

ORACLE Discoverer Plus 10g Training User Manual for NEORSD Oracle Users

Prepared by Information Technology Training Services,

February 2010

Disclosure:

This training manual was created by the Northeast Ohio Regional Sewer District Information Technology Department to train Oracle users in the use of Oracle Discoverer Reporting software.

Table of Contents

1.	Introduction.....	3
1.1	What is Oracle Discoverer?	3
1.2	Why Users Need Discoverer.....	3
2.	Terminology.....	4
3.	Starting Up.....	9
4.	Setting Options.....	11
5.	Chapter 1 – Getting Started.....	18
5.1	Creating a Workbook.....	18
5.2	Selecting Items for the Workbook	20
5.3	Adding Items to the Workbook.....	21
5.4	Arranging Items in the Workbook	21
5.5	Renaming a Worksheet	22
5.6	Running the Worksheet.....	22
5.6	Editing the Worksheet after Running	23
5.7	Opening a Previously Created Workbook	26
5.8	Scheduled Workbooks	28
5.9	Saving a Workbook.....	28
5.10	Refreshing Data in a Workbook	29
6.	Chapter 2 – Customizing the Query.....	31
6.1	Formatting Data, Headings and Totals	31
6.2	Sorting Data	32
6.3	Group Sorting.....	33
7.	Chapter 3– Query Conditions	34
7.1	Filtering the Data or Setting Conditions	34
7.2	Adding Conditions to a New Workbook	34
7.3	Adding a condition from the Toolbar	37
7.4	Prompting for Data	37
7.7	Calculations.....	40
7.8	Percentages	43
7.9	Applying Totals	45
8.	Chapter 4– Graphs	49
8.1	Using Graphs in the Reports	49
8.1	Creating a Graph.....	49
8.2	Using the Graph Toolbar	53
8.3	Saving the Graph.....	53
8.4	Deleting the Graph.....	54
9.	Chapter 5 – Exporting and Printing	55
9.1	Exporting Results.....	55
9.2	Printing Workbooks and Graphs.....	59

1. Introduction

What is Oracle Discoverer?

Discoverer is Oracle's data query and ad hoc reporting tool for its Internet based database. It is designed to meet the diverse needs and skill sets of business users and to provide access to the data within applications.

Discoverer has some powerful features including:

- Reporting Wizards
- Generating Sub-queries
- Data Drilling
- Graphs and Charts
- Ability to schedule a report to run at a different time

There are four different editions of Discoverer:

- The Discoverer Administrator Edition is used to create, maintain, and administer data and the user's interaction with that data.
- The Discoverer Desktop Edition is the client-server tool used to create the queries against the database.
- The Discoverer Plus gives you tools so you can create your own queries and reports on the web.
- The Discoverer Viewer allows you to run reports that are created using Discoverer

Why Users Need Discoverer

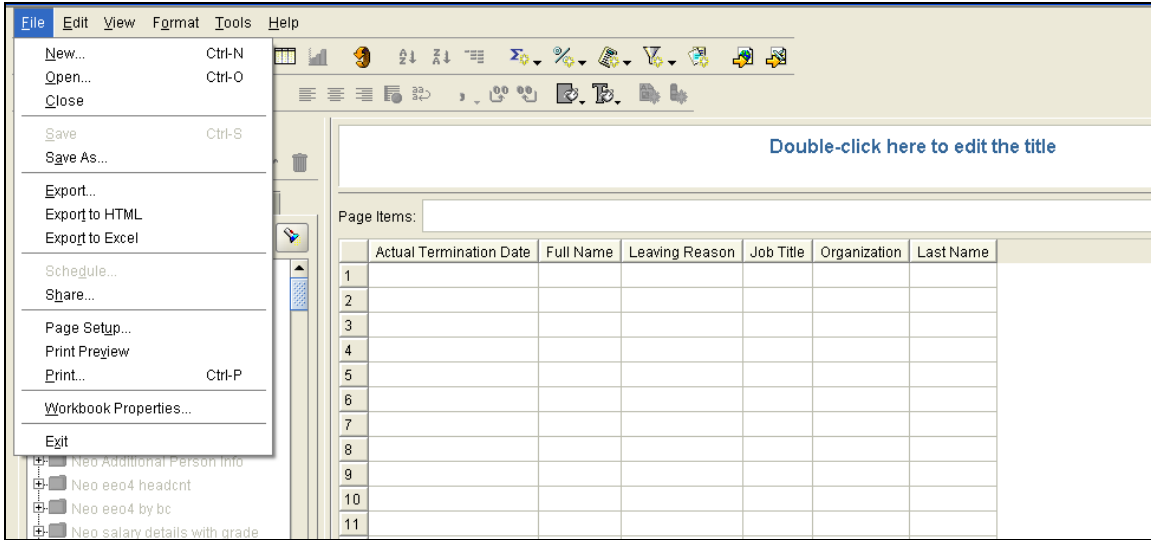
Users are often required to run reports. In the past, Cyborg was used for the reporting tool. That system did not work with Oracle web-based applications and Internet solutions. Discoverer allows us to choose items from different tables and folders. As long as there is a link in the database, and the business views are linked the fields can be used in the reports.

As with any new program, there is certainly a lack of knowledge of Discoverer. This user manual was designed to help Discoverer users to start with the basics and finish of the program. When this course is completed, students should be able to run and create their own Discoverer Reports.

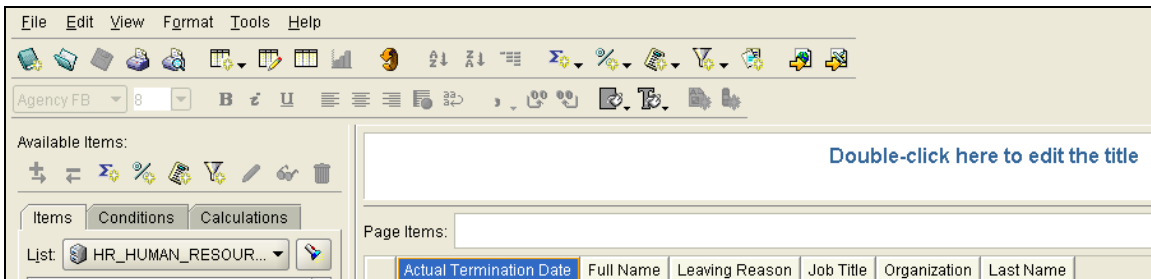
2. Terminology

Here are some of the common terms:

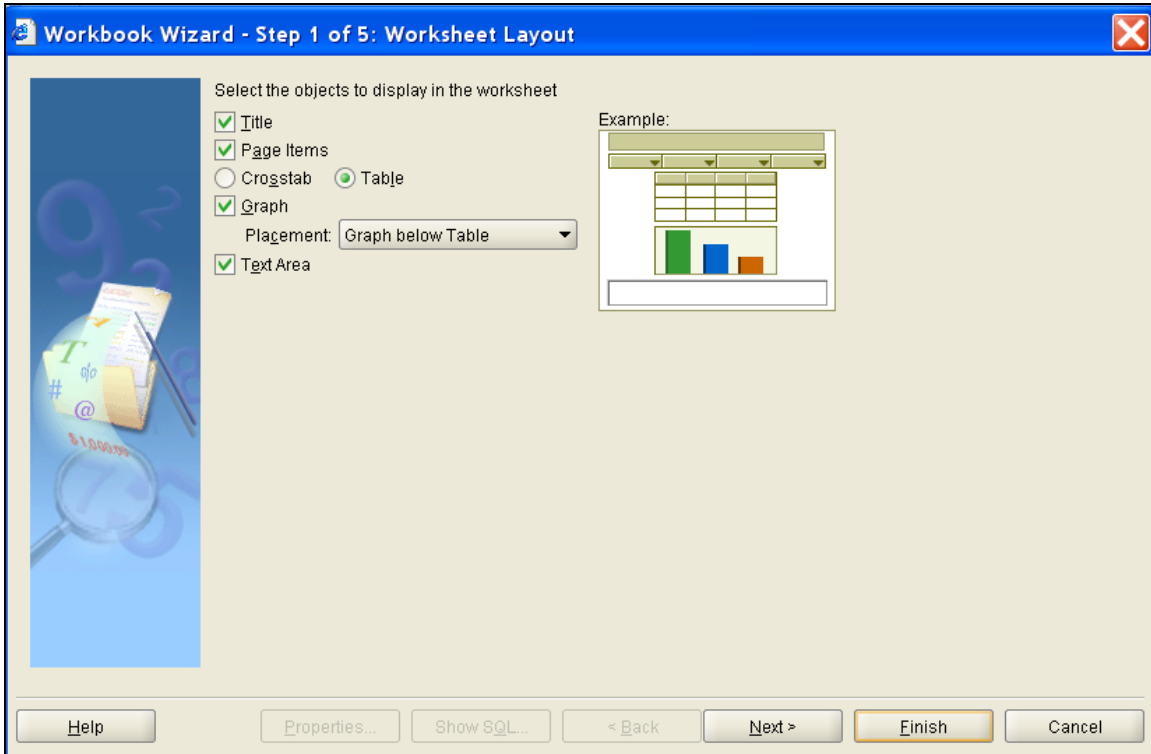
Menu bar: is a standard menu bar, which provides for the common tasks; i.e., printing, opening and saving files, and accessing help.



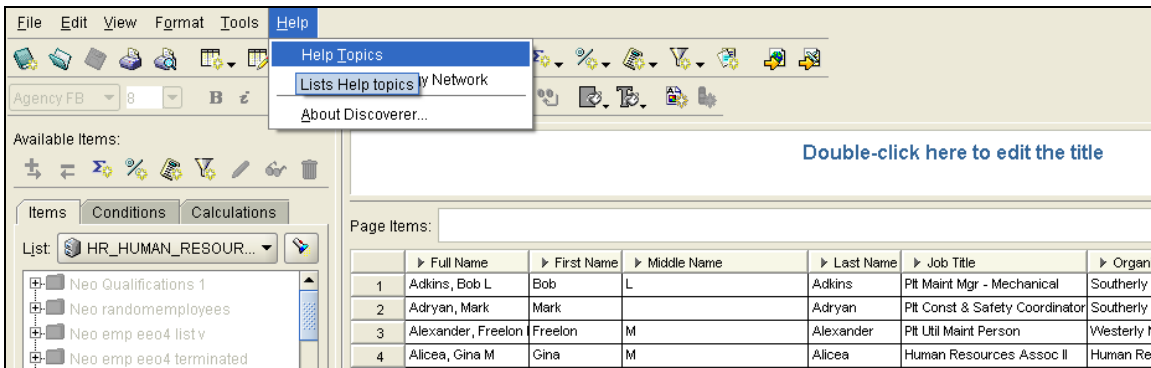
Tool Bar: provides shortcut icons for most of the common menu tasks. The icons can be used to save time.



Workbook Wizard: is used to create new workbook or worksheets. It is a great way to start writing reports.



Help: is accessed through the menu. The Help menu it is divided into several areas: Manuals, and Help Topics. There is also a context sensitive help.



Workbook: is used to prepare the layout for the report and to select the data required in the report. The workbook has worksheets in it. Each worksheet contains data related to the workbook but might be arranged differently. The workbook has a standard menu and toolbar. The toolbar allows quick access to commonly used menu options.

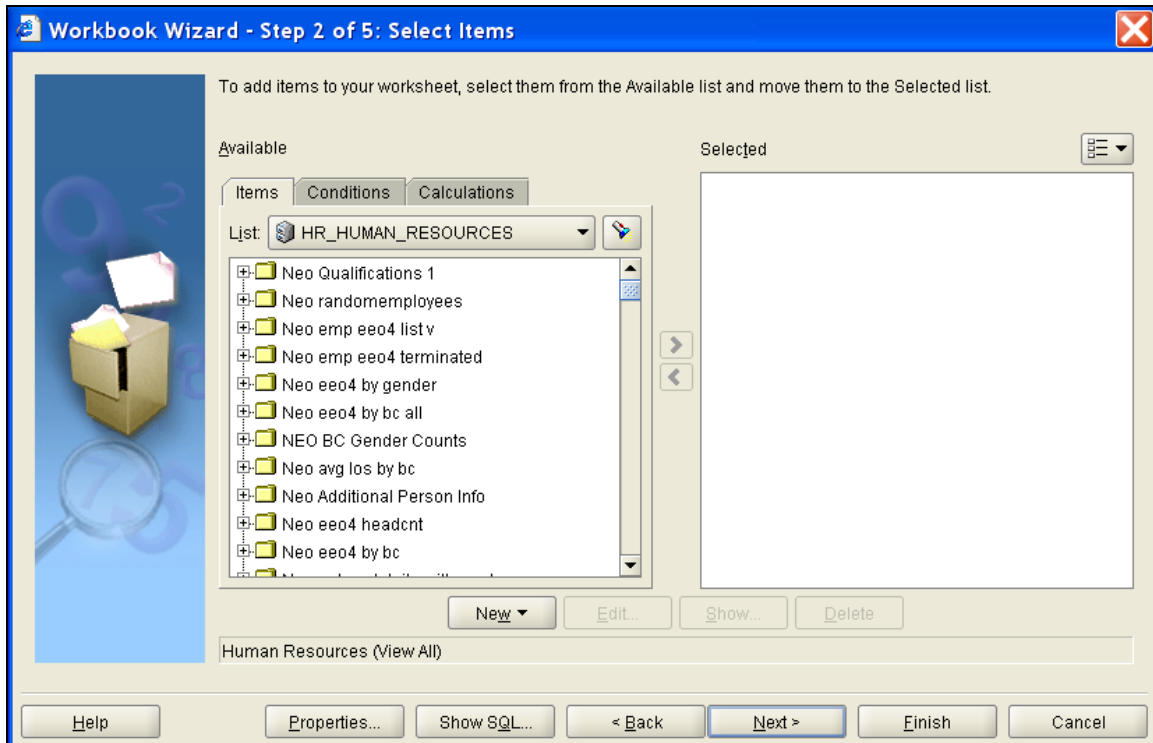
[Double-click here to edit the title](#)

Page Items:

	▶ Full Name	▶ First Name	▶ Middle Name	▶ Last Name	▶ Job Title	▶ Organization	▶ Location
1	Adkins, Bob L	Bob	L	Adkins	Pit Maint Mgr - Mechanical	Southerly Maint	Southerly
2	Adryan, Mark	Mark		Adryan	Pit Const & Safety Coordinator	Southerly Oper	Southerly
3	Alexander, Freelon	Freelon	M	Alexander	Pit Util Maint Person	Westerly Maint	Westerly
4	Alicea, Gina M	Gina	M	Alicea	Human Resources Assoc II	Human Resources	Administration
5	Anderson, Raymond	Raymond	C	Anderson	Pit Util Maint Person	Southerly Maint	Southerly
6	Andexler, Todd W	Todd	W	Andexler	Field Tech Operator	SSMO	EMSC
7	Andino, Miguel A	Miguel	A	Andino	Facilities Tech	Admin Svcs	Administration
8	Andres, Denise A	Denise	A	Andres	Mgr Of District Records	Records Manageme	Administration
9	Andrews, Brian S	Brian	S	Andrews	WWP Operator	Easterly Oper	Easterly
10	Andrulis, Stacy K	Stacy	K	Andrulis	Admin Asst	Maint Svcs	EMSC
11	Anielski, Brian S	Brian	S	Anielski	Pit Util Maint Person	Westerly Maint	Westerly
12	Anielski, Jonathan	Jonathan		Anielski	Pit Maint Mgr - Mechanical	Easterly Maint	Easterly
13	Appel, Mark S	Mark	S	Appel	WWP Operator C-1	Southerly Oper	Southerly
14	Arnold, Marc	Marc		Arnold	Security Officer	Safety & Security	Southerly
15	Arpidone, Charles W	Charles	W	Arpidone	Electrical Inst Tech	Southerly Maint	Southerly
16	Arrington-Ferguson	Ave Maria		Arrington-Ferg	IT Project Mgr II	Project Svcs	Administration
17	Arth, Kevin T	Kevin	T	Arth	Shift Mgr	Easterly Oper	Easterly
18	Auber, Robert J	Robert	J	Auber	Const Supvr IV	Sewer Const	Coventry Rd Trailer
19	Augustine, John	John		Augustine	Asst Supt	Westerly Oper	Westerly
20	Austin, Lea R	Lea	R	Austin	Bldg Supvr	Maint Svcs	EMSC
21	Azzardi, Ronald J	Ronald	J	Azzardi	WWP Operator C-2	Westerly Oper	Westerly
22	Babiak, Zenio	Zenio		Babiak	Pit Util Maint Person	Southerly Maint	Southerly
23	Baginski, Raymond	Raymond	E	Baginski	Instrument Tech	Southerly Maint	Southerly
24	Bagwell, Diane M	Diane	M	Bagwell	Admin Asst	Admin Svcs	Administration
25	Baldwin, Gregory E	Gregory	E	Baldwin	WWP Operator C-1	Southerly Oper	Southerly
26	Balson, Rosalina	Rosalina		Balson	HRMS Application Analyst	Human Resources	Administration
27	Baranowski, John M	John	M	Baranowski	Util Maint Tech	Southerly Maint	Southerly
28	Barnhill, Robert L	Robert	L	Barnhill	Human Resources Assoc II	Human Resources	Administration

Worksheets: contain the information to analyze. Each worksheet contained in a workbook is a separate query. When opening an existing worksheet, Discoverer will re-query the database for current data.

End User Layer: is what tells Discoverer which business areas to access. This layer is maintained by the server administrator for each location.



Business Areas: are the collections of folders that contain information with a common business purpose and includes the tables and items in the Oracle database.

Folders: are the second level of information in Discoverer and are groups of related information. Folders are tied to the database tables that make up the Oracle database.

Items: are the third level of information in Discoverer. Each item is tied to a specific type of information or field within a table. Items are grouped within folders.

Calculations: are custom fields that are not included in the database but are commonly used in report. The Discoverer administrator can predefine these and add them to the correct folder. The calculations also can be created at the site by the user.

Conditions: are filters that control what data is retrieved into the report. The user can define these conditions or if available, use a preset condition that the Discoverer administrator created.

Page Items: are a special item that groups like data into a page format. To change the page, select the different item from the drop down list. The page will change within that worksheet.

Rows: are the next level of information and represent all of the information about one item in the database. .

Query: is the search that retrieves data from the HRMS database according to the criteria specified. The query returns the information in a workbook on a tabbed page called a sheet. A workbook can have as many sheets as necessary to obtain the information required. A workbook must contain at least one sheet.

3. Starting Up

When first starting Discoverer, there are a few things that might have to set up.

- Launch the web browser.
- Access the web address the Discoverer administrator provides.

(<http://discover1.neorsd.com7777/discover/plus>)

- Then the Connect to Discoverer Plus screen appears with a connection line showing the connection you just created. Click on the Connection name you created.
- The Connect to Oracle Discoverer dialog appears. Type in the password to the log in account you created in the previous steps. Then click on the Connect button.

ORACLE Discoverer Plus
Business Intelligence

Connect to OracleBI Discoverer

Welcome to OracleBI Discoverer.

Connect Directly
Enter your connection details below to connect directly to OracleBI Discoverer.

* Indicates required field.

Connect To

* User Name

* Password

* Database

End User Layer

Responsibility

Locale

[Exit](#) | [Help](#)

Copyright (c)2000, 2005 Oracle Corporation. All rights reserved.
[About OracleBI Discoverer Version 10.1.2.54.25](#)
[Oracle Technology Network](#)

ORACLE Discoverer Plus
Business Intelligence

Account Details: Select Responsibility

More than one Responsibility exists for the account you have chosen. Please select the one you wish to use below.

Responsibility

Select a Responsibility.

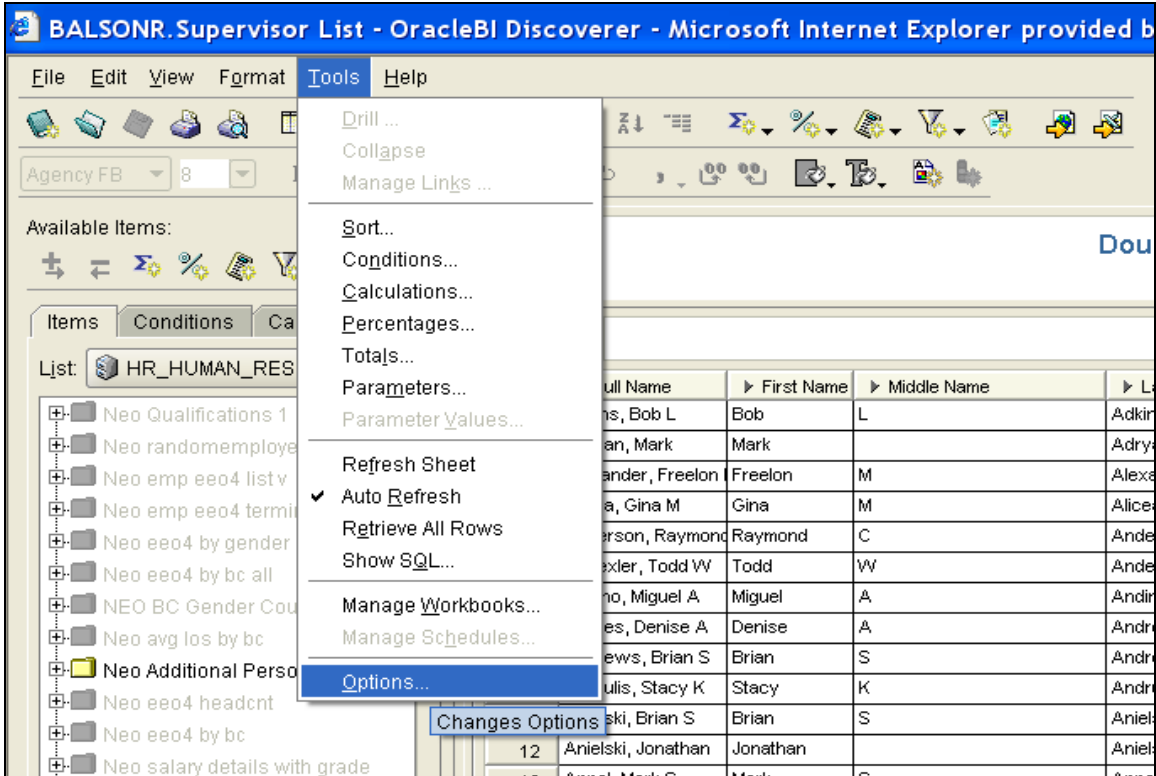
Locale **Locale retrieved from browser**
Database User Name **herbertc**
Database **Train**
Connection Type **APPS**
Responsibility

- iRecruitment Employee Candidate
- NEORSD ER User**
- NEORSD IT FINANCIAL ANALYSIS

[Exit](#) | [Help](#)

Copyright (c)2000, 2005 Oracle Corporation. All rights reserved.
[About OracleBI Discoverer Version 10.1.2.54.25](#)
[Oracle Technology Network](#)

4. Setting Options

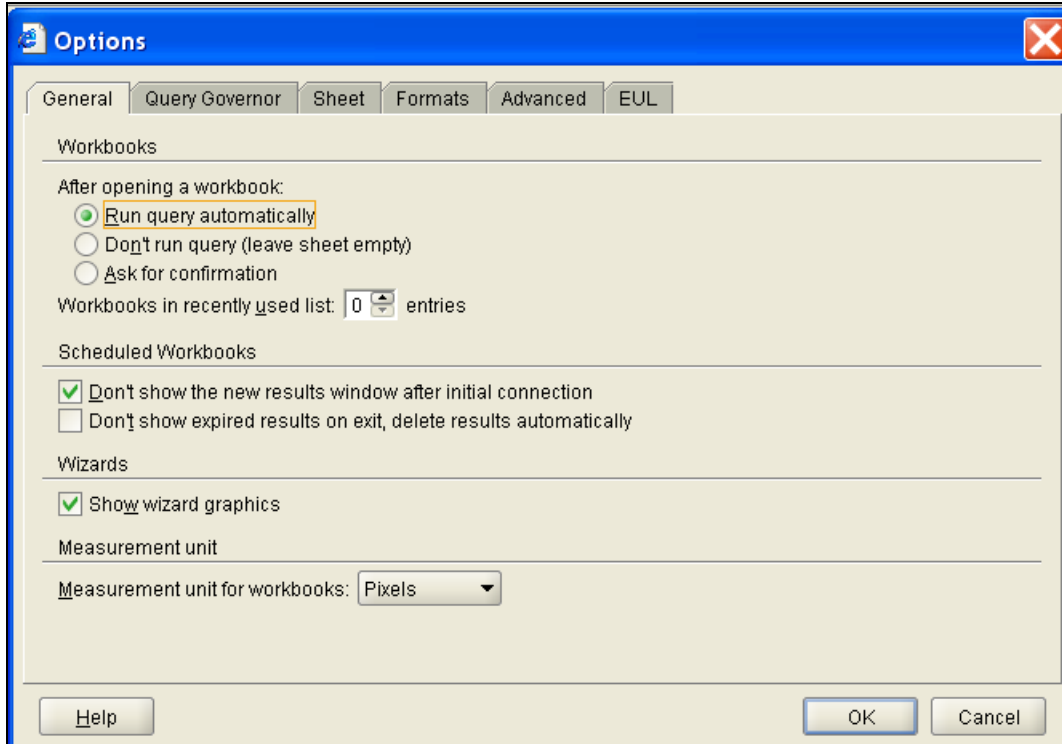


Select the default options for all the workbooks by selecting Tool/Options from the menu.

This will open an Options Dialog box. The following tabs are available:

- General
- Query Governor
- Sheet
- Formats
- Advanced
- EUL

Select the General Tab:



This is where the default settings for opening and executing the query are set. The choices are as follows:

- **Run query automatically** – retrieves data specified by the worksheet as soon as the workbook or select the worksheet is opened.
- **Don't run query (leave sheet empty)** - retrieves the workbook, but it does not contain any data. Reason for this option is to select different worksheet than the default one without waiting for the report to execute.
- **Ask for confirmation** – This is the default setting. Once the workbook opens, a dialog box appears asking to run the query for the first sheet.

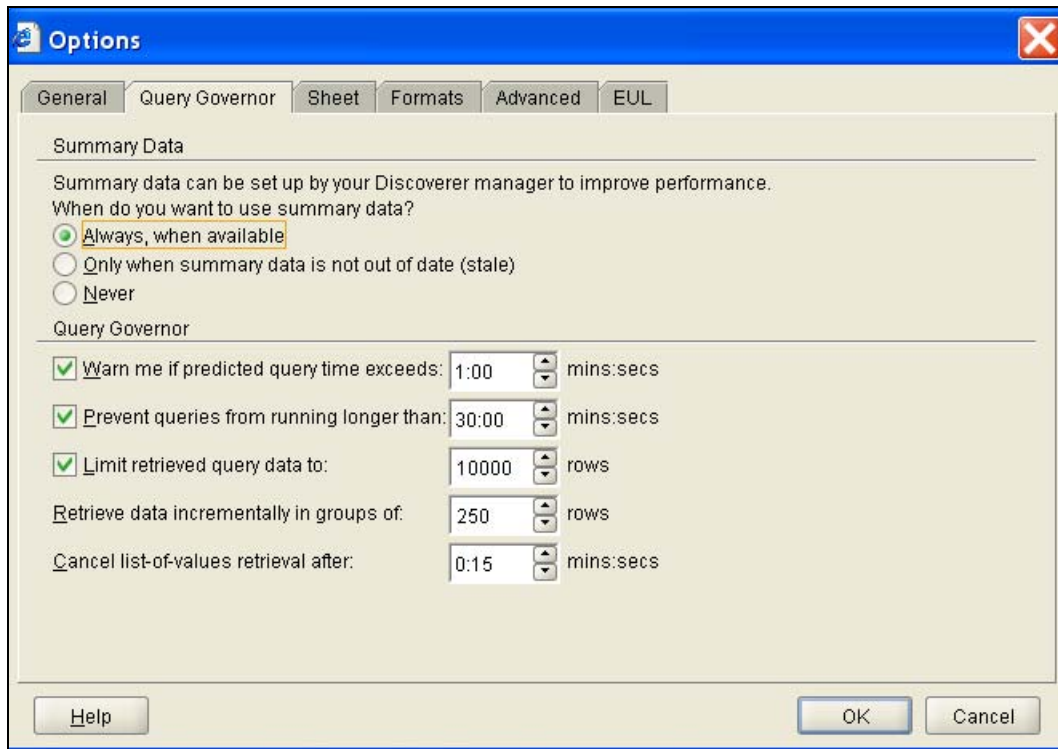
Scheduled Workbooks:

- **Don't show the new results window after initial connection** – prevents the new data from appearing in a results window.
- **Don't show expired results on exit, delete results automatically** – deletes the results upon exiting Discoverer.
- **Show wizard graphics** – This selects or deselects the graphics on the wizards. When all options on all tabs have been set select OK.

Select the Query Governor Tab:

The Query Governor options reduce the time it takes to execute a query. This tab is divided into two parts, the Summary Data and the Query Governor.

The **Summary data section** allows the default setting for utilizing summary data. The choices are:



- **Always, when available** – selecting this option tells Discoverer that the data is not time sensitive. It will always use the Summary Tables.
- **Only when summary data is not out of date (stale)** – Select this option when the data is time sensitive. The user specifies the number of days from the last update of the summary tables.
- **Never** – Selecting this option retrieves current data every time the report is ran.

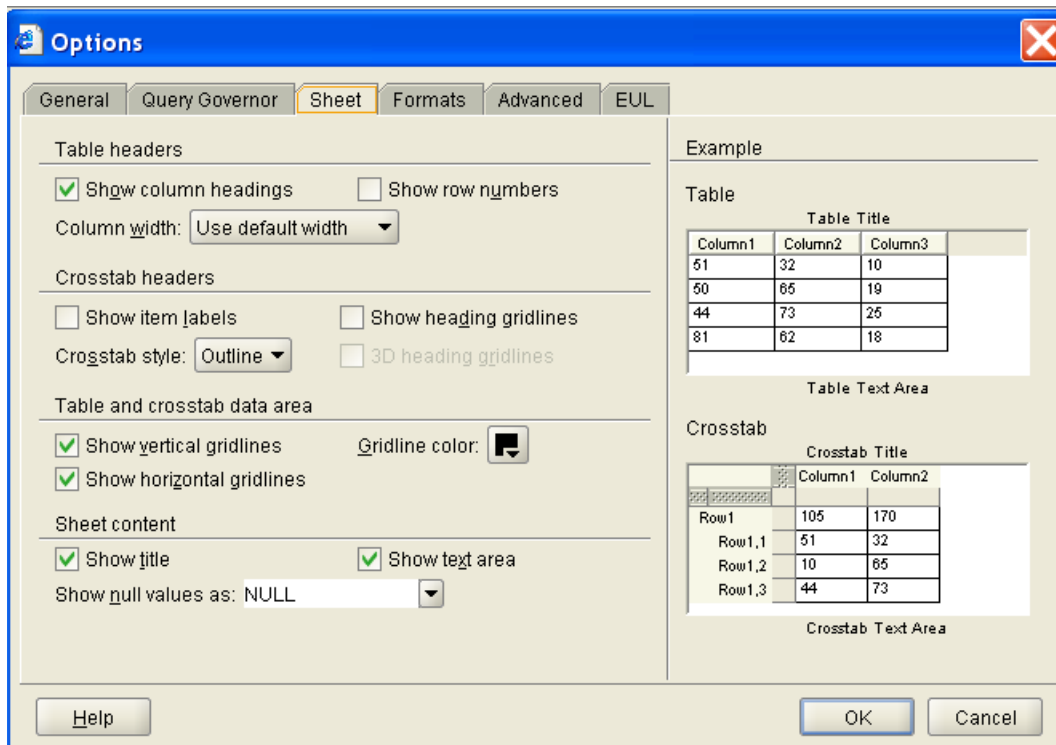
Selecting the options for the Query Governor Data

- **Warn me if predicted query time exceeds** – When retrieving data for a worksheet, Discoverer estimates the query completion time. Select this option to see a warning message if the query will take a long time to execute. This message will only appear if the query will exceed the time specified.

- **Prevent queries from running longer than** – This option selects the run time for the query. If it exceeds the specified time, the query will cancel.
- **Limit retrieved query data to** – This option controls the maximum number of rows to return. A message will display if not all rows are retrieved to inform the possibility that incomplete data is displayed.
- **Retrieve data incrementally in groups of** – This option allows Discoverer to bring back data quicker from very large tables. The default setting is 250 rows. What it does is bring back the data in smaller bits instead of waiting for it to compile all the data.
- **Cancel list-of-values retrieval after** – The setting controls the maximum time it takes to retrieve the list of values.

Select OK if there are no more options that require setting.

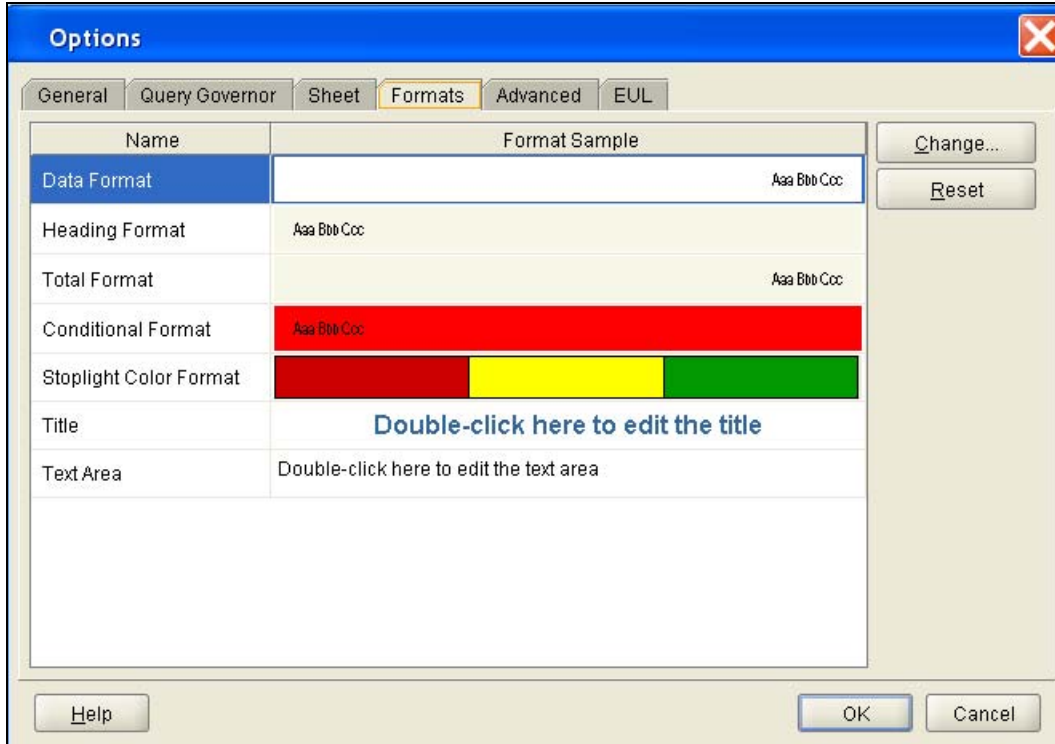
Select the Sheet Format Tab



This tab allows for display format of the crosstab or table. NOTE: Changes made to this tab affects current sheet and future sheets.

Select OK if there are no more options that require setting.

Select Default Format tab



Select the default setting for the following items:

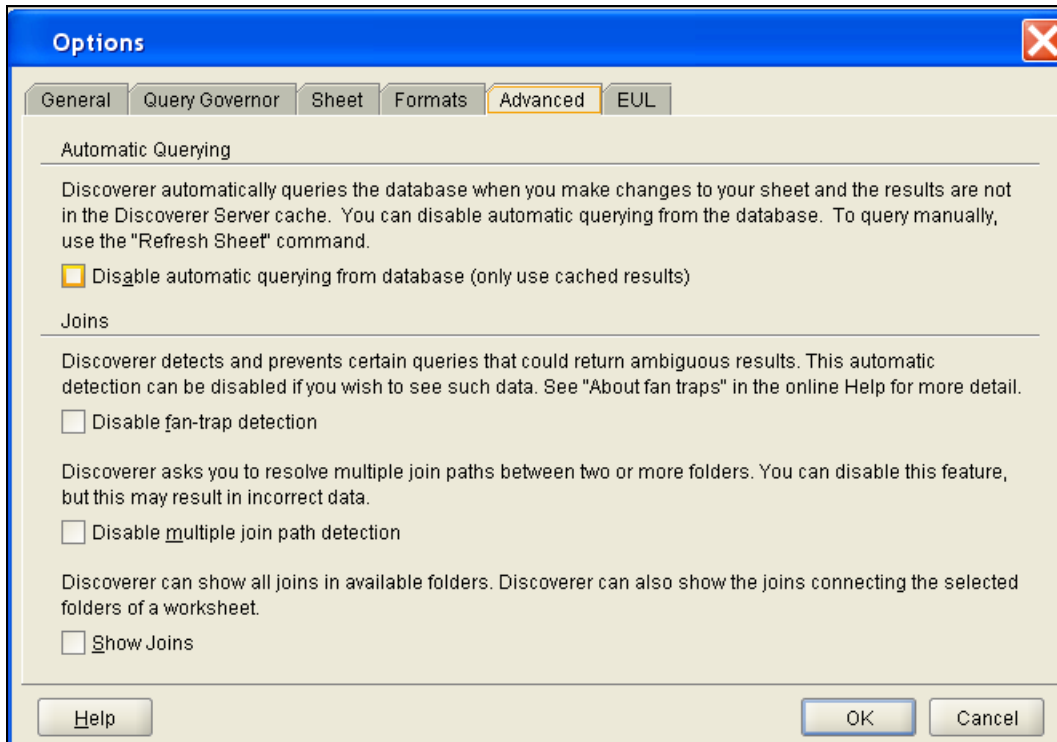
- Data Format
- Heading Format
- Total Format

Highlight the setting that requires formatting. The example box shows a sample. Select the change button to see a list of format options, make required changes, and select OK.

Repeat for each default setting that require changing.

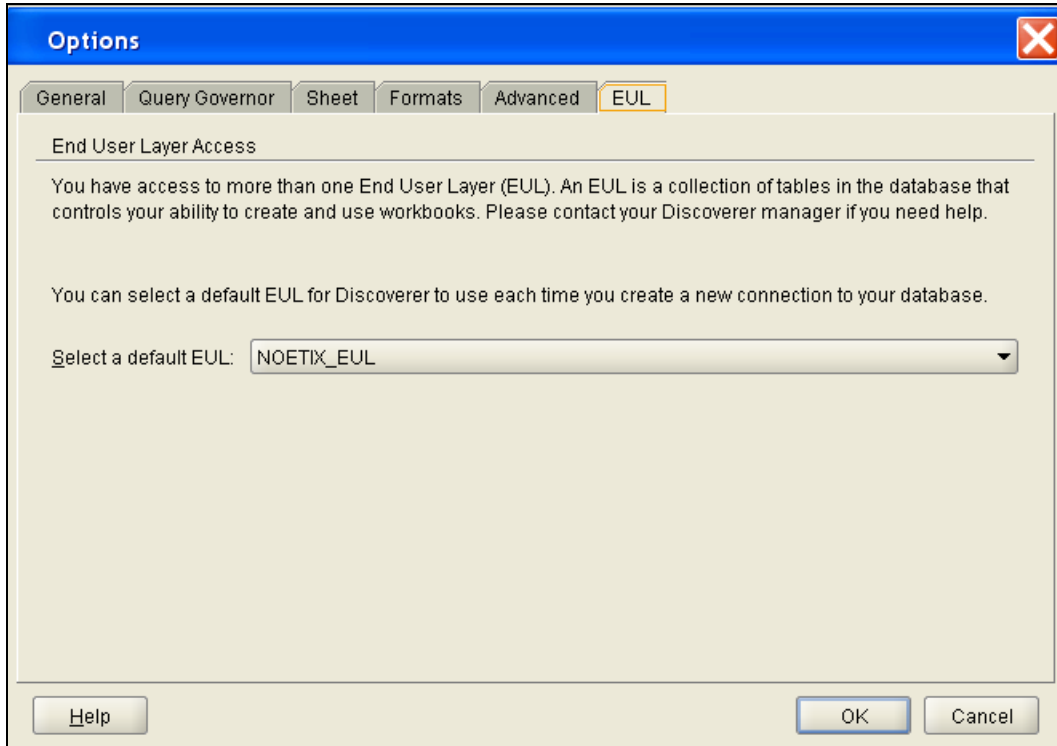
Select OK if there are no more options that require setting.

Select the Advanced Tab



This tab is for the Discoverer administrator. Do not make changes here without the Discoverer administrator assistance.

Select EUL tab



This tab tells Discoverer which End User Layer (EUL) to use. The Discoverer administrator will provide the proper EUL name. To select a different EUL, select the arrow next to the EUL name and choose the correct EUL from the list. Remember once the EUL is changed Discoverer needs to reconnect to the database. To reconnect Discoverer to the database, select from the file menu Connect to Database.

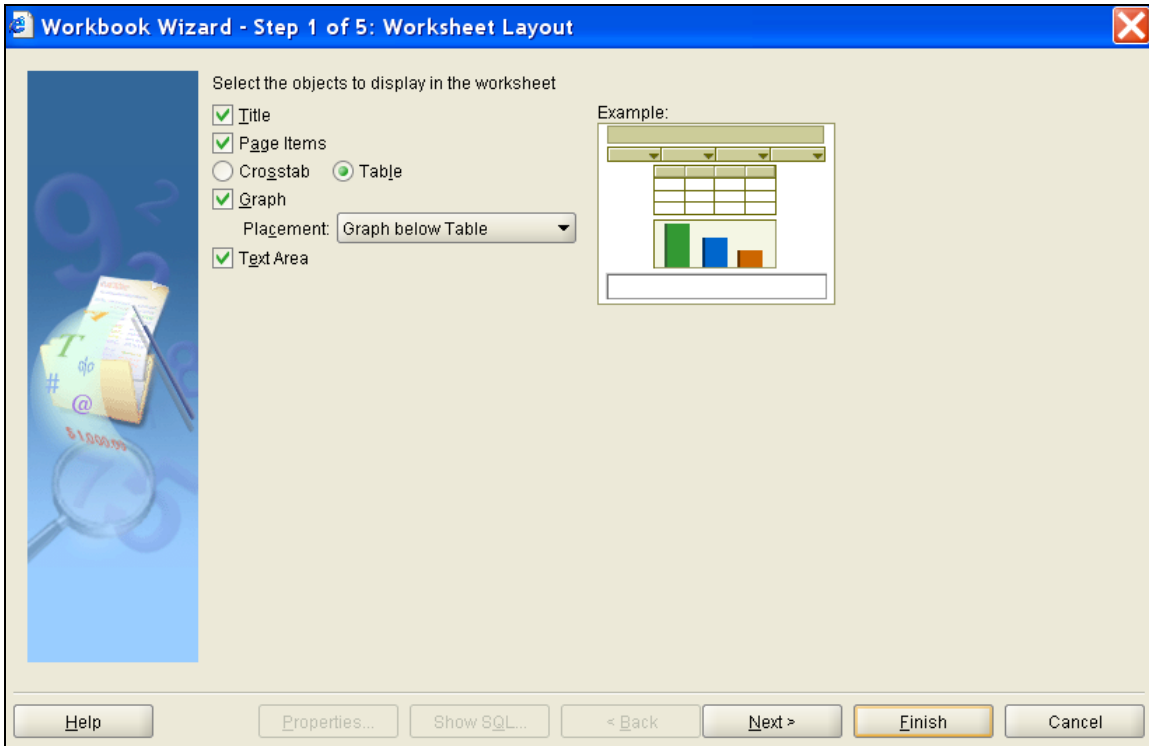
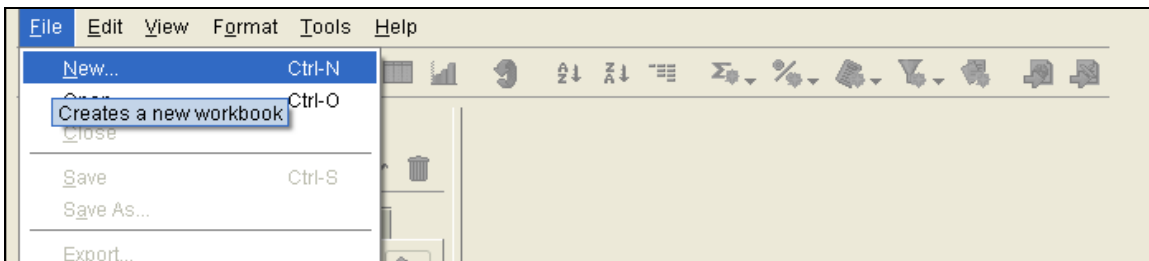
Select OK

5. Chapter 1 – Getting Started

5.1 Creating a Workbook

Creating a new Workbook or Worksheet using the Workbook Wizard is the quickest way to create a query.

When Discoverer starts, the first screen shown is the Workbook Wizard, select either create a new workbook or open an existing workbook. Select the “Create a new workbook” icon. To start a new workbook from the menu, select the File Menu and then select the “New” option or by selecting the New Workbook toolbar button.



Once a new workbook has been selected, there will be prompts to select the display types for the results.

The four options are:

- **Table** – displays data in columns with headings. Each column is a column item.
- **Cross tab** – displays data in a crosstab format with values running across the top and down left side, at the intersection of the row and column is the sum or the average.

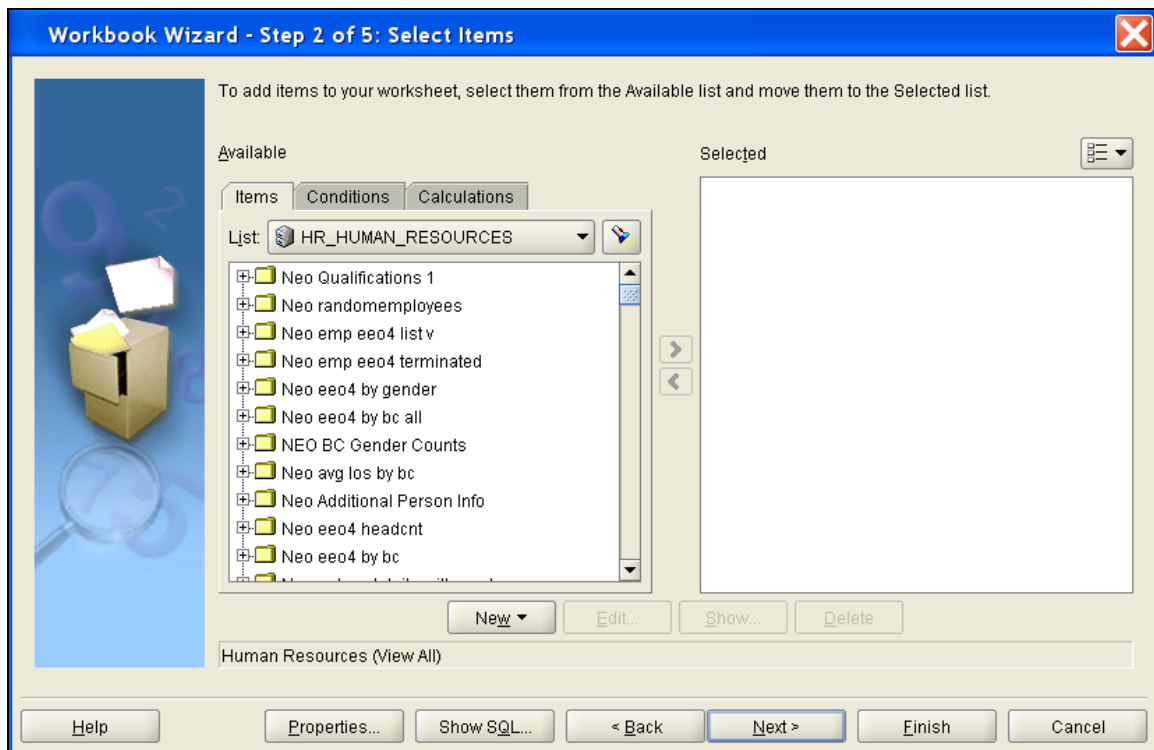
Once the format is selected, select on the Next button.

5.2 Selecting Items for the Workbook

The second step of the Workbook Wizard is used to select the items for the report. Select the items from the available folders list. The wizard utilizes the following symbols:

- A plus sign shows there is another level in the structure that is not shown but can be.
- A minus sign indicates that the lower level is displayed.
- The absence of a sign indicates there is not another level.

The items with the plus sign have children of the object. To open that child, select on the plus sign or double select the object name. Drag and drop the selected items, or highlight them then select the right arrow. If there are multiple items needed for the report, hold down the [Ctrl] key, select all the required items release the [Ctrl] key then select the right arrow. After all items are selected for the report, run the query by selecting the Finish button, or continue using the Wizard to refine the query by selecting the Next button.



5.3 Adding Items to the Workbook

The Available list shows all of the items in the Business Areas. To include an item in the query:

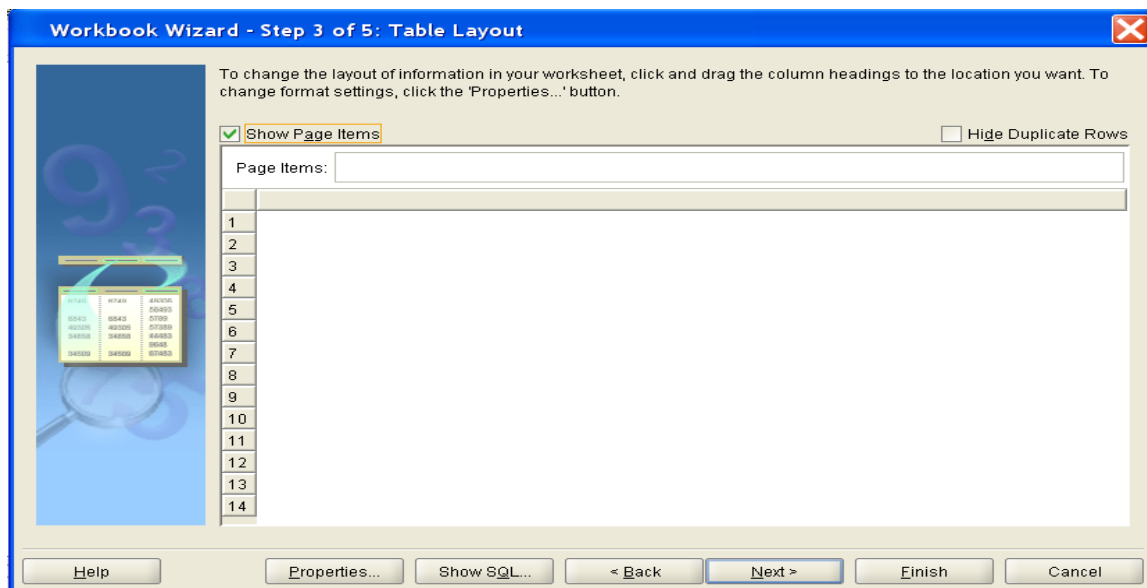
- Select the Business Area to work with.
- Select the folder that contains the item needed.
- Select the item and press the arrow key to move the item into the selected column.

Select multiple items by holding down the Ctrl key.

5.4 Arranging Items in the Workbook

The third step in the Workbook Wizard enables rearrangement the items in a query, suppress the duplicate data, and convert a table or crosstab to a page-detail layout.

To change the position of any axis item on the worksheet, drag the item to the correct position on the worksheet. To change the display type to a Page-Detail Table, select on the “Show Page Items” check box at the top of the query. This displays the “Page Items” field. Drag an item from the detail axis to the page axis and change the output to a Page Detail Layout. If the display type is a Page Detail Layout and you wish to change it to a single table, drag the items from the page axis to the detail axis.



To move a column to another location just select and drag it to the desired location.

The other option in this third step is to hide any duplicate rows. By selecting the “Hide Duplicate Rows” box in the upper right hand side of the window, only a single row for the items that have duplicates in the database will show.

5.5 Renaming a Worksheet

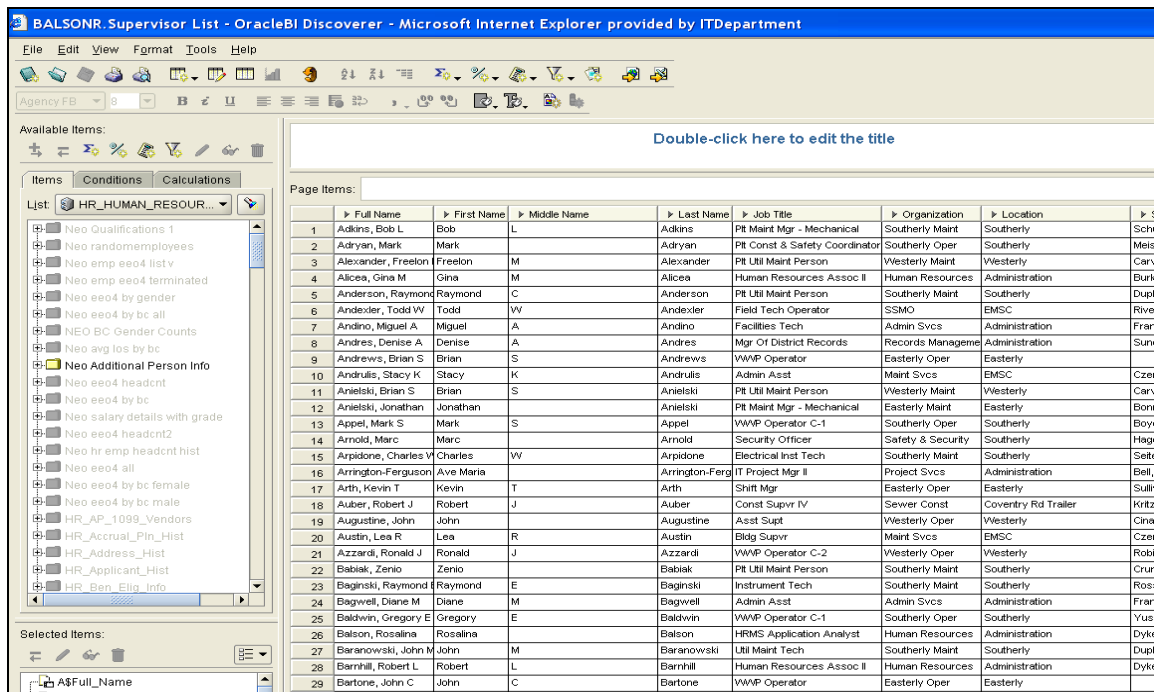
Open the workbook that contains the worksheet to be renamed. Do one of the following:

- Double-select the tab at the bottom of the worksheet.
- Select Sheet/Rename from the menu Either choice will bring up a dialog box to rename the Worksheet. Type in the new name and select OK.

5.6 Running the Worksheet

With the items selected for the query, either run the query by selecting the Finish button, or continue the Workbook Wizard for additional help in customizing the data on the workbook.

When complete select the Finish button, the report will run. The results window will appear; this shows the data that was retrieved for the query.

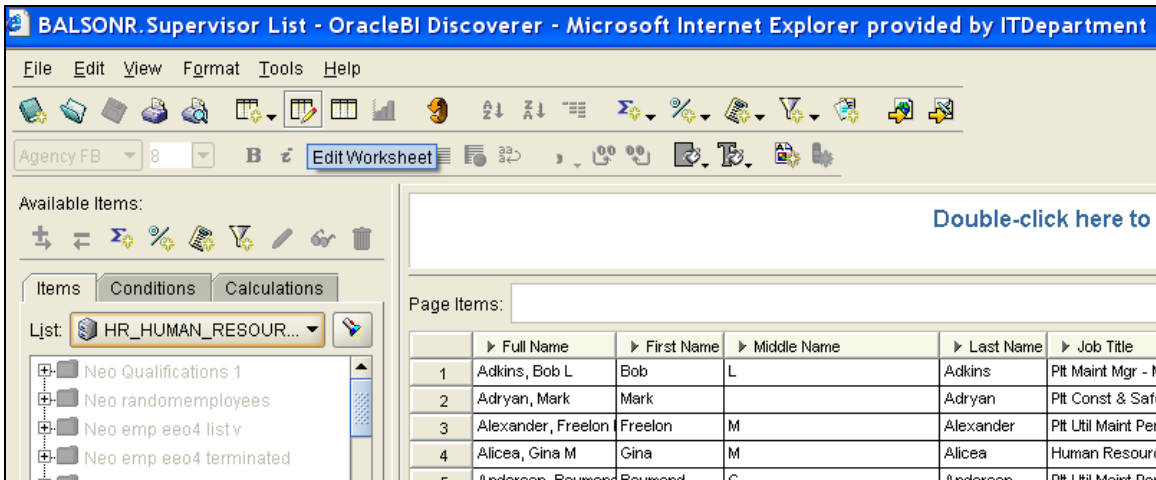
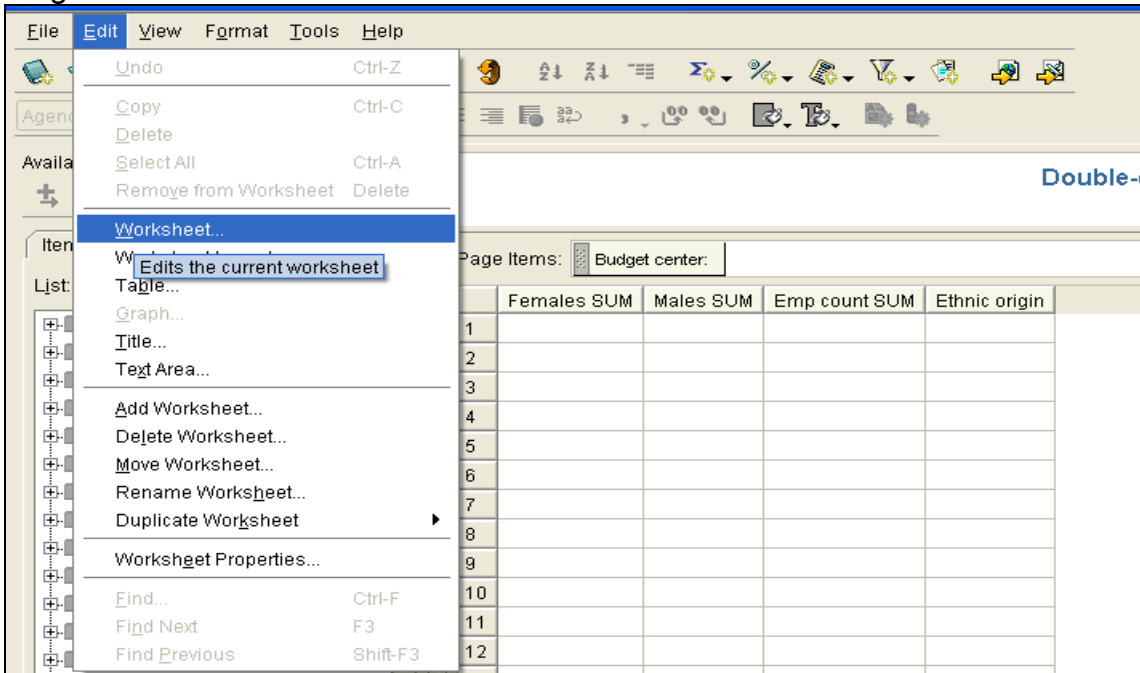


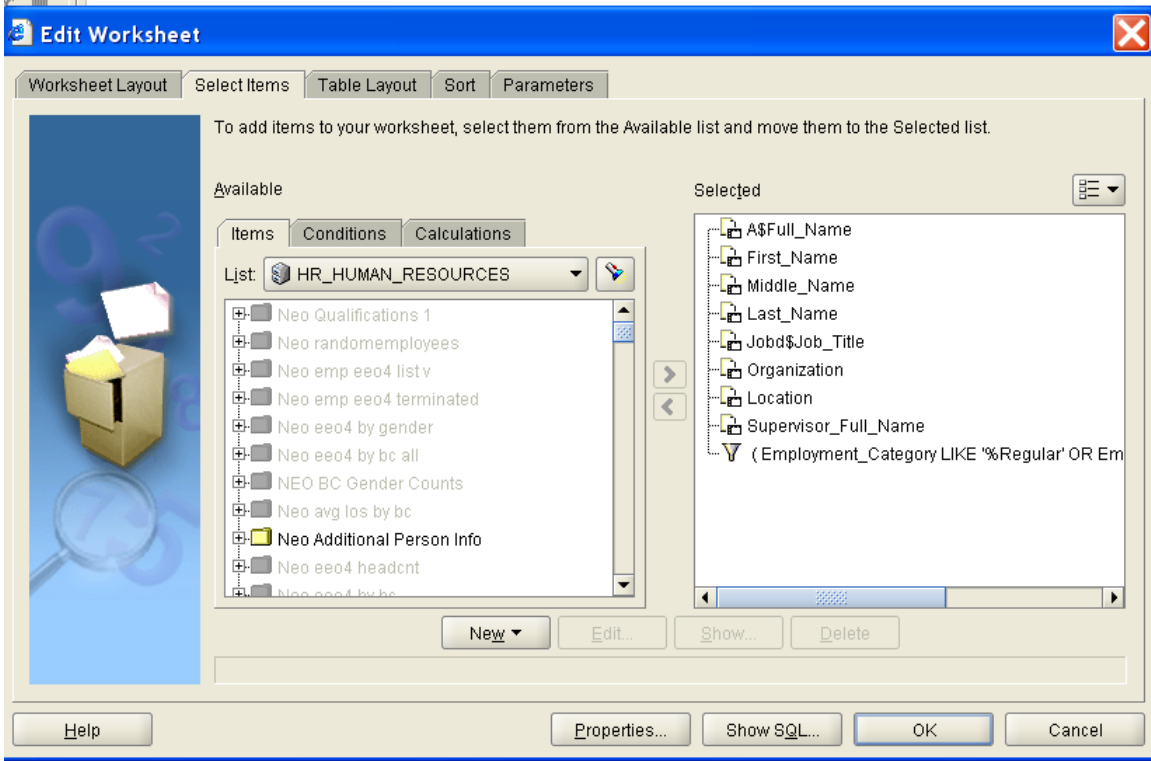
5.6 Editing the Worksheet after Running

After running the query, to edit, add or remove items from the worksheet do one of the following.

Removing items from worksheet select the item to remove, and then select Edit/Delete from the menu. Or select the edit sheet icon, simply select the item to delete from the Selected Items list and select the Left Arrow button.

Adding items to the worksheet select the Edit Sheet icon from the toolbar or select Sheet/Edit Sheet from the menu. Either one returns starts the wizard, then select the item or items from the Available List. Select the Right Arrow button or drag the item to the Selected List.

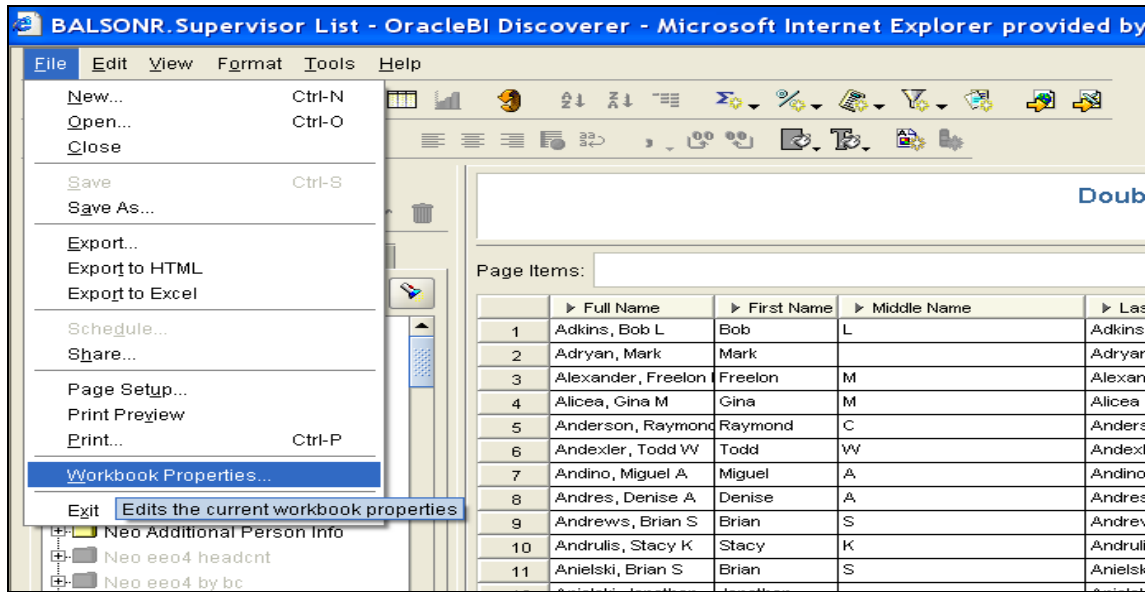


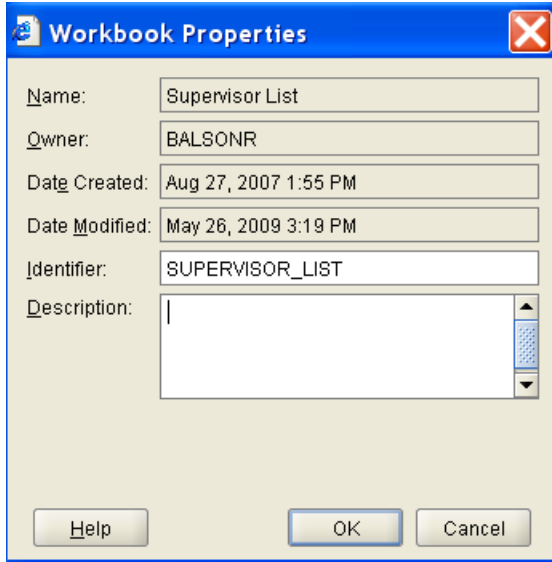


Each of these will be covered in later chapters.

Adding a Description to a Report Title

Once the report has been saved. Select the File/Manage Workbooks/Properties from the menu. Enter the desired description in the description block. Then click the save button.

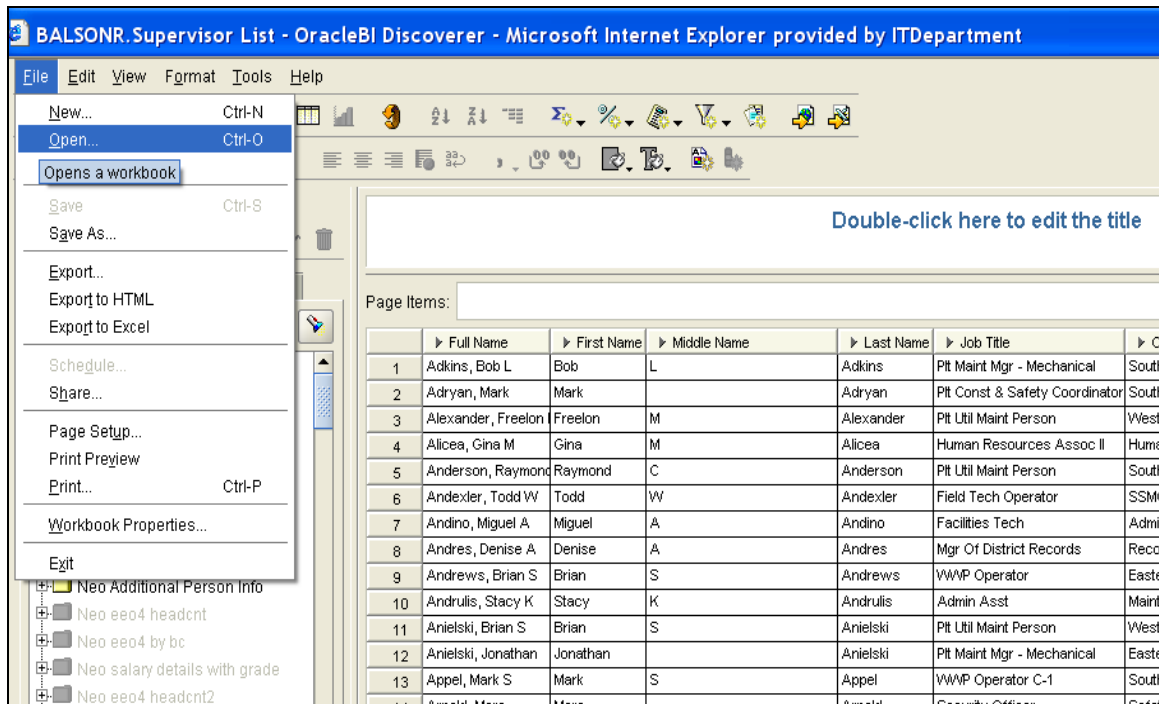


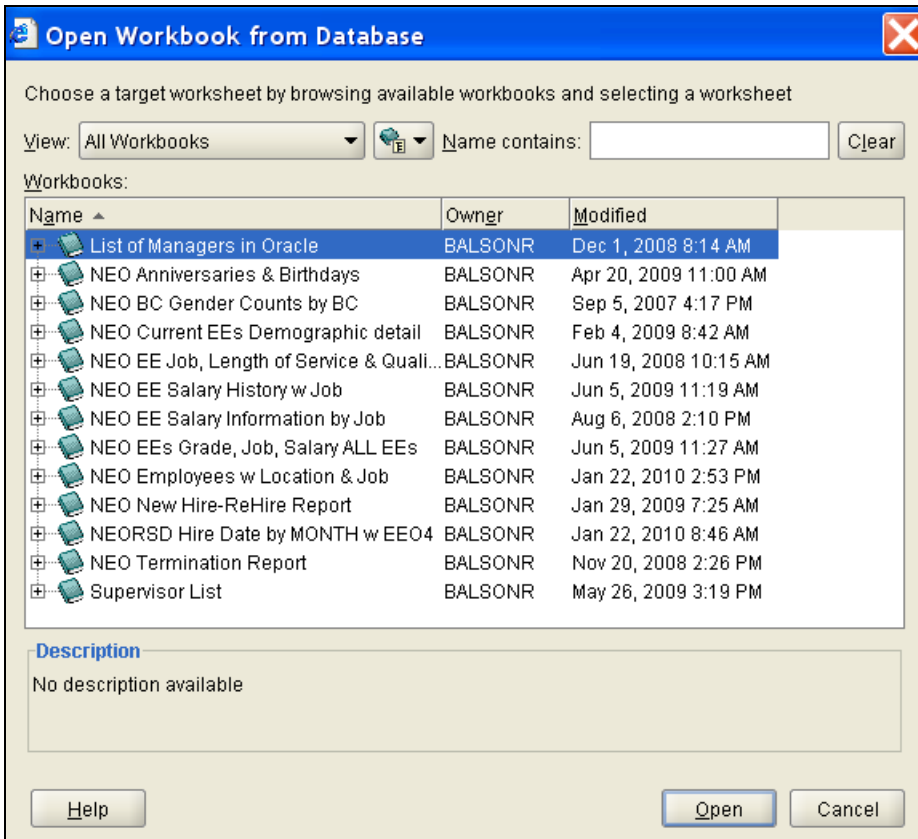


5.7 Opening a Previously Created Workbook

To open a workbook that has been saved to the database, choose one of the following:

- Select “Open an existing workbook” option, in the Wizard.
- Select File/Open from the menu.
- Select the Open Workbook icon from the toolbar.
- A dialog box will appear with the following two choices: either to open a workbook from the database or open a scheduled workbook.
- Database Dialog shows the list of workbooks that have been saved to the database and are available to run.
- Scheduled Dialog show the list of reports that have already run and are now available to view. A scheduled workbook will be covered in more detail later.





Select the workbook from the appropriate list and select Open. The workbook will open. A query execution progress dialog box will appear showing the estimated loading time for the first sheet.

In Discoverer, there are options that can be set, which limit the time allotted to open the worksheet. If the query will take longer than the set limit a dialog box will open to continue select one of the following:

- Select Yes. The query runs and fills the worksheet with the most recent data.
- Select No. The worksheet opens but contains no data. Select No to see a different worksheet from the first one. Just select the worksheet tab required from the bottom of the window.

Then select Sheet/Refresh Sheet from the menu to retrieve the data for that sheet.

5.8 Scheduled Workbooks

Workbooks can be scheduled to run at a specific time. An example of this might be a weekly inventory report, which is required to run every Thursday evening, so that the current inventory is shown, so the inventory that requires replenishment can be ordered on Friday. The Discoverer Administrator can set the schedule for this report to run. If the Discoverer Administrator has granted the appropriate privileges to schedule the workbook, the report writer could schedule these to run. Other reasons to schedule a workbook to run:

- The workbook will take a long time to run.
- The workbook is required to run on a reoccurring basis.

Since the scheduled report runs on the server, not on the local personnel computer, the local computer does not need to be on. The results of the report will be saved on the server and be available to upon log in to Discoverer.

Note: The worksheets in a scheduled workbook contain data that was derived specifically for that report. Work with the data in a normal manner. A reminder message will appear if there are changes to the data that states the new data is not the same as the old data.

5.9 Saving a Workbook

There are several options to save a workbook but it depends on whether the privileges granted.

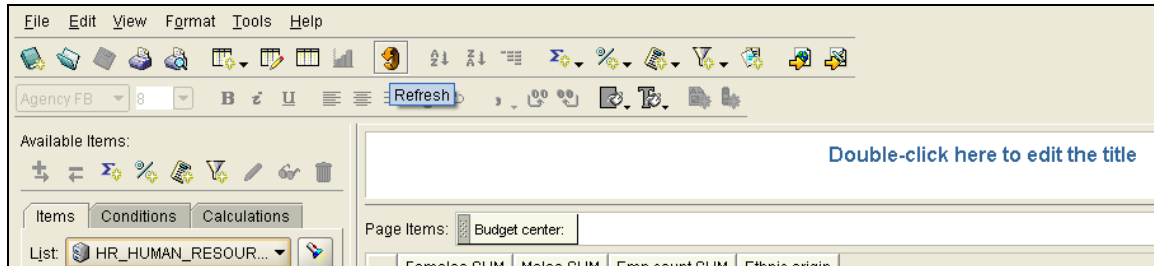
- The owner of the workbook, with the correct privileges, can save the workbook and the changes by selecting the Save icon or by selecting from the menu, File/Save.
- If it is a shared workbook, use the Save As command to save the workbook using a different name, provided the correct privileges have been granted.
- If the privileges to save the workbook have not been granted, the workbook can be viewed and edited but the changes cannot be saved.
- To save a workbook, select one of the following:
 - Select File/Save, the workbook is saved and remains open.
 - Select File/Close, the workbook will close if no changes were made. If changes were made a dialog box will appear prompting that the changes be saved.
 - Select File/Save As, a dialog box will appear prompting for a new name for the workbook. Once the new name is entered, select Save. Select Cancel, and the workbook will remain open without saving any changes made.

5.10 Refreshing Data in a Workbook

The data in the worksheet is a result of querying the database at a certain time. To refresh the data, re-query the database. By refreshing the data, it ensures that the data being viewed is up-to-date.

To refresh data in a worksheet, select Sheet/Refresh Sheet or the Refresh icon on the toolbar, the data displayed then would be based on current data.

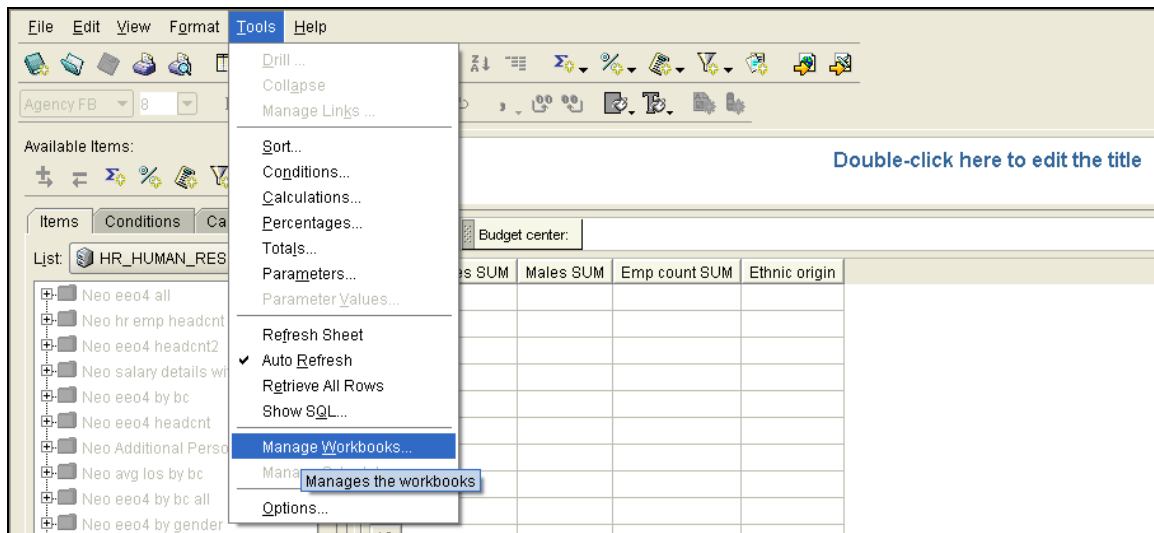
Deleting a Workbook

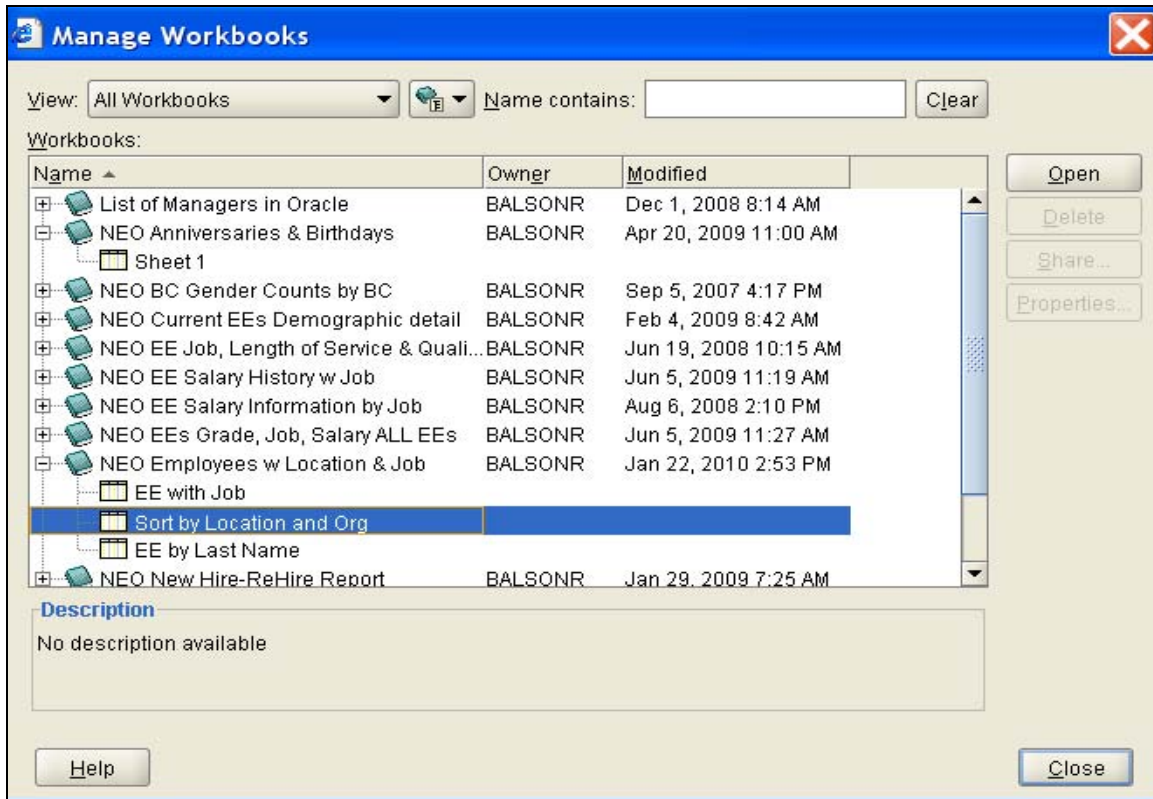


If a workbook needs to permanently remove from the database, it can be deleted.

Note: The user must have the correct database privileges to delete a workbook. Also, if the workbook is a shared workbook, it cannot be deleted unless the user is the owner of it.

To delete a workbook, select Tools/ Manage Workbooks/Delete. A dialog box will appear to show all the workbooks on the database that the user owns. Select the one to delete, and then select the Delete button.

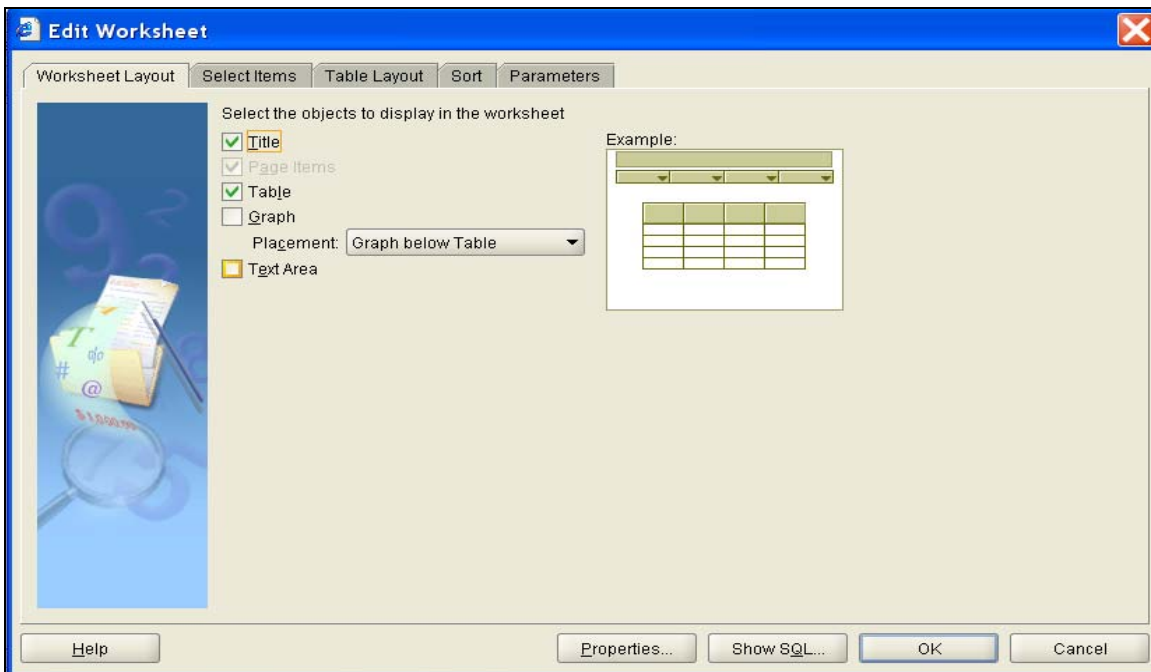
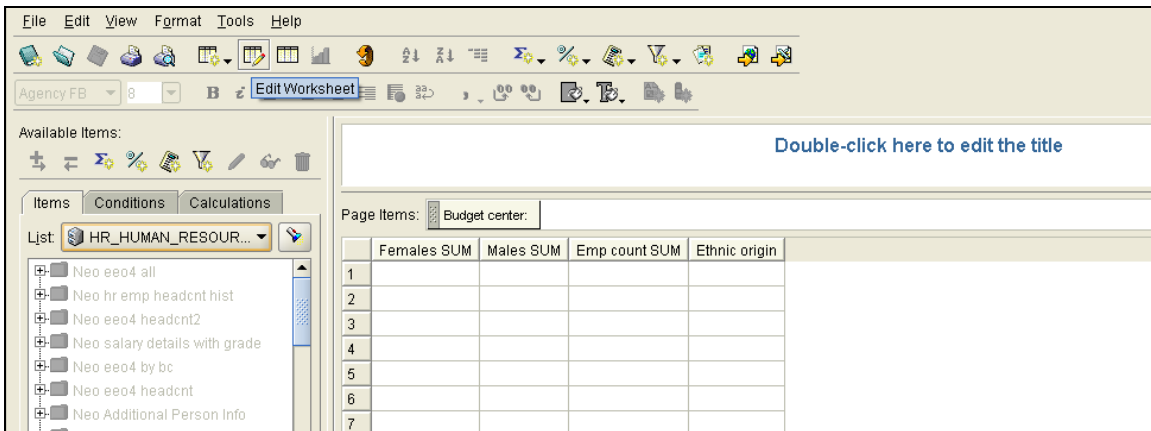




6. Chapter 2 – Customizing the Query

6.1 Formatting Data, Headings and Totals

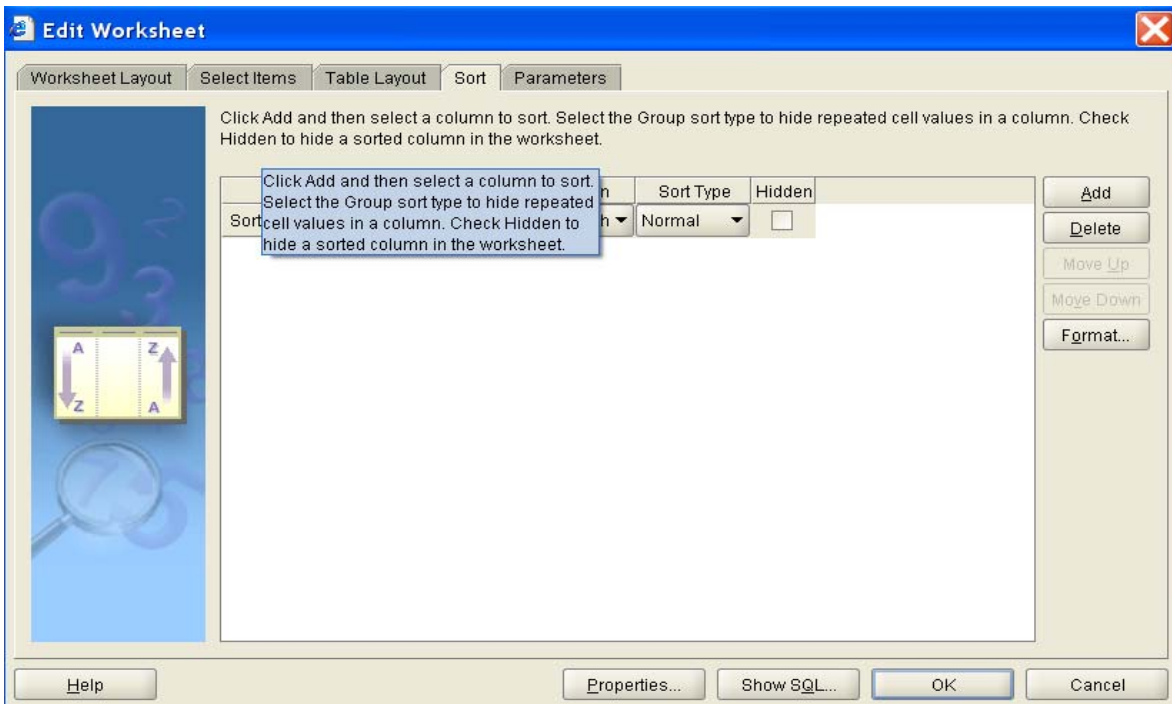
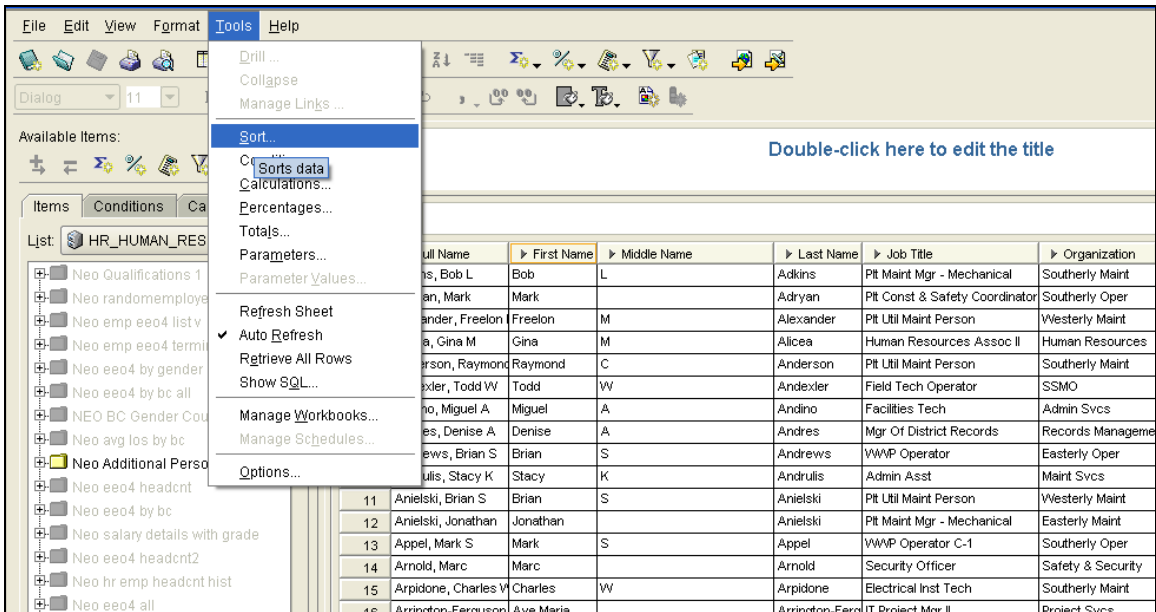
Formatting the data in the worksheet can be accomplished by applying a format mask that was previously defined by the administrator or the user can define a format. To accomplish this, select the Edit Sheet toolbar icon. Select the Default Format tab. Select the item or items that require the format changed, and then select the Change button. Then select the text or number tab. The format categories that will be available will depend on the type data that has been selected to format. To reset everything back to the original settings, select Reset.



6.2 Sorting Data

By sorting the data, it is arranged either numerically or alphabetically. The sort can be either “low to high” (ascending) or “high to low” (descending) order. Sorting helps in the process of analyzing the data.

Simple Table Sorting



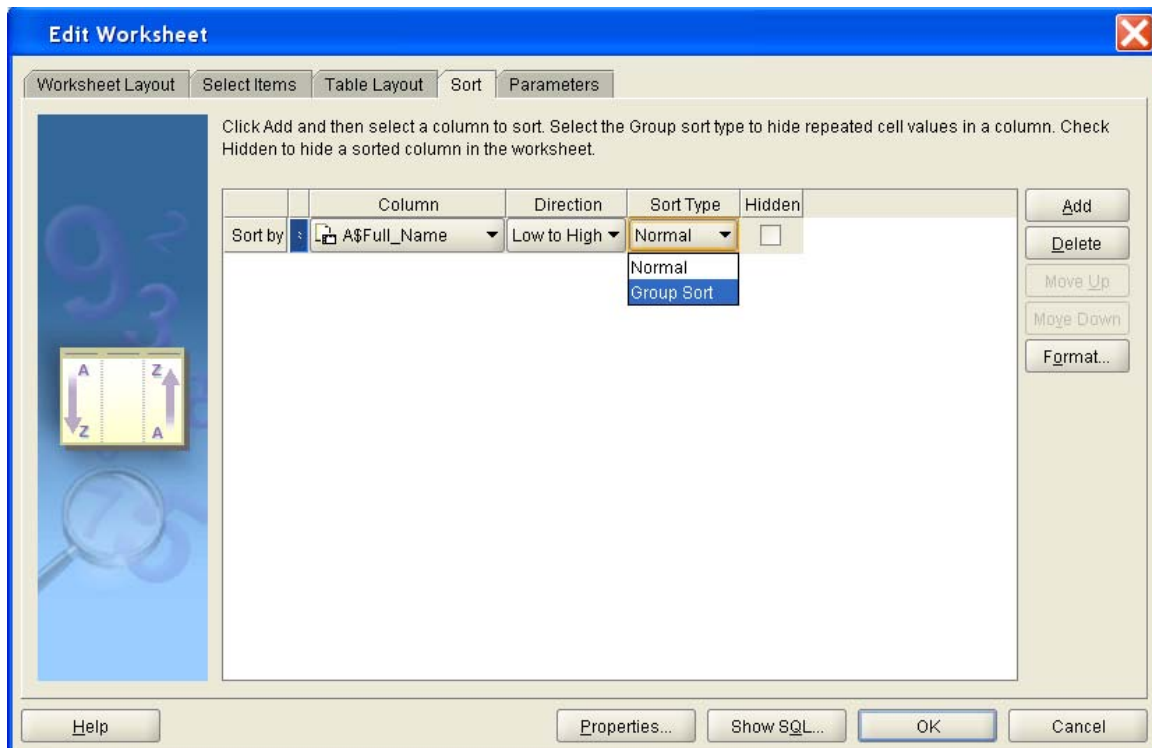
Select the Edit Sheet icon from the tool bar or select the menu item Tools and select sort. This will open the Edit Worksheet dialog box to the Sort Tab. If there are no sort options shown, select the Add button; select the column to sort by clicking the black down arrow to all columns available.

Select the direction drop-down list to select sort order, low to high or high to low. Group Sorting will be covered later in this chapter. The Hidden check box will hide the column that is being sorted; i.e., when sorting issues by the month; by checking the box to hide the month column it will make the column not show on the report. Then select OK.

To further sort the report, repeat the above steps until the report is completely sorted.

6.3 Group Sorting

NOTE: Remember a Group Sort can be applied on a table worksheet but not on a cross tab worksheet.



The steps involved in applying a group sort is similar to the simple sort, except this time select Group Sort on the sort dialog box.

7. Chapter 3– Query Conditions

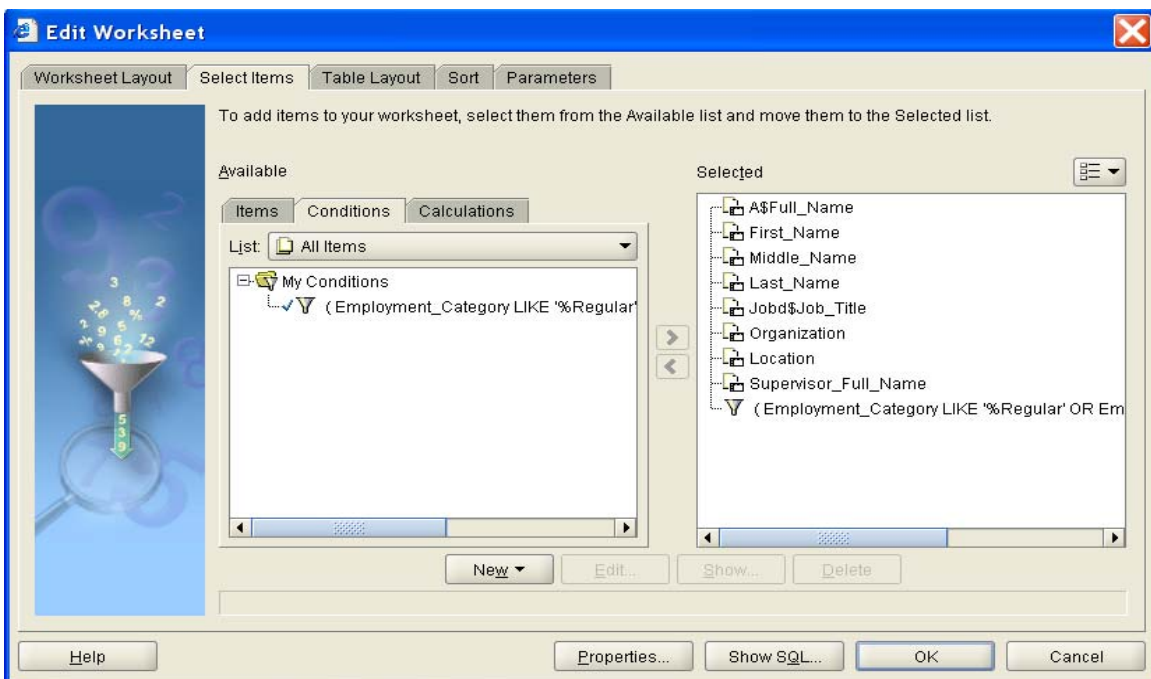
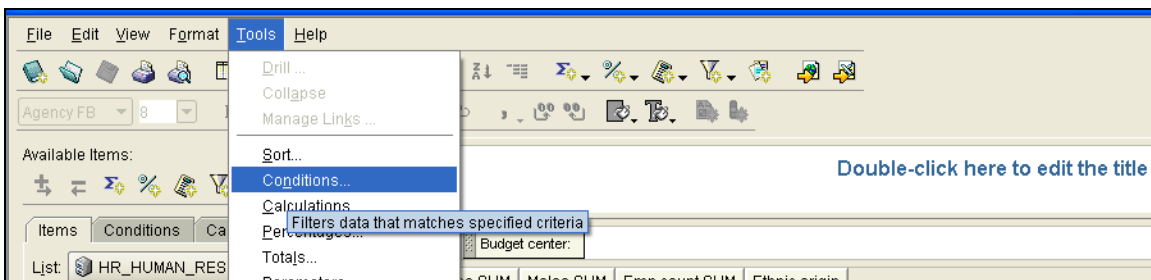
7.1 Filtering the Data or Setting Conditions

Oracle Discoverer uses conditions, which are filters that are placed on an item to limit the number of rows that are retrieving from the database.

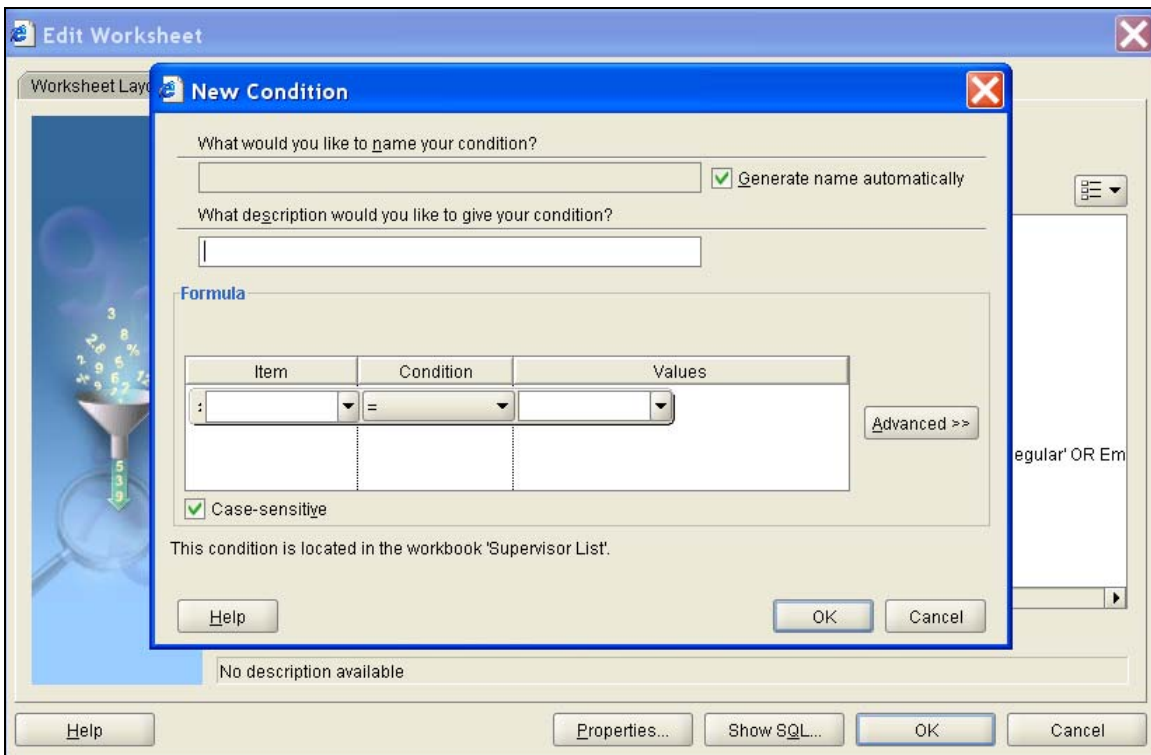
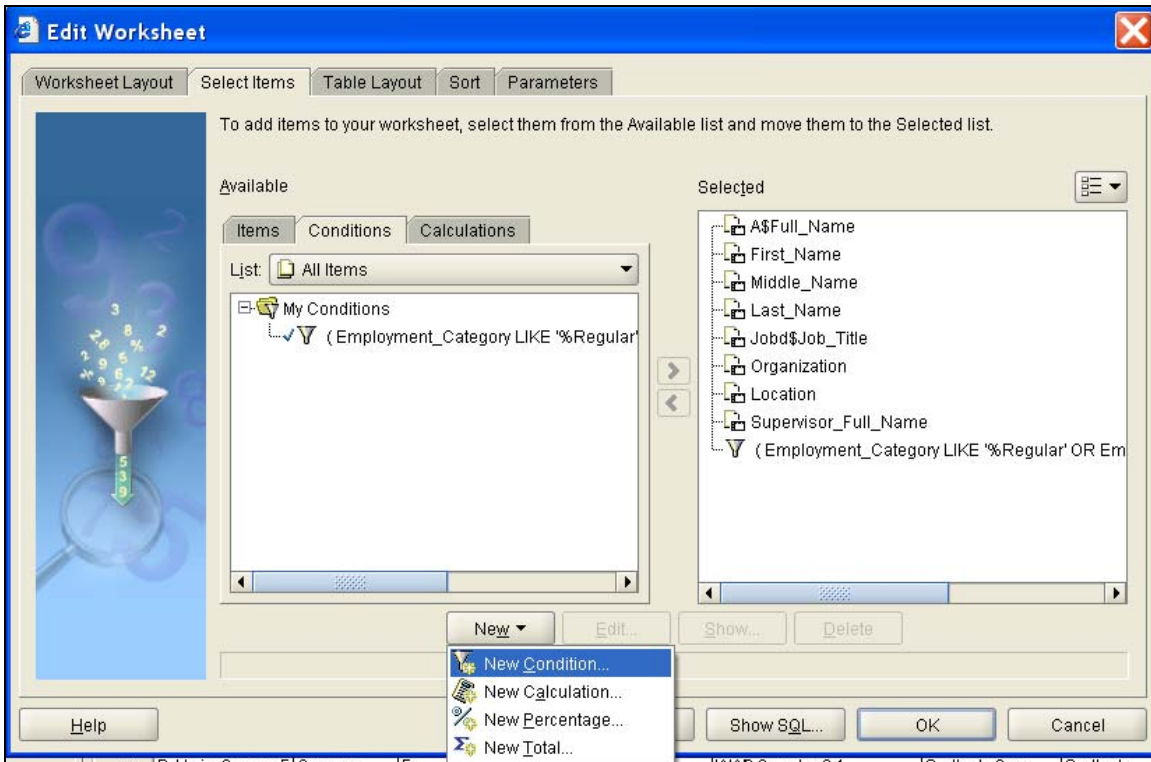
There are two types of conditions that can be applied. The first is the administrator-defined condition. This is one that the Discoverer Administrator has set up as a condition that would be used frequently. The second type is user defined, created by the user to apply to the workbook or worksheet.

7.2 Adding Conditions to a New Workbook

When creating a new report, step five of the wizard is where any conditions are applied to obtain the data required.



If your Discoverer Administrator has any Predefined Conditions, they will show up in a list in the center of the dialog box. To create a new condition, select the New button. A New Condition Dialog box will appear.



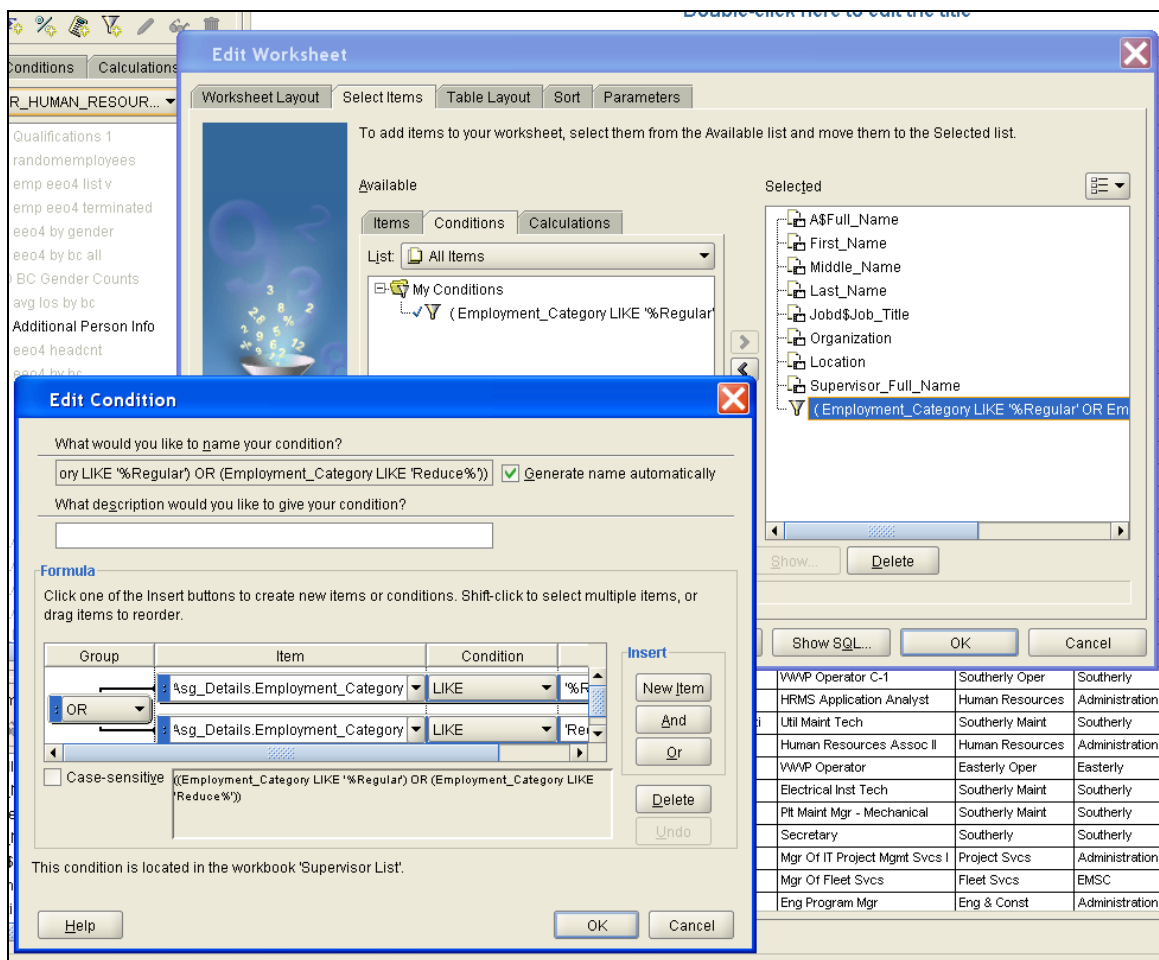
The check box beside Generate name automatically is checked by default; this option will name the condition automatically. The next block in the dialog box is a description block where the new condition is described. Then under the Item column, select the item to apply the condition to. Select the operator for the condition. Then assign it a value. Then select Ok.

Selecting a predefined condition

The Discoverer Administrator can define two types of conditions: mandatory and optional.

- A mandatory condition will be automatically applied when that item is selected to be included in the report.
- An optional condition appears in the item selector as an icon. The user selects to use it or not.

To select a condition for a worksheet, select the Condition Tab. A list of predefined conditions will be displayed. Select the condition to apply. Then select the Edit button to see the condition. An Edit Condition dialog box will appear.

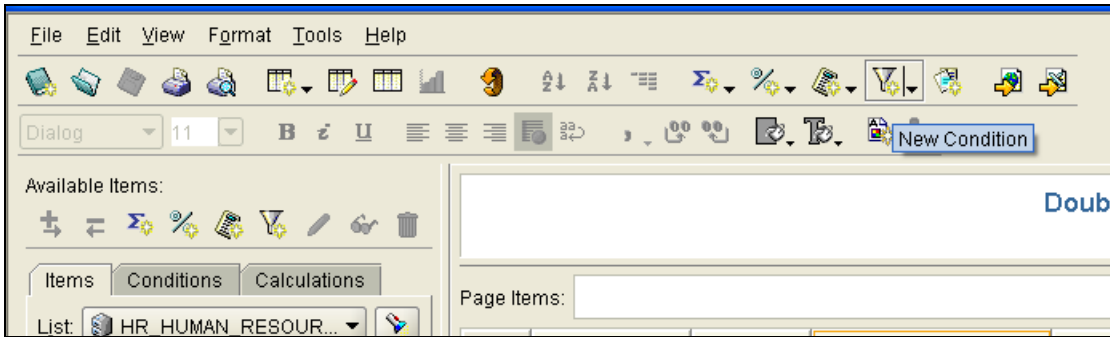


If everything is correct, then select OK. If not make the applicable changes, then select OK.

7.3 Adding a condition from the Toolbar

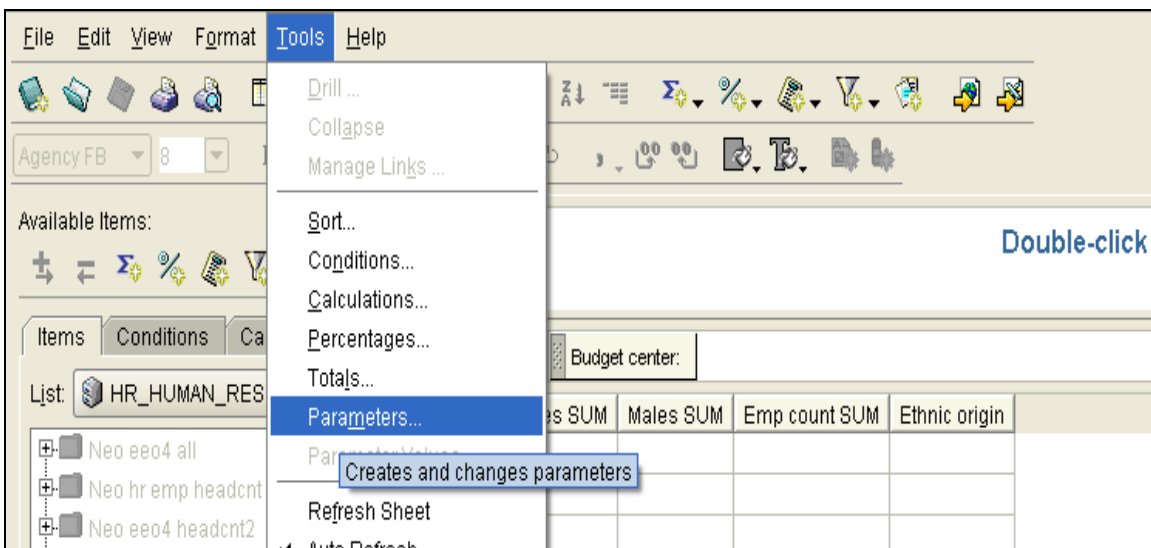
To add a condition from the toolbar, select the condition icon. The Edit worksheet dialog box will open to the condition tab. Proceed as described above.

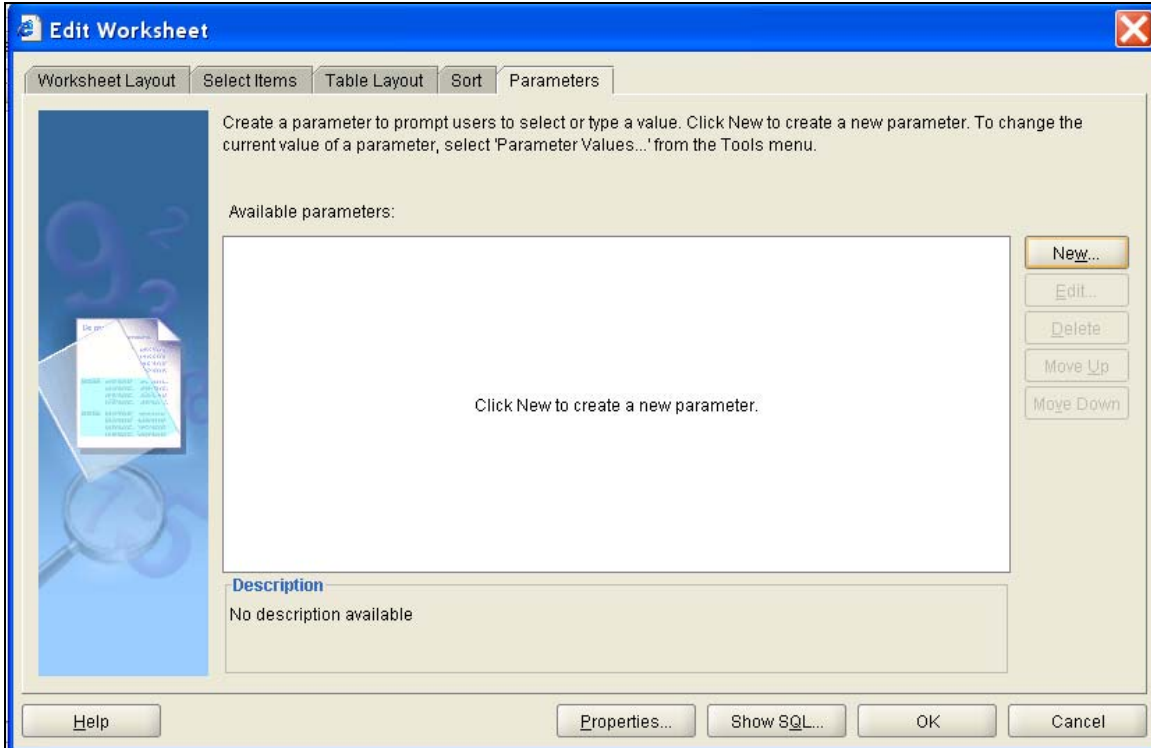
Condition Icon



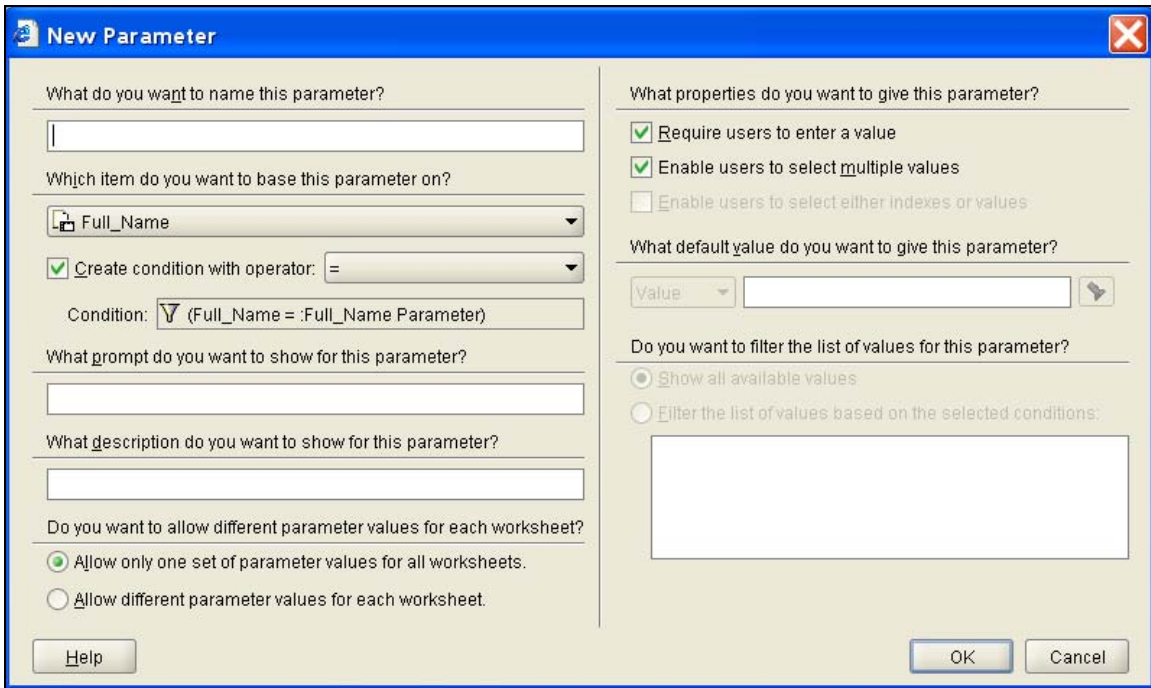
7.4 Prompting for Data

In Discoverer, the user prompts are called Parameters, which can be set in step ten of the wizard. Select the New button to create a new parameter.

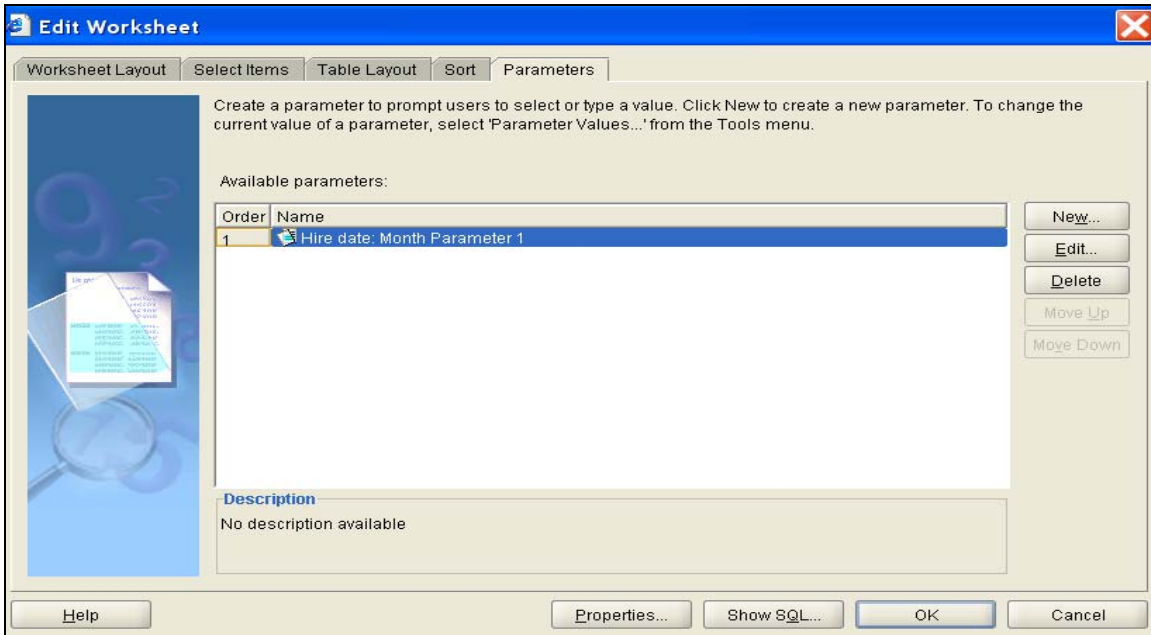




The New Parameter dialog box will open. Answer the questions; select the item on which to set the parameter. Select the operator for the condition. Remember to use wildcards the operator has to be “like.” Once all the questions are answered, select OK.



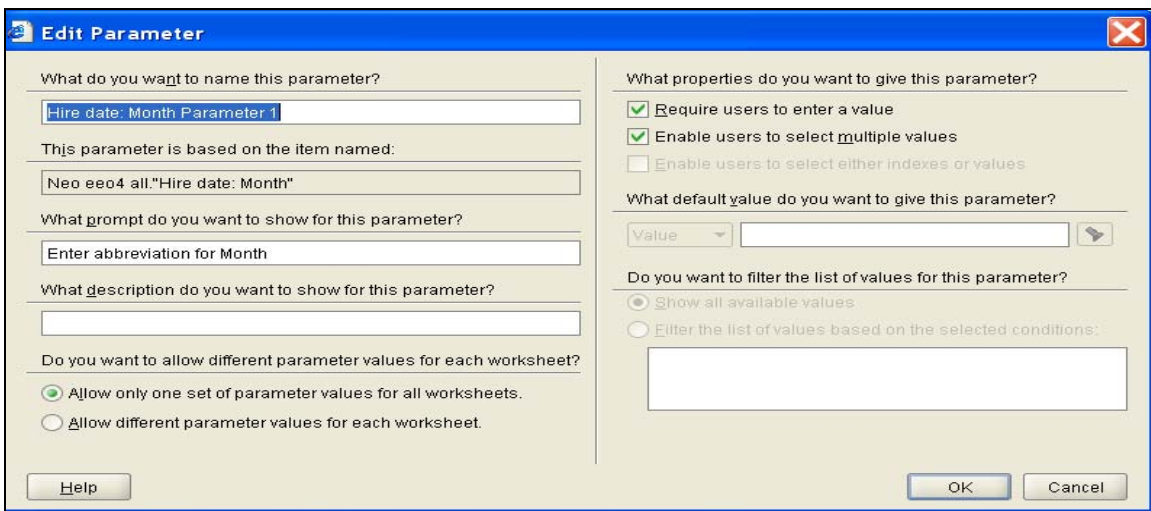
The wizard will open again; to create more parameters, repeat the above steps until all of the required parameters are done.



To change a parameter, select the Edit button, the Parameter dialog box will open and the required changes can be made..

The Delete button will delete the parameter that is highlighted.

If there is more than one parameter, then the Move Up or Move Down buttons will be available to set the order of the parameters. Once all required parameters are completed, select the Finish button. Then the Edit Parameter Values Dialog box appears. This is where the parameter questions are answered. Notice that the description of parameter is listed below the parameter. Select OK to run the report once the questions are answered.

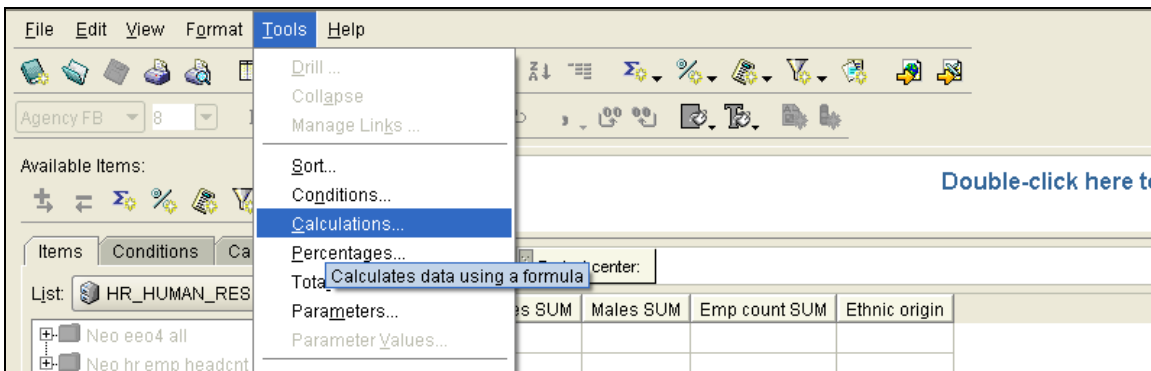


To use the menu, select Tools/Parameters; which will open the Edit Sheet dialog box to the Parameter tab. From there the process is the same.

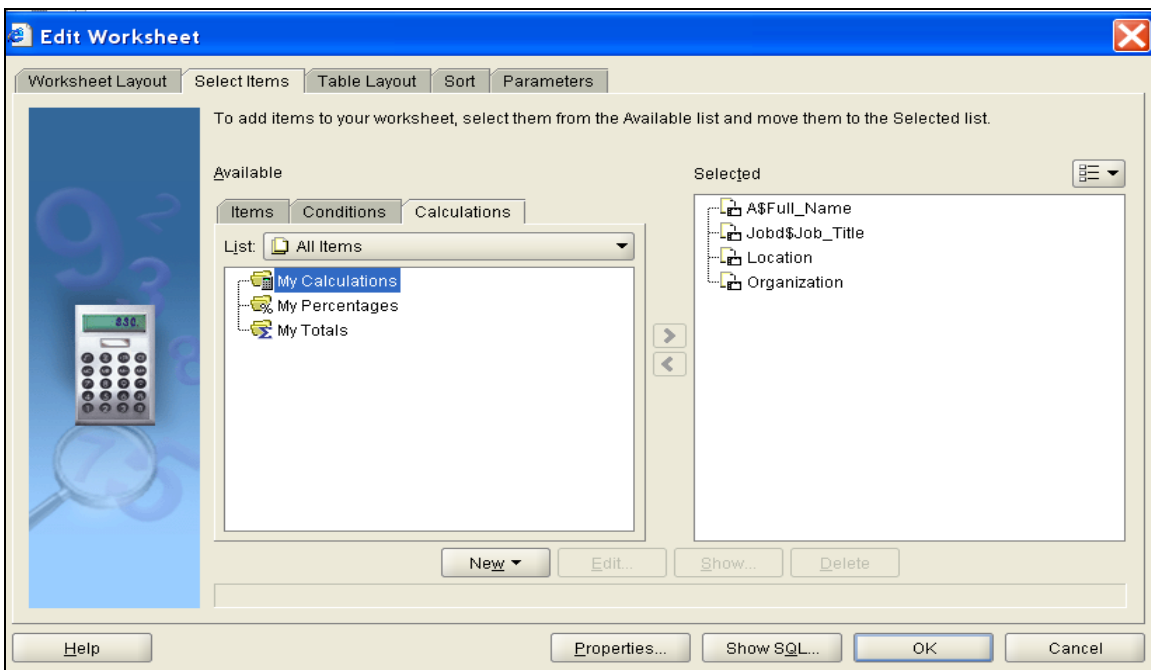
Note: If the report is being scheduled to run at a later time, the user will have to answer the parameters at the time it is being scheduled.

7.7 Calculations

Discoverer has a range of calculations it can perform, common mathematical functions, and it uses a full range of operators to give required results. A calculation can be used within another calculation.

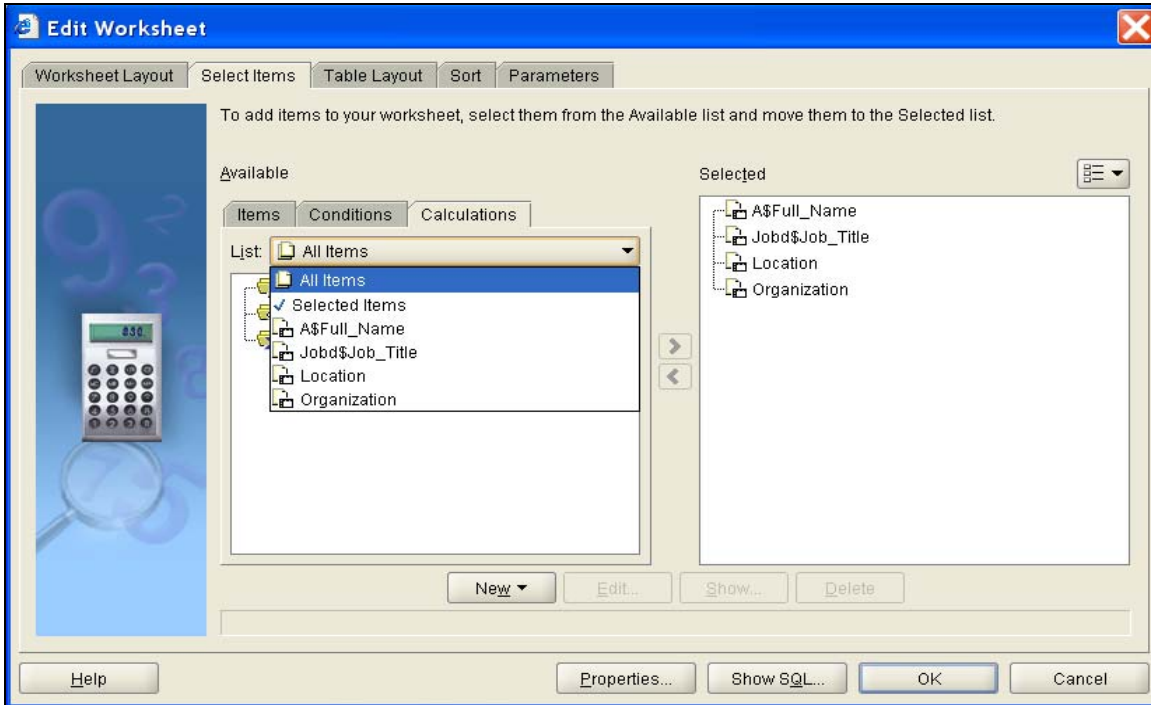


When adding a condition to an existing worksheet, then from the menu select Tools/Calculations. Or select the Calculator icon on the toolbar.

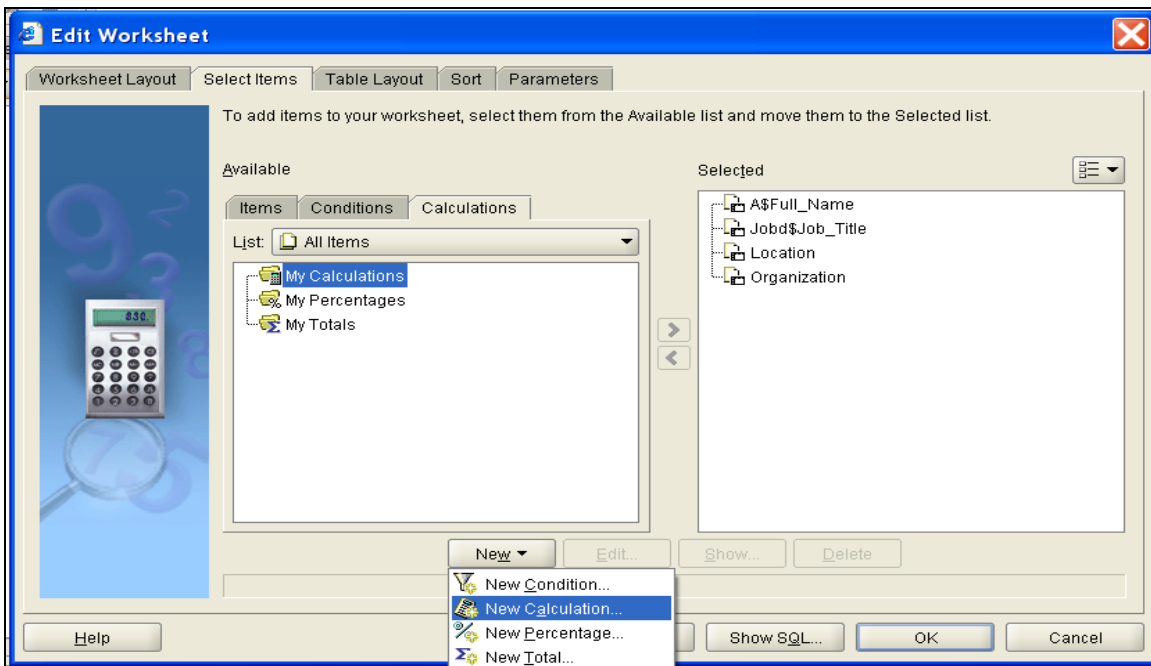


This will open up the Edit Worksheet dialog to the Calculations tab.

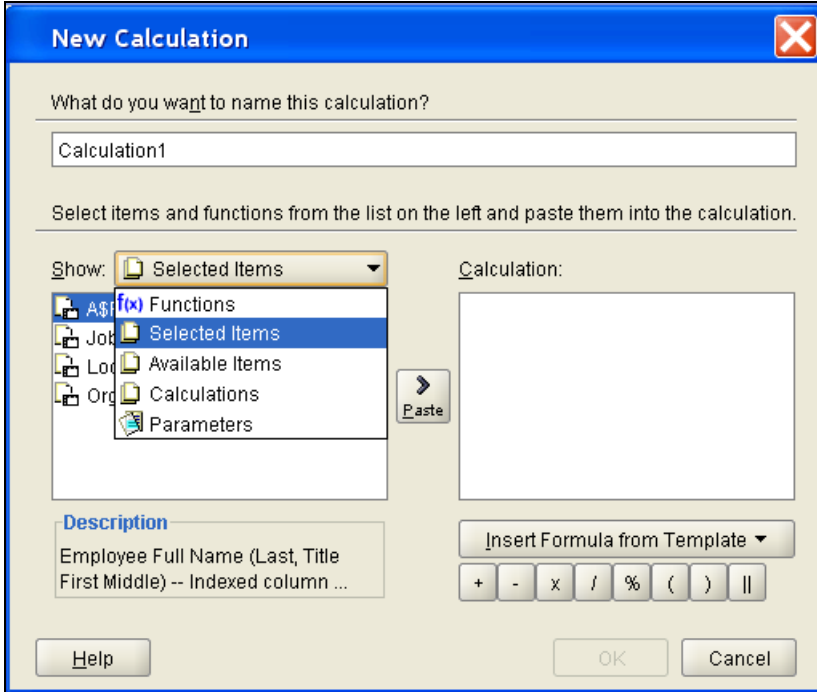
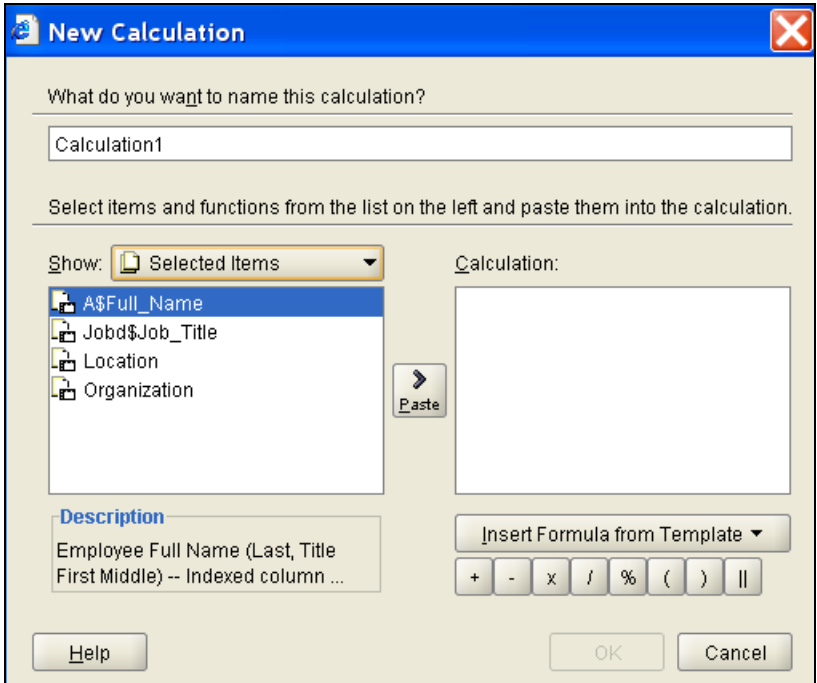
The Calculation dialog contains a “View Calculations for” list of value for all the items available in the worksheet.



Select the new button to create a new calculation.

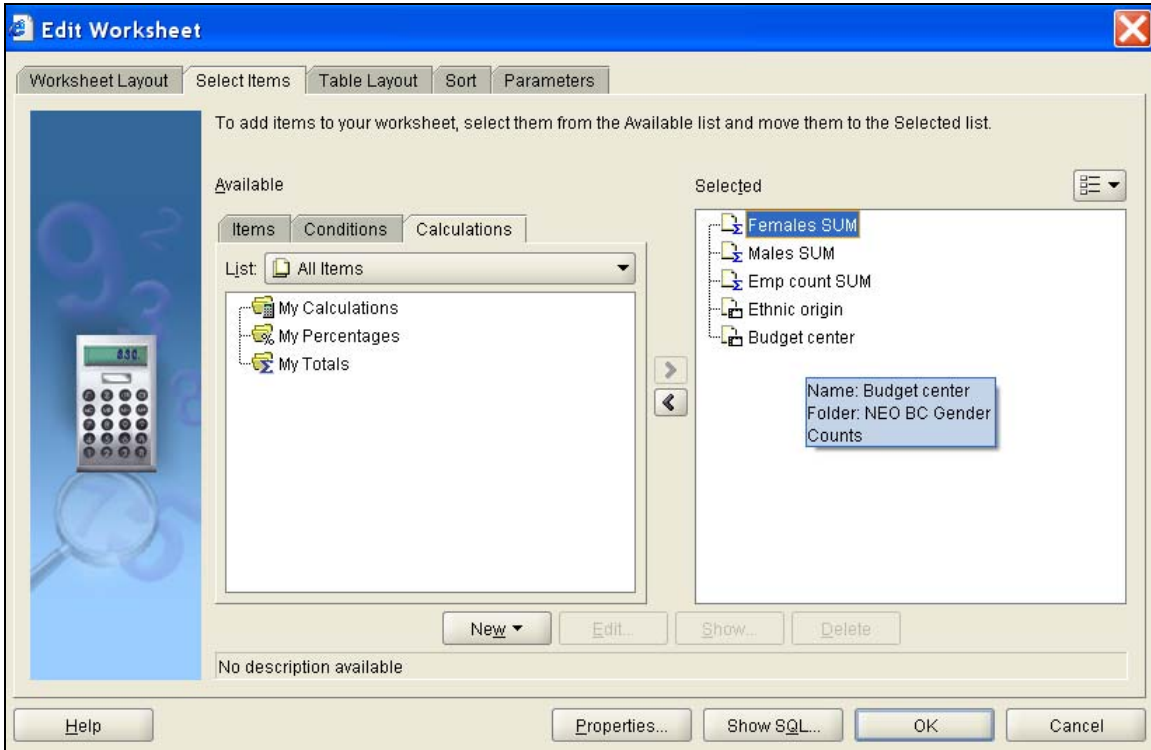


The New Calculation dialog box will appear. First give the calculation a name. Then select from the list of values to show either Selected items, Functions, etc.



There are two ways to enter the calculation: Type the syntax for the calculation in the calculation field directly or build the calculation by selecting the items from

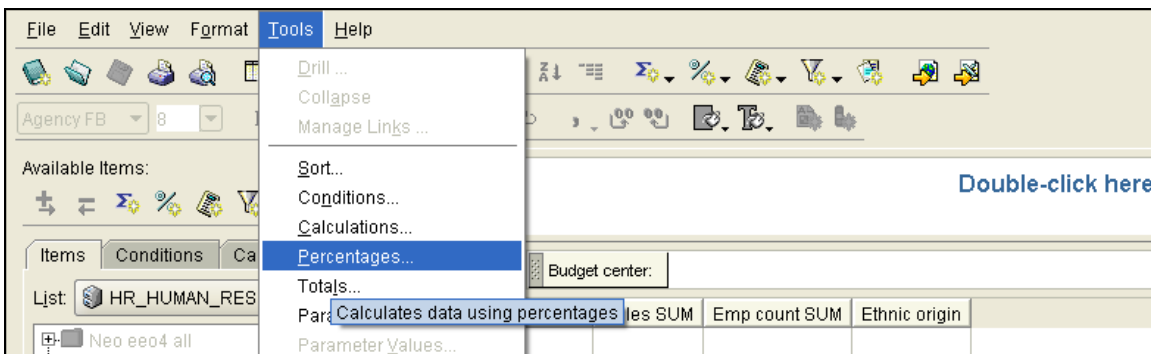
the items list and selecting the functions from the functions list, pasting both into the calculations field. Then select OK to create the calculated item.

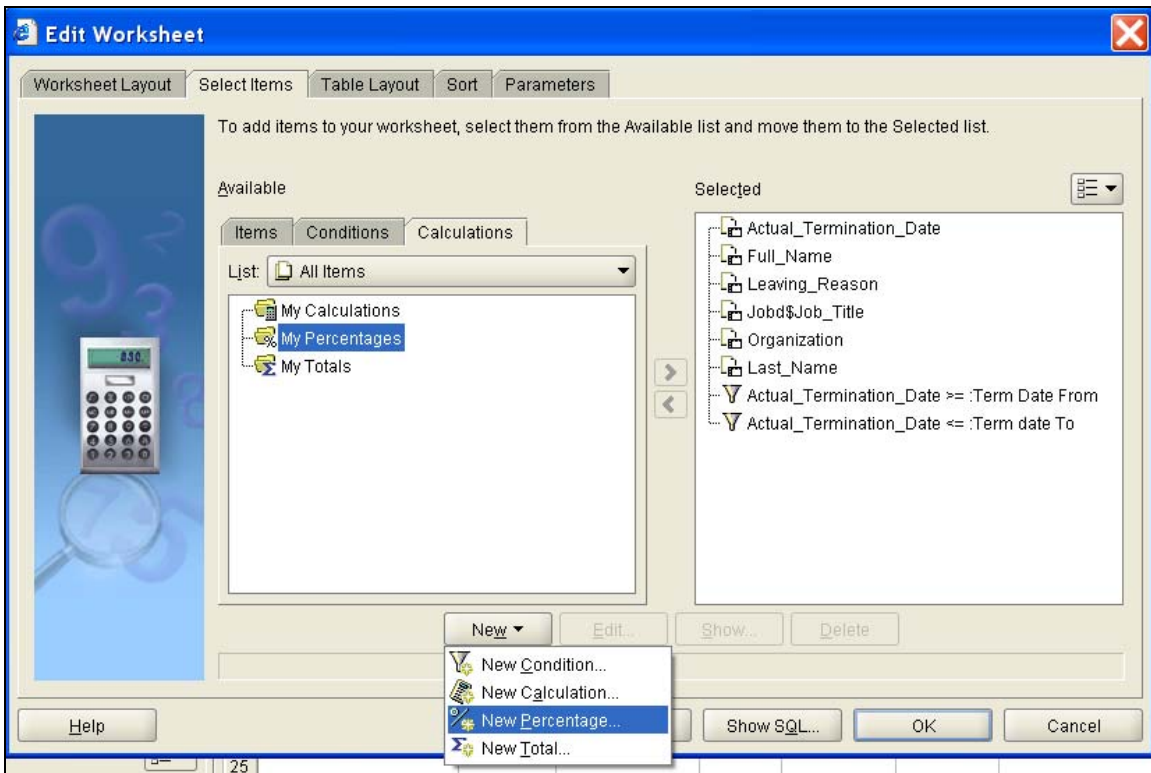
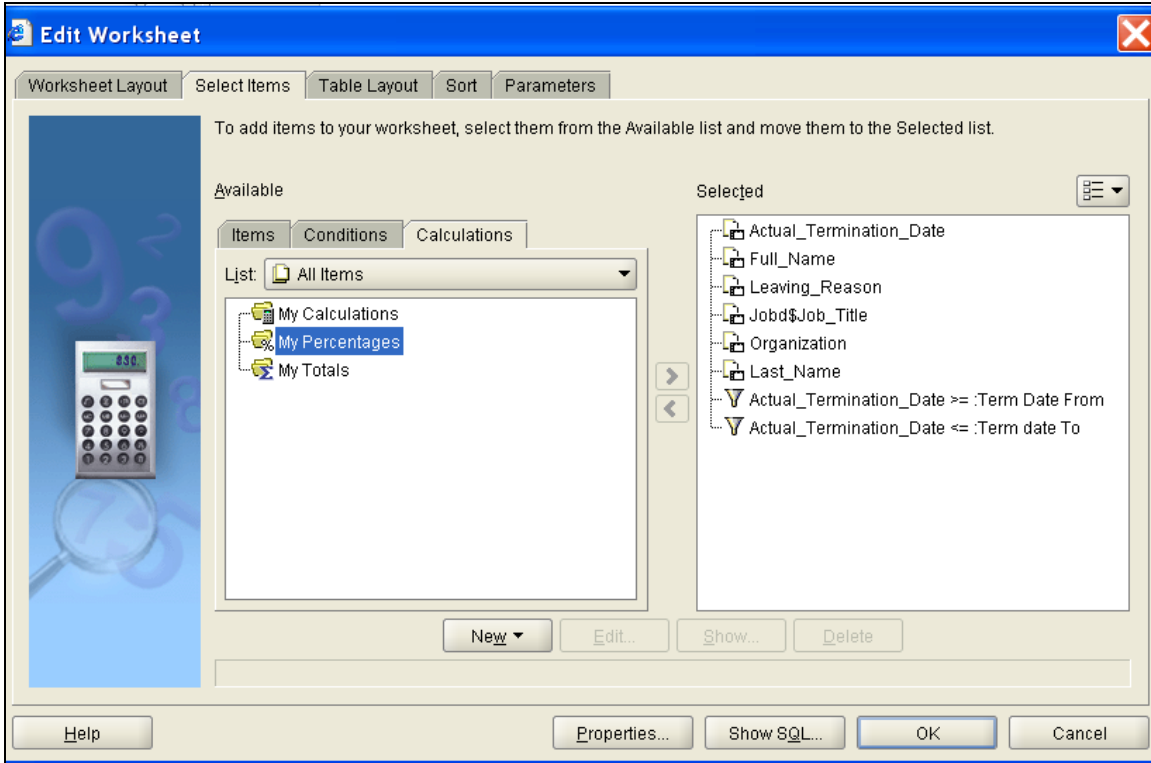


The calculation will appear in the Calculations Dialog box with a checkmark beside it, which indicates that the calculation is applied to the worksheet. Select OK in the Calculation dialog box. Then the calculated item will be added to the report.

7.8 Percentages

Calculating percentages of numbers is a data analysis task. When using the Percentages feature, specify the data to use to calculate a percentage. This is done in step 8 of the workbook wizard.





To create a percentage, select the New button.

The New Percentage dialog box opens. The first box in the top left hand corner of the dialog is where the name for this percentage is applied. Then select from the drop down list which data point to use for the calculation of the percentage. Then select whether it will be a grand total percentage or a sum of each change. Select if this percentage is for all sheets or just this one. On the right side of the dialog box select whether the grand-total number to show along with the percentage. There is drop down list of the label choices, select the desired label. Then select OK.

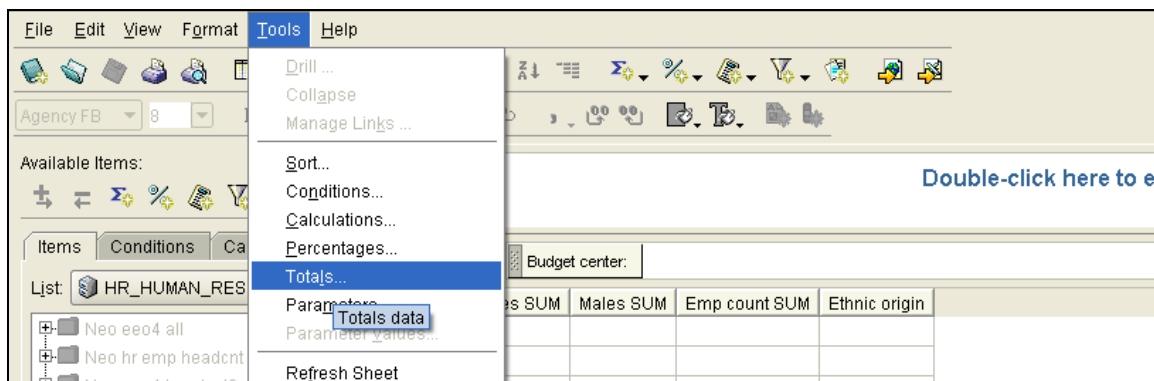
Percentages can be added to an existing sheet by using the menu Tools/Percentages. This will open up the Edit sheet dialog box to the percentage tab. From there the steps are exactly the same.

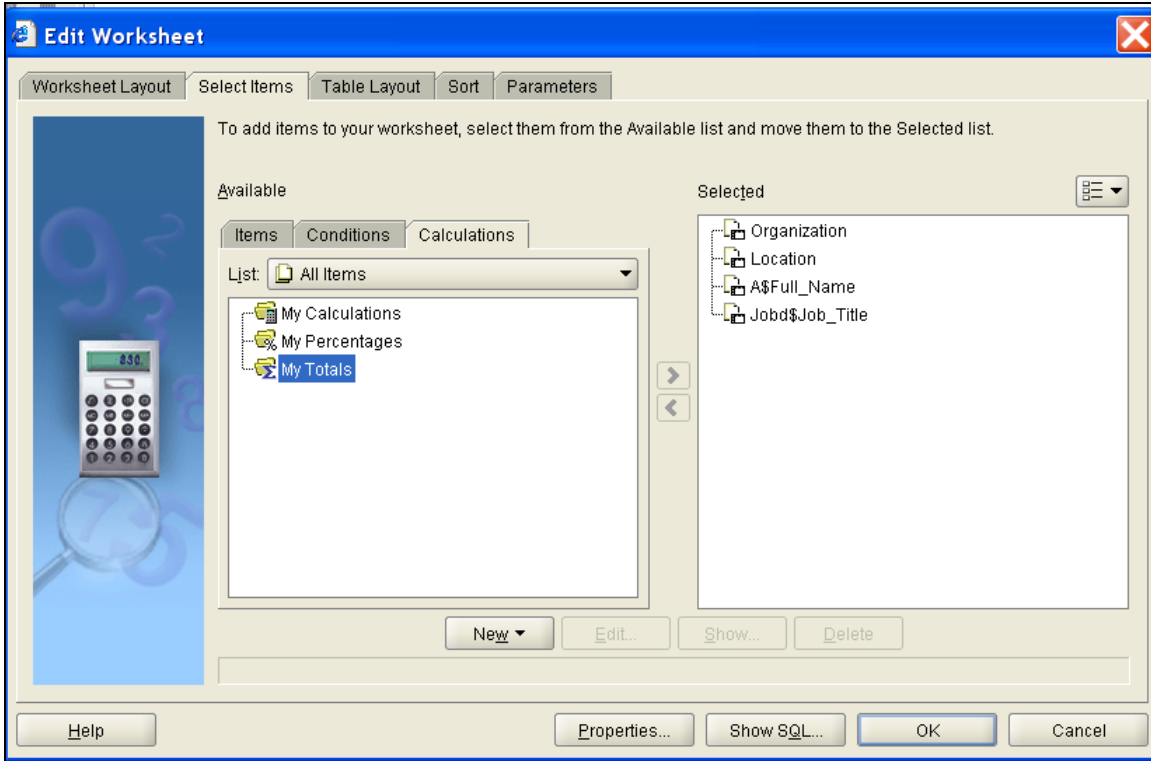
To edit an existing Percentage, select the Edit Worksheet icon. Then select the Percentage tab, and select the Edit button

This opens the Edit Percentage dialog box. Make the changes necessary and select OK.

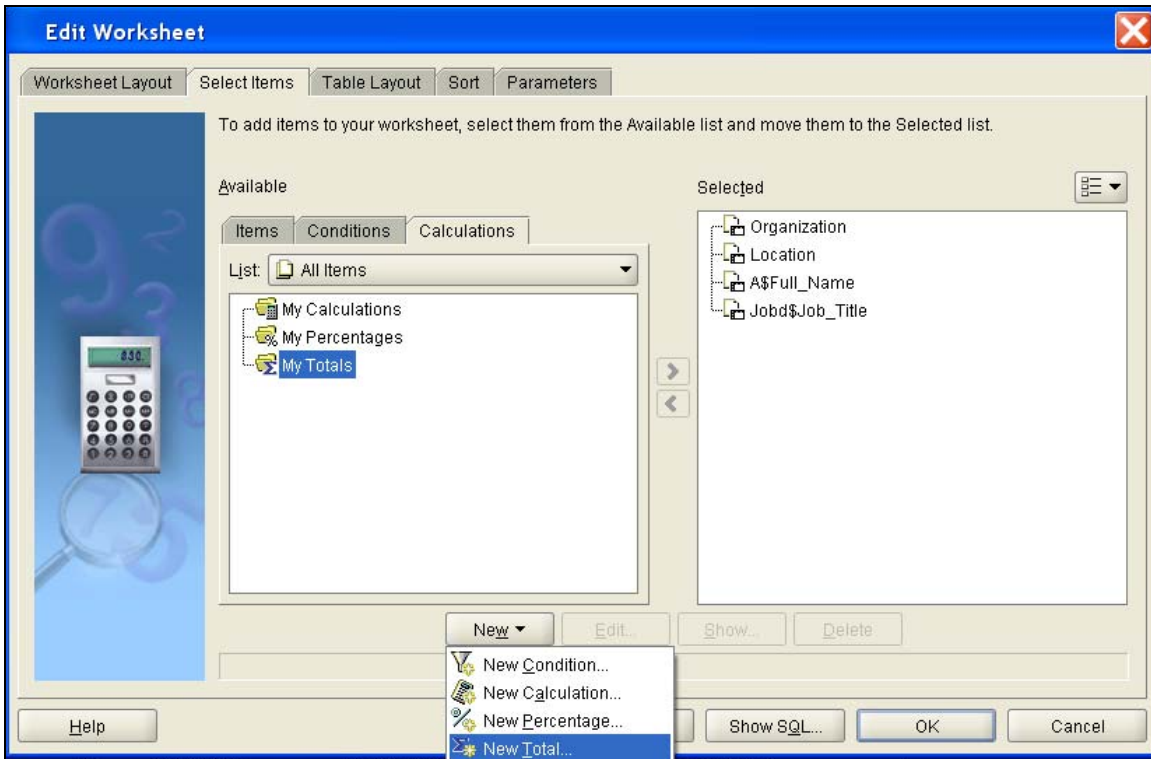
7.9 Applying Totals

Totals and Sub totals are the result of applying a function, such as an average or a sum to the values in a column. In the tabular report, the sub total or total appears below the value in the column used for the calculation. In a crosstab report, the value can either be displayed below the column or to the right of the column. In a new worksheet, totals are applied in step 9 of the wizard.

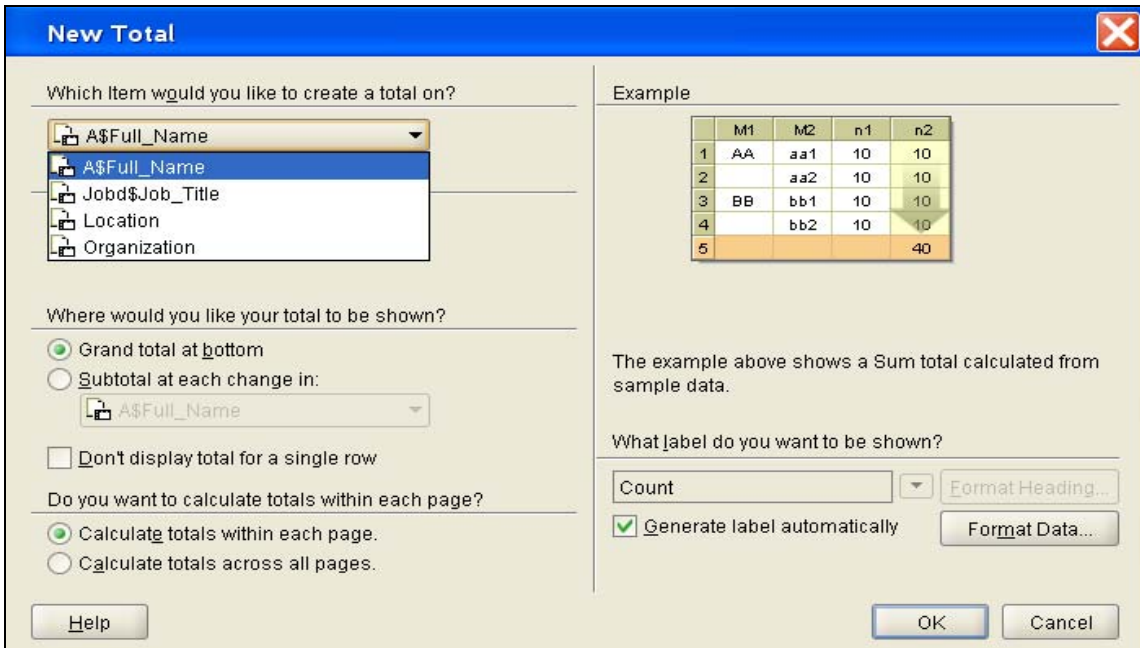




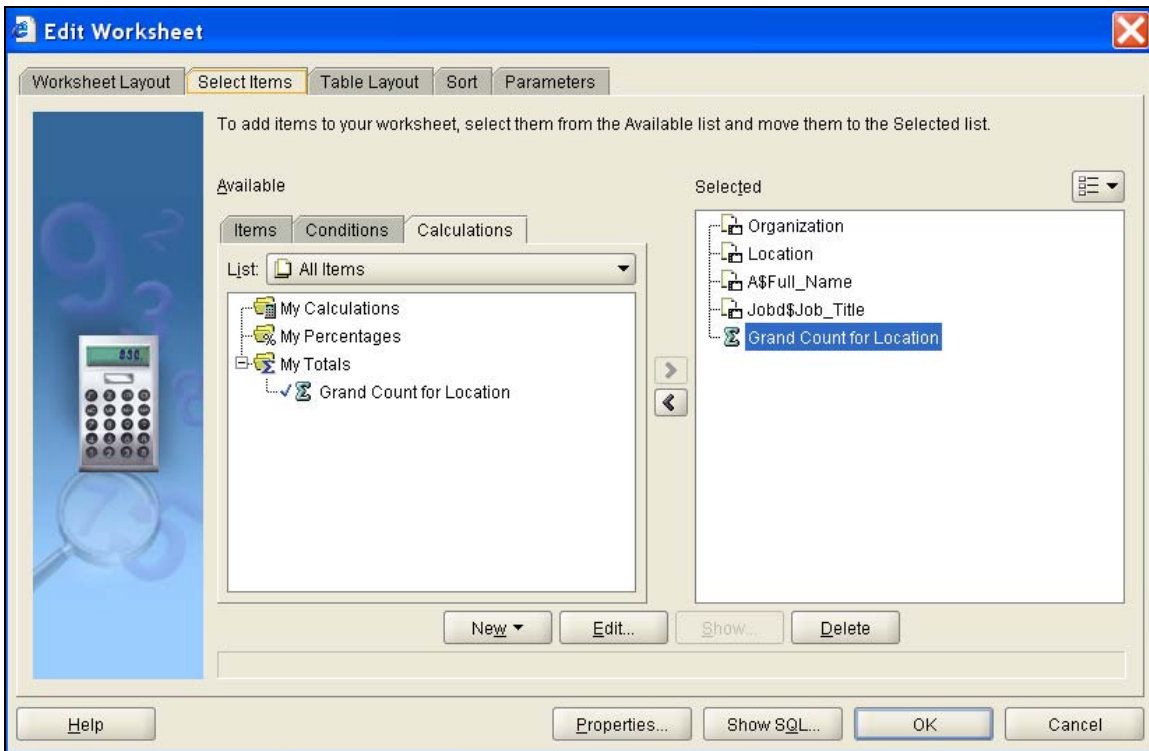
Select the New button. The New total Dialog box will open. Select on the data point drop down list and select the data point to use for the total.



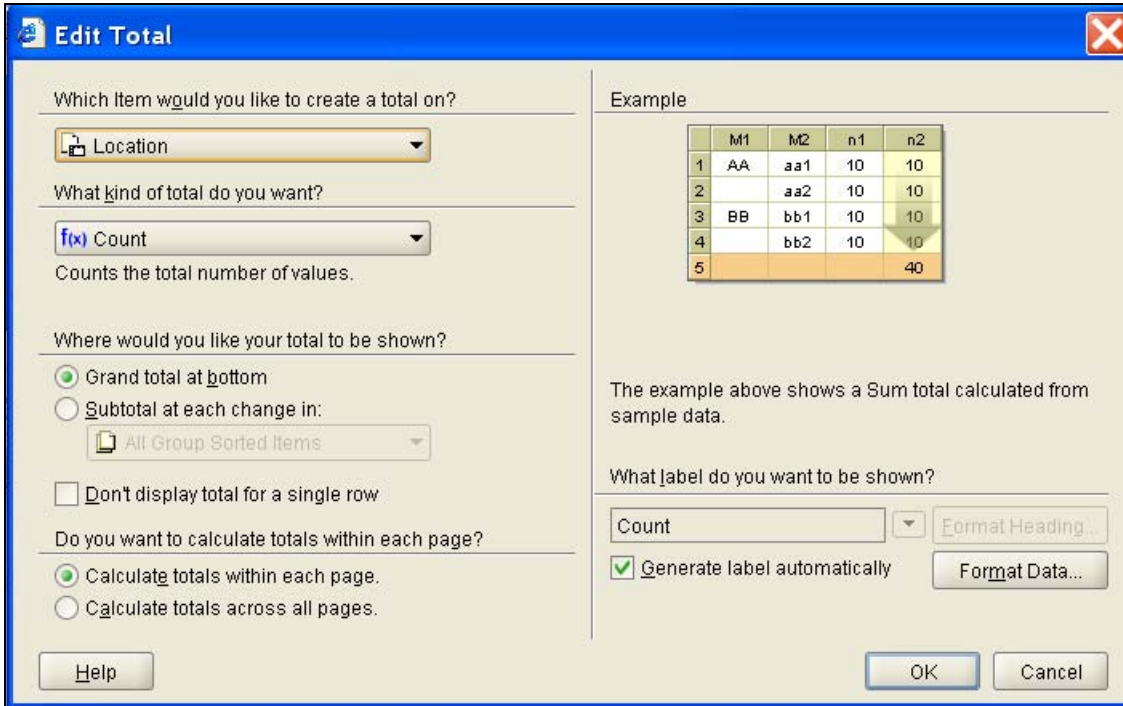
Select from the drop down list for the type total to display. The options will change depending on the type data being totaled.



Select location for the total to be displayed.



Then select OK. To edit the total, select Tools/Totals from the menu. Select the Edit button.



The Edit Total dialog will appear. Make the required changes and select OK.

8. Chapter 4– Graphs

8.1 Using Graphs in the Reports

By using a graph, there is a pictorial presentation of the data in the report. The graph can also be used as an analysis tool to visually highlight trends. Discoverer includes the following types of graphs: area, bar, line, pie, scatter graphs, and several others. The Graph Wizard helps create and edit the graph used in the report.

Any changes to the data in the worksheet, the graph will automatically update, showing the new data. Graphs are also automatically saved with the worksheet.

Graphing Terminology

The following are the terms used by the Graph Wizard.

Selecting the Correct Graph Type

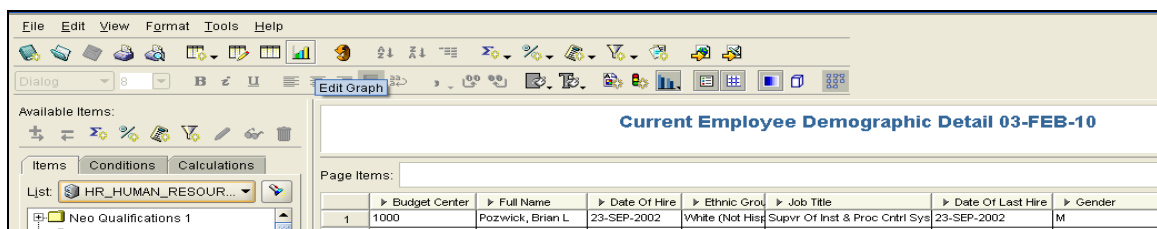
When using Discoverer to present the data in a graph, there are 12 graph types from which to choose. Each of these will have several sub-type variations within them. An example of this is in the Area Graph; the sub-types are Area, Percent Area, and Stacked Area.

Most of the sub-types have a 3-D effect that can be turn on or off by using the 3D-Effect check box.

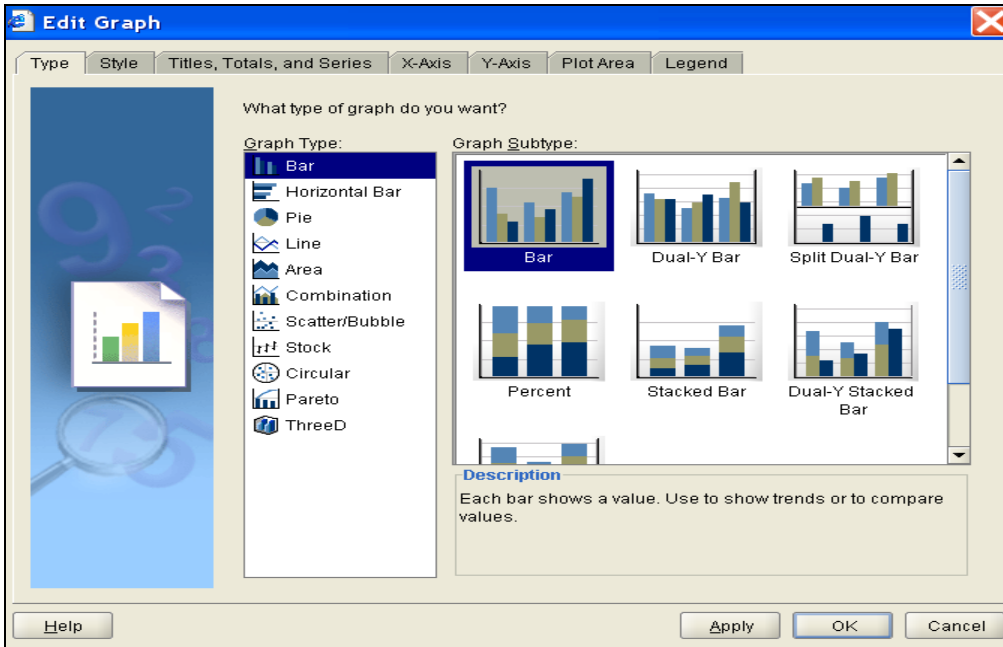
Discoverer utilizes a Graph Wizard to create a graph of the worksheet data. Every time the Graph Wizard is used, Discoverer saves the settings for the next graph.

8.1 Creating a Graph

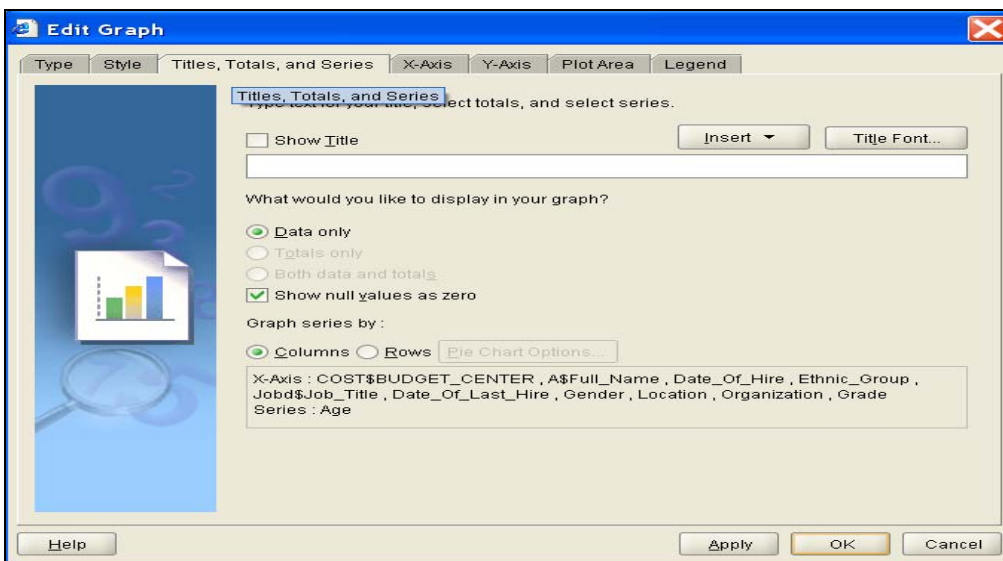
1. Select Graph from the menu, choose New Graph and the Graph Wizard appears.



2. Select type of graph by selecting on the icon for the Graph type. Then select the sub-type graph to use. In the description box on the bottom of the wizard will be a description of the purpose of each type graph. If the check box for the 3D Effect is active, select it to make the graph appear to have more depth. Then select Next.

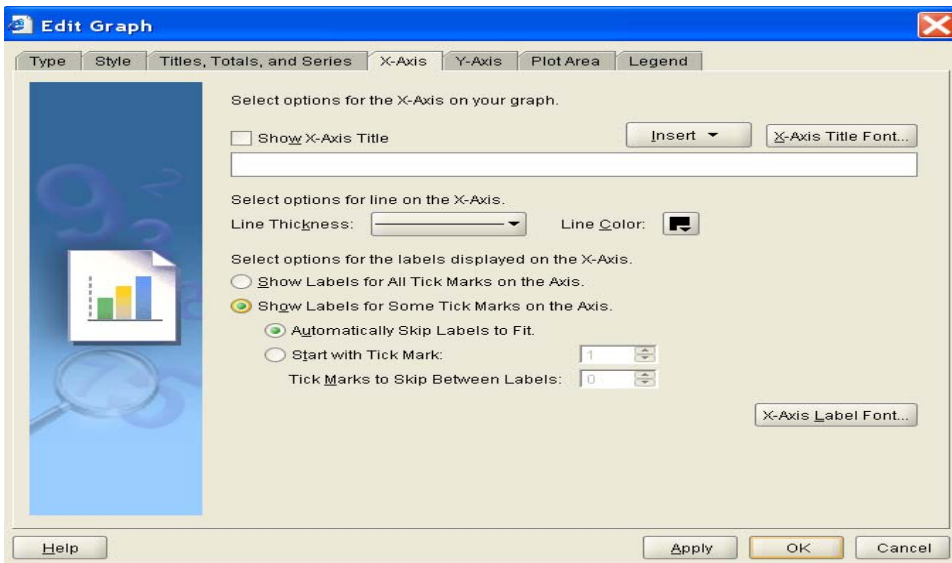
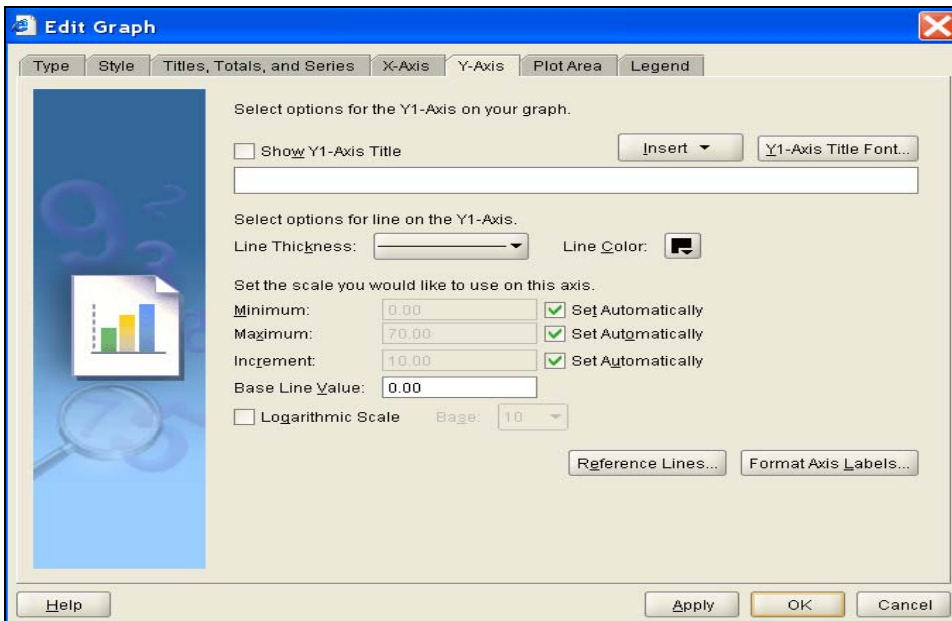


3. The Titles, Totals, and Layout Dialog box will appear. To add a title on the graph, put a check in the Show Title box. Then type in the title. Select the Insert button to insert a date, time, or other worksheet information, and then select the item to add. Select the Font button to choose the font and color you want the title.

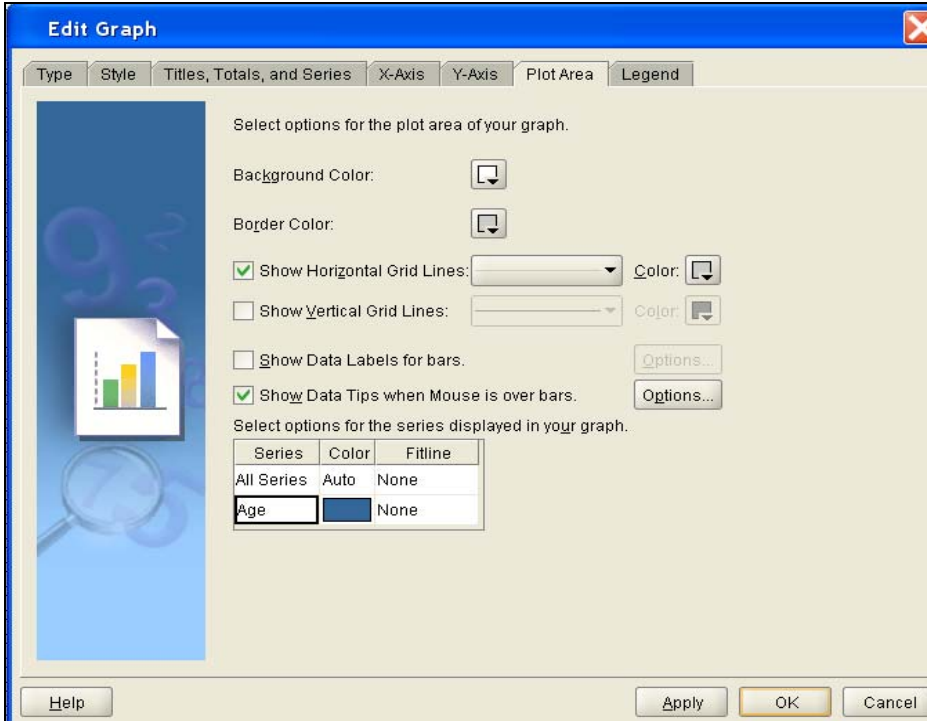


4. Then answer the question, “What would you like to display in your graph?” by selecting one of the radio buttons.
 - Data Only to graph all the data point values of the worksheet excluding any totals.
 - Totals Only to graph only the data in the totals row of the worksheet.
 - Both Data and Totals to graph everything in the worksheet.

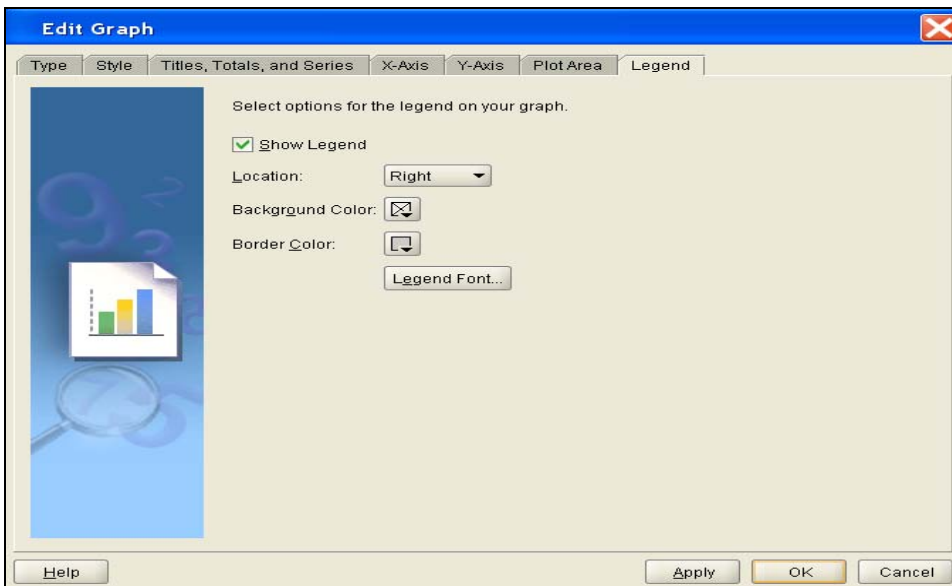
5. If creating a Dual-Y graph, the Y2-Axis dialog will appear, repeat step 8. Then select Next.



6. The Plot Area Dialog box will appear.



7. Do any of the following: choose background colors, choose line width and colors, select to show pop-ups, etc.
8. Select Next.
9. The Legend dialog box will appear. Make the necessary selections and select Finish.



10. After a short delay, the graph will appear. To reposition the graph if required by selecting from the menu Graph/Display Graph. There select the position for the graph.

8.2 Using the Graph Toolbar

The screenshot displays the Oracle Discoverer interface. On the left, there is a tree view of available items under 'HR_HUMAN_RESOUR...'. The main area shows a table titled 'Current Employee Demographic Detail 03-FEB-10'. The table has columns for Budget Center, Full Name, Date Of Hire, and Ethnic Gro. A pie chart is visible on the right side of the table, representing 100% of the data.

	Budget Center	Full Name	Date Of Hire	Ethnic Gro
1	1000	Pozwick, Brian L	23-SEP-2002	White (Not His)
2	1000	Lowery, Ramona N	04-AUG-2008	Black or Africa
3	1000	Poole, Stephen E	26-SEP-2005	White (Not His)
4	1000	Harshbarger, Allen	14-MAR-2005	White (Not His)
5	1000	McNeeley, David	18-MAY-1977	White (Not His)
6	1000	Weeden, Raymond	25-MAY-1981	Black or Africa
7	1000	Cox, Clayton T	02-SEP-1980	Black or Africa
8	1000	Klosz, James J	09-DEC-1985	White (Not His)
9	1000	Eisnaugle, Lowell E	05-MAY-1975	White (Not His)
10	1000	Woodruff, Kathryn	03-DEC-1990	Black or Africa
11	1100	Austin, Giovanni D	15-JUN-2009	Black or Africa
12	1100	Blotzer, Jimmy H	15-JUN-2009	White (Not His)
13	1100	Hawkins, Candice P	15-JUN-2009	Black or Africa
14	1100	Lee, Carl H	16-JUN-2008	Black or Africa
15	1100	Townsend, Tyvon C	15-JUN-2009	Black or Africa
16	1100	Watts, Bartelle T	18-MAY-2009	Black or Africa
17	1100	Glover, Amber N	15-JUN-2009	White (Not His)
18	1100	Leibetter, Nathanie	15-JUN-2009	Black or Africa
19	1100	Petty, Chense D	16-JUN-2008	Black or Africa
20	1100	Schreiber, Ross S	30-JUN-2008	White (Not His)
21	1100	Weaver, Brittany Y	16-JUN-2008	Black or Africa
22	1100	Shaver, Matthew A	17-FEB-2009	White (Not His)
23	1100	Stack, Matthew M	09-JUN-2009	White (Not His)
24	1100	Crum, James F	12-JUN-2006	White (Not His)
25	1100	Oriani, Matthew J	23-JUN-2008	White (Not His)
26	1100	Tomplins, Zakiya M	23-JUN-2008	Black or Africa
27	1100	Murph, Lamont L	06-JUN-2005	Black or Africa
28	1100	Theil, Ryan E	21-MAR-2005	White (Not His)
29	1100	Olsieski, Thomas J	10-JUN-2002	White (Not His)
30	1100	Tanko, Eric C	06-FEB-2006	White (Not His)

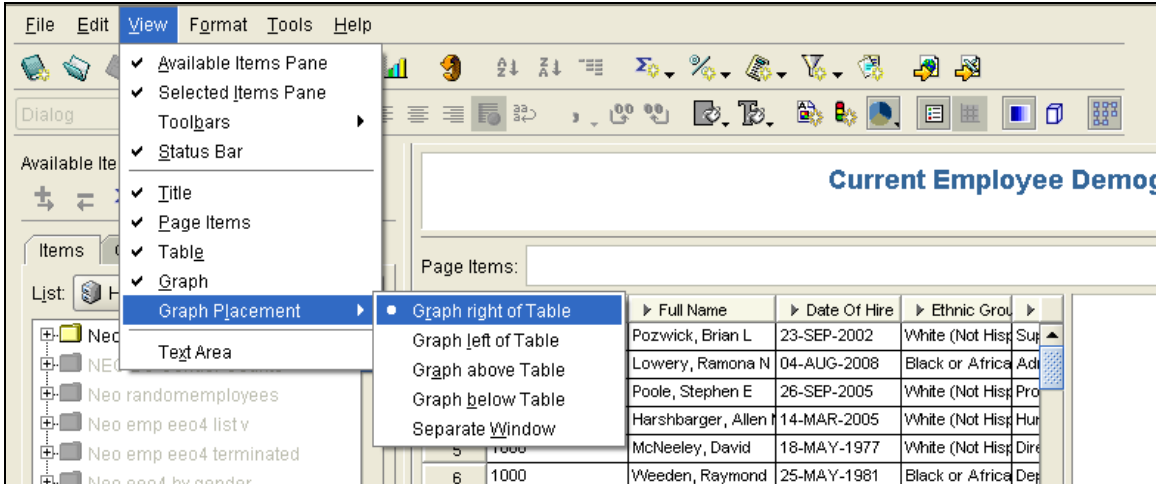
When working with graphs, there is a Graph Toolbar that will be available to make changes to the appearance of the graph without having to go back into the graph wizard. With the toolbar, changes to the fonts, colors, text alignment, and graph type can be made.

8.3 Saving the Graph

When the worksheet is saved, the graph is automatically saved. If any changes are made to the data in the worksheet, the graph will be updated automatically.

8.4 Deleting the Graph

To delete the graph go to the Graph menu and select Delete Graph. A warning message will appear. Select Yes to delete.



9. Chapter 5 – Exporting and Printing

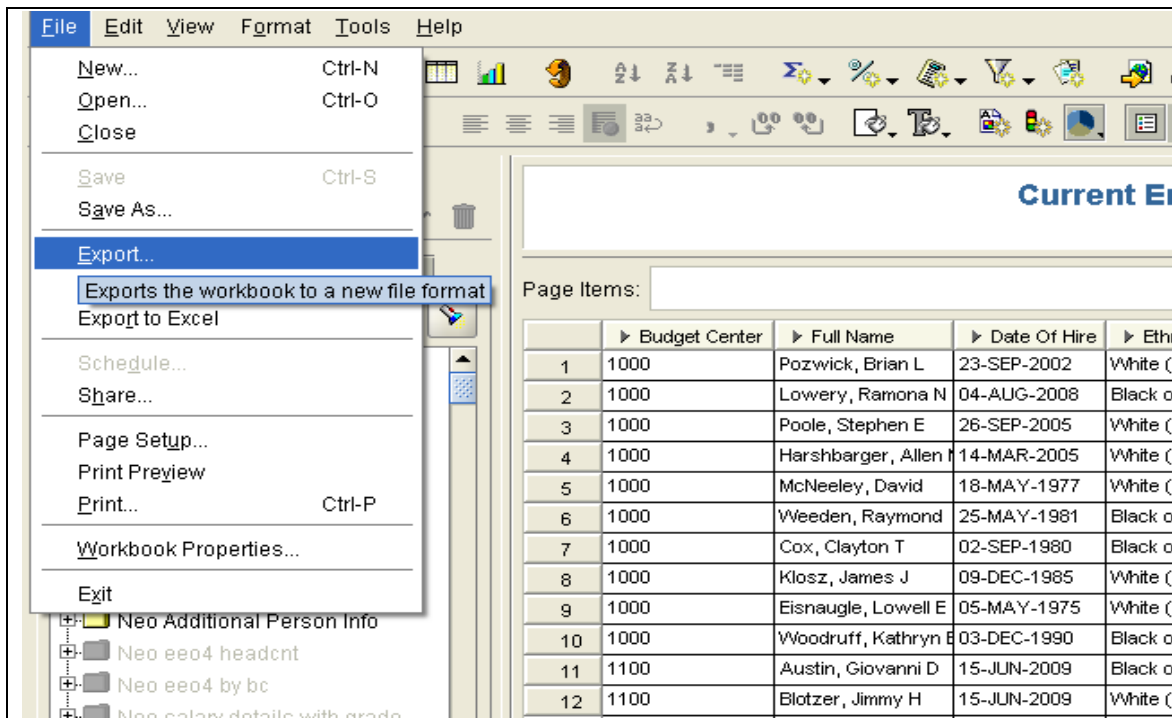
9.1 Exporting Results

Discoverer utilizes an Export Wizard to assist in sharing the workbooks with others. To export a workbook into popular application formats such as Microsoft Excel or HTML, Discoverer provides the Export Wizard. Discoverer also provides a shortcut to either Excel or HTML on the toolbar and the file menu since both of those formats are so popular in the business world.

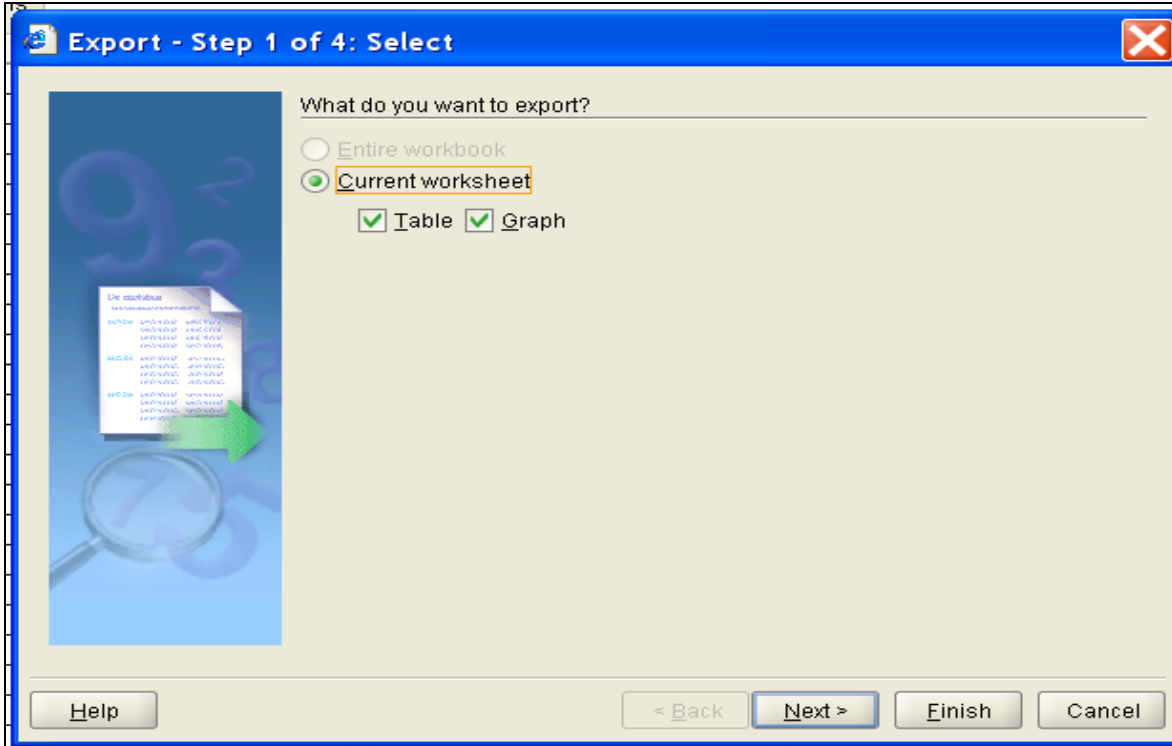
Using the Export Wizard, the report as seen on the screen appears as close as possible in the other applications.

To export to other applications

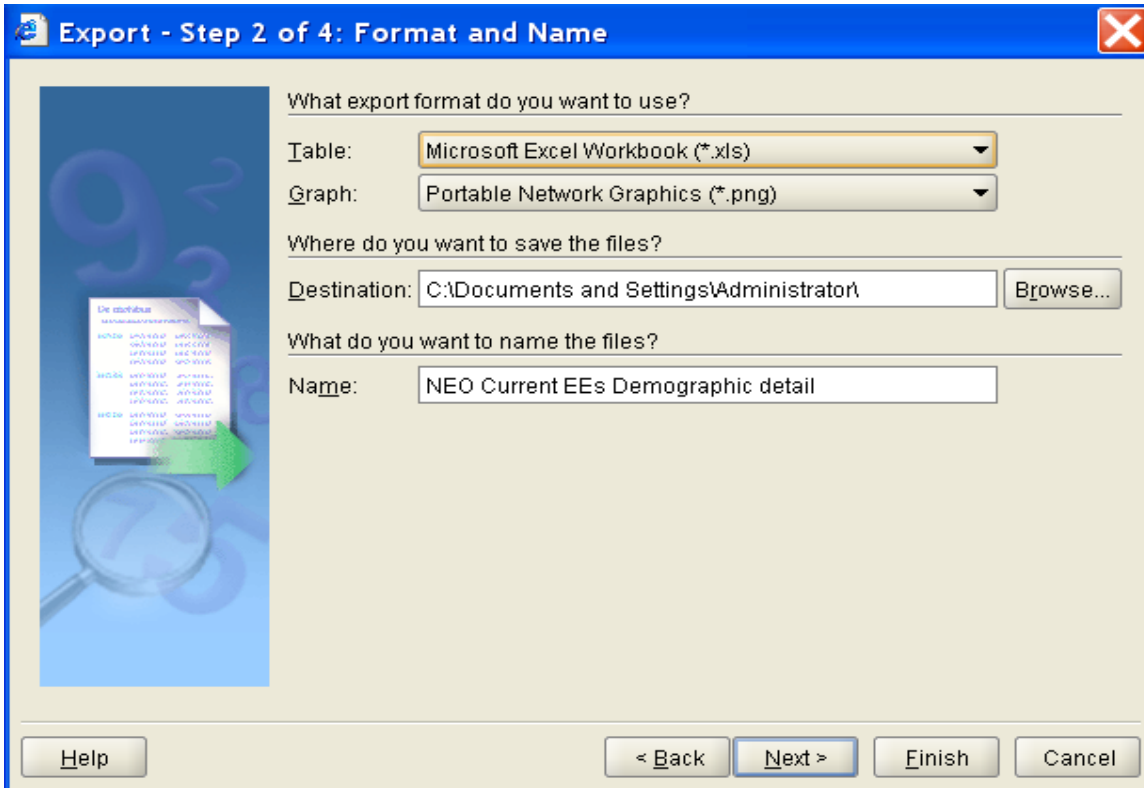
1. Open the workbook to export.
2. From the menu choose File/Export

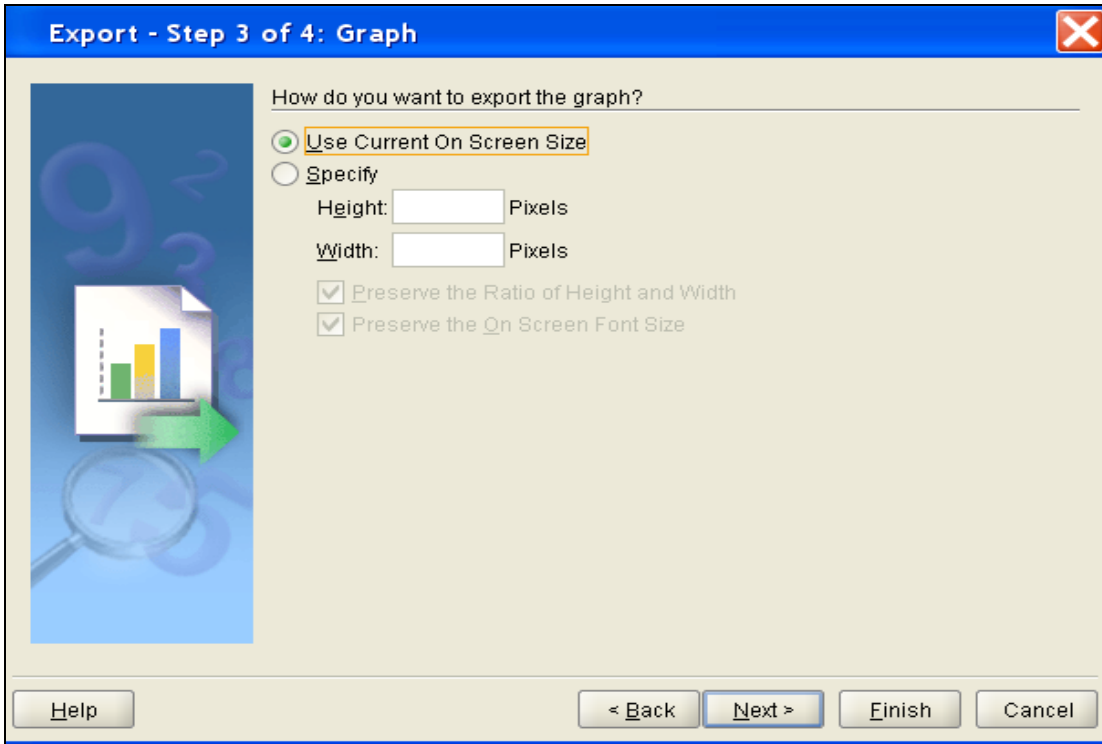


3. The Export wizard will open. Answer the questions on this page then select Next.



4. On page three of the wizard, if there is a graph, select the size of the graph. Then select Next.

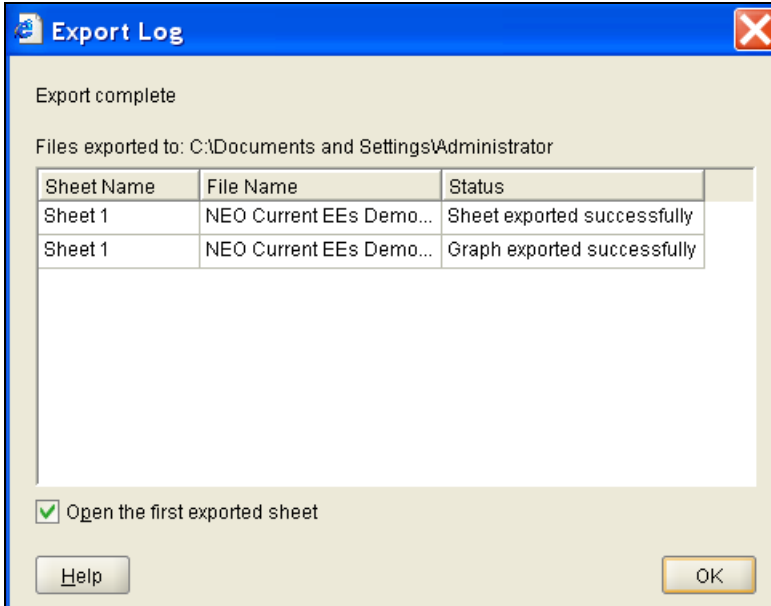




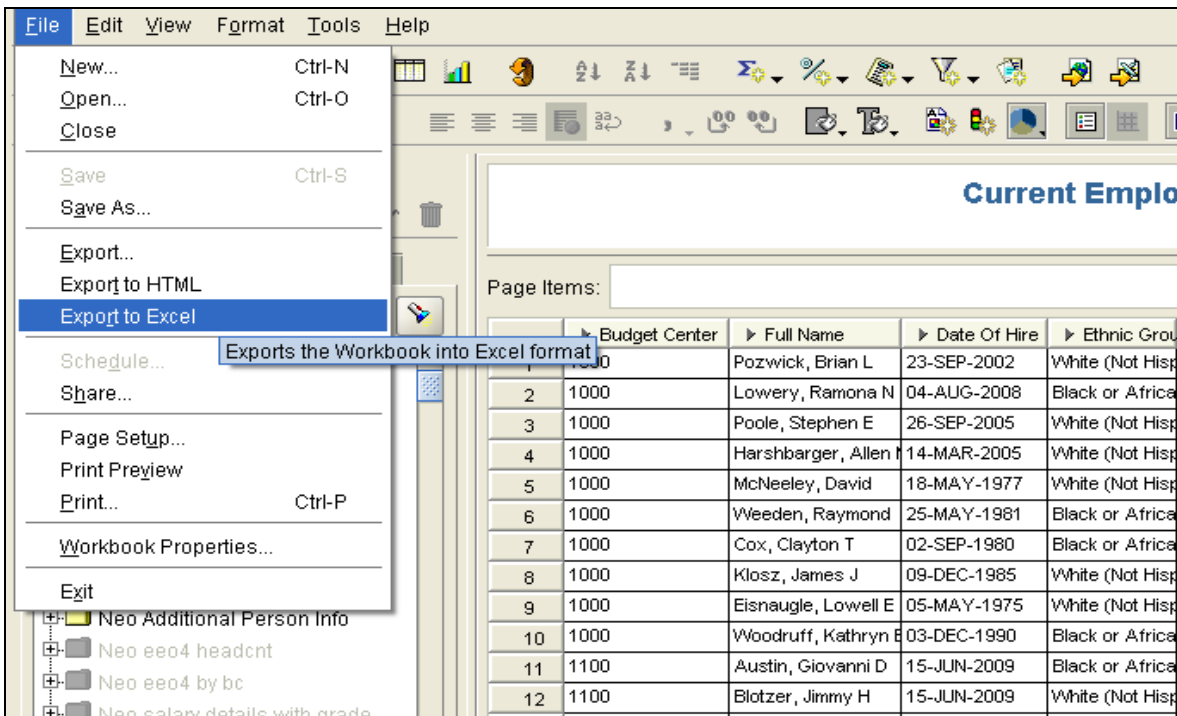
5. If there are any parameters in the report, answer the questions in the Choose Parameter page. Then select Next.



6. The worksheets are saved in the format selected and in the directory selected. An Export log will appear, showing the status of the export.



7. On page two of the wizard, select the export format from the pull down list, then select the location and file name for
8. Select the File/Export to HTML menu option or select the Export to HTML icon on the toolbar.



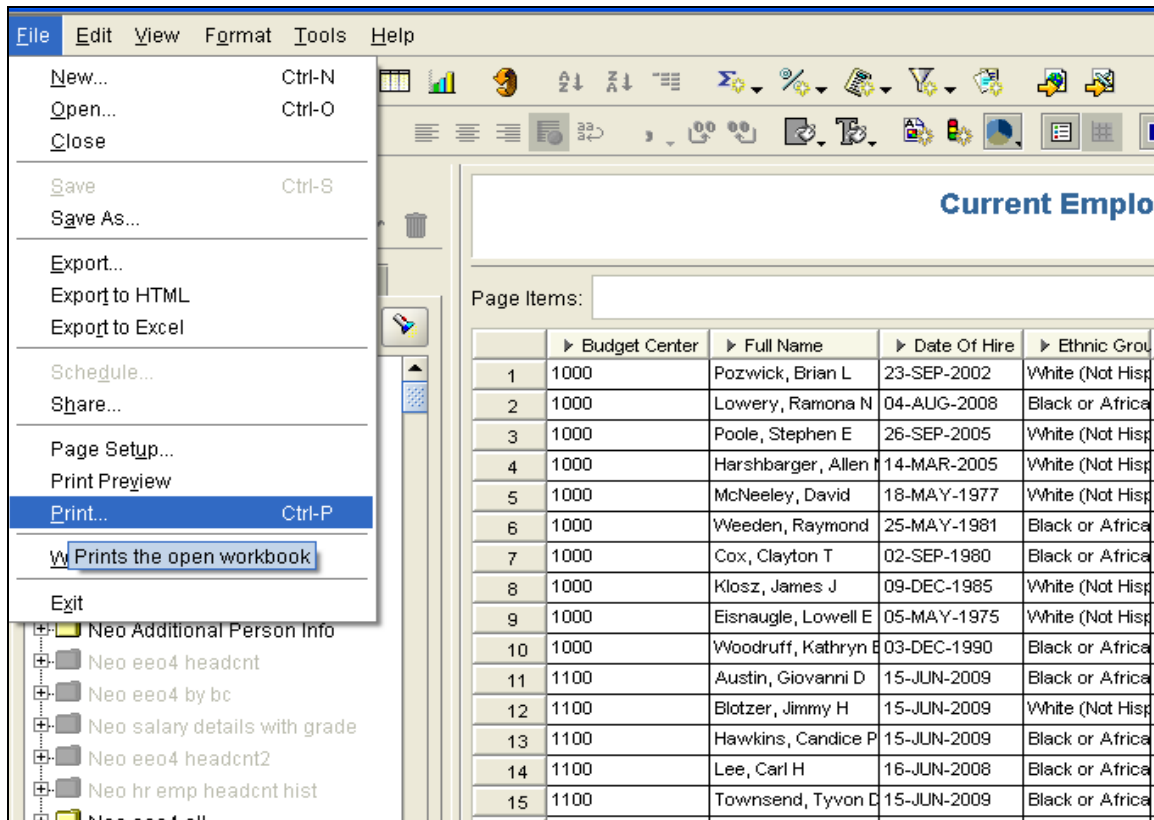
9.2 Printing Workbooks and Graphs

Discoverer provides a Print Wizard to assist printing worksheets and graphs. Utilizing this wizard what is seen on the screen will be printed out the same way on paper.

If the worksheet is a paged table or crosstab, then each page of data will have to be printed individually, since Discoverer prints exactly what is seen on the screen.

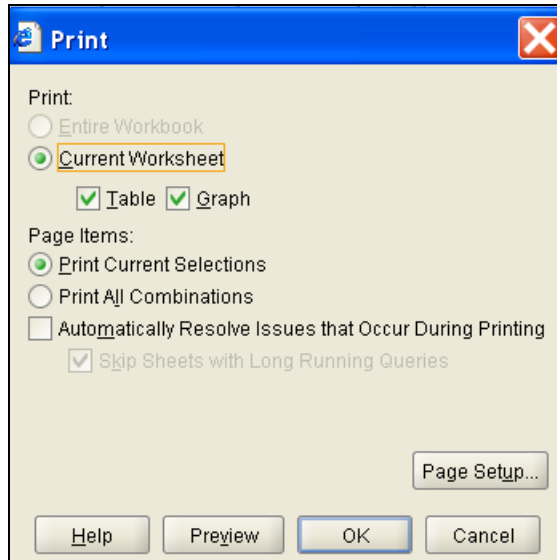
To print worksheets and their graphs

1. Open the worksheet to print.
2. Select the menu option File/Print. The Print wizard will appear. This is a 3-page wizard.
3. Answer the questions. If printing a sheet that contains a graph or if printing a graph only, the wizard will go to page two. Select Next.



4. Select the options for the graphs being printing. Select Next.
5. If the worksheet contained Parameters, a Print Parameter Page dialog box appears, answer the questions. Select Next.

6. On page four of the wizard, choose either to have the print run supervised or unsupervised. Discoverer occasionally will give alert messages on run time or database returns more information than the maximum. Choosing the supervised print, these messages will be seen. Utilizing the unsupervised print, all alert messages are ignored. Select finish to print the worksheet.



Note: If exporting or printing a paged-worksheet then repeat the above steps until every combination is either exported or printed.