
Oracle BIEE 11g Reports and Dashboard Hands On

Vlamis Software Solutions is one of the most respected training organizations in the Oracle Business Intelligence community because our training programs and materials are informed by our experience leading implementations in many of the world's foremost corporations. Through our roles as implementers, beta testers, and trainers, we develop and codify many of the "best practices" that are propagated throughout the industry. Our training materials reflect this expertise and are centered on hands-on exercises that build confidence and competence. With more than 200 Oracle BI implementations under our banner, our trainers are not just presenters, but accomplished consultants who incorporate their real world experience into the classroom ensuring that participants are optimally prepared. This Hands-on Lab is an excerpt from our OBIEE 11g classroom / web-based class.



Oracle BIEE 11g Report and Dashboard Hands On

The Oracle BI Answers and Dashboards are the reporting components of the Oracle Business Intelligence environment.

This Hands on will consist of 2 1 hour sessions covering the following:

Part One

Overview of What's New

The New Analysis Look and Feel

Answers – New Features

Lesson #1 Working with New Column Types

Graphs New Features

Lesson #2 Working with New Graphs

Part Two

Using Maps – A whole new world!

Lesson #3 – Using Maps

Prompts – New Features

Lesson #4 Working with Prompts

Dashboards Putting it All Together

Lesson #5 Building Dashboards



- Founded 1992
 - Focused on Oracle technology since 1995
 - Experienced consultants with over 200 BI implementations
 - Award winning authors and educators
 - Aggressive adopters of the latest technologies
 - Connected with Oracle product management and developers
 - Efficient implementers by working offsite to reduce costs
 - Team-oriented collaborative approach
 - Respected reputation for ethical business practices
- Training
- Training available for on-site, web, and CBT
 - OBIEE 10g to OBIEE 11g Upgrading and New Features
 - OBIEE 11g/10g - Ad-hoc Query and BI Answers
 - OBIEE 11g/10g - BI Dashboards and Delivers
 - OBIEE 11g/10g - Administration and Metadata Development
 - BI Publisher for OBIEE 11g/10g
 - Oracle OLAP

www.vlamiS.com (blog, papers, newsletters, services)



OBIEE 11g Architecture

What has changed?

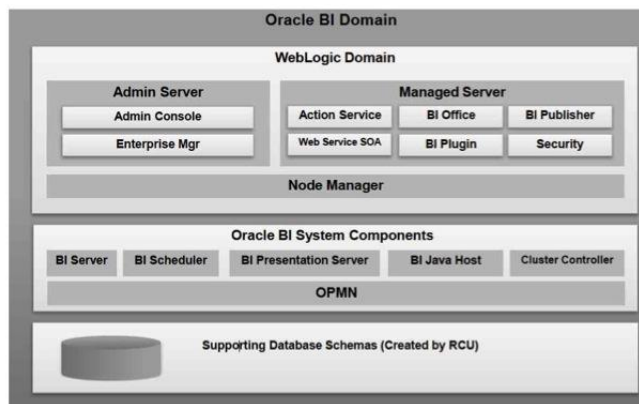
- Weblogic replaces OC4J and OAS
- Security is now done with Weblogic
- Servers now stay up!
- RPD and Webcat management done in Enterprise Manager (Weblogic)
- Can now setup and administrate shared servers

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4



OBIEE 11g Architecture

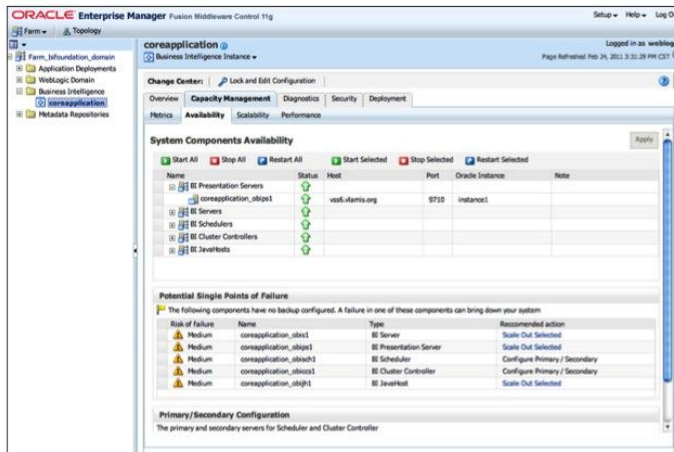


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Enterprise Manager 11g



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7

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New Answers, Dashboards and BI Publisher Features

New Features

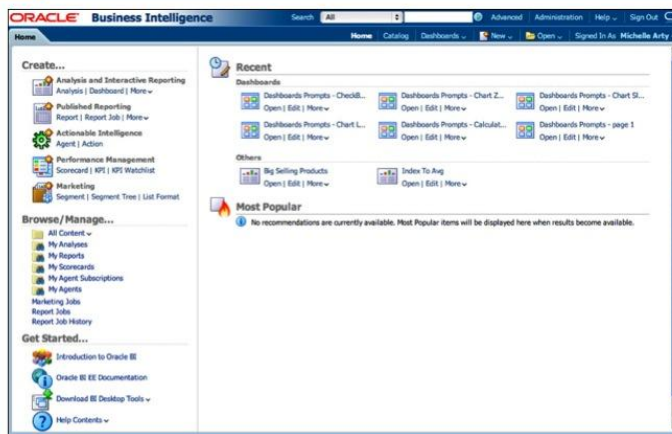
- Unified Framework
- Column Types
 - Interaction
 - Selection steps
 - Groups
 - Calculated Items
- Unified Prompting
- New Graph Features
- Maps
- BI Publisher Integration and Web Editor

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9

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New Home Page



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11

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Answers 11g Overview

- Improved support for OLAP-style reporting
 - Hierarchical columns
 - Support for ragged and skip-level hierarchies
 - Dynamic re-arrangement of pivot tables in the dashboard
- Dynamic grouping and custom aggregates
- New Prompts
- New dashboard controls
- New gauge types and graphics

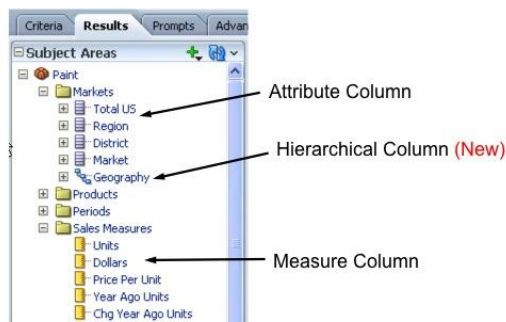


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OBIEE Column Types



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15

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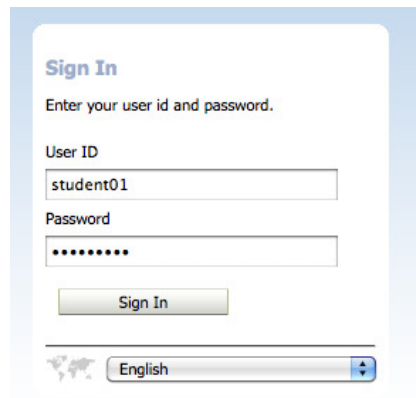
Lesson 1 – Using the New Hierarchical Columns

Exercise 1a: Creating a query

In this lesson, you will

1. Create a simple query in Answers
2. Apply filters to the query
3. Format the query

Use your browser to reach <http://50.16.24.214:9704/analytics>, and enter **studentXX** (ex. student01) as the username where XX is the ID given on the first page of this document. The password will be shown on the overhead or given to you by the instructor.



Sign In

Enter your user id and password.

User ID

Password

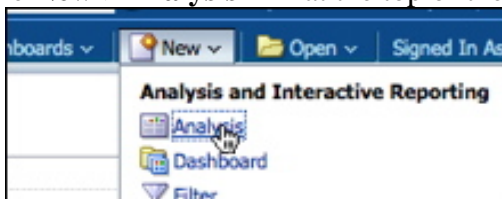
English

Scenario

Build an Analysis that will show Revenue by Office by Time. The Offices Total value should be the aggregate of all Companies but only display the Companies that have Revenue greater than \$5,100,000 for year 2008.

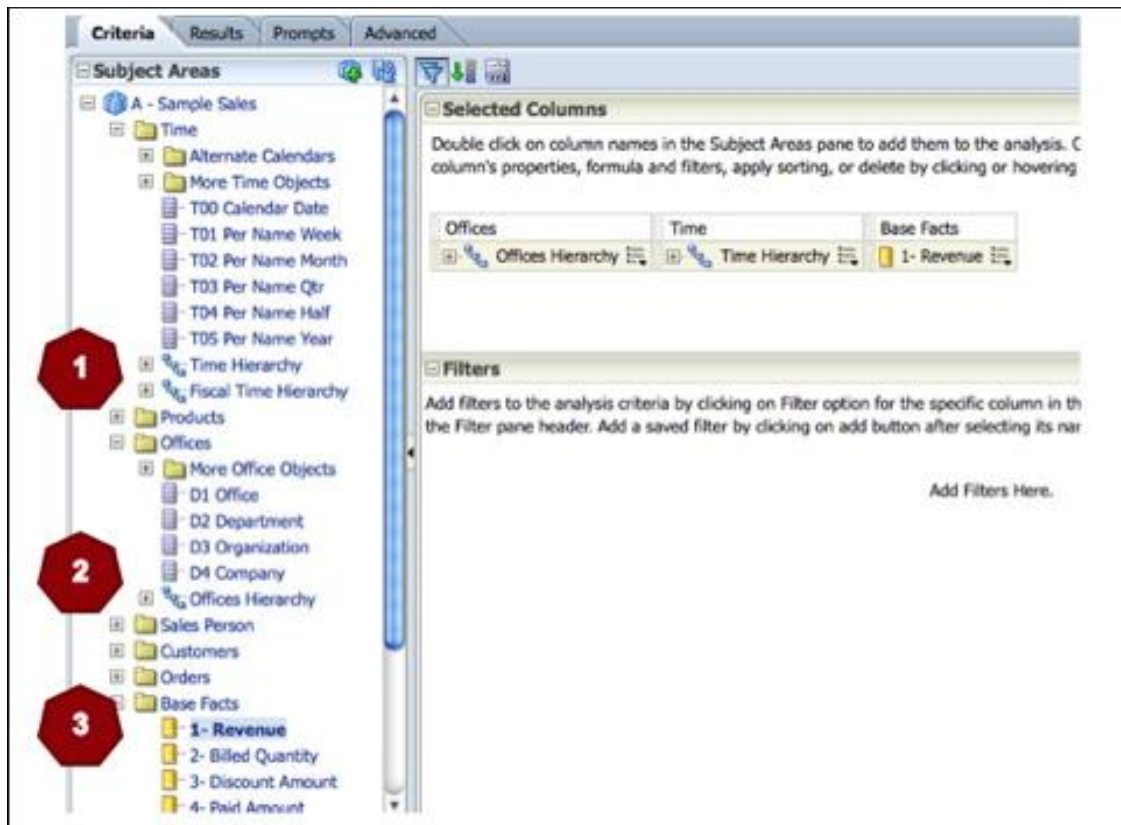
Create a Query



Click the **New->Analysis** link at the top of the screen to navigate to the Answers start page.



Click on the **Global** subject area link.





1. In the left-hand selection pane of the Answers interface, click the Plus  icon next to **Time Dimension** to drill down and see the columns associated with the **Time** dimension. Click the **Time Hierarchy** column to add it to your query criteria, which appears in the right pane.
2. Click the Plus  icon next to **Offices Dimension** to drill down and see the columns for the Offices dimension. Click the **Offices Hierarchy** column to add it to your query criteria.
3. Finally, drill on **Base Facts** and add the **Revenue** column. Click on the Results Tab. Your query should look like this:

Compound Layout

Title		
Pivot Table		
		1- Revenue
Offices Hierarchy	Time Hierarchy	
+ Corporate Total	+ Total Time	50,000,000

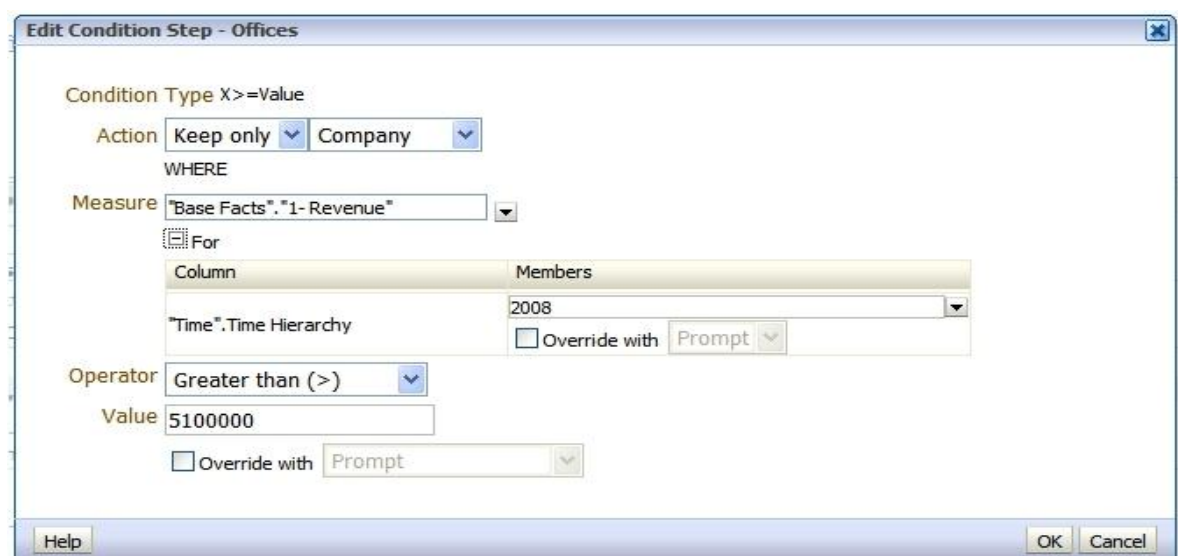
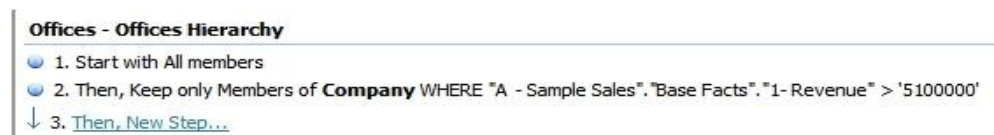
Filtering Data

Exercise 1b: Using Selection Steps

In addition to traditional Filters OBIEE11g now has Selection Steps. We will use Selection steps to choose the correct Offices to display.



Under Office Click “Then, New Step” and add a Condition Step with the following information:



Your query should look like this:

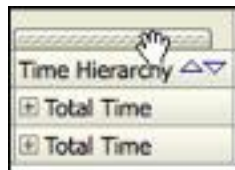
Compound Layout

Title		
Pivot Table		
		1- Revenue
Offices Hierarchy	Time Hierarchy	
+ Genmind Corp	+ Total Time	16,792,560
+ Tescare Ltd.	+ Total Time	19,641,040

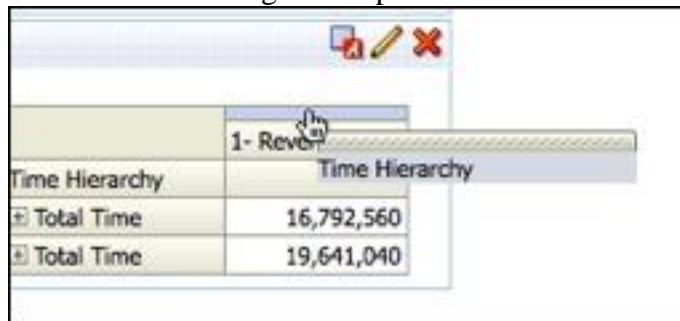
Exercise 1c: Pivot Table and Hierarchies

Now lets work with the Pivot Table. One new Feature of is the ability to Drag and Drop columns on Pivot Tables.

If you highlight the Time Hierarchy column you will see a Grey Tab Show up (and the mouse pointer will change to a hand):



Now Grab the Tab and Drag it on top of the Revenue Column



The display will now show this:

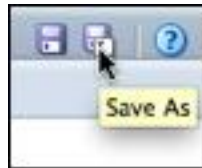
Pivot Table		
		+ Total Time
		1- Revenue
Offices Hierarchy		
+ Genmind Corp		16,792,560
+ Tescare Ltd.		19,641,040

Click the + next to Total Time to Expand the Time Dimension and your Display should look like this:

	[-] Total Time			
		[+] 2008	[+] 2009	[+] 2010
	1- Revenue	1- Revenue	1- Revenue	1- Revenue
Offices Hierarchy				
[+] Genmind Corp	16,792,560	5,470,146	5,036,331	6,286,083
[+] Tescare Ltd.	19,641,040	6,455,758	5,963,833	7,221,449

You can Expand the Offices and you will see that they stay within the same column. Expanding The Time will add columns but they are linked to the parentage and can expand and contract.

Save the Query as Lesson1 so we can use it in the next lesson.



Exercise 1d: Grouping

Next we will use the new Group Function to create an Aggregate Group

- Return to the **Results** tab.
- At the top of the area in the menu bar click on **New Group**



This you to create a separate aggregate group from selected members within a hierarchy.

- Give the Group a name (My Office).
- Select Production Org → Assembled Dept, Subcontracted Org and Tescare → Susidiaries Org.

New Group

Display Label:

Values From:

Available

- [-] **Offices.Offices Hierarchy**
 - [-] Corporate Total
 - [-] Genmind Corp
 - [-] Production Org.
 - [-] Assembled Dept.
 - [-] Manufactured Dept.
 - [-] Subcontracted Org.
 - [-] Local Plants Dept.
 - [-] Stockplus Inc.
 - [-] Tescare Ltd.
 - [-] Franchises Org.
 - [-] **Subsidiaries Org.**

Move

Move All

Remove

Remove All

Selected

- [-] Assembled Dept.
- [-] Subcontracted Org.
- [-] Subsidiaries Org.

- Click **Done**

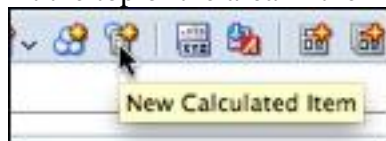
Expand My Office and your screen should look like this:

	[-] Total Time			
		[+] 2008	[+] 2009	[+] 2010
	1- Revenue	1- Revenue	1- Revenue	1- Revenue
Offices Hierarchy				
[-] Genmind Corp	16,792,560	5,470,146	5,036,331	6,286,083
[+] Production Org.	10,399,704	3,369,506	3,071,684	3,958,514
[+] Subcontracted Org.	6,392,856	2,100,640	1,964,647	2,327,568
[-] Tescare Ltd.	19,641,040	6,455,758	5,963,833	7,221,449
[+] Franchises Org.	9,145,845	2,922,692	2,885,277	3,337,877
[+] Subsidiaries Org.	10,495,195	3,533,066	3,078,556	3,883,572
[-] My Office	19,425,604	6,449,148	5,832,312	7,144,144
[+] Assembled Dept.	2,537,553	815,442	789,108	933,003
[+] Subcontracted Org.	6,392,856	2,100,640	1,964,647	2,327,568
[+] Subsidiaries Org.	10,495,195	3,533,066	3,078,556	3,883,572

Exercise 1e: Calculated Members

Next we will use the new Calculated Item Function to create an Custom Aggregate

- Return to the **Results** tab.
- At the top of the area in the menu bar click on **New Calculated Item**



This you to create a separate aggregate from selected members within a hierarchy.

- Give the Item a name (My Office Total).
- Select Production Org → Assembled Dept, Subcontracted Org and Tescare → Subsidiaries

Notice that the Select looks different. It is showing the calculations instead of just the members selected you will need to put + to add each member

- Click **OK**

The Results should look like this:

	Total Time			
		2008	2009	2010
	1- Revenue	1- Revenue	1- Revenue	1- Revenue
Offices Hierarchy				
Genmind Corp	16,792,560	5,470,146	5,036,331	6,286,083
Production Org.	10,399,704	3,369,506	3,071,684	3,958,514
Subcontracted Org.	6,392,856	2,100,640	1,964,647	2,327,568
Tescare Ltd.	19,641,040	6,455,758	5,963,833	7,221,449
Franchises Org.	9,145,845	2,922,692	2,885,277	3,337,877
Subsidiaries Org.	10,495,195	3,533,066	3,078,556	3,883,572
My Office	19,425,604	6,449,148	5,832,312	7,144,144
Assembled Dept.	2,537,553	815,442	789,108	933,003
Subcontracted Org.	6,392,856	2,100,640	1,964,647	2,327,568
Subsidiaries Org.	10,495,195	3,533,066	3,078,556	3,883,572
My Office Total	19,425,604	6,449,148	5,832,312	7,144,144

Notice that the Calculated Item is not Drillable but the Group is Drillable. The Total for both are the same.

OBIEE 11g Charts and Graphs

New Graphs and Visualizations

- Additional Graph Features implemented
- Sliders, Zoom and Legends
- Master Detail links



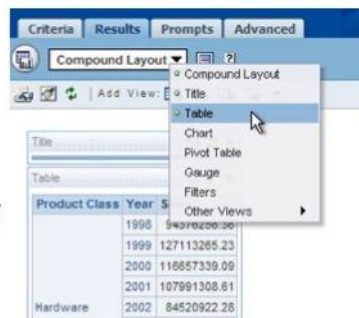
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18

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The View Selector

- Reports in Oracle Answers can have multiple Views associated with them
- Default views are Table, Title and Compound
 - Table view is a simple listing
 - Title view provides a title, subtitle and icon
 - Compound view combines multiple views
- Compound view is normally the view displayed in the dashboard



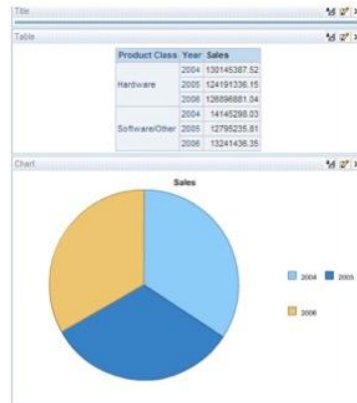
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Graphs

There are several types of Graphs Available:

- Area
- Horizontal Bar
- Bubble
- Vertical Bar
- Line
- Line-Bar Combo
- Pareto
- Pie
- Radar
- Scatter
- Step



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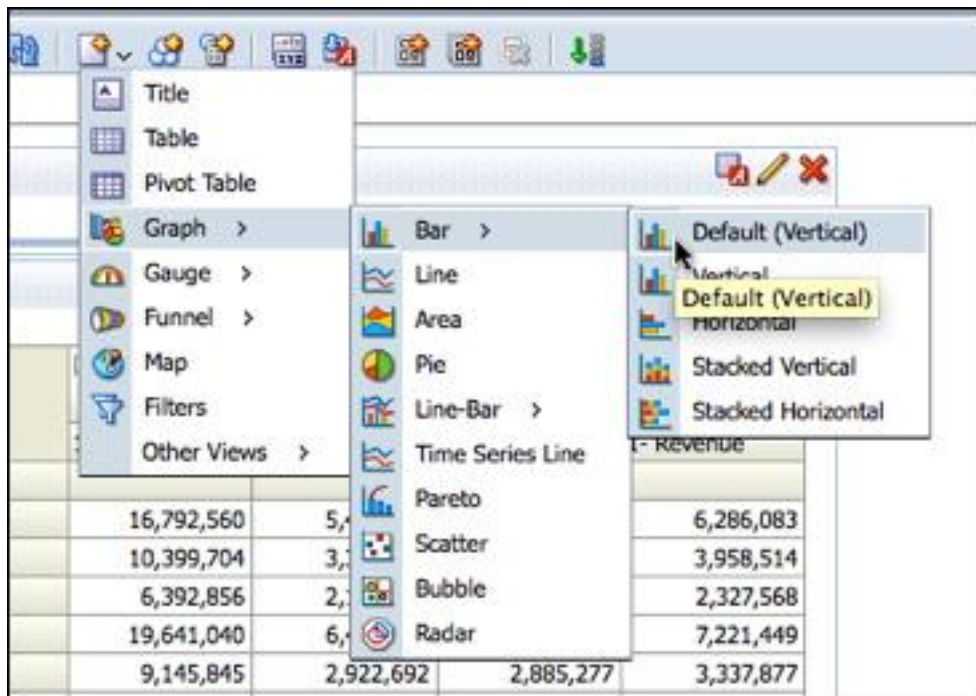
Lesson 2 – Using the New Graph Features

Exercise 2a: Graph Slider

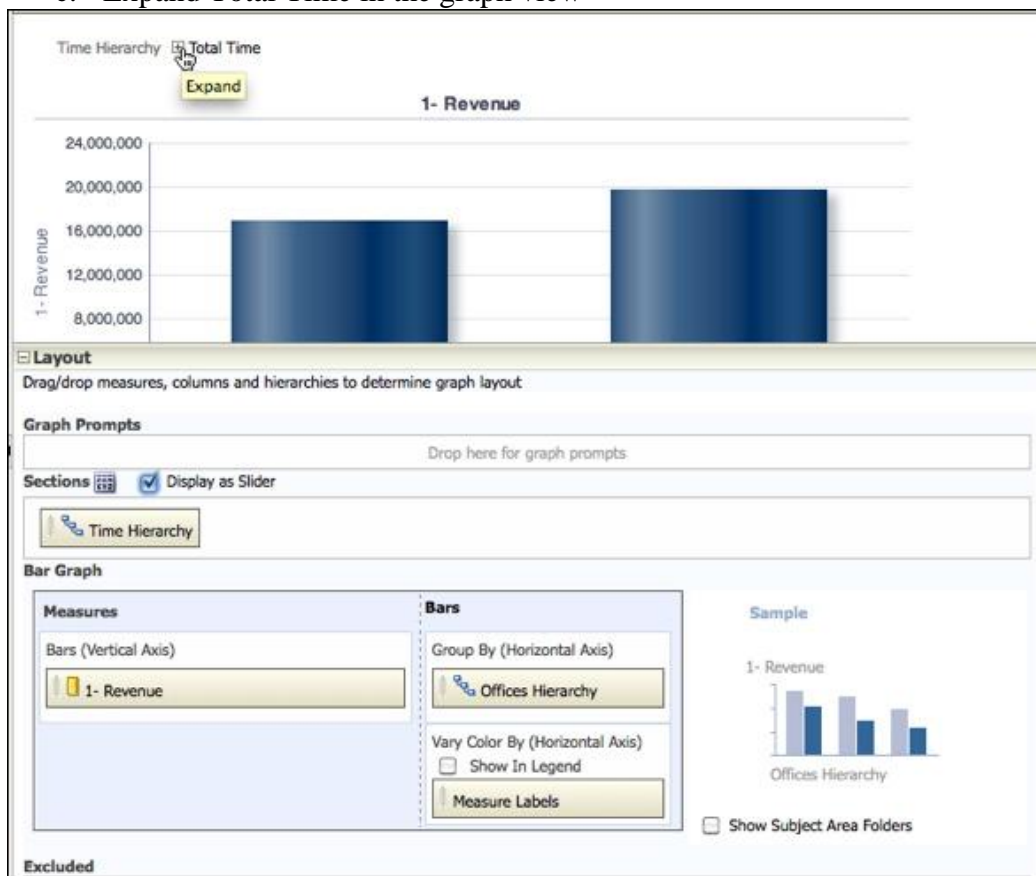
1. Go to Selection Steps and Delete the My Office Group and My Office Total Calc



2. Working with the same query, select new View → Graph → Bar → Default.



3. Edit the Graph and Perform the following:
 - a. Move Time Hierarchy under Sections
 - b. Check “Display as Slider” in the Sections
 - c. Expand Total Time in the graph view



Click **Done** and your graph will look like this:



Click the Play button on the slider or move the slider to display results for various years.

Save this as Lesson 2A

Exercise 2b: Graph Zooming

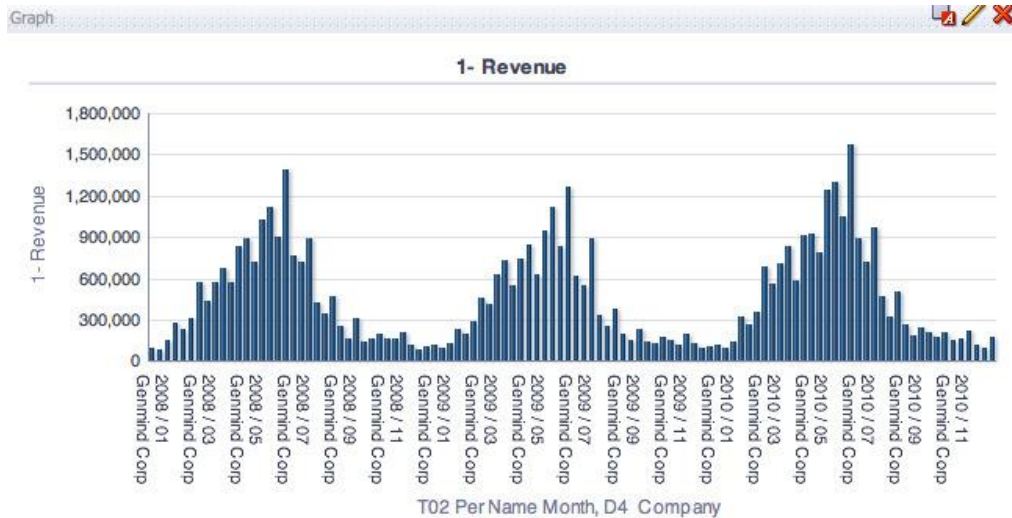
1. Create a new Analysis using the columns shows below:

Selected Columns

Double click on column names in the Subject Areas pane to add them to the column's properties, formula and filters, apply sorting, or delete by clicking

Time	Offices	Base Facts
T02 Per Name Month	D4 Company	1- Revenue

2. Create a new View → Graph Vertical Stacked Bar



3. Edit the Graph and set Company into the Legend

Measures

Bars (Vertical Axis)

1- Revenue

Bars

Group By (Horizontal Axis)

T02 Per Name Month

Vary Color By (Horizontal Axis)

☒ Show In Legend

D4 Company

Measure Labels

4. Now Edit the Graph Properties and set the following:
 - a. Zoom Enabled for Horizontal and Vertical Axis
 - b. Legend on the Top
 - c. Canvas Width to 550

Graph properties

General | Style | Scale | Titles and Labels

Canvas Width: 550 Pixels

Canvas Height: 330 Pixels

Legend Location: Top

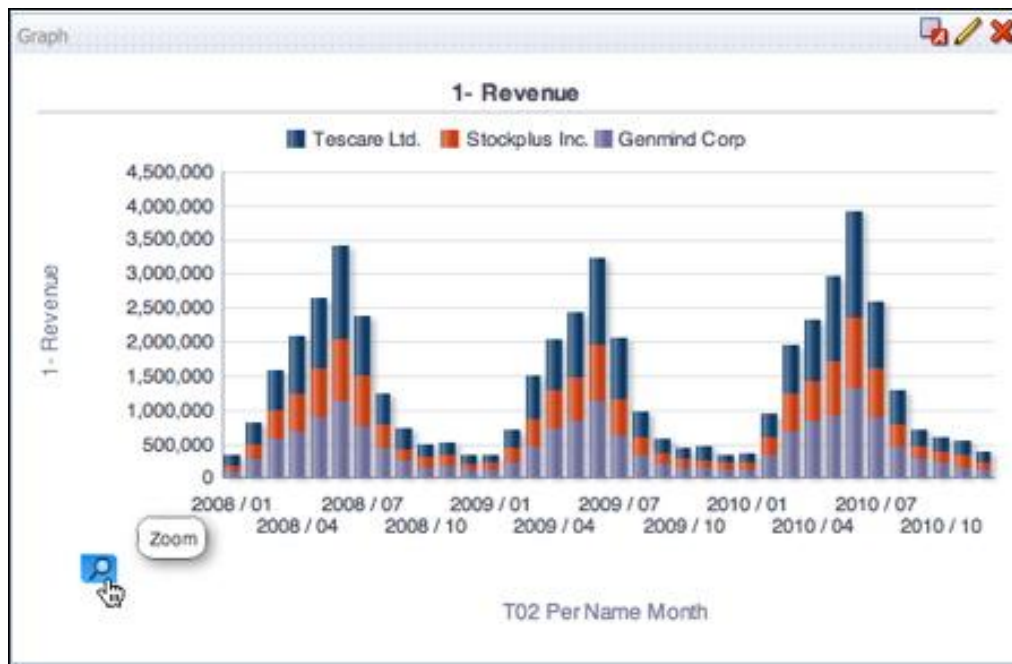
Zoom and Scroll:
 ☒ Enable for Horizontal Axis
 ☒ Enable for Vertical Axis
 ☐ Listen to Master-Detail Events

Event Channels:

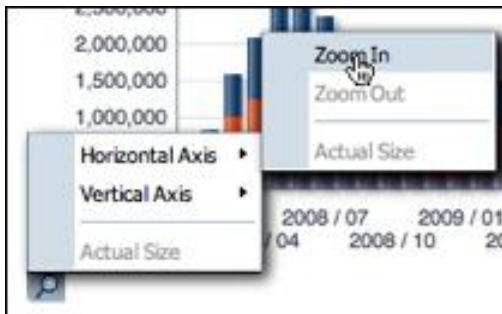
☒ Animate graph on Display

Help OK Cancel

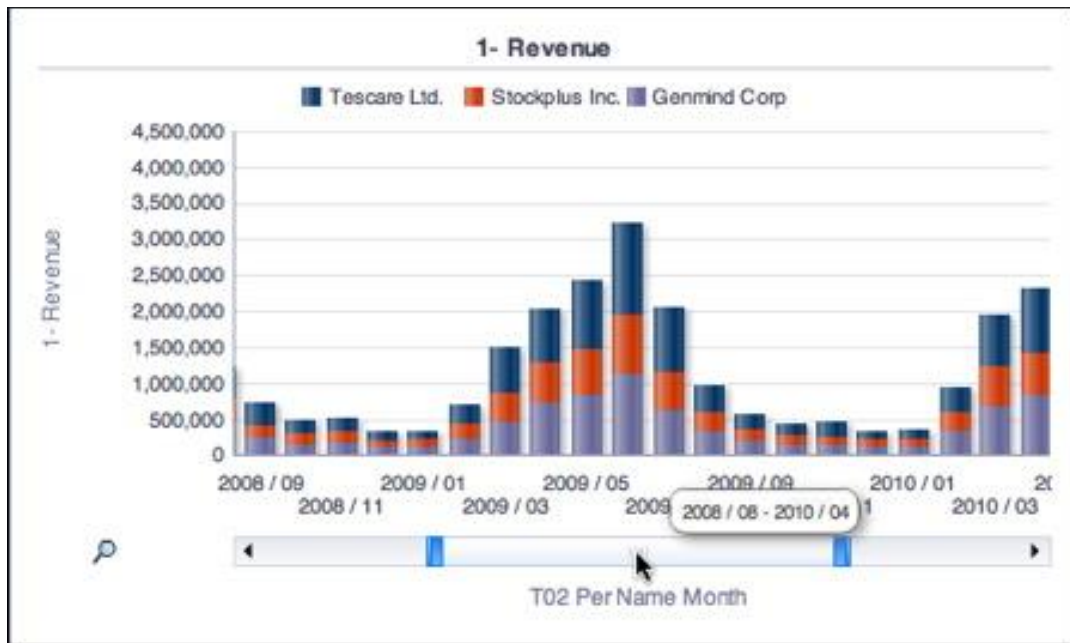
5. Click OK and your Graph should look like this:



6. Click on the Zoom icon and zoom into the Horizontal Axis



7. You can now slide for more detail

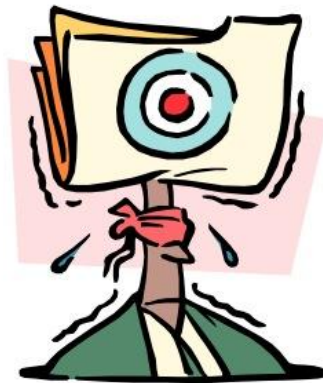


Note: You can also adjust the size of the slider bar by clicking and adjusting the “Blue” ends of the slider.

Save this as Lesson 2B



Any Questions?

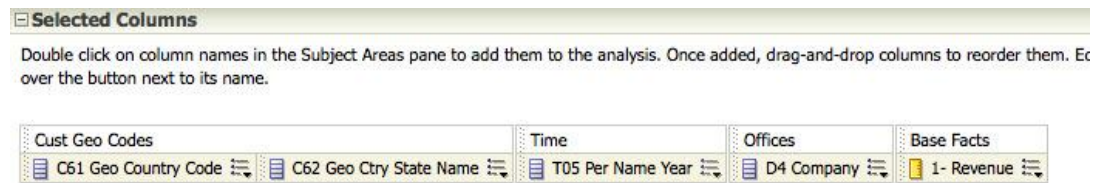


Lesson 3 – Maps

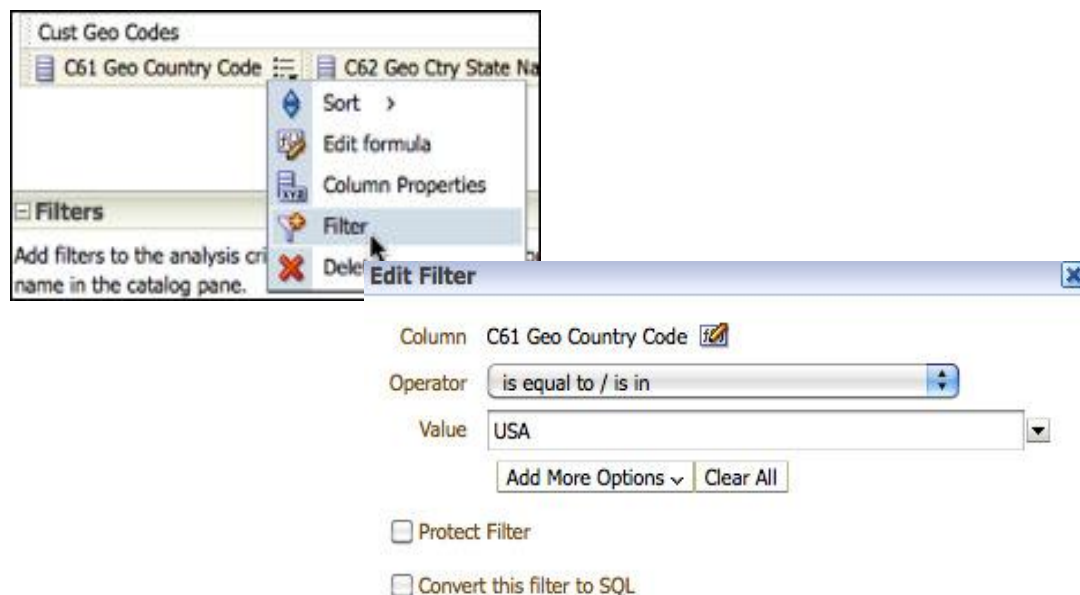
Exercise 3a: Creating a Map View

1. To create a Map view we must first start with data that has some geocoded columns. The Sample data has several columns that can be used. We first create a query with the following columns:

C61 Geo Country Code, C62 .. State Name (from Customers → Cust Geo Codes) then T05 Name Year, D4 Company and Revenue



2. Add a Filter for Country Code where the Value is USA



3. Edit the Table with the following settings:

T05 Per Name Year 2008

D4 Company	1- Revenue
Genmind Corp	1,829,536
Stockplus Inc.	1,570,278
Tescare Ltd.	1,504,166

Layout

Drag/drop measures, columns and hierarchies to determine table layout.

Table Prompts

Time

T05 Per Name Year

Sections

Drop Here for a Sectioned Report

Table

Columns and Measures

Offices Base Facts

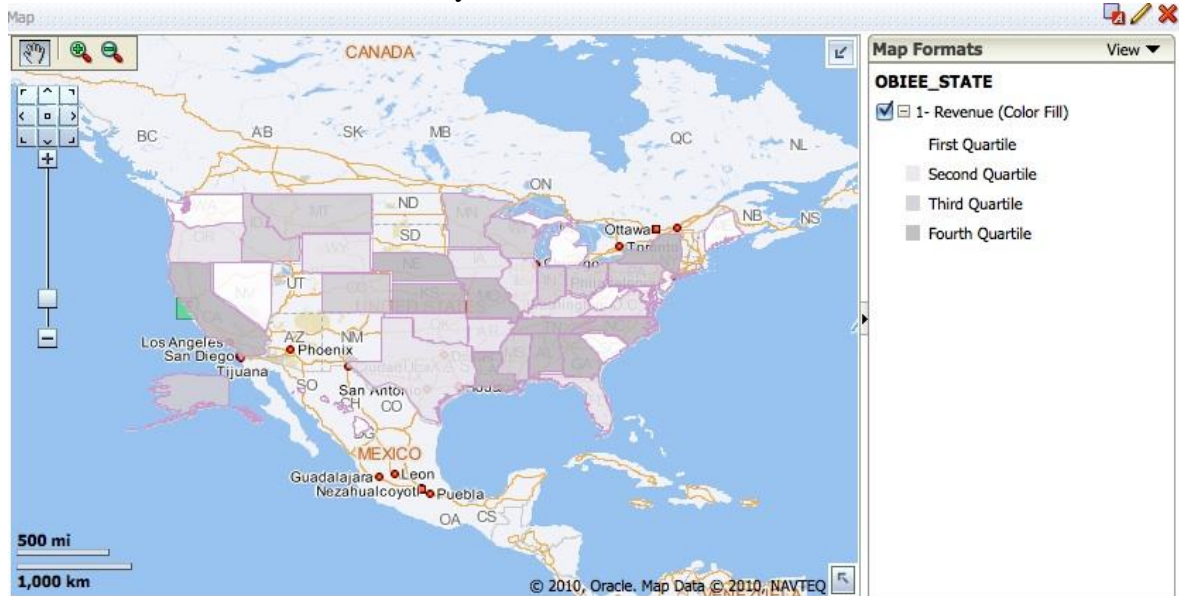
D4 Company 1- Revenue

Excluded

Cust Geo Codes

C61 Geo Country Code C62 Geo Ctry State Name

4. Now Create a New View → MAP you should now see this:



5. Click on the Edit (pencil icon)
6. Make the changes show to the Revenue Selection

OBIEE_STATE

☒ 1- Revenue (Color Fill) ✎ ✕

First Quartile

☐ Second Quartile

☐ Third Quartile

☐ Fourth Quartile

Color Fill (OBIEE_STATE)

Name:

☒ Name Automatically

ToolTips:

Vary Color By:

Bin Type:

Bins:

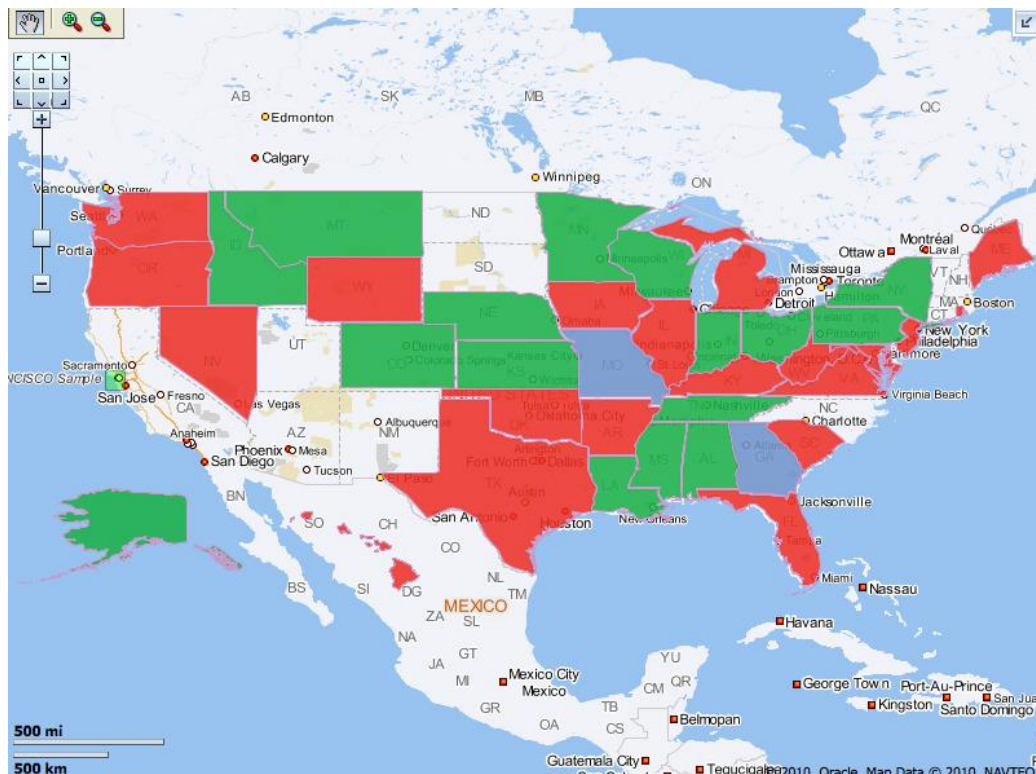
Style:

Minimum	Label	Color
<input type="text" value="199.00"/>	<input type="text" value="Fair"/>	<input type="text" value="Red"/>
<input type="text" value="150000"/>	<input type="text" value="Good"/>	<input type="text" value="Green"/>
<input type="text" value="300000"/>	<input type="text" value="Better"/>	<input type="text" value="Blue"/>
<input type="text" value="450000"/>		

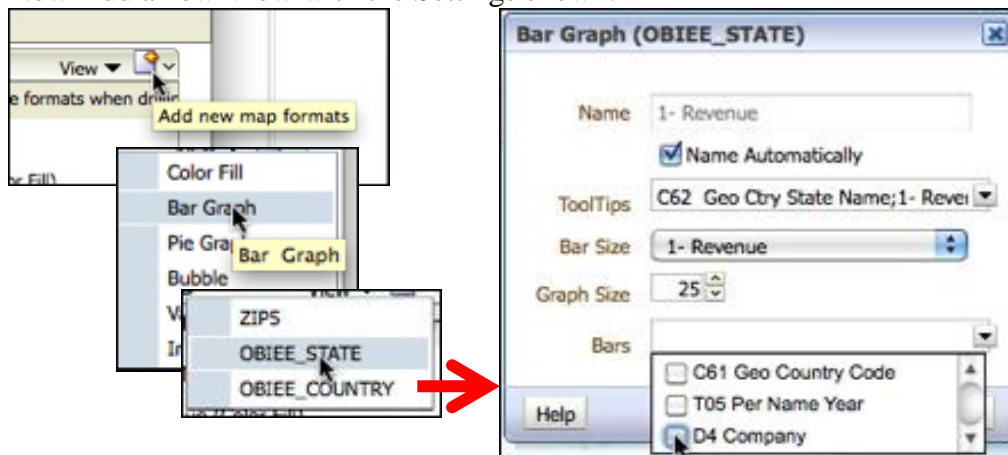
☐ Allow Dashboard Users to Edit Thresholds

Help OK Cancel

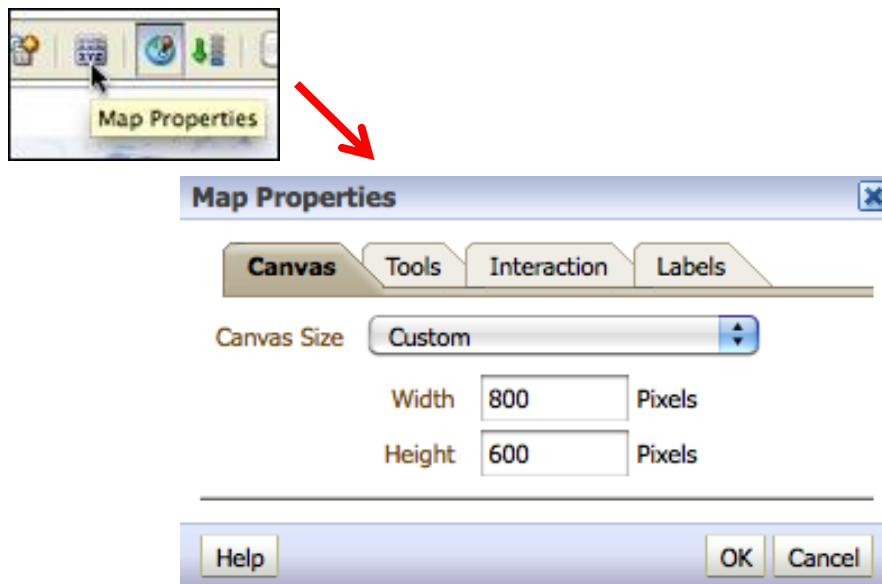
7. Click OK and your color Coding should be shown.



8. Now Add a new View with the Settings shown:

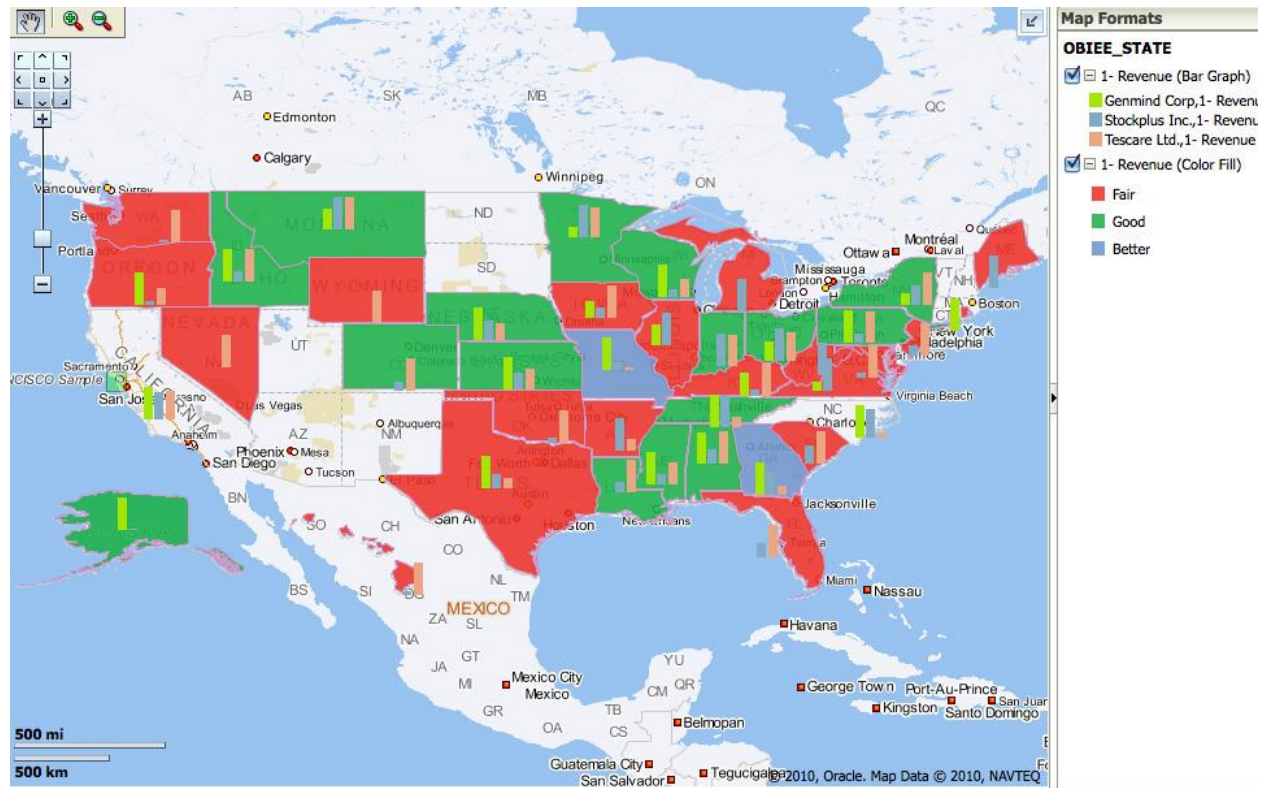


9. Now you will see Bar Charts on each of the States that have data. This represents the Revenue for Each Office within the State.
10. Last thing is to set the **Map Properties** to resize the Map



Hit OK and then you might want to zoom your map to better fill the page

11. Click **Done** to show your new Map



12. Save this as Lesson 3

Lesson 4 – Prompts

Exercise 4a: Creating a Prompt

Prompts can be created for a particular Query or can be created as a standalone prompt for a Dashboard. First we will create a prompt tied to a query.

1. Go back into the **Home** page or **Catalog** and **Edit** the Lesson 1 Query
2. Modify the Selection Steps to only keep members of the YEAR level.

Edit Hierarchy Selection Step - Time.Time Hierarchy

New Hierarchy Selection Step

Relationship: At Specified Hierarchy Level

Action: Keep only members of Year

Help

Selection Steps

List: ALL

Measures

☒ Base Facts - 1- Revenue

Offices - Offices Hierarchy

1. Start with all members

2. Then, Keep only members of **Company** where "A - Sample Sales"."Ba

↓ 3. [Then, New Step...](#)

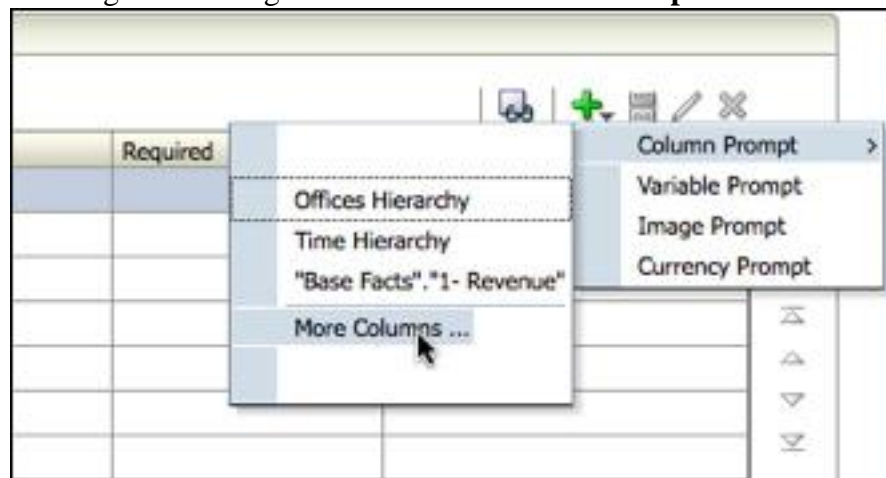
Time - Time Hierarchy

1. Start with all members

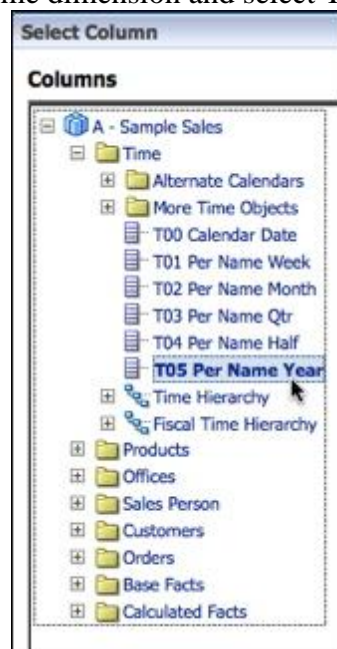
2. Then, Keep all members of: **Year** levels

↓ 3. [Then, New Step...](#)

3. Now Click on the Prompts Tab. As you can see this screen is Different than OBIEE 10g.
4. Click on the big Green + sign to start add a **Column Prompt**. Select **More Columns**



5. Expand the Time dimension and select T05 Per Name Year



- Click OK and the Prompt diagram will appear. Change the Label to “Year” and Click OK again.

New Prompt: T05 Per Name Year

Prompt For Column: "Time". "T05 Per Name Year"

Label: Year

Description:

Operator: is equal to / is in

User Input: Choice List

Options

Help OK Cancel

- Now add another prompt for Offices, D4 Company. With the User Input as a List Box.

New Prompt: D4 Company

Prompt For Column: "Offices". "D4 Company"

Label: D4 Company

Description:

Operator: is equal to / is in

User Input: List Box

Options

Help OK Cancel

- When done your screen should look like this:

Criteria Results **Prompts** Advanced

Definition
Add prompts for users when they run this analysis.

Prompt Label	Type	Prompt For	Description	Required	New Column
Page 1	Page				
Year	Column value	"Time". "T05 Per Name Year"			<input type="checkbox"/>
D4 Company	Column value	"Offices". "D4 Company"			<input type="checkbox"/>


Display
Page 1

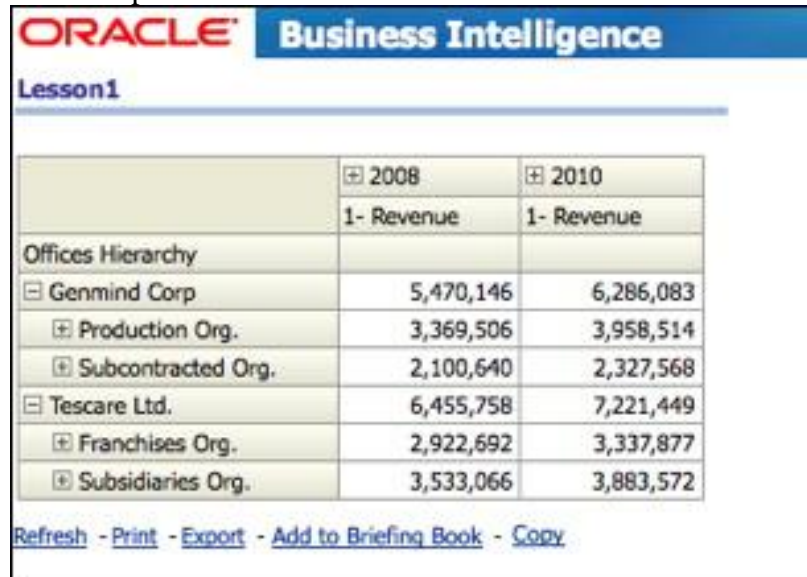
Year:

D4 Company:

OK Reset

Notice at the bottom of the screen you will see what the prompt will look like.

9. To test this click on the Preview  Icon to preview the results. Use the Drop Down to select 2008 and 2010. Notice the ability to support multi-select in a combo box. Then Select **Genmind Corp** in the company selector and click on OK. Your screen should now show this report.



	2008	2010
	1- Revenue	1- Revenue
Offices Hierarchy		
[-] Genmind Corp	5,470,146	6,286,083
[-] Production Org.	3,369,506	3,958,514
[-] Subcontracted Org.	2,100,640	2,327,568
[-] Tescare Ltd.	6,455,758	7,221,449
[-] Franchises Org.	2,922,692	3,337,877
[-] Subsidiaries Org.	3,533,066	3,883,572

Refresh - Print - Export - Add to Briefing Book - Copy

10. Click save to Lesson 4

Exercise 4b: Creating a Dashboard Prompt

Now let's create a dashboard prompt.

- The steps involved in creating a Dashboard are the same as the query prompt it is just the starting place is different. For a Dashboard Prompt you first click on the New Link in the top menu and select Dashboard Prompt.



- Unlike before will be asked to pick a Subject Area, Choose **A – Sample Sales**

3. Now you will see a blank Prompt Page. Just like before you click the Green Plus (+) and now you will be to choose a column to build a selection for.

Prompt Label	Type	Prompt For	Description	Required	New Column
Page 1	Page				

Definition
Add prompts for users when they run this analysis.

Display
Page 1

4. Expand time and Select T05 – Per Name Year

Select Column

Columns

- A - Sample Sales
 - Time
 - Alternate Calendars
 - More Time Objects
 - T00 Calendar Date
 - T01 Per Name Week
 - T02 Per Name Month
 - T03 Per Name Qtr
 - T04 Per Name Half
 - T05 Per Name Year**
 - Time Hierarchy
 - Fiscal Time Hierarchy
 - Products
 - Offices
 - Sales Person
 - Customers
 - Orders
 - Base Facts
 - Calculated Facts

Help OK Cancel

Click OK and OK on the next screen.

5. Now Create the Office Prompt just like the previous exercise (remember to set the User Input at List Box)

Edit Prompt: D4 Company

Prompt For Column "Offices"."D4 Company"

Label

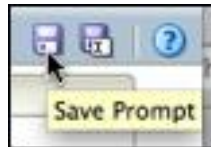
Description

Operator

User Input

Options

6. The prompt page should look just like the one from the previous exercise. Once you are sure it is correct Save the Prompt by Clicking on the Save Icon. Save as My Prompt.

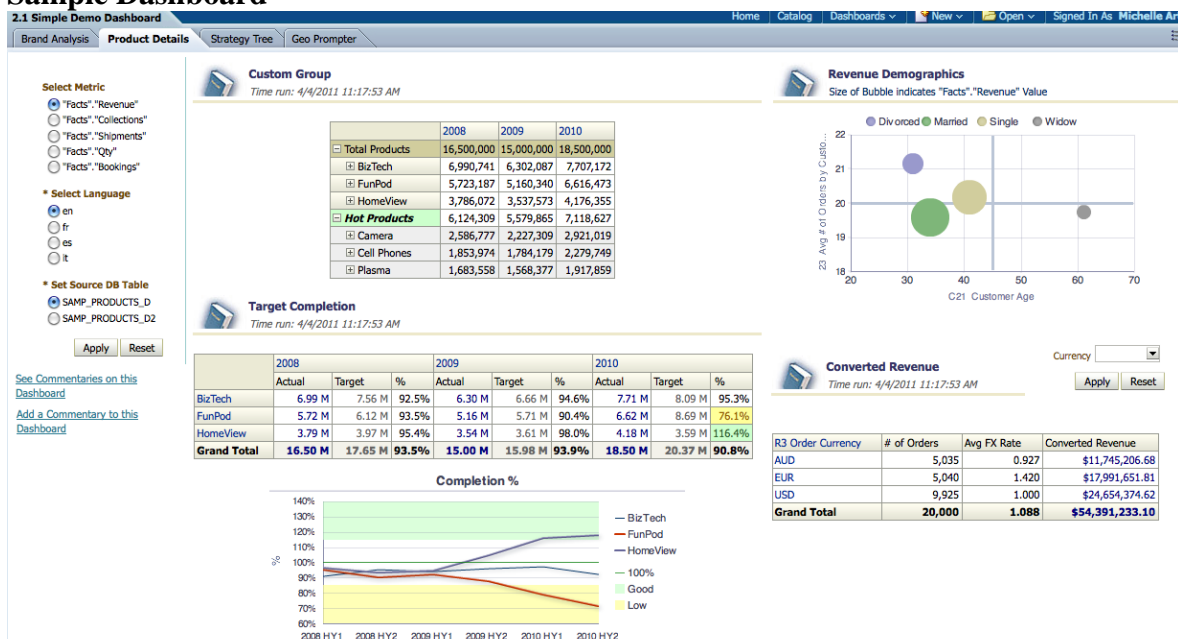


7. That is all there is to creating a dashboard prompt.

Lesson 5 The Dashboard: Putting It All Together

Oracle BI EE dashboards allow you to combine many different types and sources of data in the same place, giving users snapshot views of whatever is important for running their business. The BI Answers queries that you built in this class are just one type of content that Oracle BI EE Dashboards can utilize. This screenshot shows an example of the many different content options available to you with Oracle BI EE Dashboards.

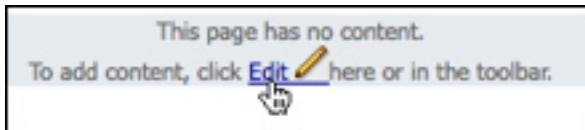
Sample Dashboard



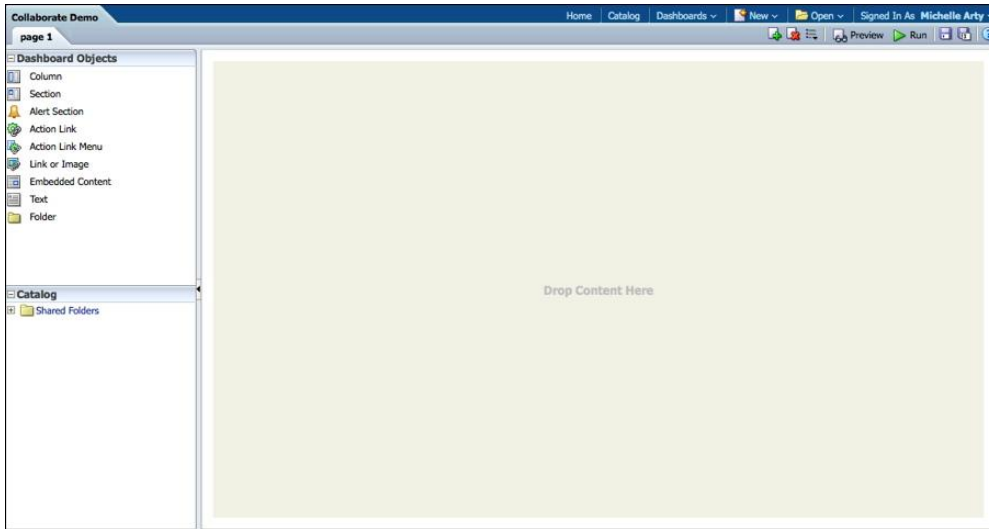
Exercise 5: Creating a Dashboard

Now let's create a dashboard to store all the queries we just built.

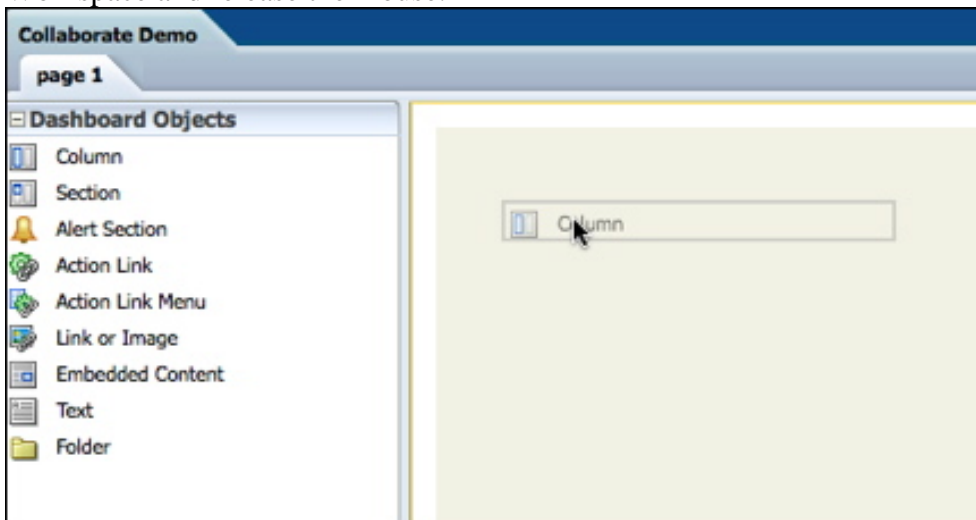
1. We can either create a new dashboard or edit the default Dashboard. For this exercise we will edit the default Dashboard. **Open My Dashboard**
2. The Blank Dashboard will show to Edit this Dashboard click on the Edit Link

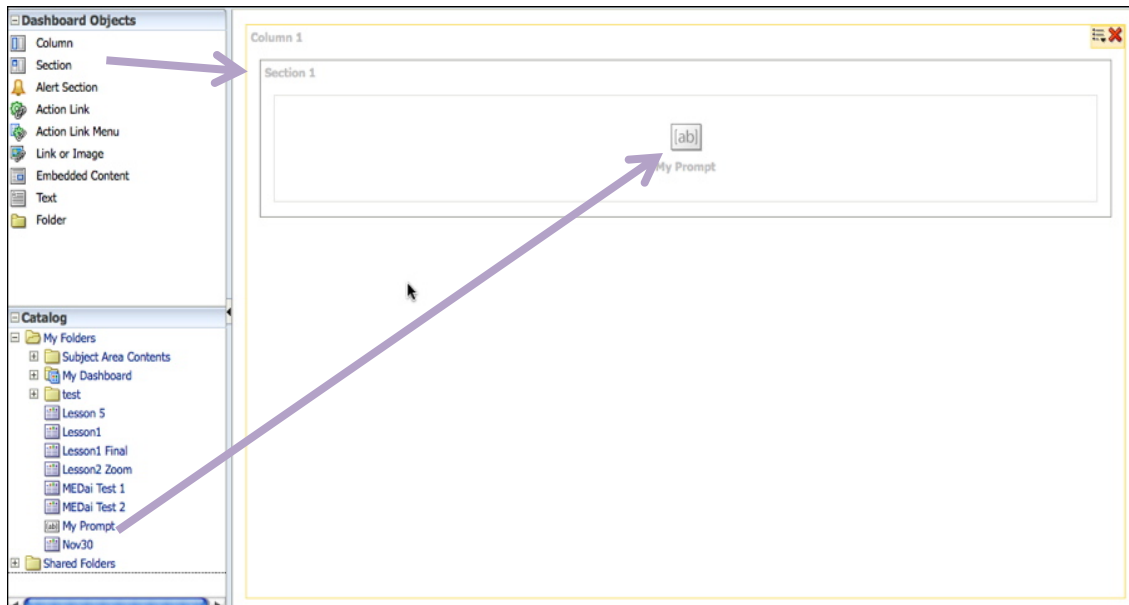


3. You will now see the blank Dashboard Screen

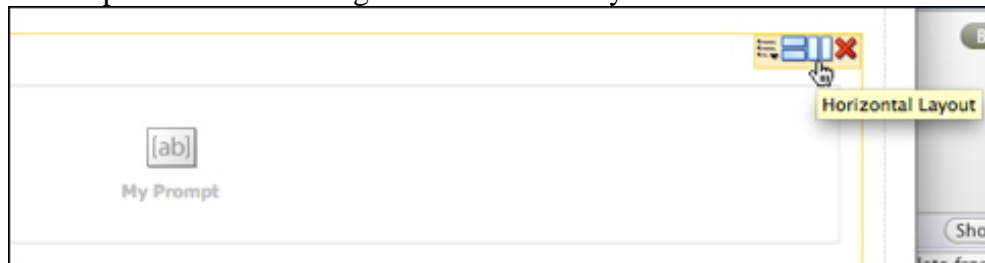


4. The next thing to do is to create a Column. On the left grab Column and drag it to the Workspace and release the mouse.

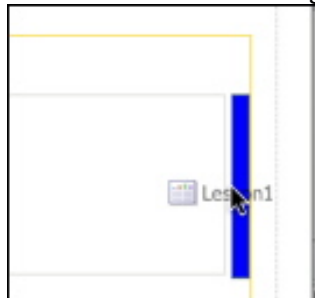




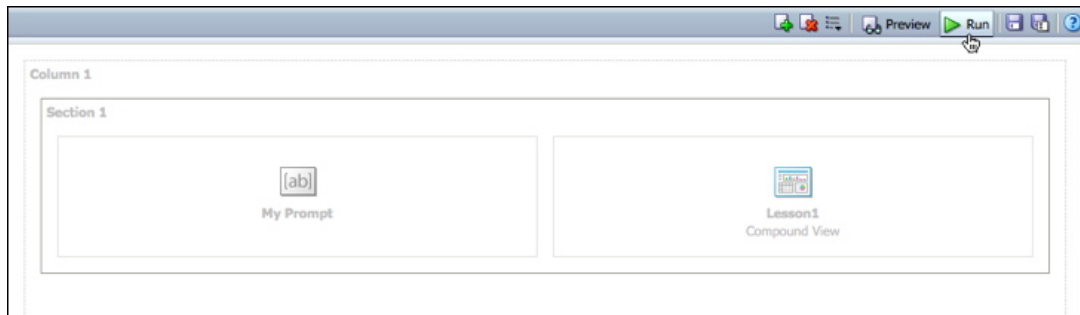
5. Do the same thing for Section, imbedded within the Column. (Top Arrow in Picture Above)
6. Drag and Drop My Prompt into the Section (2nd Arrow)
7. We want to add the Lesson 1 to the same section. To do this you must first set the section so that presentations are organized horizontally. Click this icon



8. Now click on Lesson 1 and drag it to the Right of the My Prompt.



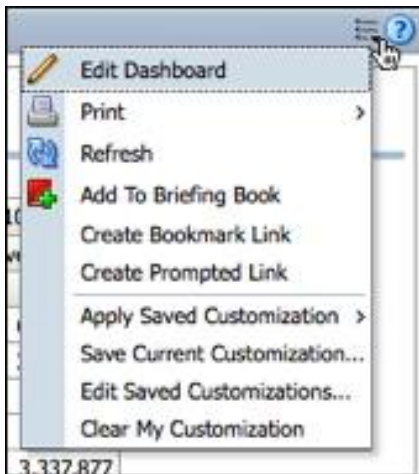
9. Now Save the Dashboard and Click on Run



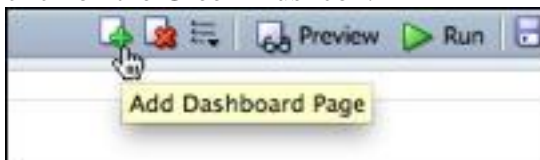
10. Now you can Test how the Prompt works

	2008	2009	2010
	1- Revenue	1- Revenue	1- Revenue
Offices Hierarchy			
Genmind Corp	5,470,146	5,036,331	6,286,083
Production Org.	3,369,506	3,071,684	3,958,514
Subcontracted Org.	2,100,640	1,964,647	2,327,568
Tescare Ltd.	6,455,758	5,963,833	7,221,449
Franchises Org.	2,922,692	2,885,277	3,337,877
Subsidiaries Org.	3,533,066	3,078,556	3,883,572

11. Now lets add a new page for our graphs.
12. In the right hand corner of you dashboard the is an option button, select Edit Dashboard.

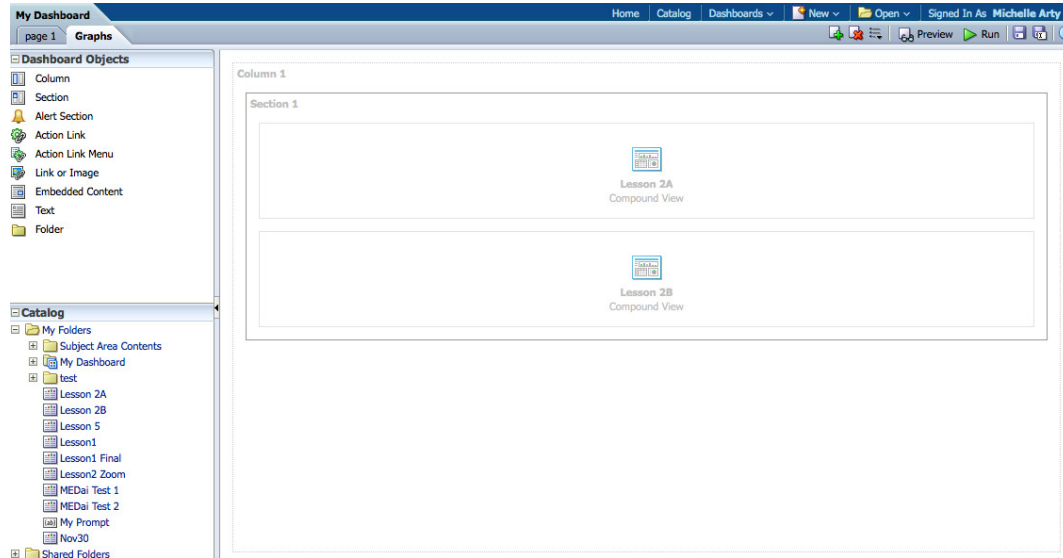


13. You will now see My Dashboard. To Add a new Page you go to the menu at the top and click on the Green Plus icon.



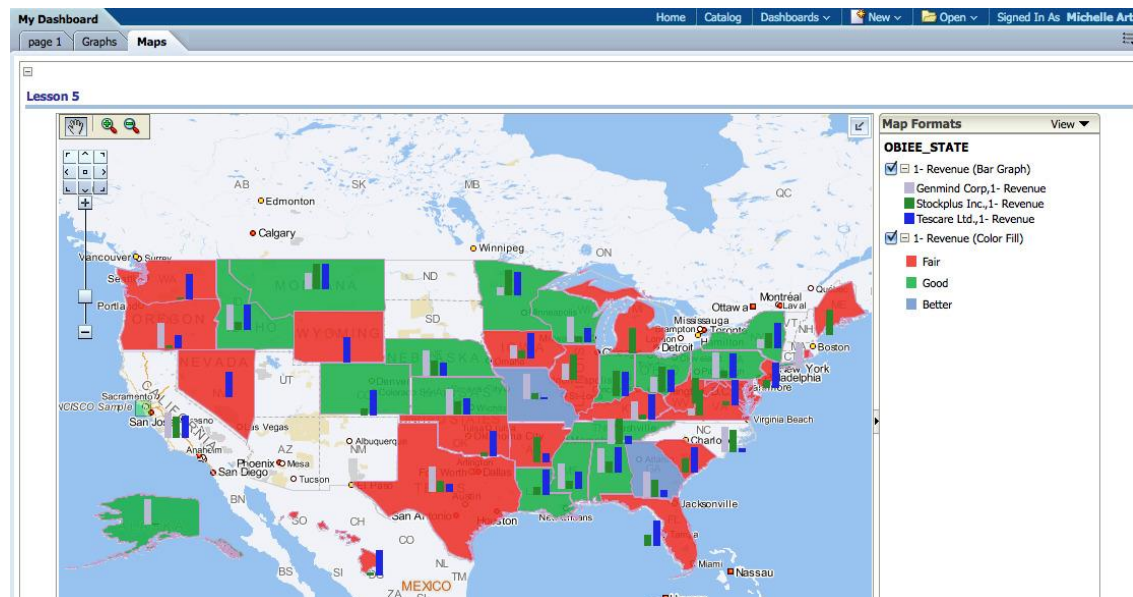
14. You will be asked for a Name – call it Graphs. And you will now see a new blank dashboard.

15. Now we want to add a new Column and 1 section. If you drag and Lesson 2A and then Lesson 2B. Your Screen should look like this:



16. Save and Run and you can see the two tabs.
17. Now we want a new page for Maps.
18. Just like you did before add a new page called Maps
19. Now add a column and section and put Lesson 4 (map) query into the section. When done it should look like this

HINT: Just drag the Lesson 4 query into the Blank Dashboard and it will automatically create the column and section!



20. Save and Log Out.

WE ARE DONE!

