COLLABORATE 12

TECHNOLOGY AND APPLICATIONS FORUM
FOR THE ORACLE COMMUNITY

OBIEE & Essbase

The Truth about Integration

Alex Ladd
Sr. Partner
MindStream Analytics

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Agenda

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- Introduction
- Audience Participation
- Current Essbase & OBIEE Integration Points
  - OBIEE querying Essbase
  - Essbase querying OBIEE (rpd)
- Known Issues
- What Customers are ACTUALLY doing
- Coming Integration!!!!
- Questions

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Introduction

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Alex Ladd

- 12 Years of Planning/Essbase Experience
- OAUG Hyperion SIG Essbase Domain Lead
- Senior Partner – MindStream Analytics

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Audience Participation

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- How many of you are Essbase Users?
  - What type of Essbase Users? (Add-in, Smart View, Reports)
- How many using OBIEE?
  - Are you here because you might start using Essbase?
- How many have both currently?

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OBIEE Querying Essbase

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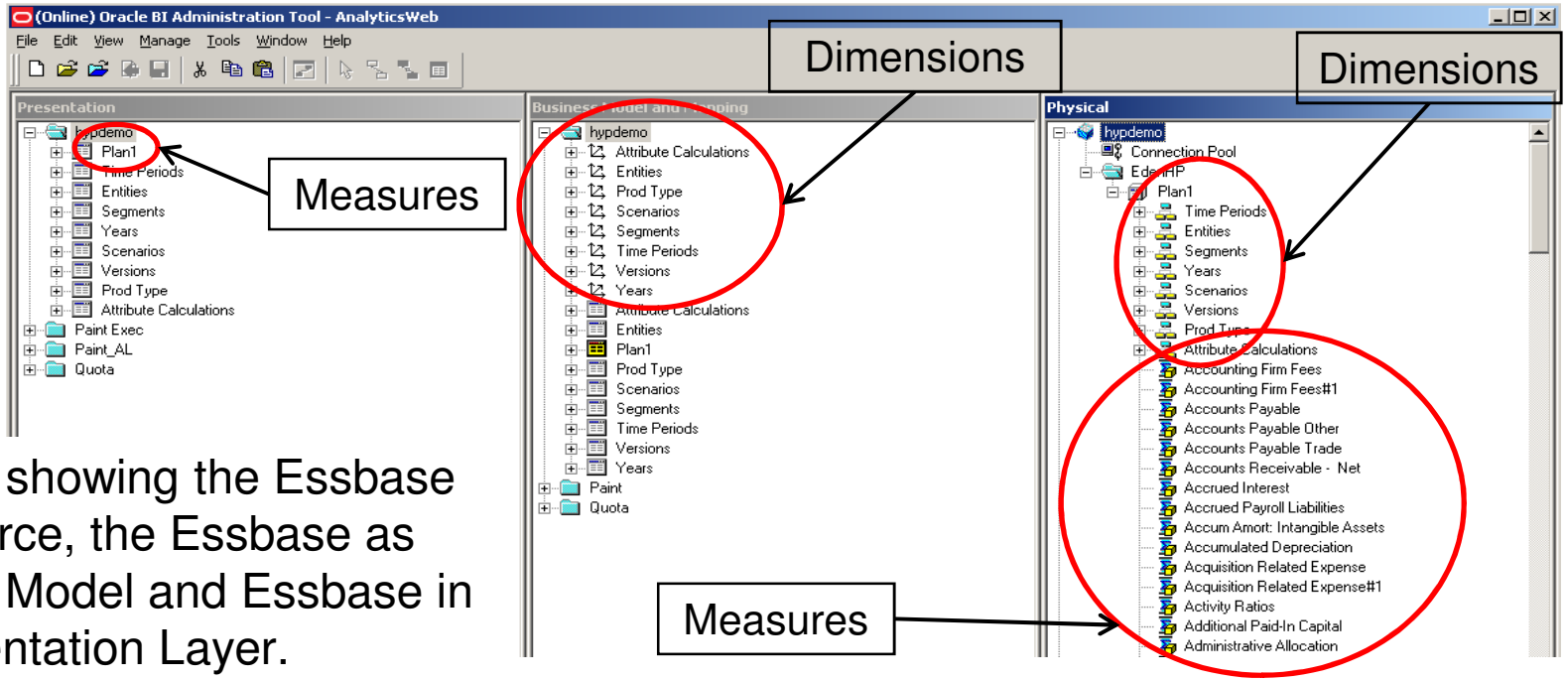
OBIEE as Reporting Tool – Essbase as Data Source

- Basics
  - Can OBIEE Pull Data from Essbase and read the dimension structures? - **YES**
  - Can the Data from Essbase be represented in OBIEE graphs and Dashboards nicely? - **YES**
- More Advanced
  - Can Answers Provide Web Enabled Ad Hoc Analysis with Essbase as the Data Source? – **Kind Of?**
    - Drill Down but not up
  - Can OBIEE provide good financial Reporting from Essbase? - **NO**
    - OBIEE is a relational Query tool so it makes Essbase behave that way too
    - This means that Ragged Hierarchies aren't presented optimally
    - Asynchronous Rows is not supported

Essbase in the RPD file

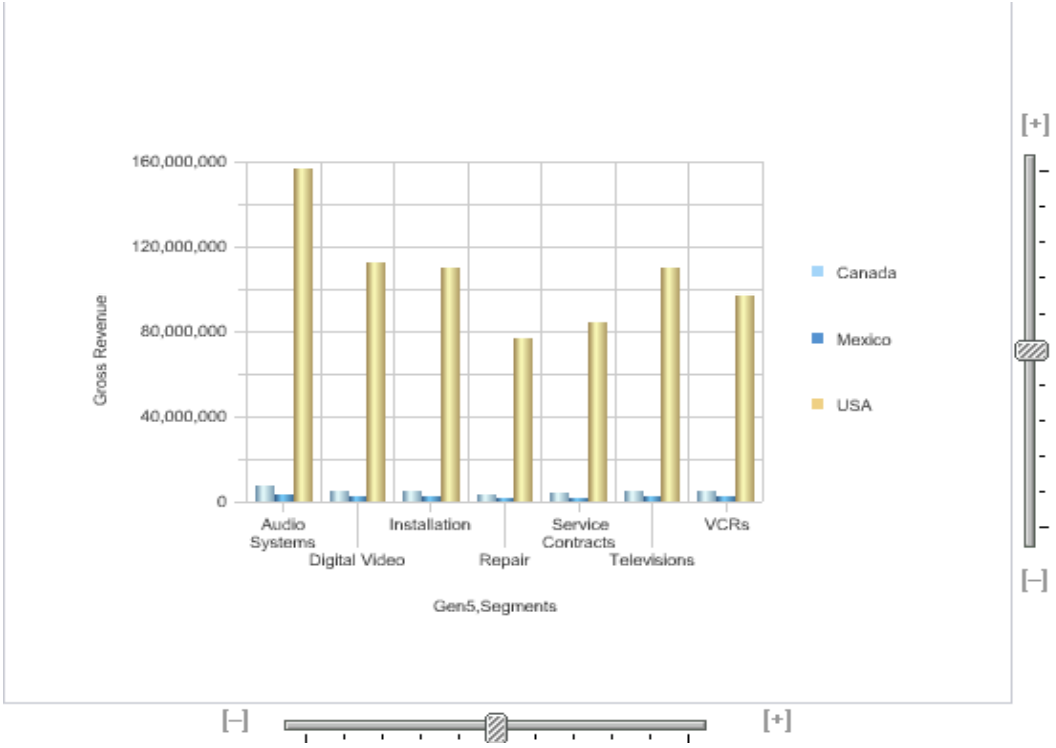


The RPD showing the Essbase Data Source, the Essbase as Business Model and Essbase in the Presentation Layer.

OBIEE Charts

OBIEE Charts with Essbase Data

Here is a multi-bar chart created in OBIEE Answers for use in a Dashboard. The OBIEE charts are very sharp and offer a rich User Interface experience. The Essbase data flows in well.



Drilling Down on Columns

	Gross Revenue		
	Total Geography		
	North America		
Gen5,Segments	Canada	Mexico	USA
Audio Systems	7,529,463	3,764,732	156,236,358
Digital Video	5,399,344	2,699,672	112,036,397
Installation	5,281,344	2,640,672	109,587,888
Repair	3,718,391	1,859,195	77,156,604
Service Contracts	4,079,374	2,039,687	84,647,009
Televisions	5,290,985	2,645,493	109,787,943
VCRs	4,672,533	2,336,266	96,955,055

	Gross Revenue
	Total Geography
	North America
	USA
Gen5,Segments	USA Sales
Audio Systems	156,236,358
Digital Video	112,036,397
Installation	109,587,888
Repair	77,156,604
Service Contracts	84,647,009
Televisions	109,787,943
VCRs	96,955,055

Drilling Down on “USA”

By drilling down on the “USA” member the whole flavor of the report changes. Canada and Mexico are removed and the USA child appears. This is the way a relational tool works, think of adding parameter to the WHERE section of a SQL Statement.

Drilling Down on Rows

	Gross Revenue		
	Total Geography		
	North America		
Gen5,Segments	Canada	Mexico	USA
Audio Systems	7,529,463	3,764,732	156,236,358
Digital Video	5,399,344	2,699,672	112,036,397
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					Gross Revenue		
					Total Geography		
					North America		
Gen5,Segments	Gen2,Segments	Gen3,Segments	Gen4,Segments	Gen6,Segments	Canada	Mexico	USA
Digital Video	Total	All Segments	Electronics	DVD Player	3,084,062	1,042,031	43,244,292
				DVD Recorder	709,580	354,790	14,723,782
				DVD/VCR Combo	1,114,303	557,152	23,121,790
				Portable DVD	1,491,399	745,700	30,946,534

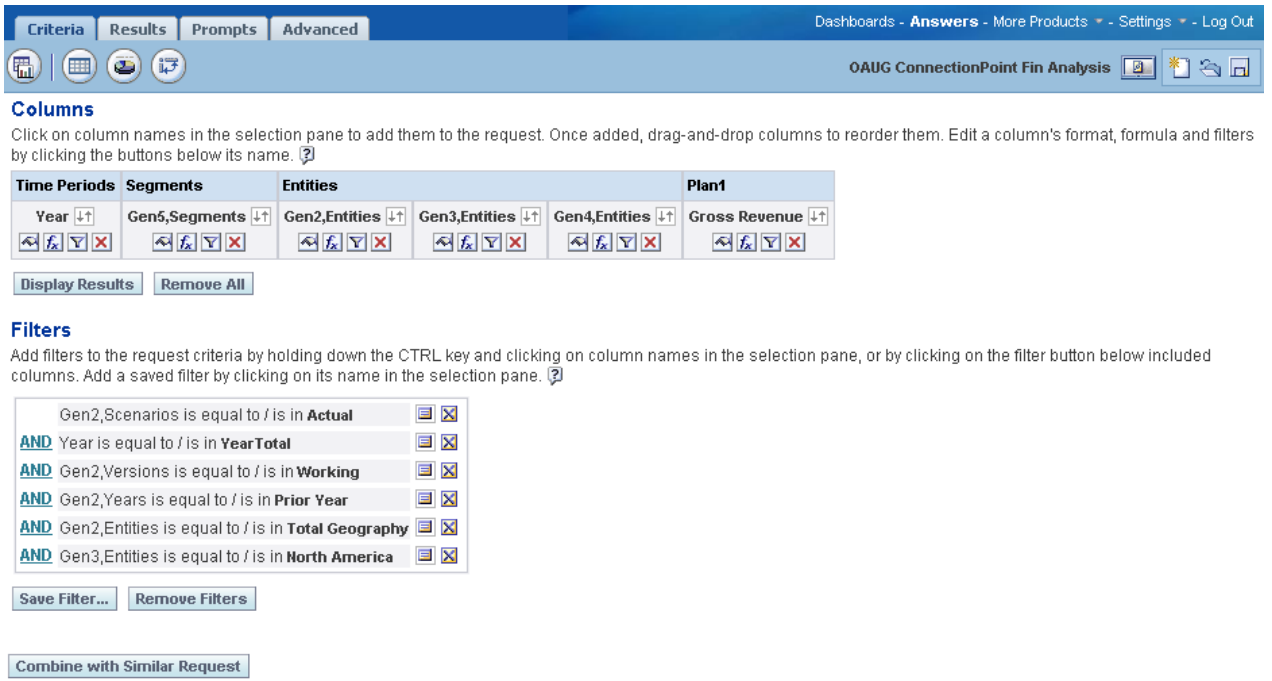
Drilling down on “Digital Video”

Drilling down of the “Digital Video” member doesn’t result in the same thing that most Essbase Users would expect. Instead we see only the children of “Digital Video” and the rest of the products no longer appear.

Undoing Drill Downs -1

Prior to Drill Down

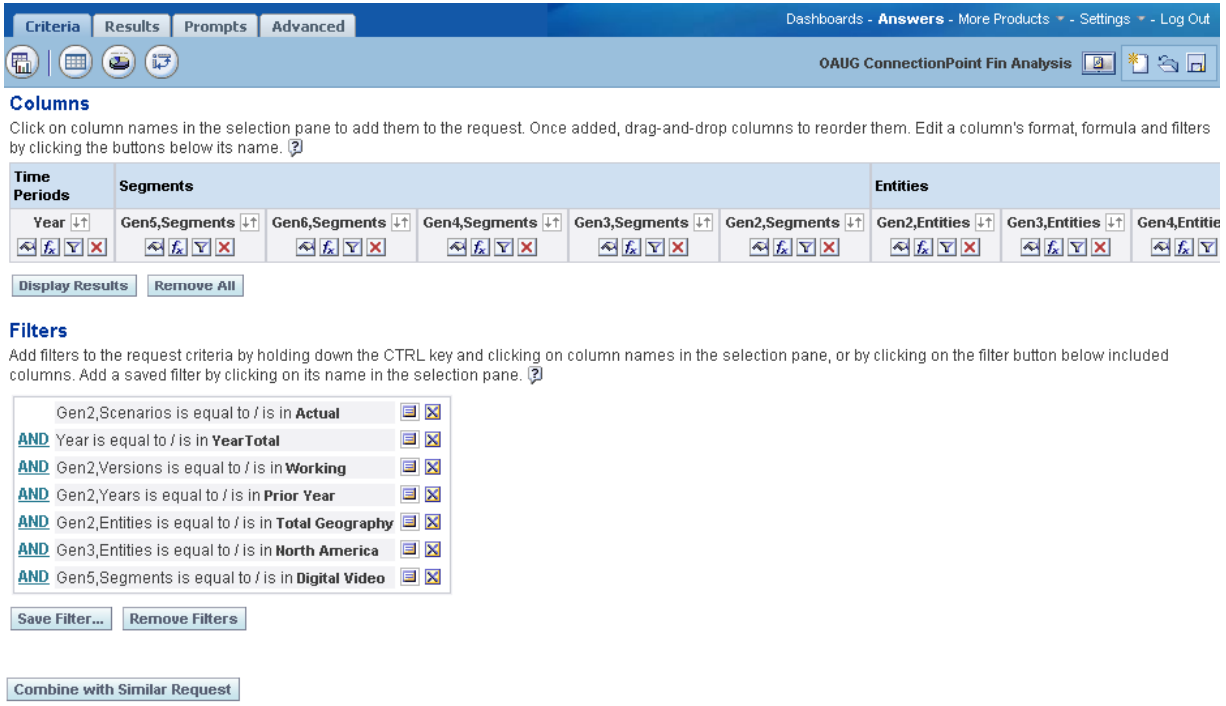
Notice Gen5,Segments only. The filters are only Scenario, Version, Periods, Year and Entities.



Undoing Drill Downs -2

Post Drill Down

Notice all the new segment columns. The filters now have a Segments limitation. In order to drill back up we need to re-launch the original saved version or delete all of the "Criteria" additions the Drill Down added.



Asynchronous Rows

OBIEE Can't Handle Asynchronous Rows Well

Gen1,Entities Entities

Gen5,Segments		Q1	Q2	Q3	Q4
Installation	Headcount	310	311	311	311
	Gross Revenue	75,721,270	26,406,720	52,813,440	110,908,224
	Operating Expenses				
	$$ per Head	244,262	84,909	169,818	356,618
Repair	Headcount	210	211	211	211
	Gross Revenue	8,660,005	59,400,951	35,880,354	82,463,779
	Operating Expenses				
	$$ per Head	41,173	281,521	170,049	390,824
Service Contracts	Headcount	289	289	289	290
	Gross Revenue	31,146,020	32,634,991	42,833,426	97,904,974
	Operating Expenses				
	$$ per Head	107,772	112,924	148,213	337,992

Could use a CASE for Gross Rev or OpEx

$$ per Head uses a CASE Statement

You can make Asynchronous Rows in OBIEE but you need to use a CASE statement and that is much more time consuming that what you can achieve in Hyperion Reports.

Financial Reporting

Gen1,Entities Entities

	Q1			Q2			Q3			Q4		
Gen5,Segments	Gross Revenue	Headcount	Revenue per Head	Gross Revenue	Headcount	Revenue per Head	Gross Revenue	Headcount	Revenue per Head	Gross Revenue	Headcount	Revenue per Head
Audio Systems	85,138,066	846	100,636	85,943,196	858	100,128	112,258,633	879	127,760	94,638,646	913	103,657
Digital Video	65,216,590	908	71,824	66,425,762	914	72,649	68,298,030	917	74,507	72,637,255	923	78,697
Installation	75,721,270	310	244,262	26,406,720	311	84,909	52,813,440	311	169,818	110,908,224	311	356,618
Repair	8,660,005	210	41,173	59,400,951	211	281,521	35,880,354	211	170,049	82,463,779	211	390,824
Service Contracts	31,146,020	289	107,772	32,634,991	289	112,924	42,833,426	289	148,213	97,904,974	290	337,992
Televisions	53,153,515	595	89,334	55,694,581	600	92,773	73,099,137	603	121,226	83,541,871	604	138,391
VCRs	61,994,136	434	142,953	58,498,139	435	134,376	58,304,652	438	133,116	57,257,869	439	130,428

Not as flexible as Hyperion Reports

OBIEE is a SQL query tool and it is designed to bring back SQL grids. The grid above is nice and informative, but it's not ready to present to senior management and even putting it in BI Publisher wont get it completely ready.

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Essbase Querying OBIEE

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Essbase on top of OBIEE (rpd as data source)

- Works Like EIS
- Essbase Schema becomes somewhat inflexible
  - Certain Changes can be problematic
- All in all it works pretty well

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Some Issues

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- Lack of ability to do Asynchronous Rows
  - If you are an organization that needs Cost Center or Cost Type and Accounts in the Rows to create a Financial Statement this can be an issue
- When using RPD as a data source for Essbase Studio you can't add a new member without rebuilding the entire schema
- When using Essbase Studio your model should be mature
  - Adding levels to a dimension entails full rework

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Customer Stories

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Investment Bank

- Wanted Financial Dashboard
- Project Successful Overall
- End Result was a set of Dashboards that were highly scripted and static and launched users into Financial Reports for any type of ad hoc analysis on the web
- Lots of Scripting in OBIEE
- BI Publisher was determined not to be capable of handling needed reporting due to asynchronous row limitation

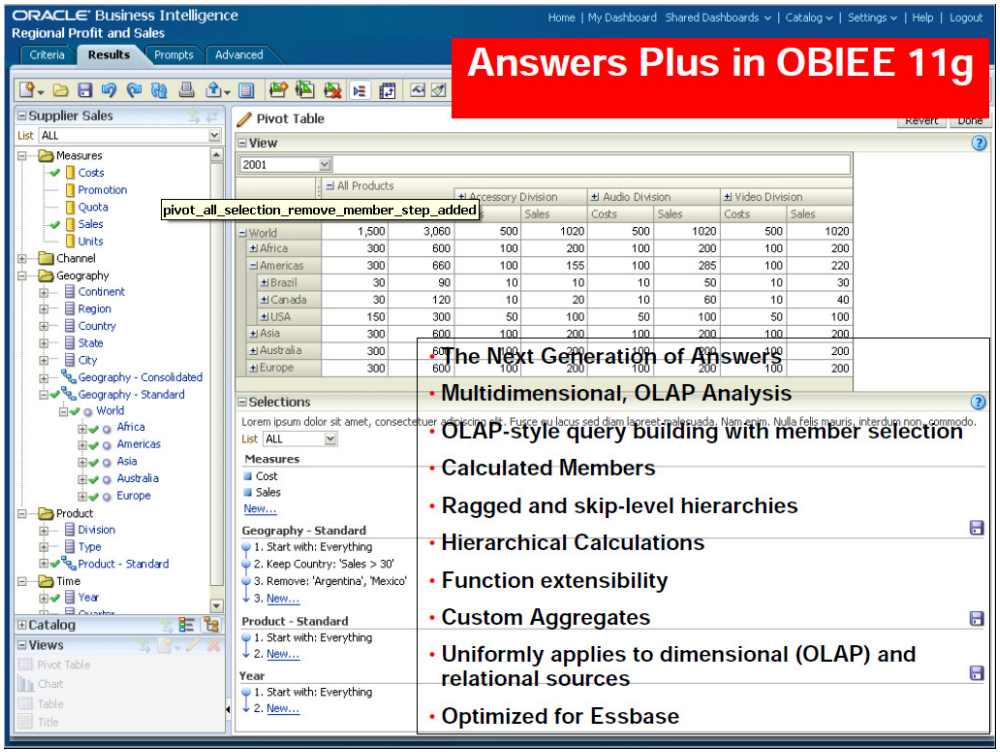
Mutual Fund

- Wanted OBIEE and BI Publisher
- Lots of problems with BI Publisher handling the relational data
- Changed course and decided to use OBIEE rpd as source for Essbase models
- Essbase Cubes built using Essbase Studio
- Essbase Cubes feed Financial Reports to deliver information

What's coming

- OBIEE interface is getting major overhaul
  - Asynchronous row issue will be resolved by what Oracle is calling "Dimensional Columns"
  - OBIEE will handle Essbase more like Financial Reports does today
- "Custom Group – Results"
- Grid Navigation in what Answers calls a Pivot Table will be much like the Excel Add-in

The New Answers



Dimensional Columns

Dimensional Columns

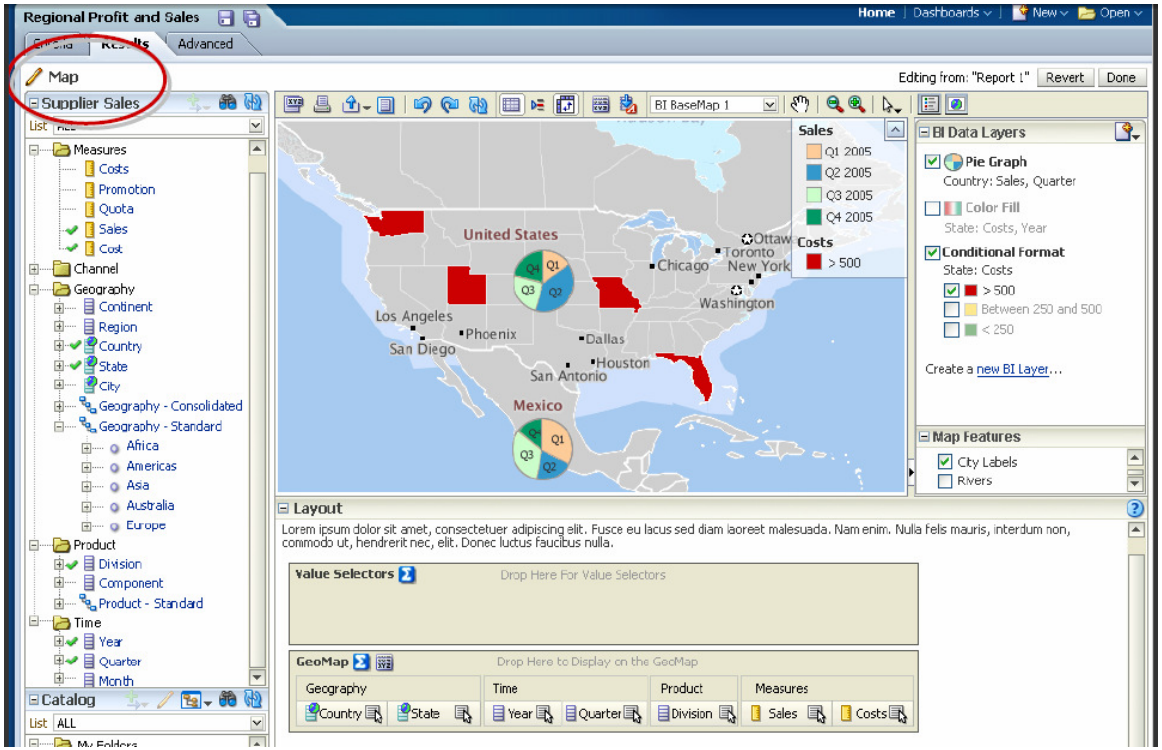
- New column type with unique capabilities
- Achieved by dragging and dropping hierarchy from Subject Area tree on to workspace
- Single column with expansion capabilities
- Asymmetrical Drilling
- "Drill Up"

Pivot Table

2001

All Products	Accessory Division		Audio Division		Video Division	
Costs	Sales	Costs	Sales	Costs	Sales	Costs	Sales
World	1,200	2,460	400	820	400	820	400	820
Americas	300	660	100	155	100	285	100	220
Argentina	30	60	10	10	10	30	10	20
Brazil	30	90	10	10	10	50	10	30
Canada	30	120	10	20	10	60	10	40
Colombia	30	30	10	5	10	15	10	10
Mexico	30	60	10	10	10	30	10	20
USA	150	300	50	100	50	100	50	100
Asia	300	600	100	200	100	200	100	200
Australia	300	600	100	200	100	200	100	200

Maps!!!!


Regional Profit and Sales
Home | Dashboards | New | Open
Advanced
Map
Editing from: "Report 1"
Revert
Done
Supplier Sales
BI BaseMap 1
Measures
Costs
Promoton
Quota
Sales
Cost
Channel
Geography
Continent
Region
Country
State
City
Geography - Consolidated
Geography - Standard
Africa
Americas
Asia
Australia
Europe
Product
Division
Component
Product - Standard
Time
Year
Quarter
Month
Catalog
List ALL
Sales
Q1 2005
Q2 2005
Q3 2005
Q4 2005
Costs
> 500
United States
Chicago
Ottawa
Toronto
New York
Washington
Los Angeles
Phoenix
Dallas
San Diego
Houston
San Antonio
Mexico
BI Data Layers
Pie Graph
Country: Sales, Quarter
Color Fill
State: Costs, Year
Conditional Format
State: Costs
> 500
Between 250 and 500
< 250
Create a new BI Layer...
Map Features
City Labels
Rivers
Layout
Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Fusce eu lacus sed diam laoreet malesuada. Nam enim. Nulla felis mauris, interdum non, commodo ut, hendrerit nec, elit. Donec luctus faucibus nulla.
Value Selectors
Drop Here For Value Selectors
GeoMap
Drop Here to Display on the GeoMap
Geography
Time
Product
Measures
Country
State
Year
Quarter
Division
Sales
Costs

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Questions?

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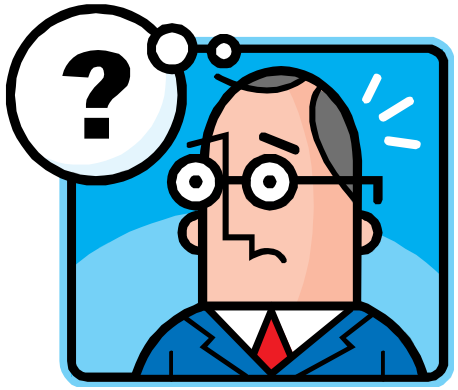

Contact Information

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Additional Info

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For Screenshots of the new OBIEE

- Visit Debashi's OBIEE Blog at:
- http://debaatobiee.wordpress.com/2009/10/06/obiee-11g-a-gospel-about-whirlpool-in-bi-space/