Oracle Discoverer 11g

Viewer User Guide

Finance Training

UNIVERSITY OF CAMBRIDGE
Finance Division

Contents Page

1. Introduction to Discoverer Viewer

1.1 What is Discoverer?

Discoverer 11g is an ad-hoc query, reporting and analysis tool that allows users to gain access to information from CUFS Live. It differs from other CUFS enquiry and reporting options because it allows more bespoke query definitions across multiple departments (for users with multi-department access rights).

1.2 What is Viewer?

The Viewer function of Discoverer allows users to interrogate CUFS data using pre-defined query worksheets contained in workbooks.

Users are offered flexible parameters to customise the query templates whilst avoiding the need to be conversant with specialist database query language and design techniques.

Viewer users run the queries and return the results in a form where they can modify layouts and formats before saving and/or exporting the results.

The Viewer retrieves real time data from CUFS Live.

1.3 Access to Viewer

Access to Viewer is from within CUFS Live using a responsibility from the U.F.S. E-Business Suite Navigator page.

Existing Discoverer users will automatically be given a Viewer responsibility in CUFS Live.

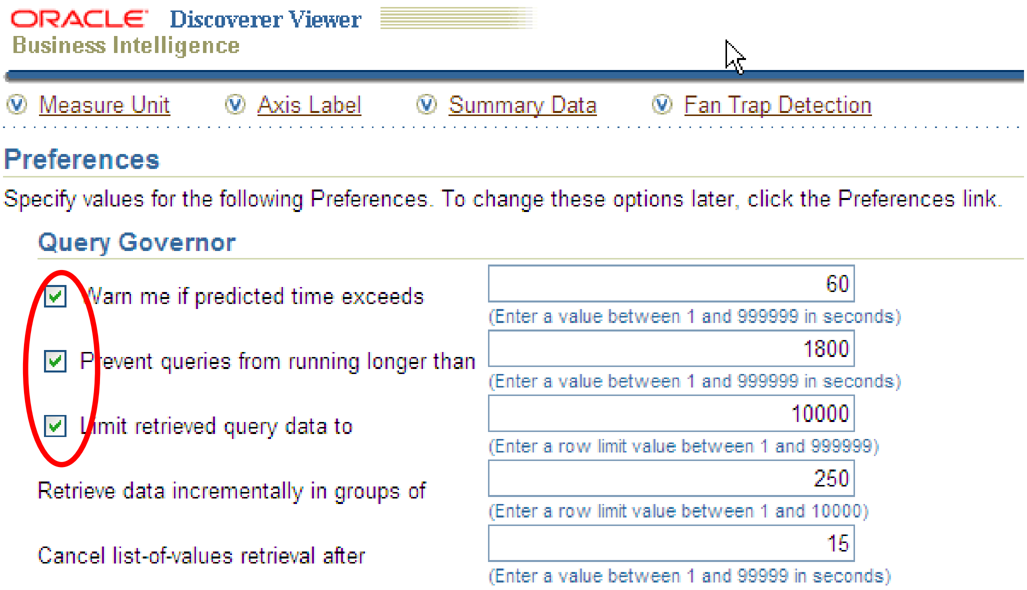
New users will be given access to the Viewer by making a request through their Key Contact to CUFS helpdesk.

Users will have different levels of access to Viewer based on the responsibilities they are given.

A central responsibility such as **AG DISCOVERER VIEWER** will have wider access to data than say **RA DISCOVERER VIEWER.**
Functionality in the Viewer is the same for everyone, regardless of responsibility.

1.4 *Preferences in Viewer*

The main options under the ***Preferences*** link concern the settings for managing data retrieval. The screen shot below shows the ***Query Governor.***



Each of the first three settings can be enabled/disabled by using the tick box.

Warn me if predicted time…these estimates are not always reliable. With this setting enabled, Discoverer will ask whether the user wishes to proceed with a query whenever the estimate exceeds the Query Governor setting.

Prevent queries running longer than….!! this setting should always be enabled and queries should not run for excessive periods. If they do, it is likely that the data range is too large, or the parameters are inappropriate. Excessive run times will take resource from other CUFS Live users

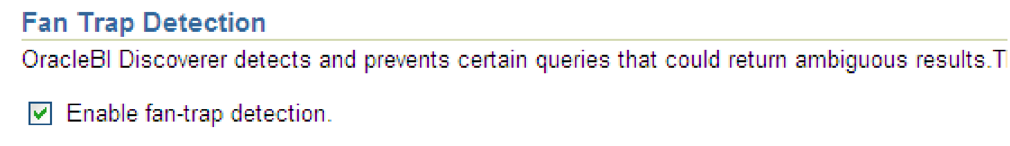
Limit retrieval data to….an absolute limit on the number of records retrieved.

Tip Take care to review this regularly if setting a low limit.

Retrieve data incrementally……this setting specifies the size of each "batch" of records within a total set – it does not limit the total records retrieved and the user is prompted until all records are returned.

Cancel list of values retrieval…. Use this field to define the maximum time you want to wait while Discoverer retrieves list of values items.

Fan Trap Detection
Leave this ticked to avoid potentially erroneous data or slow queries.



2 Workbooks and Worksheets

2.1 Access to workbooks

Workbooks are created by authors using the Discoverer Plus software. The authors are the “owners”. Viewers are given shared access to the workbooks by the Central Reporting Team (see 2.1 below).
Each workbook will contain at least one worksheet query based on a CUFS module. Users will see data from the query based on the access rights of the responsibility being used to access the Viewer.

Viewers can save their own version of a shared workbook (see section 4.5 below)

Note: **Saving a new version of a workbook deletes all sharing that applied to the old version**

2.2 Workbook listings

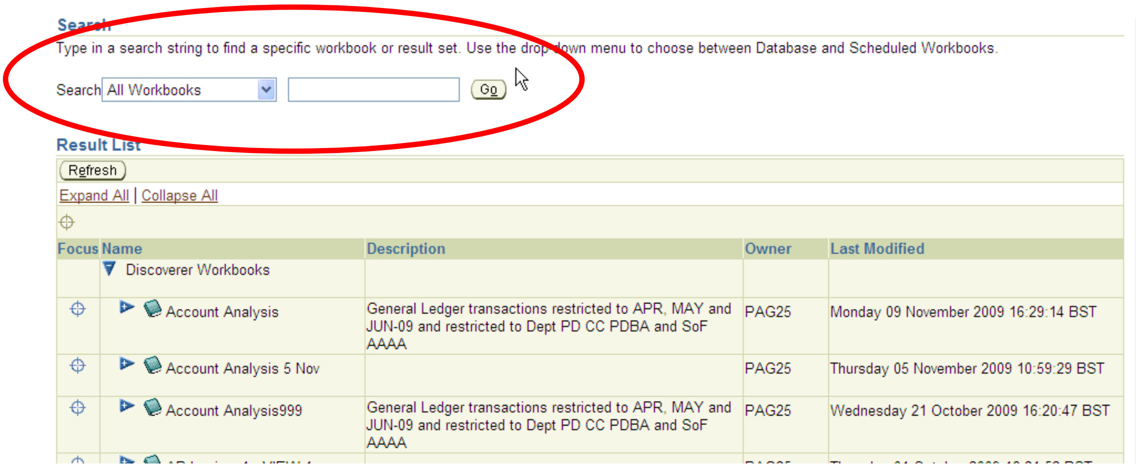
After selecting a Viewer responsibility you are presented with the Workbooks listing. This is the “home” page for Viewer and is the only menu path within the responsibility

Shared workbooks
The Finance Division Reporting Team will make workbooks available by “sharing” with Viewers in two ways:

1. Sharing a workbook with all users who have a particular responsibility
2. Sharing workbooks with selected users

Workbooks are listed alphabetically and each one has a description to define the data being retrieved and the conditions that will limit the query results.

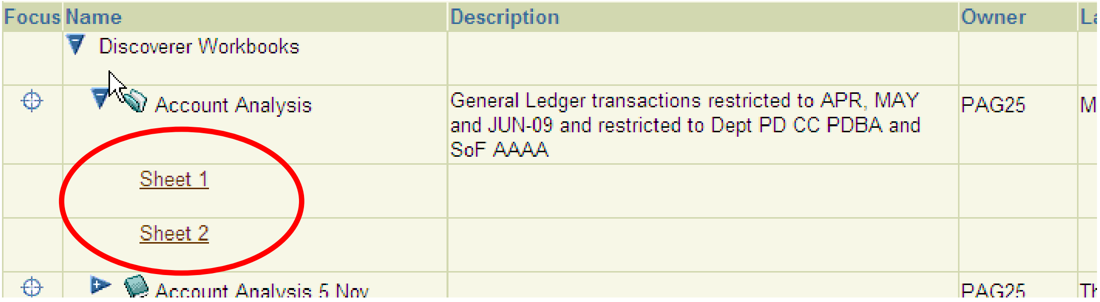
The ***search box*** allows the Viewer to ***filter*** on the workbook name



Expanding a Workbook

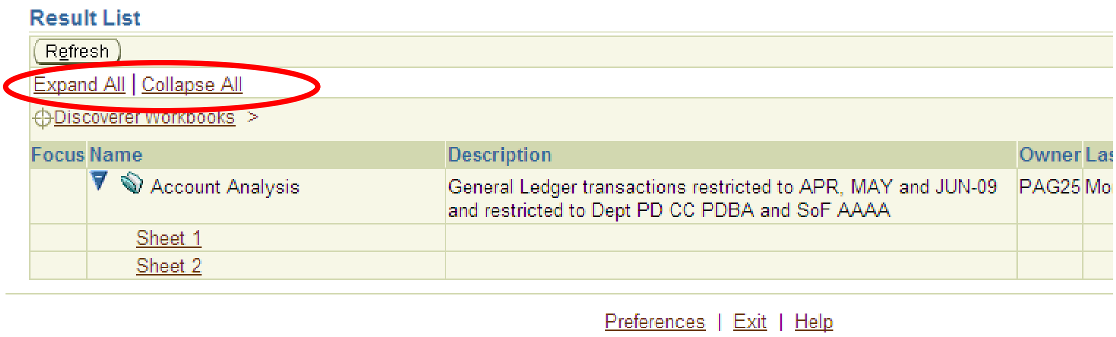
Clicking on the ***blue arrow*** beside a workbook reveals the ***Sheet(s)*** within the workbook.

Some workbooks will have only one sheet, others have more. For example a workbook showing General Ledger balances may contain four sheets – with balances for each quarter of a financial year.



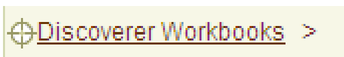
Expand All/Collapse All

To see (or hide) the contents of every workbook, click on the Expand All/Collapse All links



Focus on a workbook

The left-hand column of the workbook listing page offers the ***focus*** option. A single workbook and the sheets within it are returned by clicking on the symbol 

To go back to a ***full workbook listing***, click on the 

link.

3 Running a worksheet query

3.1 Running a query with <u>no</u> parameters

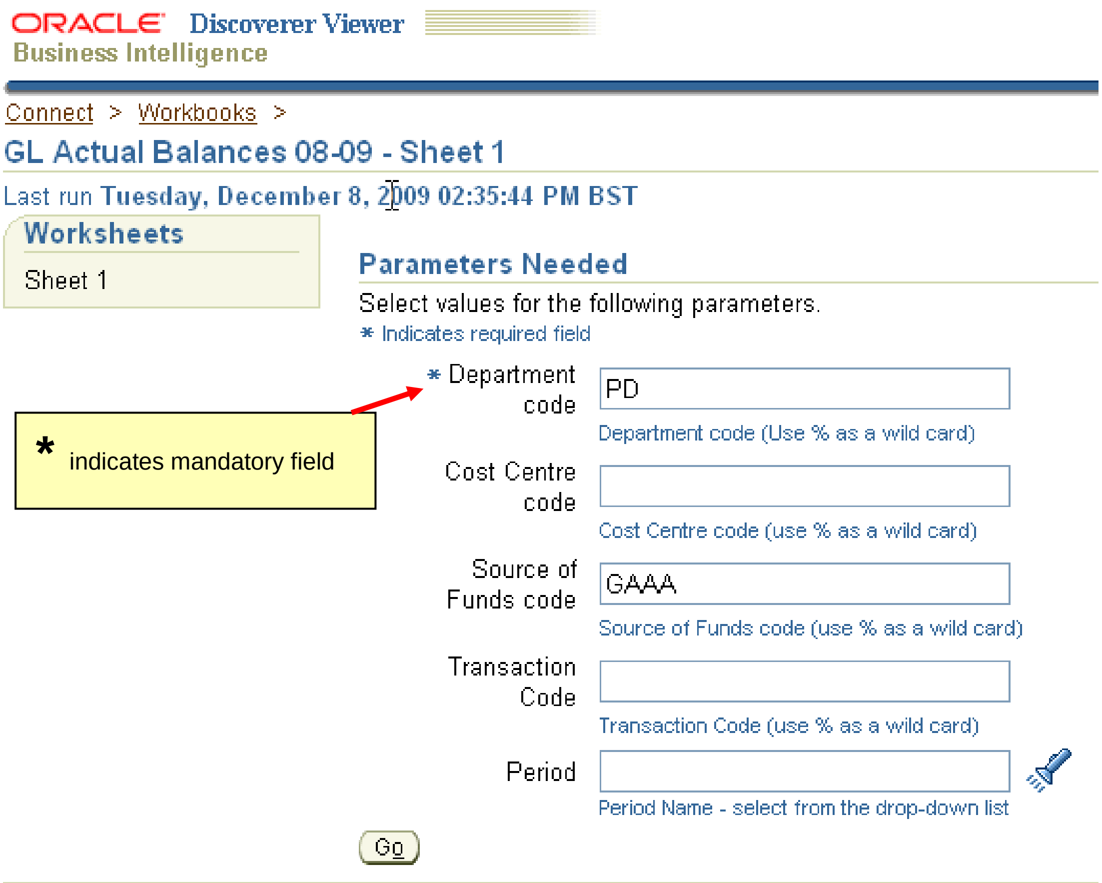
The workbook description will set out the scope and the type of data to be returned by the query.
Some queries will run without specifying any parameters beforehand. The data is limited by the underlying workbook ***conditions*** which often restrict data using account code and date ranges.

3.2 Running a query with parameters

Most workbook queries present the Viewer with parameter choices before running. These are in addition to conditions created by the workbook owner

Example: For General Ledger balances, the ***conditions*** may limit the query to the 2008-09 financial year.

In addition, the Viewer will be offered ***parameters*** to customise the data based perhaps on selected account codes or periods within the 2008-09 year.

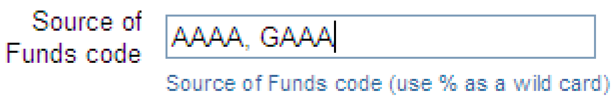


3.3 More about parameter selection

The workbook author will decide the parameter settings and the rules for selecting parameters

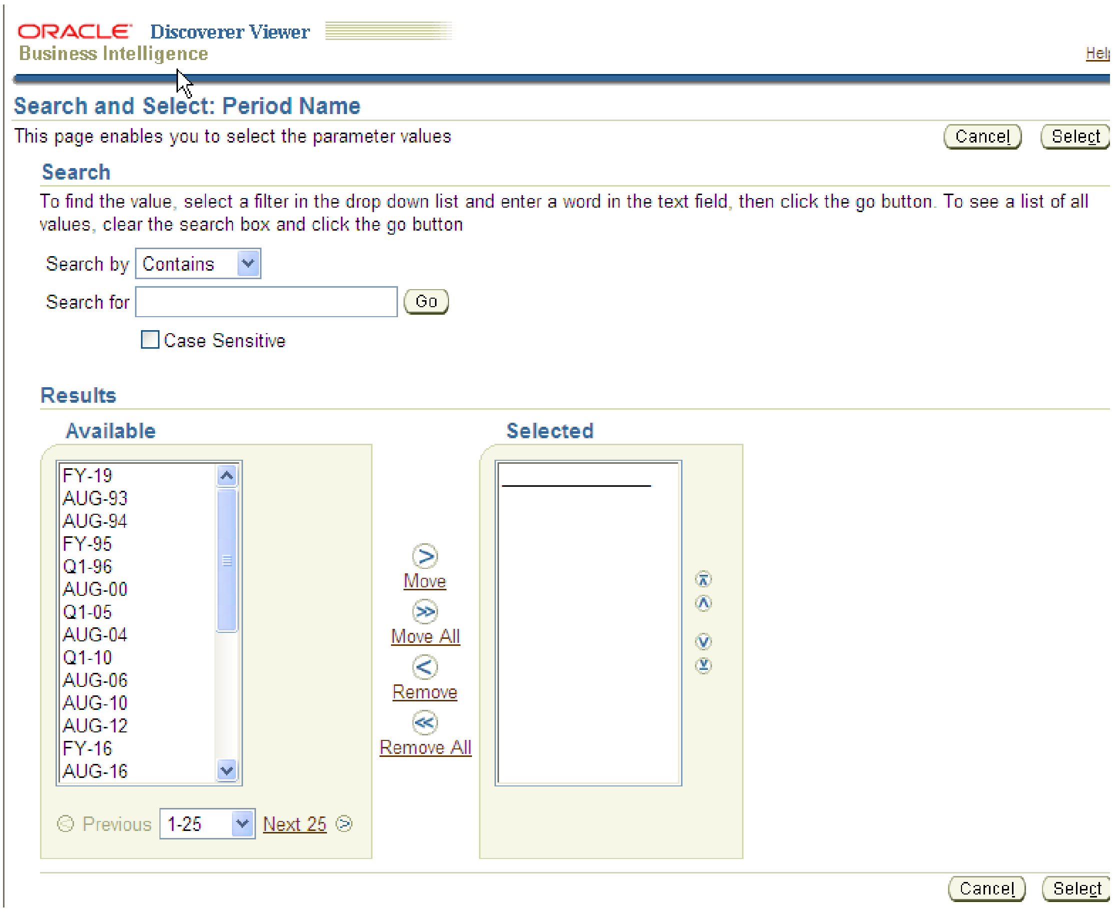
Entering parameter values

1) Parameter selections can be either a single value, a range of values (from/to) or a selection of values



2) Some parameter choices are mandatory – a value (or values) must be entered – indicated by the asterisk * symbol

3) Some parameter choices offer lists of values to select from:

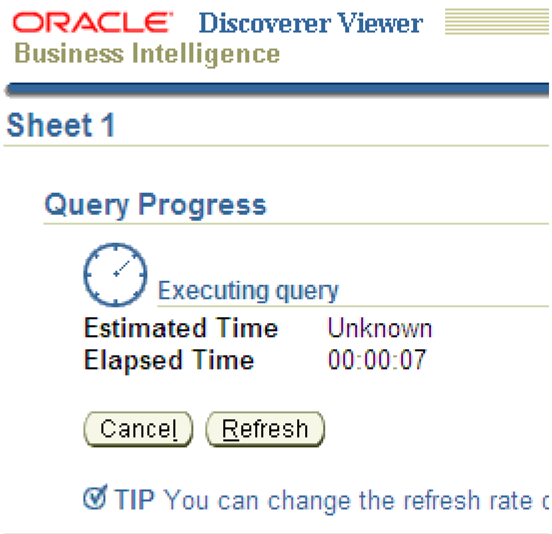


4) Some parameters are case sensitive (this will normally be stated if case sensitivity is on)

Take care when entering parameters because input errors or mistyping will lead to either no data or the wrong data being returned

3.4 Query runtime estimates and elapsed time

Once parameters are entered and the ***Go*** button is clicked, the query will start to run.



If your ***Preferences (1.4 above)*** are set to give a predicted time for the query, you will be asked if you wish to proceed, otherwise the ***Query Progress*** window will display until:

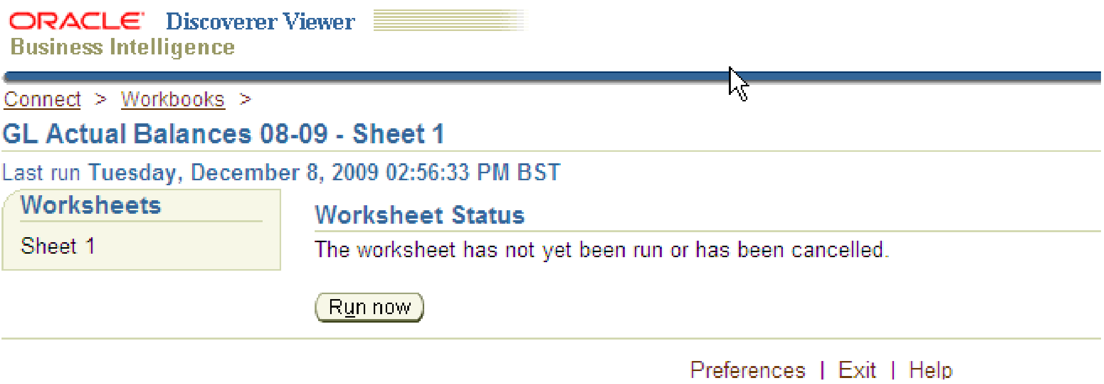
- the query completes and data is returned
- the query completes and **no** data is returned
- the query times out

A query that is running will refresh itself every few seconds, so the user does not need to click on the ***Refresh button***

Estimated run time
Some queries will give an estimated run time, but for some it will be unknown. The Viewer does not always accurately predict query run times but the user has the option to cancel a query at any time by clicking the button.

3.5 Cancelling a query

If the Viewer does opt to cancel a query, the system will begin the cancel routine and confirm the new status.



3.6 Re-running a query

After cancelling, the user can choose to run the query again by simply clicking the ***Run* now** button.
However, the user will often wish to change one or more parameters before re-running the query or just return to the Workbooks page. In both cases, click on the ***Workbooks* >** link

4 Viewing, modifying and saving query results

4.1 Viewing the data

When the query has finished running, the data will be returned as a table.

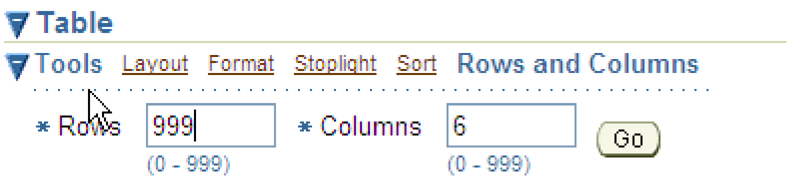
In the column header area, in blue type the total number of rows of data is shown and the number of columns that are being displayed (the default view may be less than the actual number of columns returned – this view option can be changed – see below)

Scrolling up and down

In the column header, the ***Down*** link acts as scroll button to show the next set of records in the query.
The default setting is to display 25 rows of data at a time; this can be changed by clicking the arrow. The options are 1, 5, 25 or 100 rows

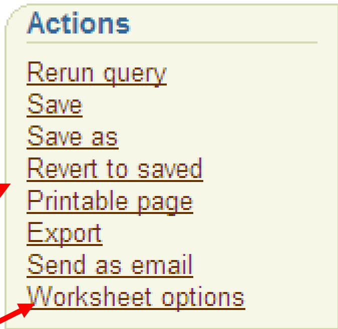
Rows and Columns tools link

The display setting for the number of rows can be customised up to a maximum of 999 by clicking the ***Rows and Columns*** link as illustrated below



The number of columns displayed can also be changed here – also up to 999.

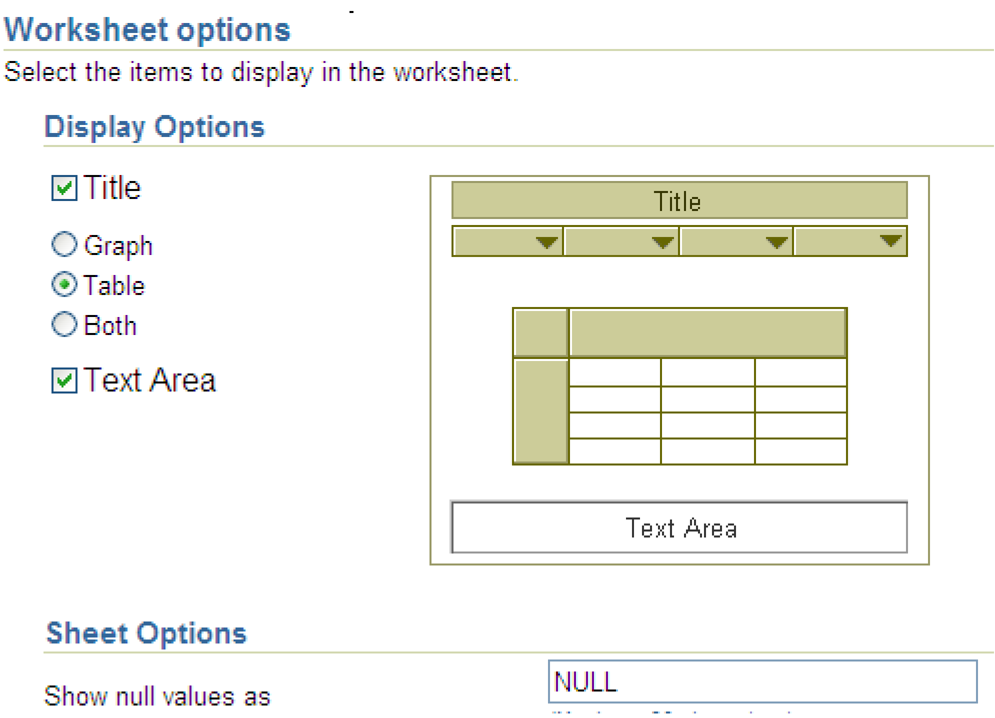
4.2 Changing the worksheet options



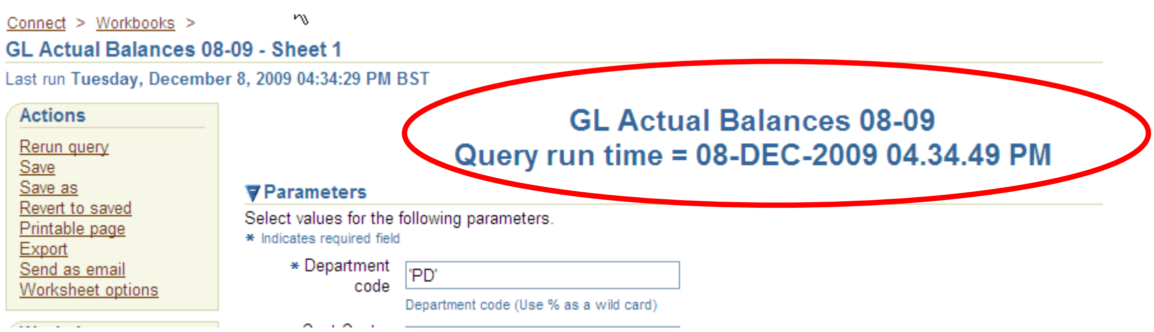
The user can change the view of the data in a number of ways – without having to rerun the query.

Note: All worksheet changes can be reversed by using ***Revert to Saved*** at any time

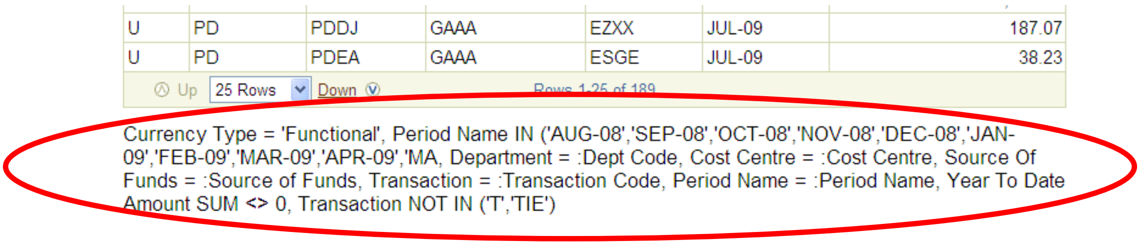
Click on the ***Worksheet Options*** link to change the settings (see screen shot below).



Title area (Workbook name)
The author of the workbook will give each query a name and may also add a field to display the time and date of the query execution.
This will display at the top of the web page.



Text area (Workbook conditions)
Users will need to know how the workbook data is restricted – by the conditions the author has applied to the query. These and other notes are displayed below the data table.

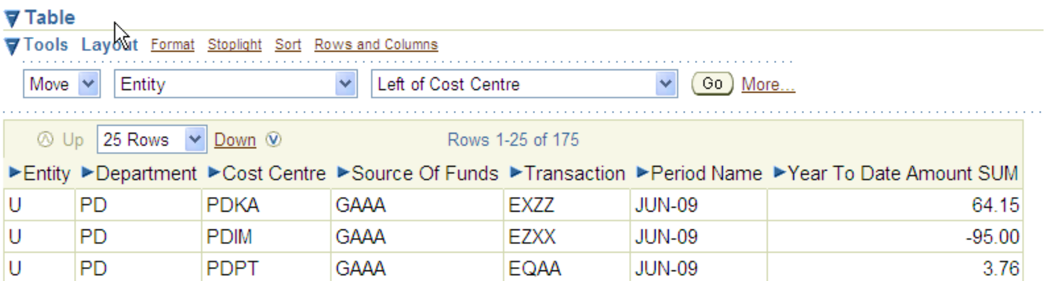


Null values
Sometimes, the data will contain cells with nothing - NULL - in them (as opposed to zero) The user can choose to show these cells as either **"NULL**", "**n/a", "-"** or simply blank (NULL is the default)

4.3 Changing the data layout

Changing column order

Click on the ***Layout*** link on the Tools menu. Three boxes appear which allow the user to move columns left and right



Tip	If you wish to hide a column from view, move it to the right hand side, then use ***Rows and Columns*** to reduce the number of columns displayed – excluding the rightmost column.

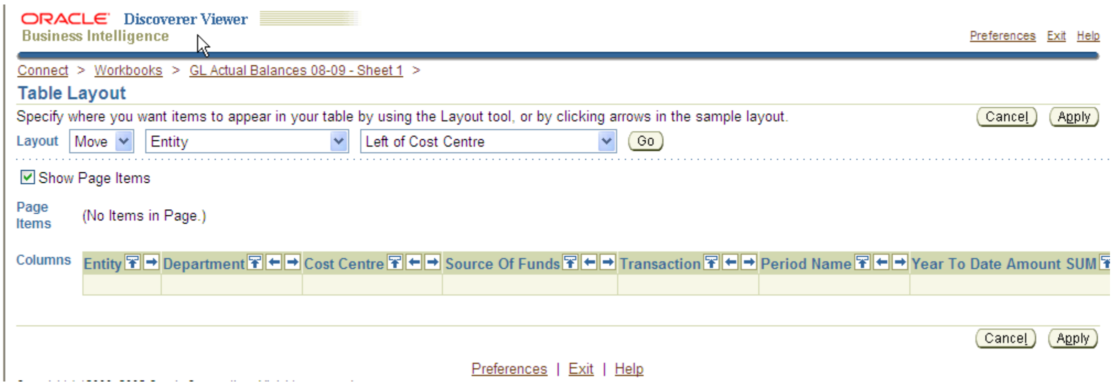
Alternatively, **columns can be hidden** as part of the Sorting functions (see Section 4.6 below

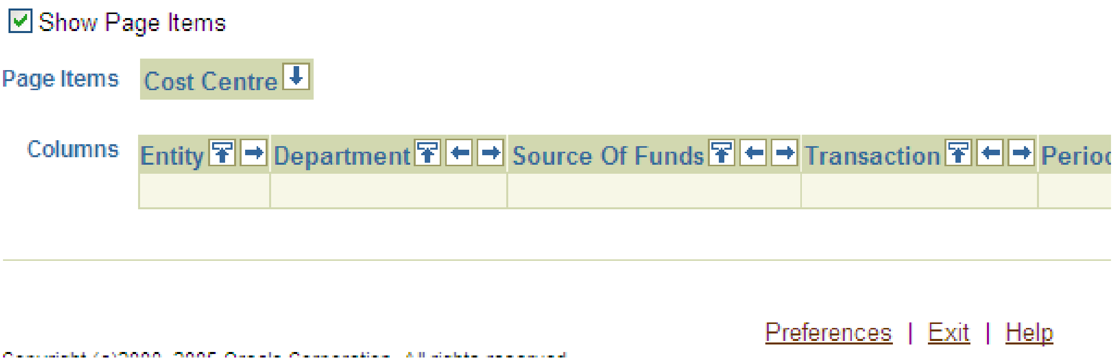
Note: Column order can also be changed by using the ***More…*** link – see 4.4 below for more information on re-arranging columns and creating page items

4.4 Creating a page item (also filtering data)

The Viewer allows one or more columns to be moved up as ***Page Items***. The page item can then be filtered for a single value, creating Pivot Table style three dimensional data layout.

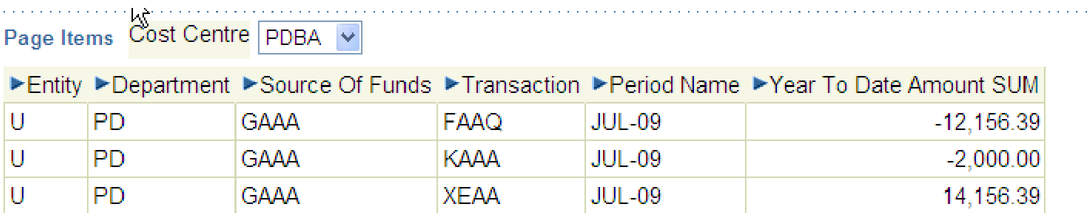
Steps: Staying in the ***Layout*** menu, click on the ***More…*** link
Choose a column heading e.g. Cost Centre and click the ***up arrow*** to add it as a page item.





Tick/untick the Show Page Items checkbox to specify whether or not you wish the Page Items to display on the results page.

Click on ***Apply*** the make the changes and the data is displayed with the new page item



Entity	Department	Source Of Funds	Transaction	Period Name	Year To Date Amount SUM
U	PD	GAAA	FAAQ	JUL-09	-12,156.39
U	PD	GAAA	KAAA	JUL-09	-2,000.00
U	PD	GAAA	XEAA	JUL-09	14,156.39

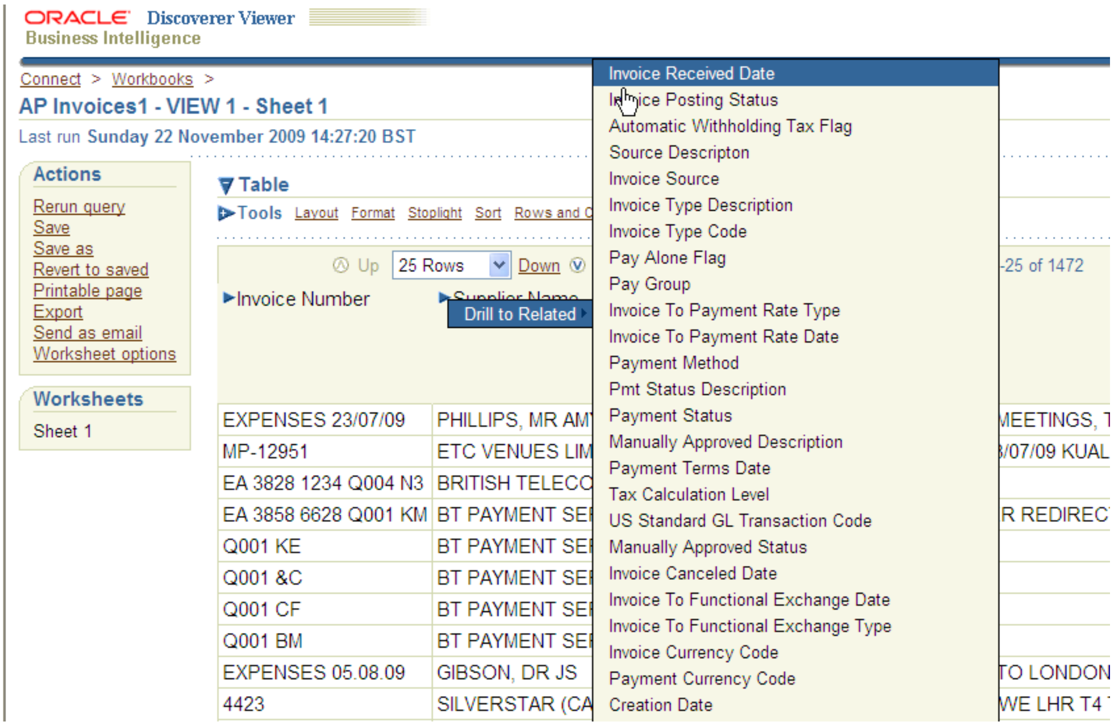
Moving columns left and right
Use the right and left arrows to re-arrange the column order

4.5 Drill to Related Data

Each column headings has a blue arrow. Clicking on the arrow brings up a ***Drill to*** listing.

The list contains related items – other data fields that are related to the CUFS module being interrogated. In the example below, additional AP Invoice fields are offered in the **Drill To** list.

When an item is selected, the query is refreshed and it is added to the data as an extra column.

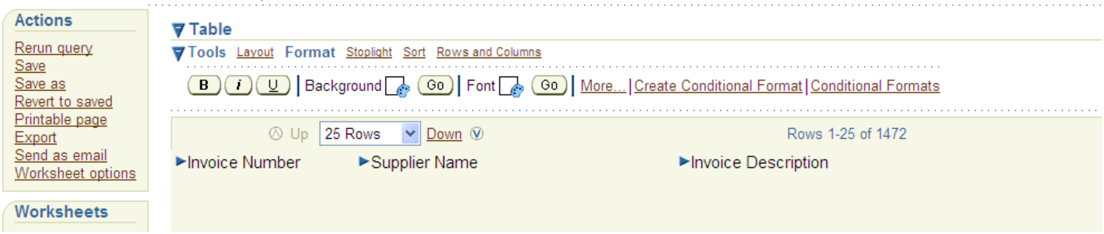


Hint: The **Drill to** list shows all available data fields.

Tip: Some fields may already be in the results but are not visible. Use the ***Rows and Columns*** link to show or hide columns.

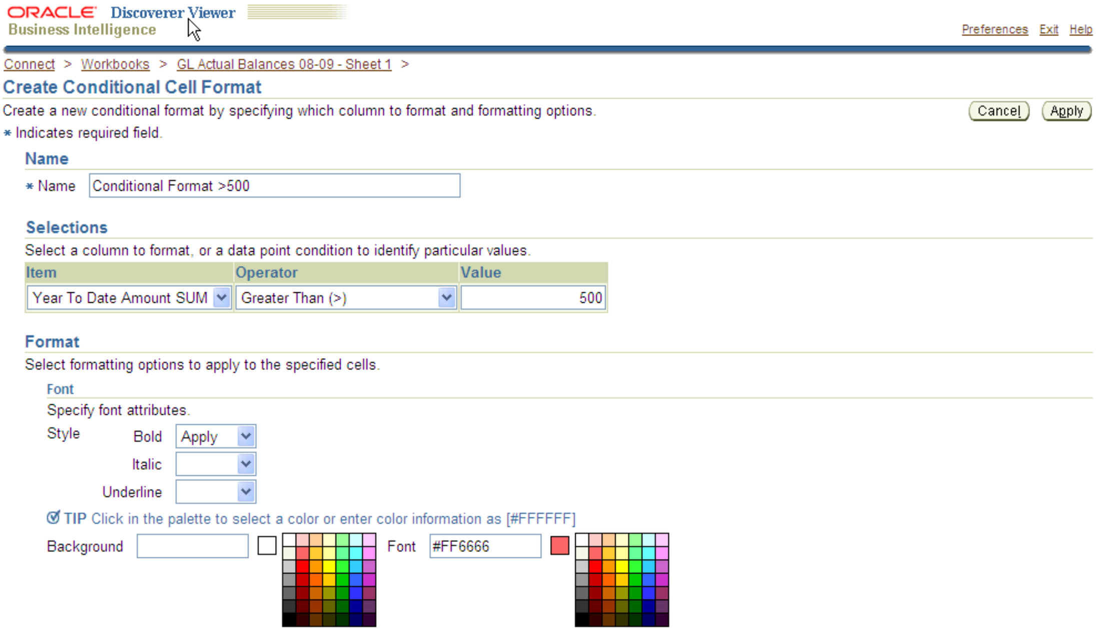
4.6 Formatting Data

In the ***Tools*** menu, select ***Format***



The data can be formatted as bold, italic and underscore. Background colours and font colours are all changeable. In addition, the Viewer allows conditional formats to be set using functionality similar to Microsoft Excel.

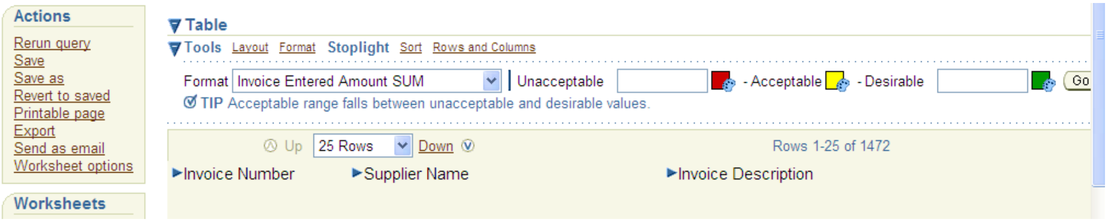
Conditional Formats



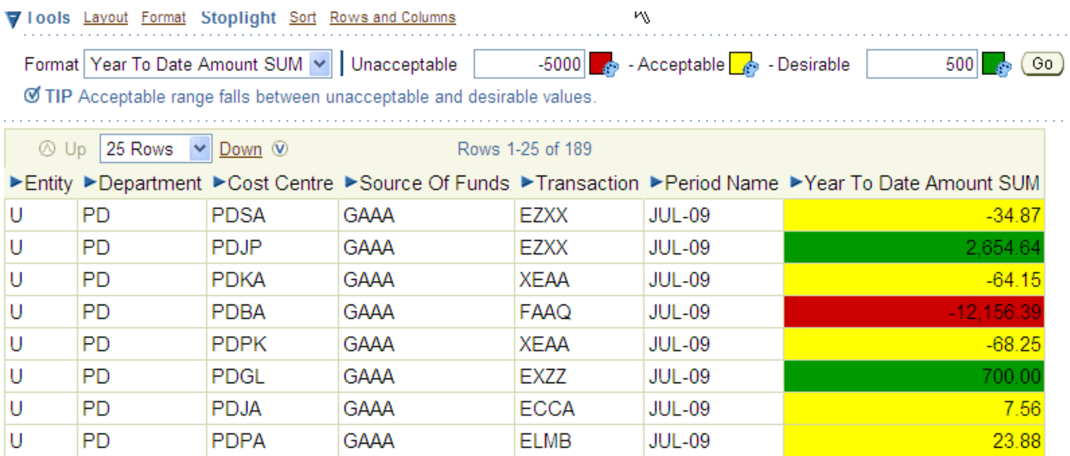
Stoplight formatting

Click on the ***Stoplight*** link on the Tools menu.

Choose the values above and below which you want to see highlighted red, yellow and green. Apply the formatting



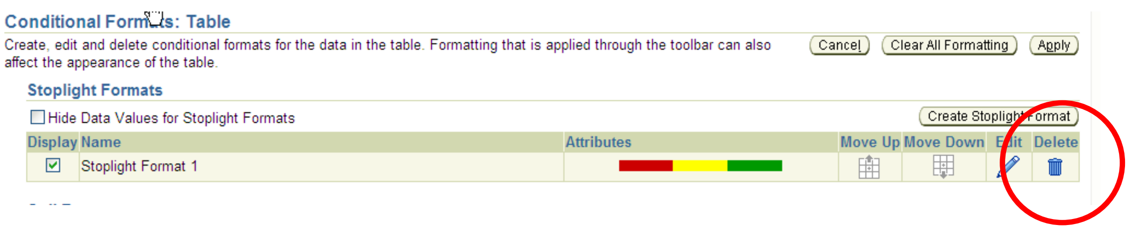
The selected column has stoplight colours applied



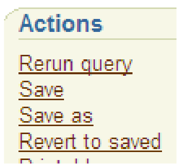
Entity	Department	Cost Centre	Source Of Funds	Transaction	Period Name	Year To Date Amount SUM
U	PD	PDSA	GAAA	EZXX	JUL-09	-34.87
U	PD	PDJP	GAAA	EZXX	JUL-09	2,654.64
U	PD	PDKA	GAAA	XEAA	JUL-09	-64.15
U	PD	PDBA	GAAA	FAAQ	JUL-09	-12,156.39
U	PD	PDPK	GAAA	XEAA	JUL-09	-68.25
U	PD	PDGL	GAAA	EXZZ	JUL-09	700.00
U	PD	PDJA	GAAA	ECCA	JUL-09	7.56
U	PD	PDPA	GAAA	ELMB	JUL-09	23.88

Deleting stoplight and other conditional formats

Click on the ***Conditional Format*** link above the data and click the ***Delete*** icon for the format you wish to remove



Remember:	The original worksheet layouts and formats can always be restored by clicking on the ***Revert to Saved*** link on the ***Actions menu***

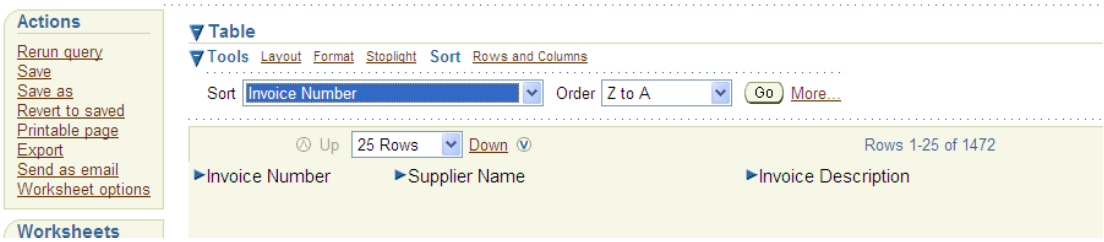


4.7 Sorting data and hiding columns

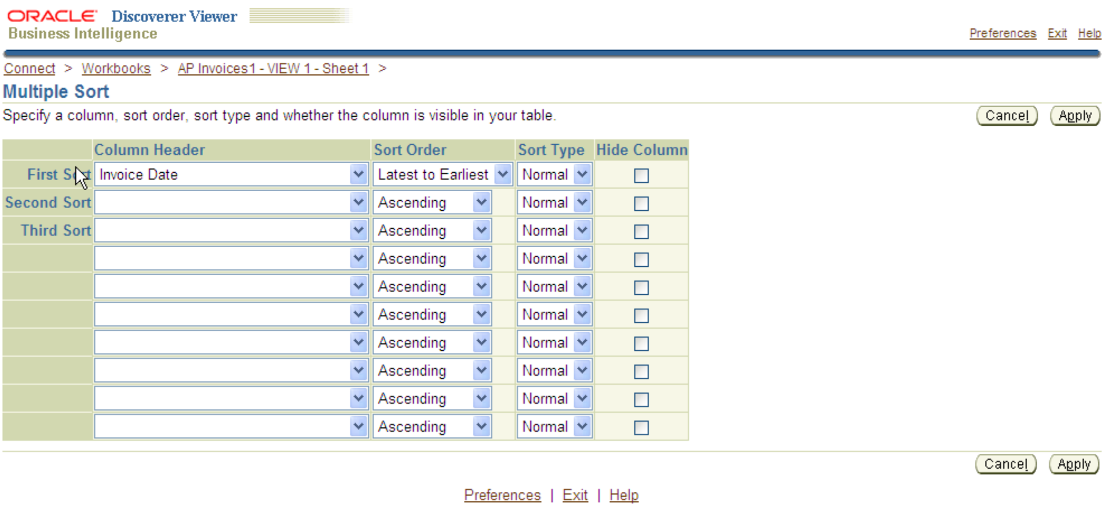
Sorting

In the ***Tools menu***, select the ***Sort*** link.

Data can be sorted on any column from the ***Sort*** drop down box.
The order of sort can also be selected with the ***Order*** drop down box



To achieve a more complex sort, on multiple columns, click the ***More…*** link



Use the table to choose additional sort columns

When all sorting options are selected, click the ***Apply*** button.

Hiding Columns

A column can be used for sorting but does not have to be displayed. Also, users may wish to hide columns regardless of whether they are sorting.

To hide a column tick the ***Hide Column*** box.

Cautionary note! This method of hiding columns requires that the hidden column is part of the sort criteria – so may require two sorts, one being the desired sort for the report, the second being created just to hide the colum

4.8 Saving workbooks

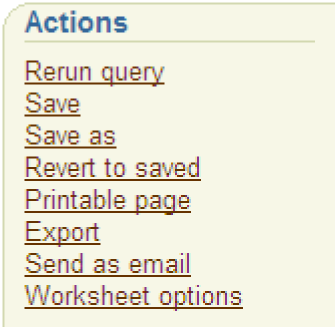
If you have made changes to a worksheet (e.g. you have re-sorted data or repositioned worksheet items), you can save these changes.
If you own the workbook, you will overwrite the original worksheet.

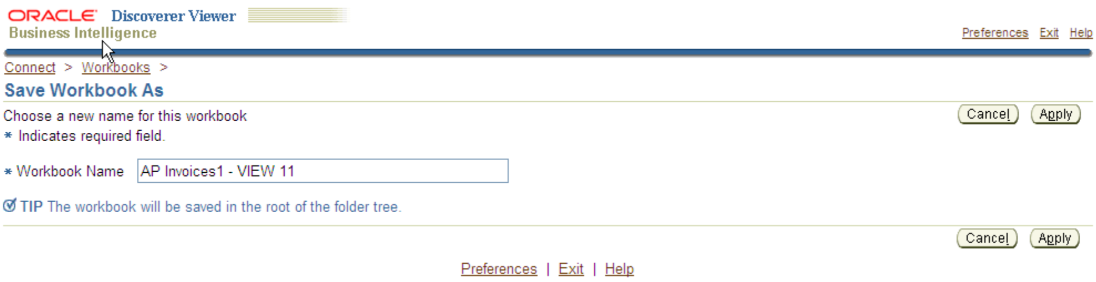
If you are not the owner of the workbook that contains the worksheet, you can ***Save a copy*** of the worksheet.

If you change a worksheet and then switch to a different worksheet, Viewer prompts you to save the changes you have made or discard the changes.

Steps

Select Save or Save as from the Actions listing

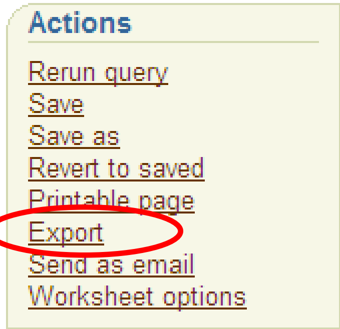


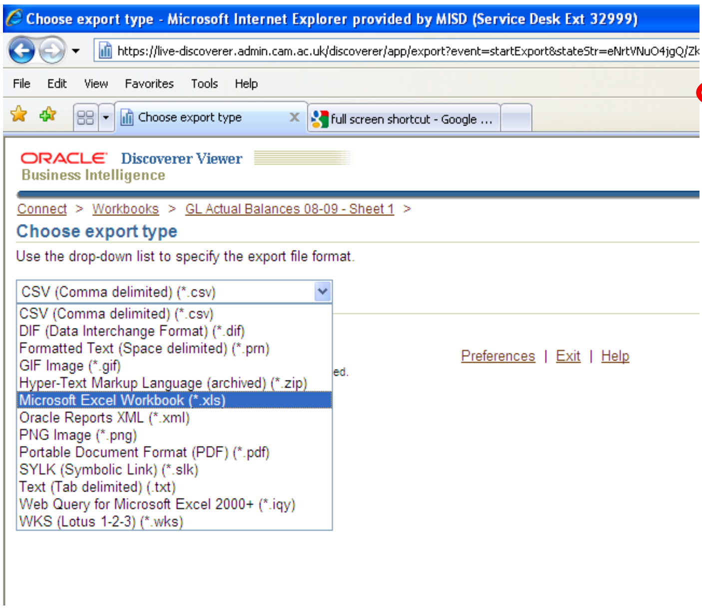


5 Exporting Data

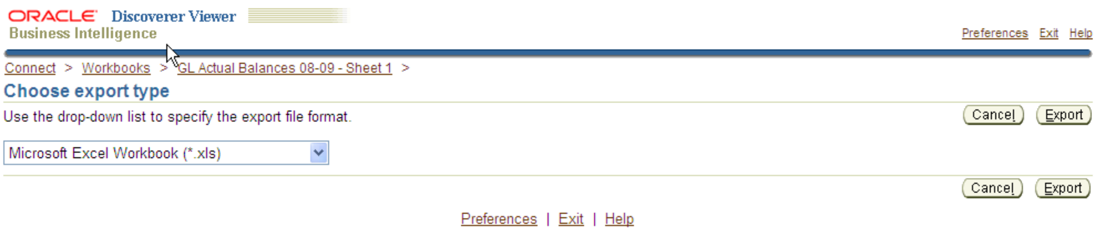
5.1 Exporting to Excel

From the ***Actions*** menu, choose ***Export.***

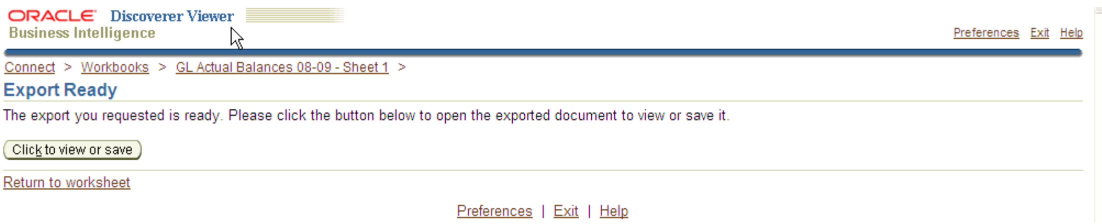


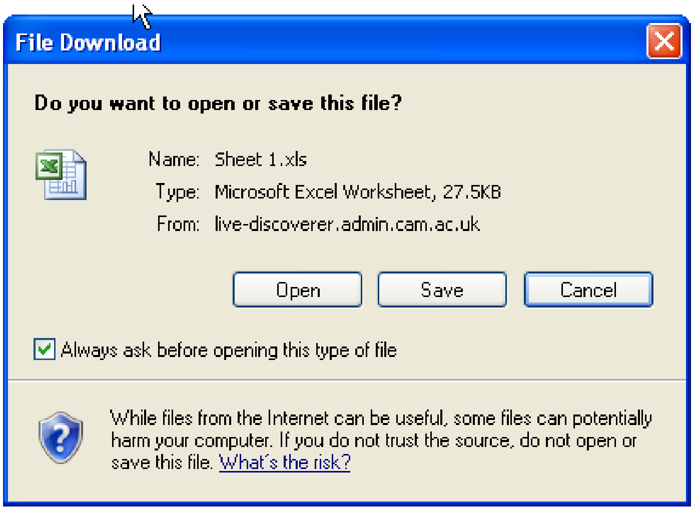


From the drop down list, choose Excel Workbook. Click on the ***Export*** button.



Click on the ***View or save*** button

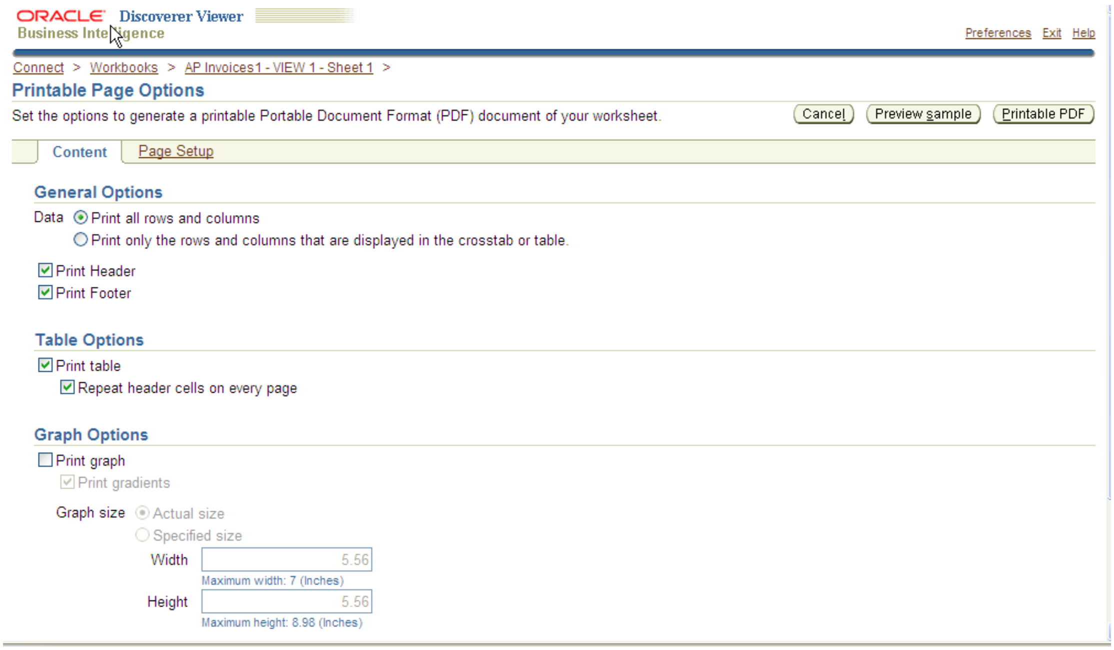




Open or ***Save*** the data in Excel.

5.2 Print data (to PDF document)

This option is useful when it is preferred to share data with no risk of it being further modified (as it can if shared for example as an Excel file).



Printing

You print a worksheet in Discoverer Viewer by generating a Portable Document Format (PDF) version of the worksheet and printing the PDF file in

Adobe Acrobat. Discoverer displays the PDF version of the worksheet for you to preview before you print it.

1. Display the worksheet that you want to print.
2. Select the **Printable Page** link to display the "Printable Page Options page: Content tab".
3. (optional) Use the "Printable Page Options page: Content tab" to change the print settings, if required.
4. (optional) If you want to preview a sample PDF version of the worksheet before printing the full worksheet, follow the steps in "How to preview worksheets before printing".
5. Click Printable PDF to display the "PDF Ready page".
6. Select the **Click to view or save** link to display the full PDF version of the worksheet in a separate browser window.

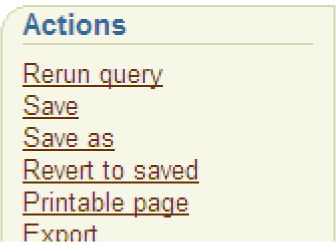
   Note: You can now view, print, or save the PDF file.

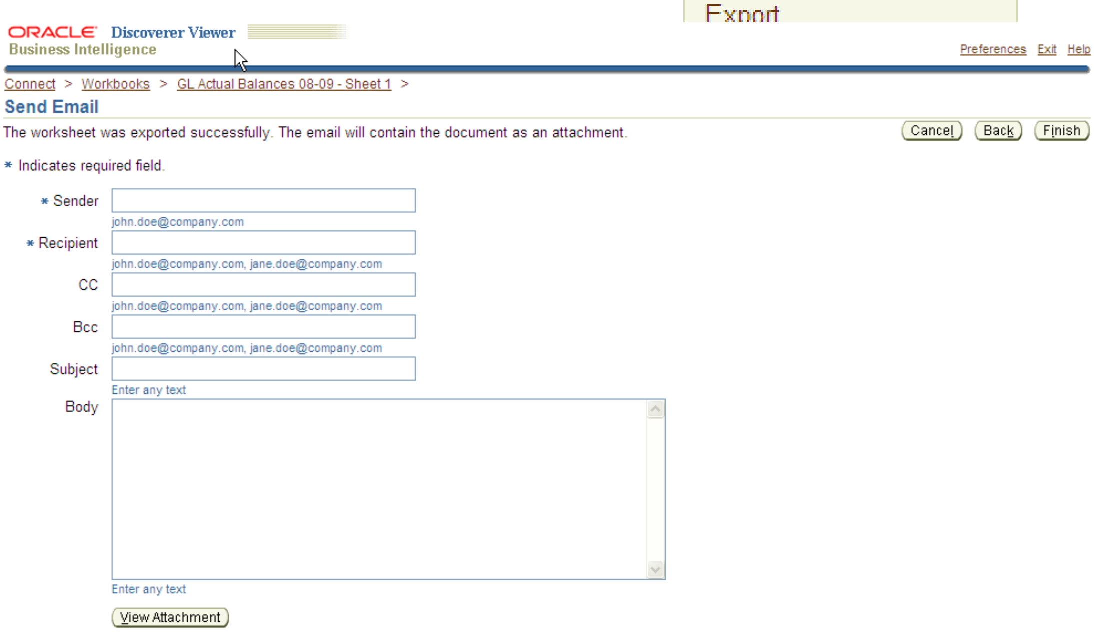
7. In the separate browser window displaying the PDF file, choose File | Print to display the operating system print dialog and print the PDF file.

   Discoverer prints the PDF version of the worksheet.

5.3 Email worksheet data

From the ***Actions*** menu, choose ***Send as email***.





The data can be viewed before sending by clicking on ***View Attachment***.

Click ***Finish***.

6 Help and Support

Helpdesk

The Finance Division Reporting Team is the "module owners" for Oracle Discoverer.

The Reporting Team are responsible for the development, release and management of workbook sharing.

The team also provides helpdesk support for Viewer users….

Helpdesk email: fin_reporting_helpdesk@admin.cam.ac.uk

Helpdesk phone: *Ext 65098*

New User access

Discoverer Viewer is accessed through a responsibility in CUFS Live. The department Key Contact should request the Viewer responsibility through the online web form at

University of Cambridge: University Finance System: University Finance System - KEY CONTACTS

Other Published information

In addition to this user manual, there are Quick Reference Guides and lists of Frequently Asked Questions available at the following sites:

Finance Training website under the section ***Further Use***
Finance Division website under the ***Reference*** section
Financial Reporting website

Appendix 1: Using graphs in Discoverer Viewer

About using graphs

The majority of users may prefer to create graphs after exporting data to Excel; however, if a workbook is to be printed to PDF, or shared with a colleague, the inclusion of a graph may enhance the information.

Graph editing options

You can edit a graph in Discoverer Viewer by:

- changing the graph type
- changing the graph size
- enabling and disabling graph gradients
- enabling and disabling 3D effects
- changing the data area that is plotted on the graph

Notes

1. Graphs created by the workbook author are displayed in Discoverer Viewer.
2. Users can select worksheet options to display or hide graphs

How to edit a graph

You edit a graph to change the style or appearance of the graph. For example, you might want to change the graph type from pie graph to bar graph.

To edit a graph:

1. Display the worksheet that you want to analyze.

If the worksheet contains a graph that is hidden, display the graph

2. Select the **Graph** link to display graph tools above the graph.

- Use the graph tools to edit the graph as follows:
    - to change the graph type, select a graph type from the Type drop down list
    - to change the graph style, select a graph style from the drop down list next to the Type drop down list
    - to change the graph size, change the values in the Height and Width fields
    - to specify whether the 3D or gradient effect is applied, use the 3D
    - Effect and Gradient check boxes.

4. Click Apply to close the ***Conditional Formats (Table/Crosstab) page*** and display the worksheet.

Discoverer applies the format changes you have specified.

Hint: Select the minus (-) icon next to the **Tools** label to hide the graph tools.

How to display or hide a graph

You display a graph to plot the currently displayed worksheet data in a graph.
For example, you might want to plot the worksheet data in a pie chart.
You hide a graph to remove it from the worksheet.

To display or hide a graph:

1. Display the worksheet that you want to analyze

2. Select the **Worksheet options** link to display the ***Worksheet Options page***

3. To display the graph for the current worksheet, select the **Graph** check box.

4. To hide the graph for the current worksheet, clear the **Graph** check box.

5. Click Apply to close the ***Worksheet Options page*** and display the worksheet.

Discoverer applies the format changes you have specified.

Hint: You can also use the Graph plus (+) and minus (-) icons to expand and collapse the graph.