers, the Manager then drills-down to the Territory level to review the performance of each of the Sales Representatives. After viewing the Sales Representatives, then a specific one can be selected so that the Customers for the Representative can be reviewed. In the second case, the Manager can go from looking at Sales by Region to viewing all Key Customers within the Region. In summary, for the Regional Manager there are two main paths that can be used: Region-Territory-Customer and Region-Key Customers-Product.

The Sales Representatives can begin by viewing the information for their specific Territory. Within their Territory they spend most of their time either looking at Sales by Customer followed by the Products for a specific Customer or by looking at Sales by Product Line followed by the Customers buying an individual Product Line.

In this example, because the four paths listed are the ones that are used the majority of the time, they are optimized. The optimization results in having DSL's and Indexes defined that match the defined path.

Analyze Ratios Between Levels

The first step in analyzing the ratios between levels is to determine the number of unique entities at each Dimension. Assume the following:



For the Dimension shown above, the following Dimension definition table is created. It shows the levels, their previous levels and the number of unique entities at each level:

| Level | Description | Nr | Previous Levels |
|-------|--------------|---------|-----------------|
| 01 | Region | 20 | |
| 02 | Territory | 80 | Region |
| 03 | Key Customer | 100 | |
| 04 | Customer | 70,000 | Key Customer |
| 05 | Product Line | 10 | |
| 06 | Product | 200,000 | Product Line |

Having determined the number of entities, we can now analyze the ratios. The first set of ratios to review are the ones between related Dimensions. This analysis indicates if it is possible to determine the amounts of one level by adding those of a previous level. In this case, the ratios between related levels are:

| Related Levels | Related Nr | Average Ratio |
|-----------------------|------------|---------------|
| Region:Territory | 20:80 | 1:4 |
| Key Customer:Customer | 100:70,000 | 1:700 |
| Product Line:Product | 10:200,000 | 1:20,000 |

To determine one region amount, *MMA* must add approximately four Territories. Based on these Dimension ratios, the Region amounts could be determined by summarizing its Territories because the ratio is small. The ratio of Key Customers to Customers is such that the amount of usage of the Key Customer level determines whether it should be kept separately summarized. The ratio of Product Lines to Products indicates that data is summarized by Product Line as well as Product.

After determining the ratios between Dimensions, examine the possible ratios between levels of the commonly used paths. The paths are listed with the largest number of entities to be retrieved with each step through the path. For example, assume the following for the four major paths:

| Path | Path Description | Ratios |
|-------------|------------------------------------|---------------|
| 1 | Region-->Territory-->Customer | 20:6:95 |
| 2 | Region-->Key Customer-->Product | 20:10:500 |
| 3 | Territory-->Customer | 80:95 |
| 4 | Territory-->Product Line-->Product | 80:10:300 |

Create Data Summary Chart

Discussion of how ratios are determined:

For path 1, the display of the initial level of Region results in 20 rows being displayed (unless authority restrictions are defined). The user then selects a Region and views the Territories for the selected Region. The largest Region contains six Territories; therefore, the greatest number of Territory rows that can be displayed for any one Region is six. Finally, the largest Territory contains approximately 90 Customers; therefore, the user sees a maximum of 95 Customers when selecting any one Territory.

This step involves the use of a data summary chart to help define the DSL's you need. The chart is created by placing each of your Dimensions across the top of the chart. The first column of the chart contains the DSL identifier. For the example case shown on the previous page, the Data Summary Chart looks like this:

| | 01 | 02 | 03 | 04 | 05 | 06 |
|--------|------|------|------|------|------|------|
| DSL ID | Regn | Terr | KyCs | Cust | PrLn | Prod |

Data Summary Chart - Step 1

The first step in determining what DSL's to create is to determine the lowest level of each of the categories. The lowest level is designated by indicating the lowest Dimension for each group that contains data. Some Dimension groups may not contain data and therefore no level is designated. For this example, assume the two categories as outlined below:

| Category | Lowest Level of Detail |
|--------------|----------------------------|
| Actual Sales | Territory/Customer/Product |
| Budget | Territory/Product Line |

In this example, Actual Sales data is kept at the lowest level (all three Dimension groups are included and the lowest Dimension of each group is designated). The Budget does not contain data for the Customer Dimension group. For the geographic group, the lowest level is Territory and for the Product group, the lowest Dimension is Product Line.

Data Summary Chart - Step 2

The second step is to create the DSL that corresponds to the lowest level of detail for each category. This step results in the following Data Summary Level chart:

| | 01 | 02 | 03 | 04 | 05 | 06 |
|--------|------|------|------|------|------|------|
| DSL ID | Regn | Terr | KyCs | Cust | PrLn | Prod |
| 999 | | X | | X | | X |
| 998 | | X | | | X | |

We defined the DSL=999 to be the DSL that corresponds to the lowest level of detail of the Actual Sales. The lowest Dimension of each group is marked. The DSL=998 corresponds to the lowest level of detail for the Budgets.

Note: The connection of the DSL used to designate a category's lowest level is made by selecting the correct data source using the Category Definition function in *Administration*.

The definition of the DSL for the lowest level is not yet complete. *MMA* requires that all Dimensions within a group above the lowest designated Dimension be included on a data summary definition. Therefore, in this example, when the Dimension of Territory is designated, the Region must also be included. It is a higher level within the geographic Dimension group. When Customer is designated, Key Customer must also be included. When Product is designated, then Product Line must be included. This rule results in the following final definition of the lowest DSL's:

| | 01 | 02 | 03 | 04 | 05 | 06 |
|--------|------|------|------|------|------|------|
| DSL ID | Regn | Terr | KyCs | Cust | PrLn | Prod |
| 999 | X | X | X | X | X | X |
| 998 | X | X | | | X | |

Data Summary Chart - Step 3

Define the other DSL's needed to support your Dimension and the required paths. For the previous example, the following DSL's might be defined. An explanation of each summary level is included below the chart.

| DSL ID | 01 | 02 | 03 | 04 | 05 | 06 | | Est # of Rcds |
|--------|------|------|------|------|------|------|----------|---------------|
| | Regn | Terr | KyCs | Cust | PrLn | Prod | Valid ?? | |
| 999 | X | X | X | X | X | X | Yes | 228,000 |
| 998 | X | X | | | X | | Yes | 800 |
| 010 | X | | | | | | Maybe | 20 |
| 020 | X | X | | | | | Yes | 80 |
| 030 | X | | X | | | | Yes | 200 |
| 040 | X | | X | | | X | No | 60,000 |
| 050 | X | X | X | X | | | Yes | 7,800 |
| 060 | X | X | X | X | X | | Yes | 22,000 |
| 070 | | X | | X | | | No | 7,800 |
| 080 | | | | | X | | Yes | 10 |
| 095 | | | | | X | X | Yes | 2,000 |
| 100 | | | X | | | | Yes | 100 |
| 110 | | | X | X | X | | Maybe | 21,000 |
| 120 | | | X | X | X | X | No | 210,000 |

DSL=999:

The estimated number of rows was determined by multiplying 7,000 Customers by an average of 30 Products sold to each Customer during the year. The result was then increased slightly to take into account the small number of Customers that belong to multiple Territories.

DSL=998:

The estimated number of rows was determined by multiplying the number of Territories (80) by the number of Product Lines (10). This assumed that all Product Lines were budgeted within all Territories.

DSL=010:

This data summary is technically correct, but it may not be required. We know from the analysis of the path ratios that the largest Region contains a maximum of six Territories. That means that only six rows of the DSL=020 must be added together to get the Region number. There would only be 20 DSL=10 rows (the number of Regions); therefore, space requirements are not greatly affected by having this DSL. The biggest concern would be on the update of data within the summary table. The inclusion of DSL=10 would result in the requirement of another row to be updated for every row sent into MMA. If nightly runtime is an issue, then the extra DSL may not be desired. If the additional update time is not an issue, this DSL would be included because of the high use of the Region as an entry point into Inquiries.

The estimated number of rows is equal to the number of Regions (20).

DSL=020:

This DSL is used to keep data summarized by Territory. If DSL=010 is not kept, then this level would also be used to retrieve the amounts by Region.

The estimated number of rows is equal to the number of Territories (80).

DSL=030:

This DSL is used to keep Key Customer information within Region.

The estimated number of rows of this DSL is equal to the number of Key Customers (100) multiplied by the average number of Territories to which the Key Customers belong (2).

DSL=040:

The purpose of this DSL is to support the path of Region-->Key Customer-->Product. This DSL is not defined correctly because the Dimension (Product Line) within the Dimension group that is above the Product is not included on the DSL. The following shows the corrected definition for this DSL:

| | 01 | 02 | 03 | 04 | 05 | 06 | |
|--------|------|------|------|------|------|------|-------|
| DSL ID | Regn | Terr | KyCs | Cust | PrLn | Prod | Valid |
| 040 | X | | X | | X | X | Yes |

The estimated number of rows is determined by taking the Region/Key Customer combination calculated for DSL=030 (200) and multiplying it by the average number of Products each Key Customer buys (300).

DSL=050:

This DSL supports the Inquiry of Customers within Key Customer for either a Region or a Territory.

The estimated number of rows is the result of adding the combination of the total number of Territory/Customer combinations (800) with the total number of Customers (7000).

DSL=060:

This DSL is correctly defined. It supports the Inquiry of Product Line within Customer.

The number of rows at this DSL is the number of Customers/Territory combinations (7333) multiplied by the average number of Product Lines each Customer buys in a year (3).

DSL=070:

This DSL was defined to support the path of Territory-->Customer. The definition is not correct because the level above Territory and the level above Customer are not included on the data summary definition. Further, if the DSL is corrected to include the Region and Key Customer, it then becomes a duplicate of DSL=050. Any duplicate DSL's should be removed.

The estimated number of rows is the result of adding the combination of the total number of Territory/Customer combinations (800) with the total number of Customers (7000).

DSL=080:

This DSL would be used whenever an Inquiry by Product Line within the whole organization was requested. The data on this DSL is summarized by Product Line.

The number of rows at this DSL is equal to the number of Product Lines (10).

DSL=095:

This DSL is used whenever the user requests a list of Products within the whole organization or within a specific Product Line.

The number of rows at this DSL is equal to the number of Products (2000). Because each Product only belongs to one Product Line, the combination of Product Line/Product does not impact the number of rows. We know that a Product only belongs to one Product Line because the Product Line is a previous level of the Product.

DSL=100:

This DSL is used whenever the user requests a list of Key Customers within the complete organization. The data is summarized by Key Customer.

The number of rows at this DSL are equal to the number of Key Customers.

DSL=110:

This DSL is correctly defined but its inclusion may not add any performance benefit. A benefit cannot be achieved if most of the Customers belong to only one Territory. If this is true, then the number of rows at this DSL are approximately the same as the number of rows at the DSL=060 level. If a Customer can belong to multiple Territories, then the addition of this DSL would be valuable as it would allow seeing a Product Line for a Customer without having to add up the number of Territories to which the Customer belongs.

The estimated number of rows is the number of Customers (7000) multiplied by the average number of Product Lines bought by each Customer during a year (3).

DSL=120:

The 120 DSL is correctly defined, but it should not be included because it adds a large number of rows without the appropriate performance benefits. The number of Customer/Product combinations determines the number of rows at this level. This is the same combination that determines the number of the lowest level rows (DSL=999). The only time this level should be considered is if a Customer could belong to a large number of Territories. Generally, there should only be one DSL with the Customer/Product combination as its lowest Dimensions.

The number of rows at this DSL is the number of Customers (7000) multiplied by the average number of Products bought each year by each Customer (30).

Create Index Chart

A chart should be created that indicates the paths (Indexes) that are to be defined. Define an exact match index for those paths that are heavily used. In the example that was used for the data summary chart discussion, the following Index Chart would be created:

| Lgl Id | Path (Key columns on logical) |
|---------------|--------------------------------------|
| 01 | Regn Terr Cust |
| 02 | Regn KyCs Prod |
| 03 | Terr Cust |
| 04 | Terr PrLn Cust |

Enter Data Summary Definitions

Data summary definitions are entered using the *Administration* menu option File | DSL. The DSL's are entered from the chart completed by the above steps.

Enter Index Definitions

This step involves entering the Index definitions into *MMA*. A *Create Index* application exists that causes the Index to be defined and created.

Indexes

There are two types of Indexes within *MMA*. All Indexes reside in the database library (AMOLIBx). The two types of Indexes are as follows:

Performance Indexes

Indexes created over data warehouse tables designed to increase performance. The indexes are set up through the *Create Index* application.

Standard Indexes

Indexes for tables that are not dependent on your environment. See the following descriptions of Standard Indexes.

Table Name: DTVG
Description: ViewGroups

| Index Name | Column Name | Sort |
|------------|-------------|------|
| VGIDX1 | ID | ASC |

Table Name: DTVS
Description: ViewSets

| Index Name | Column Name | Sort |
|------------|-------------|------|
| VSIDX1 | ID | ASC |

Table Name: DTVSI
Description: ViewSetItems

| Index Name | Column Name | Sort |
|------------|-------------|------|
| VSIIDX1 | VSID | ASC |
| | SEQ | ASC |

Table Name: STCSDT11

Description: Data Sources

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DT11INX1 | ID | ASC |

Table Name: STCSDT12

Description: Data Source Tables

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DT12INX1 | ID | ASC |
| | SEQ | ASC |

Table Name: STCSDT13

Description: Data Source Table DSL's

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DT13INX1 | ID | ASC |
| | SEQ | ASC |
| | DSL | ASC |

Used to Describe Categories, Dimensions, Values, and DSL's

Table Name: STCSBT10

Description: Base Values

| Index Name | Column Name | Sort |
|------------|-------------|------|
| BT10INX1 | BASETYPE | ASC |
| | BTSEQ | ASC |

Table Name: STCSDE10

Description: Category Values

| Index Name | Column Name | Sort |
|------------|-------------|------|
| STDEIDX | DATATYPE | ASC |
| | BASETYPE | ASC |

Table Name: STCSDS10

Description: DSL Maps

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DS10INX1 | DSTYPE | ASC |

Table Name: STCSDT10

Description: Categories

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DT10INX1 | DATATYPE | ASC |

Table Name: STCSHR10

Description: Dimensions

| Index Name | Column Name | Sort |
|------------|-------------|------|
| HR10INX1 | HRLEVEL | ASC |

Used to Store Dimension Master Table Descriptions and Characteristics

Table Name: STCSMF10

Description: Dimension Code Descriptions

| Index Code | Column Code | Sort |
|------------|-------------|------|
| STCSMF101 | HLVNO | ASC |
| | HLVAL | ASC |

Table Name: STCSMF11

Description: Dimension Code Descs Plus Chars

| Index Code | Column Code | Sort |
|------------|-------------|------|
| STCSMF1101 | HLVNO | ASC |
| | HLVAL | ASC |

Table Name: STCSMF35

Description: Master File With 35 Pick Up Fields

| Index Code | Column Code | Sort |
|------------|-------------|------|
| STCSMF351 | HLVNO | ASC |
| | HLVAL | ASC |

Table Name: STCSMP12

Description: Master File Previous Level Table

| Index Code | Column Code | Sort |
|------------|-------------|------|
| STCSMP121 | HLVNO | ASC |
| | HLVAL | ASC |
| | PHLVNO | ASC |
| | PHLVAL | ASC |

Table Name: STCSPT10

Description: Dimension Code Desc Mappings

| Index Code | Column Code | Sort |
|------------|-------------|------|
| HIDSEQ | HID | ASC |
| | SEQ | ASC |

Used to Control User Access to Information

Table Name: STCSDD10

Description: Drill-down Sets

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DD10IDX1 | NAME | ASC |
| | ID | ASC |
| | FLAG | ASC |
| | USERGROUP | ASC |

Table Name: STCSDD11

Description: Drill-down Set Dimension

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DD11IDX1 | ID | ASC |
| | DDHRLVL | ASC |

Table Name: STCSES10

Description: Value Security

| Index Name | Column Name | Sort |
|------------|-------------|------|
| ES10INX1 | USERID | ASC |
| | DEID | ASC |

Table Name: STCSHS10

Description: Dimension Security

| Index Name | Column Name | Sort |
|------------|-------------|------|
| HS10INX1 | USERID | ASC |
| | HLEVEL | ASC |

Table Name: STCSUS10

Description: User IDs

| Index Name | Column Name | Sort |
|------------|-------------|------|
| US10INX1 | USERID | ASC |

Used to Define User Inquiries

Table Name: STCSAA10

Description: Date Transactions Last Updated

| Index Name | Column Name | Sort |
|------------|-------------|------|
| AA10INX1 | LSTUPDTM | ASC |

Table Name: STCSCO10

Description: Color Maps

| Index Name | Column Name | Sort |
|------------|-------------|------|
| COLOR | SDESC | ASC |

Table Name: STCSDM10

Description: Display Masks

| Index Name | Column Name | Sort |
|------------|-------------|------|
| DMIDX1 | EDITID | ASC |

Table Name: STCSID10

Description: Templates

| Index Name | Column Name | Sort |
|------------|-------------|------|
| ID10IDX1 | ID | ASC |
| ID10IDX2 | NAME | ASC |

Table Name: STCSID11

Description: Template Columns

| Index Name | Column Name | Sort |
|------------|-------------|------|
| ID11IDX | ID | ASC |
| | COLNO | ASC |

Table Name: STCSID13

Description: Template Syntax

| Index Name | Column Name | Sort |
|------------|-------------|------|
| ID13IDX1 | ID | ASC |

Table Name: STCSRF10

Description: Rounding Factors

| Index Name | Column Name | Sort |
|------------|-------------|------|
| RF10IDX1 | ID | ASC |

Table Name: STCSUL10

Description: User Lists

| Index Name | Column Name | Sort |
|------------|-------------|------|
| STUL10KY | ULID | ASC |
| | ULUSERID | ASC |

Table Name: STCSUL11

Description: User List Dimension Codes

| Index Name | Column Name | Sort |
|------------|-------------|------|
| STUL11KY | ULID | ASC |
| | ULUSERID | ASC |
| | ULHLVAL | ASC |

Used for Multi-Currency Implementations

Table Name: STCSCR10

Description: Currency Codes

| Index Name | Column Name | Sort |
|------------|-------------|------|
| CR10IDX1 | ID | ASC |

Table Name: STCSEG10

Description: Currency Exchange Groups

| Index Name | Column Name | Sort |
|------------|-------------|------|
| EG10IDX1 | ID | ASC |

Table Name: STCSER11

Description: Exchange Rate Header Table

| Index Name | Column Name | Sort |
|------------|-------------|------|
| ER11IDX1 | EXCHID | ASC |

Table Name: STCSER12

Description: Exchange Rate Detail Table

| Index Name | Column Name | Sort |
|------------|-------------|------|
| ER12IDX1 | EXCHID | ASC |
| | BUCKET# | ASC |

Table Name: STCSET10

Description: Currency Exchange Type

| Index Name | Column Name | Sort |
|------------|-------------|------|
| ET10IDX1 | ID | ASC |

Notes

CHAPTER 4 • STCS.INI FILE SETTINGS

QuickLook

Use this chapter to become familiar with:

- The parameters of the STCS.INI file.

STCS.INI File Parameters

[Global]

This section points to the Global STCS.INI file.

| Keyname | Meaning |
|------------------------------|--|
| SecondFile=C:\mma60\stcs.ini | The path of the STCS.INI file. Used in case of a LAN shared .INI file situation. |

[sqlca]

This section specifies the parameters used to connect to the main database.

| Keyname | Meaning |
|----------------------------------|--|
| dbms=ODBC | Database Management System. |
| database=STLIB | Database name. |
| userid=AMAPICS | User ID. |
| dbparm=connectstring='dsn=STLIB' | ODBC Data Source name. |
| firsttime=no | Flag. |
| dbpass=EB5DED26D91DC1 | Encrypted password. |
| servername=Server Name | Name of the server where the database resides. |
| logid=AMAPICS | Log ID of the user signed onto the system. |
| logpass=AMAPICS | Password of the user signed onto the system. |

[inquiryengine]

This section specifies the C++ engine options.

| Keyname | Meaning |
|---|--|
| cppeng=1 | Always set to 1 for the C++ engine. |
| cppengxtab=1 | Always set to 1 for the C++ engine. For Cross Tab Templates. |
| path=C:\MMA60\ Connections=1 | Directory location of the Inquiry engine. The number of connections to be made to the database. |
| OrderBy=0 | Not used by engine. |
| HierDescInListCount=20 | This reduces the number of turnarounds to retrieve Master File descriptions. Maximum number of hierarchy values supported. |
| ConnectString=DSN=stlib DataFieldType=Double | The connection string. For AS/400 and Tandem this should be DataFieldType=String. Default, for other systems, DataFieldType=Double. |
| BestfitStrategy=0 | Best fit analysis parameter. |
| BestfitModifier=10 | Best fit analysis parameter. |
| BestfitPathValue=1 | Best fit analysis parameter. |
| MultiCurrencySupport=0 | Multi-Currency active. 1=Multi-Currency enabled. 0=Multi-Currency not enabled. |
| RefreshOptions=0 | Not used by <i>MMA</i> . |
| MaxRows=65000 | Maximum rows to retrieve within an Inquiry. |
| FlushRows=65000 | Maximum rows to retrieve within an Inquiry. |
| LogSQL=1 | Log the SQL statement to a text file. 1=log SQL statement to a text file. 0=do not log SQL statement to a text file. |
| UseHashTable=1 | Not used by engine. |
| DumpHashTableFileName= | Dumps hash table to specified table name. Default is C:\TMP\HASH.TBL. |
| ForceYield=1 | Allows cancel of the retrieval. |
| Synchronous=1 | Does not apply to <i>MMA</i> . |

[env]

Environment code for *MMA*.

Keyname

Envcode=MM
Dtalib=AMOLIB
Pgmlib=AMALIB
Morelibs=QGPL
Jobq=QBATCH

Meaning

MMA environment code.
MMA database library.
MMA programmer library.
Library list.
Job queue.

[sqlcawat]

This section specifies the parameters for connecting to the intermediate database in the *Remote Extract* application.

Keyname

dbms=ODBC
database=stcom
userid=dba
dbpass=sql
logid=sa
logpass=sa
servername=Server Name
dbparm=ConnectionString='DSN=stcom'
firsttime=no

Meaning

Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.

[watcomxtract]

This section specifies the *Remote Extract* entries.

Keyname

dbrtsql=stcs.sql
basedbname=stbase.db
comdbname=stcom.db
watcomdir=c:\wsq140\win\
basedbdir=c:\st2\
batdir=c:\st2\
txtfiledir=c:\st2\
dwnumrec=5000
usejoin=0
savetxt=0

Meaning

Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.

[syscontrol]

This section specifies the system parameters used by *Administration*, *DBView*, and so forth.

| Keyname | Meaning |
|---|---|
| maxperiod=12 | Maximum number of periods. |
| companyno=1 | Organization name. |
| companydesc=Company Name | A description or name for the company. |
| maxhierarchy=11 | Maximum number of hierarchy levels. |
| weekendson=7 | The day that the week ends on (For example, Mon=1, Tues=2, and so forth). |
| maxhrval=5000 | Maximum hierarchy value. |
| inqcomp=1 | Export Inquiries are compatible. |
| ulistflag=1 | 0 (Uses SubQuery); ulistflag=1 (Uses IN list). |
| inqStart=DBView | Used by Windows Startup while opening the application. |
| inqTitle=Market Monitoring and Analysis | Name of the <i>DBView</i> title bar. |
| admTitle=Market Monitoring and Analysis | Name of the <i>Administration</i> title bar. |
| Version=6.0 | <i>MMA</i> version number. |
| copyRightStartYear=1995 | Copyright statement. |
| copyRightEndYear=2000 | Copyright statement. |
| synchronous=1 | Does not apply to <i>MMA</i> . |
| Title=Market Monitoring and Analysis 6.0 (32 bit) | Title for the application. |
| migrationutilitytitle=Migration Utility | Migration Utility functionality. |
| Language=A | The language specified for this installation of <i>MMA</i> . |

[dir]

This section defines where data, icons, and bitmaps go.

| Keyname | Meaning |
|-------------------------------|--|
| defdir=C:\MMA60\ | Default directory. |
| deficon=misc32.ico | Default icon for Views. |
| defbmp=misc32.bmp | Default bitmap. |
| hdoc=st.hlp | Online Help file name. |
| sqllogdir=C:\MMA60\ | Directory for the SQL log. |
| landir=C:\MMA60\ | LAN directory. |
| localdir=C:\MMA60\ | The local directory. |
| rxrihdoc=C:\MMA60\rxri.hlp | Does not apply to <i>MMA</i> . |
| HelpDBView=C:\MMA60\Mau60.hlp | Path location to <i>DBView</i> Help files. |
| HelpAdmin=C:\DT23\Maa60.hlp | Path location to <i>Administration</i> Help files. |

[ask1]

This section specifies the bitmaps used for each type of Inquiry.

| Keyname | Meaning |
|---------------------|-----------------------------------|
| reginq=cascade1.bmp | Bitmap for a Regular Template. |
| xtabinq=tile1.bmp | Bitmap for a Cross Tab Template. |
| perinq=calendar.bmp | Bitmap for Period Based Template. |
| msting-script1.bmp | Does not apply to <i>MMA</i> . |

[upstreaminfo]

Keyname

sysname=System Name

pgmname=DAZ110C.DAOBJ30

targetpath=n:\share\dtalpha\bin\

fileprefix=iq400

lowlvlloaded=N

upstreamtype=

pollinginterval=1

pollinglimit=0

maxrecio=0

warninglevel=0

Meaning

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

[dwsyntax]

Does not apply to *MMA*.

[misc]

This section defines miscellaneous parameters.

| Keyname | Meaning |
|-----------------------|--|
| harpercollins=0 | Flag. Does not apply to <i>MMA</i> . |
| smarttext=[] | Smart text uses [] as variable markers; note default is {}. |
| mma=1 | Flag. |
| inlistlimit=50 | The max number of Dimension Values that can be used for an 'in list' in SQL. 0=Always use subquery. -1=Always use 'in list'. >0=Use 'in list' for number of values. <= 'in list'. |
| deletedtv=0 | Used to delete the .DTV file. 1=Yes, enable delete of .DTV file. 0=No, do not enable. |
| useTranslate=1 | Used to determine if case sensitive is available on the Search window. 1=Yes, enable case sensitive. 0=No, do not enable. |
| DMUtil=1 | Does not apply to <i>MMA</i> . |
| CaseSensitiveSearch=1 | Enables case sensitive Master File search. 1=Yes, enable case sensitive search. 0=No, do not enable. |
| WinVersion=(16 bit) | Windows version of product. |
| ActionSupport=0 | Does not apply to <i>MMA</i> . |
| SilvonPWP=1 | Password encrypted. 1=Yes. 0=No. |
| Product=MMAProd | Product code. |
| Licbrk=0 | Does not apply to <i>MMA</i> . |
| ServerType=A | Server code. |
| uluserid= | User list ID. |

[InquiryRun]

This section specifies whether or not to show the Header area, Detail area, Graph area, and Information Box.

| Keyname | Meaning |
|----------------------------------|--|
| showhdr=1 | Show header; 1=yes, 0=no. |
| showgrid=1 | Show detail; 1=yes, 0=no. |
| showgraph=0 | Show graph; 1=yes, 0=no. |
| showinfo=1 | Show info; 1=yes, 0=no. |
| showcolor=0 | Show color bar; 1=yes, 0=no. |
| showstyle=0 | Show style bar; 1=yes, 0=no. |
| defgraph=2D - Column | Default graph type. |
| inqedit=1 | Make Template definition available; 1=yes, 0=no. |
| viewicon=viewicon.dti | File to write out the icon-ized View information. |
| Inplacedd=1 | In place or new drill-down windows; 1=in place, 0=new. |
| groupson=1 | Enables Desktop Views. 1=Yes, enabled. 0=No, not enabled. |
| Viewgroup=viewgrp.dti | File to write Desktop View information. |
| DataFieldType=Double | Used by DBSet option. |
| Viewdir=c:\mma60\ | Directory where <i>MMA</i> Views are stored. |
| OthersRowValue=Others | Does not apply to <i>MMA</i> . |
| OthersRowDescription=Others | Does not apply to <i>MMA</i> . |
| IqDebugOn=0 | Does not apply to <i>MMA</i> . |
| SummarizedRowsValue=Others | Value for summary rows in a View with totaling or subtotaling. The value is stored in the .INI file but can be changed in <i>DBView</i> using the window that displays after selecting Options Defaults. |
| SummarizedRowsDescription=Others | Description for summary rows in a View with totaling or subtotaling. The description is stored in the .INI file but can be changed in <i>DBView</i> using the window that displays after selecting Options Defaults. |

[Audit]

Keyname

AuditON=0

AuditFile=C:\MMA60\audit.txt

Meaning

Turn on the audit trail.

Audit trail file name and location.

[VariablePeriods]

Keyname

On=1

enhanced=0

weekenddaynumber=1

Meaning

Allows variable period maintenance.

Allows enhanced options to be available.

When defining ViewSetItems for weeks within month, if there are no items defined, this specifies the day that ends the week and creates ViewSetItems for the month with each week ending on a weekend day number.

ranges=0

Does not apply to *MMA*.

[HcInvoice]

HarperCollins specific invoice section. Does not apply to *MMA*.

Keyname

HierISBN=11

HierCustomerShipTo=12

HierCustomerStatement=10

PollingSeconds=5

AS400Sys=AS400 System Name

AS400Pgm=DAZ115C.DAOBJ30

Block1=11,ISBN ,0,Title ,-2,Pub.
Date ,3,Price ,4

Block2A=12,Customer Ship To
,0,-2,,1,,2

Block2B=10,Customer Statement
,0,-2,,1,,2

Meaning

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

Does not apply to *MMA*.

[NT]

Keyname

ACSDRV=acsdrv.bat
ADDDSL=adddsl.bat
RMVDSL=rmvdsb.bat
CLRPRD=clrprdb.bat
CLRALL=clrallb.bat
BATPATH=c:\dtprod\
RELCHG=relchgb.bat
DACOPY=dtacpyb.bat
WRTBCK=WRTBAKB.bat
SECVAl=secvalb.bat
CRTIDX=crtidxb.bat
CHKSRV=checkservice.exe
PWBLOD=loadpwbb.bat
EXTRACT=extractb.bat

Meaning

Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
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Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.

[ORAAIX]

Keyname

ACSDRV=acsdrv.sh
ADDDSL=adddsl.sh
RMVDSL=rmvdsb.sh
CLRPRD=clrprdb.sh
CLRALL=clrallb.sh
SHELLPATH=/dtprod

Meaning

Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.
Does not apply to *MMA*.

[Extern]

Keyname

MsgLoad=2

Meaning

This parameter is used to load the messagebox literals. 1- Load as needed, 2 - Load All, 3 - Load Smart. If 3 is selected, SmartLoadIncrement is used.

Load=1

This parameter is used to load the dttag (display text) literals. Same variables used as above in MsgLoad.

SmartLoadIncrement=25

Used only if MsgLoad/Load = 3.

EngineRunMode=1

Not currently implemented.

Language=1

The language you are using. 1 - English, 2 - French, 3 - German, 4 - Spanish.

DataNotFound=

If no literals are defined for a variable when retrieving the externalized text.

LogFile=

Not currently implemented.

NotConnectedToDB=

Not currently implemented.

[Multicurrency]

Keyname

On=0

Meaning

1=Allows multi-currency processing.
0=No multi-currency.

[PWB]

Performance Tuning Workbench rule file.

| Keyname | Meaning |
|--------------------------------|---|
| RuleBase=C:\MMA60\pwb.rul | Database where Performance Tuning Workbench is installed. |
| InqLog=C:\MMA60\pwbinqllog.dat | Log Snapshot file. |
| Config=C:\MMA60\pwbcfg.dat | Local Configuration file. |
| BestfitStrategy=0 | Best fit analysis parameter. |
| BestfitModifier=10 | Best fit analysis parameter. |
| BestfitPathValue=1 | Best fit analysis parameter. |
| PWBENTRY=0 | Determines whether data for use with the Performance Tuning Workbench feature will be entered manually or come from existing historical data loaded into the workbench through the DALOAD process. Set to 1 to enter data manually. |
| maxcount=10000 | Maximum number of records to process during a Performance Tuning Workbench analysis. Can be set through the Speed Criteria tab in the Performance Tuning Workbench Configuration window. |

[MMA env]

Environment code for *MMA*.

| Keyname | Meaning |
|----------------|--------------------------------|
| EnvCode=MM | <i>MMA</i> environment code. |
| Pgmlib=AMALIB | <i>MMA</i> programmer library. |
| Dtlib=AMOLIB | <i>MMA</i> database library. |
| Jobq=QBATCH | Job queue. |
| Morelibs=QGPL | Library list. |

[SQL400DB2]

AS/400 connection information.

| Keyname | Meaning |
|-----------------------------------|--------------------------------|
| ScriptPath1=C:\MMA60\stlibm1.sql | Does not apply to <i>MMA</i> . |
| ScriptPath2=C:\MMA60\amolibm2.sql | Does not apply to <i>MMA</i> . |
| scriptpath2=C:\MMA60\stlibm2.sql | Does not apply to <i>MMA</i> . |

[SQLCA400]

AS/400 connection information.

| Keyname | Meaning |
|-----------------------------------|-----------------------------|
| dbms=ODBC | Database management system. |
| database=STLIB | Data source name. |
| UserId=AMAPICS | Log ID to server. |
| dbpass=EB5DED26D91DC1 | Encrypted password. |
| dparm=ConnectionString='dsn-STLIB | Connection string. |
| servername=Server Name | Server name. |

[STENV]

MMA environment information.

| Keyname | Meaning |
|----------------------|--------------------------------|
| envcode=MM | <i>MMA</i> environment code. |
| pgmlib=AMALIB | <i>MMA</i> programmer library. |
| jobq=QBATCH | Job queue. |
| dtalib=AMOLIB6 | Database library. |
| morelibs=QGPL, QTEMP | Library list. |

[UserId]

| Keyname | Meaning |
|---------------------------|---------------------|
| AS400_User=AMAPICS | User ID. |
| AS400_Pass=EB5DED26D91DC1 | Encrypted password. |

[STSQLCA]

Database information.

| Keyname | Meaning |
|-------------------------|------------------------------------|
| dbms=ODBC | Database source type. |
| database=STLIB | Database source name. |
| UserId=AMAPICS | User ID. |
| dbpass=EB5DED26D91DC1 | Encrypted password. |
| dparm=ConnectionString= | Database option parameter. |
| servername=Server Name | Server name. |
| logid=AMAPICS | Login name. |
| firsttime=no | Not currently used by <i>MMA</i> . |

[ExternText]

Database information.

| Keyname | Meaning |
|--|--------------------------------|
| copyRight=Copyright (c) | Does not apply to <i>MMA</i> . |
| allRights=All rights reserved. | Does not apply to <i>MMA</i> . |
| w_logInInfo_stLoginId=Login ID: | Does not apply to <i>MMA</i> . |
| w_logInInfo_stPassword=Password: | Does not apply to <i>MMA</i> . |
| w_logInInfo_cbCancel=Cancel | Does not apply to <i>MMA</i> . |
| w_logInInfo_cbOk=OK | Does not apply to <i>MMA</i> . |
| w_logInInfo_Title=Login | Does not apply to <i>MMA</i> . |
| USA_C2DTDB_InvalidLogin_Msg_Title=Error | Does not apply to <i>MMA</i> . |
| USA_C2DTDB_InvalidLogin_msg_Text=Invalid login | Does not apply to <i>MMA</i> . |
| USA_C2DTDB_cannotConnect_Msg_Title=Cannot connect to DataBase | Does not apply to <i>MMA</i> . |
| USA_C2DTDB_cannotConnect_Msg_Text=Check connect parameters and try again. | Does not apply to <i>MMA</i> . |
| DB_COMPATIBLE_MSG_TITLE=Incompatible Database | Does not apply to <i>MMA</i> . |
| DB_COMPATIBLE_MSG_TEXT=Database is not compatible to client version. ~n Please upgrade the database. | Does not apply to <i>MMA</i> . |
| DB_UPGRADE_MESSAGE_UPGSUCCESS=ST Database Upgrade completed successfully upgrade_message_upgexit=Error in Database Upgrade... Exiting ! | Does not apply to <i>MMA</i> . |

[Notepad]

Notepad information.

Keyname

PosSz=658,460,1454,876)

Meaning

First two numbers reflect the position of window that opens when the **New** or **Edit** button is clicked in the Notes window of *DBView* (accessed by selecting Information | Notepad). Second two numbers control size of window. Change the position and size by either moving or resizing the window while using it in *DBView* or changing the numbers in the .INI file.

[PurgeNotes]

Purge Notes feature information.

Keyname

PosSz=777,520,1371,788

Meaning

First two numbers reflect the position of the window that opens when the **Purge** button is clicked in the Notes window of *DBView* (accessed by selecting Information | Notepad). Change the position by either moving the window while using it in *DBView* or changing the numbers in the .INI file. The size of the window, represented by the last two numbers, is fixed and cannot be changed.

[Notes]

Notes feature information.

Keyname

PosSz=795,604,2821,968

Meaning

First two numbers reflect the position of the Notes window that displays when you select Information | Notepad in *DBView*. Change the position by either moving the window while using it in *DBView* or changing the numbers in the .INI file. The size of the window, represented by the last two numbers, is fixed and cannot be changed.

CHAPTER 5 • MMA LIBRARY AND AS/400 COMMANDS

QuickLook

Use this chapter to familiarize yourself with the *MMA* library and source files:

- *MMA* structural components.
- *MMA* AS/400 library structure.
- Source files.
- Data flow between a system and internal database.

Also use this chapter to familiarize yourself with various AS/400 commands and processes:

- Add New DSL (ADDDSL) Command
- Create Audit Report (AUDRPT) Command
- Build DSL Count (BLDDSLCNT) Command
- Change Reuse of Deleted Record (CHGDLTRCD) Command
- Delete Detail Data (CLRDTL) Command
- Copy Database Library (CPYDBLIB) Command
- Copy Detail Data (CPYDTL) Command
- Create Audit Data (CRTAUDDTA) Command
- Create Import RPG Program (CRTIMPRPG) Command
- Convert Master File Tables (CVTMFTBL) Command
- Convert Sales Year (CVTSLSYR) Command
- Convert to New Structure Code (CVTSCODE) Command
- Convert User List Tables (CVTULIST) Command
- Add New DSL (DAADDDSL) Command
- Apply Change Set (DACHGSET) Command

- Group Change Sets (DAGRPCHG) Command
- Initialize Warehouse for Refresh (DAINZDTA) Command
- Load Data (DALOAD) Command
- Load Performance Workbench (DALOADPWB) Command
- Relationship Change (DARELCHG) Command
- Remove DSL (DARMVDSL) Command
- Update Parameter Master (DAUPDPMF) Command
- Delete Zero Sales (DLTZROSLS) Command
- Data Copy (DTACPY) Command
- Remove Variable Characters (DTRMVVC) Command
- Extract Master Data (EXTMST) Command
- Generate File Servers (GENFILSRV) Command
- Import Detail (IMPDTL) Command
- Import Open Order Data (IMPORD) Command
- Import User List (IMPUSL) Command
- Move Master File Data (MOV MST) Command
- Remove DSL (RMVDSL) Command
- Remove Variable Characters (RMV VARCHAR) Command
- *MMA AS/400* Upgrade (STUPGRADE) Command
- Update Current Period (UPDCURPER) Command
- VARCHAR Conversion Report (VARCHARRPT) Command

MMA Structural Components

Internal Database

The Internal Database contains each of the tables that are supplied with *MMA*. The tables can be divided into two classifications:

- Those tables that are generated based upon your specific definitions.
- Those tables that are standard across all installations. The tables that are standard across all installations are those that are not based upon the number and size of the Dimensions nor the number of value buckets being implemented.

Internal Interfaces

These are the programs that retrieve data from or insert data into the Internal Database. As with the internal database, some of these programs are automatically generated for your specific implementation and others are standard interface programs.

External Sources

This portion of the structure represents your existing transaction systems from which *MMA* is to retrieve data. The External Sources can be divided into two groups:

Master tables

Tables where descriptions, characteristics, and previous level Dimension value information are retrieved.

Import tables

Those sets of batch data in existing tables that are reformatted for and placed into the *MMA* import tables. Once in the import tables, standard *MMA* functions update the internal database. These batches of data (Actual Sales, Budgets, Forecasts, and so forth) are usually created by another system. Conversion programs are a special type of import function and are only run during the implementation phase.

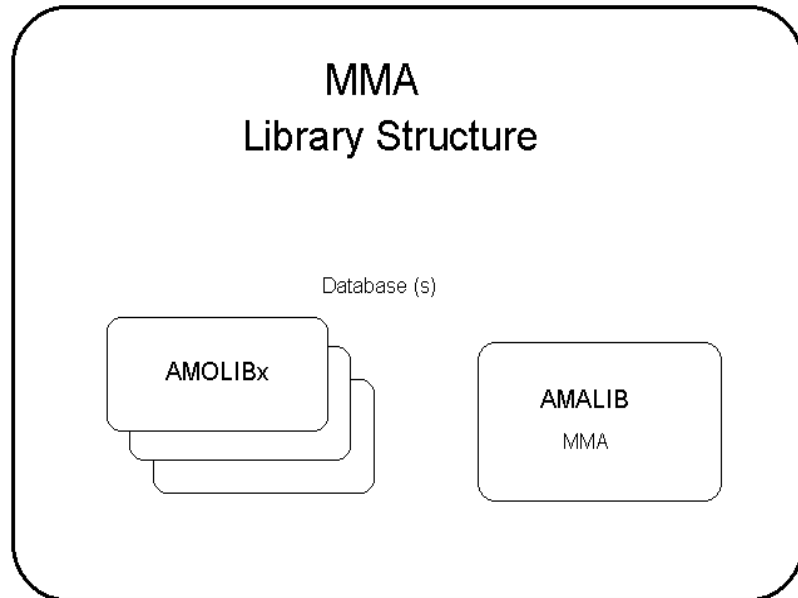
External Interfaces

These are the programs that retrieve or process the data from the external sources. These include the Master Table interface programs and the import programs to output data to *MMA* created using the *MMA Data Sourcing Kit*.

Core Program/Functions

These are the programs that perform the functions of *MMA*. They retrieve or input data using the Internal and External Interfaces. They also provide the user interface for Inquiry, reporting, and data manipulation.

AS/400 Library Structure



Overview

In one *MMA* environment, there is normally one standard program library (AMALIB) and a single or multiple database libraries (AMOLIBx).

- The program object library is shipped as part of the *MMA* product.
- The database libraries are created using the *MMA* Install and Database Maintenance functions found in the *Administration* application.

The libraries that are part of a *MMA* environment are as follows:

AMALIB

This is the base program object library name as it is shipped. It is normally installed as AMALIB.

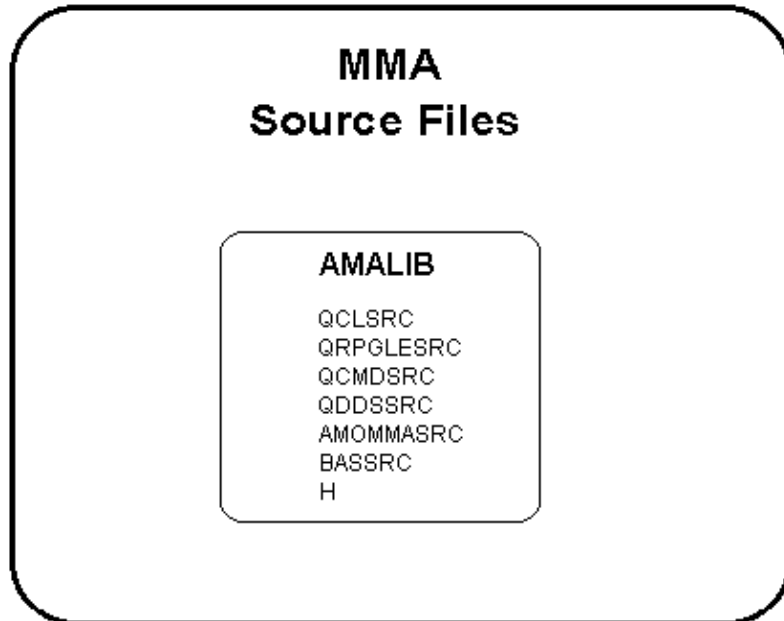
AMOLIBx

This library represents each of the database libraries that may be created for your installation. Your specific database library name would be AMOLIBx. The database libraries are created using the Create Database and Database Install functions found in the *Database Maintenance* and *Database Install* icons. The "x" could be the initials of your company.

For example, if your company name is *Smith Bicycle Company*, you might create a data library with the name of AMOLIBS. The library contains all data tables, Indexes, Views, internally generated table server programs, job descriptions, and commands (with their default values changed).

Source Files

The following diagram identifies the source files kept in each of the *MMA* libraries.



The table below lists each source file and a short description of the file. The source files are listed according to the library in which they can be found.

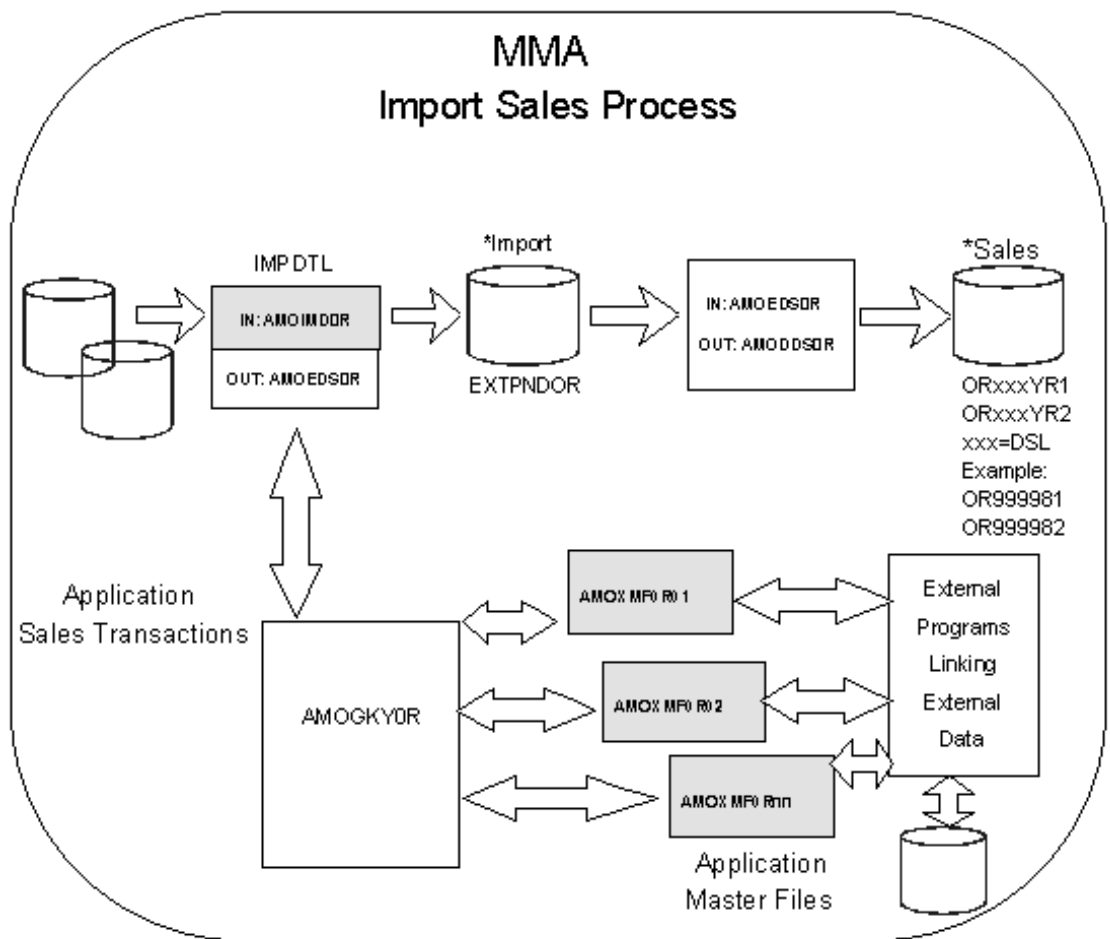
| Library | Source File | Contains |
|---------|-------------|------------------------------------|
| AMALIB | QCLSRC | Source for CL programs |
| | QRPGLESRC | Source code for RPG/ILE objects |
| | QCMSDRC | Source code for commands |
| | QDDSSRC | Source code for DDS specifications |
| | AMOMMASRC | Copy books for <i>MMA</i> |
| | BASSRC | <i>MMA</i> Base File Server source |
| | H | Header file for C programs |

Table Flow Diagrams

The following diagrams outline the flow of data between your existing system and the internal database.

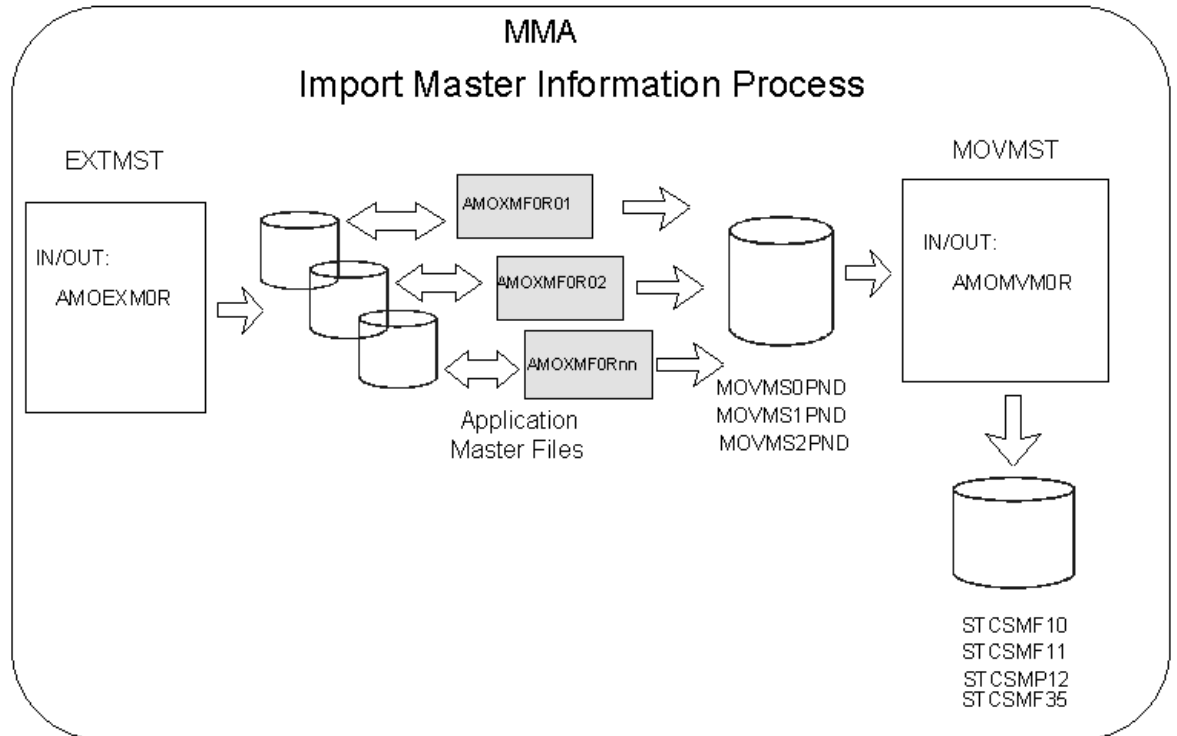
Import Sales Process

This diagram outlines the programs that are called when running the Import Detail (IMPDTL) command. This approach is used when the data being imported to MMA is to be placed directly into the Sales Summary tables (For example, OR999981 or OR999982). The shaded boxes represent External Interface programs that must be developed during the implementation process.



Import Masters Process

This diagram outlines the programs that are called when running the Import Masters (IMPST) command. This command is used to take information from your Dimensions associated Master tables and update the Master tables (STCSMF10, STCSMF11, STCSMP12, and STCSMF35) within MMA. The shaded boxes represent External Interface programs that must be developed during the implementation process. The output tables hold descriptions, characteristics, and previous level Dimensions associated with the Master tables for the Dimensions. Each Dimension is made up of a short description and, optionally, a long description. Each Dimension can contain up to 35 optional characteristics (For example, Buyer, City, State, Contact, and so forth). Each Dimension can contain Dimension values uniquely determined by a Dimension value (For example, Item Group and Item Family are uniquely determined by Item).



Add New DSL (ADDDSL) Command

ADDDSL is called by the *MMA* Utilities to execute the process of adding a new DSL.

Note: The ADDDSL command calls the DAADDSL command to execute the add DSL process for new structure codes.

```

                                Add New DSL (ADDDSL)

Type choices, press Enter.

Database Library . . . . . _____ Character value
Program Library . . . . . _____ Character value
Format of TARGET data . . . . . *DELIMITED *FIXED, *DELIMITED
Submit to batch . . . . . 1 ('1'= Yes '0'= No)

                                                                    Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Add New DSL (ADDDSL) panel

Command Parameters

Database Library

This is the name of the *MMA* database library.

Program Library

This is the *MMA* Server Object library.

Format of TARGET data

Use to identify the data field format for the Target data. Valid entries are:

***DELIMITED**

Data fields are delimited with the hex characters "FB."

***FIXED**

Data fields are represented in a standard fixed file format.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Create Audit Report (AUDRPT) Command

The AUDRPT command is used to create the Audit for Database Build report. The Audit for Database report includes move start and end times, DSL hash totals, DSL record counts, import hash totals, and import record counts. This report also gives you the completing status of each category, balancing messages for hash totals, and DSL completion statuses.

```
                                Create Audit Report (AUDRPT)

Type choices, press Enter.

Structure Code . . . . . OR           Character value, *ALL
Submit to batch? . . . . . 1         ('1'=Yes, '0'=No)

                                                                    Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Create Audit Report (AUDRPT) panel

Command Parameters

Structure Code

Structure Code

The structure code used when creating the audit report.

***All**

This processes all structure codes.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Build DSL Count (BLDDSLCNT) Command

The BLDDSLCNT command is used to refresh the last update date and counts for header and detail files for each data source, DSL, year, and category.

```
Build DSL Count Table (BLDDSLCNT)

Type choices, press Enter.

Program Library . . . . . AMALIB      Name
Database Library . . . . . AMDLIB      Name
Submit to batch? . . . . . 1          ('1'= Yes '0'= No)
Job Description . . . . . *USRPRF      Name, *USRPRF
Library . . . . . _____        Name, *LIBL
Hold on JCBQ . . . . . 1            ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Build DSL Count Table (BLDDSLCNT) panel

Command Parameters

Program Library

This is the *MMA* Server Object library.

Database Library

This is the name of the *MMA* database library.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Job Description

Name

Enter a name of a specific job description.

***USRPRF**

This uses the default job description from the user profile.

Library

Name

Enter the name of a specific library in which the command process should look for the job description.

***LIBL**

This uses the default library list from the user profile.

Hold on JOBQ

1= Yes

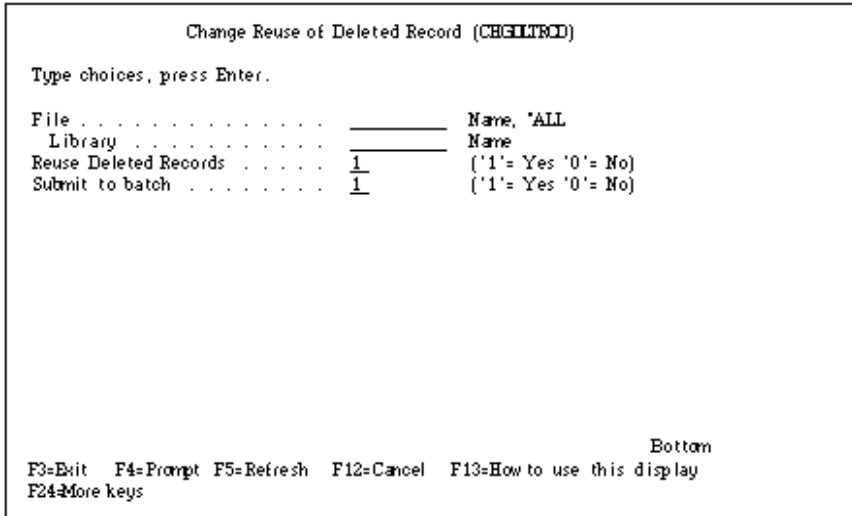
The command is submitted on hold.

0 = No

The command is NOT submitted on hold.

Change Reuse of Deleted Record Command (CHGDLTRCD)

The CHGDLTRCD will provide the ability to change reuse of deleted records for an AS/400 table.



Change Reuse of Deleted Record (CHGDLTRCD) panel

Command Parameters

File

This is the table you wish to change. Specify *ALL to change all tables in the library.

Library

This is the library in which the table resides.

Reuse Deleted Records

1 = Yes

Reuse deleted records is enabled.

0 = No

Reuse deleted records is disabled.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Delete Detail Data (CLRDTL) Command

The CLRDTL command is called by the *MMA* Utilities to execute the process of clearing detail data from warehouse tables by category, year, period, and category/value.

```

                                Delete Detail Data (CLRDTL)
Type choices, press Enter.
Database Library . . . . . _____ Character value
Program Library . . . . . _____ Character value
Submit to batch . . . . . 1 ('1'= Yes '0'= No)

                                Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Delete Detail Data (CLRDTL) panel

Command Parameters

Database Library

This is the name of the *MMA* database library.

Program Library

This is the *MMA* Server Object library.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Copy Database Library (CPYDBLIB) Command

This command allows existing *MMA* customers to do parallel testing without copying the data warehouse and Master Files. You can continue to do your day-to-day analysis with the production system.

```
Copy Database Library (CPYDBLIB)

Type choices, press Enter.

Existing Database Library . . . AMLIB      Name
New Database Library . . . . . -          Name
Create New Database Library . . . 1        ('1'= Yes '0'= No)
Create Master Data Views . . . . 1        ('1'= Yes '0'= No)
Create Warehouse Data Views . . . 1        ('1'= Yes '0'= No)
Submit to batch . . . . . 1              ('1'= Yes '0'= No)

Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Copy Database Library (CPYDBLIB) panel

Command Parameters

Existing Database Library

The existing *MMA* database library name.

New Database Library

The new *MMA* database library name.

Create New Database Library

1 = Yes

The new database library should be created.

0 = No

The new database library should NOT be created.

Create Master Data Views

1 = Yes

Views that point back to the "From" database library will get created for all Master File information instead of an actual physical table.

0 = No

Master File tables will get created in the "To" database library but will NOT get populated.

Create Warehouse Data Views

1 = Yes

Views that point back to the "From" database library will get created for all history information.

0 = No

History information tables will get created in the "To" database library but will NOT get populated.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Steps for creating a new environment:

1. Load the new client CDs and install *MMA 6.0* in a directory different from the production *MMA* directory.
2. Restore the new AS/400 tape with a name different from the production object library name.
3. Set the library list as:
6.0 New Object library
5.0 (or earlier) Production Database library
4. Execute the new CPYDBLIB command from the AS/400 using the new object library.
5. Upgrade the new database library by selecting the Upgrade option from the *Database Maintenance* window.
6. Test the new features in the Inquiry using the upgraded database library.

Copy Detail Data (CPYDTL) Command

Use to copy data from one category to another. The copy function allows for a direct copy or for the factoring of the data before it is copied to a new category.

```
Copy Detail Data (CPYDTL)

Type choices, press Enter.

FROM Category . . . . . _____ Character value
TO Category . . . . . _____ Character value
FROM year . . . . . *CURRENT 00-99, *CURRENT
TO year . . . . . *CURRENT 00-99, *CURRENT
Element to copy:
  FROM element . . . . . _____ Character value
  TO element . . . . . *FROM Character value, *FROM
  Factor code . . . . . _____ M, D, A, S, ' '
  Factor value . . . . . 0
      + for more values
Type of update . . . . . *IMMED *IMMED, *PENDING
Submit to batch . . . . . 1 ('1'= Yes '0'= No)
Database Library . . . . . _____ Name
Program Library . . . . . _____ Name

F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys

Bottom
```

Copy Detail Data (CPYDTL) panel

Command Parameters

FROM Category

The name of the category to copy detail information from.

TO Category

The name of the category to copy detail data to.

FROM year

The year to copy detail information from. Use the TO year field to specify if you want to copy data using a range of years. This can be one of the following values:

00-99

Enter the year to extract data in the YY format.

***CURRENT**

Use *CURRENT to use the current year as the year to copy detail data from.

TO year

The year to copy detail information to. This is the same value as the FROM year field if you are copying for a single year of data. This can be one of the following values:

00-99

Enter the year to extract data in the YY format.

***CURRENT**

Use *CURRENT to use the current year as the year to copy detail data to.

Element to copy

Enter a plus mark (+) in this field to display additional element parameters for copy. See the following fields for a description of this copy function.

FROM element

The name of the element to copy detail information from.

TO element

The name of the element to copy detail information to.

***FROM**

Name of the element to copy detail information from.

Factor code

The factor used to calculate the specified element (value). This can be one of the following values:

M - Multiply

D - Divide

A - Add

S - Subtract

' ' - blank

The blank value is used to identify a “no calculation” situation.

Factor value

Value used to calculate the element.

+ for more values

Enter a plus mark (+) in this field to display additional element parameters for copy.

Type of update

Use to determine how the copy request is updated. This can be one of the following values:

***IMMED**

Update the sales file immediately.

***PENDING**

Update the pending file associated with the To category.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Database Library

Name of the *MMA* database library.

Program Library

The *MMA* Server Object library.

Create Audit Data (CRTAUDDTA) Command

This command creates an audit file that summarizes all buckets by DSL, Sales year, category and Element ID (if Include SALESINFOTYPE?=1) for all data by structure code. This file can then be queried to check data integrity.

```
                                Create Audit Data (CRTAUDDTA)

Type choices, press Enter.

Structure Code . . . . .          _____      Character value
Program Library . . . . .        AMALIB         Name
Database Library . . . . .       AMLIB          Name
Audit File . . . . .             _____      Name
  Library . . . . .              *DTALIB        Name, *DTALIB
Include SALESINFOTYPE? . . . . .  1           ('1'= Yes '0'= No)
Submit to batch? . . . . .       1           ('1'= Yes '0'= No)
Job Description . . . . .        *USRPRF      Name, *USRPRF
  Library . . . . .              _____      Name, *LIBL
Hold on JCBQ . . . . .          1           ('1'= Yes '0'= No)

                                                                    Bottom
F3=Exit  F4=Prompt  F5=Refresh F12=Cancel  F13=How to use this display
F24=More keys
```

Create Audit Data (CRTAUDDTA) panel

Command Parameters

Structure Code

This is the structure code for which you want to create audit data for.

Program Library

This is the MMA Server Object library.

Database Library

This is the name of the MMA database library.

Audit File

This is the name of the audit file.

Library

This is the library where the audit file is created.

Include SALESINFOTYPE?

1 = Yes

Include Element ID in grouping.

0 = No

Do NOT include Element ID in grouping.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Job Description

Name

Enter a name of a specific job description.

***USRPRF**

This uses the default job description from the user profile.

Library

Name

Enter the name of a specific library in which the command process should look for the job description.

***LIBL**

This uses the default library list from the user profile.

Hold on JOBQ

1 = Yes

The command is submitted on hold.

0 = No

The command is NOT submitted on hold.

Create Import RPG Program Command (CRTIMPRPG)

This command is used by *MMA* for AS/400 loading programs to generate RPG file server programs. *MMA* will automatically create file server programs if the programs are needed.

```
                                Create Import RPG Program (CRTIMPRPG)

Type choices, press Enter.

Structure code . . . . . _____      Character value
DSL code . . . . . _____            Character value
Year . . . . . _____                Number
Data library . . . . . AMLIB           Name
Program to generate . . . . . *ALL      *ALL, HDR, MOV, NEW, EXT...
Program library . . . . . *DTALIB      Name, *DTALIB
Base Source file . . . . . EASSEC      Name
Library . . . . . *LIEL                Name, *LIEL

                                                    Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Create Import RPG Program (CRTIMPRPG) panel

Command Parameters

Structure code

MMA structure code to build the file servers over.

DSL code

MMA DSL to build the file servers over.

Year

Year to build the file servers over.

Data library

MMA database library name.

Program to generate

Specify which file server program to generate.

Program library

Specify the library in which the file server programs are to be created.

Base Source file

File in which the file server code resides.

Library

Name

Enter the name of a specific library in which the command process should look for the file.

***LIBL**

This uses the default library list from the user profile.

Convert Master File Tables (CVTMFTBL) Command

The CVTMFTBL command will remove variable characters from the STCSMF10, STCSMF11, STCSMF12, and STCSMF35 tables.

```
Convert Master File Tables (CVTMFTBL)

Type choices, press Enter.

Database Library . . . . . _____ Character value
Submit to batch . . . . . 1          ('1'= Yes '0'= No)

                                           Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Convert Master File Tables (CVTMFTBL) panel

Command Parameters

Database Library

This is the *MMA* database library.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Convert Sales Year (CVTSLSYR) Command

The CVTSLSYR command is used to convert the data warehouse tables and set import options to specified format. The CCYY format will store the four-digit century in the data warehouse.

```
Convert Sales Year (CVTSLSYR)

Type choices, press Enter.

Format (CCYY) . . . . . CCYY      CCYY
Submit to batch . . . . . 1        ('1'= Yes '0'= No)

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys

Bottom
```

Convert Sales Year (CVTSLSYR) panel

Command Parameters

Format

This is the format in which you want to store the data.

CCYY

This format will store the data with the four-digit century.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Convert to New Structure Code (CVTSCODE) Command

The CVTSCODE command will create tables only for the years that are loaded in the STCSxx01 and STCSxx02 tables. If these tables do not contain any data, tables will be created for the current year. The process will break up existing data into separate tables by DSL and Year redefine data source information to point to the new tables.

```
Convert To New Structure Code (CVTSCODE)

Type choices, press Enter.

Structure Code . . . . . _          Character value
Database Library . . . . .          Character value
Report Only . . . . . 1          ('1'= Yes '0'= No)
Copy Low Level Only . . . . . 0    ('1'= Yes '0'= No)
Delete After Copy . . . . . 1    ('1'= Yes '0'= No)
Submit to batch . . . . . 1    ('1'= Yes '0'= No)

Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Convert to New Structure Code (CVTSCODE) panel

Command Parameters

Structure Code

This is the structure code you want to convert.

Database Library

This is the *MMA* database library.

Report Only

1 = Yes

The Convert Structure Code report will be produced but the actual conversion will NOT occur.

0 = No

The Convert Structure Code report will be produced and if the amount of DASD needed is available, will continue with the actual conversion.

Copy Low Level Only

1 = Yes

The command will create the necessary DSL's but will only copy over the low-level data. The ADDDSL function will need to be executed after the conversion. This can be used if DASD is a concern by clearing the 2.x Non-Lowest Level tables prior to the conversion and rebuilding the DSL's after the conversion.

0 = No

The command will copy over the existing data for all DSL's defined.

Delete After Copy

1 = Yes

The data from the old tables will be deleted after it has been copied to the new tables

0 = No

The data from the old tables will NOT be deleted after it has been copied to the new tables

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Convert User List Tables Command (CVTULIST)

The CVTULIST command will remove variable characters from the (STCSUL10, STCSUL11, STCSUL12, and STCSUL13) User List Tables.

```
Convert User List Tables (CVTULIST)

Type choices, press Enter.

Database Library . . . . . _____ Character value
Submit to batch . . . . . 1          ('1'= Yes '0'= No)

                                           Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Convert User List Tables (CVTULIST) panel

Command Parameters

Database Library

This is the *MMA* database library.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Add New DSL (DAADDDSL) Command

Running the DAADDDSL command processes the call to the GISLSDRV C program for the MMA Add DSL process.

Note: The DAADDDSL command must only be run from the client. The client creates the files and records that are needed prior to DAADDDSL running.

```
DAADDDSL (DAADDDSL)

Type choices, press Enter.

Out File Format Type . . . . . *WAREHOUSE  *WAREHOUSE, *DELIMITED...
Connection String . . . . . *GENERATE  *GENERATE, *DEFINE
Program Library . . . . . _____  Character value
Recovery . . . . . 0  ('1'= Yes '0'= No)
Submit to batch . . . . . 1  ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F10=Additional parameters F12=Cancel
F13=How to use this display F24=More keys
```

DAADDDSL (DAADDDSL) panel

Command Parameters

Out File Format Type

Determines how the command attempts to write output data. Valid entries are:

***WAREHOUSE**

The output data will be written to the data warehouse tables.

***DELIMITED**

The output data will be written to a text file as delimited data.

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from current user.

A local relational database directory must be defined for the command to process. The library list must contain an *MMA* database library name.

***DEFINE**

The connection string will be defined from parameters.

If *DEFINE is selected, you will need to enter these four *DEFINE parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** *MMA* database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Program Library

MMA Server Object library name. Will add program library to library list prior to processing.

Recovery

Determines if the recovery process will be executed. Valid entries are:

0 = No

If NOT running a recovery process.

1 = Yes

If running a recovery process.

Submit to batch

Determines if the command will process in batch or interactively. Valid entries are:

0 = No

Run interactively.

1 = Yes

Run in batch.

Additional parameters can be prompted by pressing F10 after conditional prompt control.

Additional Parameters

Work Directory Name

Integrated File System directory name which any work output file will reside.

Log File Name

Integrated File System full path name of the log file.

Note: Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Input File Year Format

Year Format is not used by the command, but Year Format will display as part of the additional parameters that display for the command.

User Space Size

Defines the size of the user space that is used during the command process. Valid entries are:

***16M**

The process will use a 16-megabyte user space.

***8M**

The process will use an 8-megabyte user space.

Memory Size

Defines the amount of memory that the command will process under. Valid entries are:

***NOMAX**

Will NOT try to process within a defined memory size.

Number

Defines the amount of memory that the command will process under. Minimum number is 16 megabytes.

Inform Record Count

Inform record count.

Number

Number of records to process between informational messages.

Note: If the setting is too low, it will cause large log files and slower performance.

Chain Length Warning

A Chain Length Warning occurs when the command is forced to allocate extra memory at DSL load time because the number of header records that are being loaded exceeds the number of estimated number headers.

Number

Print a warning message if number of chains exceed the number defined.

Note: This message does not mean that the process will fail, only that it is not functioning at peak performance.

Debug

0 = No

Will NOT print debug messages.

1 = Yes

Will print debug messages. Debug messages include all SQL Statements used and other miscellaneous messages needed to debug any problem that may occur.

Apply Change Set (DACHGSET) Command

Run the DACHGSET command processes the call to GIACSDRV C program for MMA Apply Change Set process.

```
DACHGSET (DACHGSET)

Type choices, press Enter.

Change set id . . . . . _____ Character value
Category . . . . . *ALL Character value
Data year . . . . . *ALL Character value, *ALL
Data Source Name . . . . . _____
Header Lookup . . . . . *LOOKHDR *LOOKHDR, *LOOKKY
Out File Format Type . . . . . *WAREHOUSE *WAREHOUSE, *DELIMITED...
Connection String . . . . . *GENERATE *GENERATE, *DEFINE
Program Library . . . . . _____ Character value
Recovery . . . . . 0 ('1'= Yes '0'= No)
Process Change Sets to Pending . . . . . 1 ('1'= Yes '0'= No)
Type of update . . . . . *IMMED *IMMED, *PENDING
Submit to batch . . . . . 1 ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F10=Additional parameters F12=Cancel
F13=How to use this display F24=More keys
```

DACHGSET (DACHGSET) panel

Command Parameters

Change set id

Change Set Id.

Category

***ALL**

Will process all categories for the given data source.

Category

Will process only the given category for the given data source.

Data year

***ALL**

Will process all years for the given data source.

Year

Will process only the given year for the given data source.

Data Source Name

MMA data source name for the desired load.

For example: DATASOURCE(DSDS).

Header Lookup

Header Lookup is how the load process will determine if a header record exists in the database or is a new record. Valid entries are:

***LOOKHDR**

Look header will scan all records from a header table with a single query and compares header records against the import header records. Look header is primarily used for Historical Loads, Add New DSL, and for NetChange (if the NetChange is updating more records than what exists currently in the header table).

***LOOKKY**

Look Key will check for existence from the header table one import record at a time. Look Key is primarily used for NetChange (the NetChange is updating less records than what exists currently in the header table).

Example: HEADERLOOK(*LOOKHDR).

Out File Format Type

Determines how the command attempts to write output data. Valid entries are:

***WAREHOUSE**

The output data will be written to the data warehouse tables.

***DELIMITED**

The output data will be written to a text file as delimited data.

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user.

A local Relational Database Directory must be defined for the command to process. The library list must contain an *MMA* database library name.

***DEFINE**

The connection string will be defined from parameters.

If *DEFINE is selected, you will need to enter these four *DEFINE parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** *MMA* database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Program Library

MMA Server Object library name. Will add program library to library list prior to processing.

Recovery

Determines if recovery process is being executed. Valid entries are:

0 = No

If NOT running a recovery process.

1 = Yes

If running a recovery process.

Process Change Sets to Pending

If 1 is selected, you will be prompted for the type of update parameter. Valid entries are:

0 = No

Inplace

1 = Yes

Reverse Transaction

Type of update

Use to determine how the Change Set is processed. Valid entries are:

***IMMED**

Process Change Set to data warehouse.

***PENDING**

Process Change Set to Extract Pending File.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Additional parameters can be prompted by pressing F10 after conditional prompt control.

Additional Parameters

Work Directory Name

Integrated File System directory name in which any work output file will reside.

Log File Name

Integrated File System full path name of the log file.

Note: Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Input File Year Format

Year Format is not used by this command, but Year Format will display as part of the additional parameters that display for the command.

User Space Size

Defines the size of the user space that is used during the command process. Valid entries are:

***16M**

The process will use a 16-megabyte user space.

***8M**

The process will use an 8-megabyte user space.

Memory Size

Defines the amount of memory that the command will process under. Valid entries are:

***NOMAX**

Will NOT try to process within a defined memory size.

Number

Defines the amount of memory that the command will process under. Minimum number is 16 megabytes.

Inform Record Count

Inform record count.

Number

Number of records to process between informational messages.

Note: If the setting is too low, it will cause large log files and slower performance.

Chain Length Warning

A Chain Length Warning occurs when the command is forced to allocate extra memory at DSL load time because the number of header records that are being loaded exceeds the number of estimated number headers.

Number

Print a warning message if number of chains exceed the number defined.

Note: This message does not mean that the process will fail, only that it is not functioning at peak performance.

Debug

0 = No

Will NOT print debug messages.

1 = Yes

Will print debug messages. Debug messages include all SQL Statements used and other miscellaneous messages needed to debug any problem that may occur.

Process Previous Level

0 = No

Will NOT process previous level logic.

1 = Yes

Will process previous level logic. Previous levels will be added to the defined change set data records.

Group Change Sets (DAGRPCHG) Command

The Group Change Sets command is used by *Administration* to process the applied Change Sets.

```
DAGRPCHG (DAGRPCHG)

Type choices, press Enter.

Header Lookup . . . . . *LOOKHDR *LOOKHDR, *LOOKKY
Out File Format Type . . . . . *WAREHOUSE *WAREHOUSE, *DELIMITED...
Connection String . . . . . *GENERATE *GENERATE, *DEFINE
Program Library . . . . . Character value
Recovery . . . . . 0 ('1'= Yes '0'= No)
Submit to batch . . . . . 1 ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F10=Additional parameters F12=Cancel
F13=How to use this display F24=More keys
```

DAGRPCHG (DAGRPCHG) panel

Command Parameters

Header Lookup

Header Lookup is how the load process will determine if a header record exists in the database or is a new record. Valid entries are:

***LOOKHDR**

Look header will scan all records from a header table with a single query and compares header records against the import header records. Look header is primarily used for Historical Loads, Add New DSL, and for NetChange (if the NetChange is updating more records than what exists currently in the header table).

***LOOKKY**

Look Key will check for existence from the header table one import record at a time. Look Key is primarily used for NetChange (the NetChange is updating less records than what exists currently in the header table).

For example: HEADERLOOK(*LOOKHDR).

Out File Format Type

Determines how the command attempts to write output data. Valid entries are:

***WAREHOUSE**

The output data will be written to the data warehouse tables.

***DELIMITED**

The output data will be written to a text file as delimited data.

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory Entry, the **DBLIB** from the library where file STCSUS10 resides, the **USERID** from the current user, and the **PASSWORD** from the current user.

A local Relational Database Directory must be defined for the command to process. The library list must contain an *MMA* database library name.

***DEFINE**

The connection string will be defined from parameters.

If ***DEFINE** is selected, you will need to enter these four ***DEFINE** parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** *MMA* database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Program Library

MMA Server Object library name. Will add program library to library list prior to processing.

Recovery

Determines if recovery process is being executed. Valid entries are:

0 = No

If NOT running a recovery process.

1 = Yes

If running a recovery process.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Additional parameters can be prompted by pressing F10 after conditional prompt control.

Additional Parameters

Work Directory Name

Integrated File System directory name which any work output file will reside.

Log File Name

Integrated File System full path name of the log file.

Note: Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Input File Year Format

Year Format is not used by this command, but Year Format will display as part of the additional parameters that display for the command.

User Space Size

Defines the size of the user space that is used during the command process. Valid entries are:

***16M**

The process will use a 16-megabyte user space.

***8M**

The process will use an 8-megabyte user space.

Memory Size

Defines the amount of memory that the command will process under. Valid entries are:

***NOMAX**

Will NOT try to process within a defined memory size.

Number

Defines the amount of memory that the command will process under. Minimum number is 16 megabytes.

Inform Record Count

Inform record count.

Number

Number of records to process between informational messages.

Note: If the setting is too low, it will cause large log files and slower performance.

Chain Length Warning

A Chain Length Warning occurs when the command is forced to allocate extra memory at DSL load time because the number of header records that are being loaded exceeds the number of estimated number headers.

Number

Print a warning message if number of chains exceed the number defined.

Note: This message does not mean that the process will fail, only that it is not functioning at peak performance.

Debug

0 = No

Will NOT print debug messages.

1 = Yes

Will print debug messages. Debug messages include all SQL Statements used and other miscellaneous messages needed to debug any problem that may occur.

Initialize Warehouse for Refresh (DAINZDTA) Command

The DAINZDTA command will clear all warehouse data tables, last used (STCSOR00) Hierarchy ID and counts for header and details (STCSDT15).

In order to execute this command, the Parameter Master record CLEARDW must be equal to 1. Once the command has executed, the CLEARDW parameter will be set back to 0.

```
          DAINZDTA (DAINZDTA)

Type choices, press Enter.

Clear Data Source Name . . . . . _____ Character value
Clear Data Source Year . . . . . _____ *GENERATE, *DEFINE
Connection String . . . . . *GENERATE

                                                    Bottom
F3=Exit  F4=Prompt  F5=Refresh  F10=Additional parameters  F12=Cancel
F13=How to use this display  F24=More keys
```

DAINZDTA (DAINZDTA) panel

Command Parameters

Clear Data Source Name

This is the data source for which you want to clear the tables.

Clear Data Source Year

This is the year for which you want to clear the tables.

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user.

A local Relational Database Directory must be defined for the command to process. The library list must contain an *MMA* database library name.

***DEFINE**

The connection string will be defined from parameters.

If *DEFINE is selected, you will need to enter these four *DEFINE parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** *MMA* database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Load Data (DALOAD) Command

Run the DALOAD command process calls the GISLSDRV C program for the MMA loading process.

```
DALOAD (DALOAD)

Type choices, press Enter.

Data Source Name . . . . . DSOR
Header Lookup . . . . . *LOOKHDR      *LOOKHDR, *LOOKY
Load Type . . . . . *REFRESH      *REFRESH, *NECHANGE
Period Information Format . . . . . *SINGLE      *SINGLE, *FULL, *FLIPUP
Input File Format Type . . . . . *EXTPND      *EXTPND, *DELIMITED, *BINARY
Out File Format Type . . . . . *WAREHOUSE      *WAREHOUSE, *DELIMITED...
Connection String . . . . . *GENERATE      *GENERATE, *DEFINE
Program Library . . . . . _____      Character value
Recovery . . . . . 0                  ('1'= Yes '0'= No)
Submit to batch . . . . . 1          ('1'= Yes '0'= No)

                                     Bottom
F3=Exit  F4=Prompt  F5=Refresh  F10=Additional parameters  F12=Cancel
F13=How to use this display  F24=More keys
```

DALOAD (DALOAD) panel

Command Parameters

Data Source Name

MMA data source name for the desired load.

For example: DATASOURCE(DSOR).

Header Lookup

Header Lookup is how the load process will determine if a header record exists in the database or if it is a new record. Valid entries are:

***LOOKHDR**

Look header will scan all records from a header table with a single query and compares header records against the import header records. Look header is primarily used for Historical Loads, Add New DSL, and for NetChange (if the NetChange is updating more records than what exists currently in the header table).

***LOOKKY**

Look Key will check for existence from the header table one import record at a time. Look Key is primarily used for NetChange (the NetChange is updating less records than what exists currently in the header table).

For example: HEADERLOOK(*LOOKHDR).

Load Type

Load Type indicates the type of processing the command performs. Valid entries are:

REFRESH

This option does not truncate any tables. Use Refresh if you are doing a historical load with many buckets in the Extract Pending File.

NETCHANGE

This option does not truncate any tables. Use Netchange if you are doing a netchange load with only a few buckets in the Extract Pending File.

Period Information Format

Period Information Format indicates the type of format that the data will be in. Valid entries are:

***SINGLE**

The data will be in the format of one bucket value and a bucket number.

(If INPUTTYPE is defined as *EXTPND, the EXTPNDsc file will be used.)

***FULL**

The data will be in the format of multiple bucket values.

(If INPUTTYPE is defined as *EXTPND, the FULPNDsc file will be used.)

***FLIPUP**

This option is not used in *MMA*, but the option will still display as part of the parameter options that display for this command

Input File Format Type

Determines how the command attempts to read input data. Valid entries are:

***EXTPND**

The input data will be read from an AS/400 DB2 Extract Pending File.

***DELIMITED**

The input data will be read from a text file containing data separated by some type of a delimiter.

***BINARY**

The input data will be read from a file of binary fixed length data.

Out File Format Type

Determines how the command attempts to write output data. Valid entries are:

***WAREHOUSE**

The output data will be written to the data warehouse tables.

***DELIMITED**

The output data will be written to a text file as delimited data.

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user.

A local relational database directory must be defined for the command to process. The library list must contain an *MMA* Database library name.

***DEFINE**

The connection string will be defined from parameters.

If *DEFINE is selected, you will need to enter these four *DEFINE parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** *MMA* database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Program Library

MMA Server Object library name. Will add program library to library list prior to processing.

Recovery

Determines if the recovery process is being executed. Valid entries are:

0 = No

If NOT running a recovery process.

1 = Yes

If running a recovery process.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Additional parameters can be prompted by pressing F10 after conditional prompt control.

Additional Parameters:

Work Directory

Integrated File System directory name which any work output file will reside.

Log File

Integrated File System full path name of the log file.

Note: Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Input File Year Format

Year format of the data in the input file this also includes the extract pending file.

Valid entries are:

***CCYY**

Four-digit year in input file. Example: "1999"

***YY**

Two-digit year in input file. Example: "00"

User Space Size

Defines the size of the user space that is used during the command process. Valid entries are:

***16M**

The process will use a 16-megabyte user space.

***8M**

The process will use an 8-megabyte user space.

Memory Size

Defines the amount of memory that the command will process under. Valid entries are:

***NOMAX**

Will NOT try to process within a defined memory size.

Number

Defines the amount of memory that the command will process under. Minimum number is 16 megabytes.

Inform Record Count

Inform record count.

Number

Number of records to process between informational messages.

Note: If the setting is too low, it will cause large log files and slower performance.

Chain Length Warning

A Chain Length Warning occurs when the command is forced to allocate extra memory at DSL load time because the number of header records that are being loaded exceeds the number of estimated number headers.

Number

Prints a warning message if the number of chains exceed the number defined.

Note: This message does not mean that the process will fail, only that it is not functioning at peak performance.

Reverse Sign

Reverse sign of data in input file. Valid entries are:

0 = No

Will process data as normal.

1 = Yes

Will process the data as if the sign was reversed without changing the data.

Debug

0 = No

Will NOT print debug messages.

1 = Yes

Will print debug messages. Debug messages include all SQL Statements used and other miscellaneous messages needed to debug any problem that may occur.

Check for Invalid Records

0 = No

Will NOT check for invalid records.

1 = Yes

Will check for invalid records. An invalid record is a record that has no associated data source entry for year, category, or value. These invalid records will be written to an error file and process will continue as normal.

Clear Pending

0 = No

Will NOT clear the file after processing the command.

1 = Yes

Will clear the file after processing the command.

Note: Extract Pending File records are no longer deleted one a time.

Error Recovery

Process error file records. Valid entries are:

0 = No

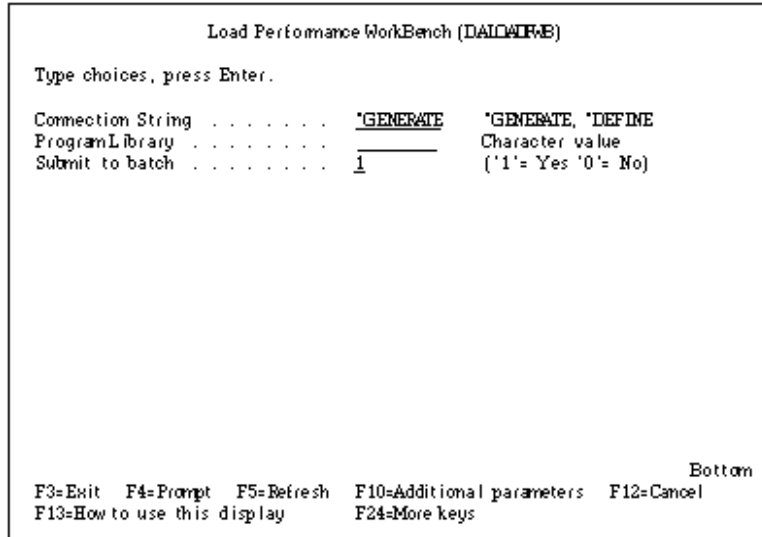
Will NOT process records in the error file.

1 = Yes

Will copy records from the error file into the Extract Pending File before processing the command and clear the error file.

Load Performance Workbench (DALOADPWB) Command

The Load Performance Workbench command is used by the *MMA* Performance Tuning Workbench to process the loading of *MMA* data source database statistics.



Load Performance WorkBench (DALOADPWB) panel

Command Parameters

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user.

A local Relational Database Directory must be defined for the command to process. The library list must contain an *MMA* database library name.

***DEFINE**

The connection string will be defined from parameters.

If *DEFINE is selected, you will need to enter these four *DEFINE parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** MMA database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Program Library

MMA Server Object library name. Will add program library to library list prior to processing.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Additional parameters can be prompted by pressing F10 after conditional prompt control.

Additional Parameters

Log File Name

Integrated File System full path name of the log file.

Note: Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Inform Record Count

Inform record count.

Number

Number of records to process between informational messages.

Note: If the setting is too low, it will cause large log files and slower performance.

Chain Length Warning

A Chain Length Warning occurs when the command is forced to allocate extra memory at DSL load time because the number of header records that are being loaded exceeds the number of estimated number headers.

Number

Prints a warning message if the number of chains exceed the number defined.

Note: This message does not mean that the process will fail, only that it is not functioning at peak performance.

Debug

0 = No

Will NOT print debug messages.

1 = Yes

Will print debug messages. Debug messages include all SQL Statements used and other miscellaneous messages needed to debug any problem that may occur.

Relationship Change (DARELCHG) Command

The Relationship Change command is used by *MMA* to process a relationship change.

```
                                DARELCHG (DARELCHG)

Type choices, press Enter.

Category . . . . .                Character value
Data year . . . . .                *CURRENT      Character value, *ALL
Relationship Dimensions . . . . .

Header Lookup . . . . .            *LOOKHDR     *LOOKHDR, *LOOKKY
Out File Format Type . . . . .     *WAREHOUSE   *WAREHOUSE, *DELIMITED...
Connection String . . . . .       *GENERATE     *GENERATE, *DEFINE
Program Library . . . . .         Character value
Recovery . . . . .                0            ('1'= Yes '0'= No)
Process Change Sets to Pending . . 1            ('1'= Yes '0'= No)
Type of update . . . . .          *IHHD       *IHHD, *PENDING
Submit to batch . . . . .         1            ('1'= Yes '0'= No)

                                Bottom
F3=Exit  F4=Prompt  F5=Refresh  F10=Additional parameters  F12=Cancel
F13=How to use this display  F24=More keys
```

DARELCHG (DARELCHG) panel

Command Parameters

Category

***ALL**

Will process all categories for the given data source.

Category

Will process only the given category for the given data source.

Data year

***ALL**

Will process all years for the given data source.

Year

Will process only the given year for the given data source.

Relationship Dimensions

Select the Dimension that will be processed during the relationship change. Enter this in a comma delimited format (for example, 2,3,4,14).

Header Lookup

Header Lookup is how the load process will determine if a header record exists in the database or is a new record. Valid entries are:

***LOOKHDR**

Look header will scan all records from a header table with a single query and compares header records against the import header records. Look header is primarily used for Historical Loads, Add New DSL, and for NetChange (if the NetChange is updating more records than what exists currently in the header table).

***LOOKKY**

Look Key will check for existence from the header table one import record at a time. Look Key is primarily used for NetChange (the NetChange is updating less records than what exists currently in the header table).

Example: HEADERLOOK(*LOOKHDR).

Out File Format Type

Determines how the command attempts to write output data. Valid entries are:

***WAREHOUSE**

The output data will be written to the data warehouse tables.

***DELIMITED**

The output data will be written to a text file as delimited data.

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user.

A local Relational Database Directory must be defined for the command to process. The library list must contain an *MMA* database library name.

***DEFINE**

The connection string will be defined from parameters.

If *DEFINE is selected, you will need to enter these four *DEFINE parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** *MMA* database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Program Library

MMA Server Object library name. Will add program library to library list prior to processing.

Recovery

Determines if recovery process is being executed. Valid entries are:

0 = No

If NOT running a recovery process.

1 = Yes

If running a recovery process.

Process Change Sets to Pending

If 1 is selected, you will be prompted for the type of update parameter. Valid entries are:

0 = No

Inplace

1 = Yes

Reverse Transaction

Type of update

Use to determine how the relationship change data is processed. Valid entries are:

***IMMED**

Process to data warehouse.

***PENDING**

Process to Extract Pending File.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Additional parameters can be prompted by pressing F10 after conditional prompt control.

Additional Parameters

Work Directory Name

Integrated File System directory name which any work output file will reside.

Log File Name

Integrated File System full path name of the log file.

Note: Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Input File Year Format

Year Format is not used by this command, but Year Format will display as part of the additional parameters that display for the command.

User Space Size

Defines the size of the user space that is used during the command process. Valid entries are:

***16M**

The process will use a 16-megabyte user space.

***8M**

The process will use an 8-megabyte user space.

Memory Space

Defines the amount of memory that the command will process under. Valid entries are:

***NOMAX**

Will NOT try to process within a defined memory size.

Number

Defines the amount of memory that the command will process under. Minimum number is 16 megabytes.

Inform Record Count

Inform record count.

Number

Number of records to process between informational messages.

Note: If the setting is too low, it will cause large log files and slower performance.

Chain Length Warning

A Chain Length Warning occurs when the command is forced to allocate extra memory at DSL load time because the number of header records that are being loaded exceeds the number of estimated number headers.

Number

Print a warning message if number of chains exceed the number defined.

Note: This message does not mean that the process will fail, only that it is not functioning at peak performance.

Debug

0 = No

Will NOT print debug messages.

1 = Yes

Will print debug messages. Debug messages include all SQL Statements used and other miscellaneous messages needed to debug any problem that may occur.

Process Previous Levels

0 = No

Will NOT process previous level logic.

1 = Yes

Will process previous level logic. Previous levels will be added to the defined change set data records.

Remove DSL (DARMVDSL) Command

The Remove DSL command is used by *Administration* to process the removal of file server programs and DSL's from the database.

```
DARMVDSL (DARMVDSL)

Type choices, press Enter.

Remove DSL Type . . . . . *CT10          *DEFINE, *CT10...
Out File Format Type . . . . . *WAREHOUSE *WAREHOUSE, *DELIMITED...
Connection String . . . . . *GENERATE    *GENERATE, *DEFINE
Program Library . . . . .                Character value
Recovery . . . . . 0                    ('1'= Yes '0'= No)
Submit to Batch . . . . . 1              ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F10=Additional parameters F12=Cancel
F13=How to use this display F24=More keys
```

DARMVDSL (DARMVDSL) panel

Command Parameters

Remove DSL Type (RMVTYPE)

Determines whether file server programs will be removed or DSL's by data source and year will be removed. Valid entries are:

***CT10**

Will remove file server programs from the database as submitted through Utilities | Remove DSL in *Administration*.

***DEFINE**

Will remove a DSL by data source and year from the server without having to use Utilities | Remove DSL in *Administration*.

If *DEFINE is selected, you will need to enter these three *DEFINE parameters to indicate the data source, year, and DSL to be used by the command:

- **DATASOURCE.** The *MMA* data source you want to perform the remove DSL on.
- **DSLYEAR.** The four-digit year (CCYY) of the data source you want to perform the remove DSL on.
- **DSL.** The DSL to be removed

Out File Format Type

Determines how the command attempts to write output data. Valid entries are:

***WAREHOUSE**

The output data will be written to the warehouse tables.

***DELIMITED**

The output data will be written to a text file as delimited data.

Connection String

The connection string defines how the command process connects to the database. Valid entries are:

***GENERATE**

The connection string will generate the DSN from the local Relational Database Directory Entry, the DBLIB from the library where file STCSUS10 resides, the USERID from the current user, and the PASSWORD from the current user.

A local Relational Database Directory must be defined for the command to process. The library list must contain an *MMA* database library name.

***DEFINE**

The connection string will be defined from parameters.

If *DEFINE is selected, you will need to enter these four *DEFINE parameters for the connection string:

- **DSN.** Define the local Relational Database Directory Entry. Use “wrkrdbdire” to determine the local Relational Database Directory Entry. The directory entry must be a local location.
- **DBLIB.** *MMA* database name.
- **USERID.** User ID.
- **PASSWORD.** Password of the user ID.

Program Library

MMA Server Object library name. Will add program library to library list prior to processing.

Recovery

Determines if recovery process will be executed. Valid entries are:

0 = No

If NOT running a recovery process.

1 = Yes

If running a recovery process.

Submit to Batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Additional parameters can be prompted by pressing F10 after conditional prompt control.

Additional Parameters

Work Directory Name

Integrated File System directory name in which any work output file will reside.

Log File Name

Integrated File System full path name of the log file.

Note: Only one file can be used at a time. If executing multiple runs at the same time, define different log file names.

Input File Year Format

Year Format is not used by this command, but Year Format will still display on the command window.

User Space Size

Defines the size of the user space that is used during the command process. Valid entries are:

***16M**

The process will use a 16-megabyte user space.

***8M**

The process will use an 8-megabyte user space.

Memory Size

Defines the amount of memory that the command will process under. Valid entries are:

***NOMAX**

Will NOT try to process within a defined memory size.

Number

Defines the amount of memory that the command will process under. Minimum number is 16 megabytes.

Inform Record Count

Inform record count.

Number

Number of records to process between informational messages.

Note: If the setting is too low, it will cause large log files and slower performance.

Chain Length Warning

A Chain Length Warning occurs when the command is forced to allocate extra memory at DSL load time because the number of header records that are being loaded exceeds the number of estimated number headers.

Number

Print a warning message if number of chains exceed the number defined.

Note: This message does not mean that the process will fail, only that it is not functioning at peak performance.

Debug

0 = No

Will NOT print debug messages.

1 = Yes

Will print debug messages. Debug messages include all SQL Statements used and other miscellaneous messages needed to debug any problem that may occur.

Update Parameter Master (DAUPDPMF) Command

The DAUPDPMF command updates the Parameter Master file (STCSPM10), allowing you to maintain the Parameter Master File from the server without using *Administration*.

```
Update Parameter Master (DAUPDPMF)

Type choices, press Enter.

Parameter Master Key . . . . . _____ Character value
Parameter Master Value . . . . .
Submit to batch . . . . . 1 ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Update Parameter Master (DAUPDPMF) panel

Command Parameters

Parameter Master Key

Enter the Parameter Master Key you want to update.

Parameter Master Value

Enter the Parameter Master Value you want the key to be updated to.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Delete Zero Sales Command (DLTZROSLS)

The DLTZROSLS command is used to delete detail records from the appropriate data warehouse tables when all buckets are equal to zero header. The records are also deleted when all corresponding detail records are deleted.

```

Delete Zero Sales (DLTZROSLS)

Type choices, press Enter.

Structure Code . . . . .
Program Library . . . . . AHOLIE      Character value
Database Library . . . . . AHOLIE      Name
Submit to batch? . . . . . 1         ('1'= Yes '0'= No)
Job Description . . . . . *USERPF     Name, *USERPF
Library . . . . . 1                 Name, *LIBL
Hold on JOEQ . . . . . 1           ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Delete Zero Sales (DLTZROSLS) panel

Command Parameters

Structure Code

This is the structure code for which you want to zero records deleted.

Program Library

This is the *MMA* Server Object library.

Database Library

This is the *MMA* database library.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Job Description

Name

Enter a name of a specific job description.

***USRPRF**

This uses the default job description from the user profile.

Library

Name

Enter the name of a specific library in which the command process should look for the job description.

***LIBL**

This uses the default library list from the user profile.

Hold on JOBQ

1 = Yes

The command is submitted on hold.

0 = No

The command is NOT submitted on hold.

Data Copy (DTACPY) Command

The DTACPY command processes the replication of data defined by the *MMA* Data Copy utility.

```
                                Data Copy (DTACPY)

Type choices, press Enter.

Database Library . . . . . _____ Character value
Program Library . . . . . _____ Character value
Type of update . . . . . *IMMED      *IMMED, *PENDING
Submit to batch . . . . . 1         ('1'= Yes '0'= No)

                                Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Data Copy (DTACPY) panel

Command Parameters

Database Library

Name of the *MMA* database library.

Program Library

The *MMA* Server Object library.

Type of update

Use to determine how the copy request is updated. This can be one of the following values:

***IMMED**

Update the sales file immediately.

***PENDING**

Processed to the pending file.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Remove Variable Characters (DTRMVVC) Command

The DTRMVVC command will convert variable character column(s) in a specified table to character format.

Note: This command should only be run if instructed to do so by *MMA* Support.

```
Remove Variable Characters (DTRMVVC)

Type choices, press Enter.

Database Library . . . . . _____ Character value
Table Name . . . . . _____ Character value
Column Name . . . . . *ALL
Submit to batch . . . . . 1 ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Remove Variable Characters (DTRMVVC) panel

Command Parameters

Database Library

This is the *MMA* database library.

Table Name

This is the table to be converted.

Column Name

This is the column to be converted.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Extract Master Data (EXTMST) Command

The EXTMST command is used to extract data from external Master Files to import into the MMA Master File pending files.

```
Extract master data (EXTMST)

Type choices, press Enter.

Extract action . . . . . *NETCHANGE *REFRESH, *NETCHANGE
Extract date for netchange . . . *LAST Character value, *LAST, *DATE
Format of TARGET DATA . . . . *DELIMITED *FIXED, *DELIMITED
Type of UPDATE . . . . . *IMMED *IMMED, *PENDING
Submit to batch? . . . . . 1 ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Extract master data (EXTMST) panel

Command Parameters

Extract action

Use to identify the extract action to be performed. Valid entries are:

***REFRESH**

This option clears the Dimension definitions, pick-up fields, and previous level databases and extracts all data from the External Master. An OPNQRYF statement can be used to filter data (For example: to refresh only active customers).

***NETCHANGE**

For the External Master, if the last maintained date is not kept in the database, this option extracts all data from the database if the last change date for the database is greater than or equal to the data specified on the Extract date for netchange field.

If the last maintained date is kept in the database, this option checks if the database is changed after the date specified in the Extract date for netchange field. If the database is not changed, an OPNQRYF statement can be executed to extract all rows greater than or equal to the date specified on the Extract date for netchange field.

Extract date for net change

Identifies the date to use to filter rows for the database. Valid entries are:

***LAST**

Uses the last refresh/netchange date for filtering rows from the database and to check if the last change date for the database is greater than or equal to the last refresh/netchange date. The last refresh/netchange date is kept in the NETCHGDT data area.

***DATE**

A specific date can be entered in the MMDDYY format for filtering rows from the database and to check if the last change date for the database is greater than or equal to the date entered here.

Format of TARGET DATA

Use to identify the data field format for the Target data. The valid values are:

***DELIMITED**

Data fields are delimited with the hex characters "FB."

***FIXED**

Data fields are represented in a standard fixed file format.

Type of UPDATE

Use to determine how the extract data request is processed. Valid entries are:

***IMMED**

Updates the Master Files directory.

***PENDING**

Puts the data in the pending files and then uses MOVMSST to update the Master Files.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Extract Master Data Technical Notes

- A. Database (MSTFILTER) with the following fields is used for filtering records during the refresh/netchange process.

| | |
|----------|--|
| HLVNUMB | Hierarchy level number. |
| HLVFILNM | External file name for the hierarchy level. |
| HLVNOVRD | Override database string for netchange option. |
| HLVNQRYF | Query statement for the netchange option. |
| HLVNCLOF | Close file string for the netchange option. |
| HLVROVRD | Override database string for the refresh option. |
| HLVRQRYF | Query statement for the refresh option. |
| HLVRCLOF | Close file string for the refresh option. |

- B. For each dimension, the EXTMST command retrieves the last change date for an external database.
- C. For *NETCHANGE/*REFRESH options, processing is only done if the last change date for the database is greater than or equal to the date specified on the Extract date for netchange field in EXTMST. All dates are converted to the cymmdd format before processing. If the OPNQRYF statement is specified for the dimension, only the records selected by the query are processed. If no OPNQRYF statement is specified, all records are processed.
- D. When framing the OPNQRYF statement, lower case c or cc for century, yy for year, mm for month and dd for date must be used to replace the last netchange/refresh date. For Julian dates, lower case yyjul must be used.

Using the OPNQRYF Statement

Following are examples of how the OPNQRYF statement can be used.

If the last change date is maintained in a numeric field as cyyymmdd where c = century (0=19, 1=20), yy = year, mm = month, and dd = date, the OPNQRYF statement is:

```
OPNQRYF FILE(*LIBL/file_name) OPTION(*ALL)
          QRYSLT('field_name *GE cyyymmdd')
          KEYFIELD(*FILE) SEQONLY(*NO)
```

If the last change date is maintained in a numeric field as ccyyymmdd where cc = century, yy = year, mm = month and dd = date, the OPNQRYF statement is:

```
OPNQRYF FILE(*LIBL/file_name) OPTION(*ALL)
          QRYSLT('field_name* GE ccyyymmdd')
          KEYFIELD(*FILE) SEQONLY(*NO)
```

If the last change date is maintained in a numeric field as cmmddy, the OPNQRYF statement is:

```
OPNQRYF FILE(*LIBL/file_name) OPTION(*ALL)
          QRYSLT('(%SST(map_field 1 1) *GE "c")
          *AND(%SST(map_field 2 2) *GE "mm")
          *AND(%SST(map_field 4 2) *GE "dd")
          *AND(%SST(map_field 602) *GE "yy"')
          KEYFLD(*FILE) MAPFLD((map_field_name
          '%DIGITS(field_name)')) SEQONLY(*NO)
```

If the last change date is maintained in a character field as cyyymmdd, the OPNQRYF statement is:

```
OPNQRYF FILE(*LIBL/file_name) OPTION(*ALL)
          QRYSLT('field_name *GE "cyyymmdd"')
          KEYFIELD(*FILE) SEQONLY(*NO)
```

If the last change date is maintained in a numeric field as a Julian date, the OPNQRYF statement is:

```
OPNQRYF FILE(*LIBL/file_name) OPTION(*ALL)
          QRYSLT('field_name *GE yyjul')
          KEYFIELD(*FILE) SEQONLY(*NO)
```

If the last change date is maintained in a character field as yymmdd and active customers are A, the OPNQRYF statement is:

```
OPNQRYF FILE(*LIBL/file_name) OPTION(*ALL)
          QRYSLT('field_name *GE "yymmdd" *AND
          field_name *EQ "A"') KEYFIELD(*FILE)
          SEQONLY(*NO)
```

- E. The following date formats are supported by the EXTMST command if the last maintained date in the database is kept as date formats supported by the following:
- cyymmdd (where c = 0 (19), or 1 (20))
 - ccymmdd
 - yymmdd
 - mmddy
 - ddmyy
 - four different fields: cc for century, yy for year, mm for month, dd for date
 - yyjul (Julian date format)
- F. The user exit program AMOCDTOC is created for all other formats that are not being supported. The two parameters to this program are:
- Input date (7 characters) - cyymmdd format and Output date (21 characters) - can be any other format. In such cases, the OPNQRYF statement should specify 21 @ signs to replace it with a new date format.

Generate File Servers (GENFILSRV) Command

The GENFILSRV command is used to create programs that move data into the pending and from the pending tables to the data warehouse based upon the structure code. These programs are used by the IMPDTL, MOVSINDTA, and MOVFULDTA commands.

```
Generate Files Servers (GENFILSRV)

Type choices, press Enter.

Structure Code . . . . . OE           Character value
Database Library . . . . . AHOLIB      Name

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Generate Files Servers (GENFILSRV) panel

Command Parameters

Structure Code

This is the structure code for file server programs you create. The programs are created based upon how the structure code is defined.

Database Library

This is the name of the database library for file server programs you create. The file server programs are also created in this library.

Import Detail Command (IMPDTL)

The Import Detail command is used to import data into the *MMA* Extract Pending tables.

```
Import Detail (IMPDTL)

Type choices, press Enter.

Category . . . . . AS          Character value, *NONE
Start Date . . . . . *CURRENT Date, *CURRENT, *START...
End Date . . . . . *END       Date, *CURRENT, *END
Data to Import . . . . . *NEW  *NEW, *ALL
Submit to batch? . . . . . 1    ('1'=Yes '0'= No)

                                     Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Import Detail (IMPDTL) panel

Command Parameters

Category

Identifies the category code to be used to import information. Valid entries are:

Character value

Any two-character category code.

***NONE**

Not currently available.

Start Date

Use to identify the date to start the import of data for the specified category. Valid entries are:

Date

Any valid date can be entered. Import of data starts at the date entered here. Entered in the MMDDYY format.

***CURRENT**

Starts importing data beginning with today's date.

***START**

Use to start import of data from the beginning of the table.

***MINUS**

Imports data beginning with today's date less the number of days specified in the "Days back from current" field. This can be used to retrieve back dated transactions.

End Date

Identifies the date to end the import of data for the specified category. Valid entries are:

Date

Any valid date can be entered. Import data ends at the date entered here. Entered in the MMDDYY format.

***CURRENT**

Import sales up to the current date.

***END**

Used in conjunction with *START. Imports data to the end of the table.

Data to Import

Identifies the type of records to be imported. Valid entries are:

***NEW**

Import only new records within the specified date range.

***ALL**

Import all records within the specified date range.

Submit to batch?

Determines how the job is submitted. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Days Back From Current

Displays only if the Start Date field is set to *MINUS. Used to specify the number of days prior to today's date to back-up. Valid entries are any number of days between zero and 365.

Import Open Order Data (IMPORD) Command

The IMPORD command is used to import open orders into the Open Order Extract Pending files. The command is used only in conjunction with the “00” structure code. The “00” structure code must be defined as a non-periodic structure code.

Note: This command does not apply to *MMA*.

```

                                Import Open Order data (IMPORD)

Type choices, press Enter.

Data Type. . . . . 0          Character value, *NONE
Submit to batch? . . . . . 1    ('1'= Yes '0'= No)

                                Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Import Open Order data (IMPORD) panel

Command Parameters

Data Type

Identifies the data type to use to import open orders. Valid entries are:

Character value

Any two-character data type code.

***NONE**

Not currently available.

Submit to batch?

Determines how you want to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Import User List (IMPUSL) Command

The IMPUSL command is used to import user list data.

```
Import User List (IMPUSL)

Type choices, press Enter.

Import Program . . . . . AMOIMUOR   Character value
Library . . . . . 'LIB'             Character value
Submit to batch? . . . . . 1       ('1'= Yes '0'= No)

                                           Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Import User List (IMPUSL) panel

Command Parameters

Import Program

This is the name of the import program to be used when running the command. The shell source for AMOIMUOR can be found in the Server Object library .

Library

This is the name of the library in which the import program resides.

Submit to batch?

Determines how the job is submitted. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Move Master File Data (MOV MST) Command

The MOV MST command is used to refresh or update the master MMA tables (STCSMFxx) with the data that was extracted to the Master Pending tables with the Extract Master Data (EXTMST) command.

```

                                Movemaster data (MOV MST)

Type choices, press Enter.

Extract action . . . . . *NETCHANGE *REFRESH *NETCHANGE
Format of SOURCE DATA . . . . . *DELIMITED *FIXED, *DELIMITED
Submit to batch? . . . . . 1          ('1'= Yes '0'= No)

                                                    Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Move master data (MOV MST) panel

Command Parameters

Extract action

Use to identify the extract action to be performed. Valid entries are:

***REFRESH**

Clears Dimension definition, pick up fields, and previous level databases. Extracts all data from the External Master. An OPNQRYF statement can be used to filter data (for example, refresh active customers only).

***NETCHANGE**

For the External Master, if the last maintained date is not kept in the database, all data is extracted from the database if the last change date is greater than or equal to the data specified on the Extract date for netchange field in Extract Master Data (EXTMST).

If the last maintained date is kept in the database, this option checks if the database is changed after the date specified on the Extract date for netchange field in Extract Master Data (EXTMST). If the database is changed, an OPNQRYP statement can be executed to extract all rows greater than or equal to the date specified in the Extract date for netchange field.

Format of SOURCE DATA

Use to identify the data field format for the Source data. Valid entries are:

***DELIMITED**

Data fields are delimited with the hex characters "FB."

***FIXED**

Data fields are represented in a standard fixed file format.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Remove DSL (RMVDSL) Command

RMVDSL is called by the *MMA* Utilities to execute the process of removing an existing DSL.

Note: RMVDSL is used for old structure codes but will also call DARMVDSL to remove new structure code data summary levels file server programs.

```
Remove DSL (RMVDSL)

Type choices, press Enter.

Database Library . . . . . _____ Character value
Program Library . . . . . _____ Character value
Submit to batch . . . . . 1      ('1'= Yes '0'= No)

                                           Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Remove DSL (RMVDSL) panel

Command Parameters

Database Library

This is the name of the *MMA* database library.

Program Library

This is the *MMA* Server Object library.

Submit to batch

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

Remove Variable Characters (RMVVARCHAR) Command

The RMVVARCHAR command will convert warehouse and pending tables that contain variable characters to non-variable character format for a specified structure code. The command will perform the following procedures:

- Runs the VARCHARRPT command to make sure that there is enough disk space for the conversion. If not, the process will automatically terminate.
- Save Index information for the tables.
- Drop Indexes for the tables.
- Rename variable character table to @OLDTABLE#.
- Create the new table with no variable characters.
- Populate the new table from renamed table.
- Delete the variable character version of the table (@OLDTABLE#).
- Recreate Indexes after all tables have been converted. Hierarchy ID will be added to the end of user defined Indexes to take advantage of Index-only access, which can help Inquiry performance.

```
Remove Variable Characters (RMVVARCHAR)

Type choices, press Enter.

Structure Code . . . . . OR           Character value
Database Library . . . . . AMLIB      Character value
Submit to batch? . . . . . 1         ('1'= Yes '0'= No)

                                           Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

Remove Variable Characters (RMVVARCHAR) panel

Command Parameters

Structure Code

This is the structure code you want to convert.

Database Library

This is the *MMA* database library.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

The following report will be produced:

| TABLE CONVERSION LISTING | | | | | |
|--------------------------|---------------|--------------------|---------------|------------|----------|
| DATA LIBRARY: AMCLIB | | STRUCTURE CODE: OR | | | |
| TABLE NAME | TOTAL RECORDS | BEGIN SIZE (MB) | END SIZE (MB) | BEGIN TIME | END TIME |
| STCSOR03 | 2832655 | 861.99500 | 544.25600 | 11:51:59 | 12:02:57 |
| STCSOR01 | 6348635 | 1930.58406 | 1219.55942 | 12:02:57 | 12:25:47 |
| STCSOR04 | 14595011 | 1868.70579 | 1518.40768 | 12:25:49 | 12:44:19 |
| STCSOR02 | 34237713 | 4383.26886 | 3561.15660 | 12:44:19 | 13:28:01 |
| CPYDUPND | | .03276 | .02867 | 13:28:03 | 13:28:05 |
| CPYDUPND | | .04096 | .03276 | 13:28:05 | 13:28:17 |
| RELPNDOR | | .04505 | .03686 | 13:28:17 | 13:28:18 |
| CHEPNDOR | | .04505 | .03686 | 13:28:18 | 13:28:19 |
| CHEPNDIA | | .05324 | .04096 | 13:28:19 | 13:28:30 |
| FULPNDOR | | .10649 | .03686 | 13:28:30 | 13:28:31 |
| EXTPNDOR | 169389 | 374.38668 | 235.96236 | 13:28:31 | 13:32:53 |

Table Conversion Listing report

MMA AS/400 Upgrade (STUPGRADE) Command

The STUPGRADE command is used to upgrade an old *MMA AS/400* Server database to the latest version. All old definitions are automatically upgraded. This must be done for each *MMA AS/400* Server database on your system.

```
MMA AS/400 Upgrade (STUPGRADE)

Type choices, press Enter.

Program Change Number . . . . . 960903      960903
Program Library . . . . . AMALIB         Name
Database Library . . . . . AMLIB         Name
Submit to batch? . . . . . 1           ('1'= Yes '0'= No)

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys
```

MMA AS/400 Upgrade (STUPGRADE) panel

Command Parameters

Program Change Number

This is the date of the Program Change Number you want to upgrade to. There is a selection for each Program Change Number available.

Program Library

This is the name of the new object library.

Database Library

This is the name of the database library that you want to upgrade.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

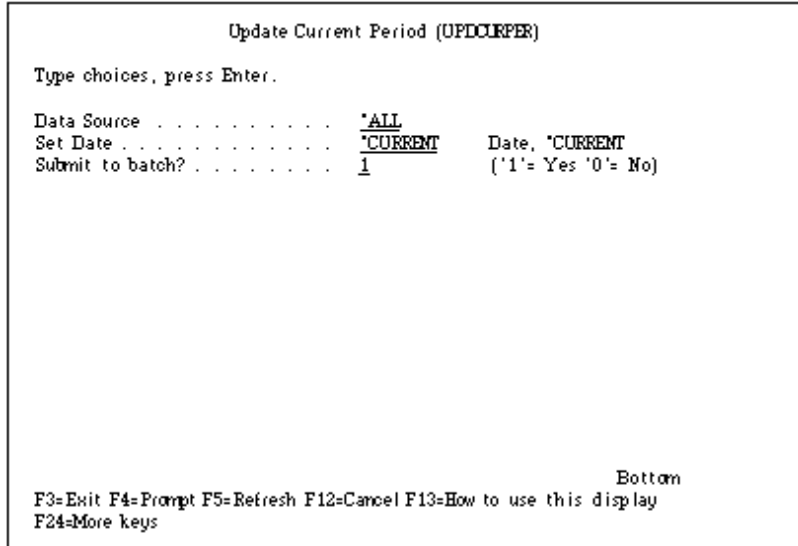
0 = No

Run online.

Note: The job uses your current library list to execute. Make sure that the *MMA* Server Object and database libraries are in your library list prior to executing this command.

Update Current Period (UPDCURPER) Command

The UPDCURPER command is used to update the current period for View Sets used in *DBView* based upon the data source selected.



Update Current Period (UPDCURPER) panel

Command Parameters

Data Source

This processes only the data source specified.

***ALL**

This processes all data sources.

Set Date

Date

This sets the current date to the date specified.

***CURRENT**

This sets the current date to the current date.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

VARCHAR Conversion Report (VARCHARRPT) Command

The VARCHARRPT command will produce a report that will list all warehouse and pending tables for a structure code and determine if there is enough disk space to perform a conversion. It will sum the sizes of all the Indexes for all of the tables by structure code and add it to the available disk space. It will take this total and compare it to the size of the largest table for the structure code to determine if conversion is possible.

Note: This command does not apply to *MMA*.

```
          VARCHAR Conversion Report (VARCHARRPT)

Type choices, press Enter.

Structure Code . . . . . OR           Character value
Database Library . . . . . AMELIE      Character value
Submit to batch? . . . . . 1         ('1'= Yes '0'= No)

                                           Bottom
F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

VARCHAR Conversion Report (VARCHARRPT) panel

Command Parameters

Structure Code

This is the structure code you want to convert.

Database Library

This is the *MMA* database library.

Submit to batch?

Determines how to submit the job. Valid entries are:

1 = Yes

Submit to batch.

0 = No

Run online.

The following report will be produced:

| VARCHAR CONVERSION LISTING | | | | |
|---|--------------------|------------------------------|-----------------|------------|
| DATA LIBRARY: AMLIB | STRUCTURE CODE: OR | 3352 MB AVAILABLE DISK SPACE | | |
| *** TABLE INFORMATION *** | | | | |
| TABLE NAME | ASP | TOTAL RECORDS | DELETED RECORDS | SIZE (MB) |
| STCSDB02 | 1 | 34237713 | | 4383.27705 |
| STCSDB01 | 1 | 6348635 | | 1930.59225 |
| STCSDB04 | 1 | 14595011 | | 1868.71398 |
| STCSDB03 | 1 | 2832655 | | 862.00320 |
| EXTPNDOR | 1 | 1169389 | | 374.39488 |
| FULPNDOR | 1 | | | .11468 |
| CHGSETDA | 1 | | | .06144 |
| RELPNDOR | 1 | | | .05324 |
| CHGPNDR | 1 | | | .05324 |
| CPYDT1PND | 1 | | | .04915 |
| CPYDT2PND | 1 | | | .04096 |
| *** INDEX INFORMATION *** | | | | |
| TABLE NAME | INDEX NAME | LIBRARY | | SIZE (MB) |
| STCSDB04 | OR04INX1 | STCSDBA | | 337.68243 |
| STCSDB03 | OR03INX2 | STCSDBA | | 464.56832 |
| STCSDB03 | OR03INX1 | STCSDBA | | 46.17830 |
| STCSDB02 | OR02INX1 | STCSDBA | | 793.81299 |
| STCSDB01 | OR01INX2 | STCSDBA | | 702.59507 |
| STCSDB01 | OR01INX1 | STCSDBA | | 102.80140 |
| RELPNDOR | RELPNDOR0 | STCSDBA | | .04505 |
| FULPNDOR | FULPNDOR0 | STCSDBA | | .04505 |
| EXTPNDOR | EXTPNDOR0 | STCSDBA | | 17.87084 |
| CPYDT2PND | CPYDT2PND | STCSDBA | | .04096 |
| CPYDT1PND | CPYDT1PND | STCSDBA | | .04096 |
| CPYDT1PND | CPYDT1PND | STCSDBA | | .04915 |
| CHGSETDA | CHGSETDA | STCSDBA | | .04505 |
| CHGPNDR | CHGPNDR0 | STCSDBA | | .04505 |
| TOTAL SIZE | | | | 2465.82062 |
| AVAILABLE DISK SPACE | | | | 3352.41930 |
| DISK SPACE AT CONVERSION | | | | 5818.23992 |
| LARGEST TABLE | | | | 4383.27705 |
| **CONVERSION POSSIBLE FOR STRUCTURE CODE OR** | | | | |

VARCHAR Conversion Report Listing

GLOSSARY OF TERMS

Administration

The *MMA* application used to define and maintain the Master Files and other vital setup information.

Authority

Access to levels of data and types of data are dependent on the user profile. For example, if Sales Representatives should not be viewing Item information, do not give them authority to that Category when defining their user profile.

Automatic Drill Down

When a row is double-clicked on within a View and a retrieval is processed for the next defined Dimension.

Background

The area behind and outside the active window, including the desktop. The second color defined defaults as the background color.

Band

The physical positioning of data on the *DBView* screen. The three main bands are the Header, Detail, and Summary bands.

Calculated Field

A field type that contains a calculation between data fields. The ability exists to Add, Subtract, Multiply, or Divide fields or groups of fields.

Category

Identifies the comparative information stored in *MMA*. For example, Actual Sales.

Change Sets

Define the realignment information that allows history data to be changed based on search and replace data.

Check Box

A small square box that can be selected or cleared. This box is a toggle that turns options ON and OFF.

Click

To press and release a mouse button quickly.

Clipboard

A temporary storage location used to transfer text or graphics from one application to another. Data can be transferred to the Clipboard by using the Cut or Copy command and inserted from the Clipboard by using the Paste command. Items put into the Clipboard remain there until the Cut or Copy command is selected again.

Color Bar

A bar of colors located at the bottom of any *MMA DBView* window. The color bar can be used to change the color of any field by selecting the field and then selecting the required color on the color bar. The user determines whether or not the color bar displays on the window.

Cross Tab Template

A Template format that displays data for two levels of summarization in a matrix format. One level displays down the rows and the other in the columns.

Data Field

A field type that is downloaded from your MAPICS XA database. For example, Sales Dollars, Sales Units, Cost, and so forth.

Data Source

A group of categories that contain the same Dimensions and values that reside in the same server files.

Data Summary Levels (DSL's)

Definitions of how data is to be summarized in the history files and are used to tune your system for better performance.

Default Drill Down Path

The automatic drill-down path specific to each user. When a row is double-clicked, the defined default drill-down path determines the next Dimension to display.

Default Settings

Settings that are supplied with *MMA* and are specific to each user. For example, if you turn the color bar ON, it always displays by default.

Description Field

A field type that contains information relating to the Dimension level selected. For example, Dimension value, short description, and pickup fields.

Desktop

The local PC that contains and displays Views that are associated with an icon.

Detail Band

The center area of the *DBView* window that usually contains the historical data. For example, Sales, Quantity, Cost, and so forth.

Dimension

Identifies a level of summarization in *MMA* that you can use to view and analyze your business. For example, Customer or Item.

Display Mask

Determine how data is formatted for display. For example, Percentage, Money, and so forth.

Double-Click

To rapidly press and release a mouse button twice without moving the mouse. Double-clicking carries out an action, such as starting an application.

Drag

To move an item on the screen by selecting the item and then pressing and holding down the mouse button while moving the mouse. For example, you can move a column within a View from one position to another by dragging it to a specific position.

Drill-Down

A way to navigate through summary levels of data. Drilling can actually be up, down, or lateral. The more you drill, the more detailed the information becomes.

Drill Down Path

The area of *DBView* that indicates the Dimension levels that are drilled through to access the data currently displayed.

dtv

The file format of *MMA* Views.

Field Definitions

Additional Master File information related to a Dimension level. *MMA* allows a maximum of 35 additional field definitions per Dimension. For example, Address, Zip Code, and Contact are Customer field definitions. Field Definitions are also called pickup fields.

Field Type

There are four different types of fields that are mutually exclusive of one another. When defining a Template, the field type must be selected. For example, Data, Calculation, Description, and Text.

Font

A set of letters, numbers, punctuation marks, and symbols that are a given size and design. The default font for a View is MS Sans Serif, but this can be changed by the user.

Function Button

In a dialog box, a button that carries out an action. A function button has a label that describes the action it carries out. For example, Save, Close, Filter, and Sort.

Header Band

The top area of the *DBView* window that usually contains the column titles of the data displayed in the Detail band.

Hidden field

A field that is necessary for the Template definition but not needed to be viewed by users.

Highlighted

Indicates that the data is selected and will be affected by your next action. Highlighted text appears in reverse video on the monitor.

Icon

Pictorial representations of frequently used *DBView* functions. Icons are displayed on the toolbar within *DBView*.

Icon-ized View

A View file associated with an icon and saved to the desktop. Double-click on an icon-ized View to automatically run the View and display the data in the customized format.

In Place Drill-down

A check box on the User Defaults window that controls the manner in which windows open as you drill through Dimensions. When "In Place Drilldown" is turned ON (the system default), the current window is updated with each new window.

Indexes

Aid in performance tuning of *MMA*. A commonly taken drill-down path is recorded so it processes faster.

Information Box

Information displayed in the upper right corner of the *DBView* window informing you of any sorting or filtering that has been applied to the View, as well as the number of rows that are summarized or hidden from the display.

Master File Information

Information specific to each Dimension value which comes from the STCSMF10, STCSMF11, and STCSMF35 tables. For example, Dimension key value, short and long descriptions, and additional field definitions.

Multi-currency

MMA can store and display your data in any previously defined currency format.

Notepad

A *DBView* feature that allows you to keep detailed information regarding a Value within a Dimension. When within a View, the additional information kept in the Notepad is accessed from a command on the menu.

Period Based Template

A Template format that displays data broken down into user-defined period buckets. The periods display down the rows of the first column.

Periods

The user-defined time slices used to accumulate data within *MMA*. *MMA* can have up to 13 period buckets.

Pickup Fields

Additional Master File information related to a Dimension level. *MMA* allows a maximum of 35 additional field definitions per Dimension. For example, Address, Zip Code, and Contact are Customer field definitions. Pickup fields are also called Field Definitions.

Preview

The final step of Template definition. The Preview displays a sample of the Template format and constructs the Template structure for use at runtime.

Radio Button

A small round circle that can be selected. This circle identifies an item that is selected over the other available mutually exclusive items.

Regular Templates

A Template format that displays data for one or more levels of summarization with the option of subtotalling.

Run

A command that retrieves the requested data. Click on the Runner icon or choose File | Run to retrieve data and display it in the customized View.

Server

A computer that provides disk space, printers, or other services to computers over a network.

Smart Text

Text labeling data within a View can be created using variable codes so it dynamically changes as the data changes.

Status Line

A line of information located on the bottom of the *DBView* window displaying the status of the active function. For example, request a retrieval and the number of rows retrieved displays in the status line.

STCS.INI file

A text file that contains configuration commands used within *MMA*. Commands in the STCS.INI file enable or disable system features and set limits on various items.

Style Bar

An interactive bar on the View that aids in the customization of a View. The style bar contains the field name, font style and size, icons for bolding, italicizing, underlining, and positioning the text displayed in a cell of the View. The user can determine whether or not the style bar displays on the View.

Summary Band

The bottom area of the *DBView* window that usually contains any requested summarization's being performed by *DBView*. For example, Totals and Averages of the data displayed down the rows.

Template

The generic format of data that is saved globally so all users can access. Only authorized users can create and maintain Template definitions.

Text Field

A type of field that contains user-defined text used to label a row or column of data. Static text can be keyed in or dynamic variables can be used to allow the titles to change as the requested data changes.

Tile

A way of arranging open windows so that no windows overlap but all windows are visible. Each window takes up an equal portion of the screen.

Toolbar

Area of the *DBView* window that displays the various icons that are used to complete frequently taken actions.

User Lists

A user-defined list of Dimension values. User Lists offer the flexibility of retrieving data for a specific list of values. For example, you are a Sales Manager and only want to view your Sales Representatives. Create a User List that contains only your Sales Representatives.

Values

Identifies a Value in *MMA* that you can use to track, compare, and analyze your business information. For example, Cost and Quantity.

View

Customized Template format that resides on your local PC. Views can be opened as a file and then ran, or associated with an icon on your desktop.

View Buckets

Define an amount of time associated with a ViewSet. For example, January = bucket 1, First Quarter = buckets 1 - 3.

View Groups

The higher level of grouping for ViewSets. For example, Sales.

View Icon

Represents a View that is associated with a customized View saved to your desktop. When you choose a View Icon, the associated View starts and loads the data in the saved format.

View Items

Define the time periods for a ViewSet to make Template definition more flexible. For example, Current Month, Previous Month, and Previous 2 Months.

View Sets

The defined available time periods and years used in Template definition. For example, Based Months and Years, Calendar Months, and Calendar Quarters.

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