# New Features of Oracle Business Intelligence 11g

#### **Using in the Real World**

Collaborate 2011 Session 200 Chris Claterbos Tim Vlamis

> Vlamis Software Solutions 816-781-2880 http://www.vlamis.com



#### Vlamis Software Solutions, Inc.

- Founded in 1992 in Kansas City, Missouri
- Oracle Partner and reseller since 1995
- Developed more than 200 Oracle BI systems
- Specializes in ORACLE-based:
  - Data Warehousing
  - Business Intelligence
  - Data Transformation (ETL)
- Delivers
  - Design and integrated BI and DW solutions
  - Training and mentoring
- OBIEE 11g beta program participant
- Expert presenter at major Oracle conferences
- <a href="https://www.vlamis.com">www.vlamis.com</a> (blog, papers, newsletters, services)





## Who We Are

#### Chris Claterbos

- Consulting and Development Manager for Vlamis Software Solutions, Inc.
- DBA and applications developer for Oracle products, since 1981.
- Beta tester and early adopter of including OBIEE11g, Oracle 8i, 9i, 10g and 11g and JDeveloper
- · Speaker and author.
- Previous IOUG Focus Area Manager for Data Warehousing and BI

#### Tim Vlamis

- Consultant for Vlamis Software Solutions, Inc.
- Past presenter at Oracle OpenWorld, Collaborate, BIWA Summit, ODTUG, and other Oracle conferences.
- 20+ years experience in business modeling and valuation, forecasting, and scenario analyses.
- Professional Certified Marketer (PCM) from AMA.
- Active Member of NICO (Northwestern Institute on Complex Systems).
- MBA Kellogg School of Management (Northwestern).
- BA Economics Yale University.
- Adjunct Professor of Business, Benedictine College



## **Overview**

- The New Architecture
- What's New and Old in Administration
- The New Analysis Look and Feel
- Answers
  - Column Types
  - Aggregates
- Dashboards
  - New Prompts
  - Master Detail
- Actionable Intelligence (Alerts and iBots)
- Bl Publisher
  - New Web Based Layout Editor
  - Integration with Dashboards
- Using Maps A whole new world!
- ScoreCard





## **OBIEE 11g Architecture**

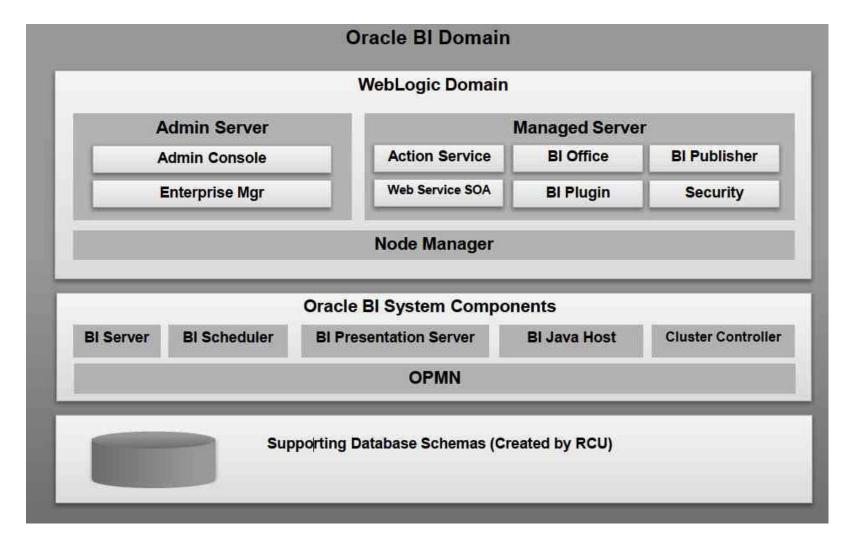
#### What has changed?

- 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





## **OBIEE 11g Architecture**







#### **Management and Operations**

#### System Management

- Major changes across the board
- Centralized / Distributed Management
- Managed via EM

#### Lifecycle

- Many changes Install, upgrade, migration, patch ...
- Managed via standard tools

#### Other Changes

• Improved scaling / resource usage





#### **Key Administration Features**

- Web Logic Used to Managed Servers and Services
- WebLogic Used to Manage Users and Groups
- AdminTool still used to manage data security and filters





## OBIEE 11g - What Has Changed?

- Identity Store is embedded LDAP server (WLS)
- Users available everywhere
- Application Roles available everywhere
- User Profile derived from LDAP server
- Users/Groups no longer defined in RPD
- Administrator and Administrators not hard-coded
- RPD protected by RPD Password
- Administrator user not used for Inter-Process Communication (component to component)





## OBIEE 11g – What has not Changed

- Init Blocks
- External Authenticators
- Custom Authenticators
- Database Authentication
- SA System Subject Area
- RPD access control
- Web Catalog access control

Essentially Everything that was in 10g is in 11g





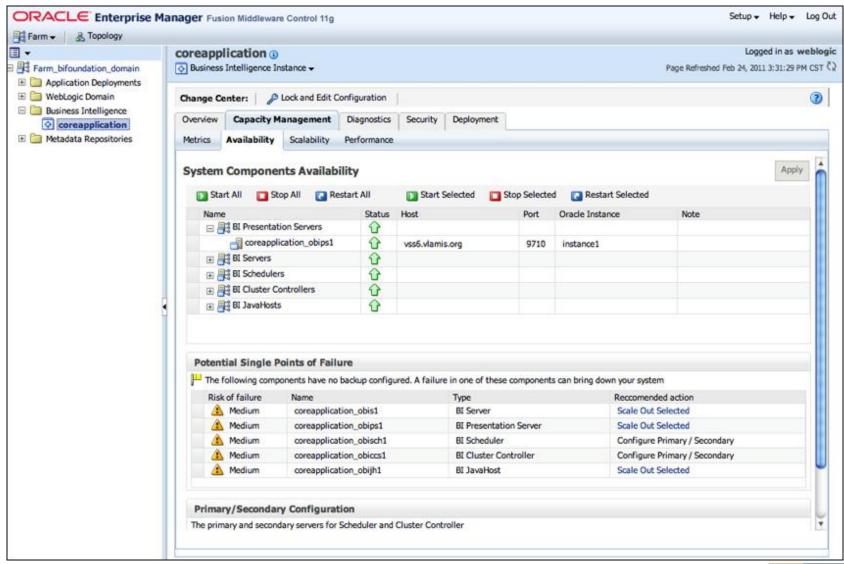
#### Leveraging Fusion Middleware Tech

- WLS (Web Logic Server)
  - Application server
  - Required on every OBIEE machine
- OPMN (Oracle Process Management Network)
  - Used for distributed process start / stop / restart
  - Process recovery (optional), Process 'Ping'
  - Managed via EM
  - Can also be used for performance collection (DMS)
  - Required on every OBIEE machine





## **Enterprise Manager 11g**





## **Web Administration Demo**





#### New Answers, Dashboards and BI Publisher Features

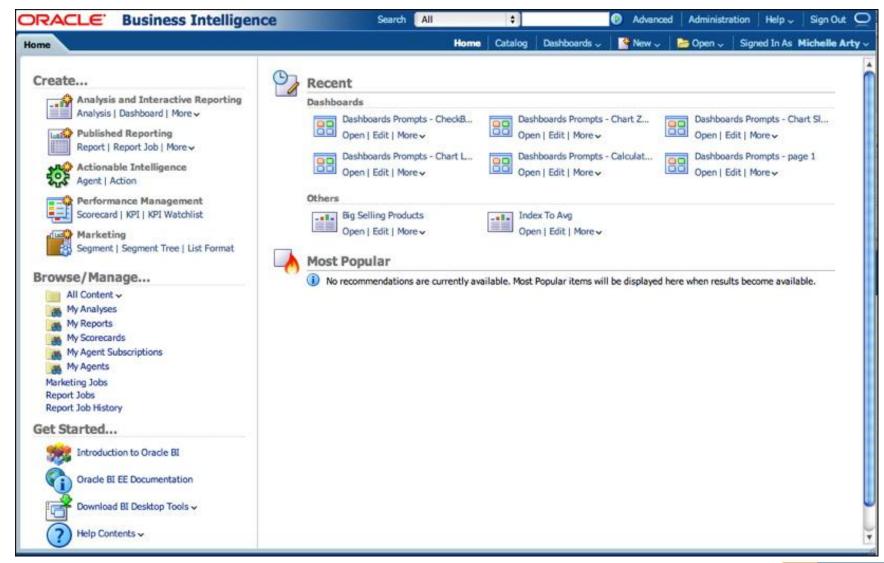
#### **New Features**

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



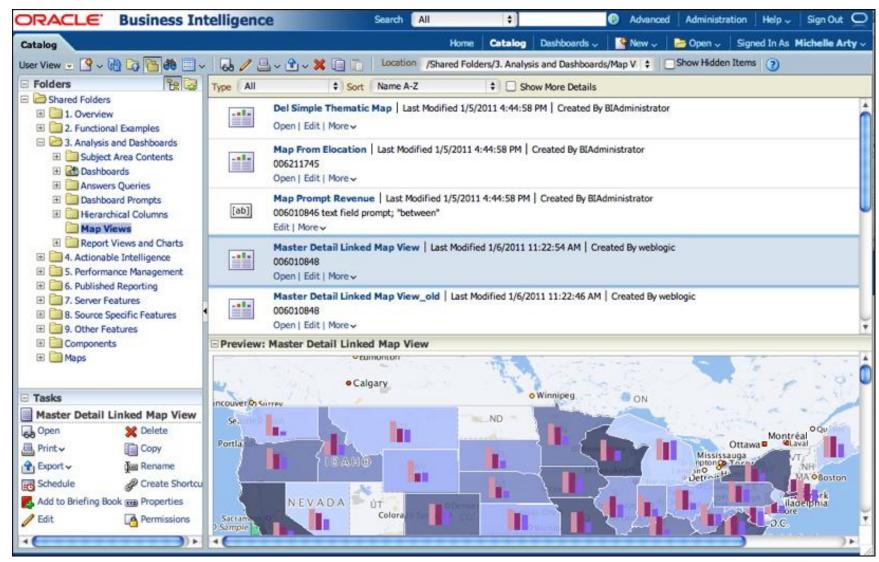


#### **New Home Page**



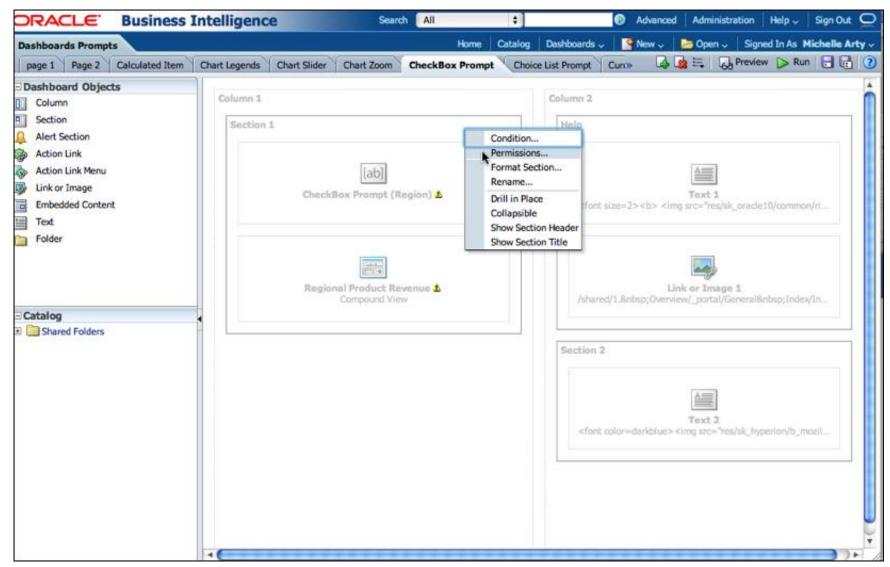


## **Catalog with Viewer**





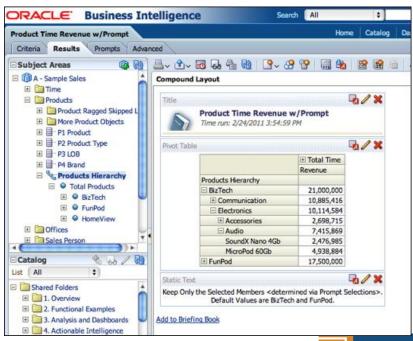
#### **Improved Dashboard Editor**





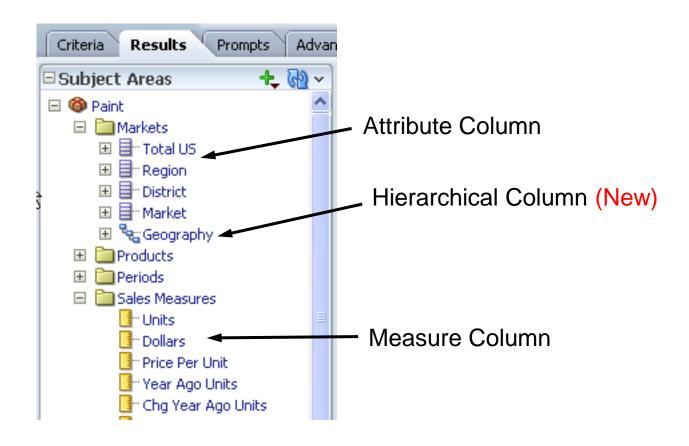
#### **Answers 11g Overview**

- 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





### **OBIEE Column Types**







#### **Hierarchical Columns**

- OLAP Analysis
  - Serve all the use cases in one place
  - Unifying models and terminology
- What are Hierarchical Columns
  - Hierarchical columns vs. attribute columns
  - Outline vs tabular display
  - Expand/collapse vs. drill down/ drill up
- Business Model Implementation
  - Physical Model: Parent-Child, Star Schema, Snowflake
  - Business Model: parent-child, skip and ragged
  - Presentation Model: dimension tree





#### **Hierarchical Columns**

- Now supports expanding and compressing hierarchy in same column
- Just like other OLAP tools like Discoverer
- Supports ragged and skip level hierarchies
- Integrated with new grouping and custom aggregate capabilities
- Works with ANY datasource (OLAP, Relational, XML)

	Revenue			
	⊞ Total Time			
Total Products	50,000,000			
⊟ BizTech	21,000,000			
Communication	10,885,416			
Electronics	10,114,584			
☐ FunPod	17,500,000			
Digital	7,735,105			
	9,764,895			
☐ HomeView	11,500,000			
Services	1,005,845			
<b>⊞ TV</b>	10,494,155			
Hot Products	18,822,801			
⊞ Cell Phones	5,917,903			
⊡ Camera	7,735,105			
MPEG4 Camcorder	3,995,040			
7 Megapixel Digital Camera	3,740,065			
Plasma	5,169,794			





## **Hierarchical Reporting**

- Hierarchical Columns can be put in Table or Pivot Table views
- Can be mixed with other column types
- Drag and Drop rearrangement supported

		Revenue							
		☐ Total Time							
			⊡ 2008					⊞ 2009	⊞ 2010
				⊞ 2008 Q1	⊕ 2008 Q2	⊞ 2008 Q3	± 2008 Q4		
☐ Total Products	Genmind Corp	16,792,560	5,470,146	932,961	2,672,378	1,441,689	423,117	5,036,331	6,286,083
	Stockplus Inc.	13,566,400	4,574,096	741,234	2,191,716	1,227,819	413,327	3,999,836	4,992,468
	Tescare Ltd.	19,641,040	6,455,758	1,033,491	3,245,622	1,669,336	507,310	5,963,833	7,221,449
⊟ BizTech	Genmind Corp	6,638,825	2,192,909	376,077	1,064,310	577,364	175,158	1,999,213	2,446,703
	Stockplus Inc.	6,289,013	2,136,281	361,774	989,802	573,723	210,983	1,839,924	2,312,808
	Tescare Ltd.	8,072,162	2,661,551	431,809	1,325,976	685,449	218,318	2,462,950	2,947,660
	Genmind Corp	2,920,284	899,128	162,373	438,735	219,250	78,771	908,519	1,112,638
	Stockplus Inc.	4,240,828	1,405,532	235,636	647,880	374,437	147,579	1,228,562	1,606,733
	Tescare Ltd.	3,724,305	1,228,831	179,706	628,925	326,636	93,564	1,141,531	1,353,943
<b>⊞</b> Electronics	Genmind Corp	3,718,541	1,293,781	213,705	625,575	358,114	96,387	1,090,694	1,334,066
	Stockplus Inc.	2,048,185	730,749	126,137	341,922	199,286	63,404	611,362	706,075
	Tescare Ltd.	4,347,857	1,432,721	252,102	697,051	358,813	124,754	1,321,419	1,593,718
FunPod	Genmind Corp	6,674,101	2,208,040	379,356	1,112,519	549,015	167,150	1,968,610	2,497,451
	Stockplus Inc.	3,448,054	1,123,130	186,146	530,059	317,494	89,431	984,165	1,340,760
	Tescare Ltd.	7,377,844	2,392,018	380,614	1,218,792	618,980	173,632	2,207,565	2,778,262
⊞ HomeView	Genmind Corp	3,479,633	1,069,197	177,528	495,550	315,311	80,809	1,068,508	1,341,928
	Stockplus Inc.	3,829,333	1,314,686	193,315	671,855	336,603	112,914	1,175,746	1,338,901
	Tescare Ltd.	4,191,034	1,402,189	221,068	700,854	364,907	115,360	1,293,318	1,495,527
☐ Hot Products	Genmind Corp	6,745,760	2,117,535	337,647	1,047,151	556,629	176,108	2,001,707	2,626,518
	Stockplus Inc.	4,315,039	1,516,319	255,707	774,003	346,365	140,244	1,224,600	1,574,120
	Tescare Ltd.	7,762,002	2,490,454	338,620	1,277,676	687,457	186,701	2,353,559	2,917,989
⊕ Camera	Genmind Corp	2,944,394	956,202	171,198	470,167	245,994	68,842	860,294	1,127,898
	Stockplus Inc.	1,495,109	531,747	91,765	265,213	128,359	46,410	381,834	581,527
	Tescare Ltd.	3,295,602	1,098,828	142,405	583,275	300,668	72,479	985,180	1,211,594
Cell Phones	Genmind Corp	2.155.126	655,182	82,108	351.183	165,440	56,451	659,225	840,719





#### **Groups**

Hierarchies can be used to build custom aggregates

Hierarchy is preserved within group so drill down is

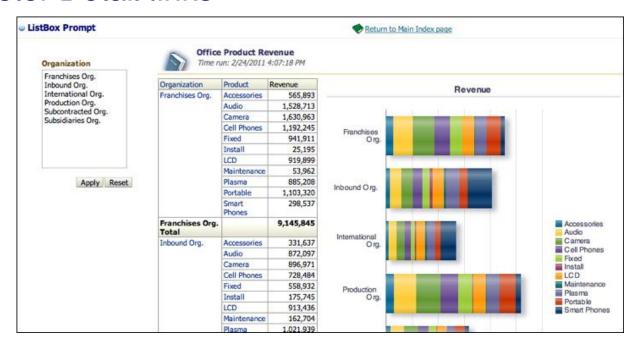
supported Compound Layout **△** ~ **1** ~ **6** • ☐ Total Til New Group **±** 2009 **# 2010** IT ZUUS Pivot Table Products Hierarchy □ Total Time 50,000,000 16,500,000 15,000,000 18,500,000 Total Products ± 2009 **±** 2010 # BizTech 21,000,000 6,990,741 6,302,087 7,707,172 Products Hierarchy □ FunPod 17,500,000 5,723,187 5,160,340 6,616,473 50,000,000 15,000,000 18,500,000 ☐ Total Products 7,735,105 2,586,777 2,227,309 2,921,019 **Digital** # BizTech 21,000,000 6,302,087 7,707,172 + Games □ FunPod 17,500,000 5,160,340 6,616,473 Display Label Media ⊟ HomeView # Digital 7,735,105 2,227,309 2,921,019 Values From Products.Products Hierarchy **E** Games 9,764,895 2,933,031 3,695,454 Products.Products Hierarchy Plasma **⊞ TV** ⊟ HomeView ☐ ○ Total Products 11,500,000 3,537,573 4,176,355 Digital ⊞ ● BizTech ■ ● FunPod **⊞** Services 1,005,845 330,837 376,561 **⊞ ᢦ**D Digital F Q Campo 10,494,155 3,206,735 3,799,795 **TV** ☐ ● HomeView Move **⊞ ©** Services Media 18,229,260 5,434,044 6,720,814 E O TV E VO LCD **Digital** 7,735,105 2,227,309 2,921,019 □ LCD 5,324,361 1,638,358 1,881,936 LCD 36X Standard 3,993,962 1,264,918 1,373,781 LCD HD Television 1,330,399 373,440 508,155 Catalog # Plasma 5,169,794 1,568,377 1,917,859 Format

OK Cancel



#### **New Dashboard Prompts and Visualizations**

- Available Prompts has been expanded
- Check List, radio buttons, list box, slider etc
- Step Based Prompt builder
- Master Detail links







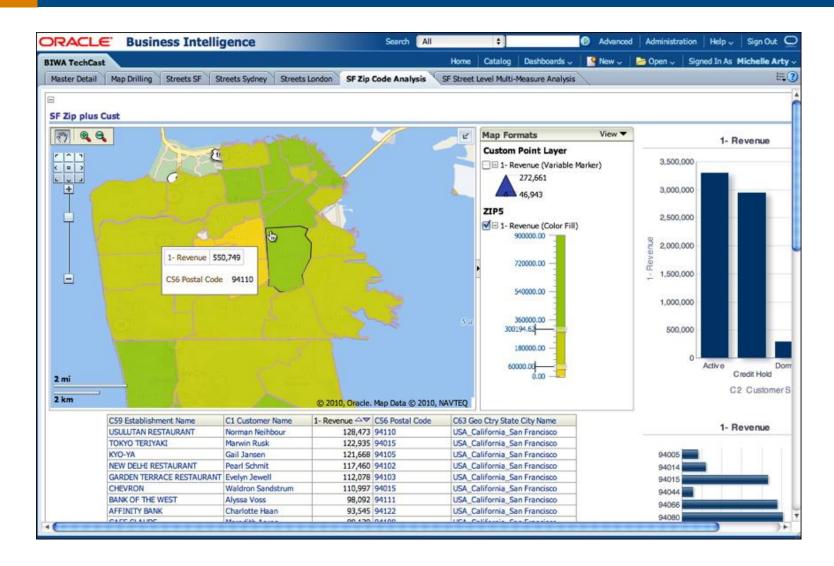
#### **MapViewer Integration**

- Map is a new View Type!
- Integrates with spatial encoded and non-spatial encoded datasets
- Comes with Navteq maps (State, County, Global)





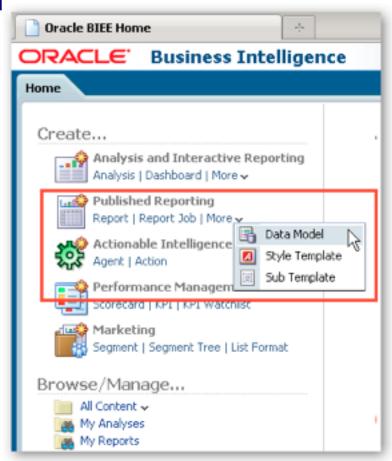
#### **Maps in Action**





#### **BI Publisher**

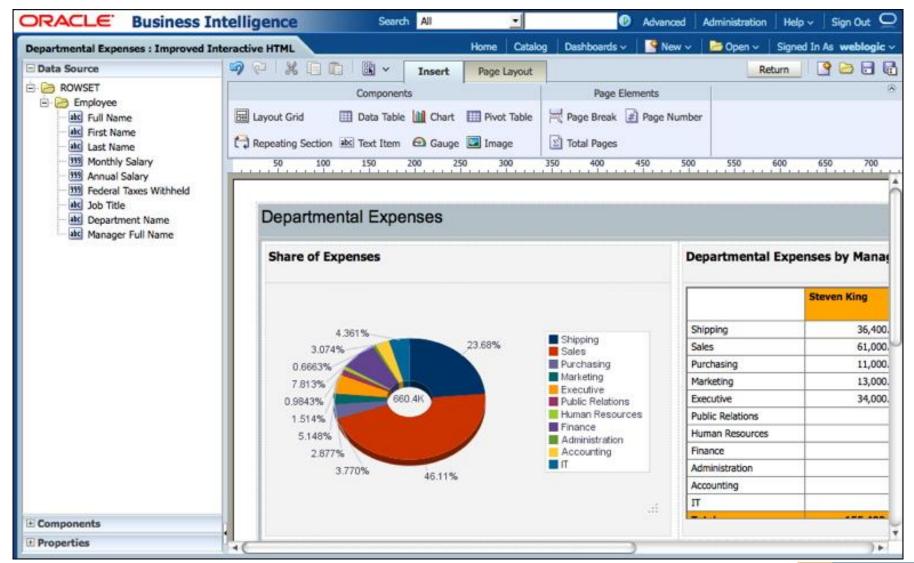
- Better Integration with UI and Dashboards
- New Web Based Editor
  - 100% Web Based
  - Not dependent on MS Word
  - RTF Templates still available
- Updated Data Modeler
  - Models exist separately
  - Datasets can be combined across sources
  - Can use OBIEE, SQL, XLS,XML, Web Service data sources







#### **BI Publisher Web Editor**





## Demonstration



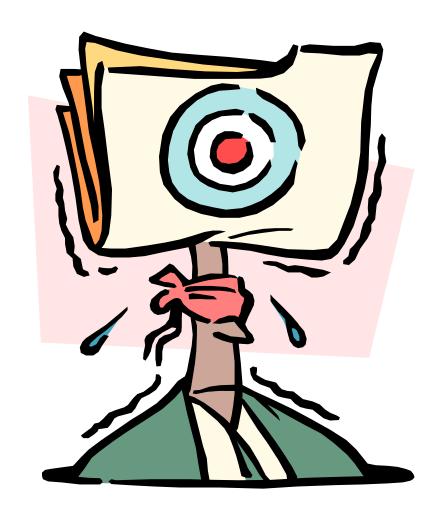


## **Tips on Getting Started**

- Use 64-bit OS with 6+GB Ram if possible
  - WebLogic requires 1.6GB Ram
  - OPMN (BI Services) needs 500+MB
  - Faster performance than 32-bit
- Put Database(s) on another Server if possible
  - Easier to manager
  - Reduces memory requirement and disk contention on server
- Load SampleApp and use it as an example
- Build Autostart routines into OS Services or Autostart scripts (blog entries for that not provided by Oracle yet)
- Must have 32-bit Admin Client for now (64-bit coming in 11.1.1.14)











## **Vlamis Collaborate Presentations**

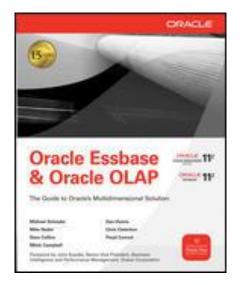
Presenter	Session	Time	Title
Chris	ODTUG	Sun	Accelerate your Data Warehouse with Oracle OBIEE, OLAP, and Essbase
Claterbos	Soup to Nuts	1:00-6:00	
Chris	BIWA	Mon	New Features of OBIEE11g – Using it in the Real World
Claterbos	Bootcamp	9:15-10:15	
Dan Vlamis	IOUG	Mon 1:15-2:15	Fast Complex Analysis with Oracle OLAP
Tim	BIWA	Tues	Visualizing Data Using Maps in OBI 11g
Vlamis	Bootcamp	10:30-11:30	
Chris	Hands On	Wed	The New OBIEE 11g - A Quick Start Guide
Claterbos	Lab	8:00-10:15	
Dan Vlamis	IOUG	Wed 9:15-10:15	Case Study on OBIEE 11g on JD Edwards Data
Cathye Pendley	IOUG	Wed 2:15-3:15	Working on Projects Remotely





## Oracle Essbase & Oracle OLAP: The Guide to Oracle's Multidimensional Solution

- Published by Oracle Press
  - Dan Vlamis
  - Chris Claterbos
  - Michael Nader
  - David Collins
  - Floyd Conrad
  - Mitchell Campbell
  - Michael Schrader



- Covers both Oracle Essbase and Oracle OLAP
- 500 Pages



# New Features of Oracle Business Intelligence 11g

#### **Using in the Real World**

Collaborate 2011 Session 1751
Chris Claterbos
Tim Vlamis

Vlamis Software Solutions 816-781-2880 http://www.vlamis.com