

Discoverer your OPM month end closing

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Introduction

Month end closing can be hard enough without having to spend hours obtaining the information you need. Learn how the use of Oracle Discoverer to query the valuable information your company needs to ensure a timely and accurate month end close can eliminate some of the hours.

Standard Oracle reporting provides valuable information, but not in a format that is very useful. This is especially true with the OPM reports. Utilizing a query tool allows companies to customize the data they need to make their month end closing run smoother.

Creating a custom Discoverer End User Layer (EUL) will allow you to obtain the data your company needs to assist in closing the following modules:

- Purchasing
- Accounts Payable
- Accounts Receivable
- Order Management
- OPM Inventory
- OPM Production
- OPM MAC
- OPM Costing

This paper will identify some key universal data elements needed to ensure accurate and timely OPM and financials month end closings.

Through this paper, also learn how to create a Discoverer EUL, create business areas and create user reports to obtain data that will aid in the month end closing process. This data will become easily accessible with the ability to share in many formats.

Create Discoverer EUL

Oracle now provides an end user layer (EUL) when you load the Discoverer 10g product. This EUL has pre-configured business areas with the joins already defined. In some cases this seeded EUL will meet the requirements of a company.

However, in most cases the reports requested are for specific company processes that would require manipulating the seeded EUL. Due to these cases creating a custom EUL is beneficial. By creating your own EUL you can control what and how elements are defined.

Following are the steps to create a custom EUL:

- 1) Log into Discoverer Administrator connecting to database as <database account: e.g. APPS>/<pwd>; it should popup a window that says there are no EUL's available to this user do you want to create one – click Yes.
 - You MUST set the *New EUL is for use by Oracle Applications users ONLY* checked.
 - Enter the Schema/Password that contains the FND tables – this has to be set to APPS/<pwd> and click Finish

NOTE: If you do not have any EUL on the system you may need to log into Discoverer on

the new instance as EUL_US/EUL_US. The cloned instances start out with EUL_US EUL on the db so this should not be necessary on the cloned instances.

Depending on your network this creating EUL may take some time. Experience has shown anywhere from less than 5 minutes to around 20 minutes.

Define User Report Requirements

For users to determine what reports are needed they need to ensure they understand the business processes related to their areas. Month end closing reflects what happened in a month, however, throughout the month users can be proactive and use exception based reports to correct issues or prepare them with documentation of final numbers. This exception based approach is what users should look for when reviewing their processes and request reports appropriately.

As OPM users have learned, OPM will create an entry for each transaction, but they must make sure all transactions are completed to ensure accurate financial and manufacturing reporting. This leads to the logical questions that are typically asked by accounting; how can I know if all the transactions are in the system and if they are accurate? These questions should lead to the request to obtain specific data, and once this question can be answered, accounting can work with manufacturing personnel and proactively monitor the monthly activity and assist in system and financial accuracy.

A simple way to ensure all transactions are entered is to send out an email to all departments prior to the pre-defined deadline from the month end checklist. In the financial world users can validate data by reviewing the General Ledger at month end. In this age of data mining this isn't sufficient and typically doesn't work. Below are some examples of data needed to ensure all transactions are completed in a timely and accurate manner.

1. Ensure OPM Receipt/Void/Return transactions complete – Review open purchase orders for past due receipts. If the receipt is past due it is because it has not been entered or it is truly past due. This review assumes the scheduled arrival date from the purchase order is accurate. Oracle provides a seeded report called Expected Receipts Report, which allows you to enter your cutoff date and run. This report only displays receipts that are due, not yet received. This listing can be reviewed by accounting and appropriate personnel to ensure it is really past due and just not entered. This accurate reporting will also benefit the manufacturing personnel as this past due information is used to calculate vendor performance criteria. Converting this report to Discoverer is strongly recommended to allow users to tailor the report to their specific needs and export to excel.
2. Ensure OPM Production transactions complete – Review production batches in completed status and not yet closed. Also, in some industries you should review WIP batches also to ensure they really are in WIP. This review can be accomplished through the application by using the production workbench and viewing the batches by status. After obtaining the list you can export the results to excel for further sorting and analysis. Making sure all batches are in their proper status also helps manufacturing as some of their objectives are based on batch inputs and outputs. Once again, Discoverer is strongly recommended for this data due to its ability to be customized easily.
3. Ensure Production Variances are accurate both financially and through production – The financial variance is found while reviewing the subledger. Since the financial variances are based on costing formulas, there could be a variance and the production floor did exactly as their formula said. This causes much dispute between accounting and manufacturing and leads to the need for a report to validate production formula usage. Discoverer allows users to review batches in the ways that reflect their processes.

4. Ensure OPM Inventory transactions complete – Since these transactions are not scheduled, they are harder to predict, but are still important because many industries have a high value of adjustments monthly due to miscellaneous use, cycle count adjustments, etc. Oracle provides a Daily Transaction Detail Report, but the user can't specify the type of transactions, so they must go through all transactions, which in many companies is not time effective. The user is looking for inventory adjustment transactions for the month and the ability to compare to past month's to ensure all are entered. A better way to get this information is to use a query tool like Oracle Discoverer and query the IC_TRAN_CMP table for ADJI document types. Users should also review all transactions with the CREI document type. These create immediate entries should be rare and have complete documentation. In many companies CREI transactions do not occur after the initial inventory load. This "creating" of inventory should be monitored.

Accurate and timely reporting of these adjustments are important to manufacturing and accounting as they drive expenses and inventory values, indicators that both groups are judged on.

5. Ensure OPM Costing item standards from period to period are accurate – Users should review item costs (either standard or actual) from one period to another to ensure any large variance is able to be explained. Discoverer will allow users to analyze, export and review data in a user friendly manner.
6. Ensure OPM Shipping transactions complete – Review order lines that have a past due scheduled ship date. Similarly to past due receipts, this allows users to verify whether shipment is late or just not recorded. By reviewing this proactively it also can identify a problem that could be serious. Missing customer expectations will not be tolerated forever. This review can be accomplished in the application by going to the shipping transaction form and querying not shipped lines with a scheduled ship date range ending with the pre-defined cutoff date. The list can be exported to excel for further review and manipulation. Non-shipped lines do not create revenue (sales). Manufacturing personnel are usually more concerned about accurate sales numbers as accounting. Discoverer will allow this data to be reported in an exception basis to facilitate quicker responses from manufacturing.
7. Ensure OPM Transfer transactions complete – Review open inventory transfers that have a scheduled delivery date that is past due. Oracle provides a seeded Inventory Transfer Report that can be run for in-transit and pending transfers with the scheduled release date range ending on the pre-defined cutoff date. Incomplete inventory transfers will cause inventory inaccuracies, which affect manufacturing personnel and accounting objectives. Discoverer will allow for better data manipulation than the seeded Oracle report.
8. Perform Preliminary Close of each warehouse – This review will allow the user to run their inventory valuation reports throughout the month to monitor inventory levels. This is particularly helpful prior to the cutoff date to get a feel of where inventory levels are. If the levels are consistently where they are expected you could assume all transactions are completed. However, this step should not be run alone. It should become a tool by which the above steps validate. Reviewing inventory levels is always a concern and Discoverer will allow users to present the data to meet their company's requirements.
9. Provide a perpetual view of inventory – Often times, users need to view (in total by item) the beginning inventory quantity, transaction (by type) quantity and ending inventory. This view is not visible through Oracle reporting. Discoverer will allow for this through the use of seeded tables and calculated fields.
10. Run Test Subledger(s) – This review should be done throughout the month to catch any flagrant accounting errors. It gives accounting time to correct and also investigate why an unexpected result occurred. Identifying and correcting in the month is less stressful than rushing around at month end. The subledger should become the accountant's best friend. Discoverer makes the

review of the subledger almost enjoyable as it can provide flexibility that the seeded report can not.

11. Purchase Price Variance (PPV) review – Before the month end is completed the PPV should be reviewed and the large variances should be investigated to ensure accuracy This should be done throughout the month as receipts come in and not wait for the first review to be during the month end process. Discoverer can provide users with exception reports that will allow for easier review of the questionable data.
12. Sales Order price versus standard and/or list prices – Before the month end is completed the sales order prices should be compared to standards to ensure margins are being met and against the pricing list price to see when salespersons are changing the prices. This information will allow users to explain month end numbers and correct errors if any are found.
13. Review details of the Accounts Payable Account Analysis – The Accounts Payable Account Analysis seeded report will show users the detail transactions in the accounts specified in the parameters. Discoverer will allow users to tailor the view of the report and allow for easier exporting.
14. AR Reconciliation Report details – The AR Recon Report shows totals, but many times users would like to see the details of the values, especially to validate GL accounts. This is where Discoverer will provide benefits
15. AR Aging by customer party – Many users utilize Oracle's party concept with customers and would like to see the aging for the party. Unfortunately, the seeded aging reports only show for account levels. Discoverer will allow for this view of data.

The above data is not the only data necessary, but represents a majority of the requests made by users. This is where a powerful query tool like Discoverer can be utilized to obtain all the data listed above in order to make the results more flexible and also easier to export to the accountant and manufacturing personnel's best friend, Excel.

Now that the users have identified what they want they need to create a document for their Discoverer Administrator to review. This documentation is also referred to as a functional report specification. For users used to working with Oracle AIM documentation, the document is the MD050. This document is important to ensure proper communication with the technical team or Discoverer administrator.

Whatever your company calls the document you should make sure it has at least the following pieces of information:

- Description of what report is used for
- Business flow using report
- Fields required on report and screen shots of where in application data resides
- Report header information
- Report field layout
- Field sorting
- Report totals, sub-totals

After the functional specification is completed the next step is for the Discoverer administrator to review and generate a technical report specification. Within Oracle AIM this is the MD070. The purpose of this document is to determine where the data requested is stored in Oracle and how it is joined together. A common technique to ensure the data is accurate is to create the SQL in a tool like Toad to ensure the data returned is what the user is seeking.

After ensuring the understanding of the data requested, the next step for the Discoverer Administrator is to determine if there is a current business area that contains the tables and joins for the requested data. If there is then the Discoverer administrator will notify the user of the business area that will allow them to get their

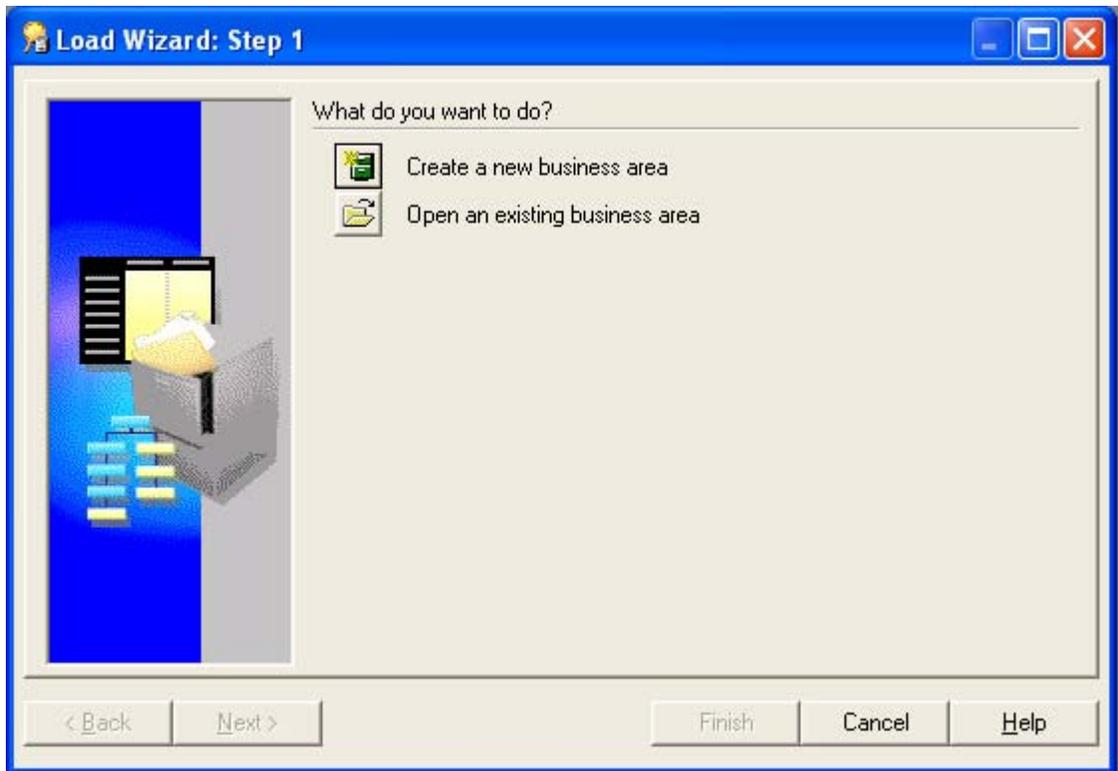
report. Depending on the company the user will create their own report or the Discoverer administrator will create the report.

However, if there is not a business area that could be adjusted to meet the data requirements of the report specification a new business area will need to be create. In the next section we will illustrate the steps necessary to create a business area.

Create Business Areas

For this example we are going to assume the user has requested a report in the proper documentation requiring Batch Number, Batch Status, and Item Number of the Products of the Batch for batch in WIP status. Through our technical review we have discovered the tables needed are gme.gme_batch_header, gme.gme_material_details and gmi.ic_item_mst_b. Following are the steps required to create a new business area:

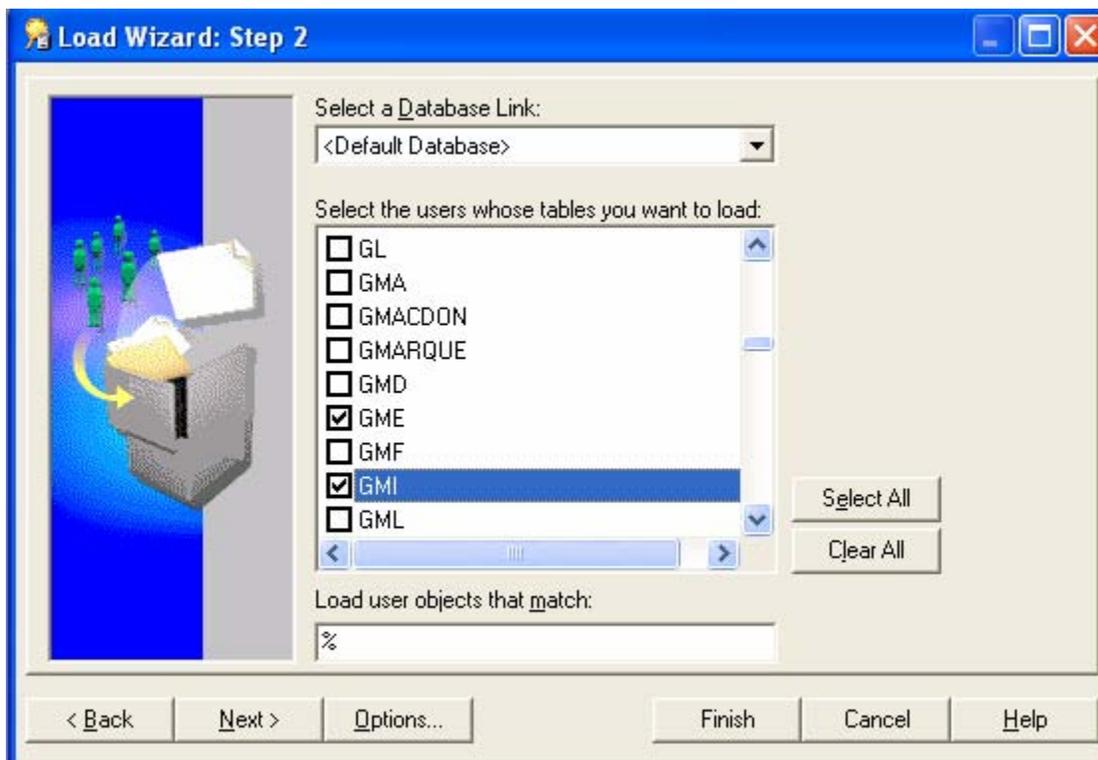
1. Log on to 10g Discoverer Administrator to begin the process



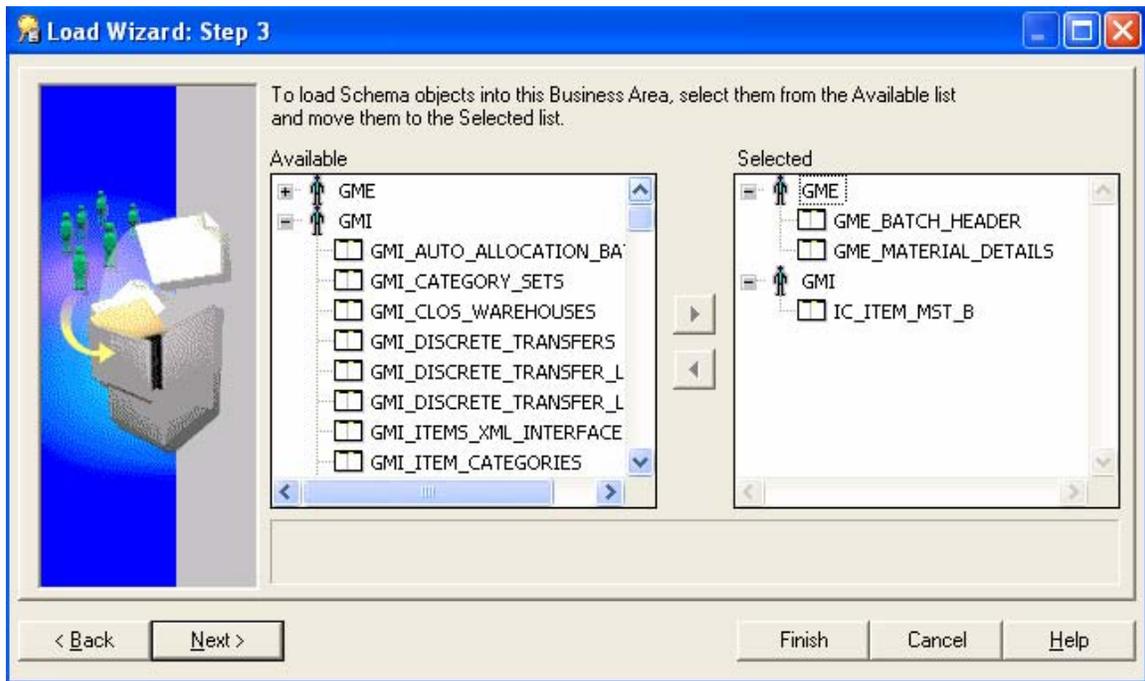
2. Click Create a new business area and then select Next > button



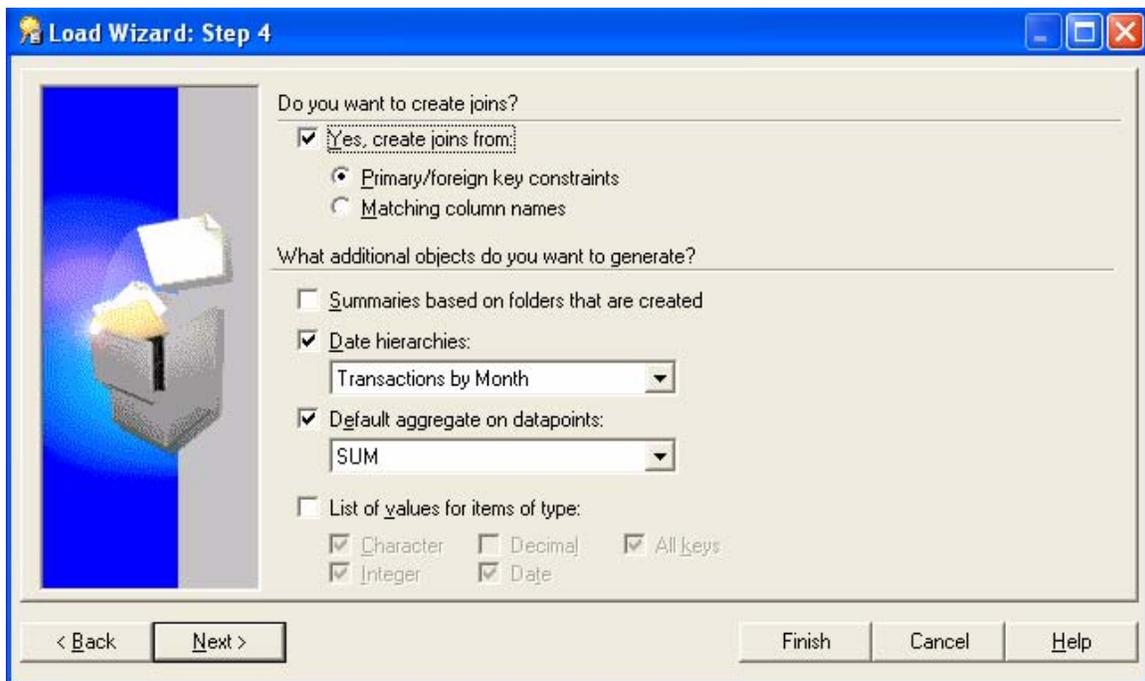
3. Select the schemas owning the tables needed. Remember in our example we need the GME and GMI schemas. These schemas are called users on the screen below.



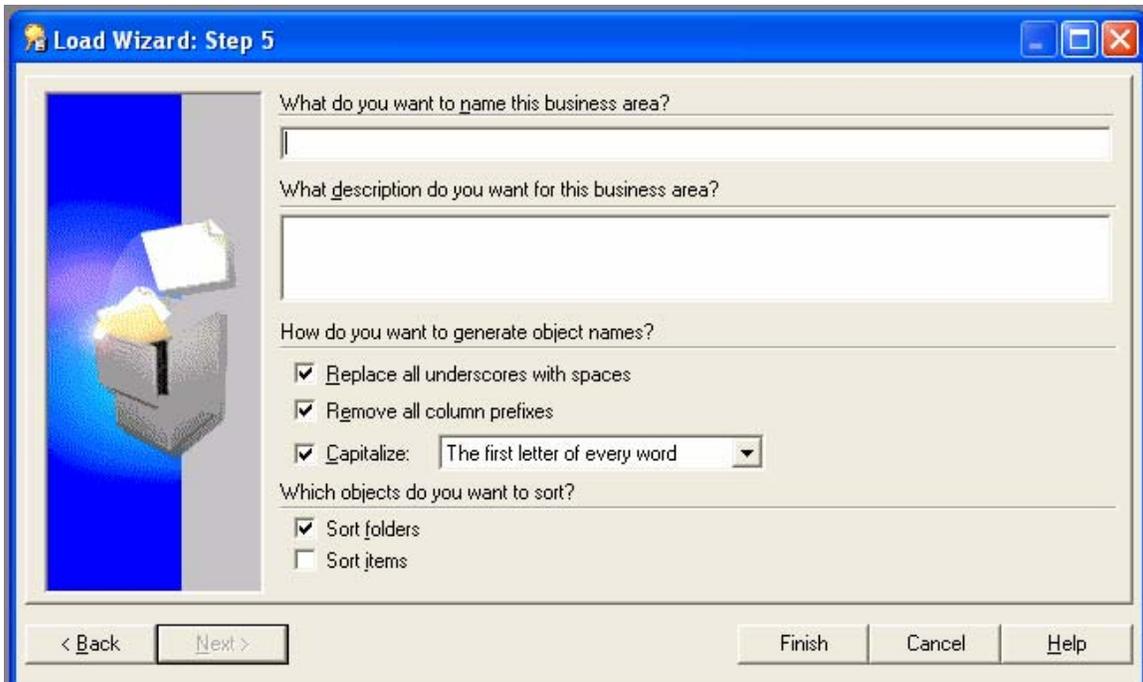
4. Click Next > button.
5. Select the tables to add to the business areas. For our example we determined we needed gme.gme_batch_header, gme.gme_material_details and gmi.ic_item_mst_b



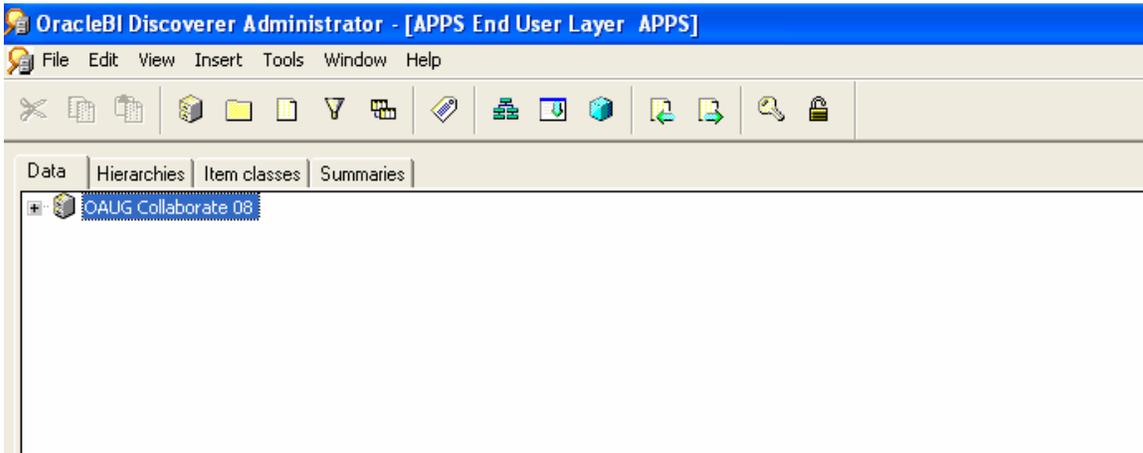
6. Click Next > button
7. Continue the configuration. Generally with this step using the defaults is recommended.



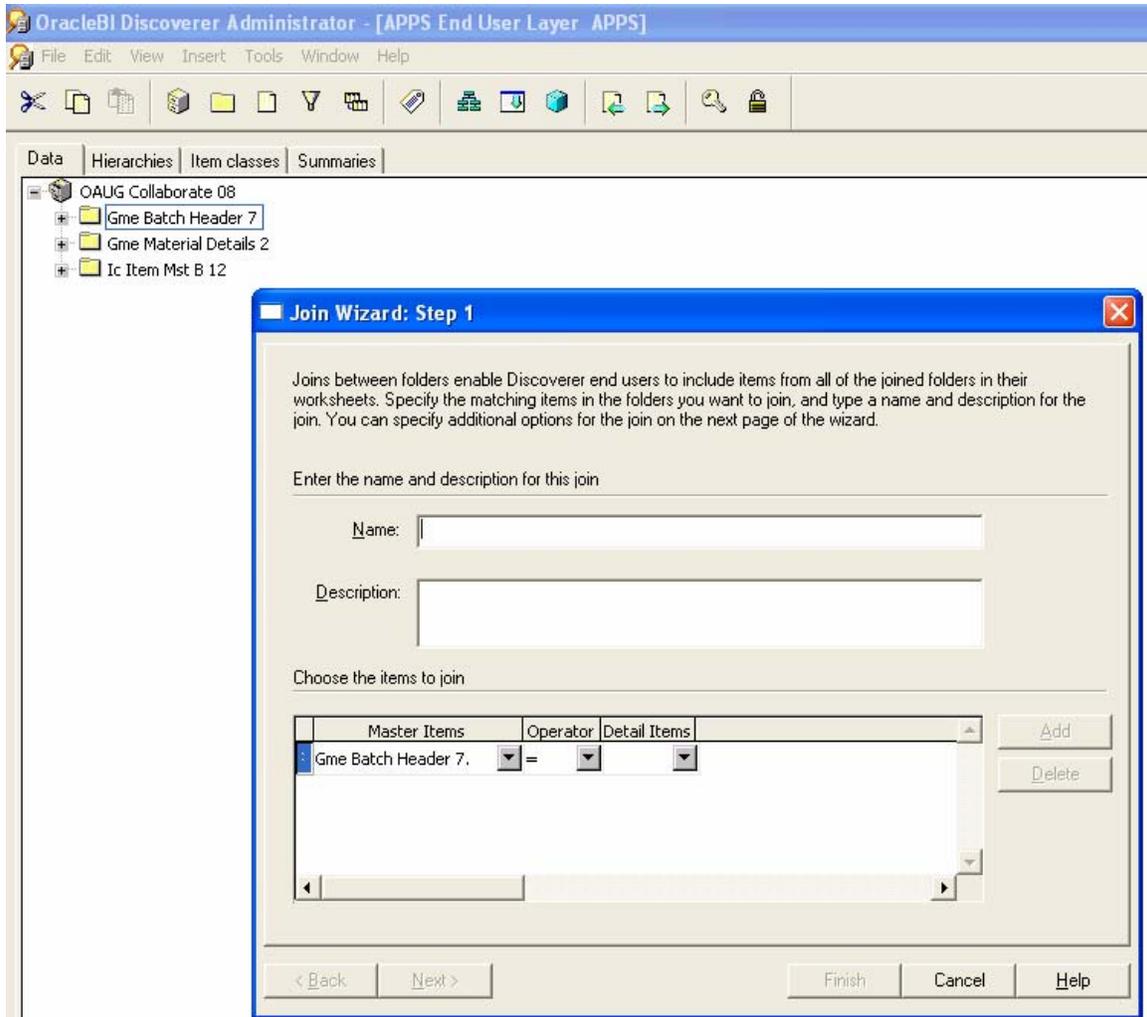
8. Click Next > button
9. Name business area



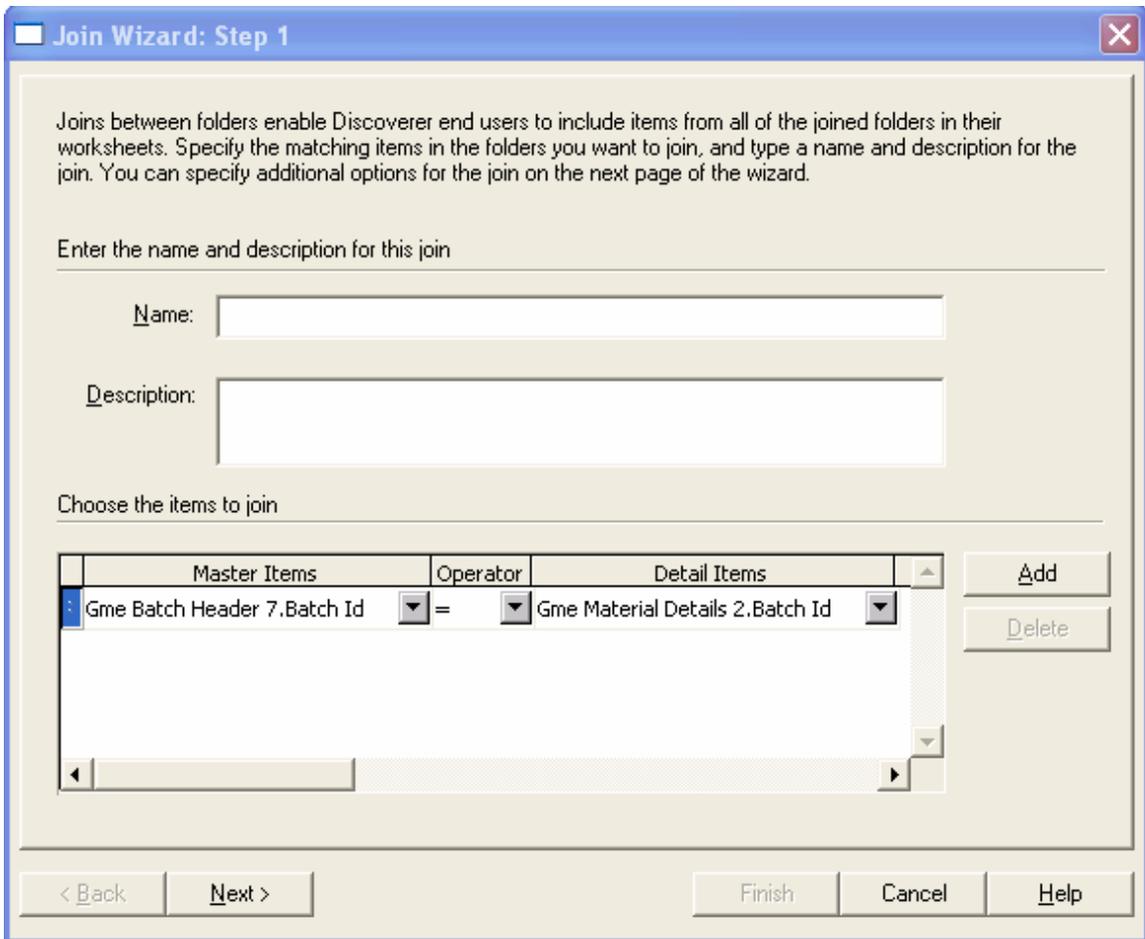
10. Click Finish and objects are loaded and when completed business area will appear



11. Create joins on tables which have been identified in the technical review. In our example we need to join the gme.gme_batch_header to the gme.gme_material_detail and then join gme.gme_material_detail to gmi.ic_item_mst_b. Open the new business area and highlight the first table to join and click Insert Join



12. Join the master items table with the detail items table



13. Click Next > button

Join Wizard: Step 2

These settings might affect both the use of summary folders and the number of rows returned from a query. If you are not sure which setting to select, click Help

Choose the join details

Detail item values always exist in master folder (Typical)

Detail item values might not exist in master folder

Choose any optional join configurations

No outer joins

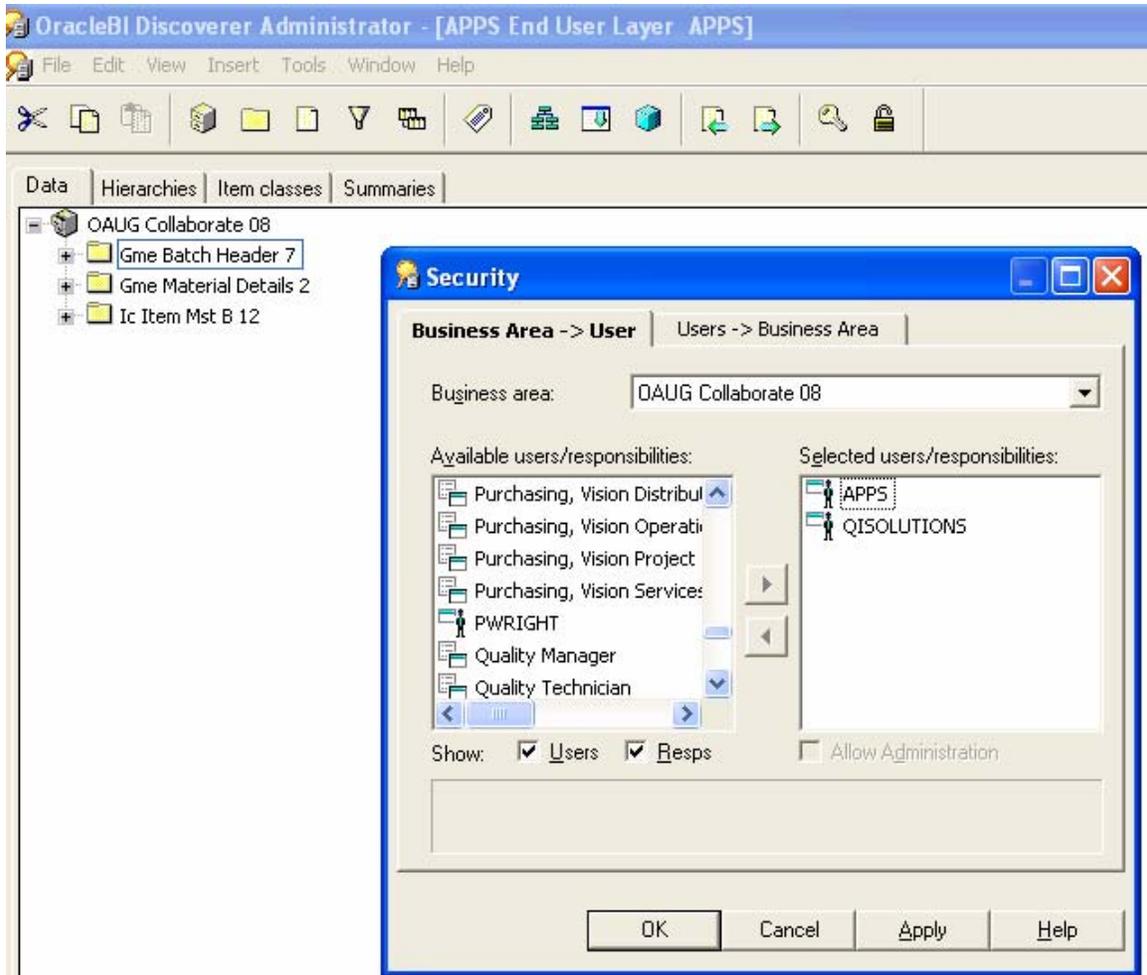
Outer join on detail

Outer join on master

One to one join relationship between master and detail

< Back Next > Finish Cancel Help

14. Select appropriate values and click Finish button and will return to main screen.
15. Repeat steps 11 – 14 for each table that needs joins
16. Next grant access to business area to users by clicking Tools>Security and adding user name to newly created Business Area

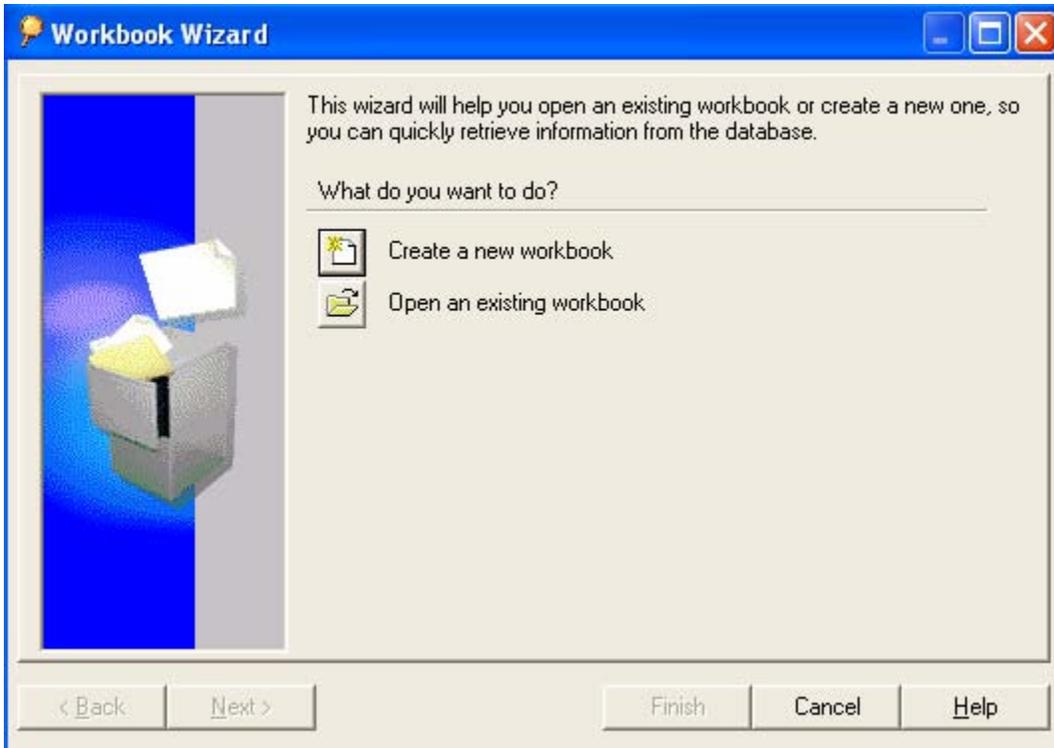


17. Click OK and now the report is ready to be created

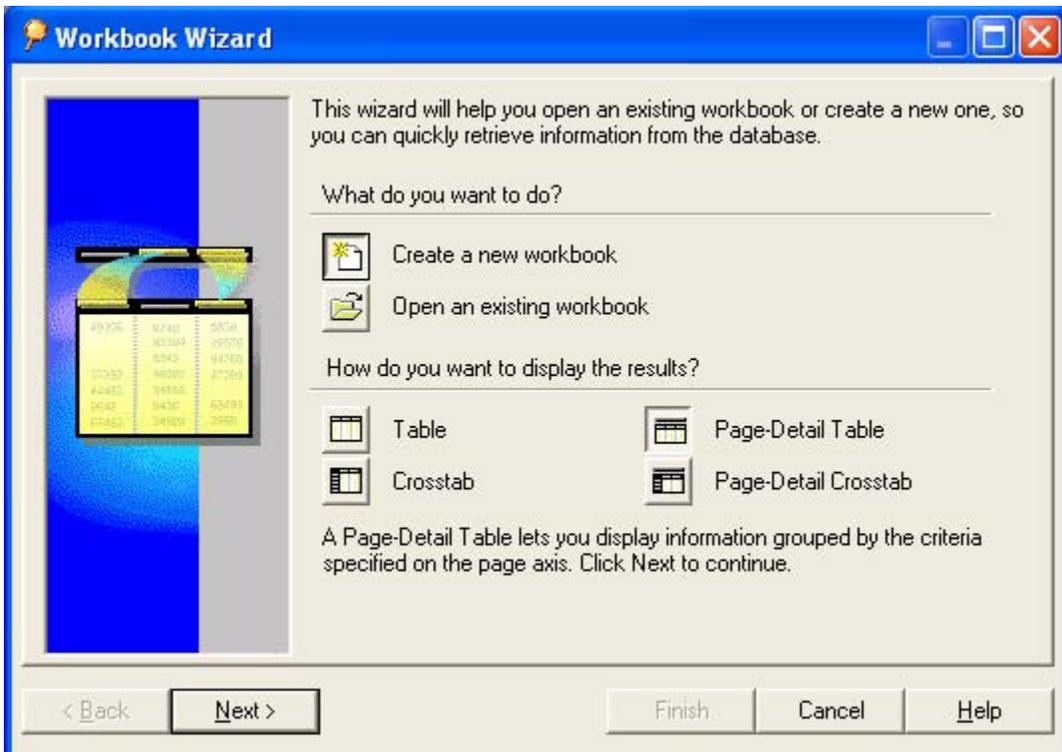
Define Reports

Now that the business area is defined, the report can now be defined. Below are the steps to create a Discoverer report. To review, for this example we are going to assume the user has requested a report in the proper documentation requiring Batch Number, Batch Status, and Item Number of the Products of the Batch for batch in WIP status.

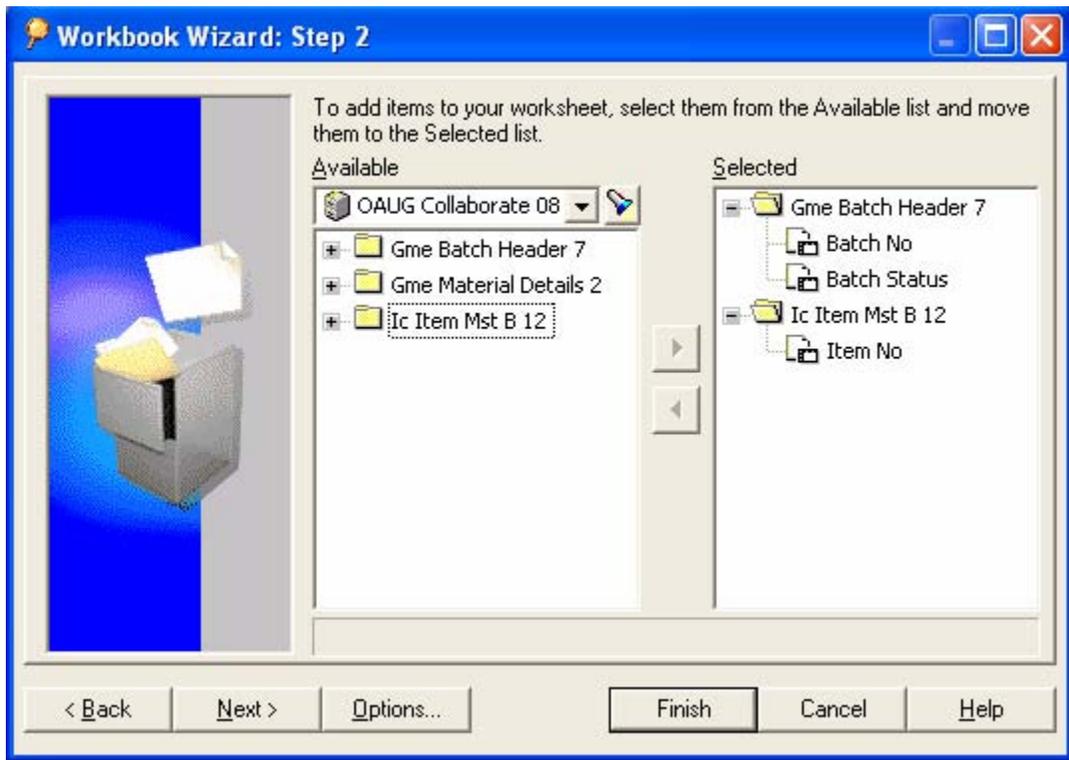
1. Logon to Oracle 10g Discoverer Desktop (Many times a colon (:) is needed after the user name to allow user to access Discoverer)



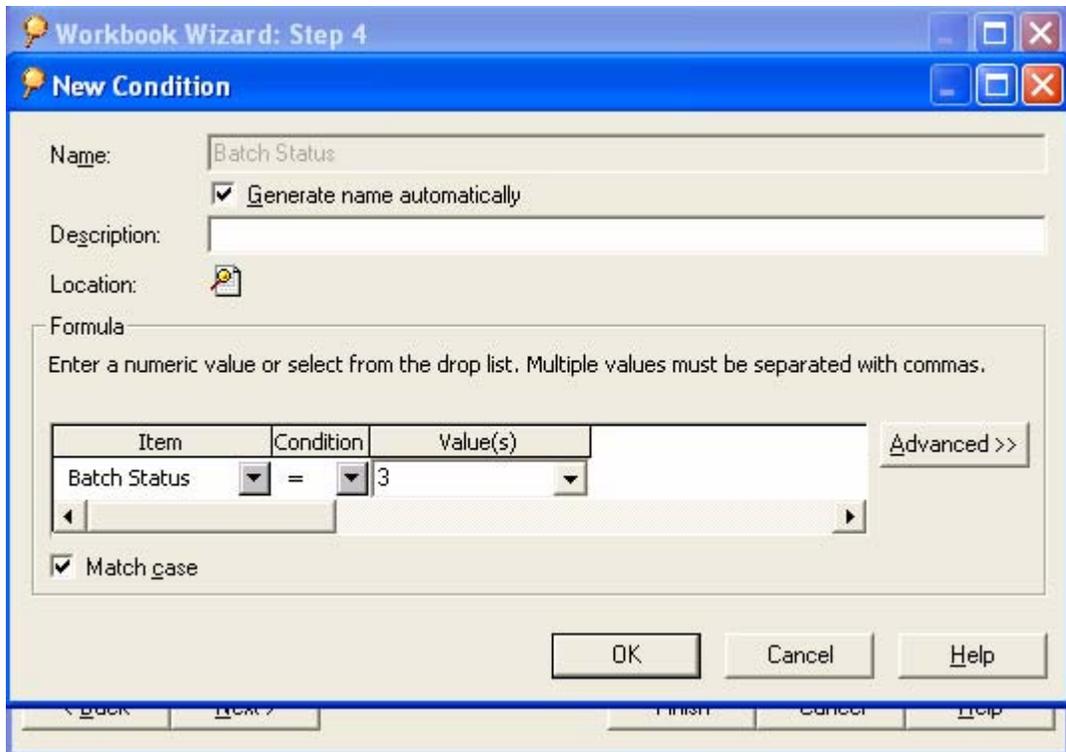
2. Click Create a new workbook and select type of workbook to create. Most reports are able to be satisfied by Page-Detail Table. For our example it does as well. After selecting type click the Next > button



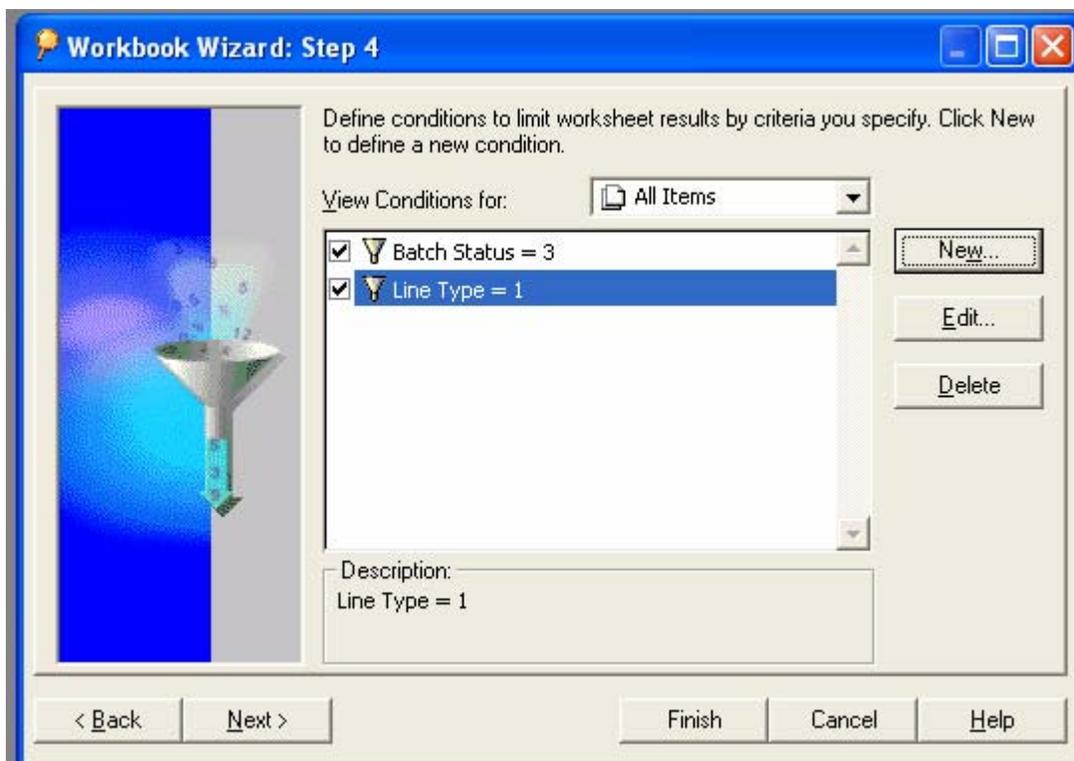
3. The next step is to select the fields requested in the report specifications. For our example we need Batch Number, Batch Status and Item Number. After selecting columns, click Next > button



4. Change layout if necessary. This is where you would order the columns. When complete select Next> button
5. Create conditions. This is where you define the conditions for your query. In our example we need to select only the items that are products and also only batches that are in WIP status. Click New button to create condition and select columns and values

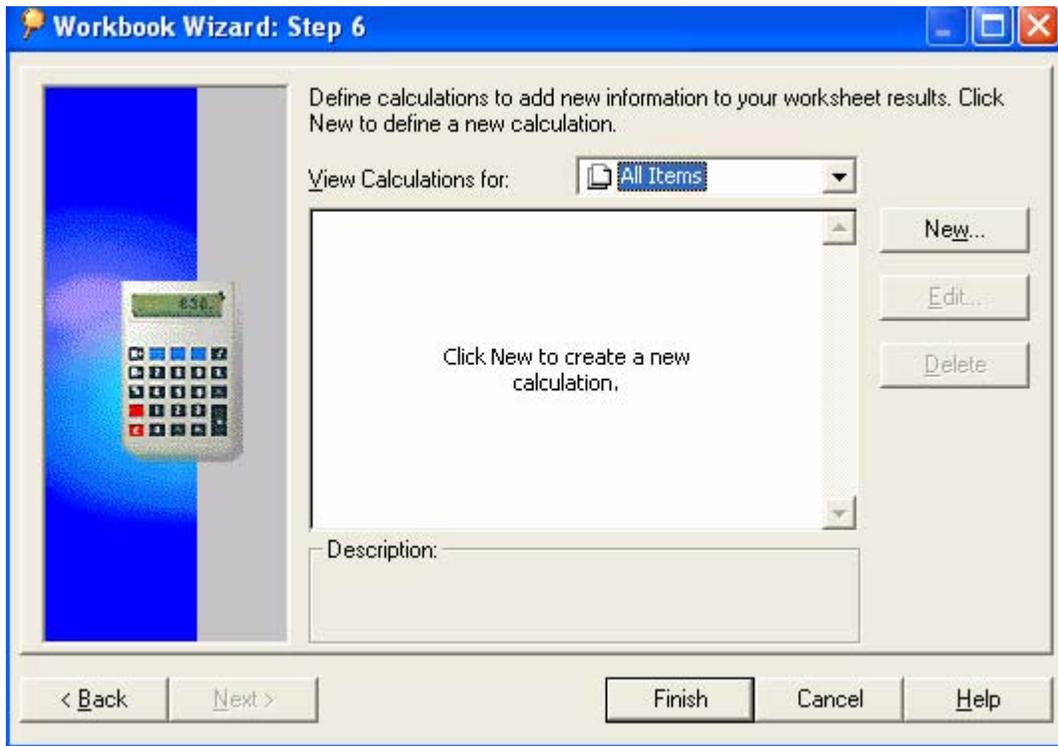


Click OK button and then repeat for additional conditions. When complete select Next > button

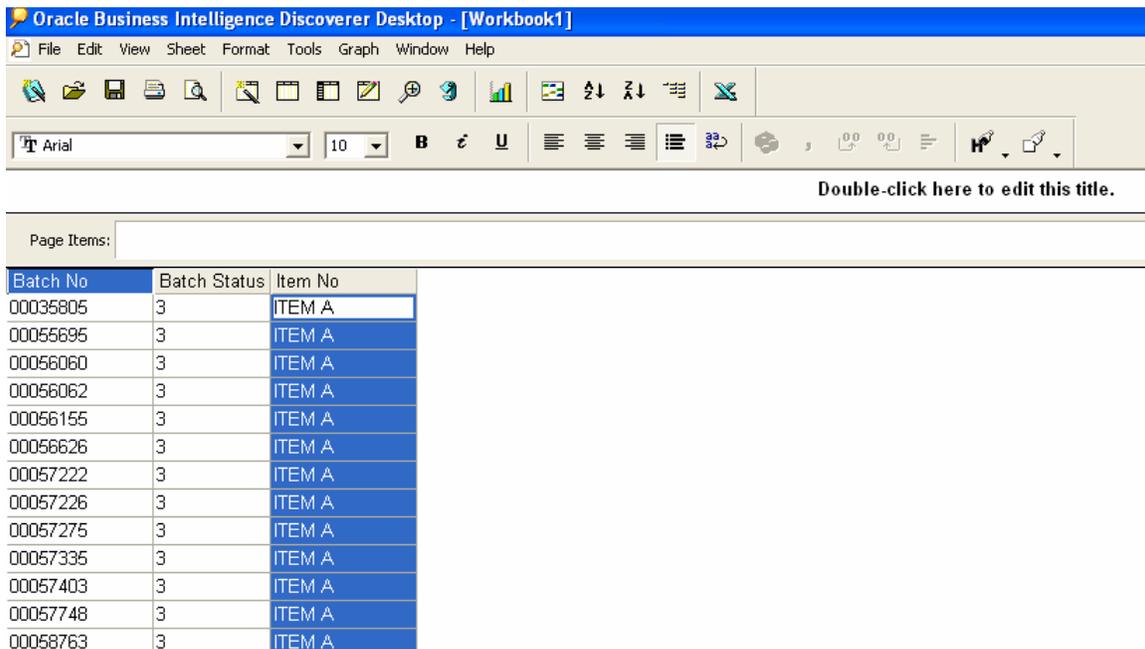


6. Select column to sort by if the specification identified a sort. Our example does not specify, so when complete click Next > button

- Define calculations. This is where users define calculated fields through mathematics or functions. Our example does not require calculations so when complete select the Finish button to begin query



- When the query completes the report is essentially complete. Titles can be added per the specification as well as any column name changes.



Lessons Learned

Through the years the following lessons have been learned:

1. Make sure you know what the user really wants before the report is developed. This is just like with Oracle report development. The biggest risk here is wasted time developing something not wanted.
2. Utilize resources. The technical resources within your company can assist in helping understand tables and joins. Once the basic understanding is there business areas can become more complex.
3. Test queries thoroughly before releasing to general user population. The risk here is the report tests positive in development, but fails in the field. This is the fastest way for users to develop the feeling that Oracle is wrong.
4. Trust users. After awhile users will be able to generate their own reports. This is highly dependant on the strength of the business area design.

Conclusion

Oracle Discoverer is a very flexible reporting tool. It will allow users to report exceptions and export to Excel, which is usually a user's friend.

As this paper has shown the steps to creating a EUL, business area and report are not hard. The difficult part of the process is the review of the user specification and determining if a current business area exists that meets the need of the user.

Additional information about Discoverer can be found in the Oracle Press Oracle Discoverer 10g Handbook. This reference guide will describe in detail the screen and steps discussed above. Also the authors of the handbook have a website www.learndiscoverer.com that has provided helpful hints and suggestions in the past.

Month end closing is a critical part of a business and having the right data at the right time will let you make timely and accurate decision. With some thought and practice you too can Discoverer your month end closing.