

Discoverer 10g Tips & Tricks

Learn to Develop and Maintain Reports

Presenter: Paula Harker

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Learning Objectives

- Learn how to create reports using Discoverer 10g
- Understanding report layouts, formats, conditions, and calculations
- What is an EUL and what does it do?
- Managing report security and sharing reports
- Develop a standard to manage the number of reports

Speaker's Qualifications

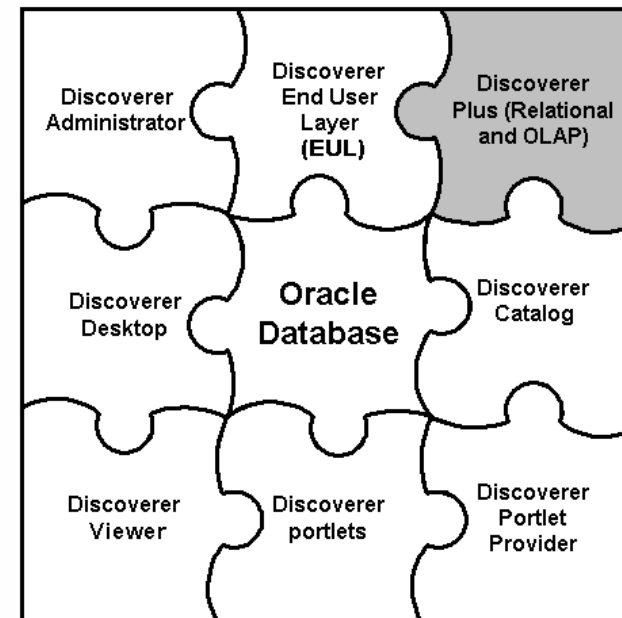
- Paula Harker is a Supervisor at Magellan Midstream Partner's, L.P. in Tulsa, OK
- Has worked with Oracle Financials for 12 years.
 - on three separate Oracle implementations and multiple upgrades
- My role is functional system support for Oracle G/L and all interfaces, support all financial reporting tools (Discoverer, Oracle FSG's, and Hyperion Essbase), and act as liaison between accounting and IT.

Benefits to Discoverer 10g

- Discoverer 10g provides detail ad hoc query analysis capabilities across Oracle modules as well as other tools.
- Users can write their own reports without needing IT resources.
- Business Intelligence
- Spreadsheet functionality
- Layout Flexibility
- Leverage Oracle security
- Real-time results
- Share reports with others

Discoverer Overview

- Administrator controls EUL & Catalog
- End User Tools
 - Desktop, Plus & Viewer



- **What is the End User Layer (EUL)?**
- The End User Layer (EUL) insulates Discoverer end users from the complexity and physical structure of the database. The EUL provides an intuitive, business-focused view of the database that you can tailor to suit each Discoverer end user or user group.
- The meta layer structure of the EUL preserves the data integrity of the database.
- The EUL is a collection of approximately 50 tables in the database. These are the only tables that can be modified through Discoverer Administrator. Business areas are defined in Discoverer Administrator using the EUL database tables. Discoverer provides read-only access to the application database.
 - Business areas are conceptual groupings of tables and/or views designed to match Discoverer end users specific data requirements.
 - A Discoverer folder represents a group of related items.

Some terminology

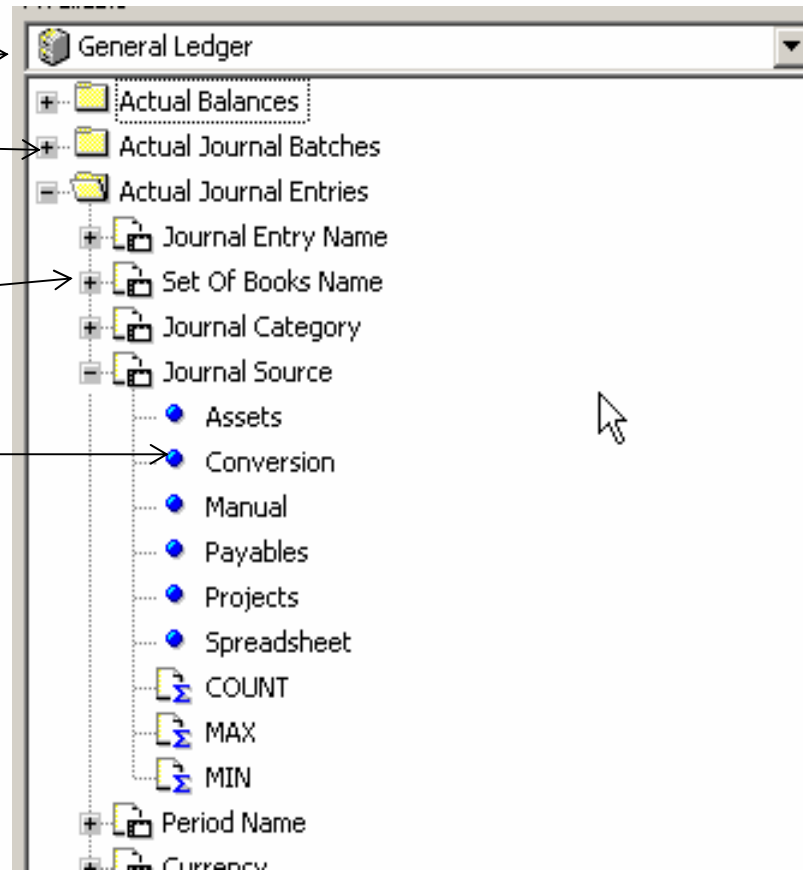
Business Area

Folder

Data-point item

Axis items

Could also have calculations and conditions within EUL



What are the new features in Discoverer Plus 10.1.2.

- Native support of the database OLAP option. You can now analyze multidimensional databases
- Enhanced interactivity
- Conditional formatting (stoplights)
- Enhanced drilling
- Enhanced printing
- New export formats
- New portlet types
- Single Sign-On support for Virtual Private Databases
- Enhanced workbook scheduling
- Enhanced parameter handling
- Enhanced charting

Log into Discoverer

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	<input type="text" value="Oracle Applications"/>
* User Name	<input type="text" value="pharker"/>
* Password	<input type="password" value="....."/>
* Database	<input type="text" value="moap"/>
End User Layer	<input type="text"/>
Responsibility	<input type="text"/>
Locale	<input type="text" value="Locale retrieved from browser"/>
<input type="button" value="Go"/>	

Workbook Wizard - Step 1 of 1: Create/Open Workbook

Connected to the Database: MOAP (EUL:EUL_US)

What do you want to do?

Open an existing workbook

Recently Used:

There are no recently used workbooks. Browse...

Create a new workbook

Select the objects to display in the worksheet

Title

Page Items

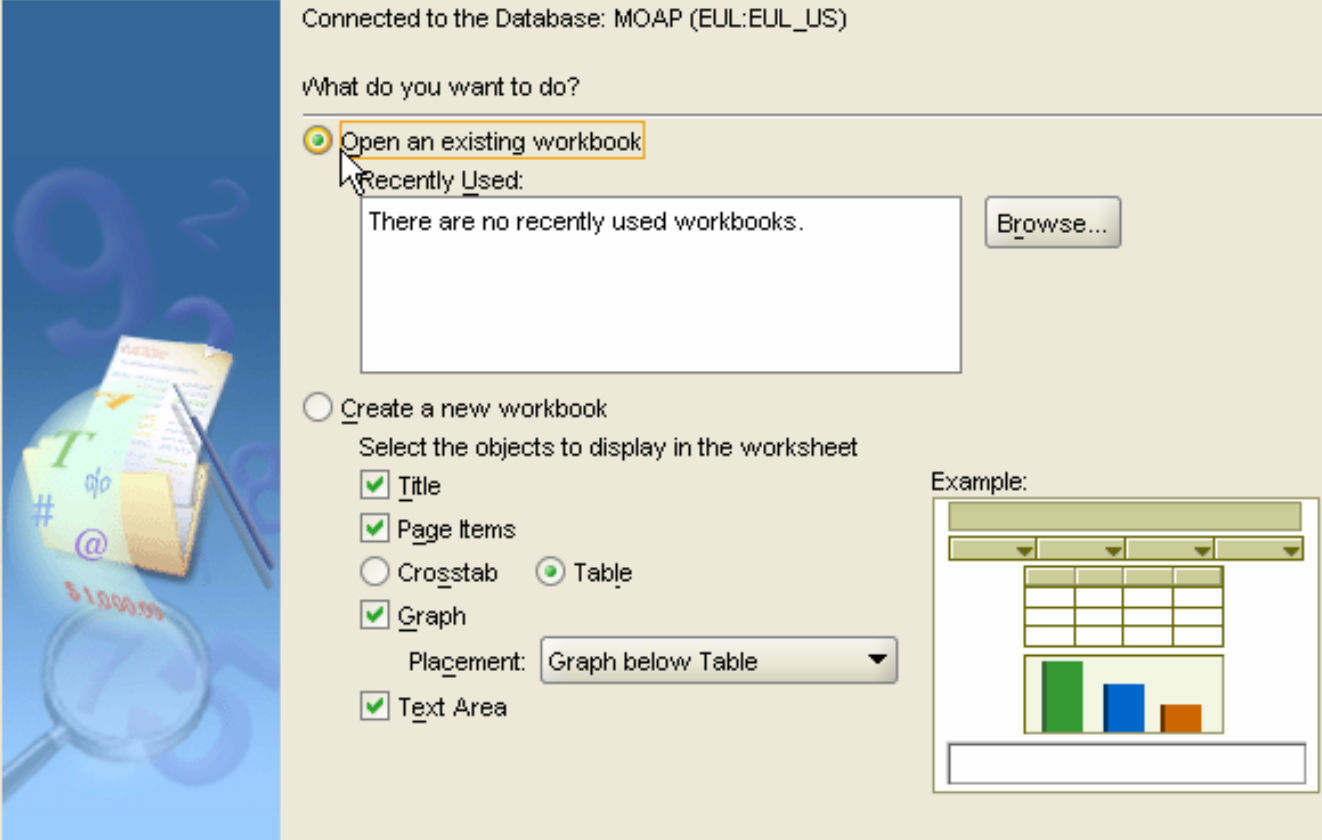
Crosstab Table

Graph

Placement: Graph below Table

Text Area

Example:



Analysis of Video Rentals and Video Sales

Page Items: **Year: 2000**

Region	Profit SUM
1 Central	\$112,538
2 East	\$180,235
3 West	\$91,934

Profits Summary for Regions

Created by: J. Glenn
21 January

Labels: a, b, c, d, e, f, g, h, i, j

Key to figure:

- a. Menu bar. Click on a menu item (e.g. File) to display the menu options.
- b. Standard toolbar. To display toolbars, choose View | Toolbars and choose the toolbar to display.
- c. Available Items Pane (also referred to as the Discoverer item navigator), showing the folders and items in the selected business area. To display the Available Items Pane, choose View | Available Items Pane.
- d. Selected Items Pane, showing the items included in the worksheet and graph area. To display the Selected Items Pane, choose View | Selected Items Pane.
- e. Tabs for worksheets in the workbook. Click on another worksheet tab to display that worksheet.
- f. Worksheet title area (also referred to as the worksheet header). To display the worksheet title area, choose View | Title.
- g. Page items area. To display the page items area, choose View | Page Items.
- h. Worksheet and graph area. To display the worksheet area, choose View | Table (on a table worksheet or View | Crosstab (on a crosstab worksheet). To view the worksheet graph area, choose View | Graph. The graph can be positioned as required (e.g. above, below, to the right of the worksheet area).
- i. Worksheet text area (also referred to as the worksheet footer). To display the worksheet text area, choose View | Text Area.
- j. Business area list, showing the business areas you can access.

As well as using the menus to add and remove items, you can drag and drop items on a worksheet. The example below shows how to add an item to a worksheet by dragging an item from the Available Items pane onto the worksheet.

- Note:** Notice the black bar below the Profit SUM heading, which indicates where the item will be dragged to. You can also drop an item on top of another item to swap the positions of the two items (the target item is marked with a gray bar).

	Profit SUM		
	1998	1999	2000
Video Rental	\$158,366	\$148,839	\$89,080
Central	\$47,204	\$43,813	\$25,157
Chicago	\$3,333	\$2,701	\$1,914
Cincinnati	\$12,587	\$11,372	\$7,153
Dallas	\$3,547	\$3,458	\$1,728
Louisville	\$12,664	\$12,119	\$7,099
Minneapolis	\$3,562	\$3,084	\$1,904
Nashville	\$3,884	\$3,426	\$1,329
St. Louis	\$7,627	\$7,653	\$4,030

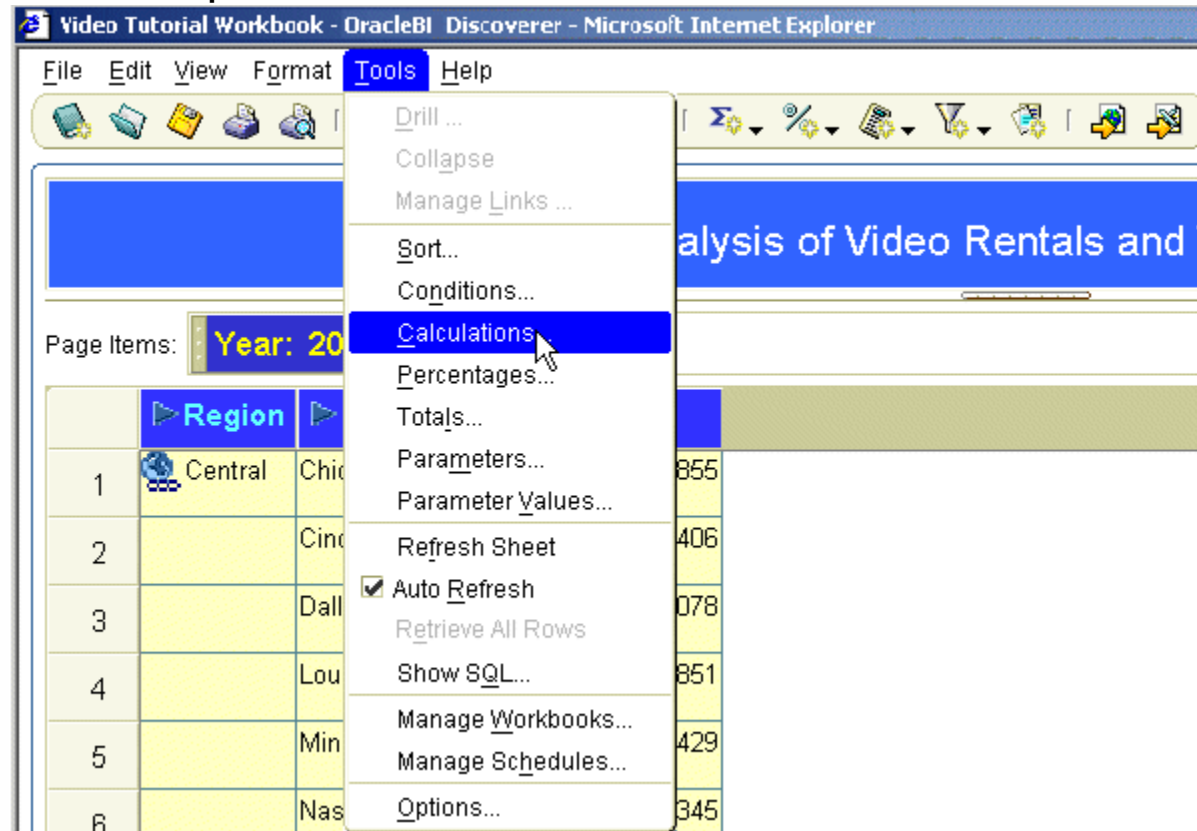
	Video Rental			Video Sale		
	1998	1999	2000	1998	1999	2000
Profit SUM	\$158,366	\$148,839	\$89,080	\$232,738	\$330,556	\$231,222
Central	\$47,204	\$43,813	\$25,157	\$67,084	\$97,921	\$69,493
Chicago	\$3,333	\$2,701	\$1,914	\$5,354	\$10,250	\$5,096
Cincinnati	\$12,587	\$11,372	\$7,153	\$18,742	\$28,406	\$22,325
Dallas	\$3,547	\$3,458	\$1,728	\$4,774	\$4,319	\$4,049
Louisville	\$12,664	\$12,119	\$7,099	\$17,103	\$25,453	\$15,997
Minneapolis	\$3,562	\$3,084	\$1,904	\$6,030	\$6,842	\$5,141
Nashville	\$3,884	\$3,426	\$1,329	\$3,571	\$5,379	\$4,616
St. Louis	\$7,627	\$7,653	\$4,030	\$11,511	\$17,273	\$12,270

- To remove a worksheet item, you can also drag and drop the item off the worksheet drag to anywhere outside of the worksheet area (except the Selected Items pane, if displayed).

About Discoverer menus

In Discoverer you can use a standard menu and a range of right-click menus to perform tasks.

The **standard menu** is displayed at the top of the Discoverer work area. The figure below shows the Tools options on the standard menu.



Right-click on any worksheet item heading to display a right-click menu of options that enable you to perform the most common analysis tasks. In the example below, right-clicking on the Profit SUM item displays a list of options that can be used to analyze this item.

Page Items: **Region: Central** **Department: VIDEO RENTAL**

	Year	Month	Profit
1	1998	Dec	
2		Nov	
3		Oct	
4		Sep	
5		Aug	
6		Jul	
7		Jun	
8		May	
9		Apr	
10		Mar	

- Copy
- Remove from Worksheet**
- Move Profit SUM To
- Format Data...
- Format Heading...
- Edit Heading...
- Conditional Formats...
- Column Width...
- Column Auto Size
- Group Sort
- Sort Low To High
- Sort High To Low

Query Management Options and Defaults Under Tools Options

Options

General | Query Governor | Sheet | Formats | Advanced | EUL

Summary Data

Summary data can be set up by your Discoverer manager to improve performance.
When do you want to use summary data?

Always, when available
 Only when summary data is not out of date (stale)
 Never

Query Governor

Warn me if predicted query time exceeds: 1:00 mins:secs
 Prevent queries from running longer than: 30:00 mins:secs
 Limit retrieved query data to: 8000 rows
 Retrieve data incrementally in groups of: 250 rows
 Cancel list-of-values retrieval after: 0:15 mins:secs

Buttons: Help, OK, Cancel

Options

General | Query Governor | Sheet | Formats | Advanced | EUL

Table headers

Show column headings Show row numbers
 Column width: Use default width

Crosstab headers

Show item labels Show heading gridlines
 Crosstab style: Outline 3D heading gridlines

Table and crosstab data area

Show vertical gridlines Gridline color: [Color Picker]
 Show horizontal gridlines

Sheet content

Show title Show text area
 Show null values as: NULL

Example

Table

Table Title		
Column1	Column2	Column3
51	32	10
50	65	19
44	73	25
81	62	18

Table Text Area

Crosstab

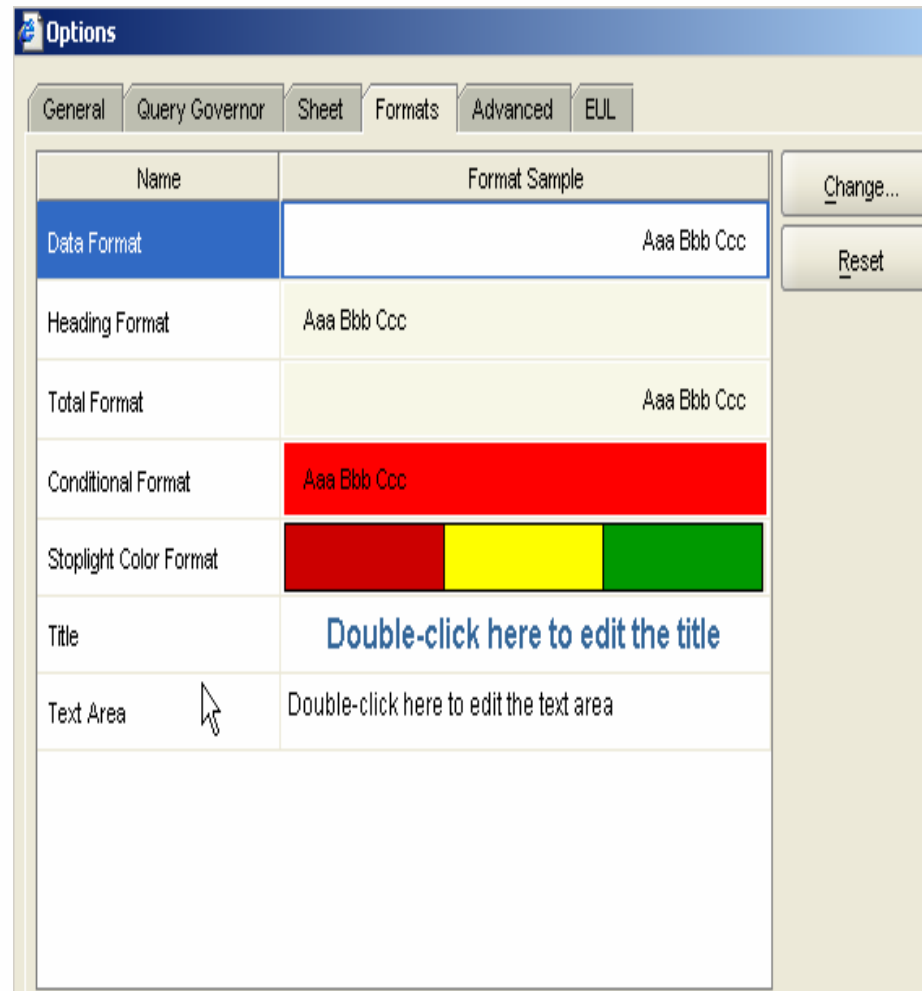
Crosstab Title		
	Column1	Column2
Row 1	105	170
Row 1.1	51	32
Row 1.2	10	65
Row 1.3	44	73

Crosstab Text Area

Buttons: Help, OK, Cancel

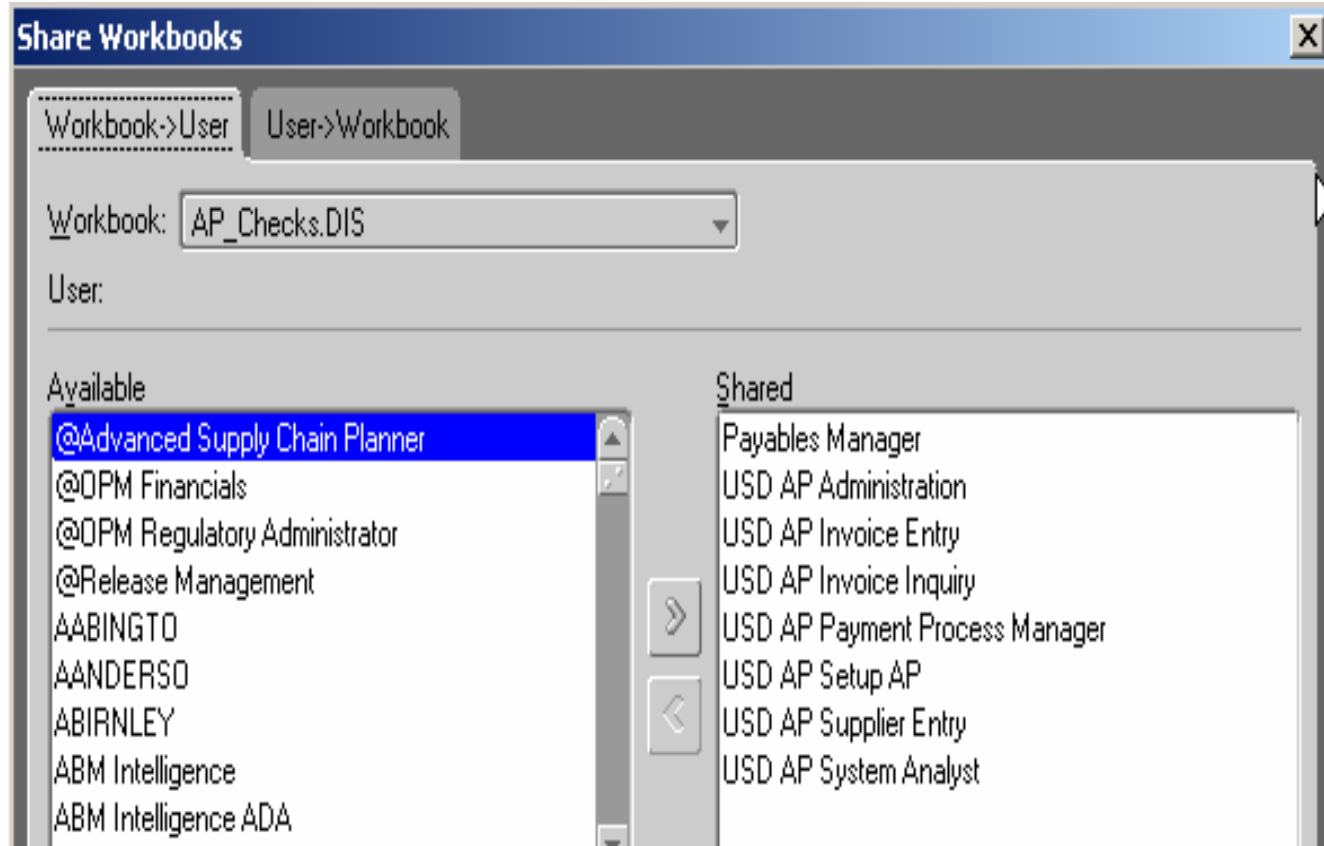
Query Management Options and Defaults Con't

- Defaults should take effect for future worksheets and workbooks
- Conditional format, stoplight format, title and text area are new with 10g



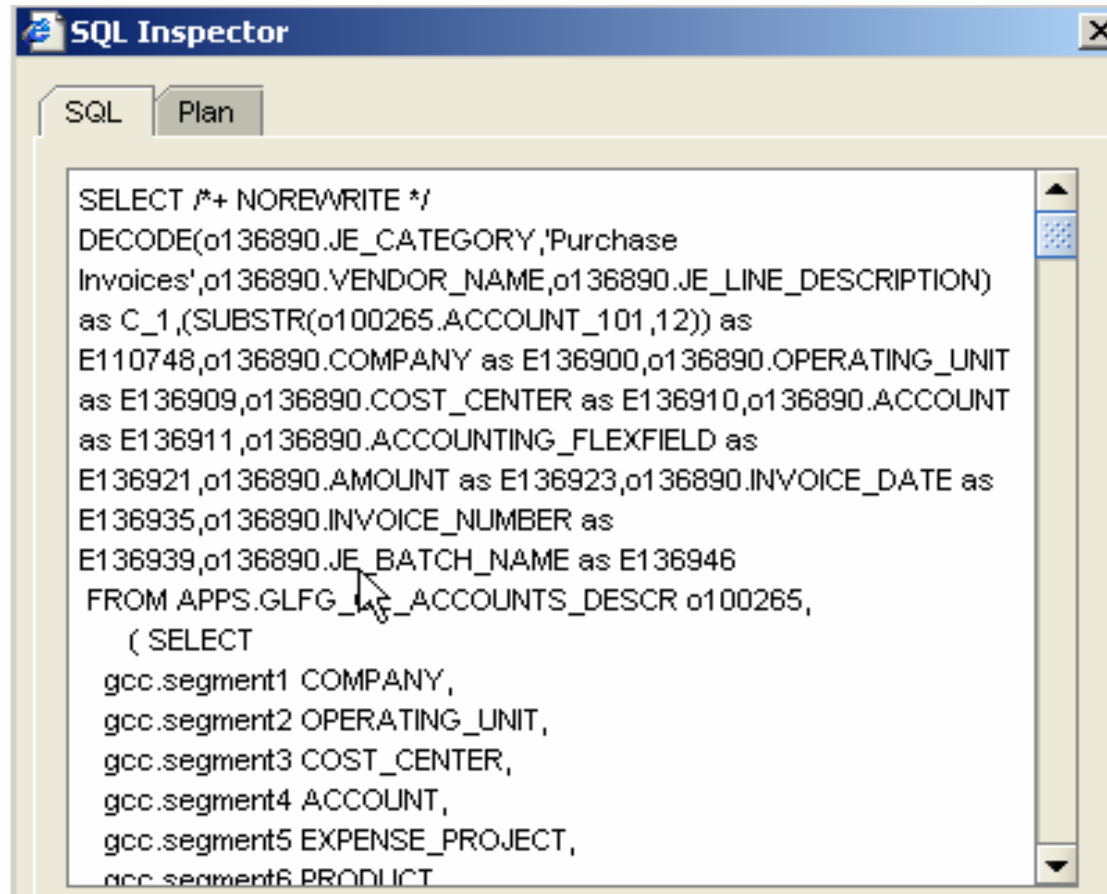
Sharing Workbooks

File
Manage
Workbook
S
Sharing



Viewing SQL Statements for a Worksheet

Tools
Show
SQL

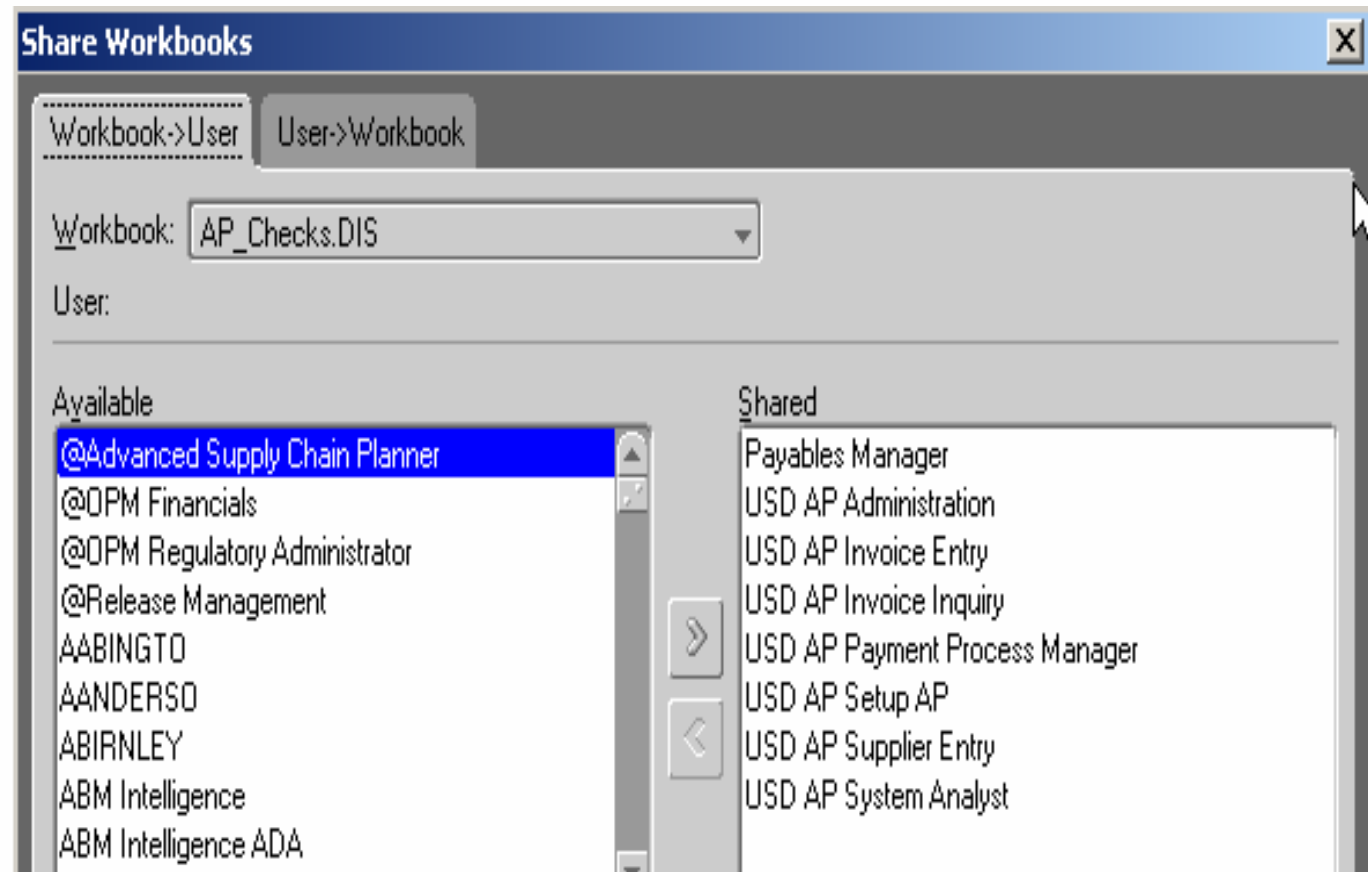


The screenshot shows a window titled "SQL Inspector" with two tabs: "SQL" and "Plan". The "SQL" tab is active, displaying the following SQL statement:

```
SELECT /*+ NOREWRITE */
DECODE(o136890.JE_CATEGORY,'Purchase
Invoices',o136890.VENDOR_NAME,o136890.JE_LINE_DESCRIPTION)
as C_1,(SUBSTR(o100265.ACCOUNT_101,12)) as
E110748,o136890.COMPANY as E136900,o136890.OPERATING_UNIT
as E136909,o136890.COST_CENTER as E136910,o136890.ACCOUNT
as E136911,o136890.ACCOUNTING_FLEXFIELD as
E136921,o136890.AMOUNT as E136923,o136890.INVOICE_DATE as
E136935,o136890.INVOICE_NUMBER as
E136939,o136890.JE_BATCH_NAME as E136946
FROM APPS.GLFG_WF_ACCOUNTS_DESCR o100265,
( SELECT
gcc.segment1 COMPANY,
gcc.segment2 OPERATING_UNIT,
gcc.segment3 COST_CENTER,
gcc.segment4 ACCOUNT,
gcc.segment5 EXPENSE_PROJECT,
gcc.segment6 PRODUCT
```

Sharing Workbooks

- File
- Manage Workbooks
- Sharing



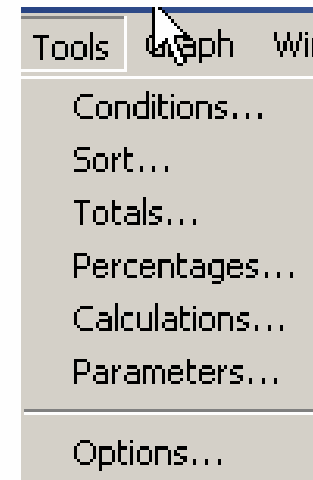
Workflow to Create a Query with Wizard

- Choose worksheet layout
- Select items
- Update layout/format
- Sort
- Define parameters

From Wizard
Or Edit Sheet



Also
navigate
from
Tools

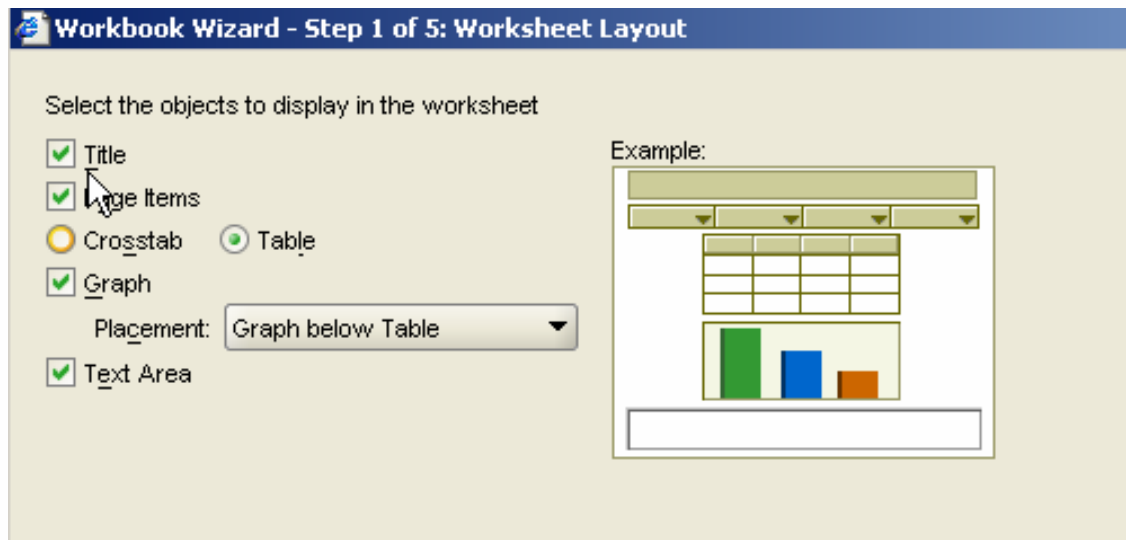


You can choose whether or not to show a title, page items, graph, and text area. You can also select Table or Crosstab.

Table – columns of info with headings

Crosstab – intersection of rows and columns – usually summarized

Page-Detail – table or crosstab report produced for each value of the page item, such as as a page per quarter



Select items

- Display Children of an Object – click the plus icon (or double click item name)
- Display Children of an Object – click the plus icon (or double click item name)

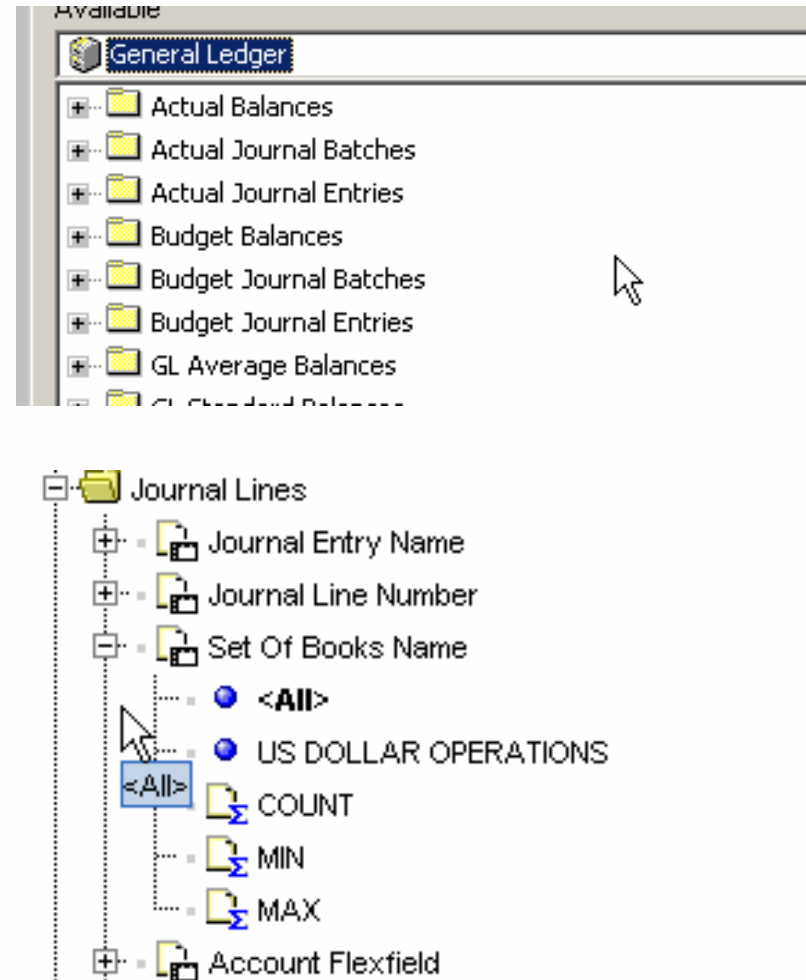


Table Layout

Show Page Items Hide Duplicate Rows

Page Items:

	Account Number 101	Account Description 101
1		
2		
3		

- Sequence items – drag and drop
- Convert to page-detail 1- select show page items
- 2- drag item into page items
- Remove page items axis
- Hide Duplicate rows – check box (equivalent to SQL Select Distinct)

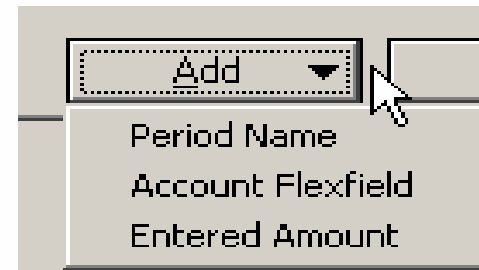
Show Page Items

Page Items:

	Account Description 101
1	

Sort

- Choose Items to sort from Add drop down list
- Update options as needed for each sort



	Column	Direction	Group	Hidden
1	: <i>Period Name</i>	Low to High ▼	Group Sort ▼	<input type="checkbox"/>
2	: Account Flexfield	Low to High ▼	None ▼	<input type="checkbox"/>

Parameters

- Can create when creating a condition OR
- Navigate from Tools Parameters

New Parameter

What do you want to name this parameter?

Which item do you want to base this parameter on?

Create condition with operator:
 Condition:

What prompt do you want to show for this parameter?

What description do you want to show for this parameter?

Do you want to allow different parameter values for each worksheet?
 Allow only one set of parameter values for all worksheets.
 Allow different parameter values for each worksheet.

What properties do you want to give this parameter?
 Require users to enter a value
 Enable users to select multiple values
 Enable users to select either indexes or values

What default value do you want to give this parameter?
 Value

Do you want to filter the list of values for this parameter?
 Show all available values
 Filter the list of values based on the selected conditions:

Parameters con't 1

- % is still the wildcard
- Default value now has pick list available for some items (see flashlight).

New Parameter

What do you want to name this parameter?

Which item do you want to base this parameter on?

Create condition with operator:
 Condition:

What prompt do you want to show for this parameter?

What description do you want to show for this parameter?

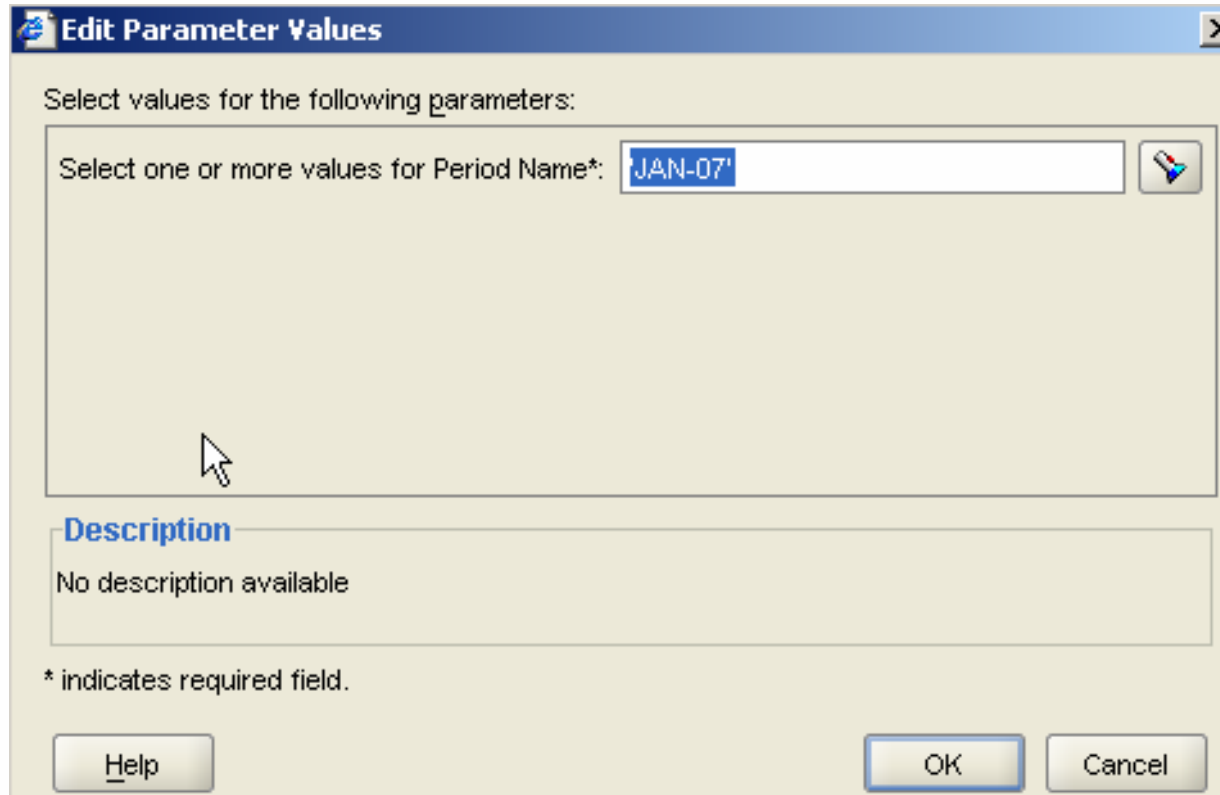
What properties do you want to give this parameter?
 Require users to enter a value
 Enable users to select multiple values
 Enable users to select either indexes or values

What default value do you want to give this parameter?

Do you want to filter the list of values for this parameter?
 Show all available values
 Filter the list of values based on the selected conditions:

Parameters con't 2

- When query is run (when opened, Sheet, Refresh Sheet, or icon ) parameter dialog box displays



Edit Parameter Values

Select values for the following parameters:

Select one or more values for Period Name*:

Description

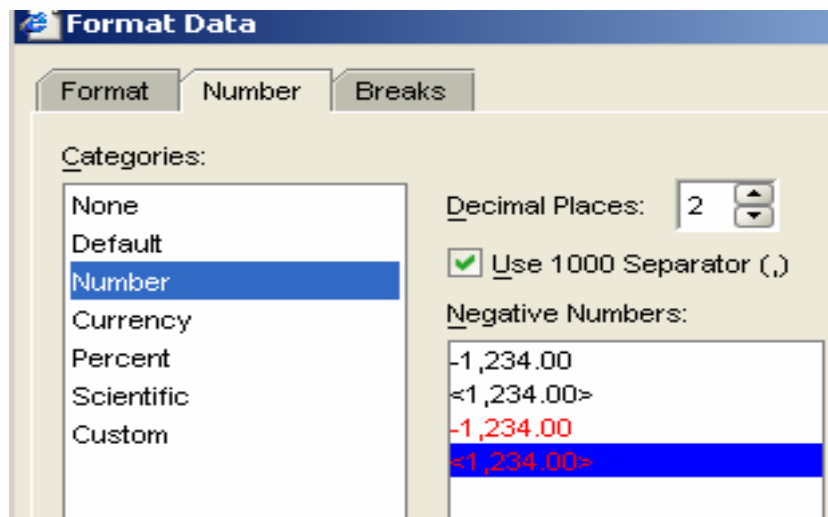
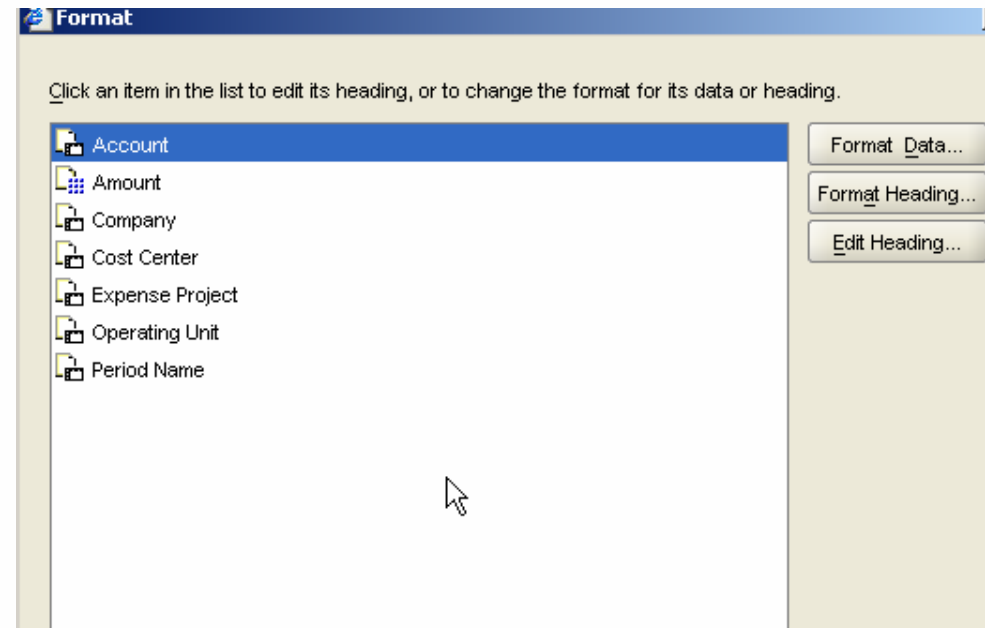
No description available

* indicates required field.

[Help](#)

Format

- Format Item Format or right click from a cell to format
- Format tabs are dependant on item type (i.e. only numbers have number tab)



Format Con't

- To change text of Heading, right click on heading, choose Edit Headings

The screenshot shows a dialog box titled "Edit Heading". It contains the following fields:

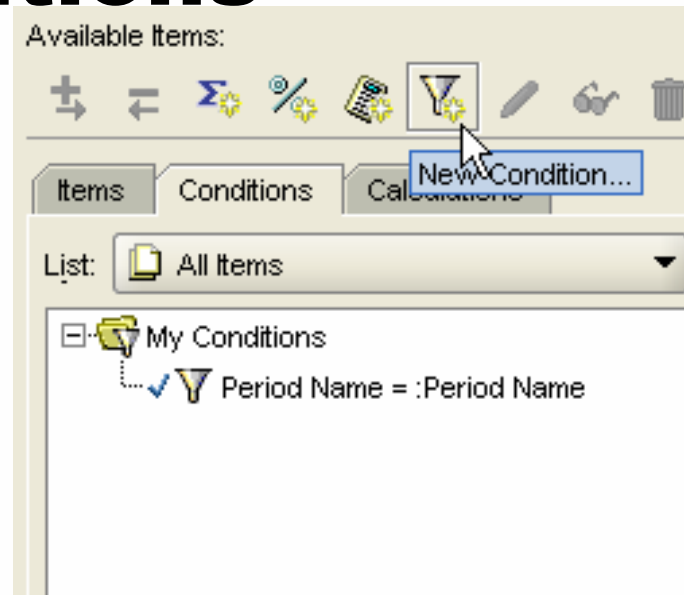
- Name: Company
- Type: Text
- Heading: Company (text is highlighted in blue)
- Description: (empty text area)

Note: - the new text will be on download to Excel, not original name

Conditions

- Choose new condition from available items.
- Use drop down to create condition

Conditions can be clicked on and off



What would you like to name your condition?

(Period Name IN :Period Name IN 'JAN-07') Generate

What description would you like to give your condition?

Formula

Item	Condition	Values
: 'Invoice Journal Lines VAV.Period Name'	IN	:Period Name, 'JAN-07'

Calculation

- Name the calculation, then choose items and functions. You can type, but preferred method is to choose – especially items.

Edit Calculation

What do you want to name this calculation?

Co OPU

Select items and functions from the list on the left and paste them into the calculation.

Show: Selected Items

- Account Description 101
- Account Number 101
- Company Number 101
- Operating Unit Number 101

Paste

Calculation:

GL Accounts and Descriptions."Company Number 101"|| "||GL Accounts and Descriptions."Operating Unit Number 101"

Insert Formula from Template

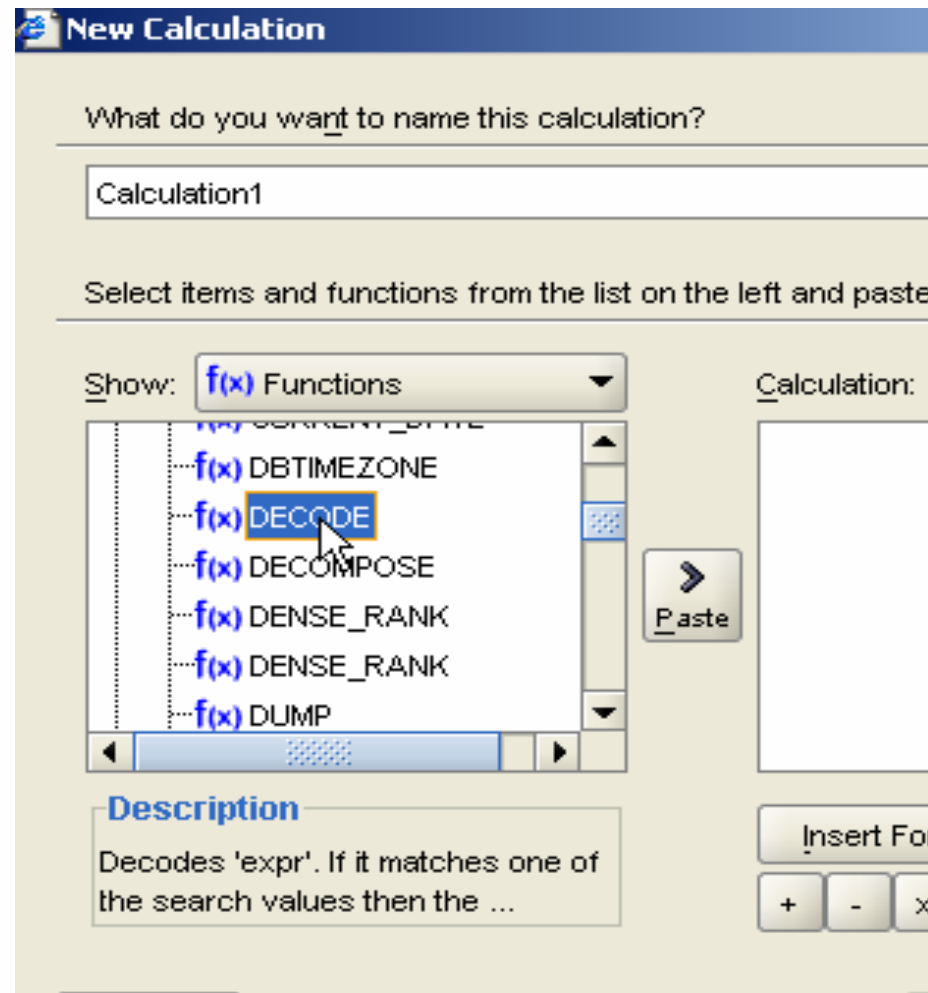
+ - x / % () ||

Description

No description available

Calculation Con't

- When you click on functions, information about that function is provided



Totals

- Choose column, function, grand or sub, label, format

New Total

Which item would you like to create a total on?

What kind of total do you want?

 Adds all the values.

Where would you like your total to be shown?
 Grand total at bottom
 Subtotal at each change in:

Don't display total for a single row

Do you want to calculate totals within each page?
 Calculate totals within each page.
 Calculate totals across all pages.

Example

	M1	M2	n1	n2
1	AA	aa1	10	10
2		aa2	10	10
3	BB	bb1	10	10
4		bb2	10	10
5				40

The example above shows a Sum total calculated from sample data.

What label do you want to be shown?

 Generate label automatically

Totals con't


Page Items: Set Of Books Name: US DOLLAR OPERATIONS ▾

	Period Name	Account Flexfield	Entered Amount
1	AUG-03	280.0135.0000.01202800.00000.000.000.285.0000.00000	50000
2			Sum: 50000
3		280.0135.0000.01202800.00000.000.000.314.0000.00000	-8376
4			-5904
5			8376
6			6466
7			5904
8			Sum: 6466
9		280.0135.0000.01209000.00000.000.000.230.0000.00000	-19145.7
10			19145.7
11			Sum: 0

- Note – column must accommodate label and value, so may want to limit labels

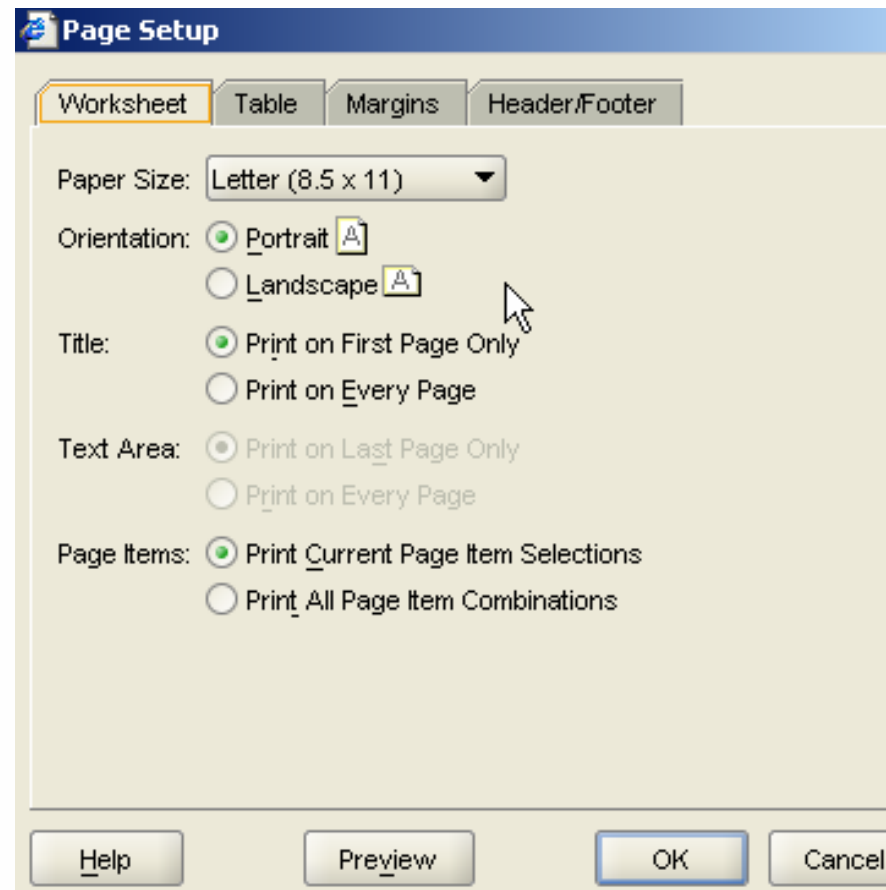
Period Name	Account Flexfield	Entered Amount
AUG-03	280.0135.0000.01202800.00000.000.000.285.0000.00000	50000
		Sum Account Flexfield : 50000

Export to Excel

- Use icon  if new, usually launches Excel and makes the active window
- Or File, Export (more options) like export to pdf, html, or xls.
- Printing options have been improved also.

Printing

File Page Setup offers many more options now to allow printing from Discoverer.

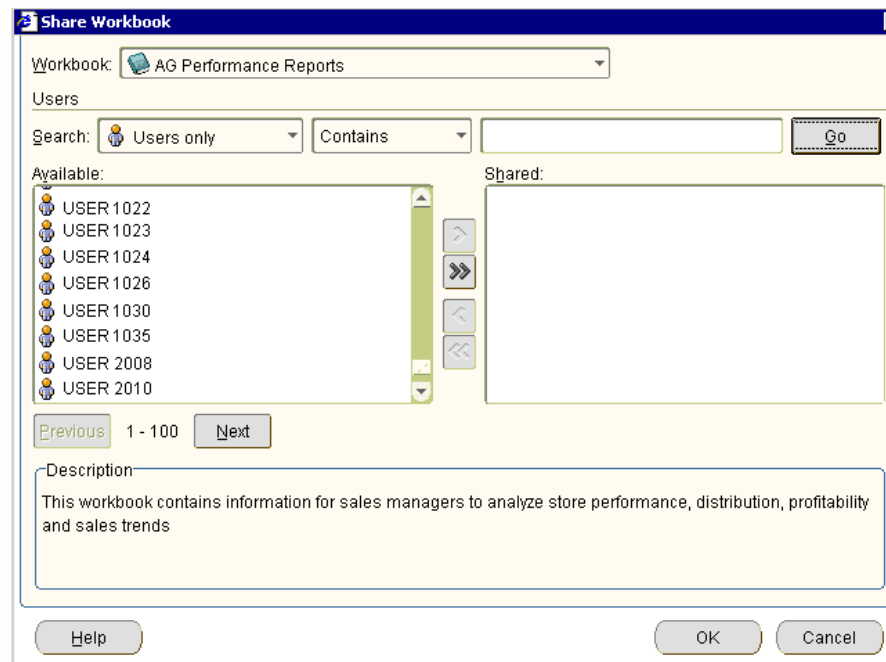


How to share the currently open workbook with other Discoverer users

You share the currently open workbook with other Discoverer users to enable other users to access a workbook using Discoverer Plus.

To share the currently opened workbook with other Discoverer users:

1. Open the workbook that you want to share
2. Choose File | Share to display the Share workbooks dialog.



Sharing Workbooks Cont

- The workbook is selected by default in the **Workbook** drop down list
- By default, the **Available** list shows all available database users (and/or roles). Use the **Search** fields to search for a particular user (and/or roles—like USD_GL_Inquiry).
- To share the selected workbook with database users (and/or roles), move database users (and/or roles) from the **Available** list to the **Shared** list.
- **Hint:** You can select more than one database user (or role) by pressing the Ctrl key and clicking another database user (or role).
- Click OK to share the workbook with the Discoverer users that you selected and close the Share Workbooks dialog.
- Discoverer users connecting as the database users (or roles) that you selected will be able to access the workbook when they next connect to Discoverer.

Discoverer Workbooks

- Worksheets contains results of a query (tabs – just like excel – example below)
- Workbook contains one or more worksheets
- Workbooks saved to database can be shared with others (or not)



Questions