Using OBIEE for Hyperion Essbase Reporting

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Talking Points

- Overview
- Data Model Definition steps
- Demo Basic Cube Import 10G
- Creating Reports
- Demo Reports
- 10 G/11G differences



OBIEE Essbase Reporting Overview

- OBIEE gives opportunity to expose Essbase Data with Dashboards and Answers.
- OBIEE Essbase Data Source has capability to combine data from other data sources, and present information in a single report or drill down to detail fashion.
- Defining data model is much simpler since OBIEE imports the data model including hierarchies based on Essbase Outline.
- Import Process creates a Single Physical Cube Table for each Essbase cube.
- OBEE generates MDX Quires to retrieve data from Essbase.
- Some improvements in 11G which provides capability to import UDA's and define columns for aliases.



OBIEE Essbase Reporting Benefits

- OBIEE provides opportunity have common dashboard/reporting tool for ERP (operational) and Essbase management and forecast reporting.
- OBIEE reports based Essbase can combine data from multiple sources to display data on same report or make it available via detail drill down.
- Possible replacement of Excel Add-In for reporting for senior management and occasional users.
- Pre build flexible reporting with prompts and dropdowns may eliminate need for through understating of Essbase outline for occasional users.
- OBIEE offers native connectivity to Essbase.
- OBIEE 11G provides parent child drill down similar to Essbase EAS outline editor.



OBIEE Data Model Steps

• Start Oracle BI Administration tool and Import Data Model





OBIEE Data Model Steps Continue..

Login to Essbase and import Cube

Import from Mult	i-dimensional		Σ
2			
Provider Type:	Essbase	•	
Essbase Server:	panditd		1
User <u>n</u> ame:	admin		1
Pass <u>w</u> ord:	*******		1
	QK <u>C</u> ancel	Help	
	Active Alias Table: Default) 44> (Alias: Period)) <3> (Alias: Q1)) <3> (Alias: Q2)) <3> (Alias: Q3)) <3> (Alias: Q4)) <3> +) <4> (+) <3> (+) <2> (Alias: Audio Product Englis (+) <3> (Alias: Visual Product Englis (+) <3> (Alias: Visual Product Englis (+) <3> (No Conversion) +) <2> % (~) (Two Pass) [Formula: Prof _% (~) (Two Pass) [Formula: Ma 3> (+) (~) (*) [Formula: Actual - Budget		

Select Source
Please select a catalog or cubes from a catalog
Image: Second state st
Import Close





OBIEE Data Model Steps Continue...

- Change Measure Dimension if needed (10G)
- 11 G Creates a fact column

panditd Connection Pool	Hierarchy - cenario	Hierarchy - Accou
E ∰ Demo E ∰ Basic E Zar Market E Zar Product	Levels Name: Scenario	Levels Name:
 ■ Scenario COGS ■ Margin ■ Margin_% ■ Marketing ■ Misc ■ Payroll ■ Profit ■ Sales ■ Tatal Expenses 	External Name: Scenario Dimension Name: Scenario Dimension Type: Measure Dimension Hierarchy Type: Fully balanced Image: Imag	External Name: Dimension Name: Dimension Type: Hierarchy Type: I Default member Use unqualified





OBIEE Data Model Steps Continue....

- Define Scenario to measure dimension and accounts to other (10G).
- Define new physical columns for scenario members.
- Delete account measures since dimension is changed to other.
- Create column for Outline Member Names as needed (Gen 2 Product Id). associate it appropriate hierarchy level.
- This completes Physical Model definition.

Physical Cube Column - Actual	je igo panditd 	🎗 Physical Cube Column - Gen2 Product Id
Name: Actual Type: DOUBLE Length: Nullable External Name: Actual Aggregation rule: Aggr_External Description:	Connection Pool Demo Demo Security Sear Security Sear Market Security Sear Security Sear	Name: Gen2 Product Id Type: VARCHAR ✓ Length: 100 ✓ Nullable External Name: MEMBER_NAME Aggregation rule: None Description:
OK Cancel Help		



OBIEE Business/Presentation Model

- Define new physical columns for scenario members.
- Delete account measures since dimension is changed to other
- If sorting of member names is desired in the order they are physically stored in the outline then create sort column with EVALUATE function.
- Drag Demo Physical Model to Business Model

Physical Cube Column - Actual Name: Actual Type: DOUBLE Length: Nullable External Name: Actual Aggregation rule: Aggr_External Description: OK Cancel Help Image: Image: <	
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OBIEE Member Name (ID) and Sort Column Example

- Member Name (ID) columns are defined in physical data model
- Sort columns are defined in Business Model, user EVALUATE function

Physical Cube Column - Gen6 Department Id 💦 🔲 🔀											
Name: Gen6 Depart	ment Id										
Type: VARCHAR	▼ Length: 100 ▼ Nullable										
External Name:	MEMBER_NAME										
Aggregation rule:	None										
Description:											

b	Expression Builder - Logical Column	
η	S IEVALUATE('Rank(%1.dimension.currentmember,%2.members)' AS INTEGER , "HYP_ESSBASE"."Finance".""."FinStmt"."Gen6,Department", "HYP_ESSBASE"."Finance".""."FinStmt"."Gen6,Department")	
	+ · · × / Ⅱ () > < = <= >= <> AND OB NOT ,	

Logical Column - Gen6,Department	i i								
General Data Type Aggregation Leve	ls								
Name: Gen6,Department									
Belongs to Table "FinStmt"."Department"									
Sort order column									
Gen6 Department Sort	Set.								





Demo Import of Basic Cube



Creating Reports using Answer

- Creation of reports and dashboard is not different for Essbase data source.
- Member Name (ID Columns) used make sure to select default column as well in 10G.
- Display of Member Name column only works for Leaf level members in 10G.
- Prompts can have Relational Query format for selecting values.
- Example below selects children's of "Total Company" (Gen 2 Member).

Gen3	🕵 is equal to / is in	Multi-Select	*	SQL Results 💙		Specific Value	·	Company
Company Id				SELECT Company."Gen3 Company Id"	^	'01'		
				FROM "Essbase - FinStmt" WHERE		L		
				Company."Gen2 Company Id" IN ('Total	~			

SELECT Company."Gen3 Company Id" FROM "Essbase - FinStmt" WHERE Company."Gen2 Company Id" IN ('Total Company')



10G Report Samples

• Spread sheet format similar to Excel Add-In attached to a dashboard

Exp	pense - H	leadcount							W	elcome	, Admi	nistrate	or! Da	shboar	ds - Ans	swers -	More Pro	ducts 🔻 -	Settings 🔻
	Expense Monthly Trend	Expense Quartely Plan vs Forecast	Expense Quartely Plan vs Actual	Expense Quarterly Forecast vs Actual	Expense Quarter By Month	Headcount Monthly Trend	Head Qua Pla For	dcount rterly in vs ecast	Heado Quart Plan Actu	ount erly vs ial	Headcou Quarteu Foreca vs Actu	unt H Iy Q st al	eadcour uarter b Month	it Dep y	oartmen Spend Breakdo	itment d wn	Depar Expe Tre	tment ense end	IT Spend as % of Revenue
_																			
													~						
	Fiscal YearCurrencyVersionCompanyDepartmentFY10USDFinal101'1604'Go																		
E	Expense Monthly Trends																		
		\mathbb{R}						Forec	ast 💌										
							P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	
	Expense	Account Catego	ry Acco	ense unt #	Expense Acco	unt Desc	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
			61110	Regul											000 700	400.000	107.085	818 921	
	COMPENSAL	ION EXPENSE		i vega	ar Employee Sala	ary	222,611	206,773	448,702	148,450	169,671	217,884	166,095	166,166	230,720	190,333	197,900	010,021	3,052,190
	COMPENSAL	ION EXPENSE	61140	Conti	ar Employee Sala Igent Employee S	ary Galary	222,611	206,773	448,702	148,450 5,000	169,671 26,920	217,884 26,893	168,095 19,790	24,020	11,331	190,333	9,616	34,580	3,052,190 170,001
	COMPENSATI	ION EXPENSE	61140 otal	Conti	ar Employee Sala Igent Employee S	ary Salary	222,611 222,611	206,773 206,773	448,702 448,702	148,450 5,000 151,450	169,671 26,920 196,591	217,884 26,893 244,777	166,095 19,790 185,885	166,166 24,020 190,186	11,331 308,051	196,333 11,850 208,183	9,616 207,581	34,580 651,401	3,052,190 170,001 3,222,191
		ION EXPENSE ION EXPENSE TO	61140 etal 61210	Conti	ar Employee Sala Igent Employee S Expense	ary Salary	222,611 222,611 18,280	206,773 206,773 30,680	448,702 448,702 22,880	148,450 5,000 151,450 18,920	169,671 26,920 196,591 18,920	217,884 26,893 244,777 5,140	166,095 19,790 185,885 14,260	166,166 24,020 190,186 19,460	296,720 11,331 308,051 39,600	196,333 11,850 208,183 17,220	9,616 207,581 17,220	34,580 651,401 48,734	3,052,190 170,001 3,222,191 269,294
	COMPENSATI COMPENSATI INCENTIVE C EXPENSE	ION EXPENSE ION EXPENSE TO COMPENSATION	61140 otal 61210 61230	Conti Bonus FTO /	ar Employee Sala Igent Employee S Expense Iccrual	ary Salary	222,611 222,611 18,280 14,804	206,773 206,773 30,680 14,655	448,702 448,702 22,860 13,380	148,450 5,000 151,450 18,920 14,142	169,671 26,920 196,591 18,920 10,493	217,884 26,893 244,777 5,140 10,547	166,095 19,790 185,885 14,260 10,732	166,166 24,020 190,186 19,460 10,783	296,720 11,331 308,051 39,600 11,814	196,333 11,850 208,183 17,220 6,335	9,616 207,581 17,220 19,150	34,580 651,401 48,734 30,418	3,052,190 170,001 3,222,191 269,294 167,252
	COMPENSATI COMPENSATI INCENTIVE C EXPENSE	ION EXPENSE ION EXPENSE TO COMPENSATION	61140 ttal 61210 61230 61235	Bonus FTO /	ar Employee Sala Igent Employee S Expense Voorual Jaken	ary Salary	222,611 222,611 18,280 14,804 (28,092)	206,773 206,773 30,680 14,855 (19,461)	448,702 448,702 22,860 13,380 (8,922)	148,450 5,000 151,450 18,920 14,142 (1,858)	169,671 26,920 196,591 18,920 10,493	217,884 26,893 244,777 5,140 10,547 (26,219)	186,095 19,790 185,885 14,280 10,732 718	166,166 24,020 190,186 19,460 10,783 (12,941)	296,720 11,331 308,051 39,600 11,814 5,369	190,333 11,850 208,183 17,220 6,335	9,818 9,818 207,581 17,220 19,150 (4,978)	34,580 651,401 46,734 30,418 0	3,052,190 170,001 3,222,191 269,294 167,252 (96,385)



10G Report Samples Continue.

 Multiple Scenario Spread sheet format similar to Excel Add-In attached to a dashboard

E	Expense - Headcount v									lministrator!	Dashboards - Answers - More Products - Set		
	Expense Monthly Trend	Expense Quartely Plan vs Forecast	Expense Quartely Plan vs Actual	Expense Quarterly Forecast vs Actual	Expense Quarter By Month	Headcount Monthly Trend	Headcount Quarterly Plan vs Forecast	Headcount Quarterly Plan vs Actual	Headcount Quarterly Forecast vs Actual	Headcount Quarter by Month	Departmentment Spend Breakdown	Department Expense Trend	IT Spend as % of Revenue

Fiscal Year	Currency	Version	Company	Department	
FY10 💙	USD 🔽	Final	♥ '01'	'604'	Go

Expense Quarterly Trends

(Plan vs Forecast)

			Sep Qtr				Dec Qtr				Mar Qtr				Jun Qtr				Die
			Q1				Q2				Q3				Q4				
Expense Account Category	Expense Account #	Expense Account Desc	Plan	Forecast	Variance	Varaince %	Plan	Forecast	Variance	Varaince %	Plan	Forecast	Variance	Varaince %	Plan	Forecast	Variance	Varaince %	Plan
COMPENSATION EXPENSE	61110	Regular Employee Salary	726,410	878,086	(151,676)	(20.9%)	726,410	534,005	192,405	26.5%	726,410	628,980	97,429	13.4%	726,410	1,011,119	(284,709)	(39.2%)	2,905,638
	61140	Contingent Employee Salary						58,813				55,142				56,046			
COMPENSATION EXPENSE Total			726,410	878,086	(151,676)	(20.9%)	726,410	592,817	133,592	18.4%	726,410	684,122	42,287	5.8%	726,410	1,067,165	(340,756)	(46.9%)	2,905,638
INCENTIVE COMPENSATION EXPENSE	61210	Bonus Expense	59,417	71,820	(12,403)	(20.9%)	59,417	42,980	16,437	27.7%	59,417	73,320	(13,903)	(23.4%)	59,417	81,174	(21,757)	(38.6%)	237,668
	61230	FTO Accrual	50,849	42,838	8,011	15.8%	50,849	35,182	15,666	30.8%	50,849	33,329	17,520	34.5%	50,849	55,903	(5,054)	(9.9%)	203,395
	61235	FTO Taken	(46,490)	(56,475)	9,985	(21.5%)	(46,490)	(28,076)	(18,414)	39.6%	(46,490)	(8,856)	(39,635)	85.3%	(46,490)	(4,978)	(41,513)	89.3%	(185,961)
INCENTIVE COMPENSATION EXPENSE Total			63,776	58,183	5,593	8.8%	63,776	50,086	13,689	21.5%	63,776	99,793	(36,018)	(56.5%)	63,776	132,100	(68,324)	(107.1%)	255,102



10G Report Samples Continue..

• Pie Chart



Modify - Refresh - Print - Download - Add to Briefing Book - Copy



10G Report Samples Continue...

• Benchmark sample





Demo Reports



OBIEE 10G and 11G differences

- 10G by default returns alias if present, if member name is required an additional column should be defined (only works for leaf members), 11 G import process created both columns in physical layer.
- 10 G by default designates Account dimension as measure dimension and create all members in account dimension as measures flattening account hierarchy. 11G creates single measure column retaining hierarchies for all dimensions.
- 11 G import process provides option to create columns for UDA (user defined attributes).
- 11G provides option to create columns for non-default aliases (i.e. German, French..)
- 11G Provides Outline drill down like Essbase Outline in reports.



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