Chapter Five Table of Contents

Introduction To Enhanced *Eureka*

This section of the *Eureka* training and reference manual describes some of those functions which in most cases are not "routine" to the every day user. Among the topics covered are inserting charts and crosstabs into your reports and queries. You will also learn how to generate labels with information drawn from your DPAS data. Finally, you will learn how to create and use a Personal Data Mart.

OBJECTIVES

You will gain a familiarity with the advanced functions found in this chapter, so that you can use them when the occasion arises.

APPLICATION

A chart may be an excellent way to represent items on your Property Book, for example, number of items entered into the property book per month, in order to show trends in how work is distributed. A Personal Data Mart can be a tool used to facilitate your work in developing reports remotely from your on-line database, or to limit the amount of data which your report will look at.

PREREQUISITES

A fundamental understanding of FreeForm documents.

ACTIVITY

Student Hands-On with Instructor direction

Charts

Unit of Study: Chart objects generate their own query that is completely separate from the initial main document query. A chart object is used to illustrate graphically your report output.

Eureka allows you to include eight different types of charts in your document:

- Three-dimensional area charts
- Two-dimensional and three-dimensional bar charts
- Two-dimensional and three-dimensional line charts
- Two-dimensional and three-dimensional pie charts
- Scatter chart

Experiment with different chart types for displaying your data. As a general rule, the more complex your data, the simpler a chart type you should start with.

Application: Property listing with output to include a chart object to illustrate graphically your data results.

Report Type: Asset listing by HRH Nbr Mjr, HRH Name with Bar Cd and Acq Cost.

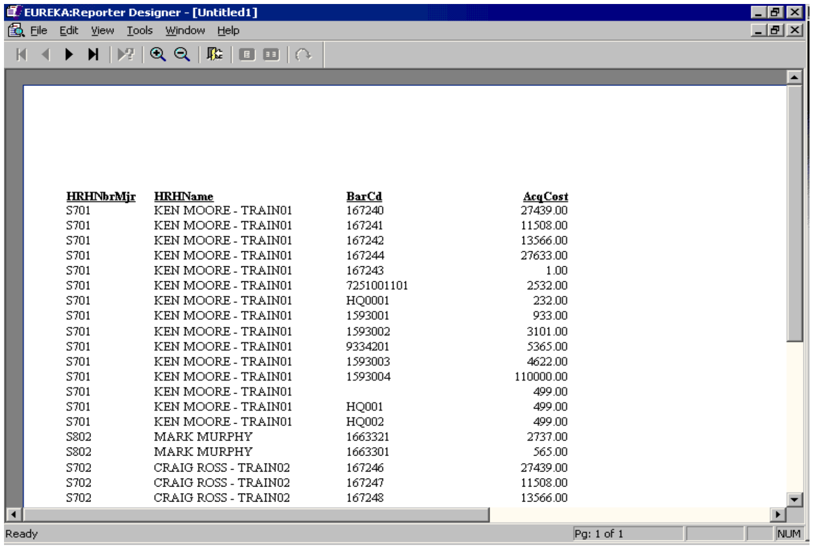
Activity: Student Hands-On with Instructor direction

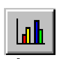
Instructions:

1. Create a new FreeForm report.
2. Select the following fields for your FreeForm report:

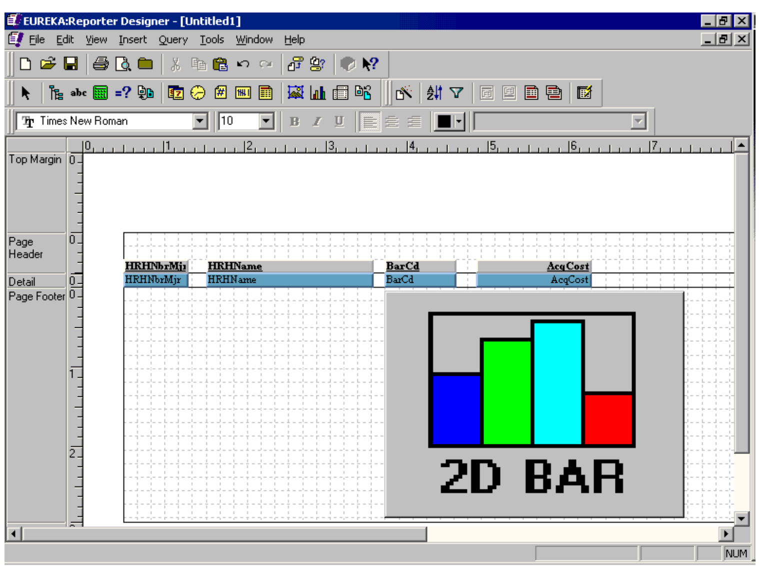
BUSINESS VIEW: END ITEM SERIAL	
FOLDER(S)	**DATA ELEMENT(S)**
Hand_Receipt_Holder	HRH Nbr Mjr HRH Name
Serial_Hand_Receipt	Bar Cd Acq Cost

3. Save your report as **CHART**.
4. Process your query.



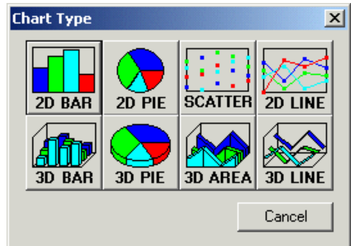
5. Close the report viewer.
6. Select the chart icon  from the tool bar.
7. Place the chart object into the Page Footer area of your document.
8. Click on the chart object and drag out to enlarge the icon to about half a page.

NOTE:
A chart is only as big as the chart object that is placed on your report. You will need to resize the object by grabbing the handles (click on the object once to get the handles) and drag the object to the desired size.



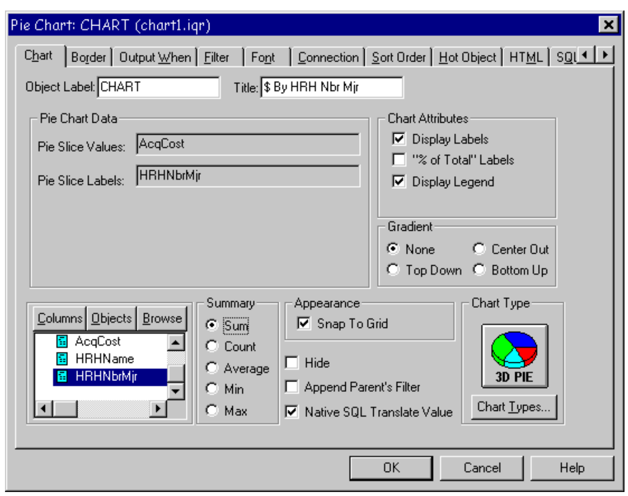
9. Double-click on the chart icon.

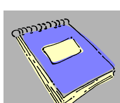
10. Select the **Chart Types** button.
11. Select **3D Pie**.



12. **Title:** Enter **$ By HRH Nbr Mjr**.
13. Click on the **Objects** button.
14. Double-click on the **Detail** folder.
15. Click, drag and drop the **Acq Cost** field to the **Pie Slice Values**. This field is grayed out, but you will still be allowed to drag the object into the field.
16. Click, drag and drop the **HRH Nbr Mjr** to **Pie Slice Labels**. This field is grayed out, but you will still be allowed to drag the object into the field.
17. In the Chart Attributes group, check **Display Legend**.
18. In the Gradient group, accept the default of **None**.

Gradient	
Top Down	White at the top blending to black at the bottom.
Center Out	White in the center blending to black at the outside.
Bottom Up	White at the bottom blending to black at the top.





NOTE:
Background gradients take precedence over other chart backgrounds. They are always white-to-black blends.

19. In the Summary group, select **Sum**.

Chart Attributes	
Draw Grid	Select this check box to include grid lines in the output.
Percentile Bar Chart	Select this check box to have calculations expressed as a percentage of the overall total. For pie charts, which are always percentile charts, this item is called **"% of Total**" Labels and controls whether labels are shown as totals or percentages.
Display Labels	Select this check box if you wish to output labels along the axes of the chart. (Horizontal axis labels appear only when you use a Group By object.)
Display Legend	Select to show an index of the colors/patterns corresponding to different Area Labels column values. (Only available when you use a Group By object.)

20. Do not change Appearance.

Appearance	
Snap To Grid	This has been defined in Chapter 3.
Hide	This has been defined in Chapter 3.
Append Parent's Filter	This has been defined in Chapter 4, Parent/Child. If you use the chart dialog box's Filter tab to define a filter, selecting this check box combines the two filters using an AND relationship – rows must meet both filters in order to be included in the chart. Unless you tell it otherwise, *Eureka* includes all database rows. To have your chart include only those rows that are included in your document, make sure that the Append Parent's Filter option is selected.
Native SQL Translate Value	This check box controls whether *Eureka* Reporter Designer ❑ Includes value translation requests as part of its query for chart information, or ❑ Performs value translations itself By default, *Eureka* does not include value translation requests as part of its query. Check this box to have it do so. When this is done, sorting and grouping are based on the translated value (when your database manager or ODBC database driver supports the SQL syntax required to do this). If you want sorting and grouping based on the untranslated value, make sure this box is not checked.

21. Select the **Filter** tab.
22. Click on the **Objects** tab.
23. Double-click on the **HRH Nbr Mjr** to add to the Object.
24. Set the Operator to **Between**.
25. Set Value1 to **W1DC03**.
26. Set Value2 to **W1NW54**.

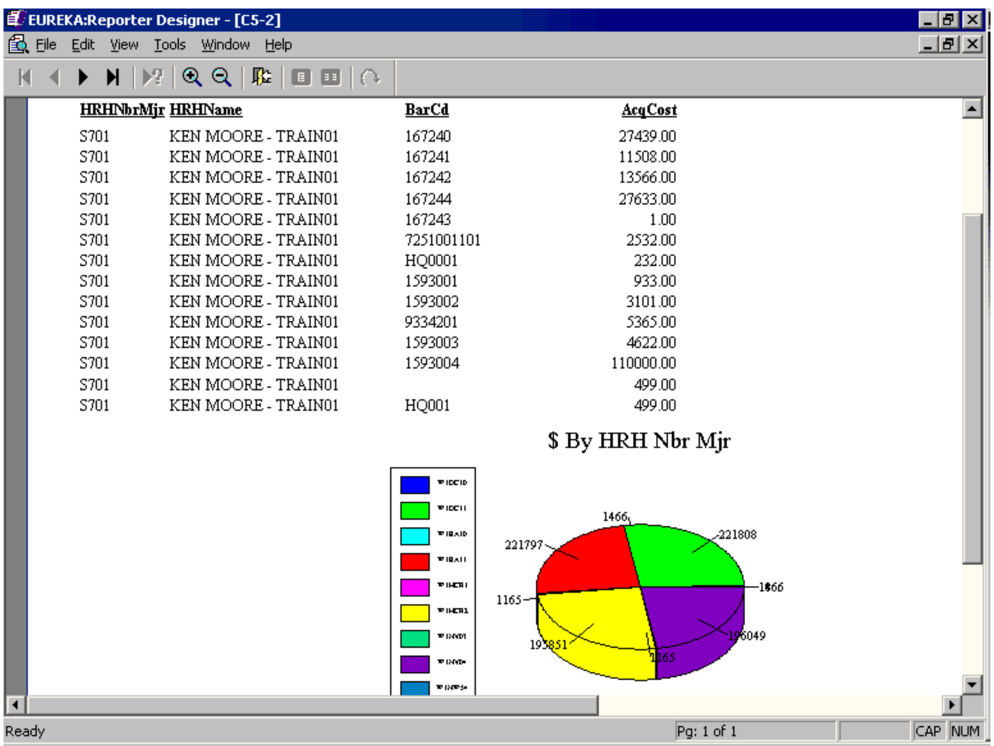
27. Click **Add**.

NOTE:
You can set a specific query filter to control which rows are included in the chart. To do this, select the Filter tab from the Chart dialog box.

The entries you make on this tab affect which rows are included in your chart. They do not affect when the chart is included in your document. To set the conditions that affect when the chart is included, select the Output When tab.

If you both select Append Parent's Filter and set up a query filter using the filter tab on the Chart dialog box, the two filters work together. Only rows satisfying both filters will appear.

28. Click OK.
29. Save your report.
30. Process your report.



31. Close your report.

Crosstabs

Unit of Study: A crosstab object is an object that outputs an entire cross-tabulation document. It uses three component objects: columns, rows, and aggregate. The crosstab provides an aggregate calculation, such as total, count, etc. for the aggregate object for each different combination of values in the other two objects.

Crosstabs are similar in appearance and function to a matrix, or spreadsheet-style, document. Like chart objects, crosstab objects generate a query that is completely separate from the original document query.

A chart object is used to illustrate graphically your report output.

Think of a crosstab as a special type chart. It is similar to appearance and function to a matrix or spreadsheet-style document. The rules which applied to creating a chart object, generally are the same for a crosstab object.

A crosstab object outputs an entire cross-tabulation document (a crosstab, for short) (think of an Excel spreadsheet). In its simplest form, a crosstab uses three component objects. Each must be a column or a custom object from your Metadata file.

- An object defined in your Metadata file for the crosstab's vertical columns. We call this the columns object. These values are listed across the top of the crosstab.
- An object for crosstab lines. We call this the rows object. These values are listed at the beginning of each line of the crosstab.
- An object to be summarized in the cells of the crosstab. We call this the aggregate object.

The crosstab provides an aggregate calculation, such as total, minimum, average, etc., for the aggregate object for each different combination of values in the other two objects.

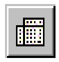
Crosstabs are stored in files separate from your design document. This allows the same crosstab to be reused as a building block in additional design documents.

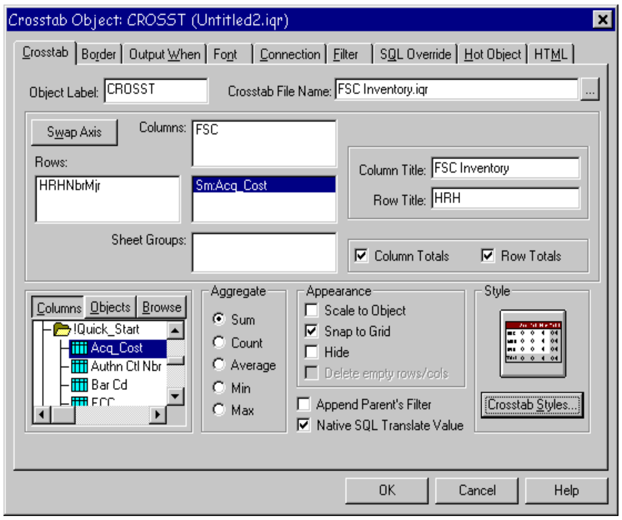
Activity: FSC Inventory with output to include crosstab to illustrate graphically your data results.

Report Type: FSC Inventory listing to include HRH Nbr with sum of property value.

Activity: Student Hands-On with Instructor direction

Instructions:

1. Create a new FreeForm report.
2. Select the crosstab icon  from the tool bar.
3. Insert the crosstab object into the detail area of your document.
4. Double-click on the crosstab icon.



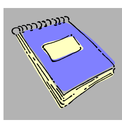
5. **Crosstab File Name:** Enter **FSC Inventory**. *Eureka* will automatically add the **.iqr** extension.
6. Click on the **Columns** tab (if it isn't already selected).
7. Scroll to the **END ITEM SERIAL** Business View.
8. Double-click on the **Quick_Start!** folder.

NOTE:
Select objects within each entry box in the order they should be used. To change the order, they must be removed and re-added. To remove an object, select it and press Delete.

9. Click, drag and drop the **FSC** field to the **Columns** window.
10. Click, drag and drop the **HRH Nbr Mjr** field to the first **Rows** window.
11. Click, drag and drop the **Acq Cost** to the second **Rows** window. The Aggregate radio button will default to Sum.

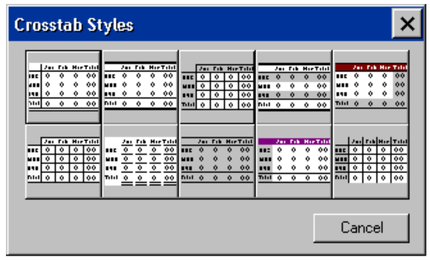
NOTE:
The **Swap Axis** button swaps the definition for columns and rows. After clicking this button, the columns that were used to define crosstab columns are used for the crosstab rows. The columns that were used to define crosstab rows are used for the crosstab columns.

12. **Column Title:** Enter **FSC Inventory**.
13. **Row Title:** Enter **HRH**.
14. De-select the **Scale to Object** in the Appearance area.

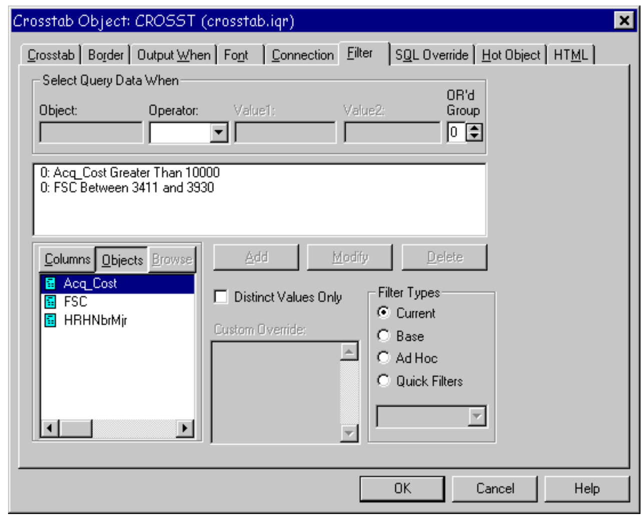


NOTE:
If you want to include totals for the columns and/or rows, then check the appropriate box(es). This default is checked.

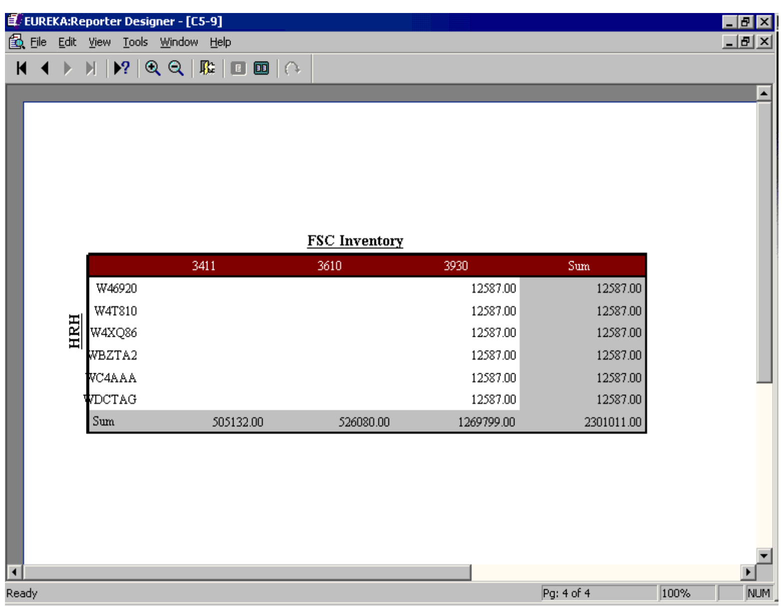
15. Click on the **Crosstab Styles** button.
16. Select the style with the **red** border.



17. Click on the **Filter** tab.
18. Click on the **Objects** button in the Object directory.
19. Double-click on the **Acq Cost** field to move it to Object.
20. Set the Operator to **>** (**greater than**).
21. Set Value1 to **10000**.
22. Click **Add**.
23. Double-click on the **FSC** field to move it to Object.
24. Set the Operator to **Between**.
25. Set Value1 to **3411**.
26. Set Value2 to **3930**.
27. Click **Add**.
28. Click **OK**.
29. If your default page setting is not already set to Landscape, change your page setup to **Landscape**.
30. Save your report as **CROSSTAB**.
31. Process your report.



Example of finished report:



Three-Dimensional Crosstabs

Eureka can also create a three-dimensional crosstab. Place a database column in the Sheet Groups control of the dialog box. When Sheet Groups are used, *Eureka* outputs a separate crosstab (*not* necessarily a separate “sheet” or “page”) for each different value in the column. For instance, using Manufacturer as the Sheets column will generate separate crosstabs for each manufacturer as well as combined totals for all manufacturers.

NOTE:
If you want to prevent sheets from being split between two pages, do not select the Scale to Object option for the crosstab. When you select Scale to Object, *Eureka* will split sheets over pages (depending on the size of the object, the size of your page, and similar factors).

Using Multiple Column, Row, Cell, and Sheet Objects

More than one database column can be used in the above objects. When multiple database columns are used, *Eureka* outputs a line (or column or sheet) for every combination of values.

Building and Using Crosstab Libraries

Each crosstab object refers to and/or creates a child object, allowing you to build a library of crosstab objects to use in different documents.

To use an existing crosstab design file as a crosstab object:

1. Open the crosstab dialog box.
2. Click the **Browse** button ... next to the Crosstab File Name input box. *Eureka* opens a file selection dialog box.
3. Select the file containing the crosstab you want to include. *Eureka* reads the file and displays its values in the dialog box.

If a password was assigned to the document, *Eureka* prompts you for the password before loading the file. A password is assigned by opening the crosstab design (***.iqr**) file in *Eureka* Passwords cannot be assigned in the crosstab dialog box. Make any desired changes to the crosstab object and click **OK**. Be sure to change the file name shown at the bottom of the dialog, so you do not overwrite the file that was imported.

Graphics

Unit of Study: Graphics represent a type of output object that will be included in your document when it is viewed or printed.

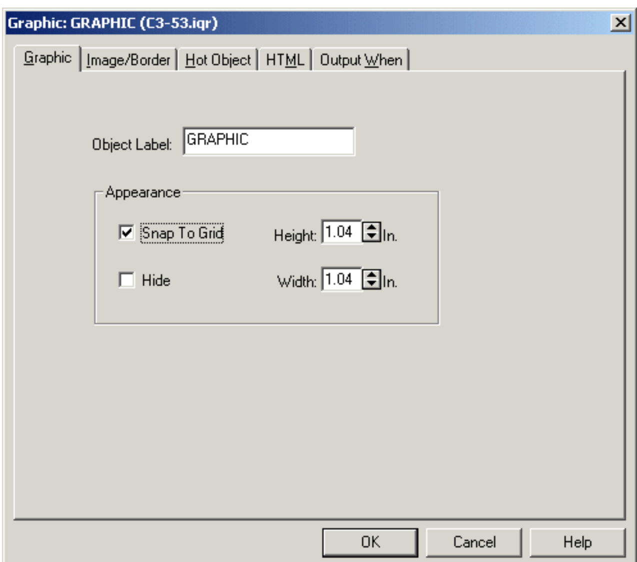
Application: This process is for adding graphics (output objects) to a new or existing document.

Report Type: Open the FFACTY report.

Activity: Student Hands-On with Instructor direction

Instructions:

1. Open your **FFACTY** report.
2. Select the graphic icon  from the tool bar.
3. Place the graphic object in the left-hand side margin of the Document Header area.
4. Double-click the graphic object.



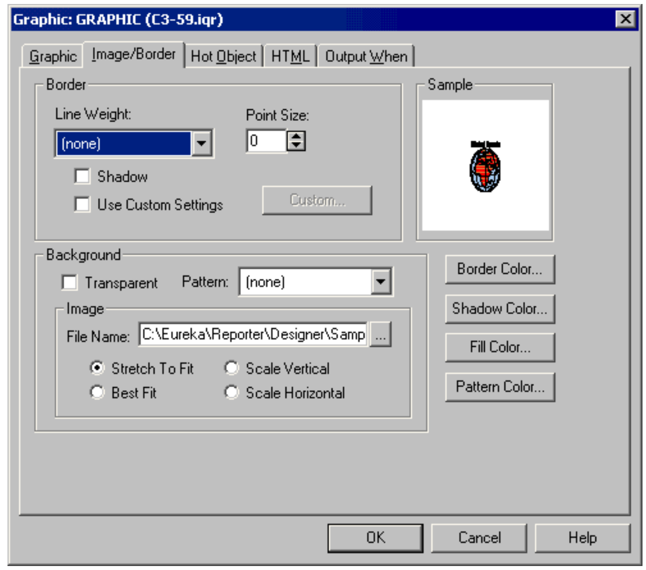
5. Enter a label for your graphic object.
6. Set the Height to **1.04**.
7. Set the Width to **1.04**.

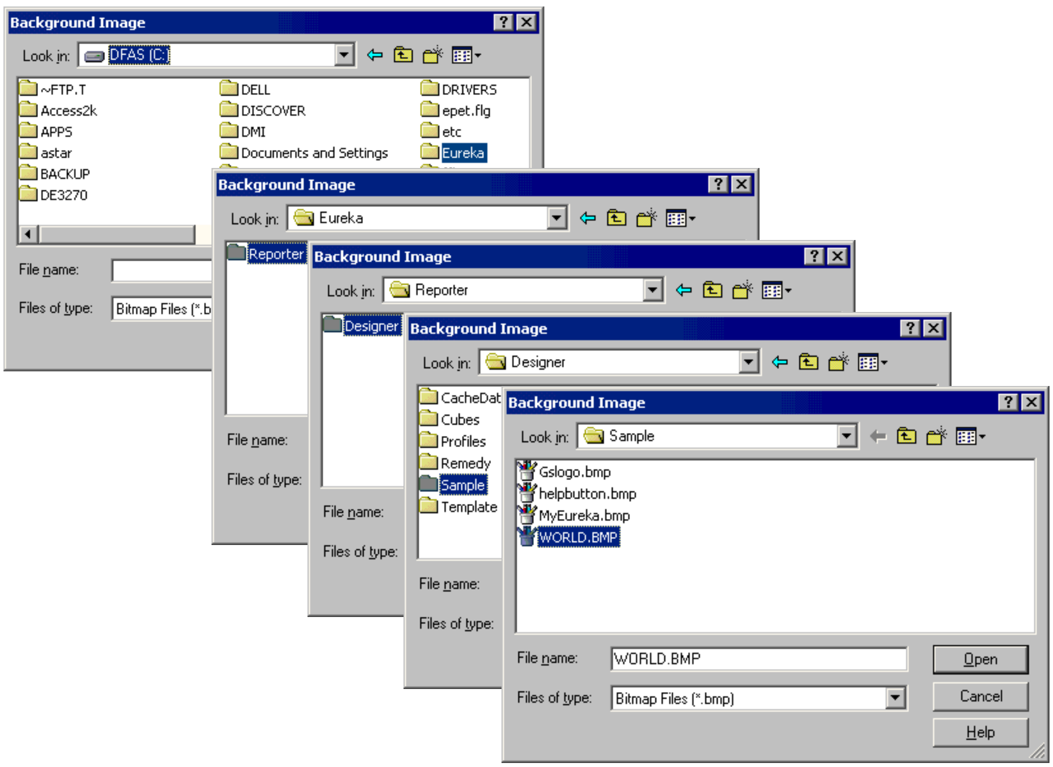
NOTE:
Use the **Height** and **Width** to make your graphic larger or smaller.

A graphic is only as big as the graphic object that is placed on your report.

You can also resize the object by clicking on the object once, and then grab the handles and drag the object to the desired size.

8. Click on the **Image/Border** tab.
9. If you want a border around your graphic, click on the list box and select the desired Line Weight. You can also set the point size, add shadowing and use customized settings.
10. If you want a background for your graphic, select a pattern; otherwise, check the **Transparent** check box.
11. If desired, change the border, shadow, fill, and/or pattern color(s).
12. Click on the browse button next to **File Name**.
13. Change **Look In:** to **C:**.
14. Double-click on **Eureka**.
15. Double-click on **Reporter**.
16. Double-click on **Designer**.
17. Double-click on the **Sample** folder.
18. Double-click on the **World.bmp** file.

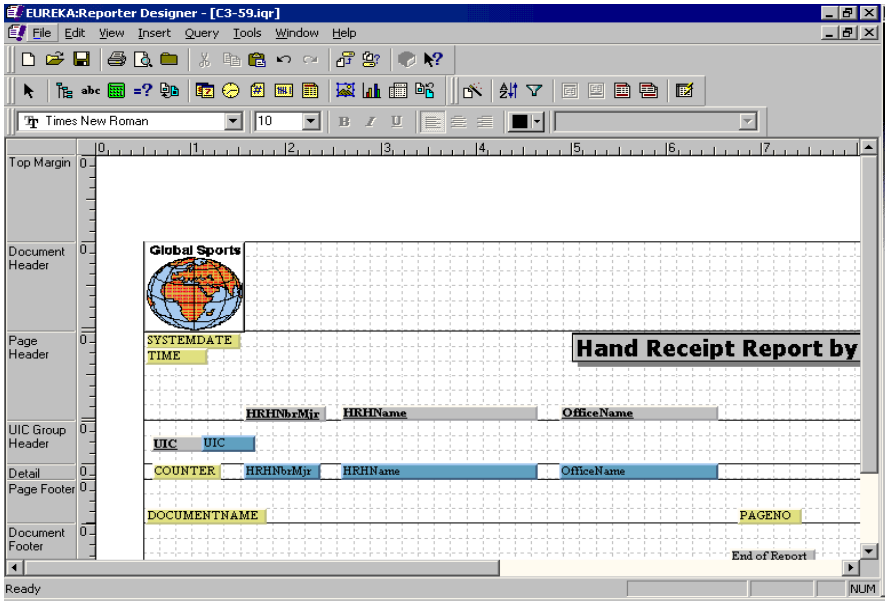




You will notice that in the Sample area, a picture of your graphic is displayed.

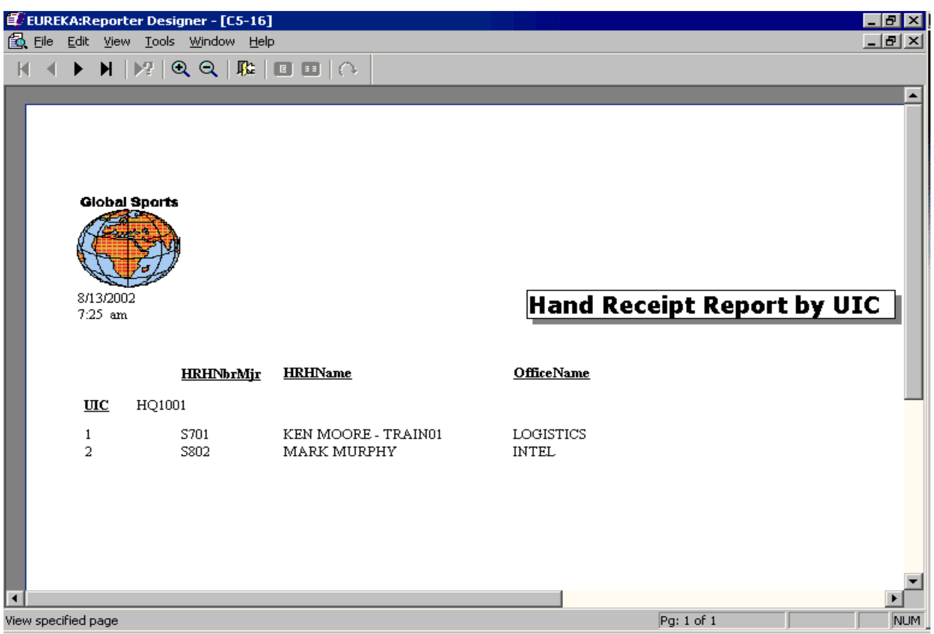
19. Click **OK.**

Example of the Design Document:



20. Click **OK.**
21. Save your report.
22. Process your report.

Example of the finished report:



23. **DO NOT** close the report – we will continue to use it in the next Unit of Study.

Creating Icons For Your Desktop

Unit of Study: This process will show you how to create a report icon for your desktop.

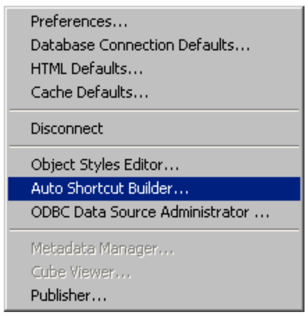
Application: When you want your documents to be viewed, printed, or exported directly from Windows by creating a program item or shortcut represented by an icon that you designate to be in Start>Programs>Accessories.

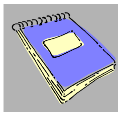
Report Type: Open the report FFACTY

Activity: Student Hands-On with Instructor direction

Instructions:

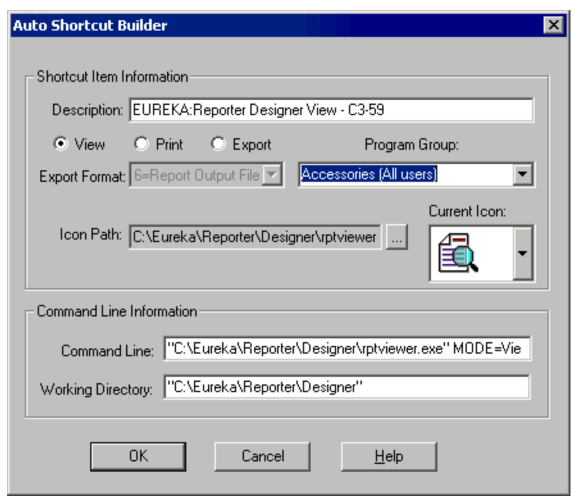
1. Open the **FFACTY** report.
2. Select **Tools** from the menu bar.
3. Select **Auto Shortcut Builder...** from the program group.





NOTE:
You cannot create an icon for a **NOT YET SAVED** document!!!

4. **Description:** *Eureka* will default this field with your report title. Depending on which radio button you select (View, Print, or Export), it will be a part of your Description.
5. Accept the default **View**.

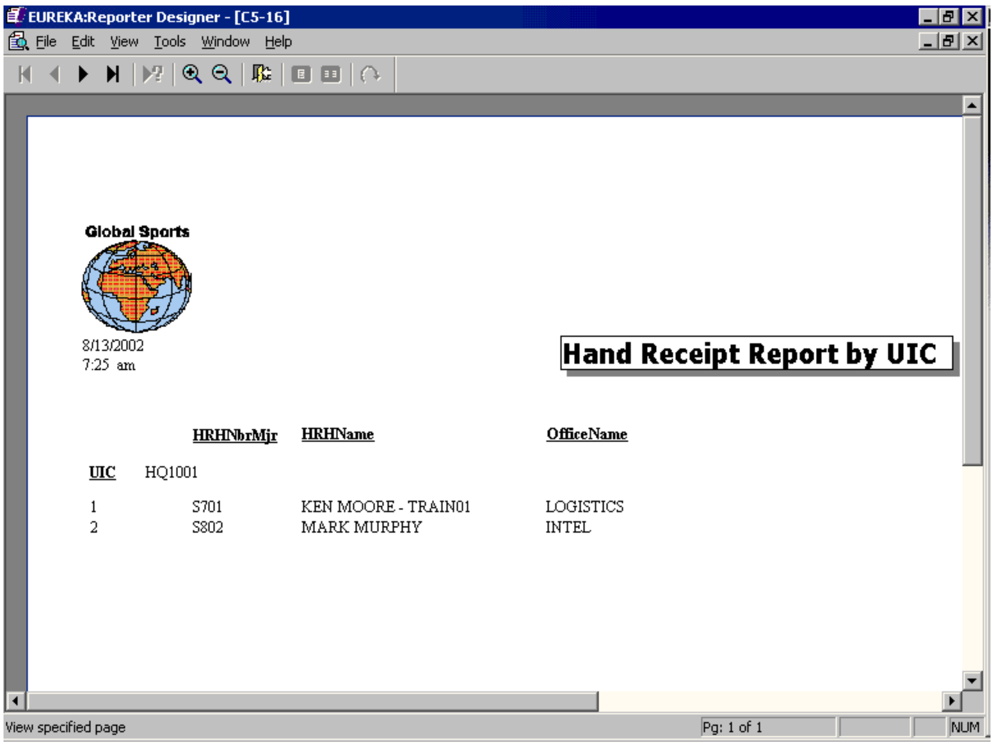


View	Select this if you want to view your report on the screen.
Print	Select this to sent your report directly to your default printer.
Export	Select this to export your report to another application.

6. **Export Format:** If you selected **Export**, you will need to select the export format.
7. Click on the Program Group list box and select **Accessories (All Users)**. Your icon will be save to the Program Group that you specify.
8. Click on the list box for **Current Icon**.
9. Select your desired icon.
10. Click **OK**.
11. Save your report.
12. **Close your report** and return to your desktop.

13. Click on the **Start** button.
14. Select **Programs**.
15. Select **Accessories**.
16. Select **Eureka-Reporter Designer View_FFACTY**.

Your report will be automatically processed and displayed.



17. Close the output window.

Creating Labels

Unit of Study: To create labels in *Eureka*, you can use the Avery label templates. Templates are predefined design documents that you can use as a model for a new document. These templates include objects on them but are not linked to specific columns. You also have the option of creating custom templates of your own.

Labels in are created with a new document from a template. When you select New From Template from the File menu, *Eureka* opens a file selection dialog box. Use the List Files of Type control to select the type of template you want to start with. Select the template you want to use. Most templates distributed with *Eureka* are installed into the template subdirectory of the *Eureka* directory. Templates for use with Avery mailing labels are installed into template\avery. When you click Open, the selected template is loaded and a new window for it is opened with the name Untitled.

Application: This process involves the use of predefined design templates to specify specific data you want to appear on a label.

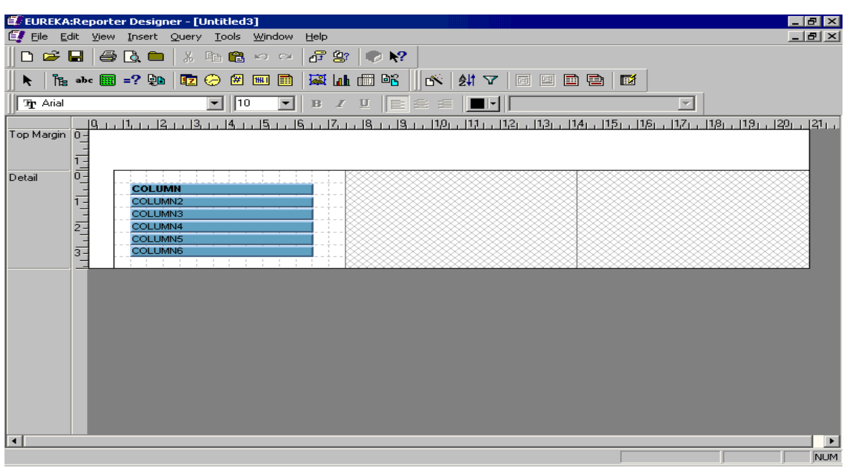
Report Type: Label design listing Stock Nbr, Nomen, Bar Cd, Location, Serial Nbr, plus who the property is assigned to.

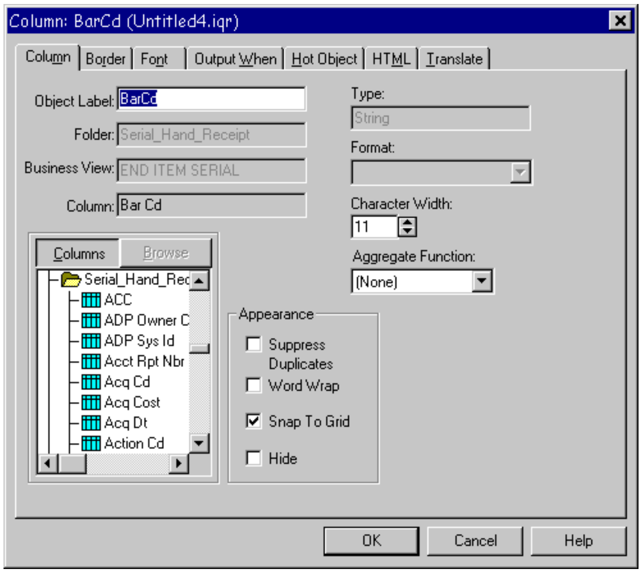
Activity: Student Hands-On with Instructor direction

Instructions:

1. Click **File>New From Template**.
2. Look in: Select **C:**.
3. Double-click on the **Eureka** folder.
4. Double-click on **Reporter**.
5. Double-click on **Designer**.
6. Double-click on **Template**.
7. Double-click on the **Avery** folder.
8. Change Files of type to **Mailing Labels (*.iqm)**.
9. Select **A4_I7160.iqm**.

After choosing a label design, it will produce a screen similar to the above, depending on what label design was selected.

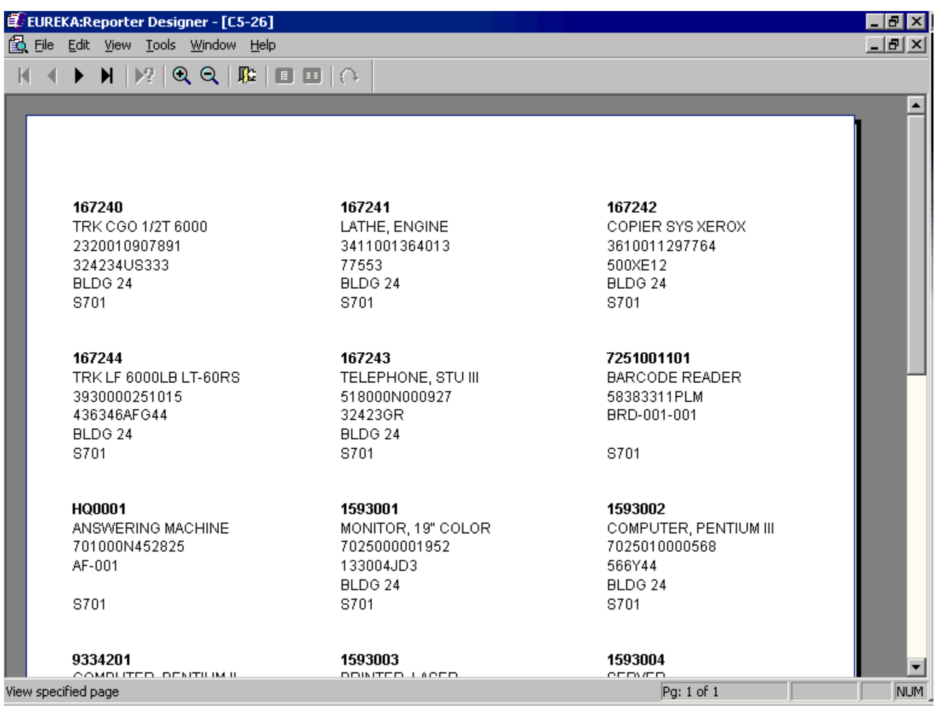




10. Double-click on **COLUMN**.
11. Scroll to the **END ITEM SERIAL** business view.
12. Scroll to the **Serial_Hand_Receipt** folder.
13. Double-click on **Bar Cd**.
14. Click **OK**. You are returned to the Design Document.
15. Click **OK**.
16. Using the table below, repeat the steps for the remaining label fields.

BUSINESS VIEW: END ITEM SERIAL	
FOLDER(S)	**DATA ELEMENT(S)**
Catalog	Stock Nbr Nomen
Serial_Hand_Receipt	Loc Serial Nbr
Hand_Receipt_Holder	HRH Nbr Mjr

17. Save your report as **Label**.
18. Process your report.



19. Close the report viewer.
20. Close your report.