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## Toolbars, Status Bars And Operators

### QuickQuery Objects Toolbar



The QuickQuery Objects Toolbar provides shortcuts for adding objects to a report.



**Column Object.** Inserts a database column object.



**Custom Object.** This is used in order to create data fields that are needed but not in the database. Examples would be calculations, substrings, or concatenations.

### QuickQuery Queries Toolbar



The QuickQuery Queries Toolbar allows you to add attributes to your report.



**Query Wizard Icon.** Creates or modifies a query using the wizard.



**Requery Icon.** Allows you to run the query again.



**Group By Icon.** Groups rows by the selected column(s).



**Remove Groups Icon.** Removes all row groupings.



**Sort Ascending Icon.** Sorts the rows by selected column(s) in ascending order.



**Sort Descending Icon.** Sorts the rows by selected column(s) in descending order.



**Apply Filter Icon.** Applies filter to the current section.



**Clear Filter Icon.** Clears the current filter.



**Quick Filter Icon.** Allows you to select a quick filter.



**Filter Icon.** This is used to apply search criteria to your report.



**Style Profiles Icon.** Add or modify QuickQuery styles.



**Clear Object Style Icon.** Clears the formatting of the selected column(s).



**Update/New FreeForm.** Update/new FreeForm with QuickQuery layout changes.

### **FreeForm Objects Toolbar**



**Select Object.** This is helpful when you want to terminate object placement. You can also hit the **<ESC>** key to de-select or terminate an object placement.



**Column Object.** This is the same as selecting it from the Objects Directory.



**Text Object.** This is used to add text to your report, as well as modify Column headings or add a Report title.



**Custom Object.** This is used in order to create data fields that are needed but not in the database. Examples would be calculations, substrings, or concatenations.



**Prompt Object.** This is used to prompt the report user for information such as UIC, Hand Receipt Number, etc.



**Child Data Object.** This is used to return a specific piece of information from one document (the Child) and use it in another (the Parent or another child).



**Date Object.** This is used to place the system date on the report.



**Time Object.** This is used to place the system time to the report.



**Page Number Object.** This is used to place page number(s) on your report.



**Counter Object.** This is used to display the count of detail records or database rows output on your report.



**Report Name Object.** This is used to place the name of the report file on your report. This is not the title of the report.



**Graphic Object.** This is used to place a bitmap image on your report.



**Chart Object.** This is used to place a chart on your report. This includes Bar, Pie, and Scatter charts.



**Crosstab Object.** This is used to provide an entire crosstab document in/on your report.



**Object Linking and Embedding (OLE) Object.** This is used to embed objects that are created by another application to your report.



**Child Document Object.** This is used to connect a *Eureka* document (child) that you include as part of another *Eureka* document (parent or another child).

### **FreeForm Queries Toolbar**



**Wizard Icon.** This is used to invoke the Wizard in FreeForm.



**Sort Icon.** This is used to sort the report by whatever data field is chosen by the user.



**Filter Icon.** This is used to apply search criteria to your report.



**Group Header Icon.** This is used to add a data Group Header Area at the **beginning** of your report. *This is not accessible until you select a column or custom object.*



**Group Footer Icon.** This is used to add a data Group Footer Area at the **end** of your report. *This is not accessible until you select a column or custom object.*



**Page Header/Footer Icon.** This is used to place data or text that will appear at the top or bottom of each page of your report.



**Document Header/Footer Icon.** This is used to place data or text that will appear on the **first** or **last** page of your report.



**Update FreeForm Layout Icon.** This rearranges all of your objects to form a neat, logical design after you have added columns to a FreeForm document by using a QuickQuery window.

## Menu Items

Menu items are grouped by functions; the File menu is for tasks such as opening and closing files, savings files and printing files.

### File Menu

File	
New...	Ctrl+N
Open...	Ctrl+O
Close	
New From Template...	Ctrl+T
Save	Ctrl+S
Save As...	
Page Setup...	
Print...	Ctrl+P
Print Setup...	
Print Preview	Ctrl+W
Export...	Ctrl+E
Report Server	
Send Mail	
1 Melanie-PDM.iqr	
2 C5-26.iqr	
3 C3-59.iqr	
4 C5-16.iqr	
Exit	

- New** – Opens a new report
- Open** – Opens an existing report
- Close** – Closes the active report
- New From Template** – Opens a template as model for new document
- Save** – Saves the active report
- Save As** – Saves the active report to a new name
- Page Setup** – Sets up the layout, margins, and point defaults
- Page Border** – Sets up the border parameters
- Print** – Prints using your Windows default dialog box
- Print Setup** – Sets up the print specification using the Windows dialog box
- Print Preview** – Generates all pages for the formatted report and gives the ability to view the document before it is printed
- Export** – Sends the report to a common separate file such as text, Excel, HTML
- Report Server** – Executes queries on a database server
- Send Mail** – emails the report to other users on the same mail server

### Edit Menu

- Undo** – Reverses the last action
- Redo** – Reverses an undo
- Cut** – Removes a selected object
- Copy** – Copies a selected object to the clipboard
- Paste** – Places copied objects to the desired area
- Paste Link** – Places a linked OLE object by pasting a non-*Eureka* Reporter Designer object from the Clipboard
- Delete** – Removes the selected object
- Select All Toggle** - Selects all the objects for editing, or deselecting
- Hide Toggle** - Hides or reveals selected objects
- Attributes** – Selects the current objects format
- Border** – Displays border dialog box for the active window
- Font** – Displays the font dialog box for the selected object
- Hot Object** - Sets hot object attributes for selected objects
- HTML** - Sets HTML attributes for selected objects
- Output When** - Sets Output When attributes for selected objects
- Translate Value** – Invokes the translate value dialog for the active window
- Prompt SQL** – Edit the SQL query associated with a user prompt object
- Prompt Connection** - Changes the database connection for a selected user prompt object

Edit	
Undo	Ctrl+Z
Redo	Ctrl+A
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Paste Link	
Delete	Del
Select All Toggle	
Hide Toggle	
Attributes...	
Border...	
Font...	
Hot Object...	
HTML...	
Output When...	
Translate Value...	
Prompt SQL...	
Prompt Connection...	
Object	

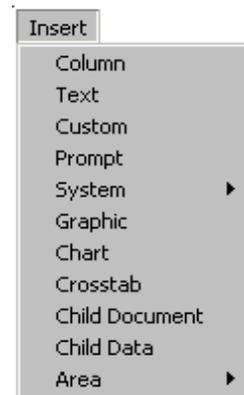
## View Menu



- Toolbars** – Displays toolbar dialog box for selecting toolbar
- Status Bar** – Toggles on and off the display of the status toolbar
- Object Directory** – Toggles on and off the display of the object directory
- Area Object List** – Toggles on and off the display of the area object list
- Freeze Columns** – Keeps at least one column stationary at all times in order to help identify the content of the rows
- Unfreeze Columns** – Allows the frozen column to scroll
- Margins** - Controls the display of a document's page margins. Turning them off lets you see more of the document. Margins are always shown in output windows.
- Horizontal Ruler** – Controls the display of a document's horizontal ruler.
- Vertical Ruler** – Controls the display of a document's vertical ruler.
- Area Labels** – Controls the display of a document's area labels.
- Grid** – Controls the display of the document's grid lines.
- Show Object Format** – Controls whether each object's output format is shown
- Show Object Colors** – Controls whether each object's name or format is shown:
  - In a "container" with the background differently colored for each type of object,
  - or As black text with no background
- Zoom In** – Increases the magnification of QuickQuery
- Zoom Out** - Displays more of your QuickQuery screen at one time
- 100%** - Displays the QuickQuery in normal view size

## Insert Menu

- Column** – Inserts column objects that references an object defined in the knowledge base
- Text** – This is used to add text to your report, as well as modify Column headings or add a Report title
- Custom** – This is used in order to create data fields that are needed but not in the database. Examples would be calculations, substrings, or concatenations
- Prompt** – This is used to prompt the report user for information such as UIC, Hand Receipt Number, etc
- System** – Inserts objects such as current date, time, page number, count, and report name
- Graphic** – This is used to place a bitmap image on your report
- Chart** – This is used to place a chart on your report. This includes Bar, Pie, and Scatter charts
- Crosstab** – This is used to provide an entire crosstab document in/on your report
- Child Document** – This is used to connect a *Eureka* document (child) that you include as part of another *Eureka* document (parent or another child)
- Child Data** – This is used to return a specific piece of information from one document (the Child) and use it in another (the Parent or another child)
- Area** – Inserts area objects such as document header and footer, detail area, and page header and footer to the design window



## Query Menu



- Wizard** – Enables the query wizard
- TM1 Cube Wizard** – Creates TM1 Cubes
- Sort Order** – Displays the sort order/filter dialog box to set the sort order for the columns used in the query
- Filter** – Displays the sort order/filter dialog box for setting the column filters used in the query
- Quick Filters** – Displays a pick list of saved filters
- Setup** – Displays a dialog box for setting the grid size, the password, units of measure, and row and time limits for the query
- Default Font** – Displays the dialog box for setting font attributes and alignment for new objects
- Database Connection Override** – Displays the dialog box that allows you to override the default options for connecting to the database
- SQL Override** – Displays the dialog box for creating a query from scratch or editing the queries that the user generates
- Cache Override** – Displays the dialog box for setting cache properties that are specific to your current document
- QuickQuery Properties** – Displays the dialog box for controlling the on-screen appearance or the row and column titles
- View** – Uses notepad to display the SQL syntax for the query
- Refresh Cache** - Empties the data cache and refills it from your database

## Tools Menu

- Preferences** – Displays the preferences dialog box for setting the master data source
- Database Connection Defaults** – Displays default database connection options, login ID, password, and default metadata file and knowledge base
- HTML Defaults** – Controls default settings for creating HTML files
- Cache Defaults** – Enables cache and sets cache preferences to specify cache duration
- Disconnect** – Discontinues the current database connection
- QuickQuery Styles Editor** – Displays dialog box to define rules which control the font, color, borders, and text alignment of a specified document
- Auto Shortcut Builder** – Displays a dialog box to create an icon or program item to process your active design document
- ODBC Data Source Administrator** - Displays a dialog box used to add and modify the ODBC driver
- Metadata Manager** - You can have the *Eureka* Metadata Manager substitute pre-defined user-friendly column names for the actual column names used in your database. This is only available to the database administrator
- Cube Viewer** – This option is disabled with the DPAS application



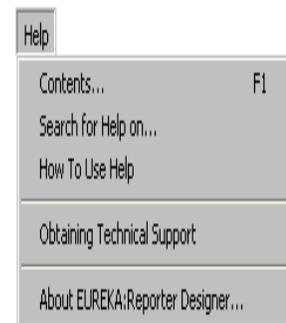
## Window Menu



- Free Form** – Shows a current QuickQuery document in a FreeForm window
- QuickQuery** – Shows a current FreeForm document in a QuickQuery window
- Cascade** – Rearranges and sizes all non-minimized windows so that they are next to each other
- Tile** – Rearranges and resizes all non-minimized windows so that they are next to each other within an objects window
- Arrange Icons** – Neatly arranges the icons for all minimized windows

## Help Menu

- Contents** – Displays a list of topics in the help system
- Search for Help On** – Displays a search dialog box for key words
- How to Use Help** – Displays a dialog box to let you type the word you want to find
- Obtaining Technical Support** – States useful information for obtaining product technical support
- About *Eureka* Reporter Designerer** – Displays product information such as name, version, copyright information, and current system resources



# Changing Your *Eureka* Password

## INTRODUCTION

This process will show you the procedures used to change your password in *Eureka*. Anytime you change your login or password for DPAS, you must also change them to the same for *Eureka*. When you change your password in DPAS, you will get a pop-up message to change your password in *Eureka*.

## OBJECTIVES

To allow the user to understand when and how to change the *Eureka* password.

## APPLICATION

You have just changed your DPAS password and now you need to change it in *Eureka*.

## PREREQUISITES

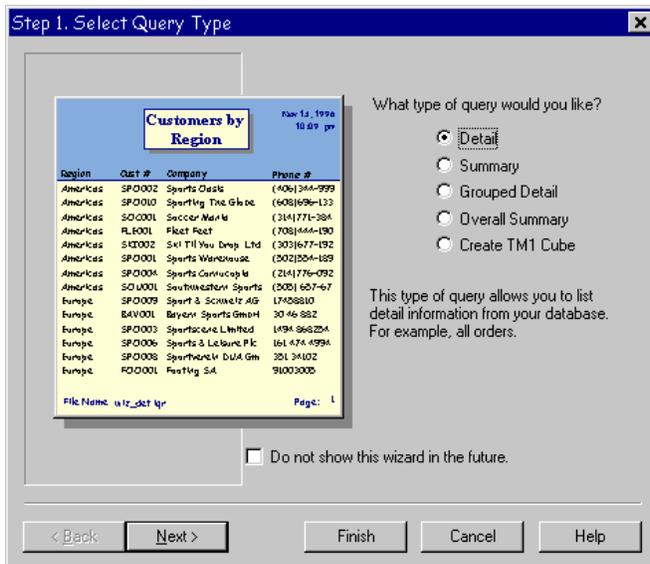
*Eureka* Reporter Designer is correctly loaded and configured.

## ACTIVITY

Instructor-led demonstration

## STEPS TO PERFORM ACTION

1. Select **Ad Hoc Reports** icon or select **Ad Hoc** from the menu bar.
2. Select ***Eureka*** from the program group.

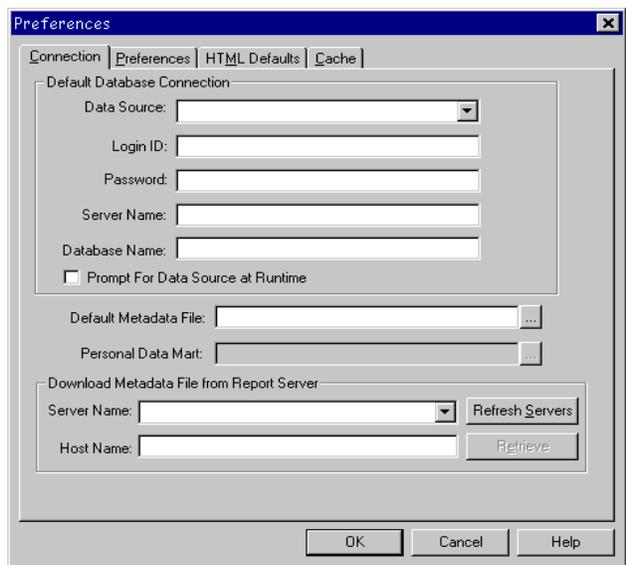
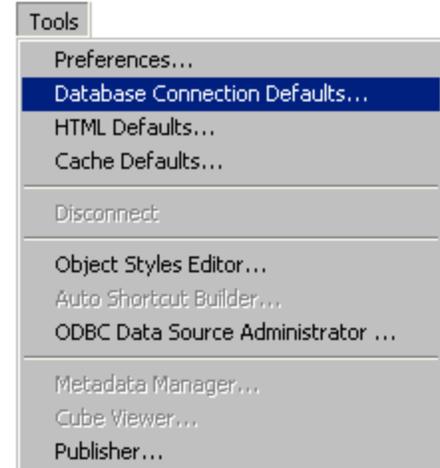


### STEP 1:

- If you get the wizard, click **Finish**; otherwise, go to the next step.

## STEP 2:

- a. From the menu bar, select **Tools**.
- b. Select **Database Connection Defaults...**



## STEP 3:

- a. **Data Source:** Make sure that your DPAS Site ID is displayed.
- b. **Login ID:** Make sure that your DPAS User ID is displayed.
- c. **Password:** Enter your **NEW** DPAS password.
- d. **Server Name:** Leave this field blank.
- e. **Database Name:** Leave this field blank.
- f. **Prompt For Data Source at Runtime:** Do not check this box. If checked, you will be prompted to enter your DPAS Site ID each time you run a report.
- g. **Default Metadata File:** Browse for where the DPAS programs reside on you workstation. If all the defaults were taken during installation, then the path is normally: **C:\Program Files\DOD\DPAS\DPAS.iqk**.

If you are unable to locate the DPAS.iqk file, click on the **START** button, select **Find** (or **Search** if using Windows ME or 2000), **Files or Folders...**, enter **dpas.iqk** look in the Local Hard Drives.

- h. **Server Name:** Leave this field blank.
- i. **Host Name:** Leave this field blank.
- j. Click **OK**.

## Installation Of The *Eureka* Reporter Viewer

### INTRODUCTION

There are occasions when you may want to provide a report electronically to a person who does not have DPAS or *Eureka* installed on their own PCs. In those cases, you have the choice of "exporting" your *Eureka* file in another format, such as Microsoft Excel (.xls), or text (.txt). Another alternative available is for the people to whom you regularly submit reports to have the *Eureka* Reporter Viewer installed, instead of the full *Eureka* Reporter Designer. (Note: *Eureka* Reporter Viewer provides the QuickQuery tool set only.) (dpaspr.exe, 9,448,006 bytes)

### OBJECTIVES

The instructions below are general and provide the guidelines of how to install only the *Eureka* Reporter Viewer. Whoever is responsible for installing DPAS and *Eureka* in your organization should still have the responsibility to install the Reporter Viewer.

### APPLICATION

As described in the introduction section above, the Reporter Viewer is intended for those who do not want or need the full DPAS and *Eureka* Reporter Designer installation.

### PREREQUISITES

A login and password for software downloads from the DPAS Homepage, similar to any other DPAS download.

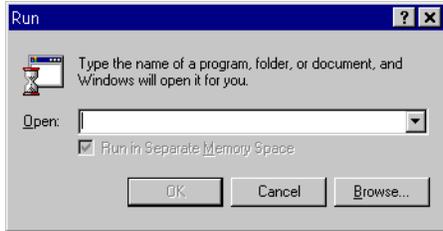
### ACTIVITY

None

### STEPS TO PERFORM ACTION

As with SUPRA NT, the installation of *Eureka* Reporter Viewer is simply a matter of reading the screen prompts throughout the installation process and following the directions provided.

1. If installed, remove the existing version of *Eureka* Reporter Designer via the Control Panel "Add/Remove Programs" applet prior to installing the *Eureka* Reporter Viewer program.
2. To install *Eureka* Reporter Viewer, click on the **Start** button.
3. Select **Run** from the program group.

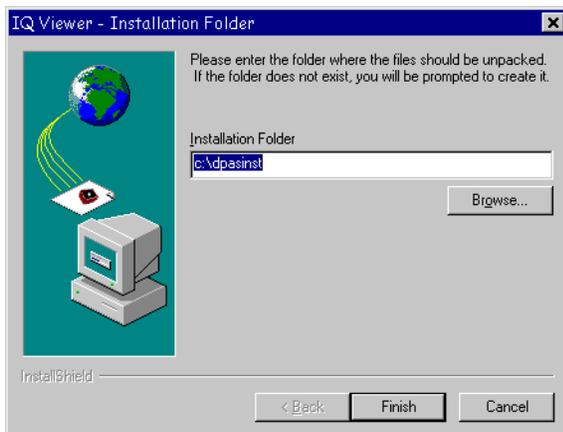
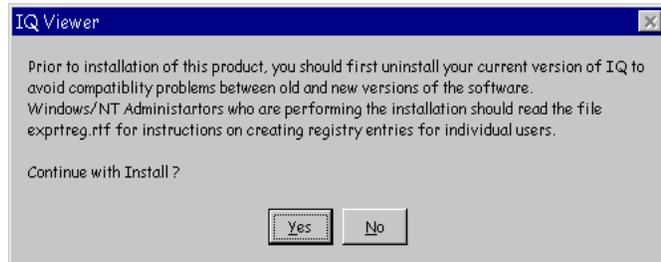


### STEP 1:

- a. **Open:** Enter the full path of where you downloaded the "dpasspr.exe" file.
- b. Click **OK**.

### STEP 2:

- Click **Yes**.



### STEP 3:

- a. **Installation Folder:** Accept the default of "c:\dpassinst".
- b. Click **Finish**.



#### NOTE:

This window will prompt you to choose a directory in which to unpack the files that will be used to install *Eureka*. The default unpacking directory is "c:\dpassinst", the same directory in which the DPAS GUI and Supra NT programs are normally unpacked). The files begin unpacking in the directory specified.

***If there had been DPAS GUI or Supra NT installations prior to running this installation, AND if the unpacking directory was not deleted, an "Overwrite Protection" window will appear at this time. If this window appears, click on the "Yes to All" button to overwrite all temporary files left over from the DPAS GUI and/or Supra NT installations.***



### STEP 4:

- Click **Next>**.

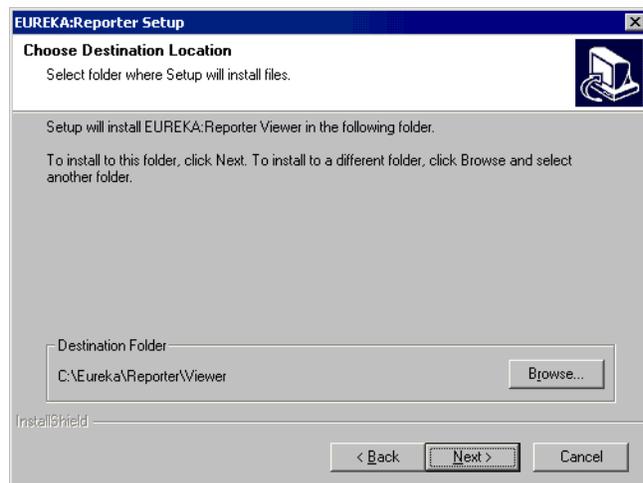
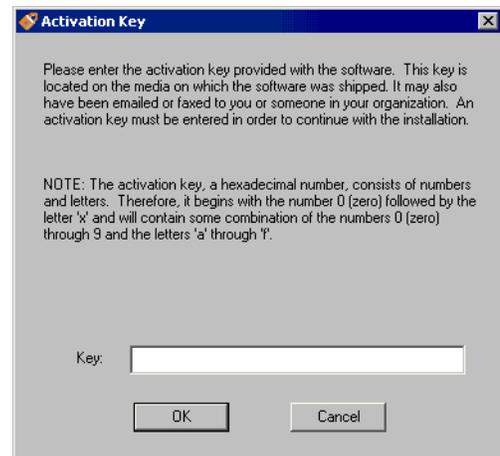
### STEP 5:

- a. Enter the key that was given to you in the Installation Instructions.
- b. Click **OK**.



#### NOTE:

The *Eureka* key code **IS** case sensitive.



### STEP 6:

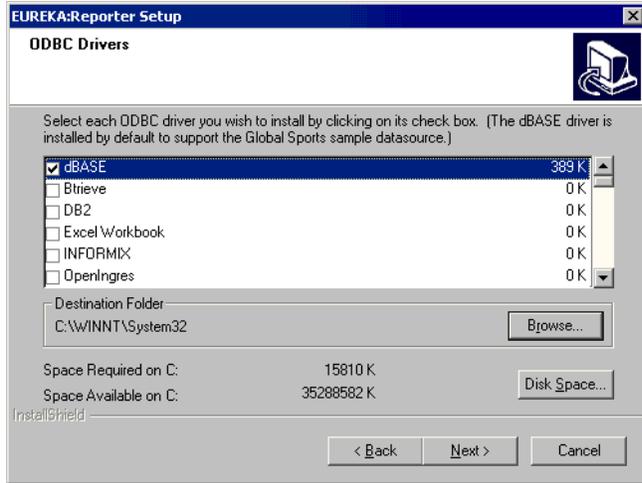
- Click **Next>**.



#### NOTE:

The default directory is **C:\Eureka\Reporter\Viewer**. If you wish to install this program in the default directory, then click **Next>**.

If you want to specify a desired program directory location, click on the **Browse** button and select the desired directory.



**STEP 7:**

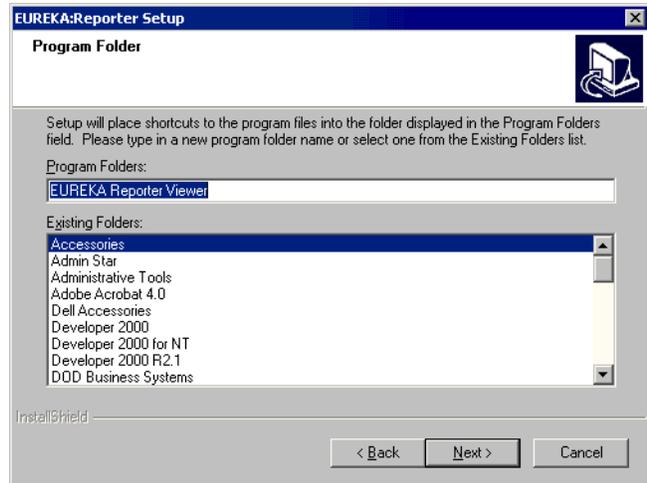
- Click **Next>**.

**NOTE:** Do not select any ODBC drivers. Leave the checkmark next the dBASE (it cannot be cleared and gets installed by default).

**STEP 8:**

- Click **Next>**.

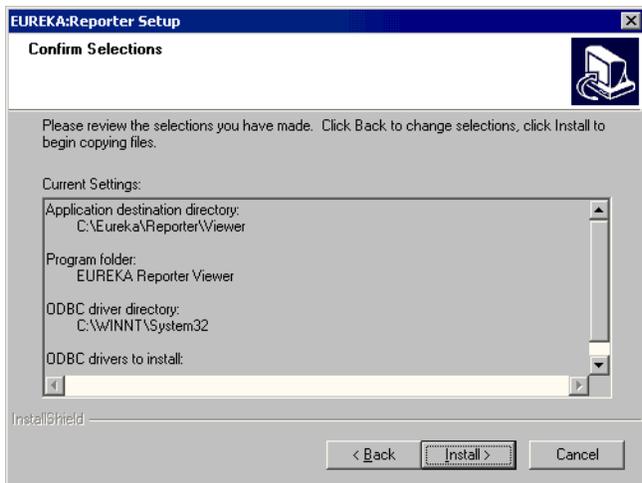
**NOTE:** The default folder is **Eureka! Reporter Viewer**. You may specify a different folder, if desired.



**STEP 9:**

- Click **Install>**.

The program files are now installed on the computer with a status bar to indicate setup progression.



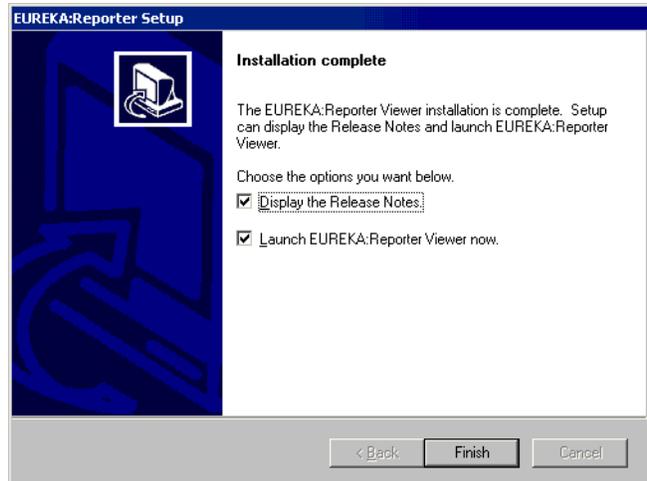
### STEP 10:

- a. **Uncheck** the "Display the Release Notes" and "Launch EUREKA Reporter Viewer now" check boxes.
- b. Click **Finish**.



#### **NOTE:**

Release notes are not available with this version. Also, the Adobe Acrobat Reader was removed from this software bundle to reduce the size of the self-extracting executable for quicker downloads. Therefore, leaving either of these boxes checked will result in an error message at the completion of the installation.



This completes the installation of *Eureka* Reporter Viewer.

#### **Notice for Windows NT users:**

The administrator for the Windows NT client may, depending upon the permission settings, have to grant the user access to the executables that were installed with this process. They are:

*Eureka* Reporter Viewer: iqpersnl.exe

#### **File Clean-up:**

You have completed the installation and have determined that you no longer have a need for the software package(s). You can delete the files that were downloaded from the Web site and the files that were unpacked during the installation process (all files located in the unpacked directory "c:\dpasinst").

## Chart Types

### Bar Chart

Bar Chart Data

Bar Data:

Bar Labels:

Group by:  
(optional)

Horiz Axis Title:

Vert Axis Title:

- ❑ **Bar Data** - Place the object for which you want to summarize values in the Bar Data control. This object determines the height of the bars.
- ❑ **Bar Labels** - Place the object for which you wish to see bars in the Bar Labels control. A different bar will be calculated for each value in this object.
- ❑ **Group By** - In the Group By control, place the object you wish to group by, if any. *Eureka* creates a different group of bars for each value in this object. Each group includes one bar for each value in the Bar Label object. Each bar represents the calculated value for the Bar Data object for a single particular combination of Bar Label object value and Group By object value.

For instance, if the Bar Labels object is Class and the Group By object is Sport, there will be one group of bars for each sport. Each of the groups will have one bar for each different Class value. For two-dimensional charts, the groups are placed next to each other. For three-dimensional charts, the Group By object is used as the X-axis and the Bar Label object is used as the Z-axis. If there were no Group By object, there would be a single group of bars.

- ❑ **Horiz Axis Title** - Enter a label to describe the Bar Labels object or the Bar Labels and Group By objects.
- ❑ **Vert Axis Title** - Enter a label to describe the Bar Data object.

### Pie Chart

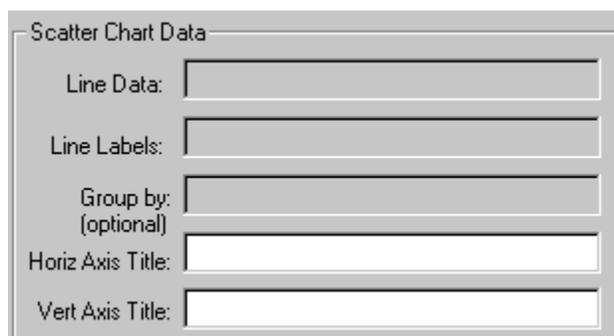
- ❑ **Pie Slice Values** - This is the object that controls the size of the pie slices.
- ❑ **Pie Slice Labels** - There will be a slice calculated for each value in this object.

Pie Chart Data

Pie Slice Values:

Pie Slice Labels:

## Scatter Chart



Scatter Chart Data

Line Data:

Line Labels:

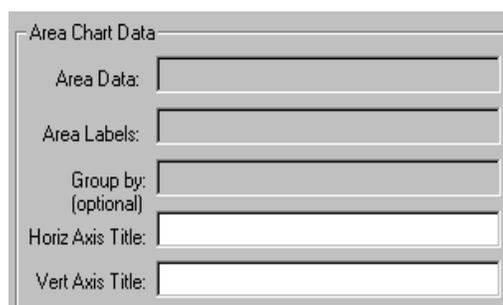
Group by:   
(optional)

Horiz Axis Title:

Vert Axis Title:

- ❑ **Line Data** - Place the object for which you want to summarize values in the Line Data control. This object controls the point heights – it is the Y-axis object.
- ❑ **Line Labels** - In the Line Labels control, place the object for which you wish to calculate points. The object is the X-axis object unless you use a Group By object, in which case it becomes the Z-axis object. (Since scatter charts are two-dimensional, the Z-axis points are differentiated from each other by color.)
- ❑ **Group By** - Add a Group By object if you want to chart three separate objects. *Eureka* creates a different set of points on the chart for each value in this object. This object is used as the X-axis object.
- ❑ **Horiz Axis Title** - Enter a label to describe the Line Labels object or Line Labels and Group By objects.
- ❑ **Vert Axis Title** - Enter a label to describe the Line Data object.

## Area Chart



Area Chart Data

Area Data:

Area Labels:

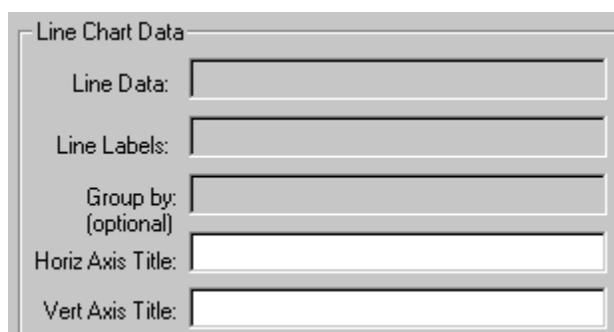
Group by:   
(optional)

Horiz Axis Title:

Vert Axis Title:

- ❑ **Area Data** - Place the Y-axis object in the Area Data. This is the object for which areas are plotted (i.e., it is the object which you want to summarize).
- ❑ **Area Labels** - Place the X-axis object in the Area Labels control. If you are using a Group By object, place the Z-axis object here. There will be an area calculated for each value in this object.
- ❑ **Group By** - In the Group By control, place the object you wish to group by, if any. The Group By object is used as the X-axis object and the Area Labels object is used as the Z-axis object.
- ❑ **Horiz Axis Title** - Enter a label to describe the Area Labels object or the Area Labels and Group By objects.
- ❑ **Vert Axis Title** - Enter a label to describe the Area Data object.

## Line Chart



Line Chart Data

Line Data:

Line Labels:

Group by:   
(optional)

Horiz Axis Title:

Vert Axis Title:

- ❑ **Line Data** - Place the object for which you want to summarize values in the Line Data control. This object controls the line height – it is the Y-axis object.
- ❑ **Line Labels** - In the Line Labels control, place the object for which you wish to calculate points along on the line(s). There will be a separate point plotted for each value in this object. This is the X-axis object unless you use a Group By object, in which case it becomes the Z-axis object.
- ❑ **Group By** - When you place an object here, *Eureka* uses it as the X-axis object. (A separate line is drawn for each value in the Line Labels Object; it becomes the Z-axis object.) Each line has points plotted for each separate value in the Group By object.

For instance, if the Line Labels object is Class and the Group By object is Sport, there will be one line for each Class value. Each line will have points plotted bar for each Sport. If there was no Group By object, there would be a single line that would have a separate point plotted for each Class value.

- ❑ **Horiz Axis Title** - Enter a label to describe the Line Labels object or the Line Labels and Group By objects.
- ❑ **Vert Axis Title** - Enter a label to describe the Line Data object.

## Style Profiles

### INTRODUCTION

Style profiles allow you to control the appearance of your QuickQuery by defining rules that apply style attributes.

### OBJECTIVES

You will demonstrate an ability to establish style profiles for your own QuickQuery Reports.

### APPLICATION

Style Profiles is another tool to determine how your data will be represented on-screen or in print.

### PREREQUISITES

Complete Chapters 1 and 2 of this manual.

### ACTIVITY

The Style Profiles Dialog Box - Using Style Profiles to Control the Appearance of a QuickQuery.



#### STEP 1:

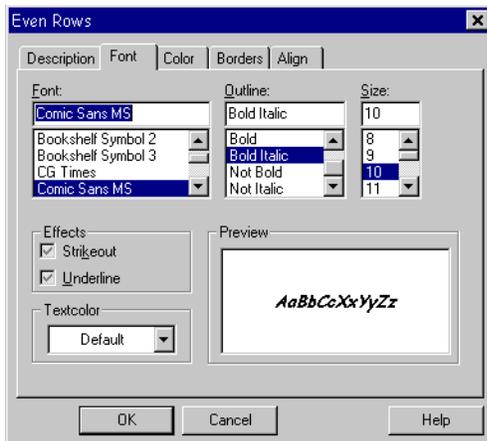
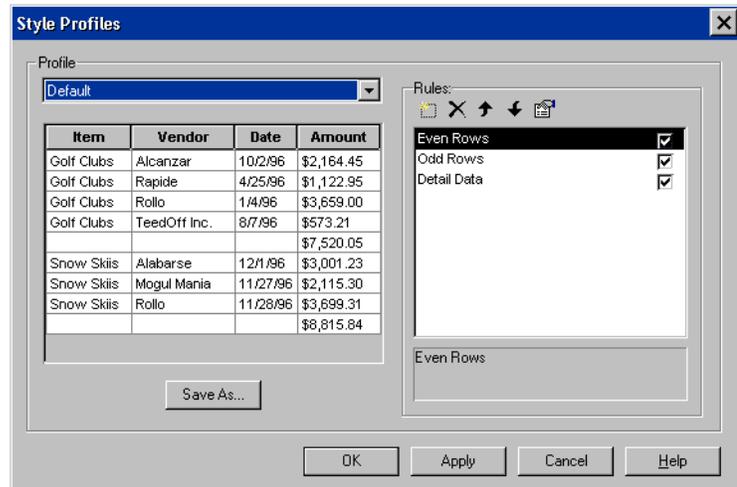
- Select the Style Profiles icon OR select Tools and then QuickQuery Styles Editor

This dialog box lets you define rules which control the font, color, borders, and text alignment of your document. Each rule applies to those parts of your document which meet the condition (e.g., Even Rows, Odd Rows, Group Data, etc.) that you select for the rule. One or more rules can be saved as a Style Profile, which can be applied to other documents.

When you first open this dialog box, the Rules section lists the rules which control text meeting these conditions: Even Rows, Odd Rows, and Detail Data. (These conditions are always fulfilled in a QuickQuery document that has more than one detail row.) If you open the Editor and select an existing Style Profile from the drop-down list at left, the Rules section displays a list of the rules that have been defined in the selected Style Profile. Each rule is accompanied by a checkbox, which can be used to turn the application of the rule off or on.

**STEP 2:**

- Double-click on the rule that you want to set your attributes to.
- Click **Apply** to assign your style. This only assigns the rule to the current query.
- Click **Save As...** to save this style to use in other queries.

**STEP 3:**

- Define rules for Odd Rows, Even Rows, or Detail Data by double-clicking the rule name, or rule the condition and clicking the Edit button (located directly above the Rules list). This opens the Rule dialog box for the selected condition. Add new rules by clicking the Add Rule button. This inserts an untitled entry in the rules list and opens the Rule dialog box, where you can select a condition and define the rules to apply to it.
- Click the **Font** tab and change the attributes for your styles, such as font types, size, and effects.
- Click on the other tabs to add borders, colors, etc.
- Click **OK**.

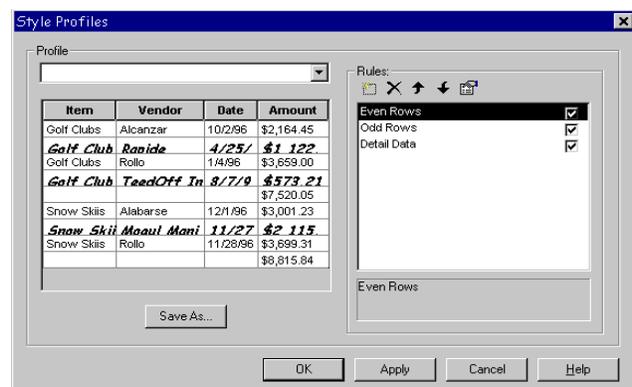
As you define rules, the example QuickQuery in the Editor displays the cumulative effect of the defined and selected rules on the appearance of your document.

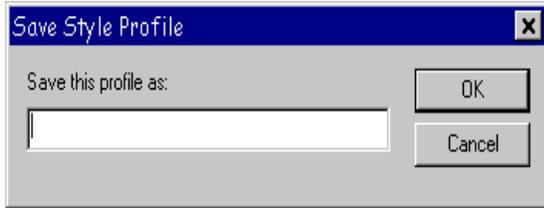
You can apply the rules you have defined to your document at any time by selecting the Apply button.

**STEP 4:**

- Once you have completed your profile, click **Save As...**

Notice that this screen will show an example of your profile.





## STEP 5:

- a. **Save this profile as:** Give your profile a name.
- b. Click **OK**.

## Applying A New Style

When you create a new QuickQuery report, you can apply your new style for that report.

1. Click on **Tools>QuickQuery Styles Editor** from the menu bar.
2. Change the **Profile** to the style you want to use.
3. Click **OK**.
4. Create and process your report.

Qty	Cost	BarCd	HID/No/Id	Loc	Name	Stock/No	Serial/No
2749.00	001221	5701	BLDG 13		TRK COO 1/2T 6000	341001297764	371700007721
13566.00	167242	5701	BLDG 24		LATHE, ENIGME	3411001264013	77552
13566.00	167242	5701	BLDG 24		COPIER SYS XEROX	361001129764	5000212
27493.00	167244	5701	BLDG 24		TRK LF 6000LB LT-60	3830000251015	436346AFG4-
1.00	167245	5701	BLDG 24		TELEPHONE, STU III	318000000927	3242038
252.00	7251001102	5701	UNASSIGNED		BARCODE READER	5020111FLM	800-001-001
20.00	193000	5701	UNASSIGNED		ANSWERING MACHINE	7010000432025	AF-001
933.00	193000	5701	BLDG 24		MONITOR, 19" COLOR	702000000952	1330047D3
3101.00	193000	5701	BLDG 24		COMPUTER, PENTIUM III	702000000508	560744
3345.00	9384201	5701	BLDG 24		COMPUTER, PENTIUM III	7020010001217	9384201
4621.00	193000	5701	BLDG 24		PRINTER, LASER	702001000221	97766482D
110000.00	1930004	5701	BLDG 24		SERVER	7020011725133	5644634563-
3223.00	1930006001	5701	BLDG 24		COMPUTER, LAPTOP	7020010034231	21043234
3223.00	1930006001	5701	BLDG 24		COMPUTER, LAPTOP	7020010034231	21043234
3223.00	1930006001	5701	BLDG 24		COMPUTER, LAPTOP	7020010034231	21043234
499.00	1930001	5701	UNASSIGNED		HANDHELD COMPUTER	7020010000403	538-001
499.00	1930002	5701	UNASSIGNED		HANDHELD COMPUTER	7020010000403	538-002
344100.00	42545	5701	BLDG 24		HANDHELD COMPUTER	7020010000403	3893AL
27439.00	167246	5702	BLDG 3		TRK COO 1/2T 6000	2360010007991	1242305338
11500.00	167247	5702	BLDG 3		LATHE, ENIGME	341001364013	775528
13566.00	167248	5702	BLDG 3		COPIER SYS XEROX	3410011297764	800EX128
2763.00	167245	5702	BLDG 3		TRK LF 6000LB LT-60	3830000251015	436346AF316
1.00	167249	5702	BLDG 3		TELEPHONE, STU III	318000000927	32423621
252.00	7251001102	5702	UNASSIGNED		BARCODE READER	5020111FLM	800-001-002
232.00	1930002	5702	UNASSIGNED		ANSWERING MACHINE	7010000432025	AF-002
933.00	1930005	5702	BLDG 3		MONITOR, 19" COLOR	702000000952	1330047D4
3101.00	1930006	5702	BLDG 3		COMPUTER, PENTIUM III	7020010000508	560745

5. Save your report.
6. Close your report.

## What If Statements

This report writer uses the document, filter to solve WHAT IF statements. As long as the conditions in the IF statement or statements do not contradict one another one report may be used. Otherwise, filters in child reports must be used, and their outputs may be placed on multiple detail lines. (You can have more than one detail line.)

You need to consider how to solve the following WHAT IF statements:

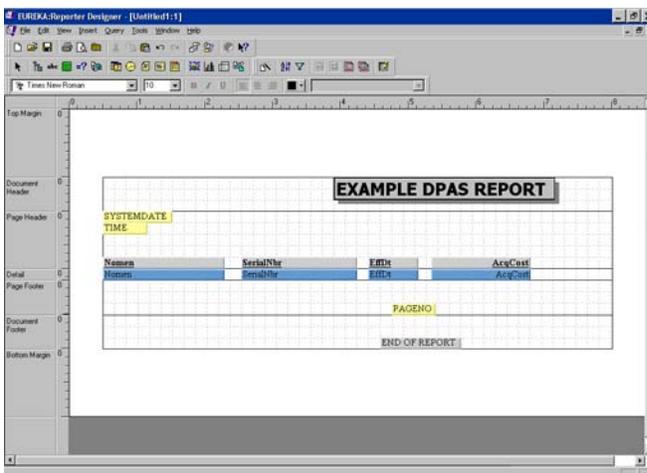
If Acquisition Cost is greater than or equal to \$10,000 and Effective Date is greater than or equal to 19960101, and UIC starts with A (Army), then process the information.

A second statement:

If Acquisition Cost is greater than or equal to \$10,000 and the Effective Date is greater than or equal to 19960101 and UIC starts with N (for Navy), then process information.

In addition, we want the Army information, and the Navy information to print out in separate groups. We will use multiple filters to satisfy the WHAT IF statements.

### Creating What If Statements:



1. Create a new FreeForm report.
2. Add a Document Header area.
3. Add a report title to the Document Header area.
4. Add a Document Footer area.
5. Using the text object, add **End of report** to the Document Footer area.
6. Add the date and name of file to the Page Header area.
7. Add the page number to the Page Footer area.

### Adding from the Object Directory:

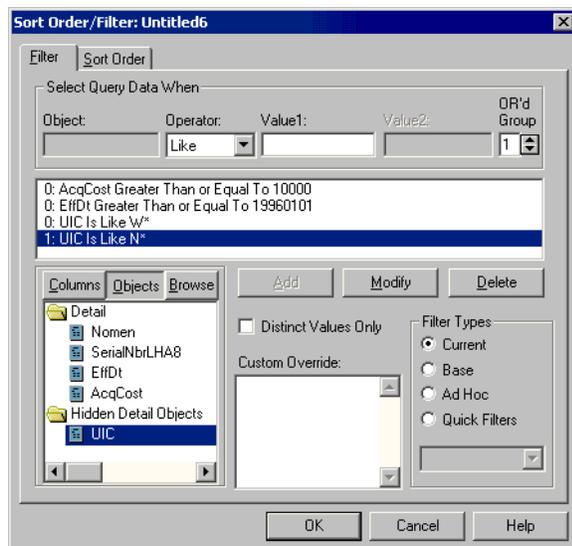
1. Select the following fields for your report and add to the Detail area of your report:

BUSINESS VIEW: END ITEM SERIAL	
FOLDER(S)	DATA ELEMENT(S)
Catalog	Nomen
Serial Hand_Receipt	Serial Nbr Eff Dt Acq Cost
Unit	UIC

2. Right-click on the UIC data object (blue object) and select **Hide Toggle**.
3. Delete the UIC column heading (gray object) from the Page Header area.

### Applying Multiple Filters:

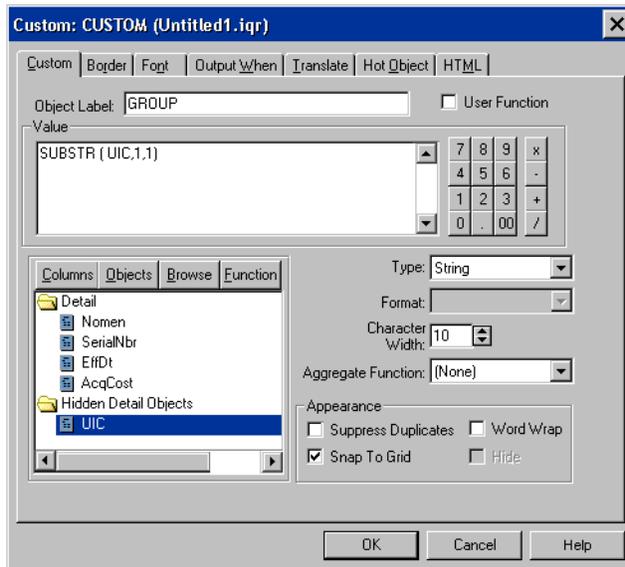
1. Click on the Filter icon.
2. From the Objects tab, double-click on the Detail folder.
3. Double-click on **AcqCost** to move into the Object.
4. Set the Operator to **>= (greater than or equal to)**.
5. Set Value1 to **10000**.
6. Click Add.
7. Double-click on **EffDate** to move into the Object.
8. Set the Operator to **>= (greater than or equal to)**.
9. Set Value1 to **19960101**.



10. Click **Add**.
11. Double-click on the Hidden Detail Objects folder.
12. Double-click on **UIC** to move into the Object.
13. Set the Operator to **Like**.
14. Set Value1 to **W\***.
15. Click **Add**.
16. Double-click on **UIC** to move into the Object.
17. Set the Operator to **Like**.
18. Set Value1 to **N\***.
19. Change the OR'd Group to **1**.
20. Click **Add**.
21. Click **OK**.
22. Save the report as **What If**.

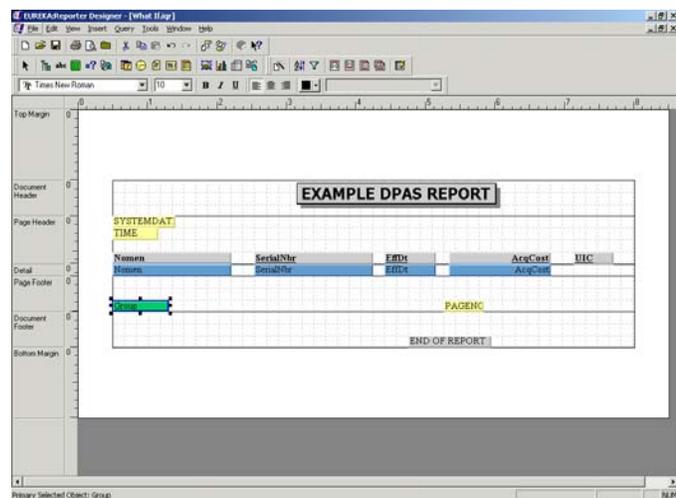
## Grouping Information by Creating a Custom Column:

1. Click on the Custom icon.



2. Type in **Group** for the Object Label.
3. Click on the Function button and scroll to SUBSTR.
4. Double-click on SUBSTR, to move into the Value area.
5. Remove everything except the left parenthesis.
6. Click on the Objects tab.
7. Double-click on UIC, to place it next to the left parenthesis (no space).
8. After the UIC, type in **“,1,1”** (without the quotes). It should read **SUBSTR (UIC,1,1)**.
9. Click **OK**.

10. Place the object in the Page Footer area.
11. Click once on the Custom field **“Group”** that we just created.
12. Click the Group Header icon.
13. Move the Custom Field **“Group”** into the Group Header area of the report.



## Structured Query Language (SQL)

SQL is the language the report writer uses to talk to the computer, to tell it to bring up the data that has been asked for in the report. In older report writers the person writing the report had to write out the SQL. In today's report writers, the report writer constructs SQL. Each time a block of data is added to the report, the report writer writes additional SQL. When you tell the report how to sort, and what to filter on, it will add more SQL.

There are occasions with *Eureka*, that makes it necessary to actually go into the SQL language, which is called syntax, and change it. There are two primary situations when the SQL will need to be edited. One is when you wish to sort on a custom data field. The second is if a compound statement is entered into the filter that includes **AND**, and **OR**.

Before examples are provided on how to modify the SQL for the two reasons mentioned above, it is necessary to have some understanding of how to read the SQL.

There are command words in the SQL. The most often used commands are:

**SELECT**  
**FROM**  
**WHERE**

These must exist in every report. The most common optional commands are:

**ORDER BY**  
**GROUP BY**

The SELECT command is constructed as you add data blocks to your report. If it is desired to construct a report from the History file that will provide a list of all ADP equipment turned in for a specific time, such as a year, and be broken down into months. First it would be necessary to select a data field that would indicate that an item is ADP, this data field would be the ADP RPTB CD. Also, it would be necessary to pull the transaction date of the action, this data field is called LHAZ DT.

When these two data fields are added to the report, the report writer would construct the following:

**SELECT**  
**TO."CTLG\_ADP\_RPTB\_CD",**  
**TO."LHAZ\_DT"**

To explain, it must be understood that DPAS system is a collection of files or tables. They will be called files for this discussion. Each file has a purpose: there is the catalog file which houses basic catalog information, the end item serial file which houses the bulk of the equipment on your property book, the serial asset. There is a component file, a hand receipt holder file, and a file for each specific job in the system. In report writing, these files may or may not be joined together, or as it is called "linked" together.

Therefore in the SELECT statement the report writer indicates which file the data field is from. Each of the files, such as end item serial, have a program name, it is like a short name for the file, for instance, the catalog file program name is LHAA. The end item serial file is named LHAF. The SQL uses these short names. It is not necessary to memorize these short names, but it will be helpful if you construct very many reports. The SELECT statement also further abbreviates the program name of files by assigning it a

"T" number. If a report selects from two or three files, the first file you select a data field from will be "T0", the second file you selected from, "T1", and so on. The data field itself has a naming convention that indicates the home file for the data field. For instance, STK NBR, its home file is the catalog, it may also appear in the serial asset file, but the first part of its data field name will always start with CTLG, which indicates its home file is the catalog file.

So in the SELECT statement above, the first data field selected is home to the catalog file, the second from the history file, however, both are being selected from the History business view and pulled from the history file which is called LHAZ. Therefore both have T0 assigned to them. But notice the ADP RPTB CD has CTLG at the first of it indicating its home file is the CTLG file, LHAA. Note there will be a comma after each data field selected, except the last one.

So the SELECT statement is saying:

**"Computer" go pull the ADP RPTB CD and the LHAZ DT. Go back and re-read the select statement.**

### **FROM Command**

This command word tells the computer from which file in the DPAS system it will find the data field desired.

**From  
"LHAZ" T0**

The FROM statement indicates the data is to be pulled from the file LHAZ. Note the LHAZ is in "", then T0 follows outside of the quotes. This is a statement that T0 is an abbreviation for LHAZ. It should be noted that when reading and editing SQL, each comma, each period, each quote is critical, and must be in the correct place. So now the report writer can tell the computer I want certain data fields, and where it gets those data fields from.

### **WHERE Command**

The WHERE clause or statement has a two fold purpose. In the business views of DPAS, there is a primary file, such as End Item Serial. The primary file is the end item serial file, called LHAF. But in the End Item Serial business view, there are "links" to other files. To link files together, which makes the computer look at them like one large file, there is a linking statement in the WHERE clause. The linking statement is the first of the two part WHERE clause. To link files together, there is a requirement - there must be at least one data field that is common to both files. Such as STK NBR is found both in the Catalog file and the End Item Serial file, so these two files could be linked together with the following linking statement in the WHERE clause:

**Where  
T0."CTLG\_STK\_NBR" = T1."CTLG\_STK\_NBR"**

Do not forget the T0 and the T1 are short names for the file names.

The second part of the WHERE clause is what has been placed in the filter, and will usually be enclosed in parenthesis ( ). These must be upper case 9 and uppercase 0, not brackets. If it is just one simple statement in the filter, it may not be in parenthesis.

In the report being constructed, if it was desired to prompt for a beginning date (BEGDT) and an ending date (ENDDT), the WHERE clause statement for the filter would look like this:

**(T0."LHAZ\_DT between 'BEGDT' and 'ENDDT')**

The entire WHERE clause would look like this:

**Where T0."CTLG\_STK\_NBR" = T1."CTLG\_STK\_NBR"** ((the linking part of the statement))  
**And (T0."LHAZ\_DT between 'BEGDT' and 'ENDDT')** ((the filter part of the statement))

### **ORDER BY Command**

This is the command used when a sort is desired. It is the last statement in the SQL. It would look like this if it were to be sorted by date:

**Order by**  
**T0.'LHAZ\_DT'**

The entire SQL for the report would be:

**Select**  
**T0."CTLG\_ADP\_RPTB\_CD",**  
**T0."LHAZ\_DT"**  
**From**  
**"LHAZ" T0**  
**Where**  
**T0."CTLG\_STK\_NBR" = T1."CTLG\_STK\_NBR"**  
**And (T0."LHAZ\_DT between 'BEGDT' and 'ENDDT')**  
**Order by**  
**T0.'LHAZ\_DT'**

All of this is compressed more in the actual syntax.

To elaborate on one of the two occasions when it may be necessary to edit the SQL, sorting with a custom data field. Suppose a report is desired from the History business view that list ADP equipment that has been turned in for the past year, but broken down into months. All that is desired is a count of those items for each month, then a total at the end of the report.

First, the ADP RPTB CD will be used to indicate which items are ADP, secondly the LHAZ DT will be used to determine the date of the transaction, and last a data field called PGM DESC will be used to indicate the action was a turn in. From experience it will be learned a turn in action will be a PGM DESC of EI DEC TI. This means End Item Decrease Turn In.

The problem is to sort, or group by month. It will be necessary to create a Group Header for Month. DPAS does not have a data field of MONTH. It will be necessary to construct a Custom data field using the Substring method learned earlier in the course (refer to page XX). The substring will use the LHAZ DT data field, and start at position 5 of the data field for a total of 2 spaces. This custom data field will be called MONTH. To create a MONTH group header, click on the data field, and click the group header icon. This causes an automatic sort by MONTH in the Order by clause. The problem is this: the Order By statement the SQL constructs will look like this:

**Order by  
SUBSTR (T0."LHAZ\_DT",5,2)**

When the report is started, the above statement will generate an error message of "Invalid Command End". To correct this problem, you must edit the SQL. To do this, on the top of the screen, click QUERY, then click SQL OVERRIDE, click the button labeled GENERATE SQL, go to the bottom of the SQL and place the cursor to the right of the "y", of Order by, delete out all of SUBSTR (LHAZ\_DT,5,2), and replace it with the number 1. The reason for this is the substring custom data field is the first item in the select list under the SELECT command. If it had been the third item on the select list, a number 3 would have been inserted. Now the report will run. Now it is important to remember to go to the top of the box and put a check mark into the box labeled "Use SQL Override", if you do not do this the change you made will not work. Also, if the Generate SQL button is accidentally pressed after the changes to the SQL have been made, it will re-write the SQL back to what it was before the modification. Incidentally, the SQL syntax is not space sensitive, nor is it important that a statement be on the same line or below the command words.

The second of the two reason why it may be necessary to edit the SQL is compound AND, OR Statement in the filter. This report writer has a flaw of re-arranging filter statements.

Suppose a report was desired to list computers that cost \$1000 or more for HR # 0101 or HR # 0102.

The following was entered into the filter, don't forget the numbers on the left indicate whether an AND, or an OR is between two statements.

**0 Acq\_Cost Greater Than or Equal To 1000**  
**0 Nomen is Like '\*COMPUTER\*'** (the single quotes will not be visible here)  
**0 HRHNbrMjr Equal To 0101**  
**1 HRHNbrMjr Equal To 0102**

This statement is saying all data must meet the criteria of costing \$1000 or more, and having the word COMPUTER in its nomenclature, and be on the hand receipt of HR 0101 OR HR 0102. It will look fine when you click OK. Save the report, then go back and look at the filter, it will now look like this.

**0 Acq\_Cost Greater Than or Equal To 1000**  
**0 HRHNbrMjr Equal To 0101**  
**0 Nomen Is Like '\*COMPUTER\*'**  
**1 HRHNbr Mjr Equal To 0102.**

This rearranging of the filter desired has totally changed the results of the report. The version that had been put into the filter would have pulled any data that had the word COMPUTER in its Nomen and cost \$1000 or more, and from either HR 0101, or HR 0102. Now the report will pull up data that is from HR 0101 and cost \$1000 or more and has the word COMPUTER in its Nomen, OR anything from HR 0102.

To correct this you must go into QUERY, SQL OVERRIDE, GENERATE SQL, then edit the SQL to look like what was placed into the filter, making sure to place in all commas, single or double quotes and periods.

