OBIEE/Business Intelligence Applications Simplified

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Introduction

- Introduction to Business Intelligence / OBIEE
- Business Intelligence Applications
- Case Studies
    - Custom OBIEE Development
    - BI Applications
- Technical Details
- BI Center of Excellence
- Wrap-up / Questions & Answers

About Speakers!

Vivek:

- OBIEE professional with IBM (Global Business Services) in Oracle Consulting Practice

- Skills in OBIEE, Oracle Spatial and MapViewer, OLAP/Essbase, Oracle RTD etc

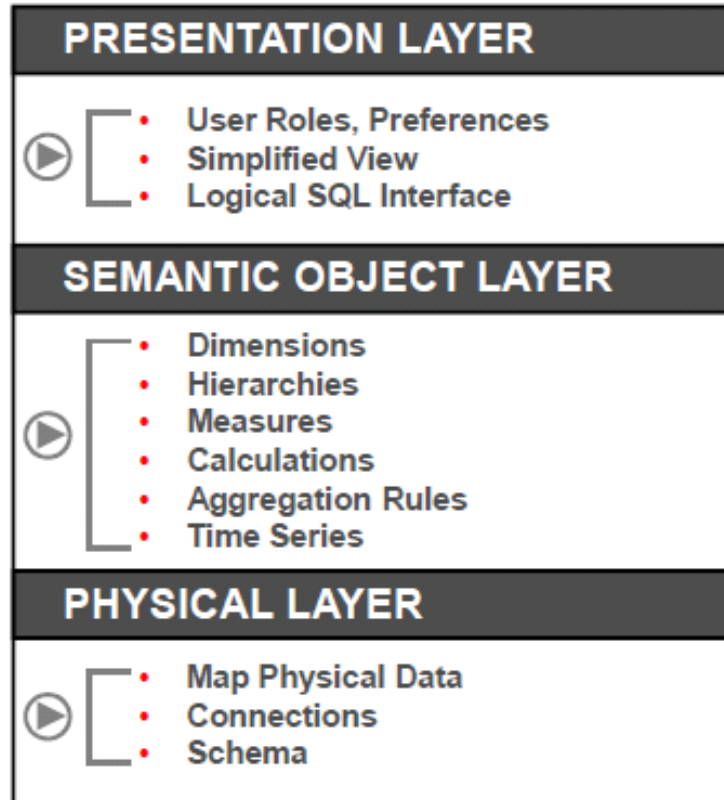- Many years of hands-on experience with many Fortune 100 companies in all of these areas

Why Oracle BI EE (OBI EE)?

- Age old Enterprise BI Industry Challenges
  - No effective way to analyze requirements
    - "*It took us two years to build the enterprise DW, and it is not being fully utilized since being built.*"
  - Reporting silos
    - Silo data marts or cubes; query tool silos
    - Batch-based reporting deployed as dead "sheets of paper"
  - Low user adoption
    - Hard-to-use
    - Poor performance
    - High TCO
    - Not actionable or relevant
    - Too late; not detailed enough

Why is Oracle BI EE different?

- Solutions versus tools
    - OBI EE Platform
        - Flexibility for functionality extensions
        - Application administration for TCO
    - Model-driven applications methodology minimizes requirements surprises
- Enterprise versus departmental
    - Enterprise Information Model -- versus hundreds of cubes
    - Handles large data volumes by function shipping to the database
    - Minimizes the use of temp tables to exploit the database optimizer
- Pervasive
    - Ad hoc analysis for business users via interactive dashboards
    - Business problem orientation: analytic workflows and guided navigation
    - Open APIs to fit underneath existing operational systems UI -- SOAP Services for UI reuse or odbc for data / business logic re-use only
- Unified server-centric architecture with full thin client UI

OBIEE – Three Layers

PRESENTATION LAYER

- User Roles, Preferences
- Simplified View
- Logical SQL Interface

Role-Based Views of the Information Relevant to the User

SEMANTIC OBJECT LAYER

- Dimensions
- Hierarchies
- Measures
- Calculations
- Aggregation Rules
- Time Series

Consistent Definition of Business Measures, Metrics, Calculations

PHYSICAL LAYER

- Map Physical Data
- Connections
- Schema

Model Once, Deploy Everywhere

Across Any Data Sources

Ideal Information Architecture

Orchestration

Applications

Data Warehouse

Data Marts Reporting

CRM Apps

SCM Apps

Operations

Websites

Financials

Distribution

ERP Apps

HCM Apps

EAI

ETL

DW

(OLAP)

Essbase

Business Intelligence
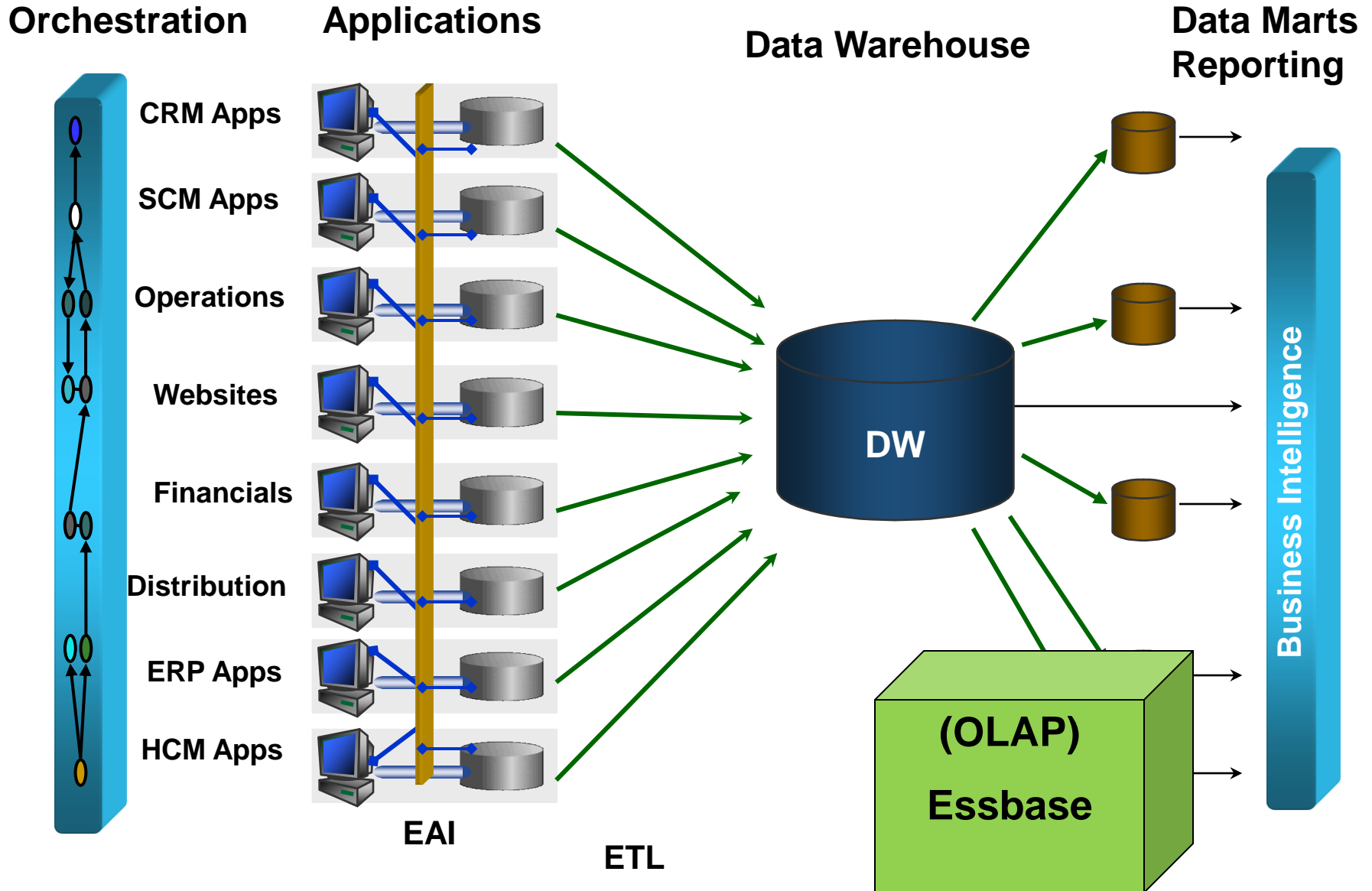
Why the Data Warehouse?

ERP Systems

Data warehouse/OBIEE leverages ERP data for analysis

Data warehouse also gathers data from multiple systems: Legacy, Demantra, etc.

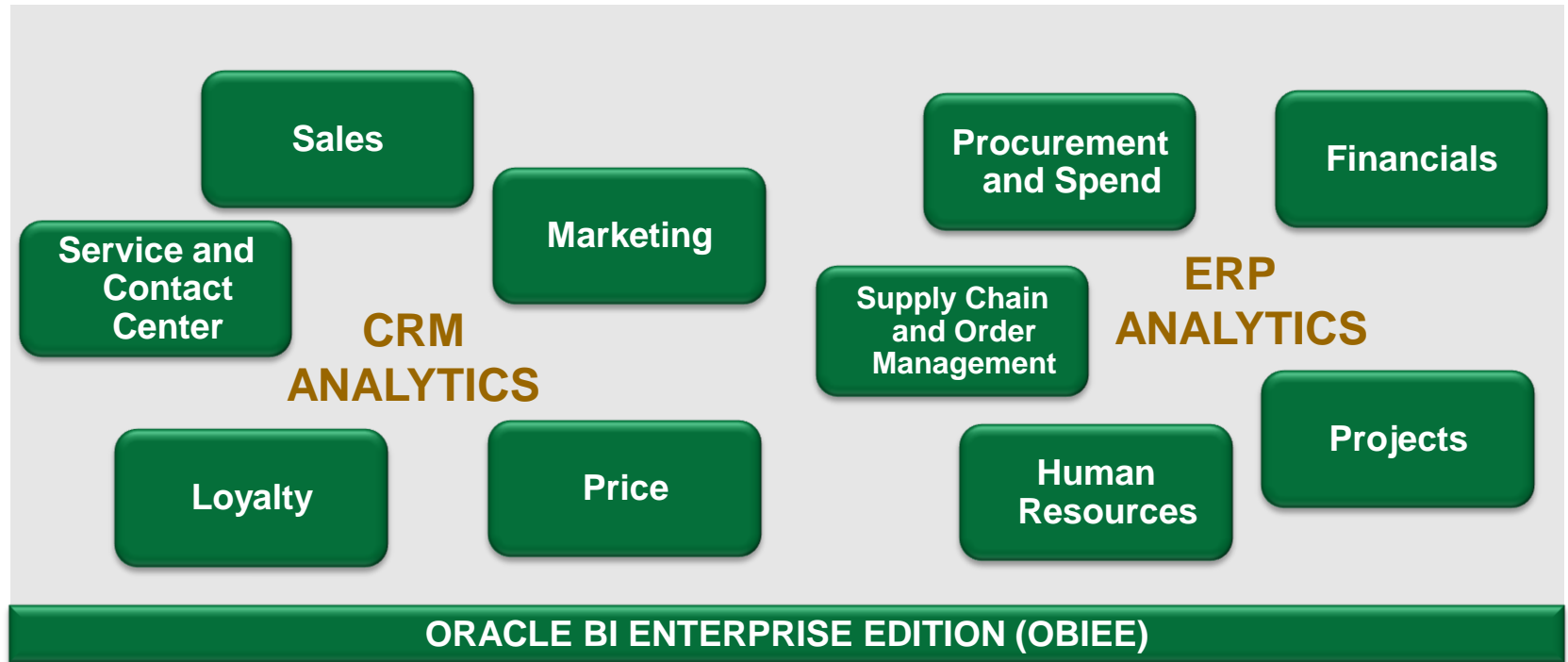ERP's like Oracle EBS are excellent in capturing business data
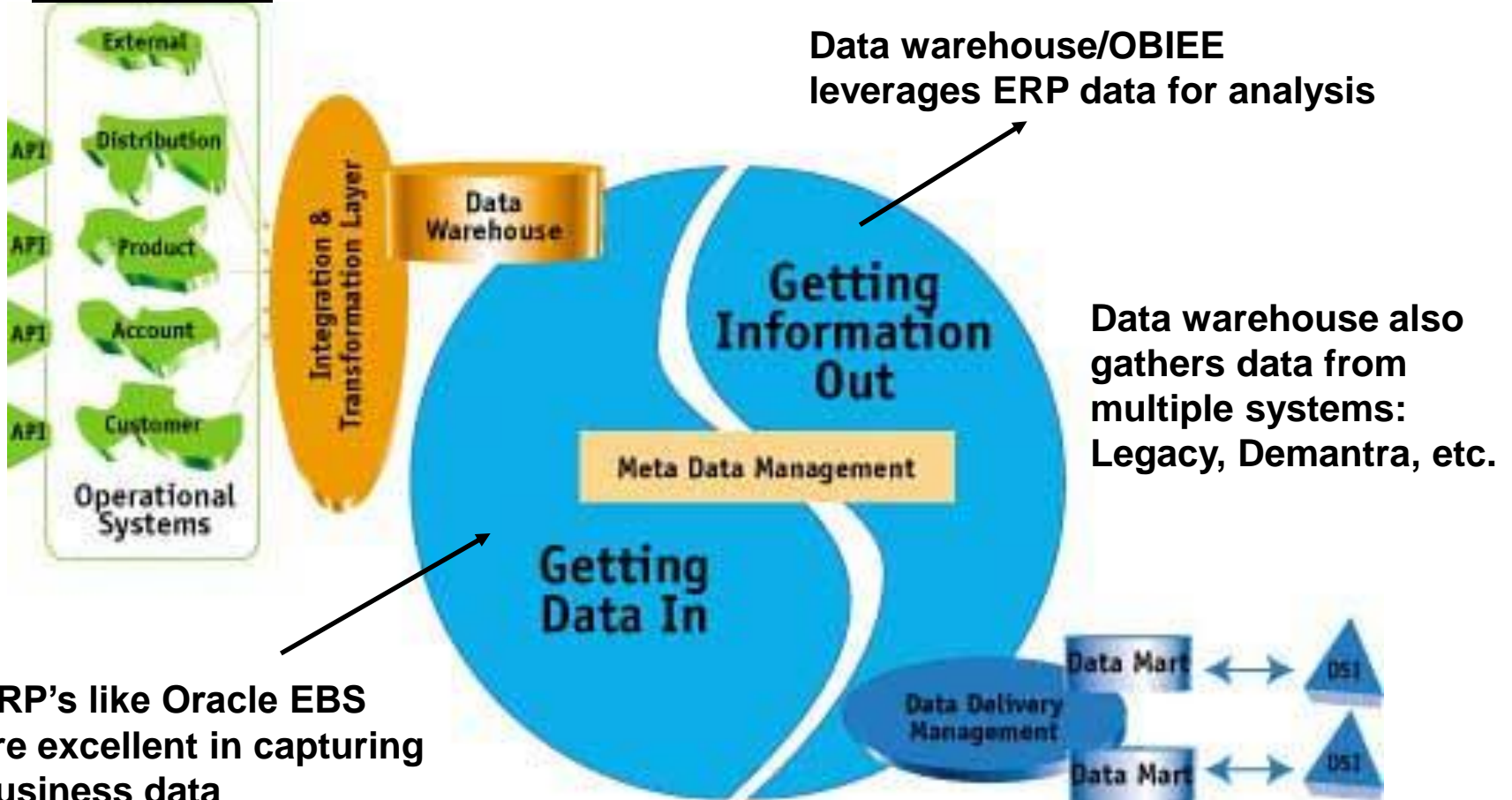
Two Scenarios – User of OBIEE

- ## Company A (Printing/Packaging Industry)
    - ❏ ERP is JD Edwards and Legacy
    - ❏ IBM H/W and AIX shop
    - ❏ EPM - System 7 to System 11 Migration
    - ❏ ODS / Crystal Reports
    - ❏ Essbase & Demantra (for S&OP)
- ## Company B (Energy Sector)
    - ❏ One Division SAP, rest legacy, EBS R12 to consolidate into one ERP
    - ❏ SAP tools for Reporting, Crystal
    - ❏ New HFM and Planning (System 11)

OBIEE   v/s   Packaged BI Application

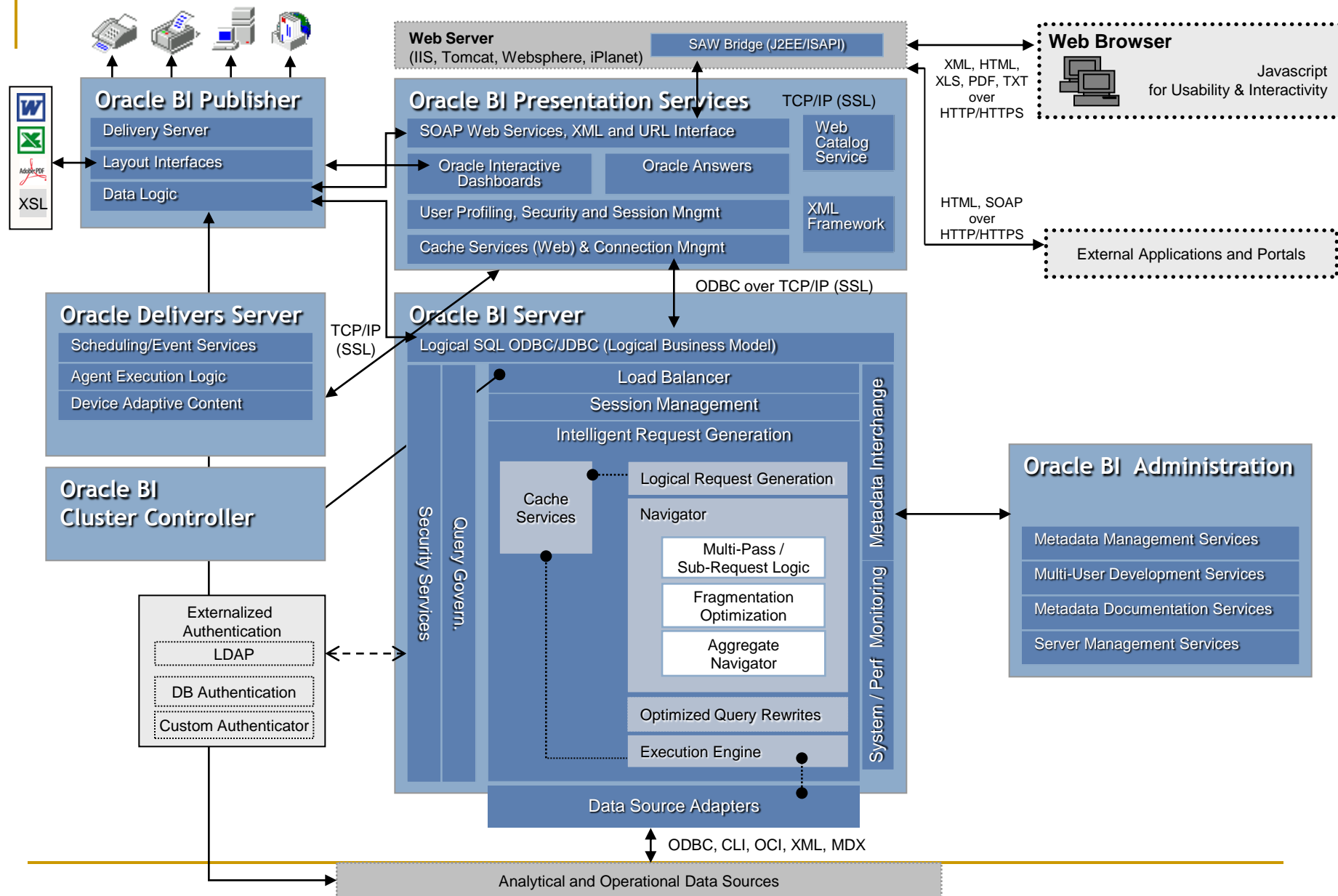# OBIEE 10g Architecture

Web Server
(IIS, Tomcat, Websphere, iPlanet)

SAW Bridge (J2EE/ISAPI)

Web Browser

Javascript
for Usability & Interactivity

Oracle BI Publisher

Delivery Server

Layout Interfaces

Data Logic

W

X

Adobe PDF

XSL

Oracle BI Presentation Services

TCP/IP (SSL)

SOAP Web Services, XML and URL Interface

Oracle Interactive Dashboards

Oracle Answers

Web Catalog Service

User Profiling, Security and Session Mngmt

XML Framework

Cache Services (Web) & Connection Mngmt

XML, HTML, XLS, PDF, TXT over HTTP/HTTPS

HTML, SOAP over HTTP/HTTPS

External Applications and Portals

ODBC over TCP/IP (SSL)

Oracle Delivers Server

Scheduling/Event Services

Agent Execution Logic

Device Adaptive Content

TCP/IP (SSL)

Oracle BI Server

Logical SQL ODBC/JDBC (Logical Business Model)

Load Balancer

Session Management

Intelligent Request Generation

Logical Request Generation

Cache Services

Navigator

Multi-Pass / Sub-Request Logic

Fragmentation Optimization

Aggregate Navigator

Security Services

Query Govern.

Metadata Interchange

System / Perf Monitoring

Optimized Query Rewrites

Execution Engine

Oracle BI Cluster Controller

Externalized Authentication

LDAP

DB Authentication

Custom Authenticator

Oracle BI Administration

Metadata Management Services

Multi-User Development Services

Metadata Documentation Services

Server Management Services

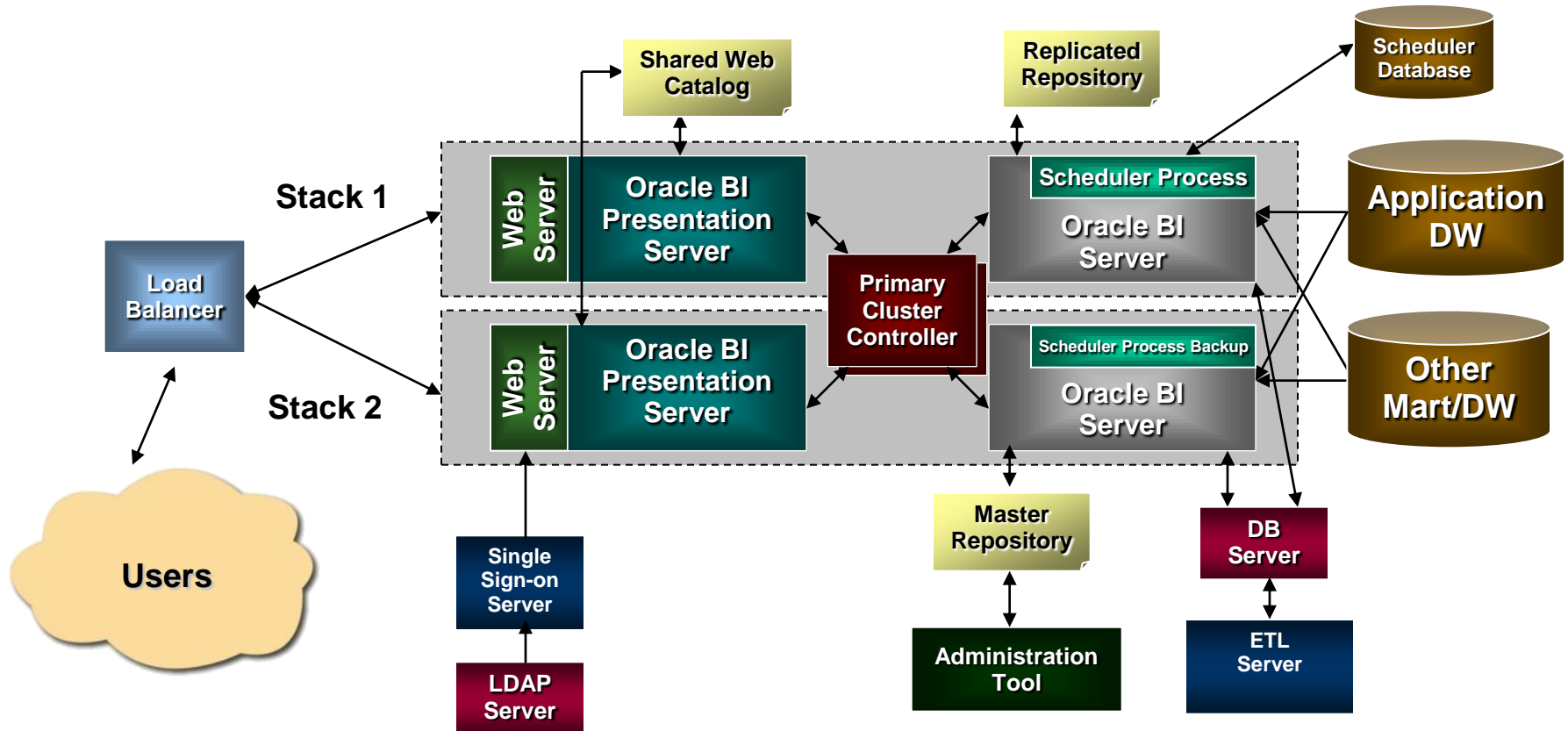Data Source Adapters

ODBC, CLI, OCI, XML, MDX

Analytical and Operational Data Sources

OBIEE 10g Architecture
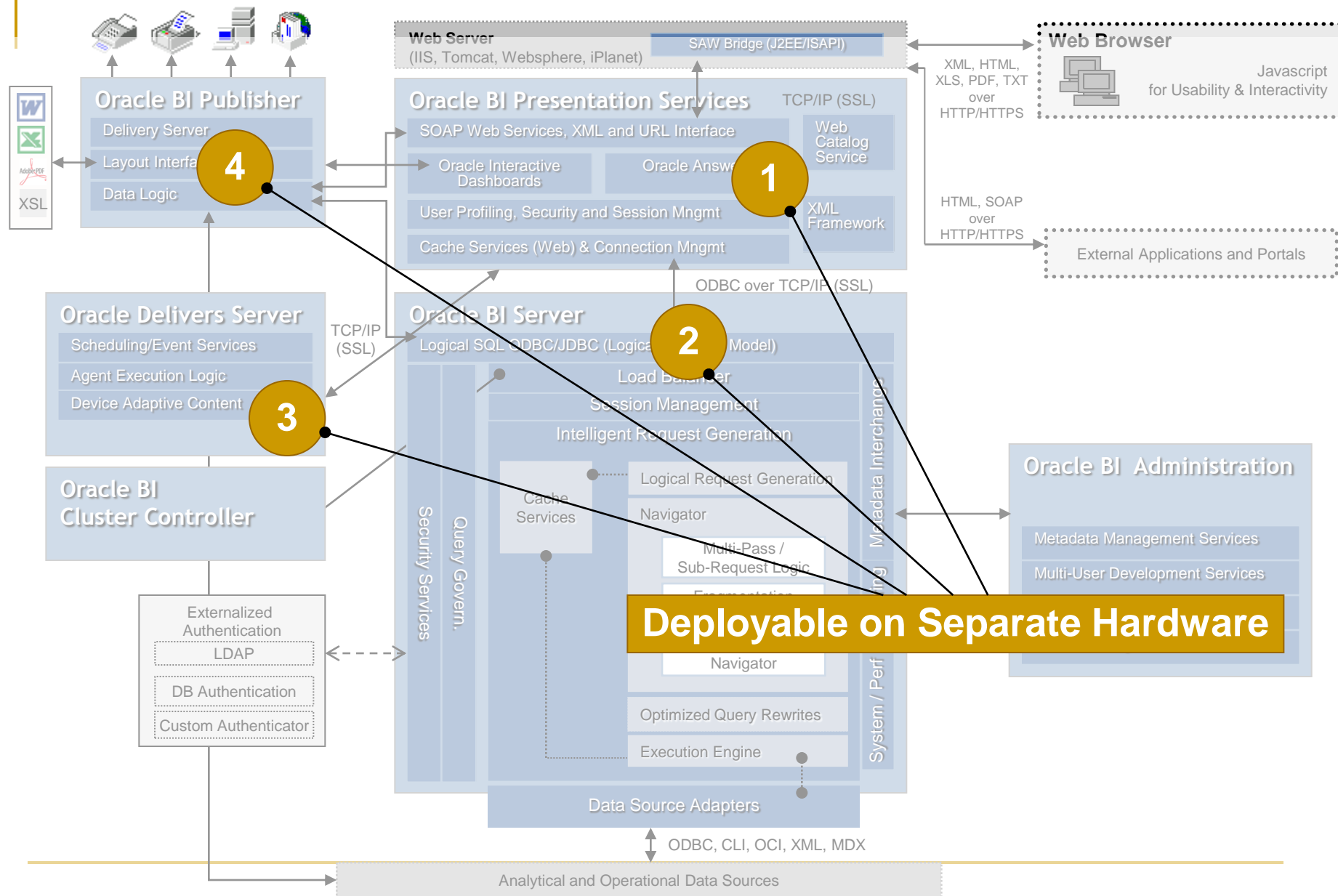
Example 10g Deployment High Availability

Oracle BI 11g High Level Architecture
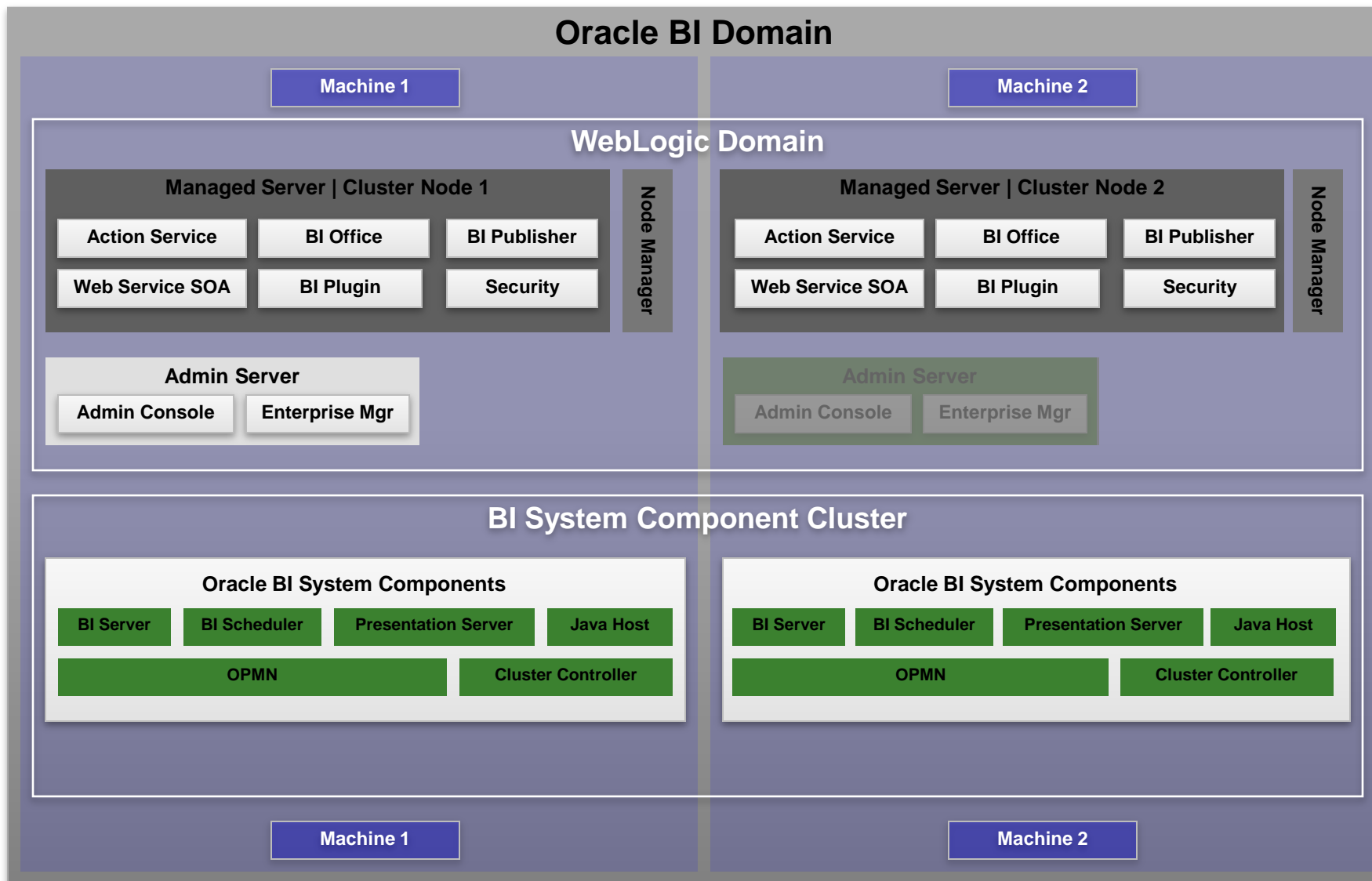
Oracle BI Domain

WebLogic Domain

Admin Server

| Admin Console |
| Enterprise Mgr |

Managed Server

| Action Service | BI Office | BI Publisher |
| Web Service SOA | BI Plugin | Security |

Node Manager

Oracle BI System Components

| BI Server | BI Scheduler | BI Presentation Server | BI Java Host | Cluster Controller |

OPMN
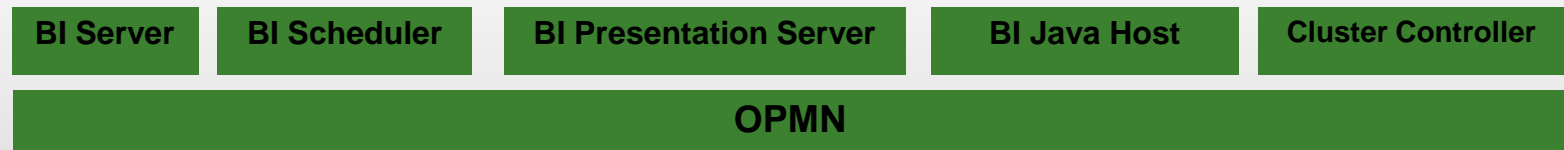
Supporting Database Schemas (Created by RCU)

Oracle BI 11g Clustering

Oracle BI Domain

Machine 1 | **Machine 2**

WebLogic Domain

Managed Server | Cluster Node 1

Action Service	BI Office	BI Publisher
Web Service SOA	BI Plugin	Security

Node Manager

Managed Server | Cluster Node 2

Action Service	BI Office	BI Publisher
Web Service SOA	BI Plugin	Security

Node Manager

Admin Server

Admin Console	Enterprise Mgr

Admin Server

Admin Console	Enterprise Mgr

BI System Component Cluster

Oracle BI System Components

BI Server	BI Scheduler	Presentation Server	Java Host
OPMN		Cluster Controller	

Oracle BI System Components

BI Server	BI Scheduler	Presentation Server	Java Host
OPMN		Cluster Controller	

Machine 1 | **Machine 2**

Enterprise Deployment Diagram

Mycompany BI Technical Architecture

Arch'd/AJ

OBIEE 11g
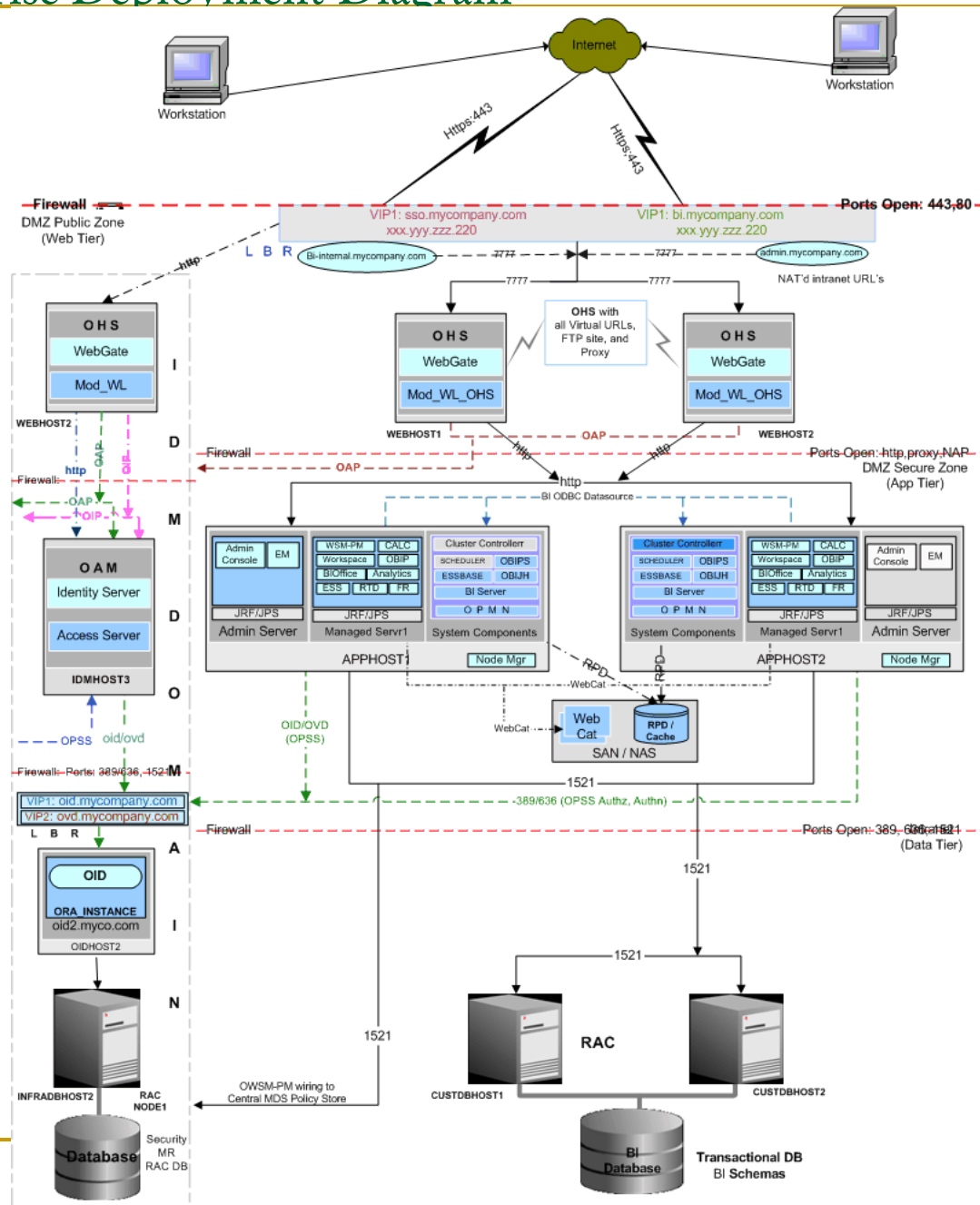
- ## New Features
  - Olap Style reporting
  - ADF integration
  - Actions Framework
  - Security

- ## Ragged and Skip level hierarchies

- ## Essbase Integration

- ## Mapping – Mapviewer integration

Business Model Support for Leveled-Ragged and Skip

- Ragged and Skip Checkboxes
  - Tells server to check for NULL member names in SQL
  - Slight performance hit – only do this when necessary
- Ragged or Skip in Relational Source
  - Missing node should be a NULL field for the member name
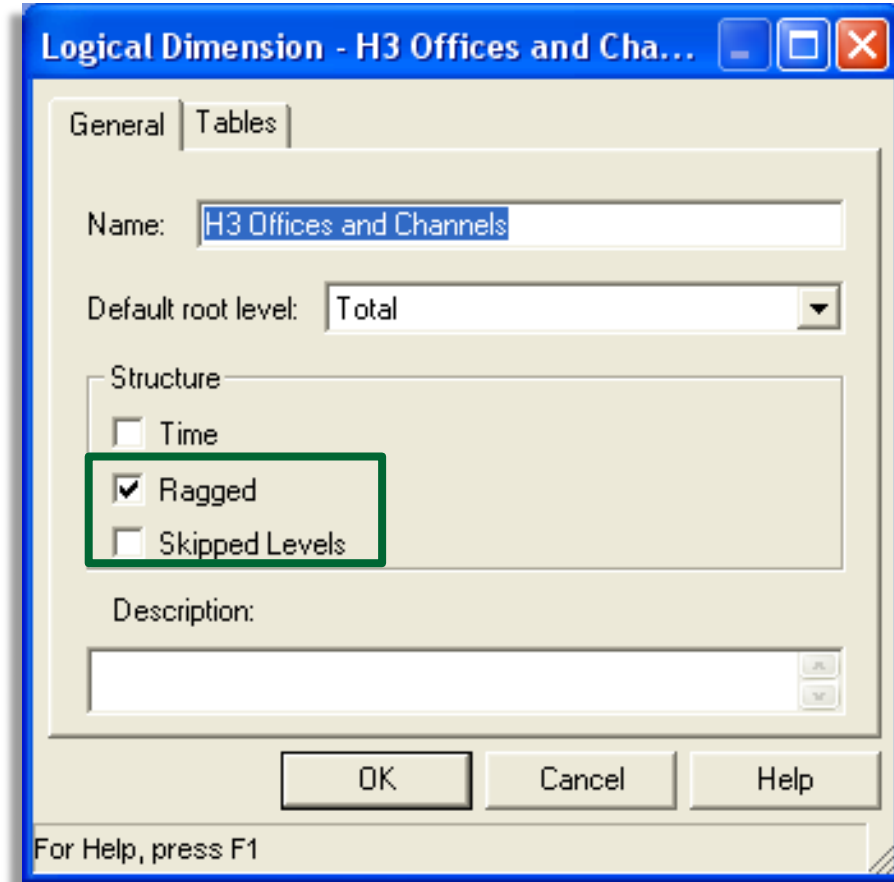
Nulls for Skip or Ragged Levels

	Key	Member Name	Attribute	Level 3	Level 2	Level 1
	Prod_Key	**Prod_Dsc**	**Color**	**Type**	**LOB**	**Brand**
	1	Starter 3-blade Razor	Black	3-blade	Razors for Men	Swordsman
	2	Refill 3-blade - 4 cnt.	Black	3-blade	Razors for Men	Swordsman
	3	Refill 3-blade - 15 cnt.	Black	3-blade	Razors for Men	Swordsman
	4	Starter 5-blade Razor	Black	5-blade	Razors for Men	Swordsman
	5	Refill 5-blade - 4 cnt.	Black	5-blade	Razors for Men	Swordsman
	6	Refill 5-blade - 15 cnt.	Black	5-blade	Razors for Men	Swordsman
	7	Shaving Crème	n/a	Cream	Shaving Creme	Swordsman
	8	Shaving Gel	n/a	Gel	Shaving Creme	Swordsman
	9	Electric Razor - Black	Black		Electric Razors	Electrosmooth
	10	Electric Razor - Chrome	Chrome		Electric Razors	Electrosmooth
	11	Starter Razor - Pink	Pink		Razors for Ladies	Goddess
	12	Starter Razor - Blue	Blue		Razors for Ladies	Goddess
	13	Refill - 6	White		Razors for Ladies	Goddess
	14	Refill - 18	White		Razors for Ladies	Goddess
	15	Spring Breeze Air Freshener	n/a		Air Fresheners	Spring Breeze

Nulls for skip level

Oracle BI Server 11gR1 Enhancements for Essbase

- Essbase MDX enhancements to support Answers+
  - Hierarchy and member browsing
  - Member selection steps
- Improved support for:
  - Measures/Accounts hierarchies
  - Aliases
  - User Defined Attributes (UDAs)
  - Value-based hierarchies
- Enhanced capabilities for federating Essbase and relational sources
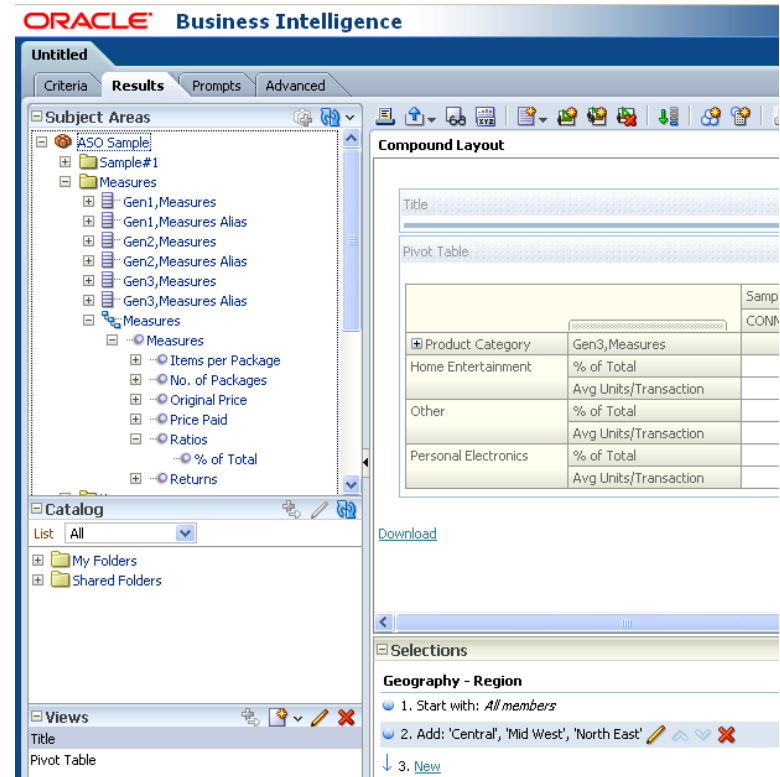
Richer Essbase Metadata in OBIEE Admin Tool

- Ability to create columns for UDAs
- Ability to create columns for Alias tables
- Measure hierarchy modeling
- Value-hierarchy modeling
- Alternate hierarchies automatically imported as separate hierarchies
- Member order column
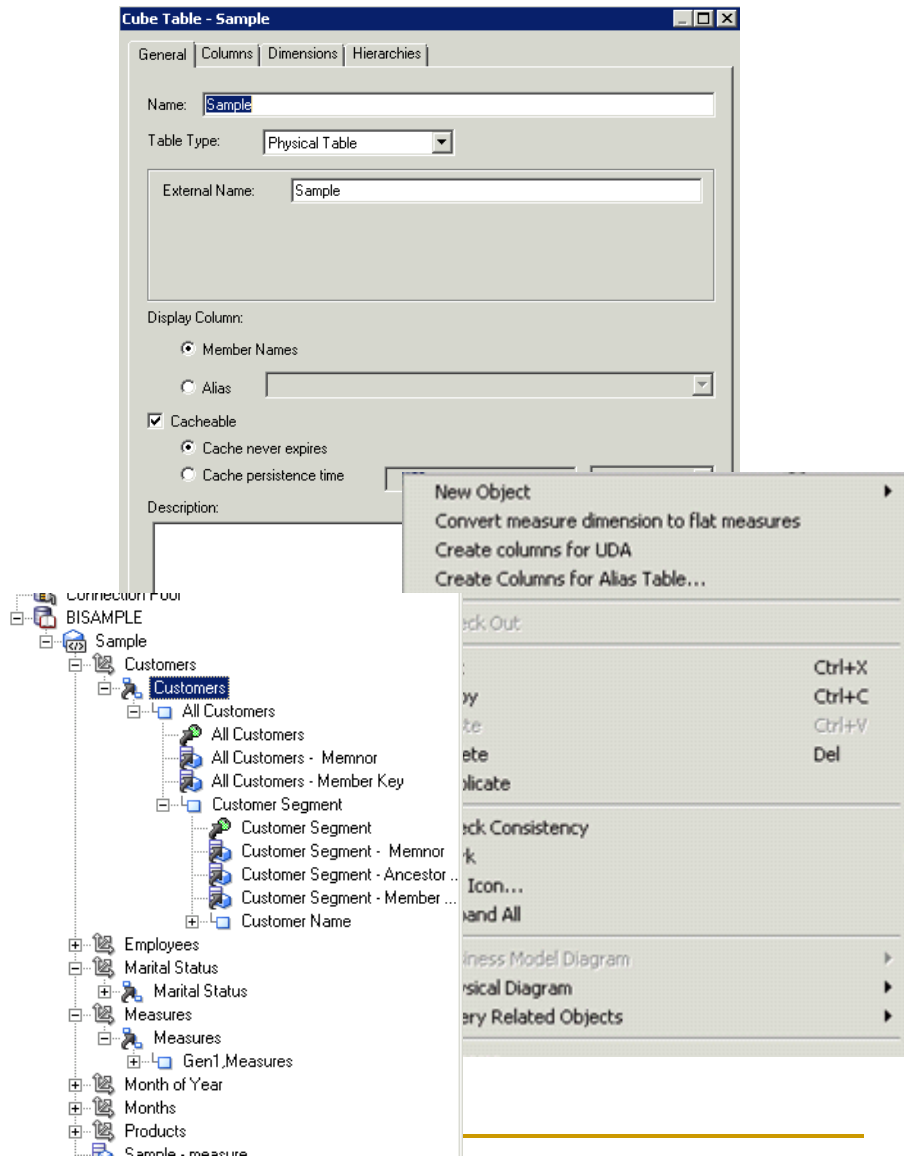
MapViewer BI Integration Architecture

Mapbuilder: Basemaps/ themes/ styles manager (thick client)

NSDP (Non-Spatial Data Provider) key MapViewer integration feature

NSDP

JSON/XML

Mapviewer

OBIEE

Oracle Fusion Middleware

Mapbuilder

ORACLE SPATIAL

Oracle Database

Other Oracle/non-Oracle databases, data warehouses …
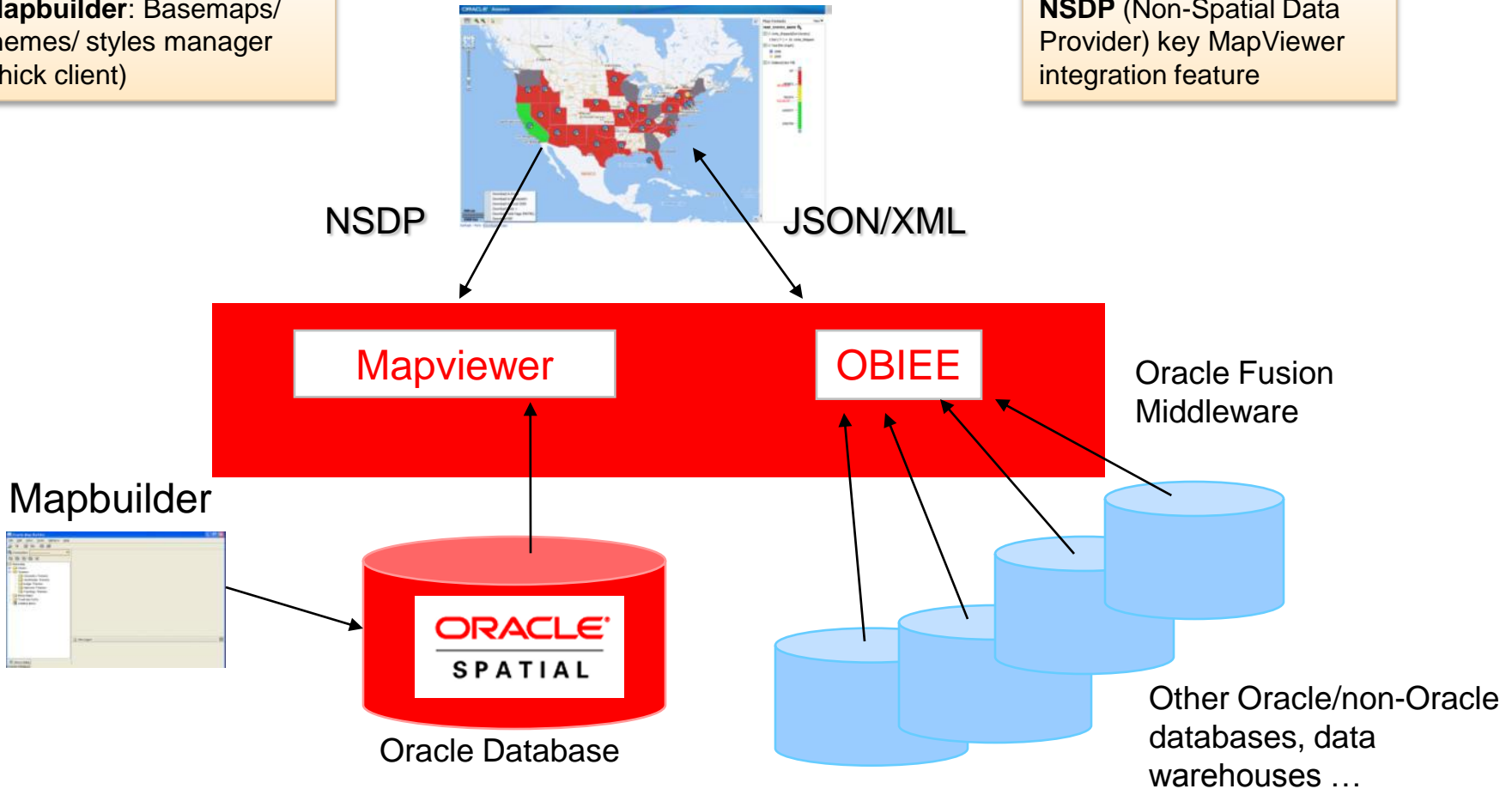
BI Presentation Services (Admin)

- Import themes, tile layers, styles created in mapviewer into the OBIEE catalog creating a central repository and associate subject areas with the maps

- Provide mapping between BI metadata and Mapviewer metadata

- Provide layer ordering, zoom levels on the map
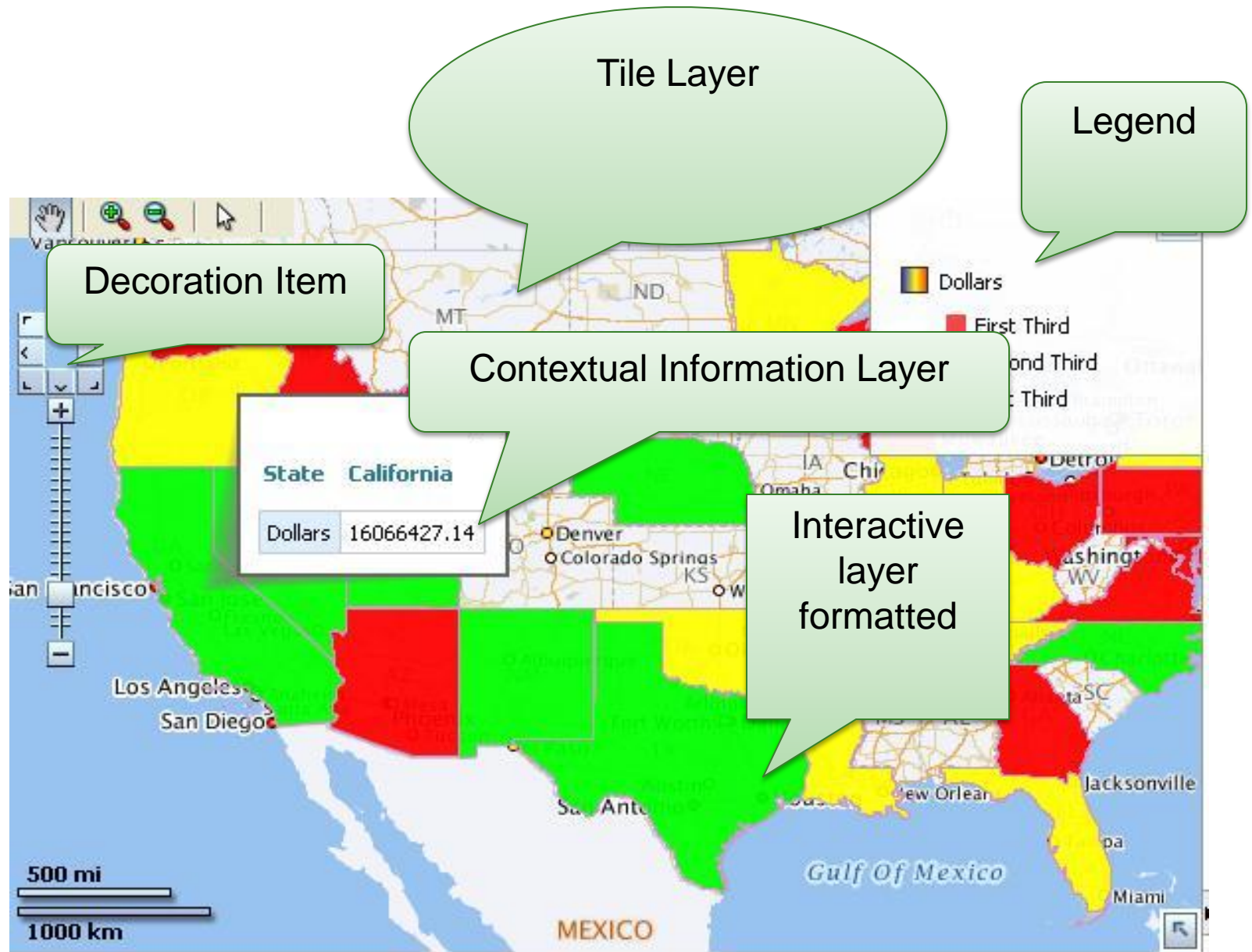
About Me!

Rahul Kundavaram:

- Senior Principal Consultant in Oracle – BI Practice

- Skills in OBIEE / BI Applications, Discoverer, BI Publisher, Oracle EBS

- 10+Years of experience in all these areas

- Implemented BI Solutions for Various Industries including Retail, Healthcare, Federal, Insurance, Finance and Media.

Acronyms

- OBIEE
- OBIA
- OLAP,OLTP,OBAW
- DAC
- INFA
- SDE (Source Dependent executions)
- SIL (Source Independent executions)
- Fin, SCM, HR…

OBIEE v/s Packaged BI Application
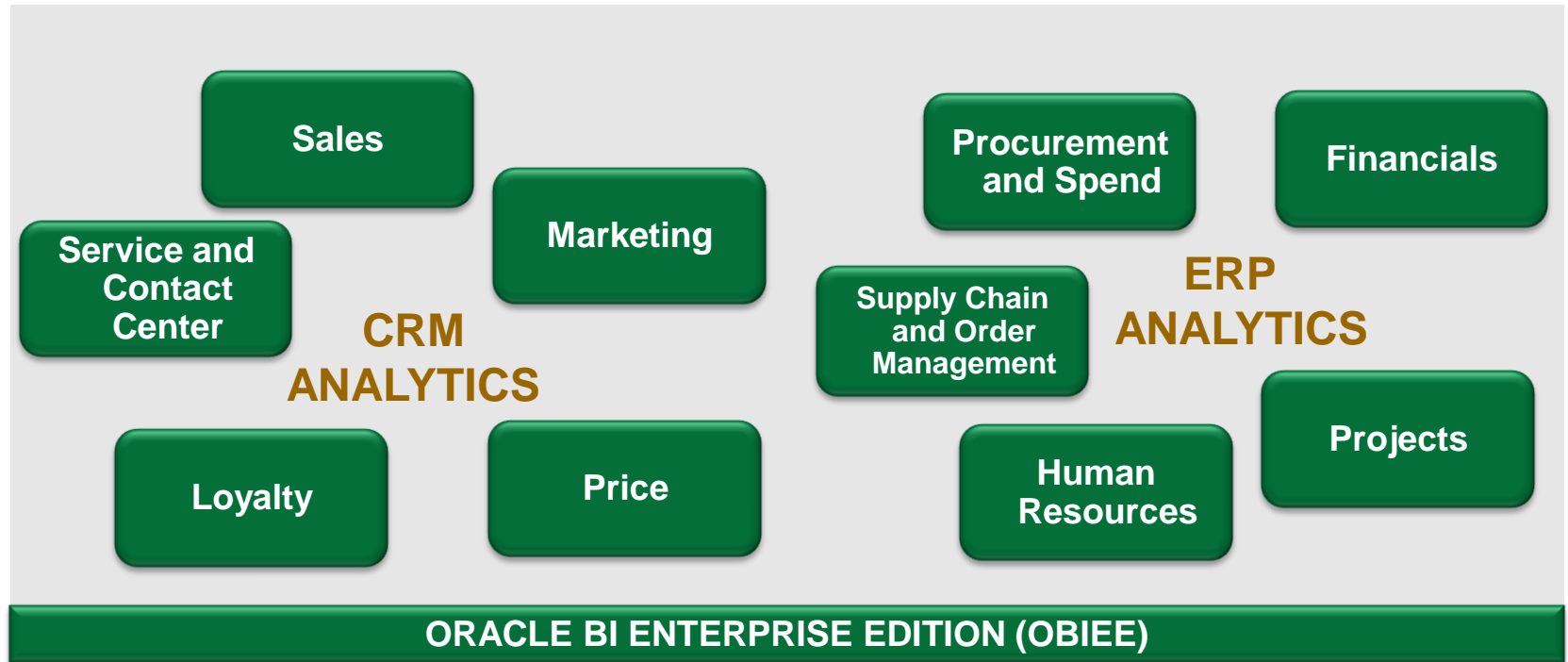
OBIA Block Diagram
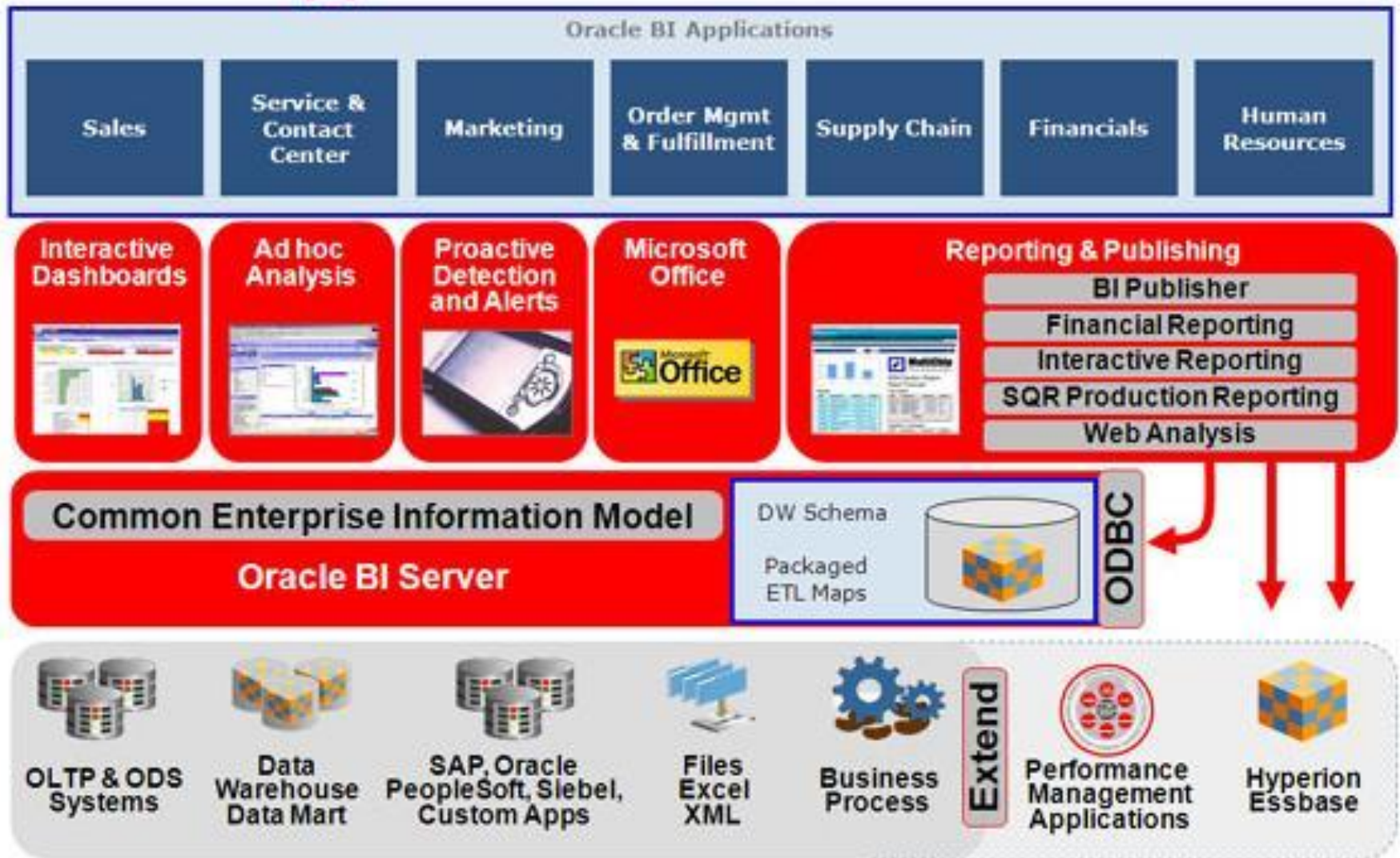
Traditional Circular Join
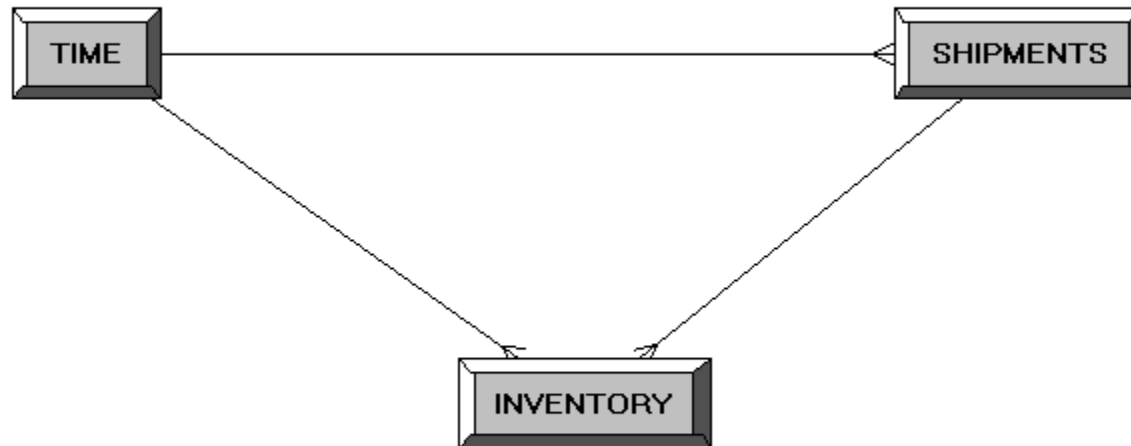
OBIEE – Logical Star
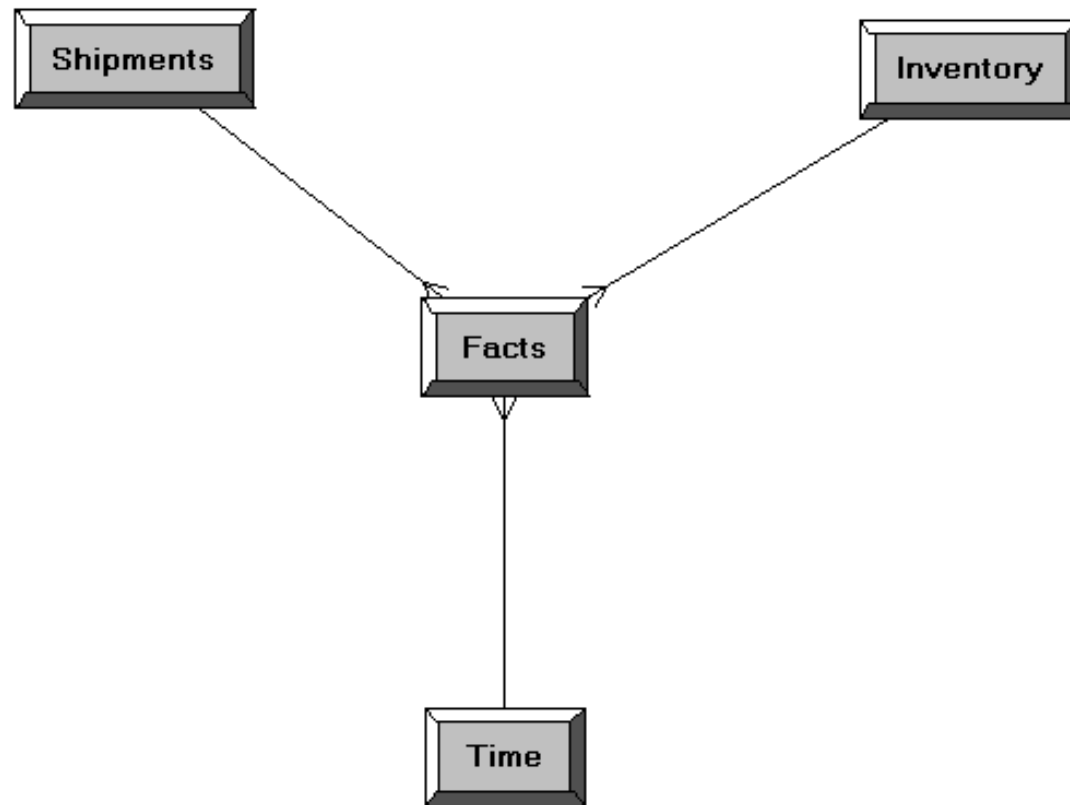
Star Data Model
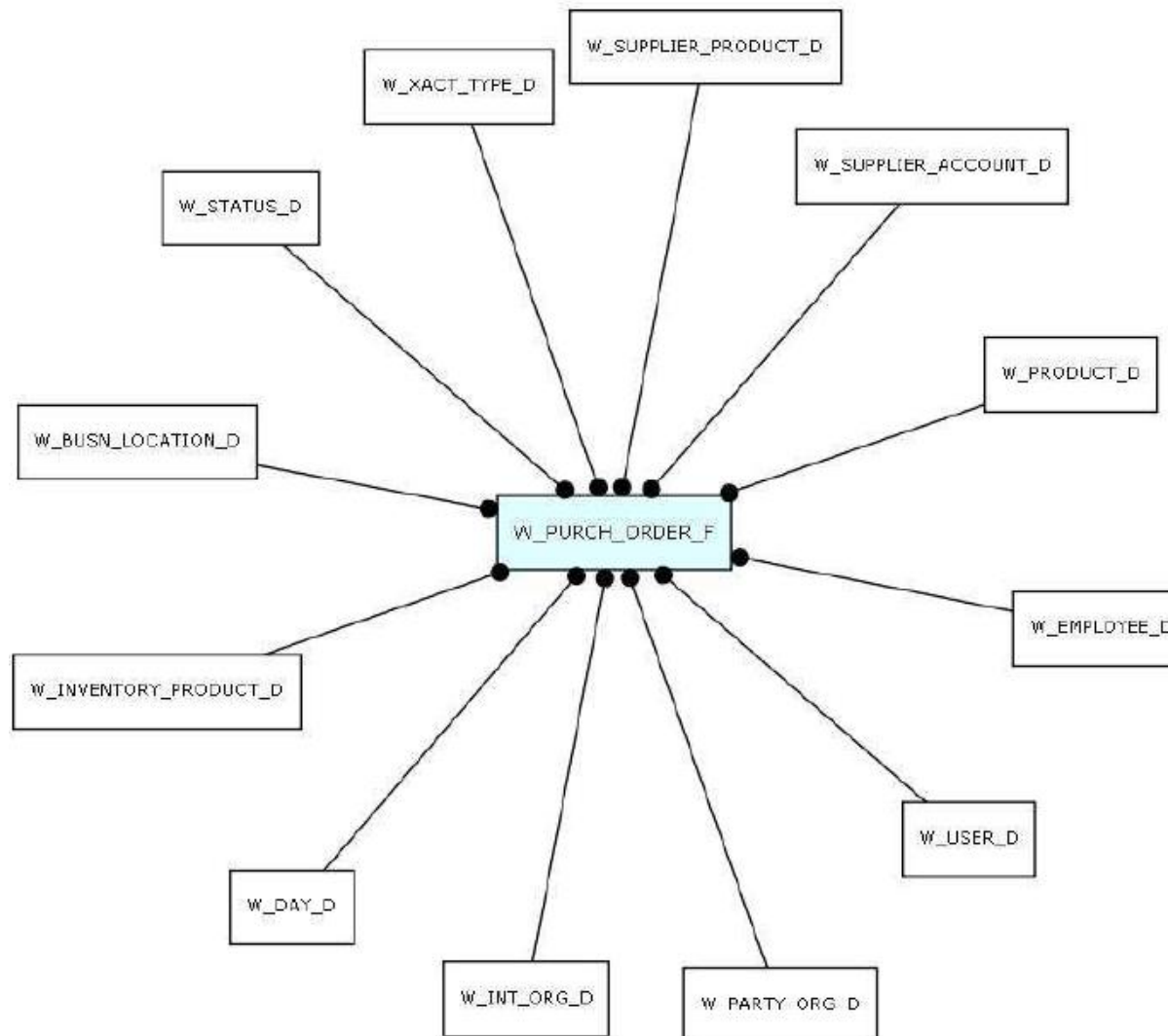
New Oracle BI Apps Rel 7.9.6.2 Sep '10

How to decide what BI application are Available for a Given ERP system?

Oracle's JD Edwards EnterpriseOne[12]	8.11SP1, 8.12, 9.0	Oracle Financial Analytics Fusion Edition	Oracle's JD Edwards EnterpriseOne Financial Management
Oracle's JD Edwards EnterpriseOne	8.12[13], 9.0[13]	Oracle Supply Chain and Order Management Analytics[14]	Oracle's JD Edwards EnterpriseOne Inventory Management Oracle's JD Edwards EnterpriseOne Product Data Management Oracle's JD Edwards EnterpriseOne Sales Order Management
Oracle's JD Edwards World[15]	A9.2	Oracle Financial Analytics Fusion Edition	Oracle's JD Edwards World Financial Management
Universal Source	N/A	All available Oracle Business Intelligence applications	N/A

Vendor and Product	Version	Oracle Business Intelligence Application	Associated Source Application or Module
Oracle eBusiness Suite	11.5.10, R12.0, R12.1.1[4], R12.1.2[5]	Oracle Procurement and Spend Analytics Fusion Edition[6]	Oracle Purchasing/ Procurement Oracle iProcurement Oracle Financials (Payables) Oracle iExpenses
		Oracle Financial Analytics Fusion Edition[7]	Oracle Financials (GL, Payables, Receivables)
		Oracle Human Resources Analytics Fusion Edition	Oracle Human Resources Oracle Payroll Oracle Learning Management Oracle iRecruitment
		Oracle Project Analytics Fusion Edition[8]	Oracle Project Costing Oracle Project Billing
		Oracle Service Analytics Fusion Edition	Oracle Teleservice[9] Oracle iSupport[9]
Oracle's PeopleSoft Enterprise	8.9, 9.0, 9.1[10]	Oracle Financial Analytics Fusion Edition	Oracle's PeopleSoft Financials (GL, Accounts Payable, Accounts

BI Applications (OBIA) – Downloading the Different Components

Select a Product Pack Oracle Business Intelligence ⓘ

Platform Micr

Results

Go

esults

Select	Description	Release ▽	Part Number	Updated	# Parts / Size
⦿	Oracle Business Intelligence (10.1.3) Media Pack for Microsoft Windows (32-bit)	10.1.3.0.0	B36246-24	AUG-10-2009	52 / 31G
○	Oracle Business Intelligence 10g Release 1 (10.1.2.0.2) Standard Edition Media Pack	10.1.2.0.2	B35739-01	NOV-09-2006	23 / 11G
○	Oracle Business Intelligence Applications 7.9.5.2 for Oracle Data Integrator Media Pack for Microsoft Windows (32-bit)	7.9.5.2.0	B54513-01	APR-23-2009	14 / 6.2G

|	Description	Part	Size
Download	Oracle Business Intelligence Applications 7.9.6	V16390-01	319M
Download	Oracle Business Intelligence Data Warehouse Administration Console 10.1.3.4.1 for Microsoft Windows	V16377-01	181M
Download	Informatica PowerCenter and PowerConnect Adapters 8.6.0 for Windows x86 (32-bit) (Part 1 of 2)	V16329-01 Part 1 of 2	1.1G
Download	Informatica PowerCenter and PowerConnect Adapters 8.6.0 for Windows x86 (32-bit) (Part 2 of 2)	V16329-01 Part 2 of 2	977M

OBIA 7.9.6.2

Oracle Business Intelligence Applications (7.9.6.2)

Welcome to the InstallShield Wizard for Oracle Business Intelligence Applications 7.9.6.2

The InstallShield Wizard will install Oracle Business Intelligence Applications 7.9.6.2 on your computer. To continue, choose Next.

Oracle Business Intelligence Applications 7.9.6
Oracle Corporation
www.oracle.com

InstallShield

ORACLE
BUSINESS INTELLIGENCE

Oracle Business Intelligence Applications (7.9.6.2)

Select the Oracle Business Intelligence Applications 7.9.6.2 you would like to install:

- Product Installation
  - ☑ Oracle Business Intelligence Applications (installed)
    - ☑ Financial Analytics (Commercial) Fusion Edition (installed)
    - ☑ Financial Analytics (US Federal Financials) Fusion Edition
    - ☑ Supply Chain and Order Management Analytics Fusion Edition (installed)
    - ☑ Procurement and Spend Analytics Fusion Edition (installed)
    - ☑ Human Resources Analytics Fusion Edition
    - ☑ Sales Analytics Fusion Edition
    - ☑ Service Analytics Fusion Edition
    - ☑ Contact Center Telephony Analytics Fusion Edition
    - ☑ Marketing Analytics Fusion Edition
    - ☑ Price Analytics Fusion Edition

InstallShield

ORACLE
BUSINESS INTELLIGENCE

[< Back] [Next >] [Cancel]

Install Process

- End user machines requires no software, browser based assess
- Windows boxes required for client software and for transferring some server software (A and B)
- Co-location of Informatica PowerCenter Services and DAC Server – **C**
- Clients can be installed on multiple Windows boxes
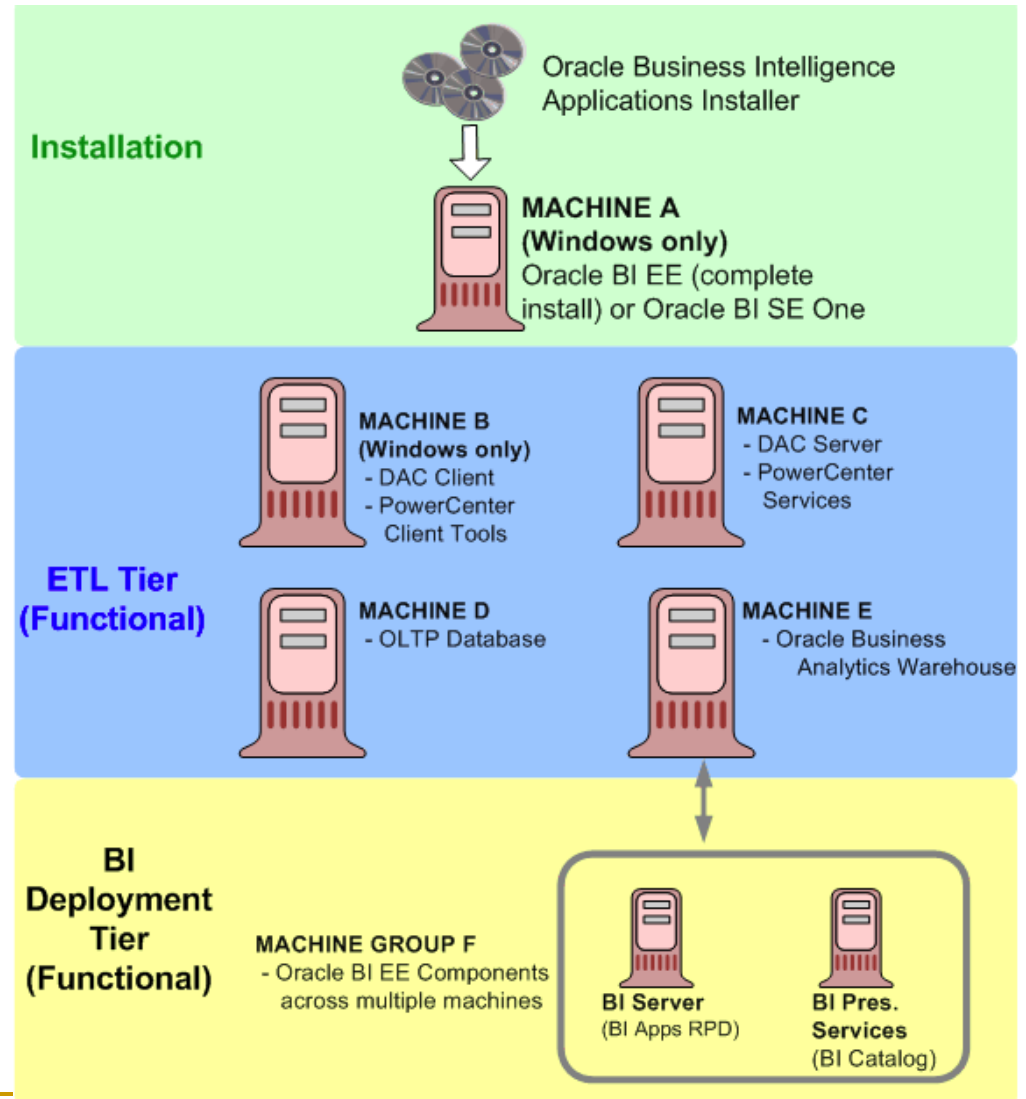
Supporting Infrastructure – Informatica and DAC
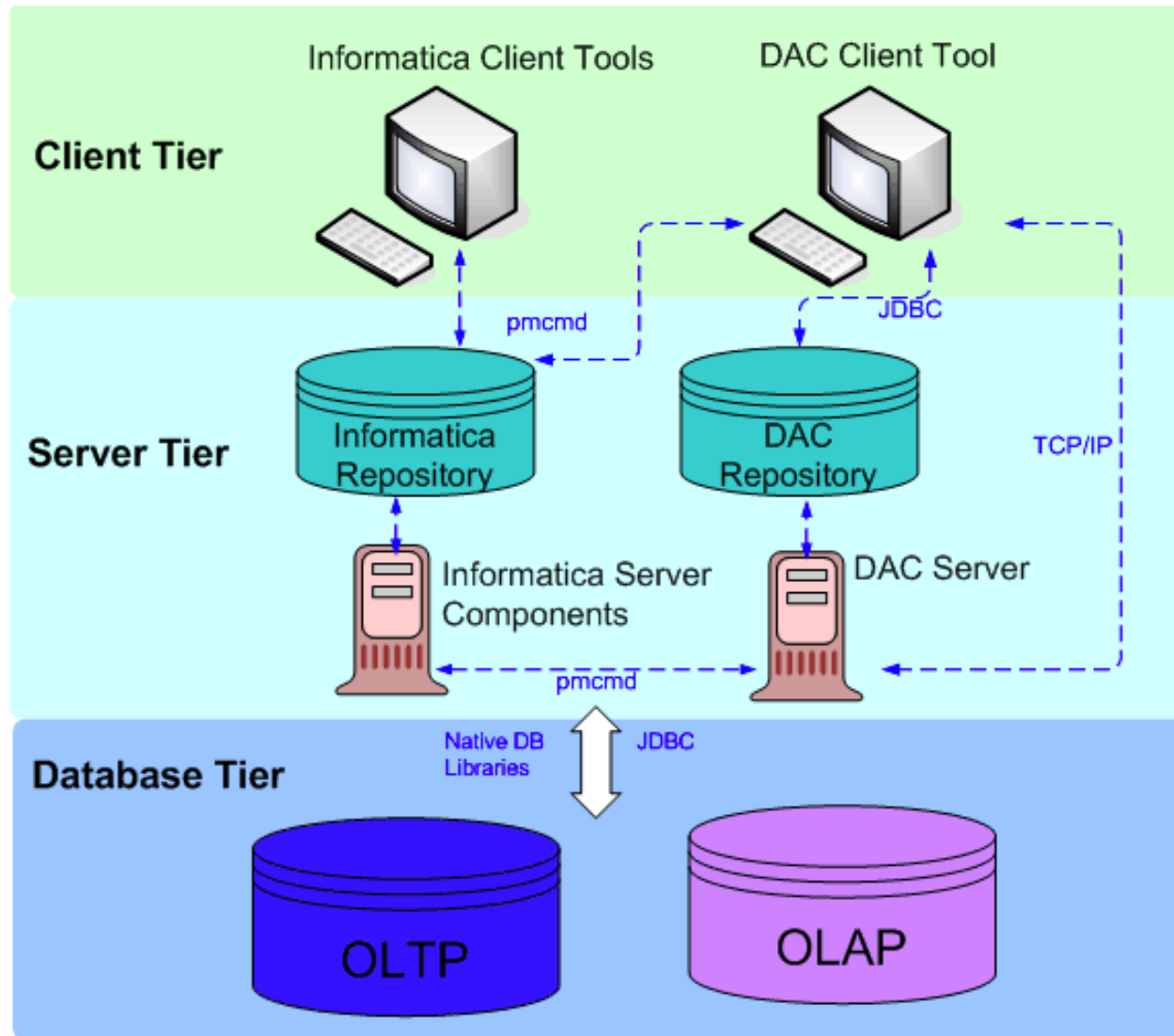
High Level Data Flow

- Source – eBS/PSFT/Siebel/JD Edwards/Custom   (Raw Data)
- ETL – Extraction Transform and Load (Informatica – PowerCenter or ODI)
- OBAW - Business Analytics Warehouse
- OBIEE Metadata
- OBIEE Content – Reports and Dashboards

OBIEE – From Surface to Plumbing
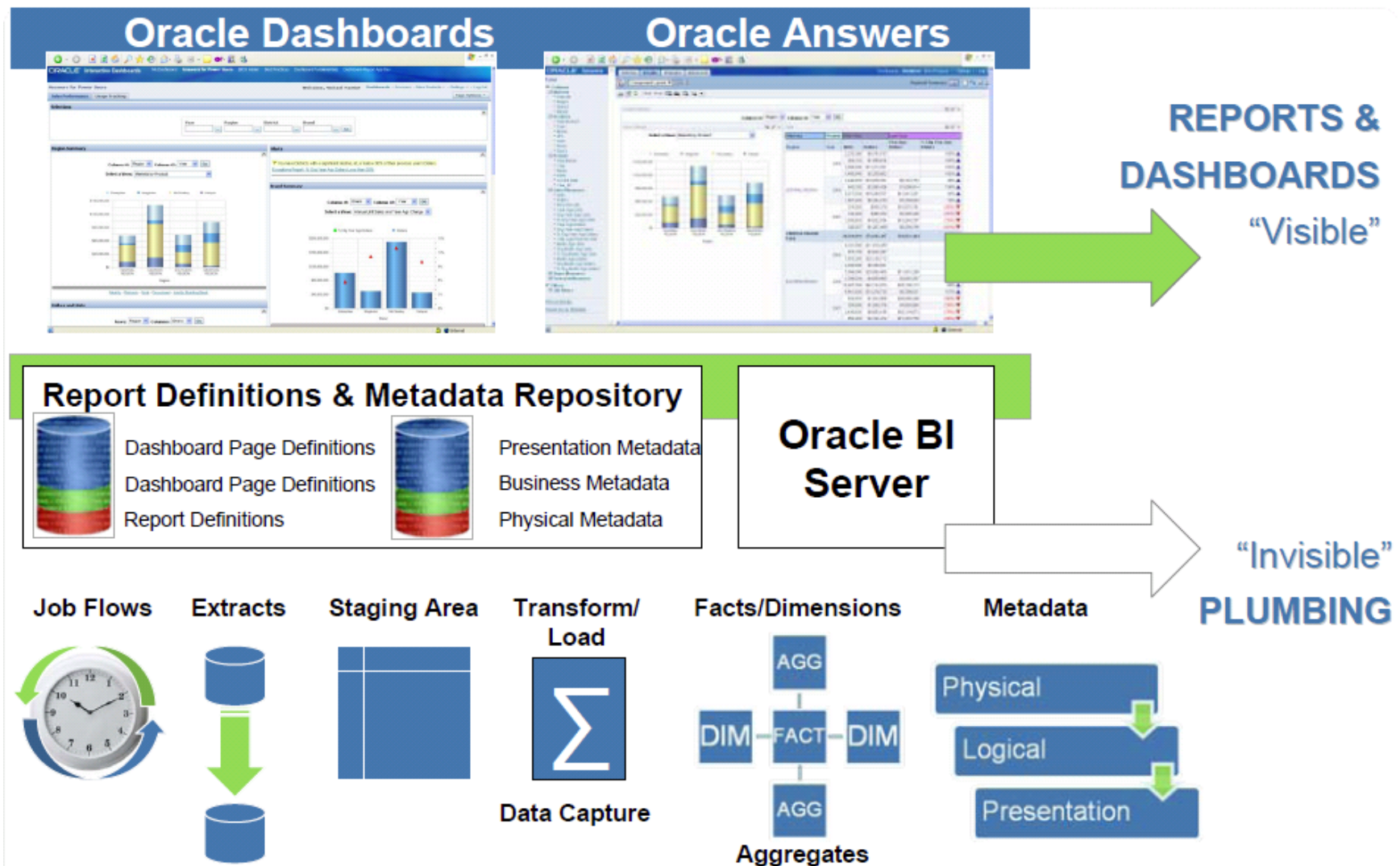
Value Added to the Layered Architecture

Metrics used in Reports & Dashboards		Not all measures in presentation layer used in reports & dashboards
Metrics in Subject Areas		Subset of logical measures are exposed in presentation layer
Metrics in Logical Layer		Aggregations, time series calculations and derived calculated measures extend physical measures
Metrics in Physical Warehouse		Measures from physical columns in data warehouse

Effort v/s Customization Balance

Dashboards & Reports — **Easy**
Additional dashboards and reports, guided and conditional navigations, iBots, etc.

OBIEE Metadata — **Moderate**
Additional derived metrics, custom drill paths, exposing extensions in physical, logical and presentation layer, etc.

DW Schema — **Intermediate**
Extension of DW Schema for extension columns, additional tables, aggregates, indices, etc.

ETL — **Involved**
Extension of ETL for extension columns, descriptive flexfields, additional tables, etc.

Degree of Customization   **Level of Effort**

- # Company A (Non Profit)
  - ❑ ERP is Siebel and EBS
  - ❑ IBM H/W and AIX shop
  - ❑ ODS / Crystal Reports
  - ❑ Cognos for Planning and Budgeting
- # Company B (Energy Sector)
  - ❑ One Division SAP, rest legacy, EBS R12 to consolidate into one ERP
  - ❑ SAP tools for Reporting, Crystal
  - ❑ New HFM and Planning (System 11)

JD Edwards Tables

- The JD Edwards table names are quite cryptic
- This shows that that for building custom OBIEE solutions, deep ERP knowledge is required
- Need for data modeler, ETL/OBIEE architect and developers

JDE Module	Table	Description
Validity of all tables from 2001		
G/L	F0901	Account Master
	F0902	Account Balances
	F0911	Account Ledger
A/P	F0401	Supplier Master
	F0411	Accounts Payable Ledger
	F0413	Accounts Payable - Matching Document
	F0414	Accounts Payable - Matching Document Detail
	F0457	A/P Payment Type
	F04571	A/P Payment Processing - Header
	F04572	A/P Payment Processing - Summary
A/R	F03012	Customer Master
	F0311	Accounts Receivable Ledger
	F03B11	Customer Ledger
	F03B13	Receipts Header
	F03B14	Receipts Detail
Fixed Assets	F1200	Fixed Asset Constants
	F1201	Asset Master File
	F1202	Asset Account Balance File
	F1204	Location Tracking Table
	F1205	Equipment Messages
	F1206	Equipment License Master
	F1207	Maintenance Schedule File
	F1208	Units of Production Schedule Master File
Inventory	F4100	Location Master
	F4101	Item Master
	F41011	Bulk Item Master
	F4102	Item Branch File
	F41021	Item Location File
	F4105	Item Cost File
	F4106	Item Base Price File
	F4111	Item Ledger File
	F4140	Cycle Count Header File
	F4141	Cycle Count Transaction File

General Challenges with BI Projects

• Users often want one place / tool for Operational and Analytical reporting

- Degree of details in warehouse
- Right time data – need for intra-day ETL
- Highly Formatted reports

• Security model across BI and Source Systems.

Managing the OBIEE Project

- Quick Dev / Test environment install for **OBIEE Socialization**

- Show customer's data and invite users to start playing with it to **Create a Dashboard Envy**

- Fit Gap Analysis

- Iterate and fine tune the system

- Recap OBIEE

- Recap BI Applications

- Technical Details

- Questions

- Contact Information:
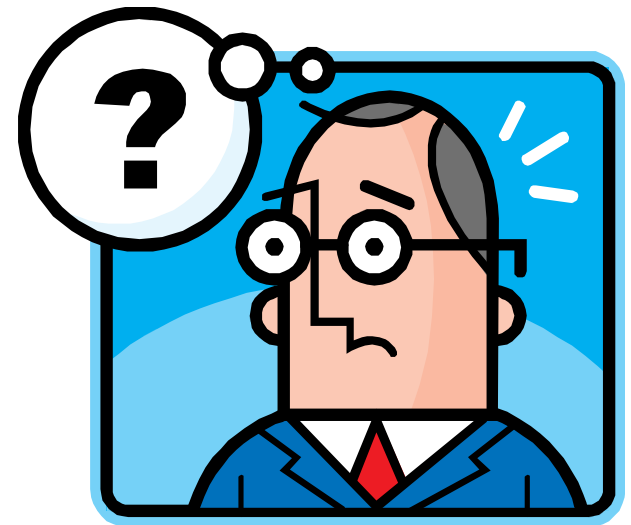
BI Center of Excellence

Definition and Purpose of Center of Excellence

Impact of CoE

Relevance of CoE for company

Best practices for CoE

Next Steps…

The business intelligence competency center is essential to an business intelligence strategy. It can effectively address critical challenges such as education, staffing, planning and organizational support & execution.

BI Competency Center Is Core to BI Success. *Gartner*

Why BI-CoE

Relevance At company

Why CoE?	Relevance At company
We need better information faster	✔✔
Systems are complex	✔✔
Many products, many applications	✔✔
Limited resources	✔✔
Global teams, often times with outsourcing	✔
Shrinking budgets	✔

Data Warehouse Administration Console (AA_7961 @ OBIDEV 7.9.5)

File Views Tools Help

| Design | Setup | Execute | Oracle R12.1.1 ▼ |

Subject Areas | Tables | Indices | Task Groups | Tasks | Configuration Tags | Source System Parameters | Source System Folders

New | Reference | Save | Undo | Delete | Query | Refresh | Assemble | ? | All ▼

Design
- Subject Areas
- Tables
- Indices
- Task Groups
- Tasks
- Configuration Tag
- Source System Pa
- Source System Fo

Name	Configuration Tag Tasks Only	Last Designed	Inactive	Owner
Common Dimension (for internal testing)	☐	5/4/09 5:04:09 PM	☐	Oracle R12.1.1
Data Lineage	☐	11/2/07 11:49:34 AM	☑	Oracle R12
Employee Expenses	☐	5/4/09 7:13:42 PM	☐	Oracle R12.1.1
Enterprise Sales - Backlogs	☐	5/4/09 7:15:58 PM	☐	Oracle R12.1.1
Enterprise Sales - Booking Lines & Order Lin...	☐	5/4/09 10:48:37 PM	☐	Oracle R12.1.1
Enterprise Sales - Booking Lines & Schedule...	☐	5/5/09 8:53:23 AM	☐	Oracle R12.1.1
Enterprise Sales - Customer Status History	☐	5/5/09 10:09:57 AM	☐	Oracle R12.1.1
Enterprise Sales - Cycle Lines	☐	5/5/09 11:18:07 AM	☐	Oracle R12.1.1
Enterprise Sales - Invoice Lines	☐	5/5/09 12:28:13 PM	☐	Oracle R12.1.1
Enterprise Sales - Order Lines	☐	5/5/09 2:03:27 PM	☐	Oracle R12.1.1
Enterprise Sales - Pick Lines	☐	5/5/09 11:10:14 AM	☐	Oracle R12.1.1
Enterprise Sales - Schedule Lines	☐	5/5/09 10:07:32 AM	☐	Oracle R12.1.1
Financials - Budget	☐	5/5/09 8:52:01 AM	☐	Oracle R12.1.1
Financials - Cost of Goods Sold	☐	5/5/09 12:23:15 PM	☐	Oracle R12.1.1
Financials - General Ledger	☐	8/20/09 2:18:46 PM	☐	Oracle R12.1.1
Financials - General Ledger - US Federal	☐	8/20/09 2:18:51 PM	☐	Oracle R12.1.1
Financials - Group Account Number Clean Up	☑	5/5/09 6:32:05 PM	☐	Oracle R12.1.1
Financials - Payables	☐	5/5/09 6:39:02 PM	☐	Oracle R12.1.1

Edit | Description | Tables | Configuration Tags | Tasks | Extended Tables (RO) | Task Source Tables (RO) | Task Target Tables (RO)

* Name:

Dimension (for internal testing)

☐ Configuration Tag Tasks Only   ☐ Inactive

| Save | | Undo |

Data Warehouse Administration Console (AA_7961 @ OBIDEV 7.9.5)

File   Views   Tools   Help

Design **Setup** **Execute** Oracle R12.1.1 ▼

| Subject Areas | Tables | Indices | Task Groups | Tasks | Configuration Tags | Source System Parameters | Source System Folders |

⊟ Design
  📩 Subject Areas
  📄 Tables
  📄 Indices
  ⚙ Task Groups
  ⚙ Tasks
  ⚲ Configuration Tag
  📊 Source System Pa
  📊 Source System Fc

| New | Reference | Save | Undo | Delete | 🔍 Query | 🔄 Refresh | Assemble | ❓ | All ▼ | 1 of 37 |

Name	Configuration Tag Tasks Only	Last Designed	Inactive	Owner
Common Dimension (for internal testing)	☐	5/4/09 5:04:09 PM	☐	Oracle R12.1.1
Data Lineage	☐	*11/2/07 11:49:34 AM*	☑	*Oracle R12*
Employee Expenses	☐	5/4/09 7:13:42 PM	☐	Oracle R12.1.1
Enterprise Sales - Backlogs	☐	5/4/09 7:15:58 PM	☐	Oracle R12.1.1
Enterprise Sales - Booking Lines & Order Lin...	☐	5/4/09 10:48:37 PM	☐	Oracle R12.1.1
Enterprise Sales - Booking Lines & Schedule...	☐	5/5/09 8:53:23 AM	☐	Oracle R12.1.1
Enterprise Sales - Customer Status History	☐	5/5/09 10:09:57 AM	☐	Oracle R12.1.1
Enterprise Sales - Cycle Lines	☐	5/5/09 11:18:07 AM	☐	Oracle R12.1.1
Enterprise Sales - Invoice Lines	☐	5/5/09 12:28:13 PM	☐	Oracle R12.1.1
Enterprise Sales - Order Lines	☐	5/5/09 2:03:27 PM	☐	Oracle R12.1.1
Enterprise Sales - Pick Lines	☐	5/5/09 11:10:14 AM	☐	Oracle R12.1.1
Enterprise Sales - Schedule Lines	☐	5/5/09 10:07:32 AM	☐	Oracle R12.1.1
Financials - Budget	☐	5/5/09 8:52:01 AM	☐	Oracle R12.1.1
Financials - Cost of Goods Sold	☐	5/5/09 12:23:15 PM	☐	Oracle R12.1.1
Financials - General Ledger	☐	8/20/09 2:18:46 PM	☐	Oracle R12.1.1
Financials - General Ledger - US Federal	☐	8/20/09 2:18:51 PM	☐	Oracle R12.1.1
Financials - Group Account Number Clean Up	☑	5/5/09 6:32:05 PM	☐	Oracle R12.1.1
Financials - Payables	☐	5/5/09 6:39:02 PM	☐	Oracle R12.1.1

| Edit | Description | Tables | Configuration Tags | Tasks | Extended Tables (RO) | Task Source Tables (RO) | Task Target Tables (RO) |

Data Warehouse Administration Console (AA_7961 @ OBIDEV 7.9.5)

File   Views   Tools   Help

Design | Setup | Execute | Oracle R12.1.1 ▾

Design
- Subject Areas
- Tables
- Indices
- Task Groups
- Tasks
- Configuration Tags
- Source System Param
- Source System Folder

| Subject Areas | Tables | Indices | Task Groups | Tasks | Configuration Tags | Source System Parameters | Source System Folders |

New | Reference | Save | Undo | Delete | Query | Refresh | ? | All ▾ | 1 of 1053

Name	Parent Group	Group Order	Command for Incremental Load	Command for Full Load	Folder Name	Primary Source	Primary T
DL Extract ETL metadata			SDE_DL_infa	SDE_DL_infa	Extract	DBConnection_IN...	DBConnect
DL Extract OLTP metadata for ora ...			SDE_DL_ora_ebs	SDE_DL_ora_ebs	Extract	DBConnection_O...	DBConnect
DL Extract RPD metadata			SDE_DL_rpd	SDE_DL_rpd	Extract	FlatFileConnection	DBConnect
DL Extract Webcat metadata			SDE_DL_webcat	SDE_DL_webcat	Extract	FlatFileConnection	DBConnect
DL Load into ETL Fact			SIL_DL_ETL_Fact_Incremental	SIL_DL_ETL_Fact_Full	Load	DBConnection_O...	DBConnect
DL Load into ETL Hierarchy			SIL_DL_ETL_Hierarchy	SIL_DL_ETL_Hierarchy	Load	DBConnection_O...	DBConnect
DL Load into Oracle OLTP Fact			SIL_DL_Oracle_EBS_Fact_Incremental	SIL_DL_Oracle_EBS_Fact_...	Load	DBConnection_O...	DBConnect
DL Load into RPD Fact			SIL_DL_OBI_RPD_Fact_Incremental	SIL_DL_OBI_RPD_Fact_Full	Load	DBConnection_O...	DBConnect
DL Load into Table Column Dime...			SIL_DL_Table_Column_Dimension_I...	SIL_DL_Table_Column_Di...	Load	DBConnection_O...	DBConnect
DL Load into Webcat Dashboard ...			SIL_DL_OBI_Webcat_Dashboard_Fa...	SIL_DL_OBI_Webcat_Dash...	Load	DBConnection_O...	DBConnect
DL Load into Webcat Request Fact			SIL_DL_OBI_Webcat_Request_Fact_...	SIL_DL_OBI_Webcat_Requ...	Load	DBConnection_O...	DBConnect
DL Update ETL Flag			SIL_DL_Table_Column_Dimension_...	SIL_DL_Table_Column_Di...	Load	DBConnection_O...	DBConnect

| Conditional Tables | Refresh Date Tables | Phase Dependency | Configuration Tags | Parameters | Actions | Subject Areas (RO) |

| Edit | Description | Source Tables | Target Tables |

* Name:
DL Extract ETL metadata

Command for Incremental Load:
SDE_DL_infa

Command for Full Load:
SDE_DL_infa

Folder Name:
Extract

Primary Source:
DBConnection_INFA

Primary Target:
DBConnection_OLAP

* Task Phase:
Extract Fact

* Execution Type:
Informatica

* Execution Priority:
5

☐ Build Image   ☐ Continue On Error   ☑ Inactive

Save   Undo

File   Views   Tools   Help

Design   Setup   Execute   Oracle R12.1.1 ▼

Design
- Subject Areas
- Tables
- Indices
- Task Groups
- Tasks
- Configuration Tags
- Source System Param
- Source System Folder

| Subject Areas | Tables | Indices | Task Groups | Tasks | Configuration Tags | **Source System Parameters** | Source System Folders |

New   Reference   Save   Undo   Delete   🔍 Query   🔁 Refresh   ❓   All ▼   1 of 70

Name	Data Type	Load Type	Value	Inactive	Owner
$$ANALYSIS_END	Timestamp	Both	Custom Format(...	☐	Data Warehouse
$$ANALYSIS_END_WID	Timestamp	Both	To Wid(2011-01-...	☐	Data Warehouse
$$ANALYSIS_START	Timestamp	Both	Custom Format(...	☐	Data Warehouse
$$ANALYSIS_START_WID	Timestamp	Both	To Wid(1979-12-...	☐	Data Warehouse
$$COST_TIME_GRAIN	Text	Both	QUARTER	☐	Data Warehouse
$$CURRENT_DATE	Timestamp	Both	Custom Format(...	☐	Data Warehouse
$$CURRENT_DATE_IN_SQL_FORMAT	Timestamp	Both	SQL Syntax (Dat...	☐	Data Warehouse
$$CURRENT_DATE_TIME_IN_SQL_FORMAT	Timestamp	Both	SQL Syntax(@D...	☐	Data Warehouse
$$CURRENT_DATE_WID	Timestamp	Both	To Wid(@DAC_...	☐	Data Warehouse
$$DATASOURCE_NUM_ID	Text	Both	@DAC_DATASO...	☐	Data Warehouse
$$DEFAULT_LOC_RATE_TYPE	Text	Both	Corporate	☐	Oracle 11.5.8
$$DFLT_LANG	Text	Both	US	☐	Oracle 11.5.8
$$ETL_PROC_WID	Text	Both	@DAC_CURRE...	☐	Data Warehouse

Edit   Description

* Name:
$$ANALYSIS_END

* Data Type:
Timestamp ▼

* Load Type:
Both ▼

Value:
Custom Format(2011-01-... 🖾

☐ Inactive

Save   **Undo**

File   Views   Tools   Help

Design   **Setup**   **Execute**

Setup
- DAC System Propertie
- Informatica Servers
- Physical Data Sources
- Email Recipients

DAC System Properties | **Informatica Servers** | **Physical Data Sources** | **Email Recipients**

Save   **Undo**   **Query**   **Refresh**   ?   1 of 24

Name	Value	Default value
Analyze Frequency (in days)	14	7
Analyze Table After Query Index Creation	false	true
Auto Restart ETL	false	false
DAC Alternate Server Hosts	localhost	Unspecified
DAC Server Host	localhost	localhost
DAC Server OS	Windows	Windows
DAC Server Port	3141	3141
Drop and Create Change Capture Views Always	true	true
Dryrun	false	false
Generic Task Concurrency Limit	10	10
HeartBeatInterval	900	900
InformaticaParameterFileLocation	D:\Informatica\PowerCenter8.6.1\server\infa_sh...	DEFAULT
No Run	false	false
Output Redirect	false	false
Repository DB Pool Size	10	10
Repository Name	AA_7961	DAC Repository
SQL Trace	false	false
Scheduler.Poll.Interval	300	300
Script After Every ETL	post_etl.bat	post_etl.bat
Script Before Every ETL	pre_etl.bat	pre_etl.bat
Server Log Level	SEVERE	SEVERE
Test Run	false	false
Verify And Create Non-Existing Indices	false	false
Worker Pool Size	50	50

File Views Tools Help

Design | **Setup** | **Execute**

Setup
- DAC System Propertie
- Informatica Servers
- Physical Data Sources
- Email Recipients

DAC System Properties | **Informatica Servers** | **Physical Data Sources** | **Email Recipients**

New | Save | Undo | Delete | Query | Refresh | ?

2 of 2

Name	Type	Hostname\Service	Server Port	Domain	Login	Maximum Sessions	Repository Name	Inactive
Oracle_BI_DW_Server	Informatica	Oracle_BI_DW_Base_Int...	4006	Domain...	Adminis...	10	Oracle_BI_DW_Base	☐
INFORMATICA_REP_SERVER	Repository	DDCOBI001D	6001	Domain...	Adminis...	5	Oracle_BI_DW_Base	☐

Edit | **Description**

* Name:
NFORMATICA_REP_SERVER

* Type:
Repository ▼

Hostname:
DDCOBI001D

* Server Port:
6001

Domain:
Domain_DDCOBI001D

* Login:
Administrator

* Password:
••••••••••••

* Maximum Sessions:
5

Repository Name:
Oracle_BI_DW_Base

☐ Inactive

Save | Test Connection | Undo

Data Warehouse Administration Console (AA_7961 @ OBIDEV 7.9.5)

File   Views   Tools   Help

Design **Setup** **Execute**

Setup
- DAC System Properties
- Informatica Servers
- Physical Data Sources
- Email Recipients

| DAC System Properties | Informatica Servers | Physical Data Sources | Email Recipients |

New **Save** **Undo** **Delete** **Query** **Refresh** ?

1 of 7

Name	Type	Connection Type	Connection String	Table Owner	Max Num Connections	DB Host	Port	Dependency Priority	Data Source Number
DataWarehouse	Warehouse	Oracle (OCI8)	OLAP	DWUSR	10			10	9
FlatFileConnect...	Other	Flat File						1	16
ORA_R1211	Source	Oracle (OCI8)	OLTP	xxpb_obiee	10			1	26
ORA_R1211_Fl...	Source	Flat File						1	26
SEBL_VERT_811	Source	Oracle (OCI8)	<Enter Here>	<Enter Here>	10		0	1	1
SEBL_VERT_8...	Source	Flat File			0		0	1	1
UNIV	Source	Flat File			0		0	1	3

| Edit | Description | Refresh Dates | Parallel Indexes | Index Spaces | Analyze Frequencies |

* Name:
DataWarehouse

* Type:
Warehouse

* Connection Type:
Oracle (OCI8)

TNS Name:
OLAP

Table Owner:
DWUSR

Table Owner Password:
•••••••••

Max Num Connections:
10

DB Host:

Port:

* Dependency Priority:
10

* Data Source Number:
9

Default Index Space:
DWUSER_IDX

* Num Parallel Indexes Per Table:
1

JDBC Driver (Optional):

URL (Optional):

Save   **Test Connection**   **Undo**

Data Warehouse Administration Console (AA_7961 @ OBIDEV 7.9.5)

File Views Tools Help

Design **Setup** **Execute**

Execute	
Execution Plans	
Current Run	
Run History	
Scheduler	

Execution Plans | **Current Run** | **Run History** | **Scheduler**

New | Save | Undo | Delete | Query | Refresh | Run Now | Build | ?

Name	Full Load Always	Micro ETL	Last Designed	Analyze	Analyze Truncated Tables Only	Drop/Create Indices	Inactive
UNIT Test	☐	☐	8/31/10 9:22:21 ...	☐	☐	☑	☐
ProBuild - Group Account Number Clean Up	☐	☐	7/26/10 10:51:15...	☐	☐	☑	☐
Financials_Oracle R1211	☐	☐	6/28/10 3:19:17 ...	☑	☐	☑	☐
ProBuild Conversion AR and Inventory ETL	☐	☐	3/3/10 11:36:37 ...	☑	☐	☑	☐
CRM Complete Industry - Universal	☐	☐	9/10/09 6:25:21 ...	☑	☐	☑	☐
Financials_Oracle_USFederal R1211	☐	☐	8/18/09 2:22:14 ...	☑	☐	☑	☐
ProBuild Receivables Only	☐	☐	7/14/09 3:56:45 ...	☑	☐	☑	☐
Procurement and Spend Only: Oracle R1211	☐	☐	5/12/09 7:44:55 ...	☑	☐	☑	☐
Procurement and Spend: Oracle R1211	☐	☐	5/12/09 5:43:24 ...	☑	☐	☑	☐
Human Resources - Oracle R1211	☐	☐	5/12/09 3:00:54 ...	☑	☐	☑	☐
Projects - Finance Integration(Oracle R1211)	☐	☐	5/12/09 10:47:45...	☑	☐	☑	☐
Oracle R1211 Enterprise Sales	☐	☐	5/12/09 8:16:07 ...	☑	☐	☑	☐

Preceding Tasks | **Following Tasks** | **Ordered Tasks** | **Immediate Dependencies** | **All Dependencies** | **Tables (RO)** | **Refresh Dates**

Edit | **Description** | **Subject Areas** | **Parameters**

* Name:

als GL Other Fact Cleanup LW

☐ Full Load Always   ☐ Micro ETL   ☐ Analyze

☐ Analyze Truncated Tables Only   ☑ Drop/Create Indices   ☐ Inactive

Save   **Undo**

SDE_ORAR1211_Adaptor

SDE_ORAR1211_Adaptor

SILOS

PLP