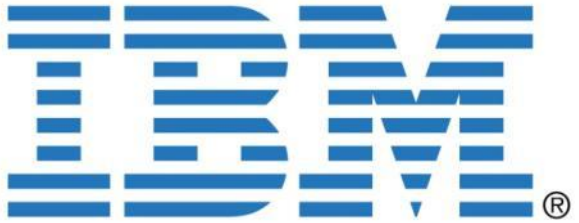


De-Mystifying OBIEE / Oracle Business Intelligent Applications

Shyam Varan Nath

OBIEE Architect, IBM

President BIWA SIG

Thanks: Rahul K, Mohit S, Rajan G, Erik L, Sateesh N, Mark R, Caryl F, Doug W

Agenda

- BI Reporting Landscape (Operational, Analytical)
- Oracle perspective (OBIEE, OBIA)
- DBI, Fusion Intelligence
- Discoverer Migration to OBIEE
- OBIA 7.9.6 – tips and tricks
- Real life issues
- Wrap Up

About Me!

- A Business Intelligence / Data Warehousing professional with IBM (Global Business Services) – Oracle Practice
- OCP since 1998 on 4 different database versions
- President/Founder of BIWA SIG – a Special Interest Group for BI, DW and Advanced Analytics professionals
- Regular speaker at NYOUG (since 2006), Oracle Open World, Collaborate, BIWA Summit and Regional User Groups
- Bachelor's from IIT-India, MBA and MS from Florida Atlantic University, Boca Raton, FL

Overview | IBM Speaking Sessions

Enjoy lively discussions and expert insights. Collaborate and network with your peers. Join us for these thought-provoking sessions.

Every year Oracle OpenWorld offers a schedule that's bursting with sessions, demos, networking events and more—all geared to making your company work better. This year is no exception and IBM will be there to discuss the issues that are important to you. IBM will present on a range of topics from enabling technologies for business intelligence, optimizing your supply chain, evaluating CRM SaaS projects and leveraging Web 2.0. Take advantage of any or all of the following IBM sessions.

How Smarter Financial Institutions Thrive with IBM 10/14/2009 11:45 - 12:45
Presenters: Boxley Llewellyn, IBM; Patrick Boyle, Oracle; Senthil Kumar, Oracle; Steve Meadows, AIB
This session reviews how Allied Irish Bank shortened their time to market for new banking products and services, reduced the time and cost of compliance, and were able to offer targeted services through a portfolio view of the customer.

How Oracle Business Accelerators Delivered a Complex Implementation in 20 Weeks 10/12/2009 16:00 - 17:00
Presenters: Paul Parent, IBM GBS; Yves Nadon, FPInnovations
This session explores how IBM Global Business Services used Oracle Business Accelerators to help FPInnovations optimize their supply chain to increase efficiency, streamline processes, reduce costs and give local management faster access to data and information.

IOUG BIWA SIG: Critical Success Factors for Business Intelligence/Data Warehousing Projects 10/11/2009 15:30 - 17:00
Presenters: Shyam Varan Nath, BIWA SIG / IBM (GBS)
This panel discussion features customers, industry experts and Oracle business intelligence/data warehousing (BI/DW) staff to define a list of the critical success factors that should be identified and prioritized for BI/DW project success.

Strategies for Controlling Costs and Improving the Performance of Your HCM Applications 10/15/2009 13:30 - 14:30
Presenters: Steve Johnston, IBM
In this session, attendees will learn how effective data management strategies can help maximize the business value of their HCM applications, reduce costs, optimize application performance, enhance data security, improve storage utilization and increase efficiency.

The Journey to a Successful Integrated Finance Organization: What Drives Change? What's Next? 10/12/2009 13:00 - 12:00
Presenters: Bill Fuessler, IBM GBS, Financial Management Global Leader; Carl Nordman, IBM GBS, Oracle Practice, Financial Management
This session details findings from a recent peer-to-peer exchange hosted by IBM for CFOs and senior finance professionals who have successfully become an integrated organization.

Using Web 2.0 to Become a Recognized Oracle Expert: Customer Panel 10/12/2009 13:00 - 14:00
Presenters: Shyam Varan Nath, IBM / BIWA SIG; Mohan Dutt, Verisign, Inc.; Debbie Kiaaina, Oracle; Rob Shapiro, Oracle
This panel discussion features Oracle customers, partners and employees who will address ways to take full advantage of the

http://www-03.ibm.com/solutions/oracle/us/detail/landing/G895727T11328H38.html?tab=2

…OOW Oct 11-15, 2009

Is Your Enterprise CRM SaaSy: Considerations for Successful CRM Transformation 10/15/2009 12:00 - 13:00
Presenters: Rick Gaetano, IBM GBS; David Lashar, IBM GBS
This session explores the benefits one company achieved through their Oracle CRM On Demand implementation and how the solution can fulfill its value proposition. The session also addresses leading practices for evaluating, delivering and deploying CRM SaaS projects.

Oracle Database Machine and Oracle Exadata: Best Practices and Customer Considerations 10/13/2009 17:30 - 18:30
Presenters: Shyam Varan Nath, BIWA SIG / IBM (GBS); Philip Stephenson, Oracle
In this joint session, IOUG's Oracle Exadata SIG and Oracle product management discuss the impact of the Oracle Database Machine and Oracle Exadata Storage Server on the high-end data warehousing user community.

help drive innovation.

Demystifying the Oracle Database Platform and Oracle Exadata Server 10/11/2009 14:00 - 15:00
Presenters: Shyam Varan Nath, IBM Global Business Services
This session details the HP Oracle Database platform and Oracle Exadata Storage Server and how to tackle the challenges of getting information out of database environments that are approaching terabyte limits. The session will also examine the data warehousing server market as a whole.

Insights from the Trenches: Partners Speak Out on Delivering Real Value with AIA 10/12/2009 11:30 - 12:30
Presenter: Bob Devonshire, IBM Global Business Services
This session explores how Oracle and its partners can leverage their proven success in developing and implementing integrated enterprise solutions to help you control costs and minimize risk using the Oracle Application Integration Architecture framework.

Blog
http://Oracle**BIWA**sig.blogspot.com

oracle business intelligence, warehousing and analytics - biwa sig

897

LOOKING FOR A BUSINESS INTELLIGENCE SOLUTION? NOT SURE WHAT TECHNOLOGY TO USE, OR NEED JUST A LITTLE HELP, COME TO THIS PEER SUPPORT GROUP.

monday, june 22, 2009

Smart Strategies for Uncertain Times

The Monday keynote by John Kopcke (happy the keynote is in the BI/EPM space, so the lanyard by RittmanMead and bags logo of Interrel!)

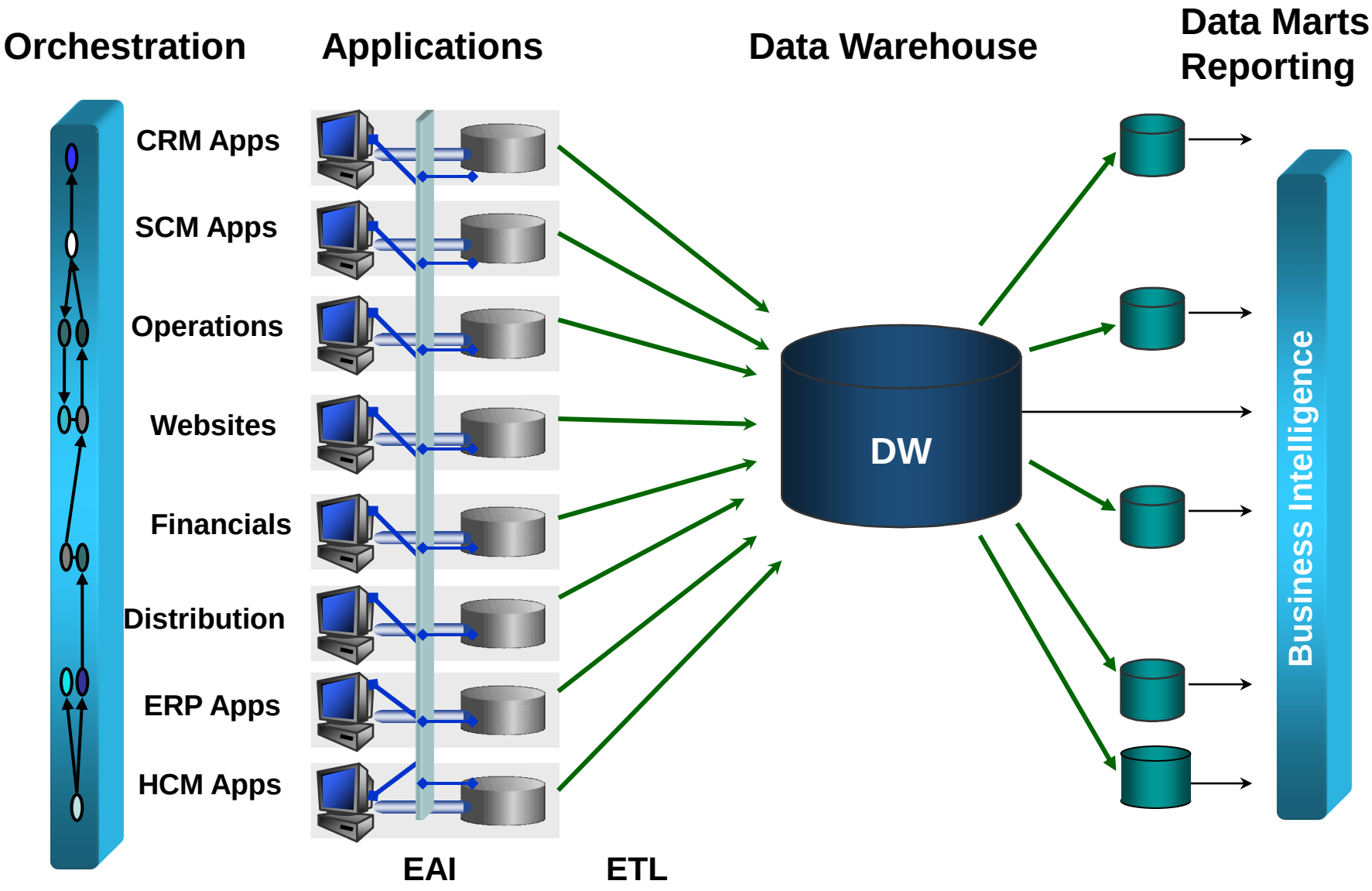
Do business executives really do not know what they want for BI/EPM is it simply the dashboard envy that drives the projects? John is highlighting the importance of economic downturn for new opportunities. Smukers has grown in profits recently. So what are the high impact strategies:

- Cash conservation is a no-brainer here...
- Manage risk and performance
- Management Excellence (ability of business to be agile in changing

Acronyms

- OBIEE
- OBIA
- OLAP, OLTP, OBAW
- DAC
- EUL
- RPD, Webcat
- INFA, ETL / ELT, EAI
- SDE (source dependent executions)
- SIL (source independent loads)
- Fin, SCM, P&S, HR etc.
- DBI

Ideal Information Architecture

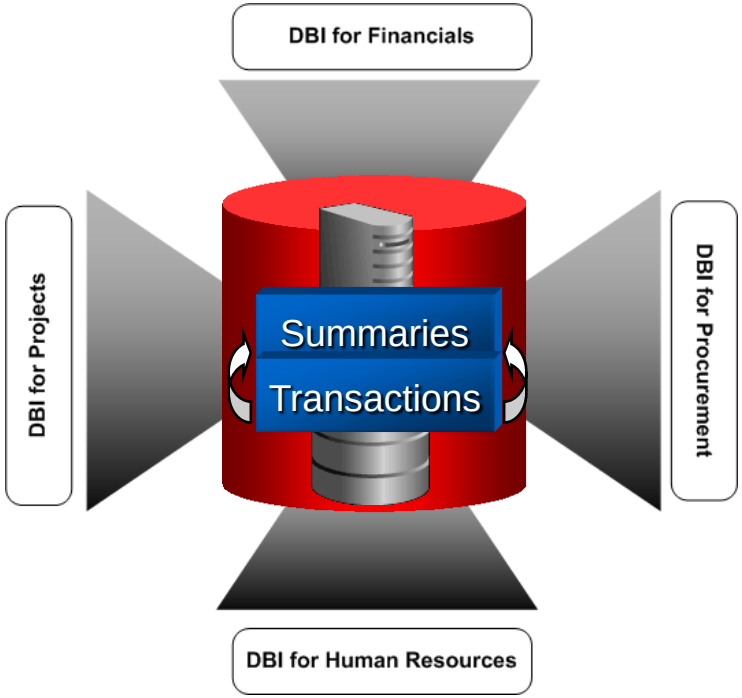


Enterprise BI/Reporting Landscape

- Operational Reporting
  - Oracle Reports, BI Publisher
  - Discoverer EUL
- Operational Intelligence
  - Daily Business Intelligence
  - Neotix Views
  - Fusion Intelligence
- Data Warehouse (strategic)
  - EDW
  - OBIEE (Custom, Data Federation)
  - OBIA Apps
- SAP – BW (counterpart)

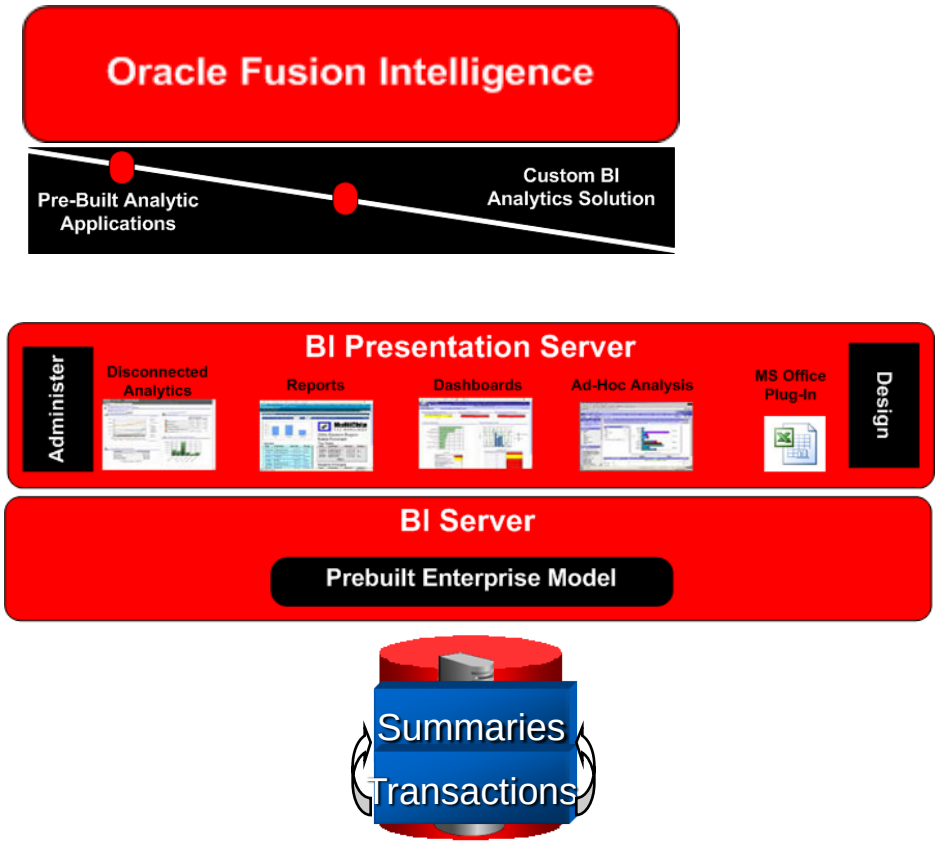
	Strategic BI	Tactical BI	Operational BI
Business focus	Develop long-term business goals	Manage tactical initiatives to achieve strategic goals	Manage and optimize daily business operations
Primary users	Executives & business analysts	Executives, analysts & LOB managers	Analysts, LOB managers and users, and operational processes
Time-frame	Months to years	Days to weeks to months	Intra-day
Data	Historical data	Historical data	Real-time, low-latency & historical data

Daily Business Intelligence (DBI)



- Out-of-the-Box:
  - Predefined Roles
  - Predefined Key Performance Indicators (KPIs)
  - Drill-Down Reports
- Embedded EBS Role-based Security
- Data Synchronization
  - Summary Tables & Materialized Views
  - Refresh Daily or As Desired
- Runs Directly from Transactional System – No Separate Reporting Infrastructure Required

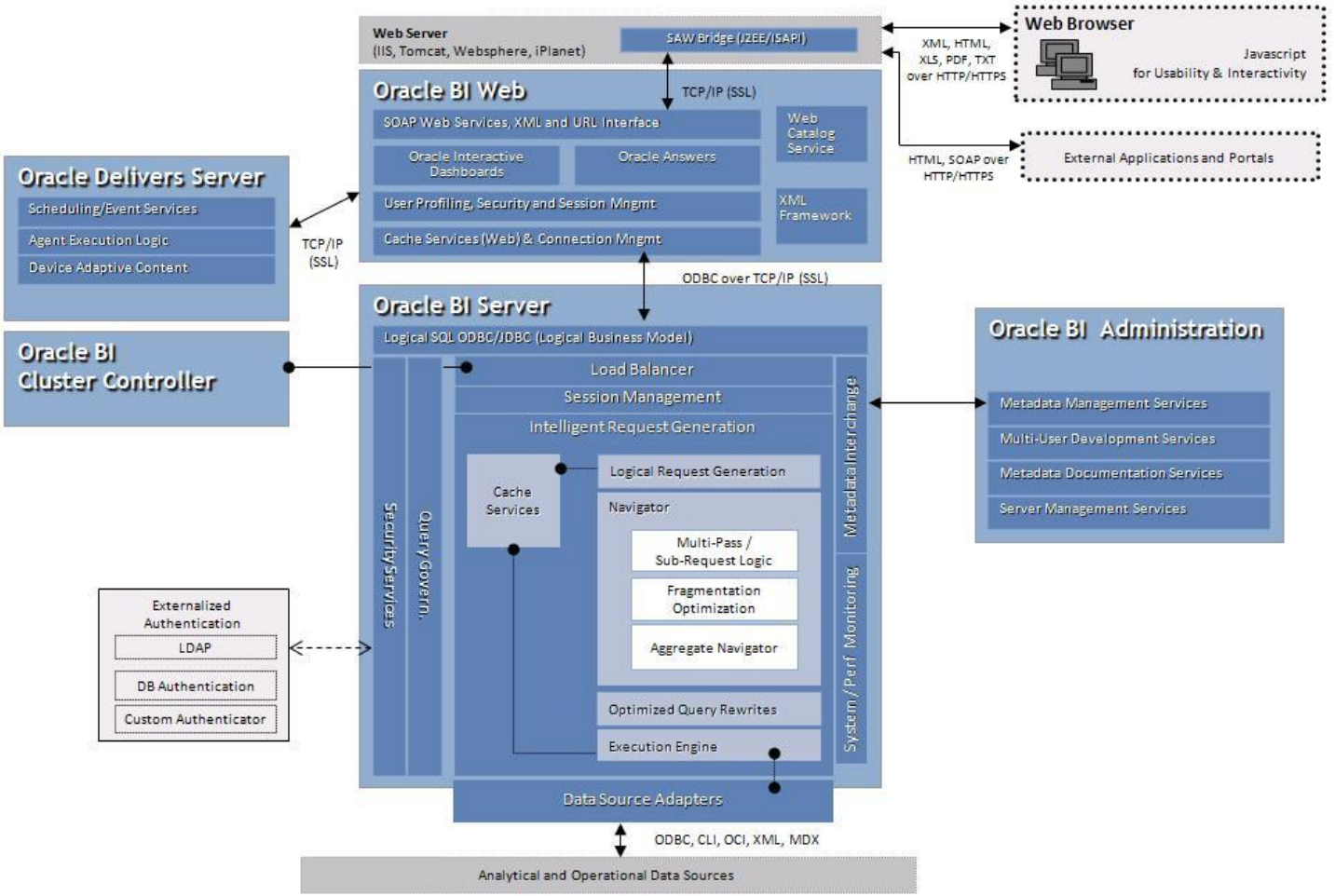
Fusion Intelligence - EBS Edition (Now Obsolete)



- Leverage Existing DBI Capabilities & Investment using OBIEE
- Greater Flexibility to meet Reporting Requirements (i.e.adhoc reporting)
- Greater Extensibility with Developing Custom KPIs
- Greater Personalization: Add, Rearrange, Hide or Rename Dashboards, Reports, Graphs etc.
- Integrate Information from 3rd-party Data Sources (i.e.unify DBI and Non-DBI information)

Oracle Business Intelligence – Enterprise Edition

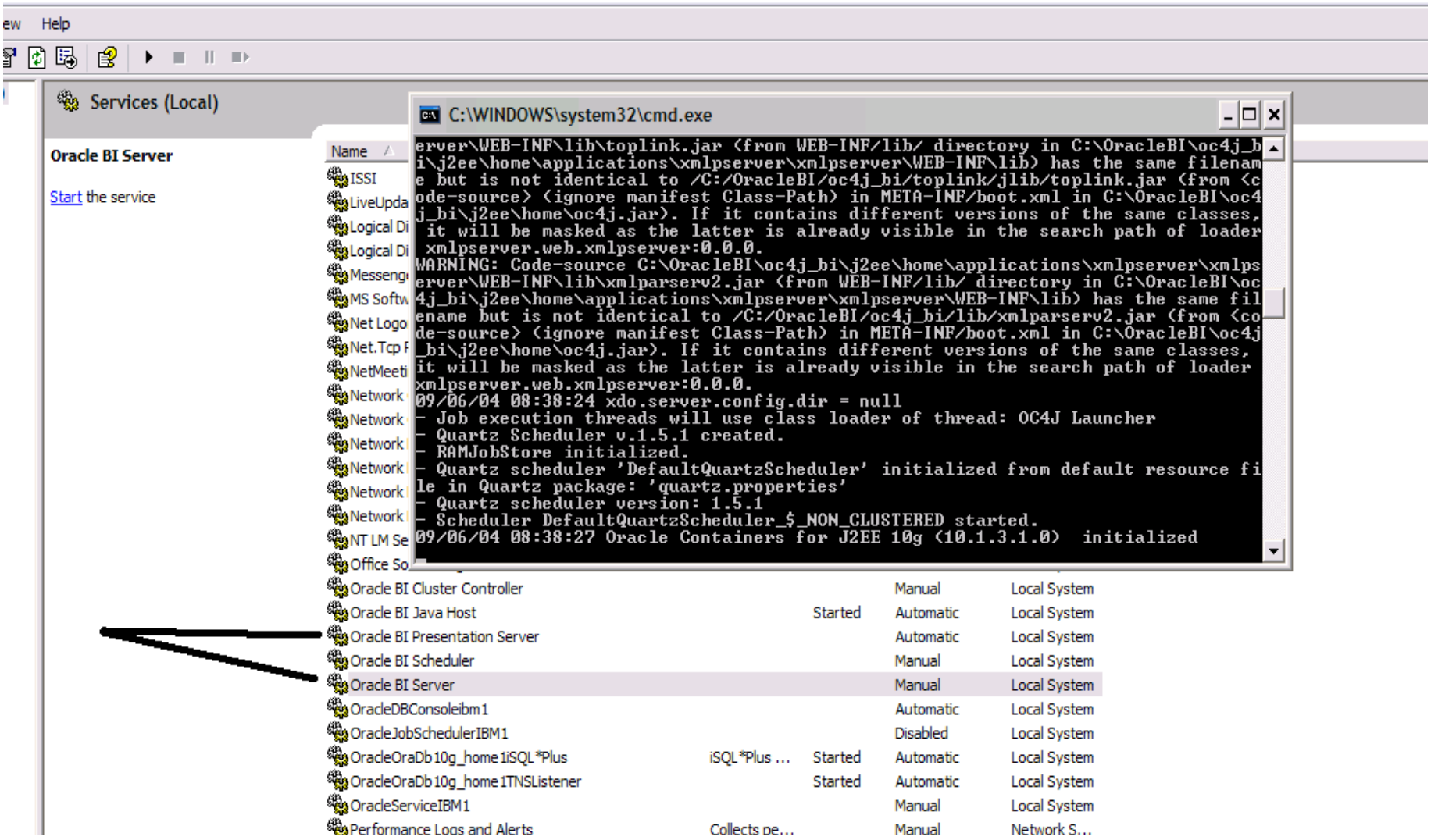
Oracle BI EE Architecture



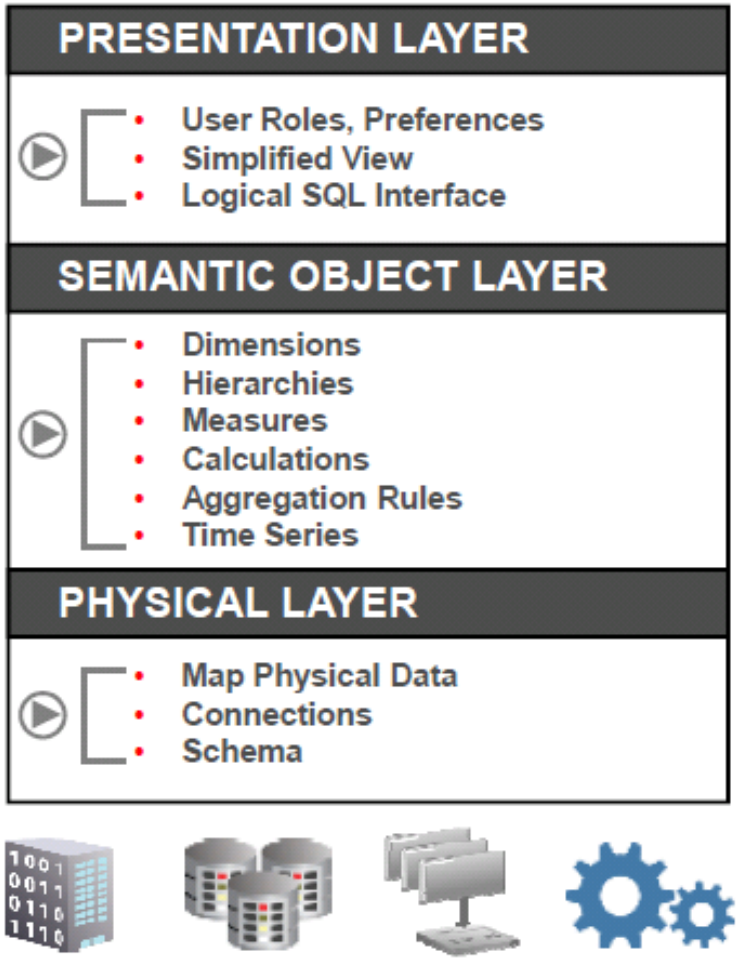
Oracle Business Intelligence Enterprise Edition

- Installation
  - JDK 5
  - Java Containers
  - Admin Tool in Windows only
  - BI Server in Windows / Linux
- On-going
  - Users and Security
  - Cache
- Advanced
  - High Availability
  - Clustering

OBIEE - Services



OBIEE – Three Layers

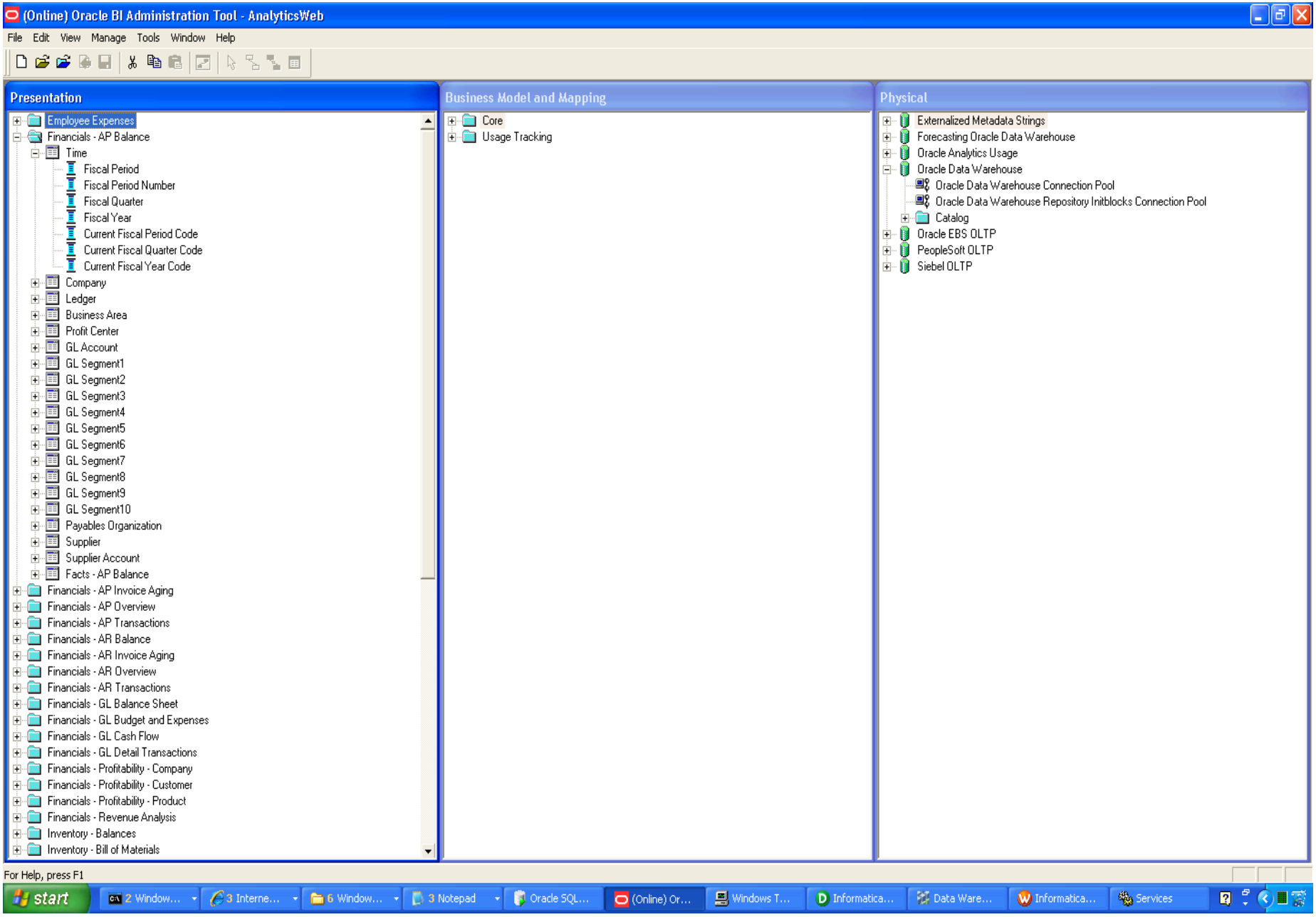


Role-Based Views of the Information Relevant to the User

Consistent Definition of Business Measures, Metrics, Calculations

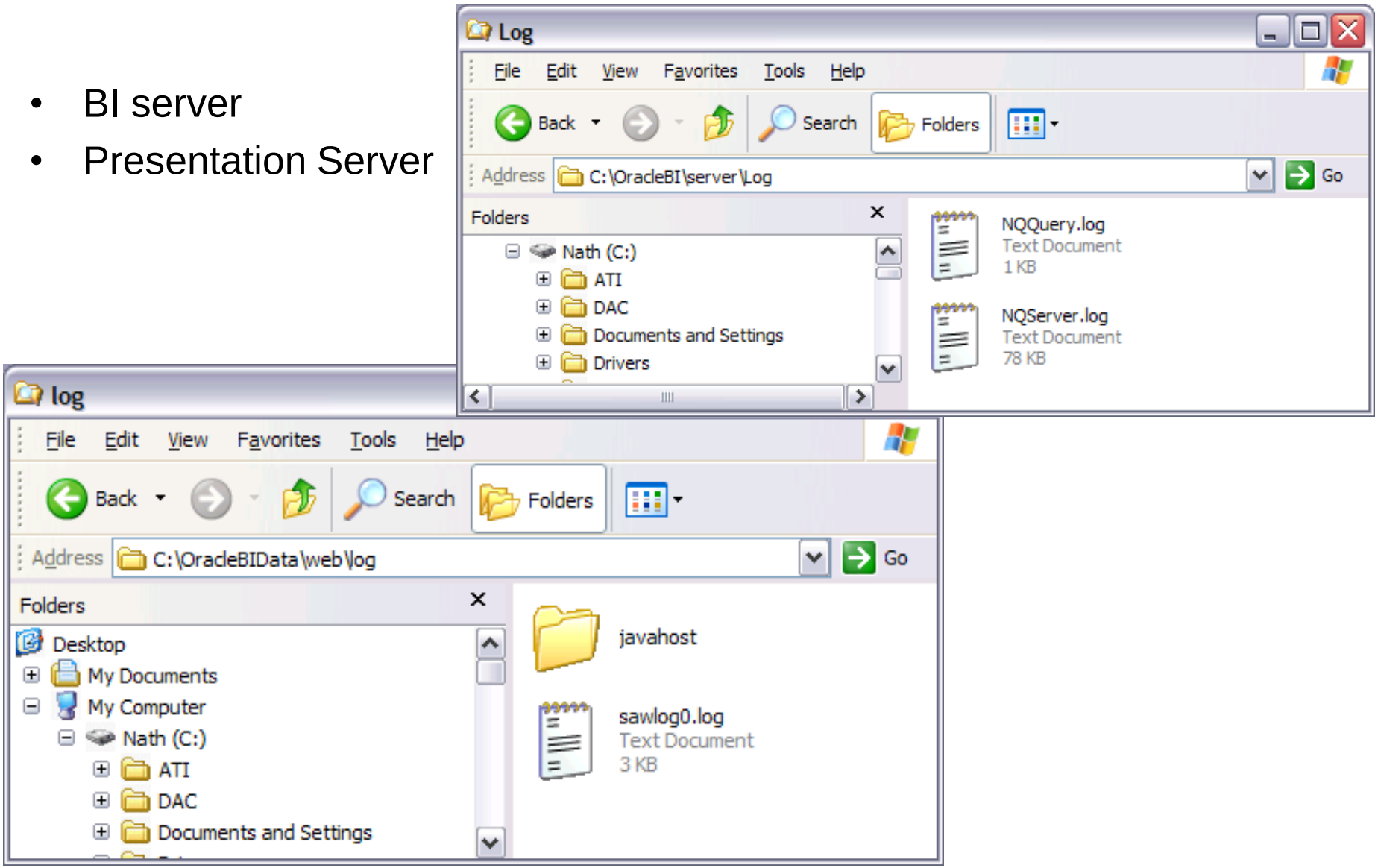
Model Once, Deploy Everywhere

Across Any Data Sources


(Online) Oracle BI Administration Tool - AnalyticsWeb
File Edit View Manage Tools Window Help
Presentation
Employee Expenses
Financials - AP Balance
Time
Fiscal Period
Fiscal Period Number
Fiscal Quarter
Fiscal Year
Current Fiscal Period Code
Current Fiscal Quarter Code
Current Fiscal Year Code
Company
Ledger
Business Area
Profit Center
GL Account
GL Segment1
GL Segment2
GL Segment3
GL Segment4
GL Segment5
GL Segment6
GL Segment7
GL Segment8
GL Segment9
GL Segment10
Payables Organization
Supplier
Supplier Account
Facts - AP Balance
Financials - AP Invoice Aging
Financials - AP Overview
Financials - AP Transactions
Financials - AR Balance
Financials - AR Invoice Aging
Financials - AR Overview
Financials - AR Transactions
Financials - GL Balance Sheet
Financials - GL Budget and Expenses
Financials - GL Cash Flow
Financials - GL Detail Transactions
Financials - Profitability - Company
Financials - Profitability - Customer
Financials - Profitability - Product
Financials - Revenue Analysis
Inventory - Balances
Inventory - Bill of Materials
Business Model and Mapping
Core
Usage Tracking
Physical
Externalized Metadata Strings
Forecasting Oracle Data Warehouse
Oracle Analytics Usage
Oracle Data Warehouse
Oracle Data Warehouse Connection Pool
Oracle Data Warehouse Repository Initblocks Connection Pool
Catalog
Oracle EBS OLTP
PeopleSoft OLTP
Siebel OLTP
For Help, press F1
start
2 Window...
3 Interne...
6 Window...
3 Notepad
Oracle SQL...
(Online) Or...
Windows T...
Informatica...
Data Ware...
Informatica...
Services

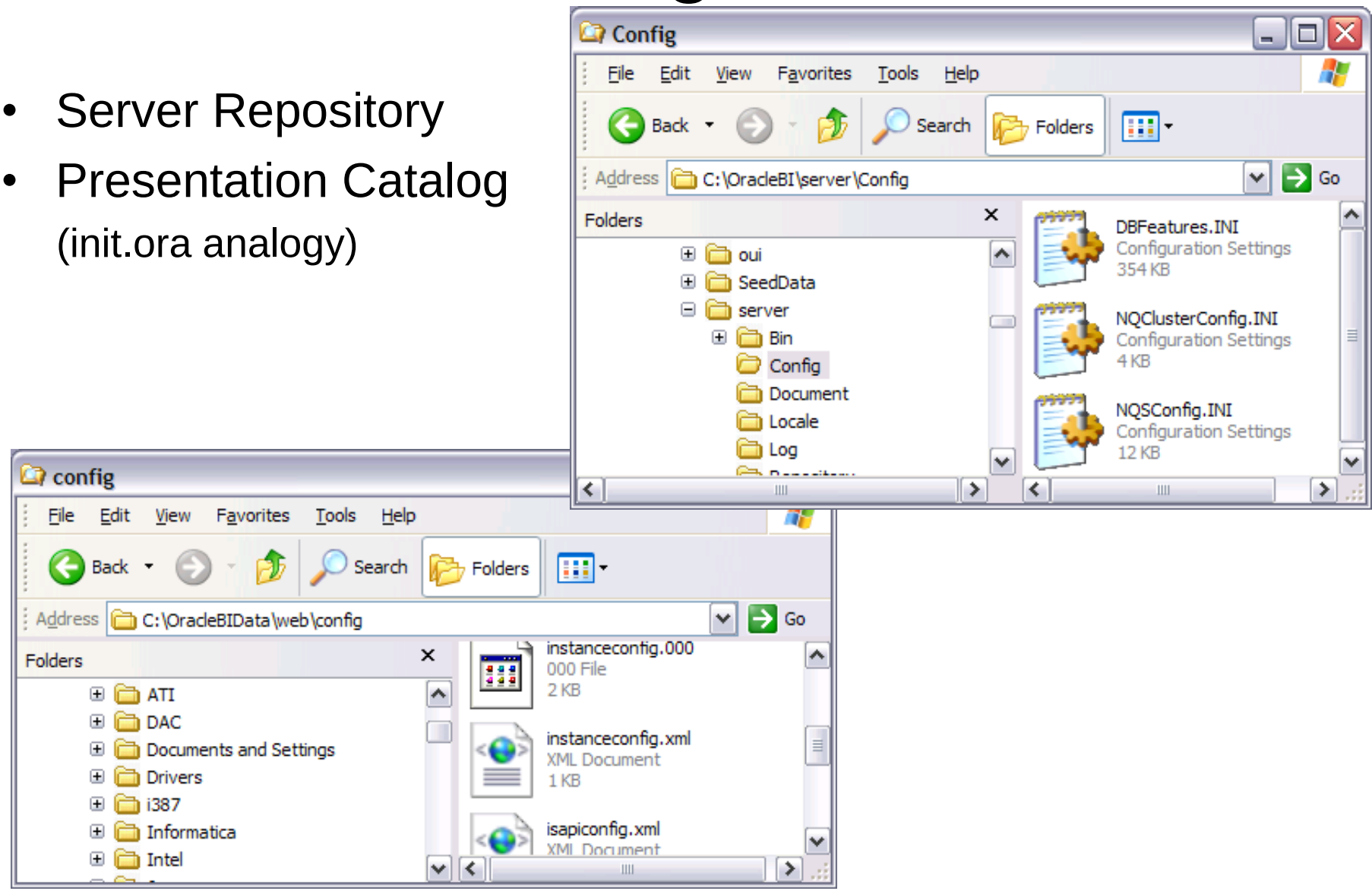
Logs for OBIEE

- BI server
- Presentation Server



OBIEE – Configuration Files

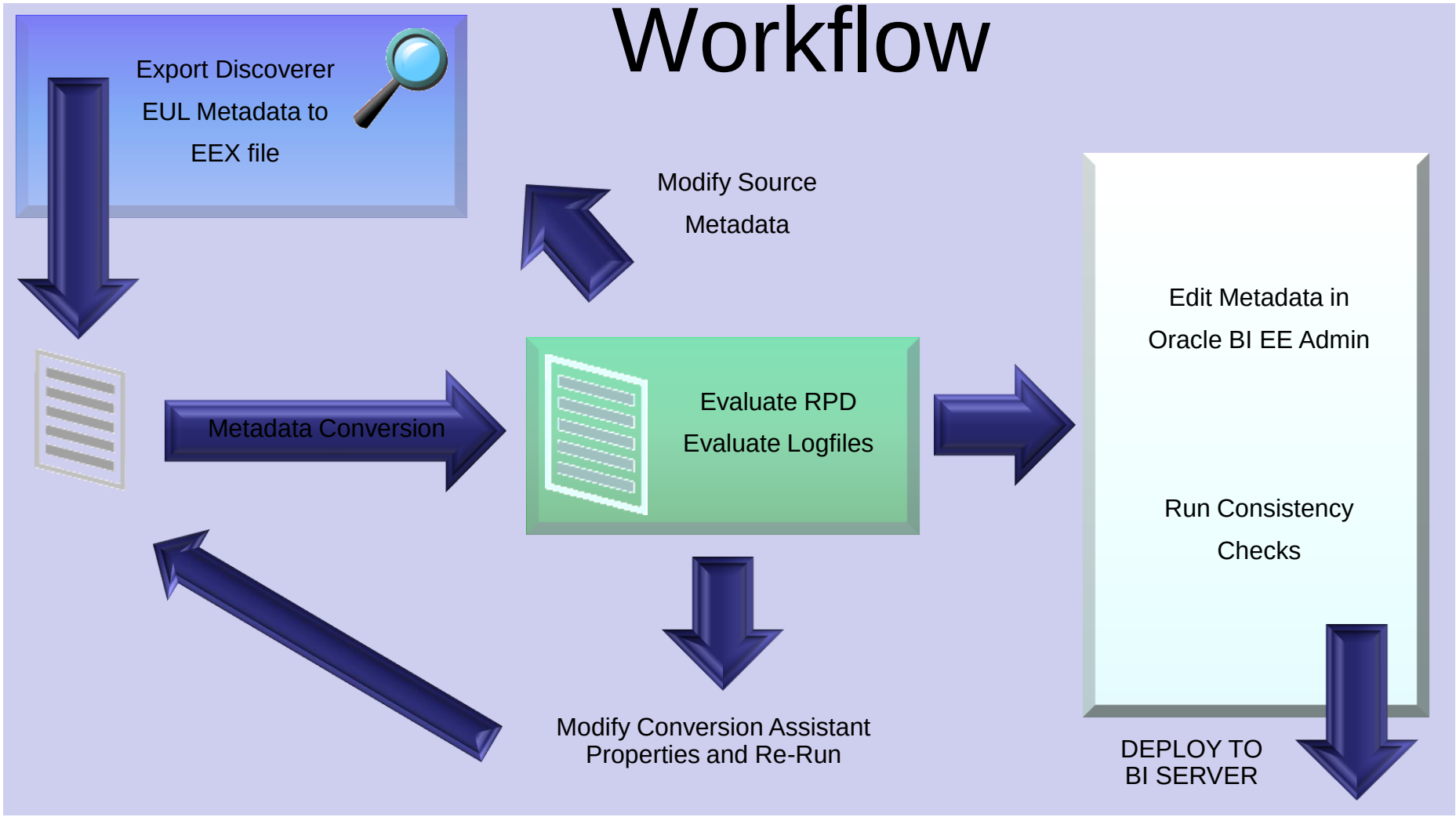
- Server Repository
- Presentation Catalog
  (init.ora analogy)



Discoverer (OBISE) to OBIEE

Migration Utility

Metadata Conversion Assistant Workflow



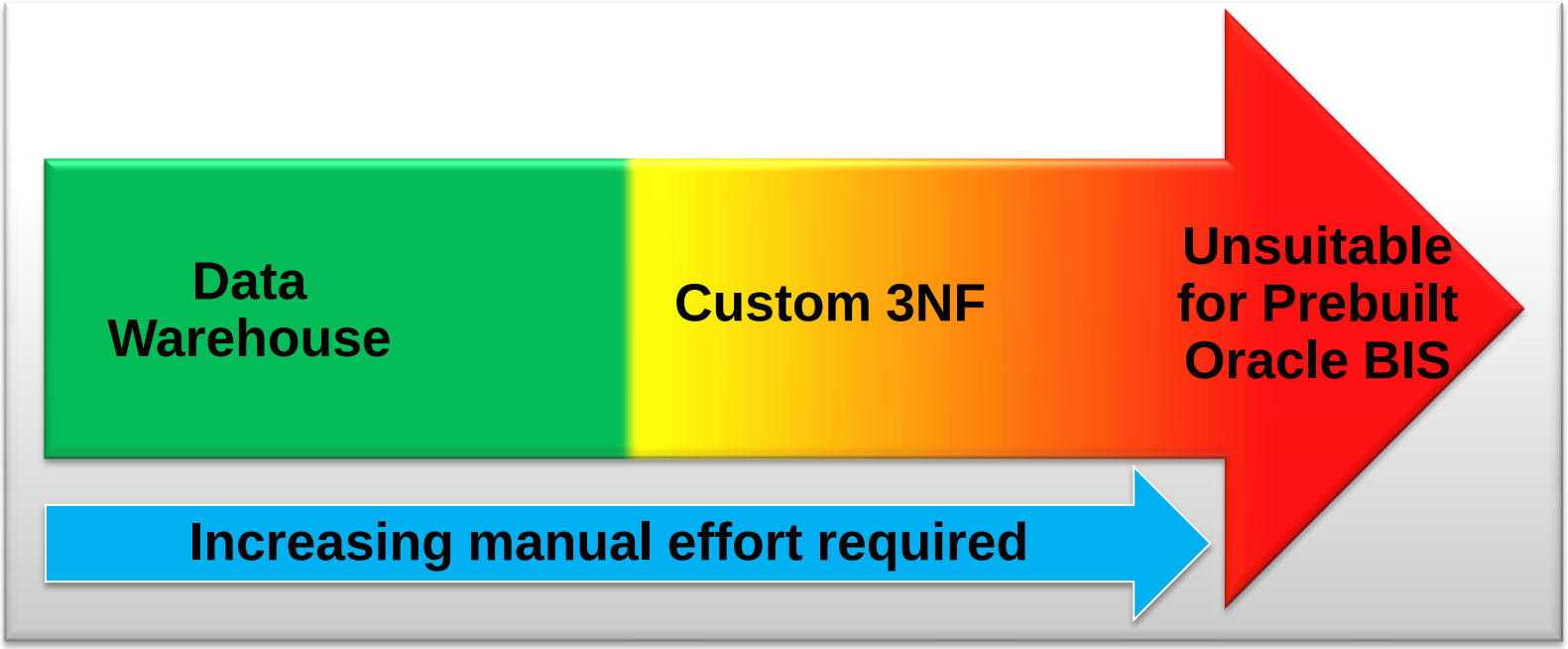
Source: Mike Durran, Oracle

Metadata Conversion Assistant

- Available with Oracle BI EE 10.1.3.4 and higher
- Free download and easy to use – command line
- Generates OBIEE repository .rpd file from Discoverer End User Layer (EUL) or .eex file
- Snowflake data models in Discoverer >Collapsed into a star schema
- Circular or multiple join paths in Discoverer
  - Alias folders used to satisfy multiple join paths
  - Utility generates list of folders that have multiple join paths
  - User can then optionally choose which alias folders to create
- The Workbook Migration utility is in progress

Metadata Conversion Assistant

- Suitability of Discoverer metadata for automated conversion

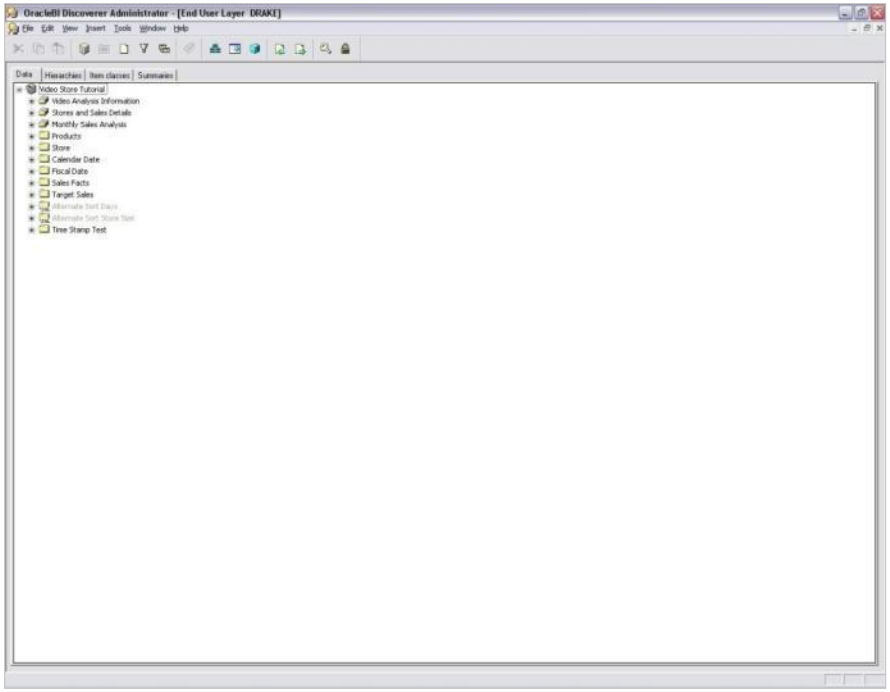


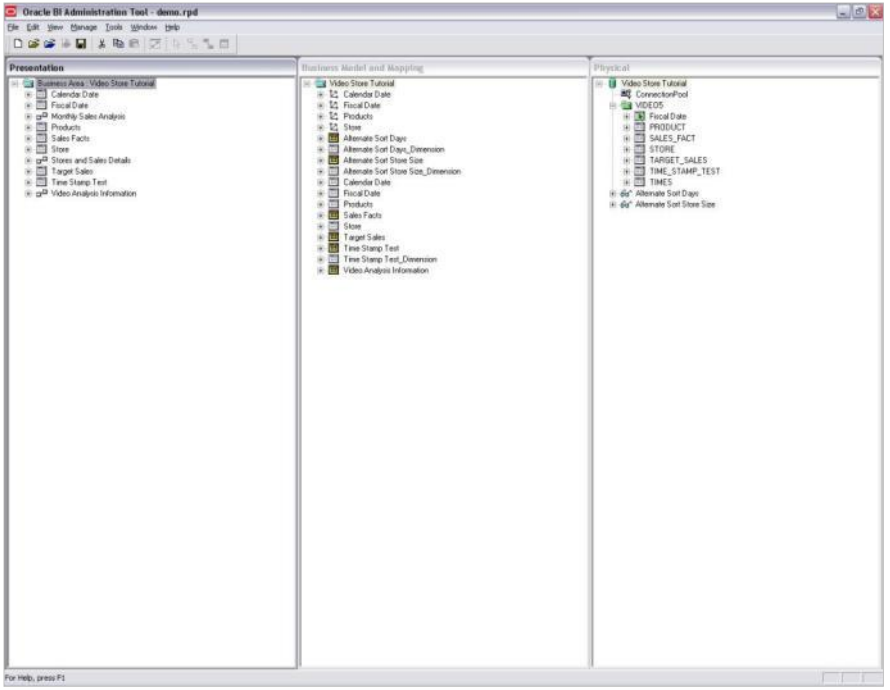
Source: Mike Duran, Oracle

Oracle Discoverer – Oracle BI EE

Analogous Components

- **Discoverer Administrator <> BI EE Administration Tool**

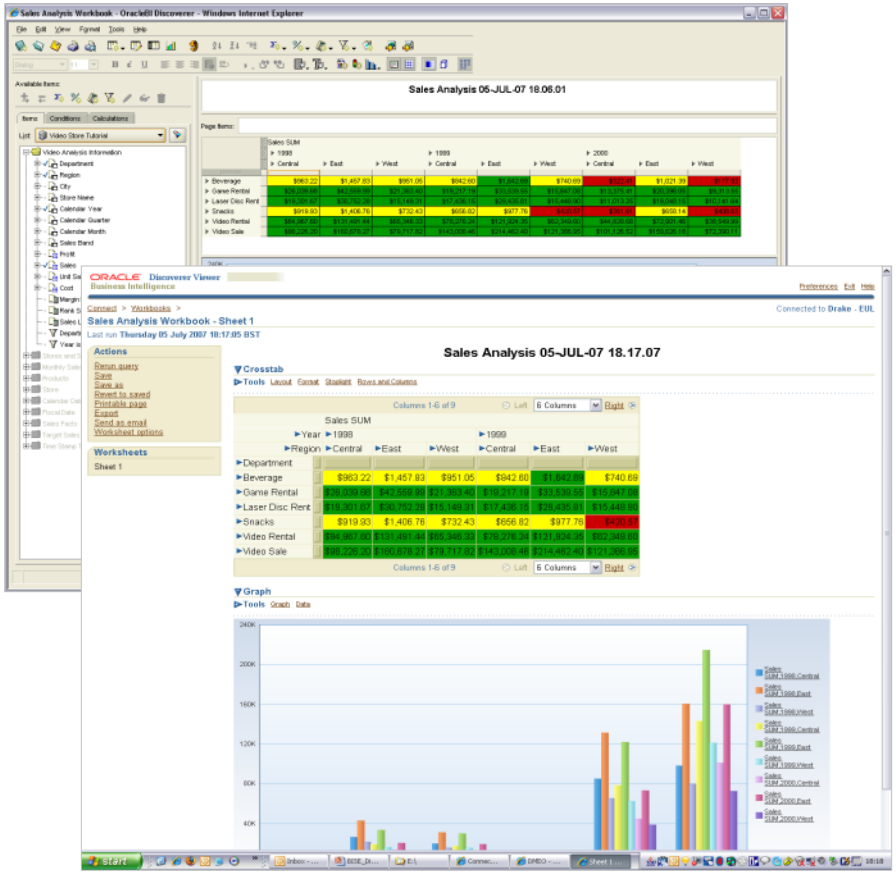


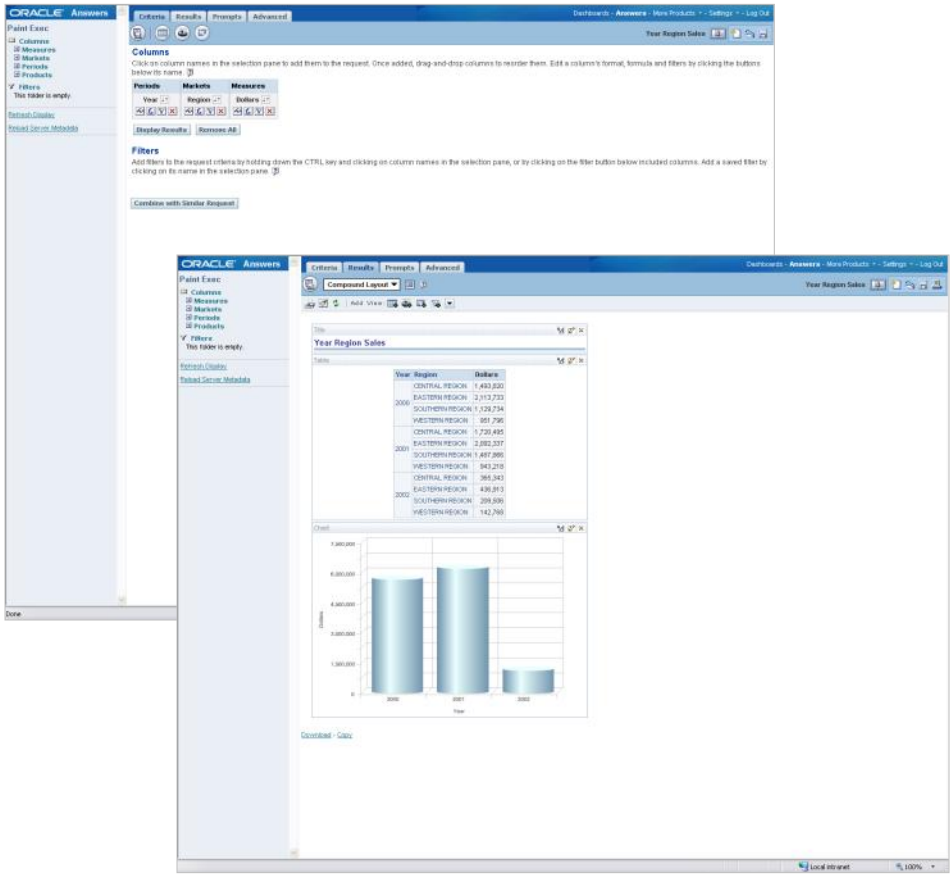


Oracle Discoverer – Oracle BI EE

Analogous Components

- **Discoverer Plus/Viewer <> BI EE Answers**

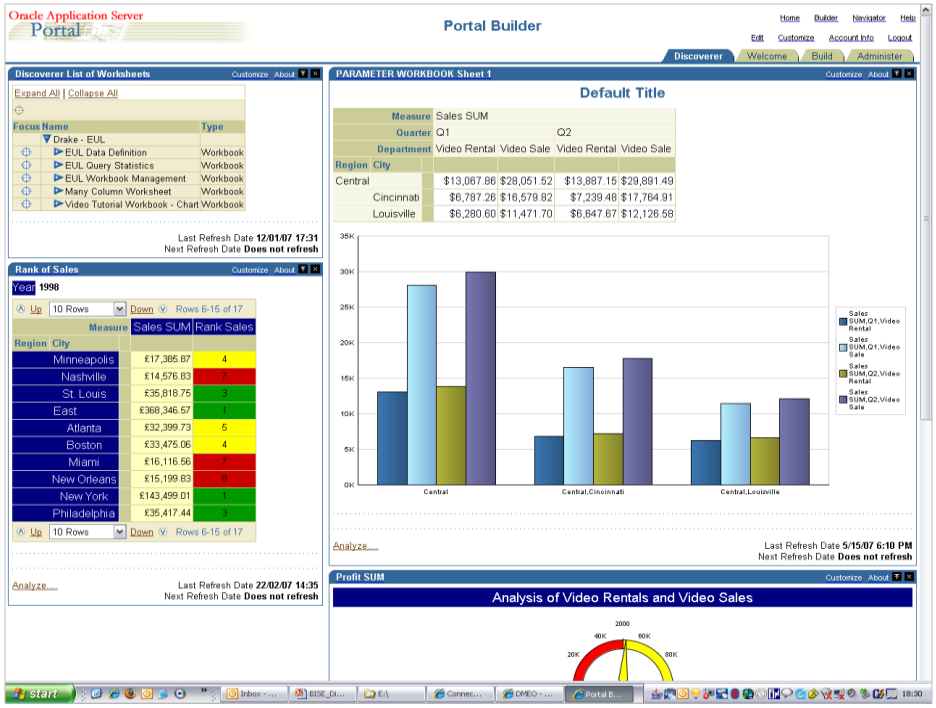


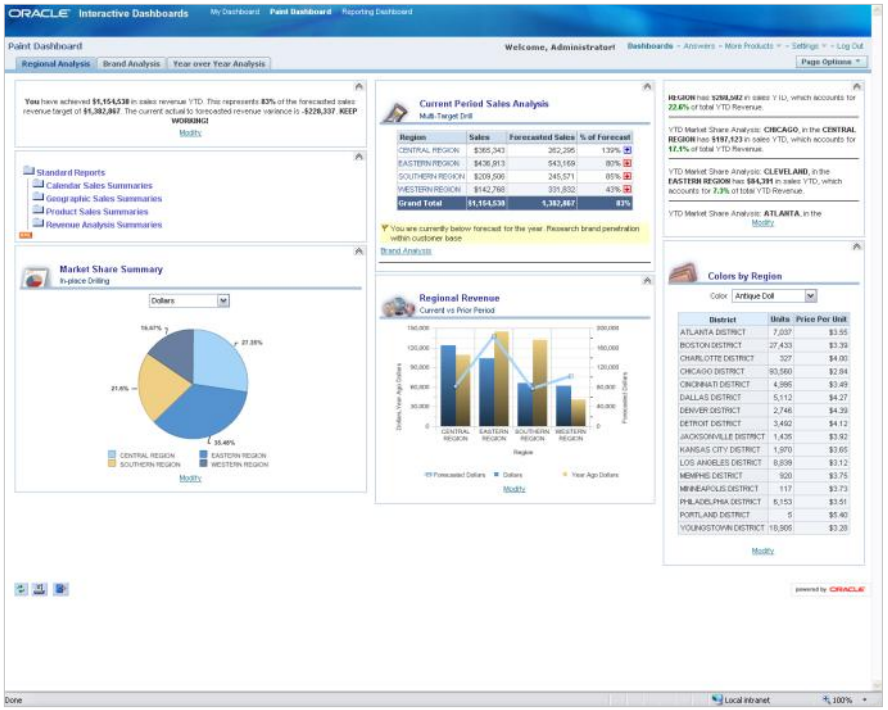


Oracle Discoverer – Oracle BI EE

Analogous Components

- **Discoverer Portlet Provider <> BI EE Dashboards**



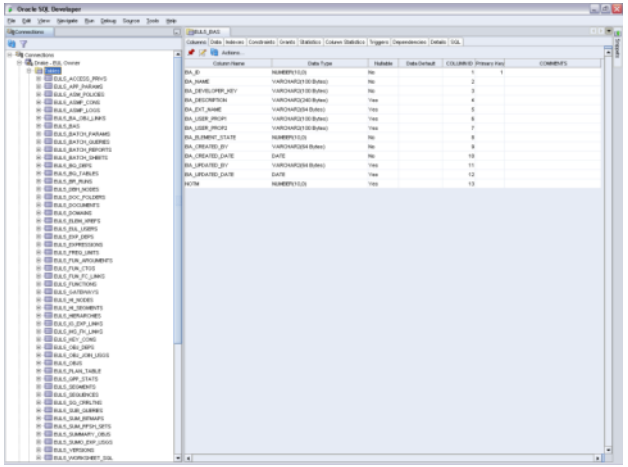


Migration Approach (1 => 3?)

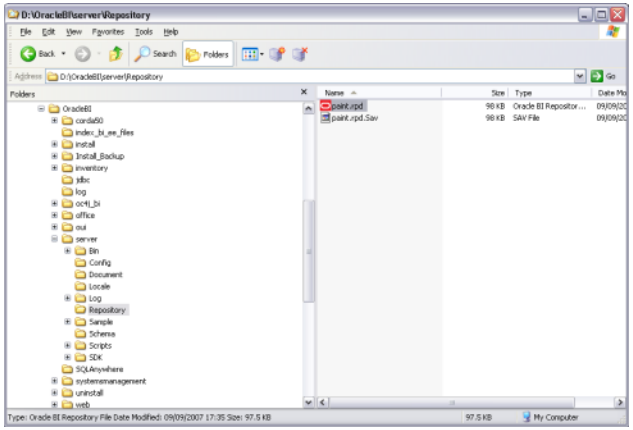
- **Map objects with similar metadata concepts…..**
  - **End User Layer**
  - **Business Areas**
  - **Folders and Items**
  - **Joins**
  - **Hierarchies**

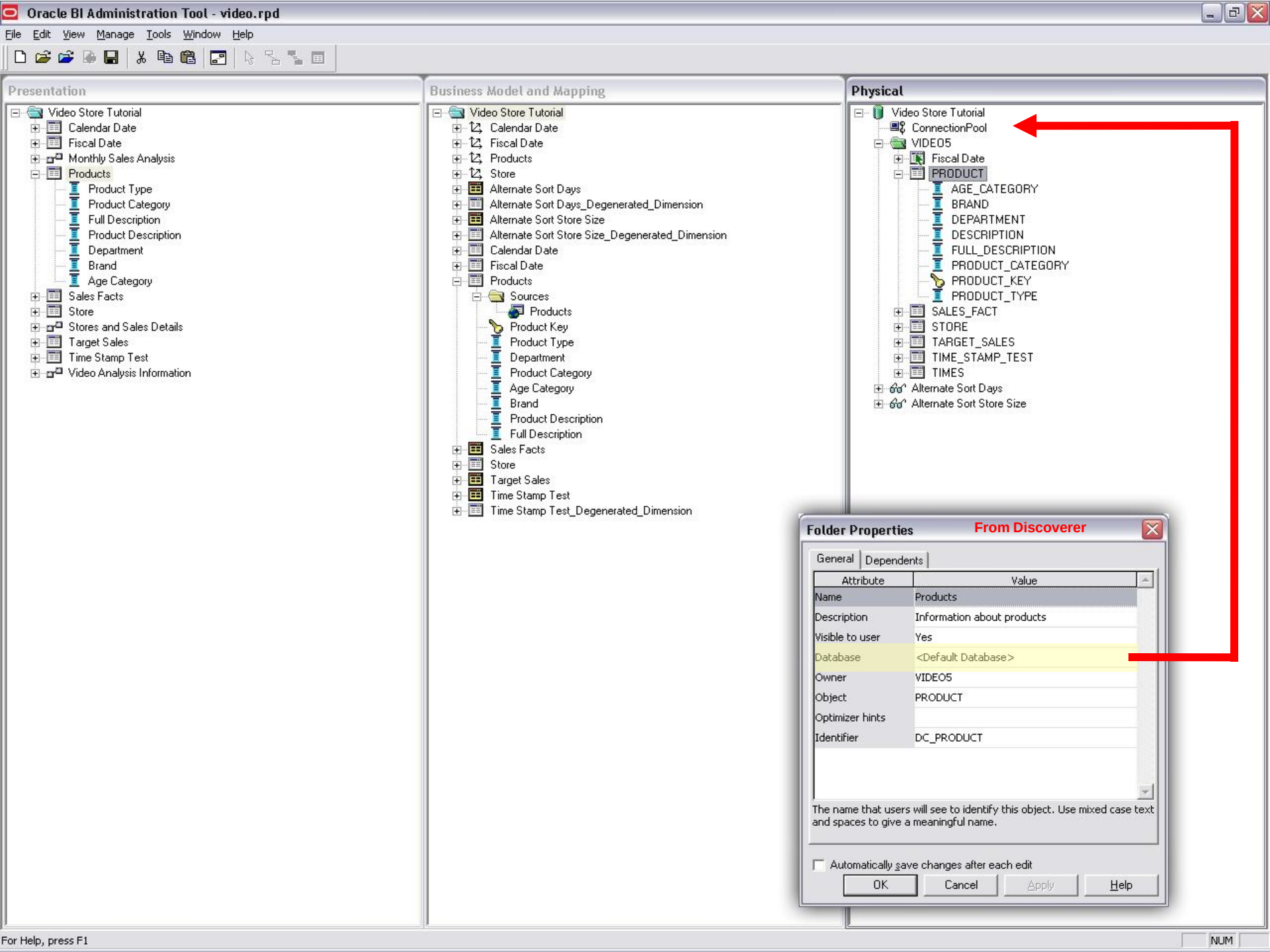
Migration Approach

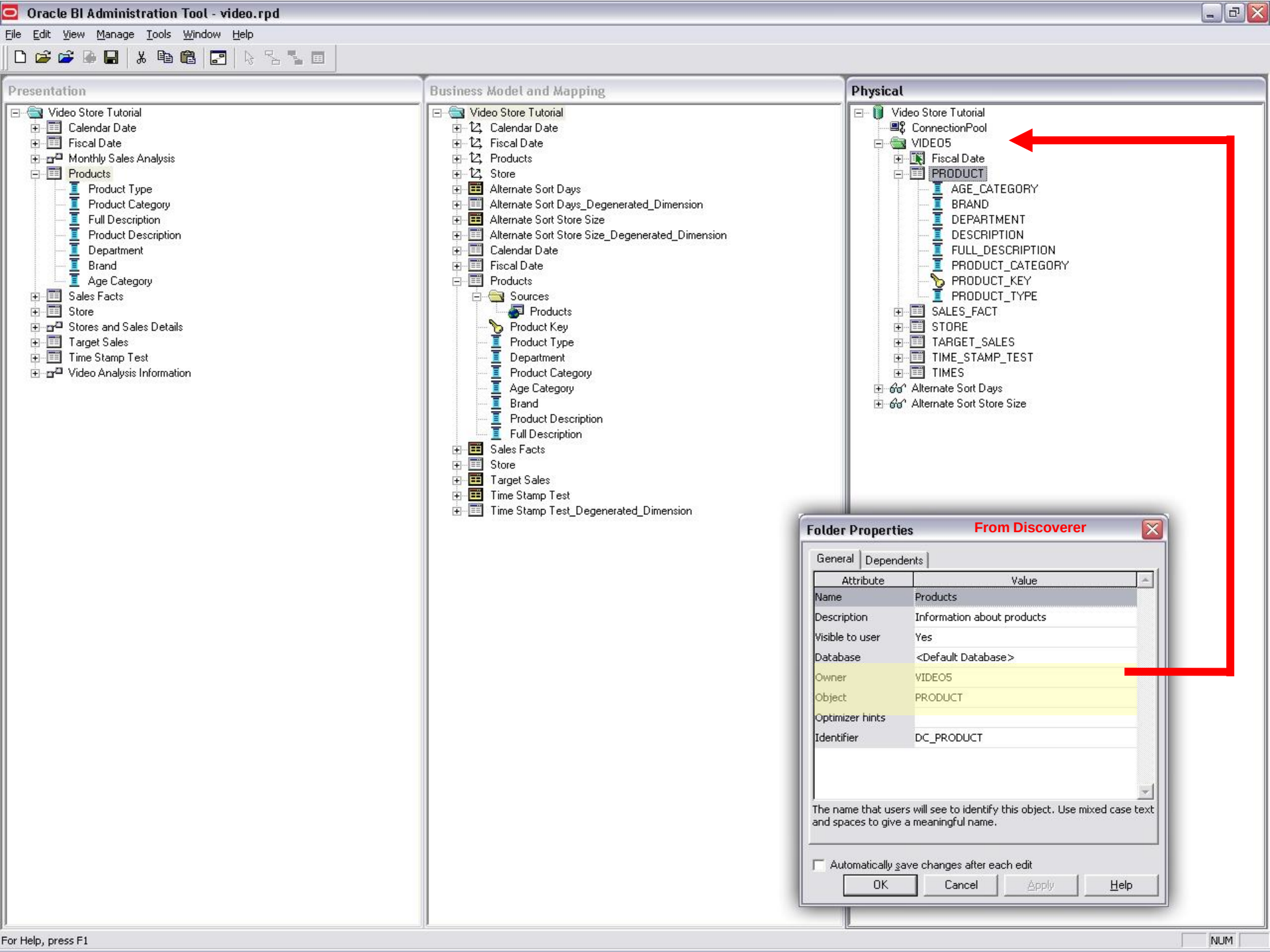
- **End User Layer (EUL)**
  - **Discoverer metadata repository**
  - **Schema in a database**

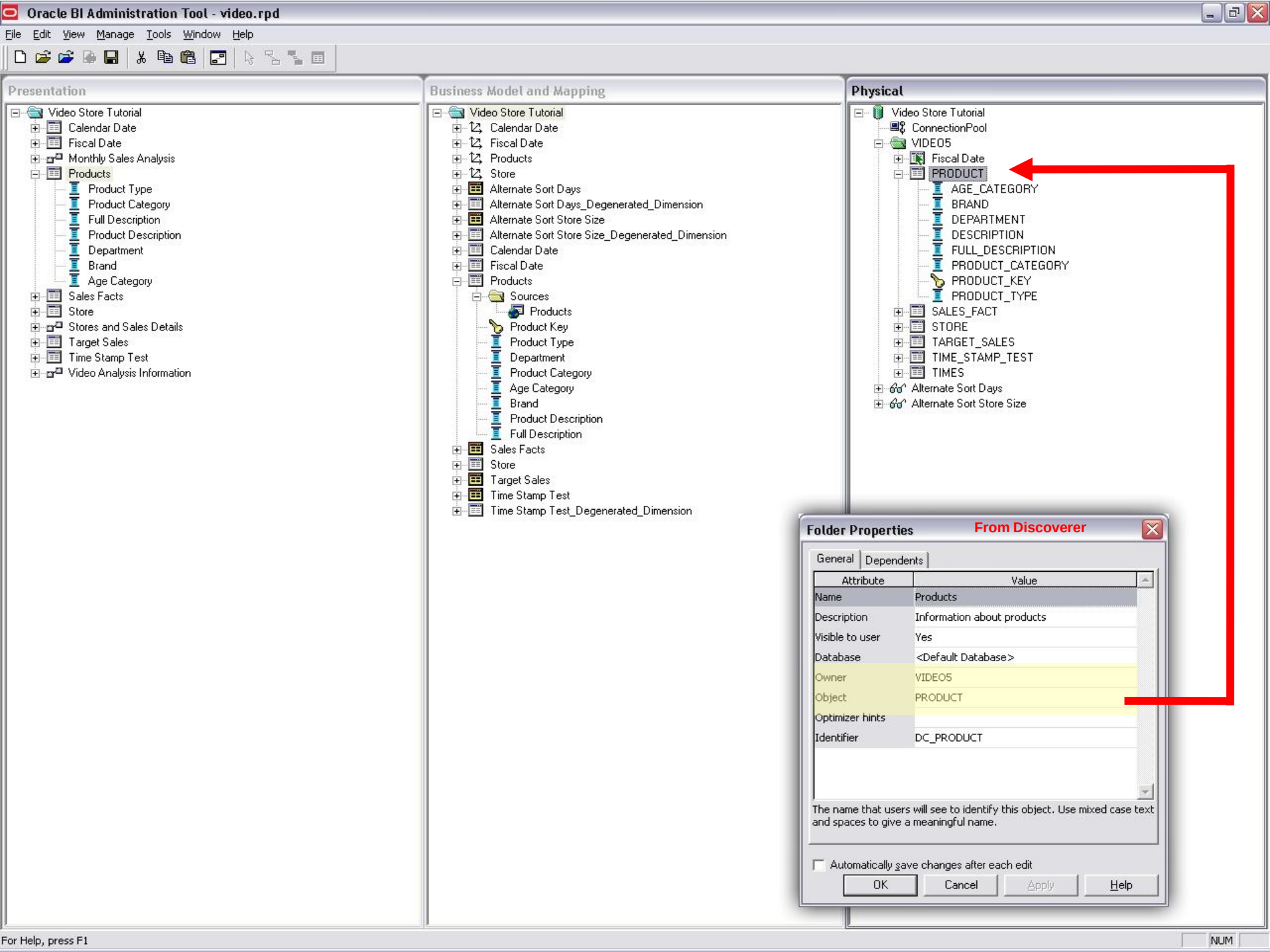


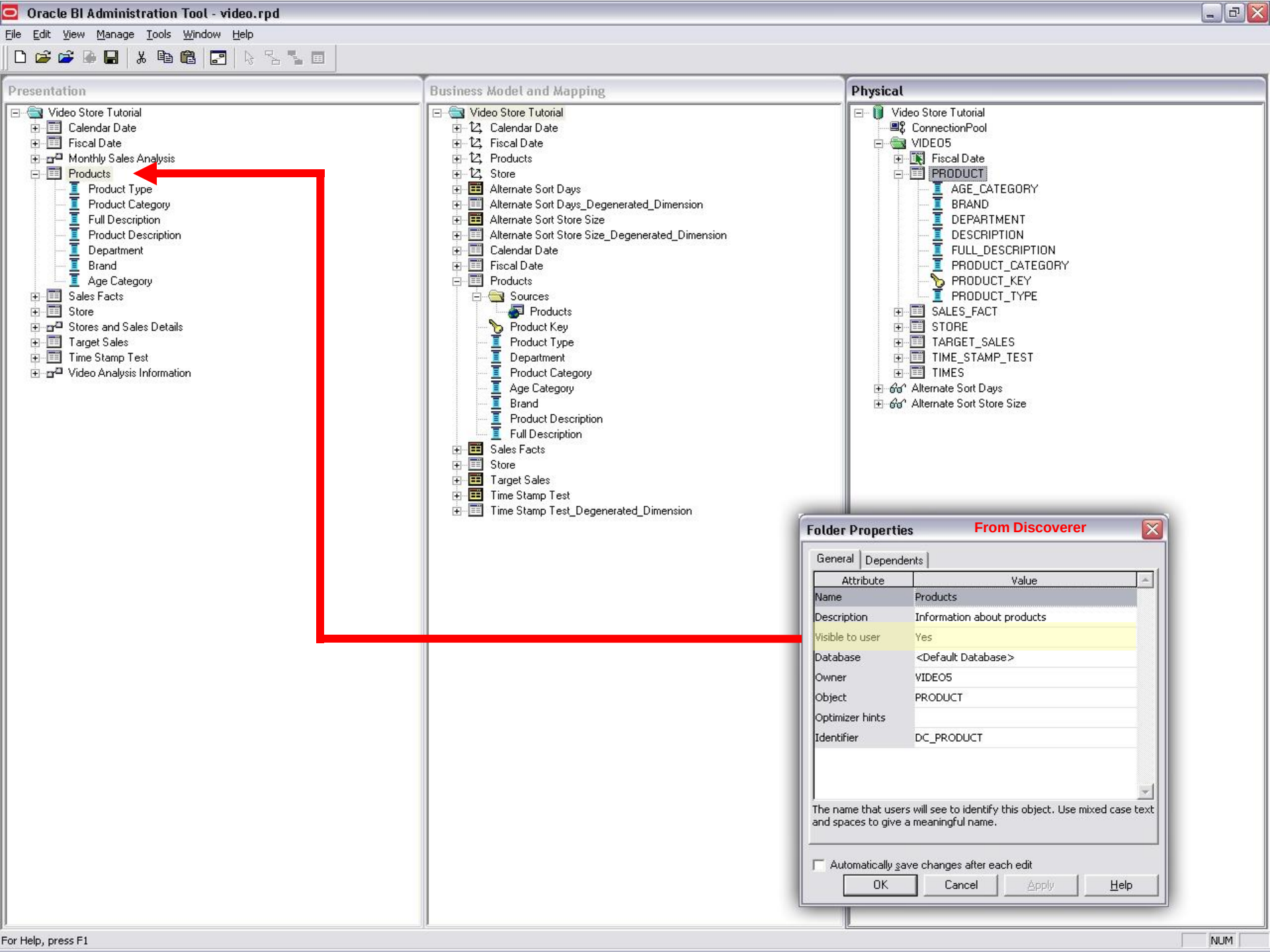
- **BI Enterprise Edition RPD file**
  - **Metadata repository file**




Oracle BI Administration Tool - video.rpd
File Edit View Manage Tools Window Help
Presentation
Video Store Tutorial
Calendar Date
Fiscal Date
Monthly Sales Analysis
Products
Product Type
Product Category
Full Description
Product Description
Department
Brand
Age Category
Sales Facts
Store
Stores and Sales Details
Target Sales
Time Stamp Test
Video Analysis Information
Business Model and Mapping
Video Store Tutorial
Calendar Date
Fiscal Date
Products
Store
Alternate Sort Days
Alternate Sort Days_Degenerated_Dimension
Alternate Sort Store Size
Alternate Sort Store Size_Degenerated_Dimension
Calendar Date
Fiscal Date
Products
Sources
Products
Product Key
Product Type
Department
Product Category
Age Category
Brand
Product Description
Full Description
Sales Facts
Store
Target Sales
Time Stamp Test
Time Stamp Test_Degenerated_Dimension
Physical
Video Store Tutorial
ConnectionPool
VIDEO5
Fiscal Date
PRODUCT
AGE_CATEGORY
BRAND
DEPARTMENT
DESCRIPTION
FULL_DESCRIPTION
PRODUCT_CATEGORY
PRODUCT_KEY
PRODUCT_TYPE
SALES_FACT
STORE
TARGET_SALES
TIME_STAMP_TEST
TIMES
Alternate Sort Days
Alternate Sort Store Size
Folder Properties
From Discoverer
General
Dependents
Attribute
Value
Name
Products
Description
Information about products
Visible to user
Yes
Database
<Default Database>
Owner
VIDEO5
Object
PRODUCT
Optimizer hints
Identifier
DC_PRODUCT
The name that users will see to identify this object. Use mixed case text and spaces to give a meaningful name.
Automatically save changes after each edit
OK
Cancel
Apply
Help
For Help, press F1
NUM


Oracle BI Administration Tool - video.rpd
File Edit View Manage Tools Window Help
Presentation
Video Store Tutorial
Calendar Date
Fiscal Date
Monthly Sales Analysis
Products
Product Type
Product Category
Full Description
Product Description
Department
Brand
Age Category
Sales Facts
Store
Stores and Sales Details
Target Sales
Time Stamp Test
Video Analysis Information
Business Model and Mapping
Video Store Tutorial
Calendar Date
Fiscal Date
Products
Store
Alternate Sort Days
Alternate Sort Days_Degenerated_Dimension
Alternate Sort Store Size
Alternate Sort Store Size_Degenerated_Dimension
Calendar Date
Fiscal Date
Products
Sources
Products
Product Key
Product Type
Department
Product Category
Age Category
Brand
Product Description
Full Description
Sales Facts
Store
Target Sales
Time Stamp Test
Time Stamp Test_Degenerated_Dimension
Physical
Video Store Tutorial
ConnectionPool
VIDEO5
Fiscal Date
PRODUCT
AGE_CATEGORY
BRAND
DEPARTMENT
DESCRIPTION
FULL_DESCRIPTION
PRODUCT_CATEGORY
PRODUCT_KEY
PRODUCT_TYPE
SALES_FACT
STORE
TARGET_SALES
TIME_STAMP_TEST
TIMES
Alternate Sort Days
Alternate Sort Store Size
Folder Properties
From Discoverer
General
Dependents
Attribute
Value
Name
Products
Description
Information about products
Visible to user
Yes
Database
<Default Database>
Owner
VIDEO5
Object
PRODUCT
Optimizer hints
Identifier
DC_PRODUCT
The name that users will see to identify this object. Use mixed case text and spaces to give a meaningful name.
Automatically save changes after each edit
OK
Cancel
Apply
Help
For Help, press F1
NUM


Oracle BI Administration Tool - video.rpd
File Edit View Manage Tools Window Help
Presentation
Video Store Tutorial
Calendar Date
Fiscal Date
Monthly Sales Analysis
Products
Product Type
Product Category
Full Description
Product Description
Department
Brand
Age Category
Sales Facts
Store
Stores and Sales Details
Target Sales
Time Stamp Test
Video Analysis Information
Business Model and Mapping
Video Store Tutorial
Calendar Date
Fiscal Date
Products
Store
Alternate Sort Days
Alternate Sort Days_Degenerated_Dimension
Alternate Sort Store Size
Alternate Sort Store Size_Degenerated_Dimension
Calendar Date
Fiscal Date
Products
Sources
Products
Product Key
Product Type
Department
Product Category
Age Category
Brand
Product Description
Full Description
Sales Facts
Store
Target Sales
Time Stamp Test
Time Stamp Test_Degenerated_Dimension
Physical
Video Store Tutorial
ConnectionPool
VIDEO5
Fiscal Date
PRODUCT
AGE_CATEGORY
BRAND
DEPARTMENT
DESCRIPTION
FULL_DESCRIPTION
PRODUCT_CATEGORY
PRODUCT_KEY
PRODUCT_TYPE
SALES_FACT
STORE
TARGET_SALES
TIME_STAMP_TEST
TIMES
Alternate Sort Days
Alternate Sort Store Size
Folder Properties
From Discoverer
General
Dependents
Attribute
Value
Name
Products
Description
Information about products
Visible to user
Yes
Database
<Default Database>
Owner
VIDEO5
Object
PRODUCT
Optimizer hints
Identifier
DC_PRODUCT
The name that users will see to identify this object. Use mixed case text and spaces to give a meaningful name.
Automatically save changes after each edit
OK
Cancel
Apply
Help
For Help, press F1
NUM

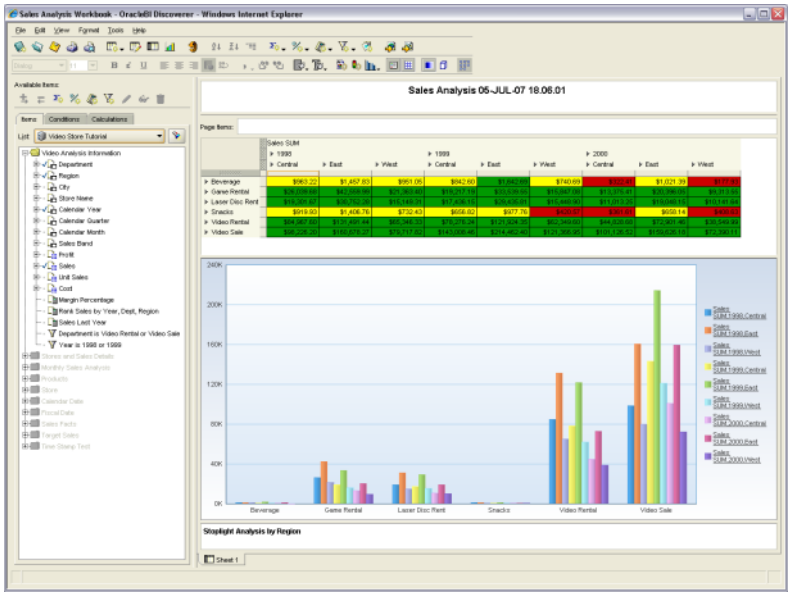

Oracle BI Administration Tool - video.rpd
File Edit View Manage Tools Window Help
Presentation
Video Store Tutorial
Calendar Date
Fiscal Date
Monthly Sales Analysis
Products
Product Type
Product Category
Full Description
Product Description
Department
Brand
Age Category
Sales Facts
Store
Stores and Sales Details
Target Sales
Time Stamp Test
Video Analysis Information
Business Model and Mapping
Video Store Tutorial
Calendar Date
Fiscal Date
Products
Store
Alternate Sort Days
Alternate Sort Days_Degenerated_Dimension
Alternate Sort Store Size
Alternate Sort Store Size_Degenerated_Dimension
Calendar Date
Fiscal Date
Products
Sources
Products
Product Key
Product Type
Department
Product Category
Age Category
Brand
Product Description
Full Description
Sales Facts
Store
Target Sales
Time Stamp Test
Time Stamp Test_Degenerated_Dimension
Physical
Video Store Tutorial
ConnectionPool
VIDEO5
Fiscal Date
PRODUCT
AGE_CATEGORY
BRAND
DEPARTMENT
DESCRIPTION
FULL_DESCRIPTION
PRODUCT_CATEGORY
PRODUCT_KEY
PRODUCT_TYPE
SALES_FACT
STORE
TARGET_SALES
TIME_STAMP_TEST
TIMES
Alternate Sort Days
Alternate Sort Store Size
Folder Properties
From Discoverer
General
Dependents
Attribute
Value
Name
Products
Description
Information about products
Visible to user
Yes
Database
<Default Database>
Owner
VIDEO5
Object
PRODUCT
Optimizer hints
Identifier
DC_PRODUCT
The name that users will see to identify this object. Use mixed case text and spaces to give a meaningful name.
Automatically save changes after each edit
OK
Cancel
Apply
Help
For Help, press F1
NUM

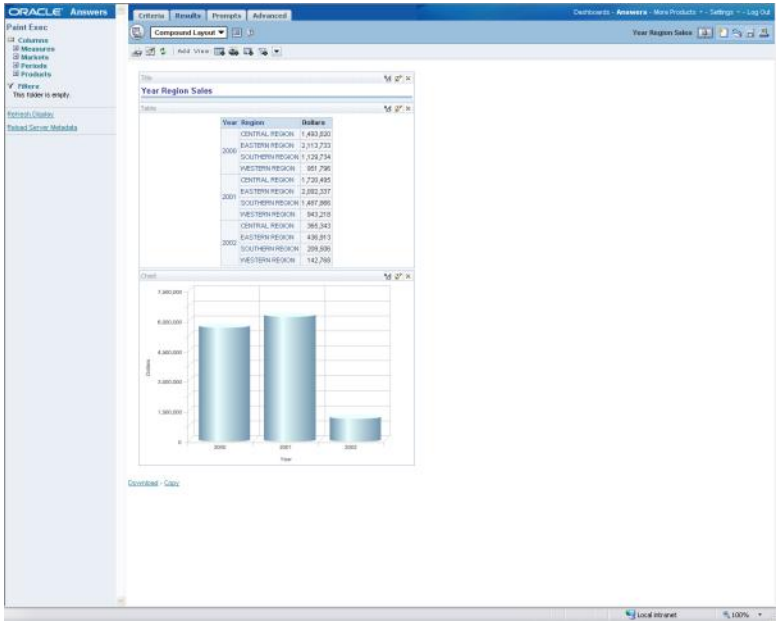
Workbook Migration

(to be released)

Workbook Migration

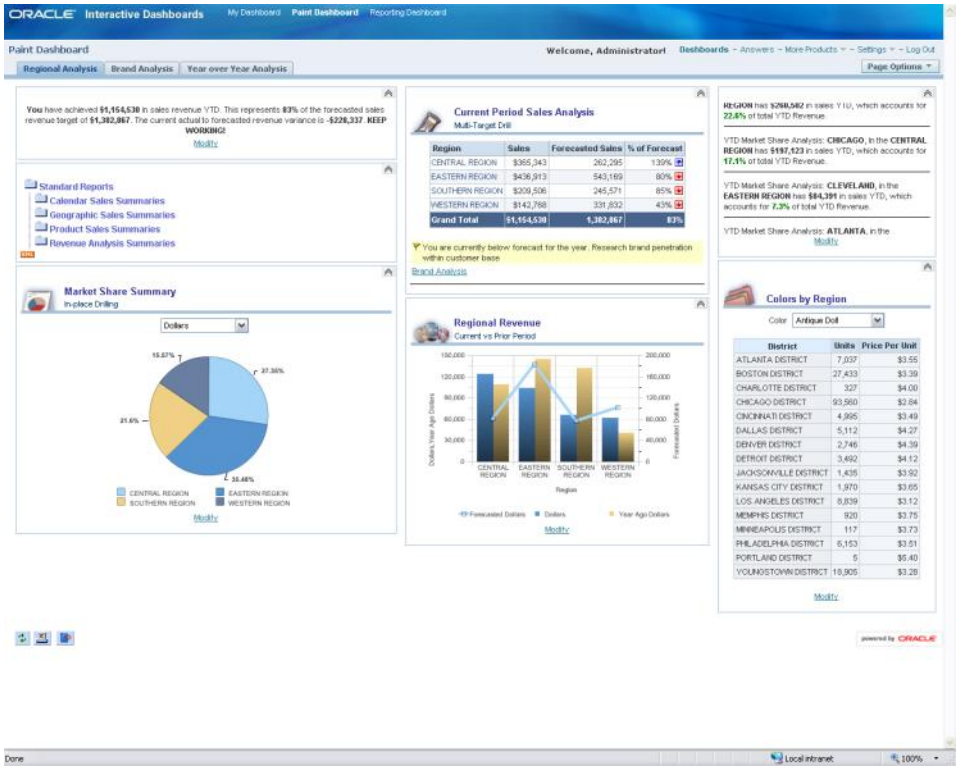
- **Discoverer Worksheets → Answers Requests**



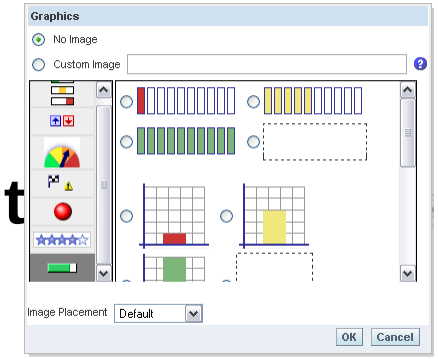


Workbook Migration

- **No direct equivalent to workbook in BI EE**
  - **Dashboards can be used to group functionally related requests**



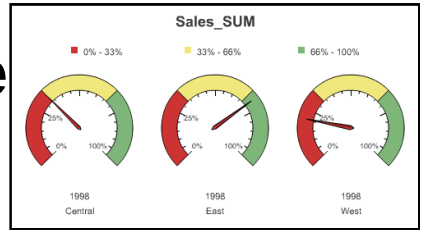
Workbook Migration



- **Same ability to conditionally format result**
  - **Extra capability in BI EE e.g. icons**

Customer Name	Credit Rating	Credit Limit	Average DSO	Total Revenue Due	Number of Orders	Total Order Revenue
ADR	GOOD	10,000	10	1,000	1	4,000
Mac Supplies	GOOD	5,000,000	20	5,000	1	65,000
PCS Computing	BAD	200,000	50	66,000	4	175,000
Vision	GOOD	1,500,000	21	406,000	2	610,000
iComp	MEDIUM	300,000	15	21,000	2	295,000

- **Extra visualizations in BI EE – e.g. Gauge**



http://ukp16765.uk.oracle.com/?event=getPlusPlugin&remoteSessionID=1 - Workbook 1 - OracleBI Di - Windows Internet Explorer

File Edit View Format Tools Help

Dialog 14

Available Items:

Items Conditions Calculations

List: Video Store Tutorial

- Video Analysis Information
  - Department
  - Region
  - City
  - Store Name
  - Calendar Year
  - Calendar Quarter
  - Calendar Month
  - Sales Band
  - Profit
  - Sales
  - Unit Sales
  - Cost
  - Margin Percentage
  - Rank Sales by Year, Dept, Region
  - Sales Last Year
  - Department is Video Rental or Vide
  - Year is 1998 or 1999
- Stores and Sales Details
- Monthly Sales Analysis
- Products
- Store
- Calendar Date
- Fiscal Date

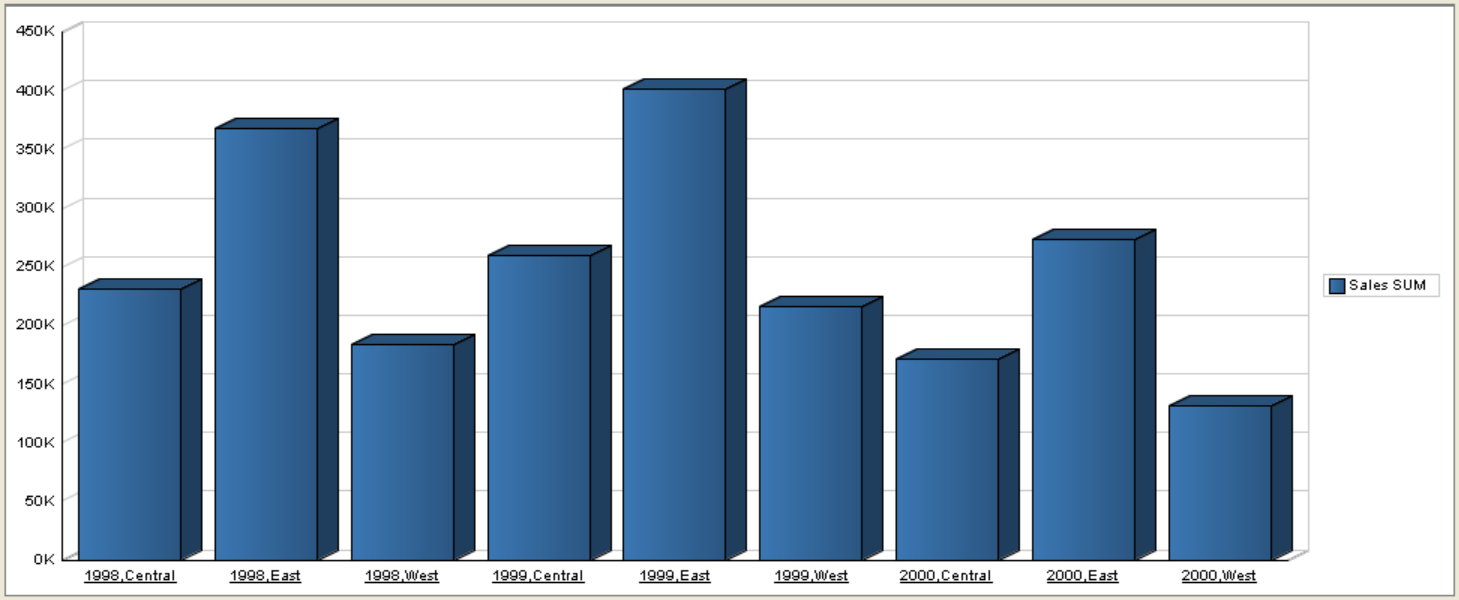
Selected Items:

- Calendar Year
- Region
- Sales SUM

Year Region Sales

Page Items:

Year	Region	Sales SUM
1998	Central	230,418.30
	East	368,346.57
	West	183,260.34
1999	Central	259,437.46
	East	401,982.56
	West	216,173.79
2000	Central	171,027.88
	East	273,651.37
	West	130,981.85



Sheet 1

ORACLE Answers

Criteria | Results | Prompts | Advanced

Dashboards - **Answers** - More Products - Settings - Log Out

Video Store Tutorial

- **Columns**
  - **Calendar Date**
    - Calendar Month
    - Calendar Day
    - Transaction Date
    - Time Key
    - Holiday Flag
    - Day Of Week
    - Calendar Year
    - Calendar Quarter
  - **Fiscal Date**
  - **Monthly Sales Analysis**
  - **Products**
    - Product Type
    - Product Category
    - Full Description
    - Product Description
    - Department
    - Brand
    - Age Category
  - **Sales Facts**
  - **Store**
    - Store Size
    - Store Name
    - Reports
    - Region
    - Floor Plan Type
    - City
    - Store Key
  - **Stores and Sales Details**
  - **Target Sales**
  - **Time Stamp Test**
  - **Video Analysis Information**
- **Filters**

This folder is empty.

Refresh Display

Reload Server Metadata

Compound Layout

Year Region Sales - Video

Add View:

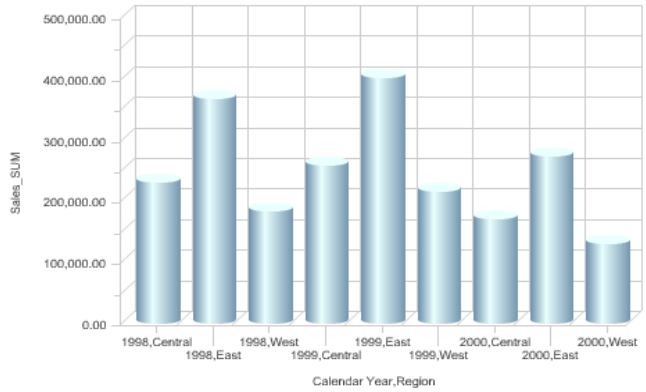
Title

Year Region Sales

Table

Calendar Year	Region	Sales_SUM
1998	Central	230,418.30
	East	368,346.57
	West	183,260.34
1999	Central	259,437.46
	East	401,982.56
	West	216,173.79
2000	Central	171,027.88
	East	273,651.37
	West	130,361.65

Chart



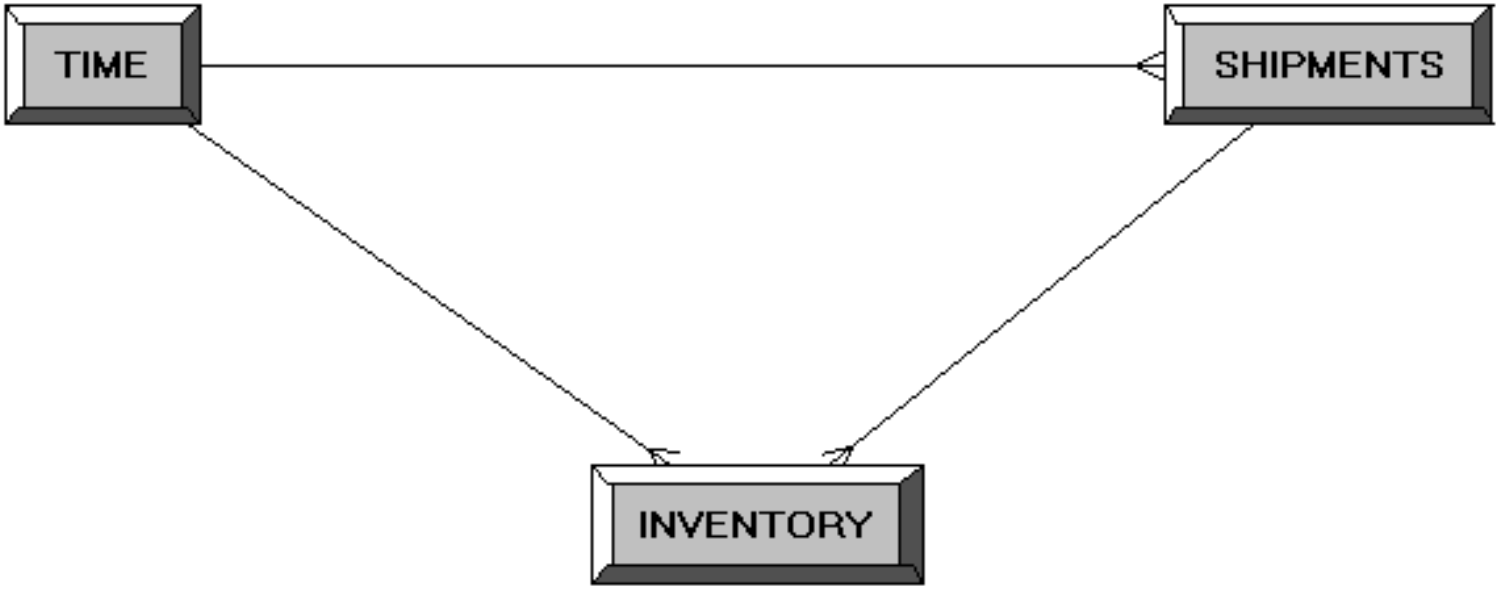
Download - Copy

Migration Considerations

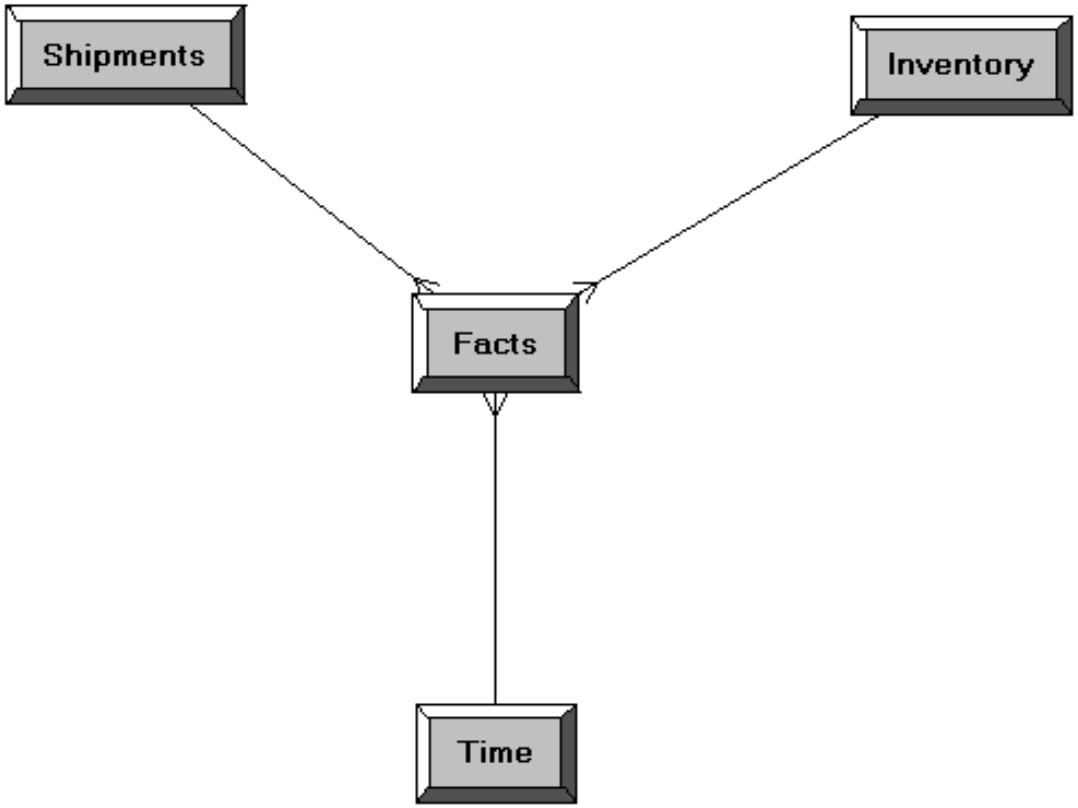
- What type of system do you wish to migrate?
  - Data warehouse
  - Custom built solution – 3NF
  - Oracle Applications reporting (e.g. BIS)
- What aspects of the system need to be migrated?
  - Metadata
  - Workbooks and worksheets

Goal : To introduce OBIEE as we talk about Discoverer

Discoverer – Circular Join



OBIEE – Logical Star



In Review - Applications

Description	DBI	Fusion Intelligence	Oracle BI Applications
Platform	DBI: Integrated reporting tool fully contained on the EBS platform, no separate tools (licensing) required.	DBI Licensing + OBI EE: Standardize enterprise wide on a single BI Platform	Application Intelligence + OBI EE: Standardize enterprise wide on a single BI Platform
Heterogeneity	EBS Only	EBS + External Data Sources	Support for data from any Source (Oracle, DB2, SQL, etc) Support for data from multiple ERP instances (SAP, EBS, PS, JDE)
Ad Hoc	None	Full Ad hoc capabilities	Full Ad hoc capabilities
Extensibility	Limited capabilities	Full capability to customize metrics and dashboards	Full capability to customize metrics, dashboards, and extend data model
Data Layer	Data resides in transactional DB	Data resides in transactional DB	Data resides in separate instance

Custom OBIEE Development

- Example of EBS as source of data
- Knowledge of different Schemas
- Naming conventions
- Security of Objects

EBS Object Names

	Object Name	Function of the object	E.g.
	_ALL	Underlying table with all the values	PO_DISTRIBUTIONS_ALL
	_B	Base of underlying table, same as _ALL	
	_TL	Language translation table with translation of descriptive fields in different languages	
	_VL	View based on translation table	OKE_K_Deliverables_VL
	_BASIC_V	View on top of the Basic table	
	_DFV	Descriptive Flex Field related view, it will have the defined values as Column names instead of generic attribute 1, ..2	
	_KFV	Key Flex Field views contain the concatenated fields as it would be displayed to the user. For e.g. A field may consist of Division, Department and Account fields and the KFV will have the concatenated values.	

EBS Naming Conventions

- All objects accessed by EBS application have synonym in APPS schema, e.g.OKE.OKE_K_LINES has synonym APPS.OKE_K_LINES
- EBS Forms fetch data from a “user friendly” view with name ending is _V or _VL (e.g. OKE_K_Deliverables_VL).
- Views have descriptive value as opposed to the numeric id’s fields stored in the base table making it “human-readable” for reports.
- Views also implement security and restrictions to the data in various forms such as restrict values by language, org_id etc
- These variables are set by EBS (session context) when the user accesses data via the EBS application.

Some EBS Schema Names

AP - Oracle Payables
AR - Oracle Receivables
GL - Oracle General Ledger
INV - Oracle Inventory
MRP - Oracle Master Scheduling/MRP
PA - Oracle Projects
PAY - Oracle Payroll
PER - Oracle Human Resources
PJM - Oracle Project Manufacturing
WIP - Oracle Work in Process
WMS - Oracle Warehouse Management System
WSH - Oracle Shipping
WSM - Shop Floor Management

Some Tips and Tricks

- Take help from EBS users
  - Help >Record History (table, views)
  - Help > Examine (column)
  - Involve the users to develop MD50, MD70
- Sometimes users can point to an Oracle Report that has similar data source
  - The SQL from Oracle Report can help to jumpstart
  - Create views that OBIEE can use

Custom OBIEE - Summary

- Directly from Source System (e.g. EBS)
  - RICE development like skills needed
  - “Load” on the operation system
  - Good for stop gap arrangement, give users the Top-Ten reports to go-live
  - E.g. Gallup case study of Project Analytics
- From custom Data Warehouse
  - Big upfront effort / investment
  - Custom ETL, DW design etc

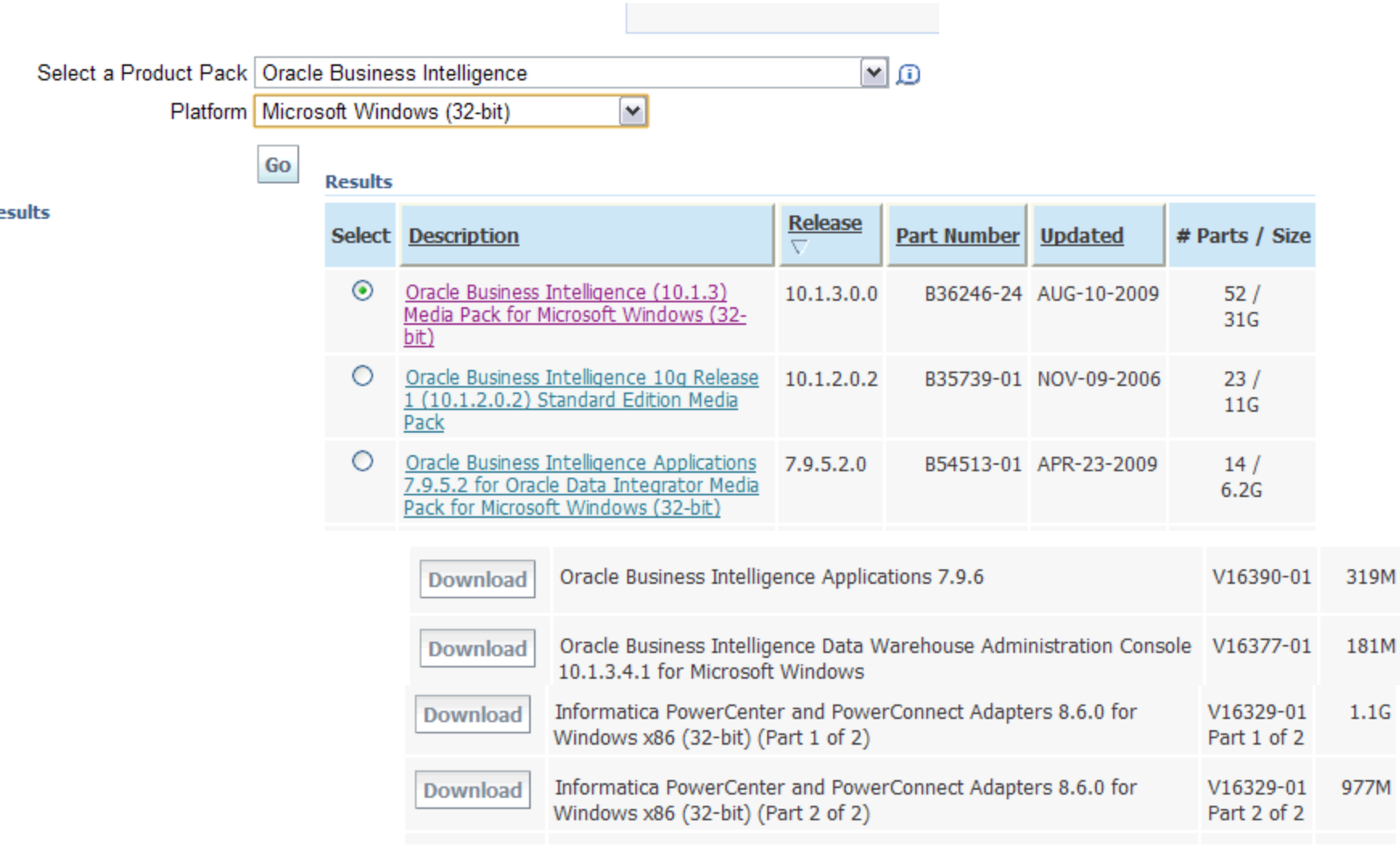
Getting Started OBIA

- Lookup what solutions exist EBS v.s Apps v.s. versions
- What to download – edelivery (http://edelivery.oracle.com)
- What to install - BI server and names of Analytic Apps
- Informatica (changes in Informatica)
- DAC
- Configuring Dashboard
- Domain Value files

Table 8. Supported Source Systems for Oracle Business Intelligence Applications 7.9.6

Vendor and Product	Version	Oracle Business Intelligence Application	Associated Source Application or Module
Oracle Applications	11.5.10, R12.0	Oracle Procurement and Spend Analytics Fusion Edition[3]	Oracle Purchasing/ Procurement Oracle iProcurement Oracle Financials (Payables) Oracle iExpenses
		Oracle Financial Analytics Fusion Edition	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[4]	Oracle Project Costing Oracle Project Billing
		Oracle Service Analytics Fusion Edition	Oracle Teleservice[5] Oracle iSupport[5]
Oracle's PeopleSoft Enterprise	8.9, 9.0	Oracle Financial Analytics Fusion Edition	Oracle's PeopleSoft Financials (GL, Accounts Payable, Accounts

Software Components



Select a Product Pack: Oracle Business Intelligence

Platform: Microsoft Windows (32-bit)

Go

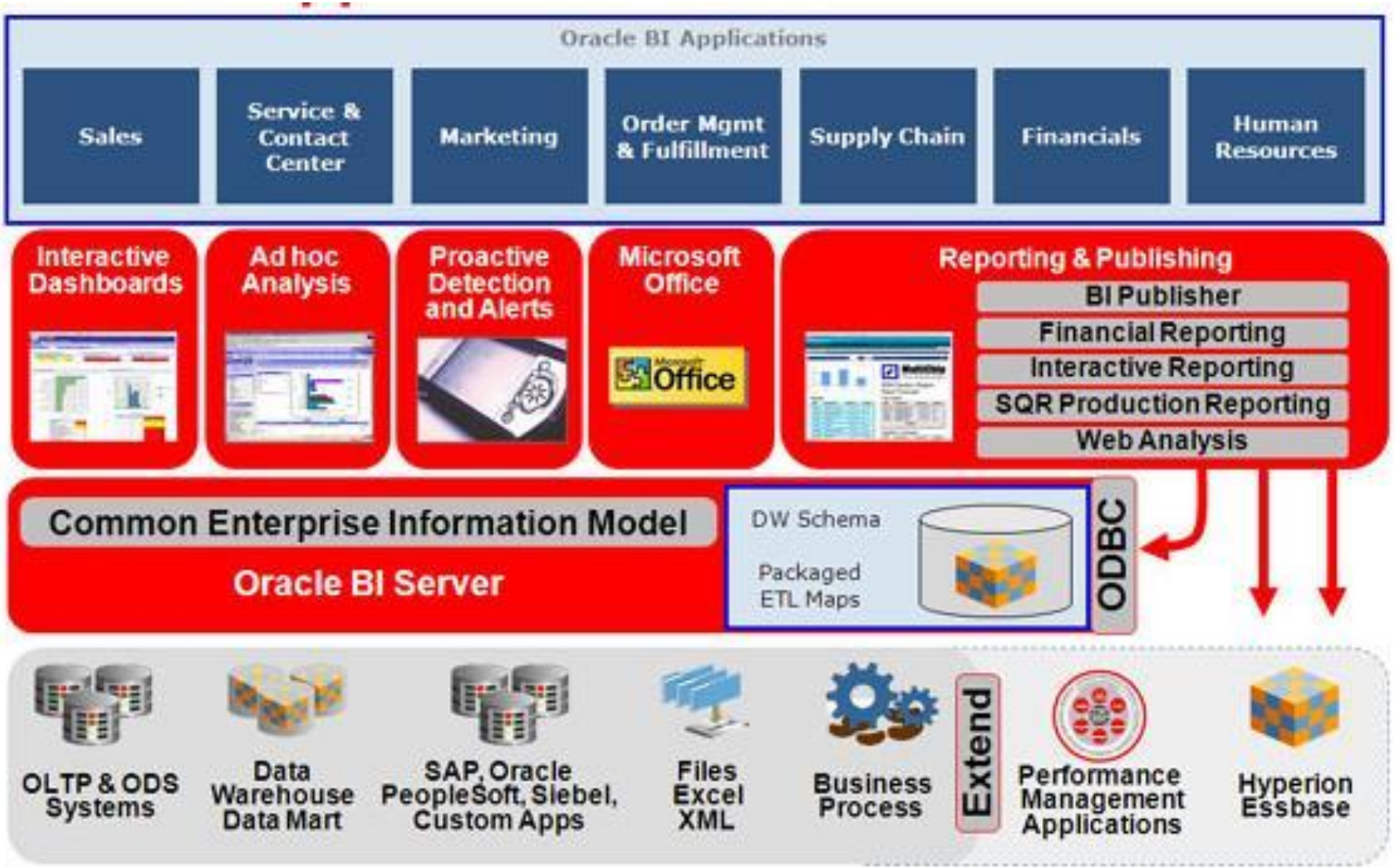
esults

Results

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

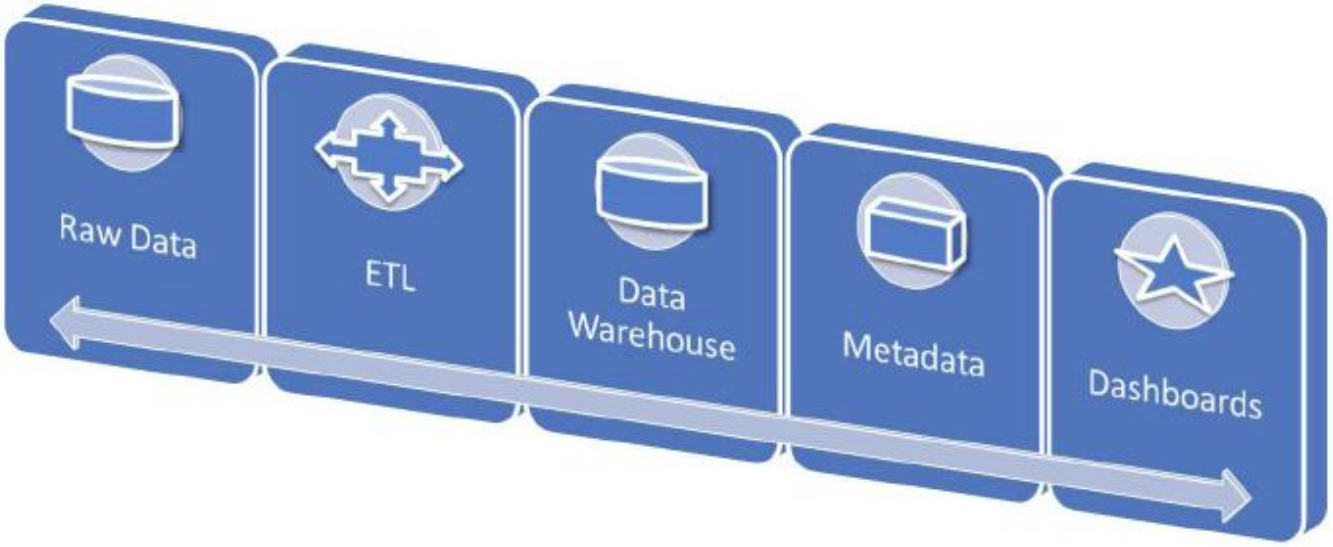
Download	Oracle Business Intelligence Applications 7.9.6	V16390-01	319M
Download	Oracle Business Intelligence Data Warehouse Administration Console 10.1.3.4.1 for Microsoft Windows	V16377-01	181M
Download	Informatica PowerCenter and PowerConnect Adapters 8.6.0 for Windows x86 (32-bit) (Part 1 of 2)	V16329-01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

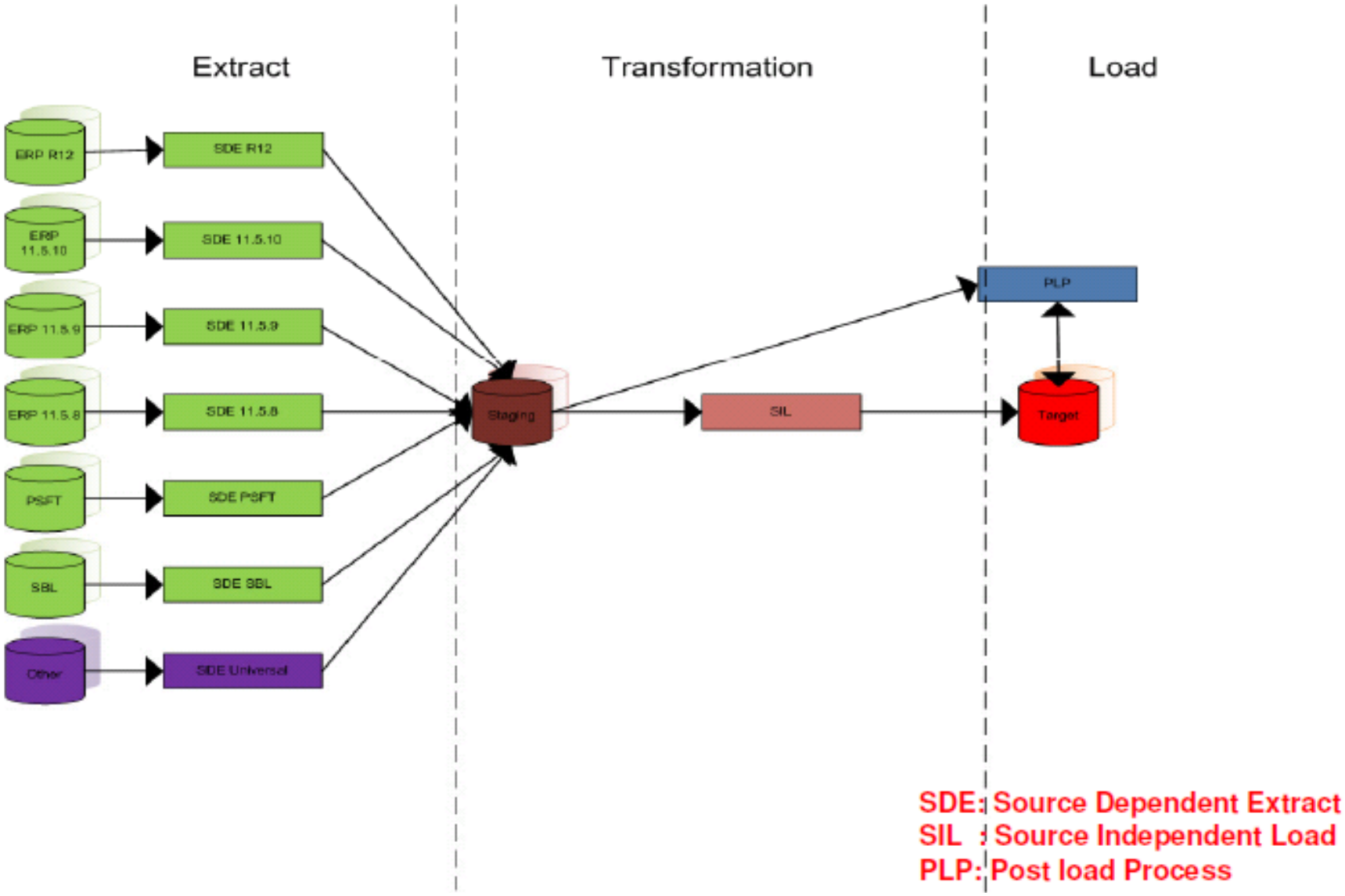


High Level Data Flow

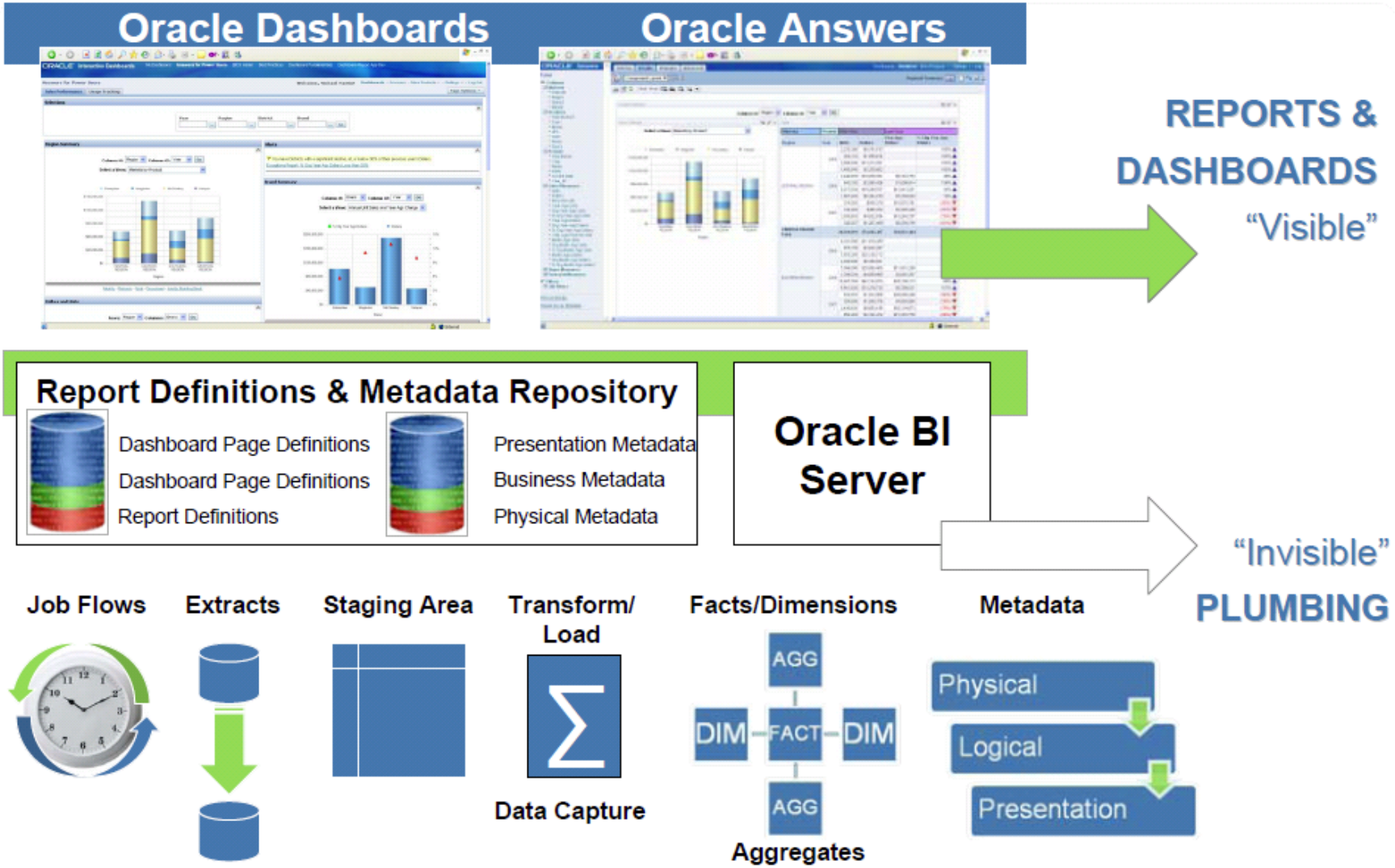
- Source – eBS (Raw Data)
- ETL – Extraction Transform and Load (Informatica – PowerCenter or ODI)
- OBAW - Business Analytics Warehouse
- OBIEE Metadata
- OBIEE Content – Reports and Dashboards



Modular Design of ETL



OBIEE – From Surface to Plumbing

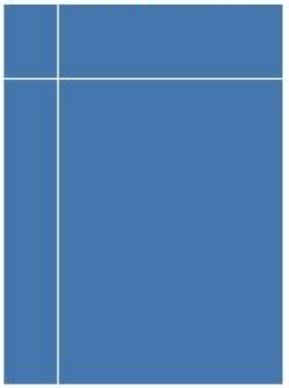


What's Below the Surface?

Job Flows

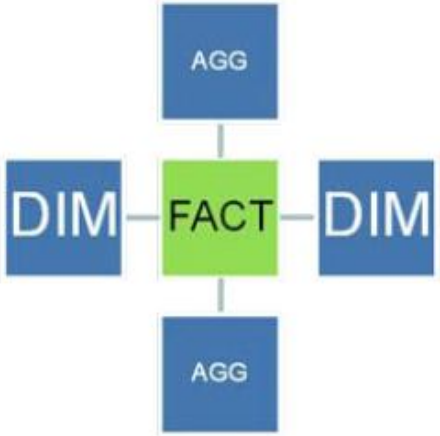
Extracts

Staging Area

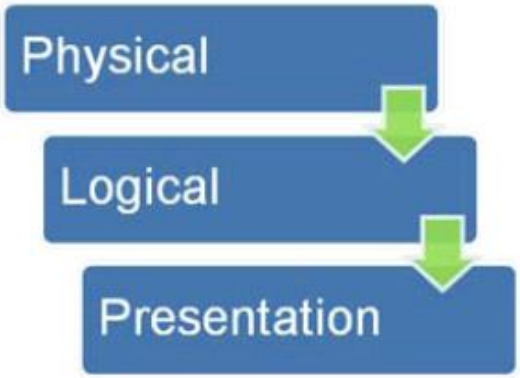


Capture/Transform/Load

Facts/Dimensions/Aggregates



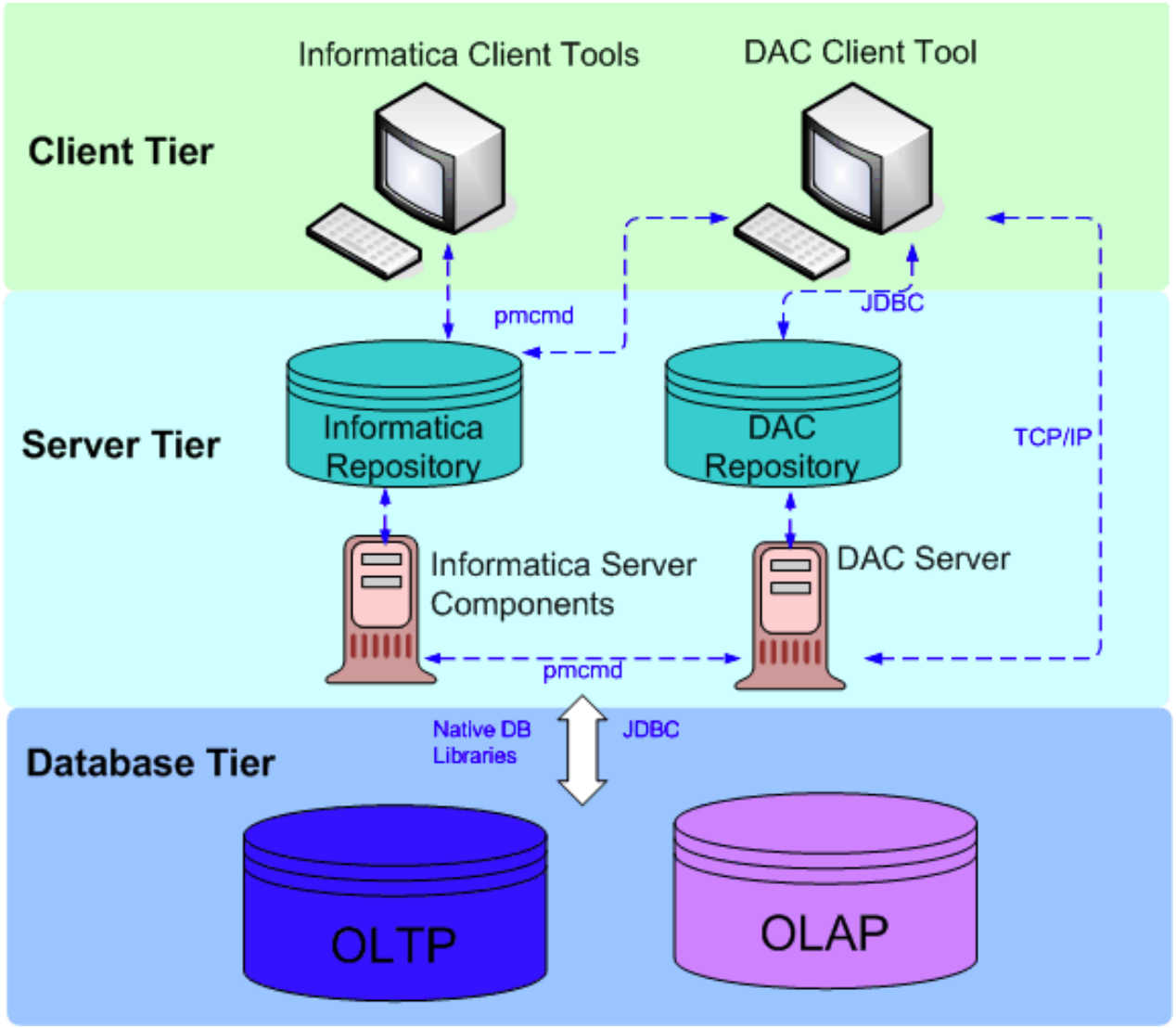
Metadata



Installation / Post Installation Configuration

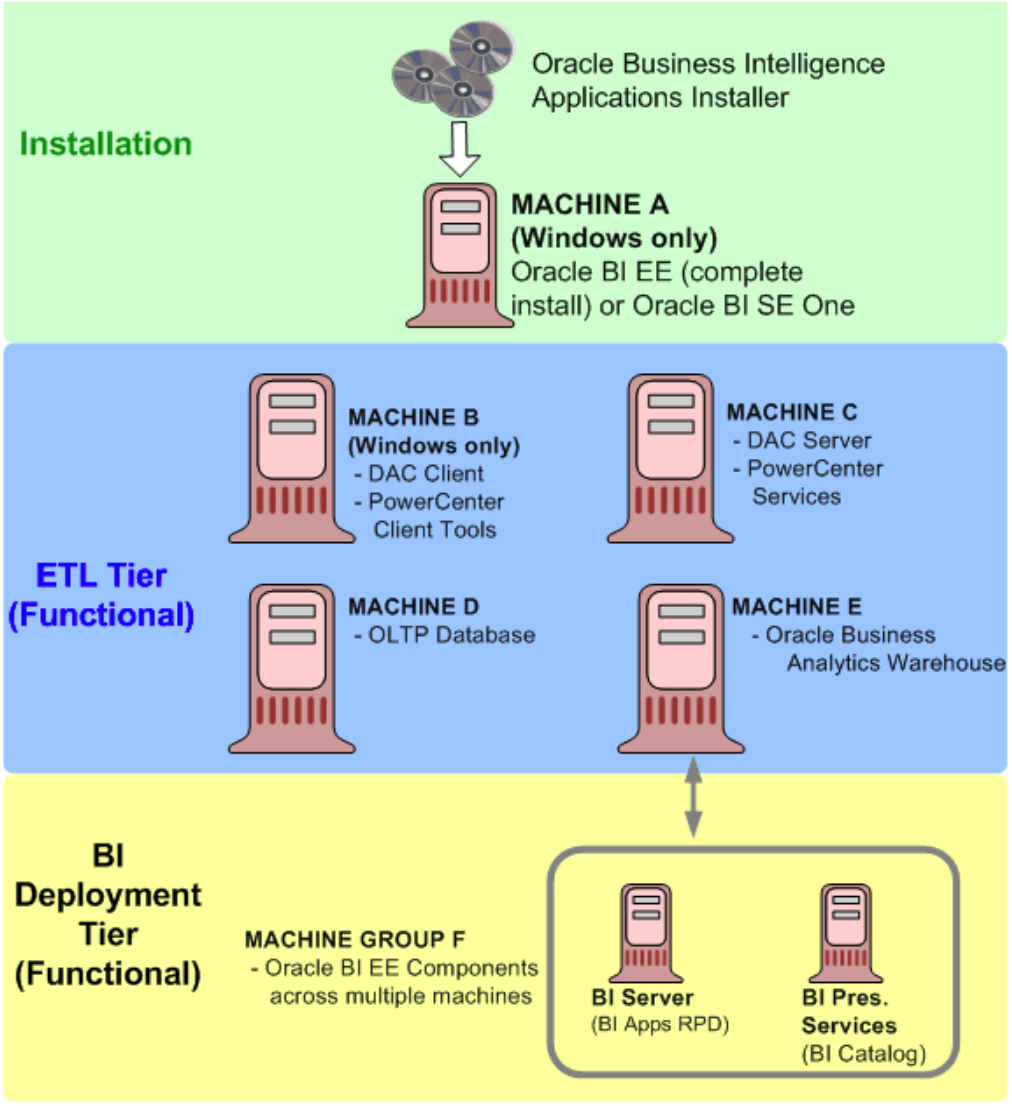
- Install OBIEE
- Install OBIA (e.g. 7.9.6)
- Create Target Database (e.g. 10.2.x or 11g)
- Install Informatica (e.g. 8.6, SP4)
  - Client
  - Server (Server / Repository)
  - Integration Service and Repository Service
- Install DAC (e.g. 10g)
  - Install DAC client
  - Install DAC Server
- Restore Informatica Repository
- Restore DAC Repository
- Register Informatica Repository services with DAC
- Connect DAC to DW
- Create Custom Container in Informatica for ETL loads

Supporting Infrastructure – Informatica and DAC

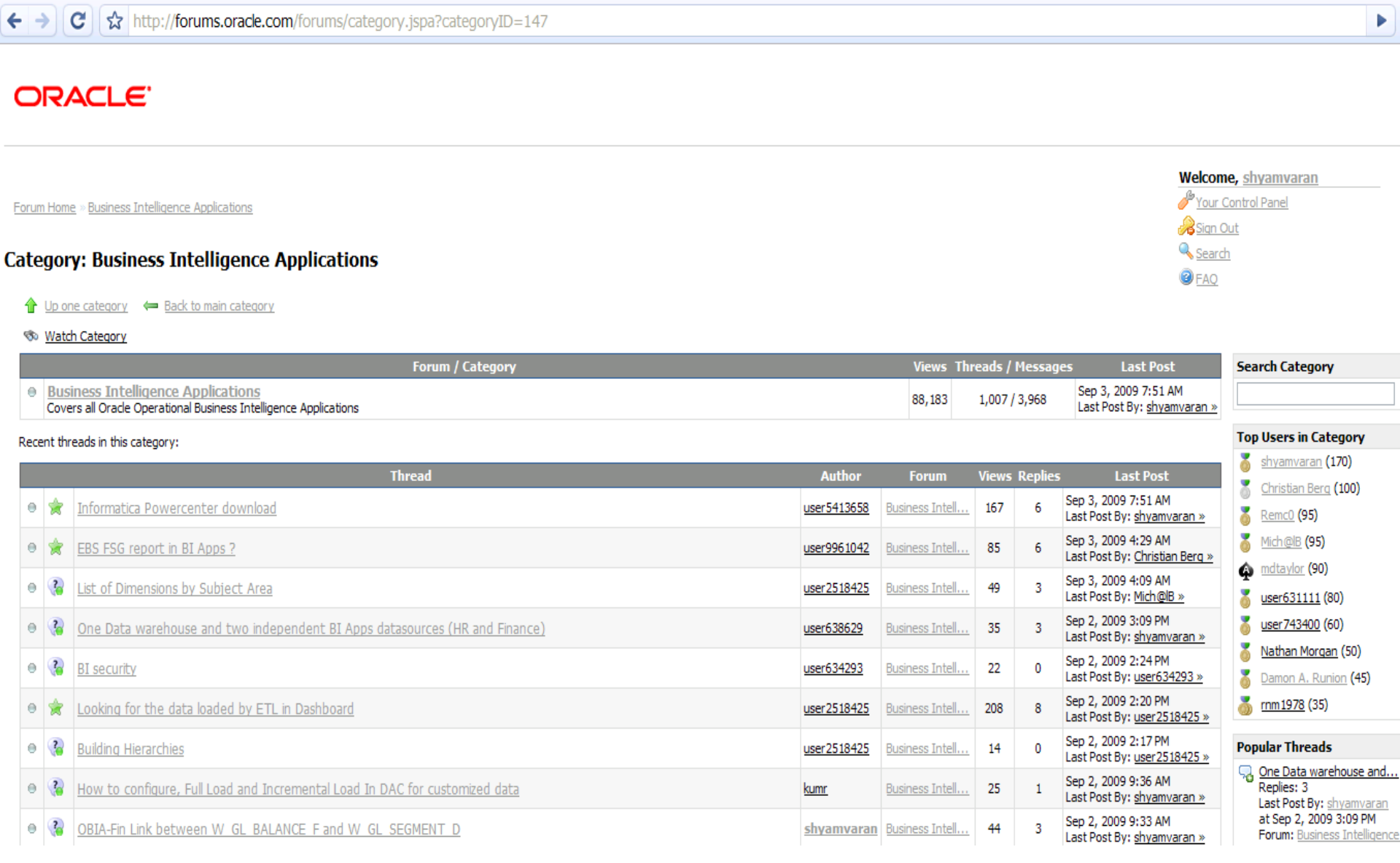


Install Process

- 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



OTN BI Apps Forum



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

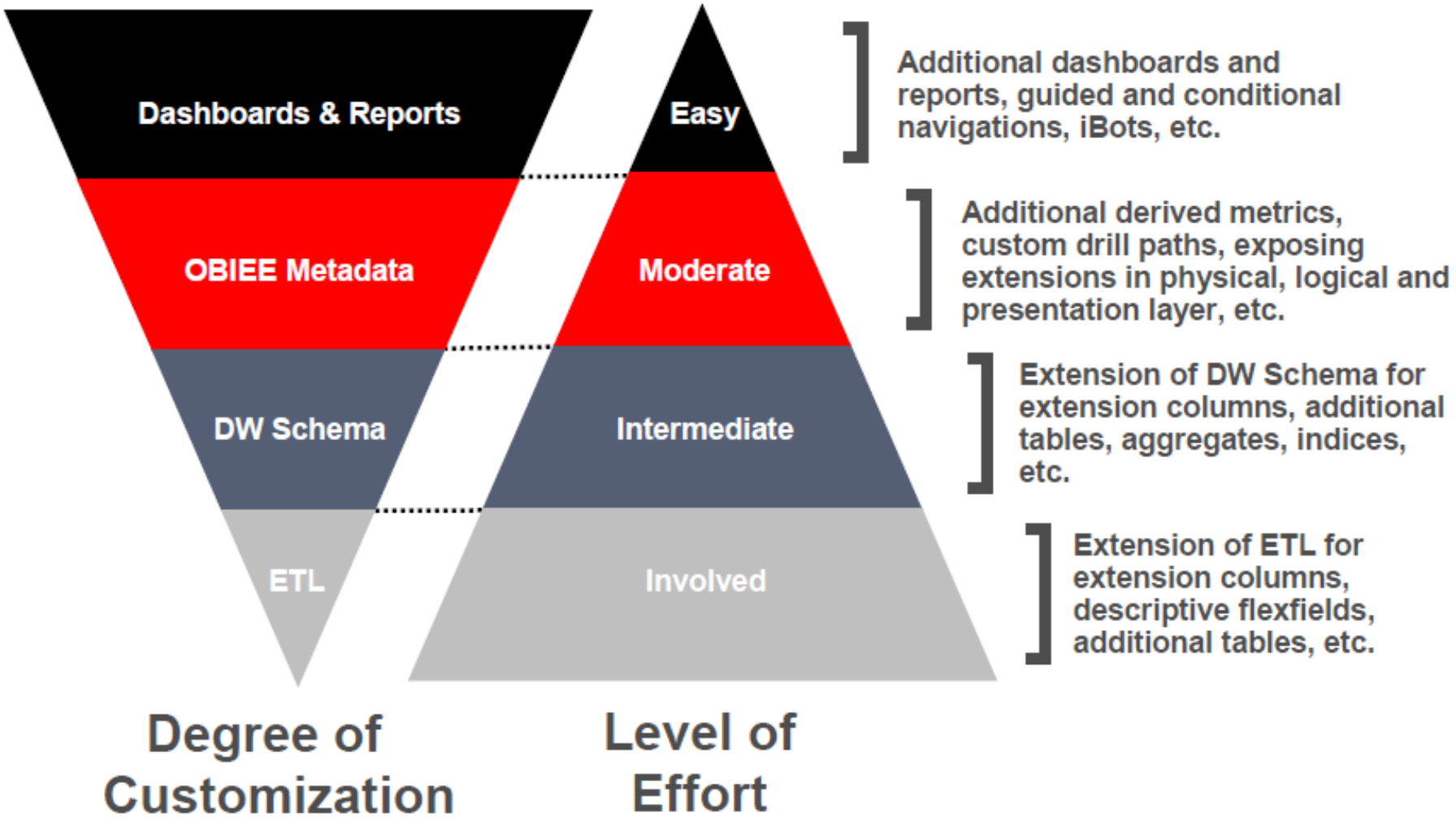
Metrics in Logical Layer

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



Financial Analytics (7.9.x)

• No. of dashboards	5
• No. of dashboard pages	34
• No. of reports	225
• No. of metrics	385

- General Ledger
  - Overview
  - Balance Sheet
  - Cash Flow
  - Budget vs. Actual
  - Asset Usage
  - Liquidity
  - Financial Structure
  - GL Balance
- Profitability
  - Overview
  - P&L
  - Margins
  - Revenue
  - Products
  - Customers
- ~~US Federal Financial Performance~~
  - ~~Budget Summary~~
  - ~~Budget Details~~
  - ~~Budget Spending~~
  - ~~Payables~~

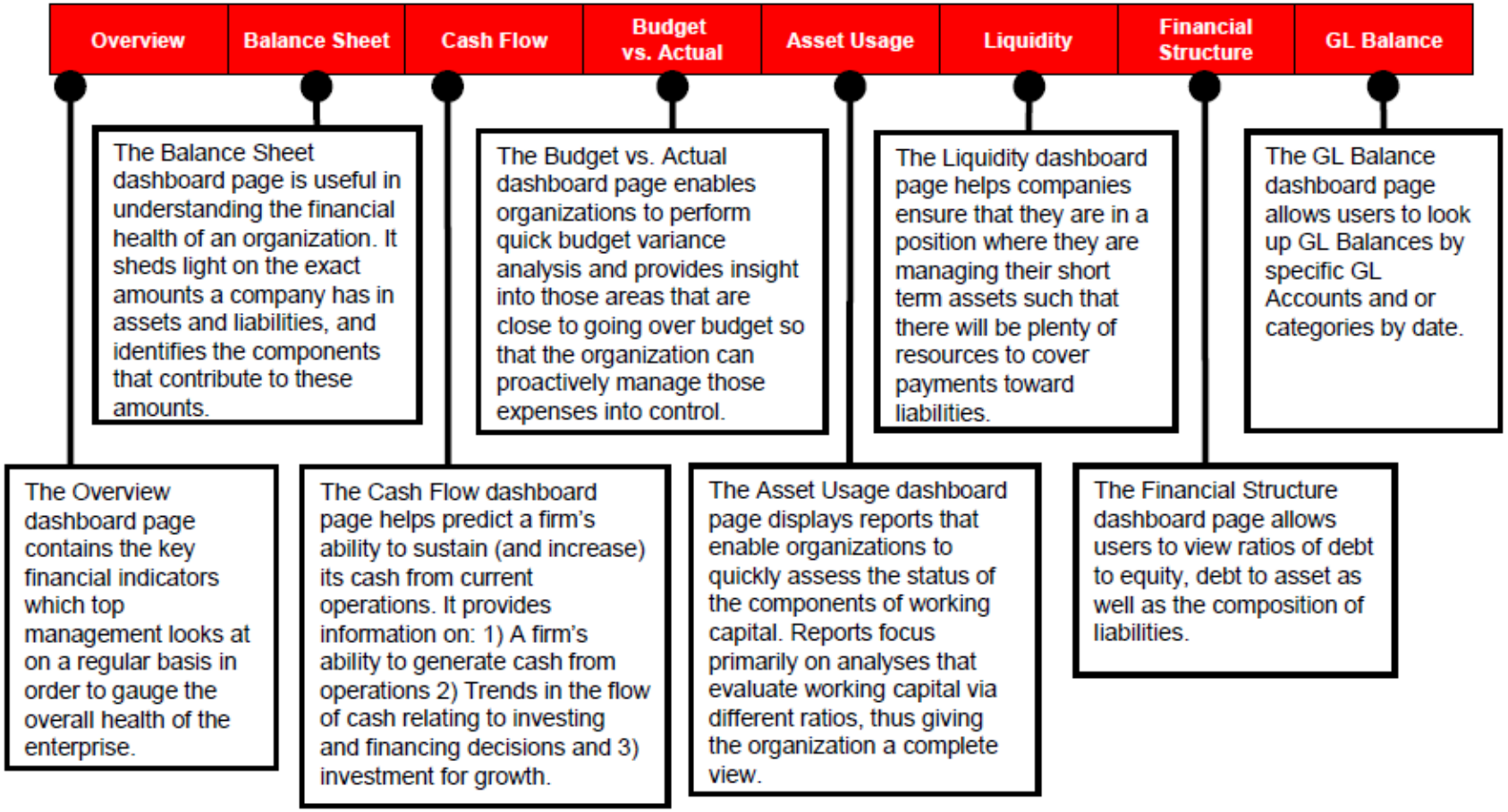
- Receivables
  - Overview
  - AR Balance
  - Payments Due
  - Effectiveness
  - Payment Performance
  - Customer Report
  - Invoice Details
  - All AR Transactions
- Payables
  - Overview
  - AP Balance
  - Payments Due
  - Effectiveness
  - Payment Performance
  - Supplier Report
  - Invoice Details
  - All AP Transactions

Target Roles for Financial Analytics

General Ledger	Profitability	Receivables	Payables	U.S. Federal Financial
Primary: • CFO • VP of Finance • Controller • Accounting Manager • Analyst	Primary: • CFO • VP of Finance • Controller • Accounting Manager • Analyst	Primary: • CFO • VP / Director of Credit and Collections • Collections Agent	Primary: • CFO • VP / Director of Accounts Payable • Payables Analyst	Primary: • CFO • Federal Budget Manager • Federal Budget Analyst • AP/AR Manager
Secondary: • Cost Center Owner • General Manager • Budget Owner	Secondary: • Cost Center Owner • General Manager • Budget Owner	Secondary: • Sales Professionals • Sales Operations	Secondary: • Inventory Manager • Procurement Agent	Secondary: • General Manager • Budget Owner

General Ledgers Dashboard

The General Ledger Dashboards have been designed to provide insight into key financial areas of performance, including balance sheet, cash flow, expenses, budget vs. actual, working capital, liquidity.



Financial Metrics (KPI's)

Example Financial Analytics Metrics

Receivables

AR Balance
- DSO
- Closing Group Amt
- Credit Limit Used %
- Total AR Overdue Amt

AR Aging
- AR Aging 1-30 Amt
- AR Due 1-30 Amt
- AR Overdue 1-30 Amt

Payment Performance
- AR Payment Days
- AR Weighted Days
- Times Paid Before Due

AR Transactions
- AR Avg Invoice Amt
- AR Credit Memo Amt

Payables

AP Balance
- DPO
- Closing Group Amt
- Total AP Overdue Amt
- Overdue Amt to Total %

AP Aging
- AP Aging 1-30 Amt
- AP Due 1-30 Amt
- AP Overdue 1-30 Amt

Payment Performance
- AP Payment Days
- AP Weighted Days
- Times Paid Before Due

AP Transactions
- AP Avg Invoice Amt
- AP Avg Payment Amt

General Ledger

Balance Sheet
- Cash
- Accounts Receivable
- Debt to Equity Ratio
- Current Ratio

Asset Turnover
- AR Turnover
- AP Turnover
- Inventory Turnover
- Cash Cycle
- Fixed Assets Turnover

Cash Flow
- Operating Cash Flow
- Investing Cash Flow
- Financing Cash Flow
- Net Cash Flow

Profitability

Profitability Returns
- Return on Equity
- Return on Assets
- Return on Capital

Margins
- Gross Margin %
- Operating Margin %
- EBT Margin %
- Net Income Margin %

Product Profitability
- Revenue
- Product Gross Profit
- Product Operating Profit

Customer Profitability
- Revenue
- Customer Gross Margin

Sample Pre-Built Dashboards

Financial Controller
- Balance Sheet
- Cash Flow
- Budget Vs Actual
- P&L

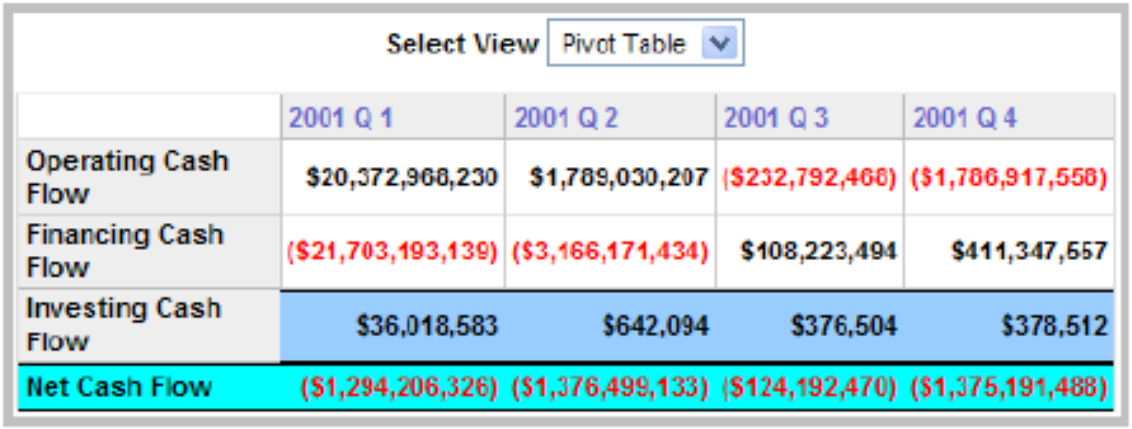
Receivables Manager
- AR Balance
- Payments Due
- Effectiveness
- Invoice Details

Payables Manager
- AP Balance
- Payments Due
- Effectiveness
- Invoice Details

Department Manager
- Budget Vs Actual
- P&L
- Product Profitability
- Customer Profitability

GL Reports – Cash Flow Summary

- **Purpose:**
  - Displays an overview of the components of cash flow over time
- **User Focus:**
  - CFO, VP of Finance, Controllers, Accounting Managers, Analysts
- **Location:**
  - Dashboard – General Ledger
  - Page – Overview
- **Source:**
  - Financials - GL Cash Flow Subject Area



	2001 Q 1	2001 Q 2	2001 Q 3	2001 Q 4
Operating Cash Flow	$20,372,968,230	$1,789,030,207	($232,792,466)	($1,786,917,558)
Financing Cash Flow	($21,703,193,139)	($3,166,171,434)	$108,223,494	$411,347,557
Investing Cash Flow	$36,018,583	$642,094	$376,504	$378,512
Net Cash Flow	($1,294,206,326)	($1,376,499,133)	($124,192,470)	($1,375,191,488)

Configuring Financial Analytics Groups (Domain Value Files)

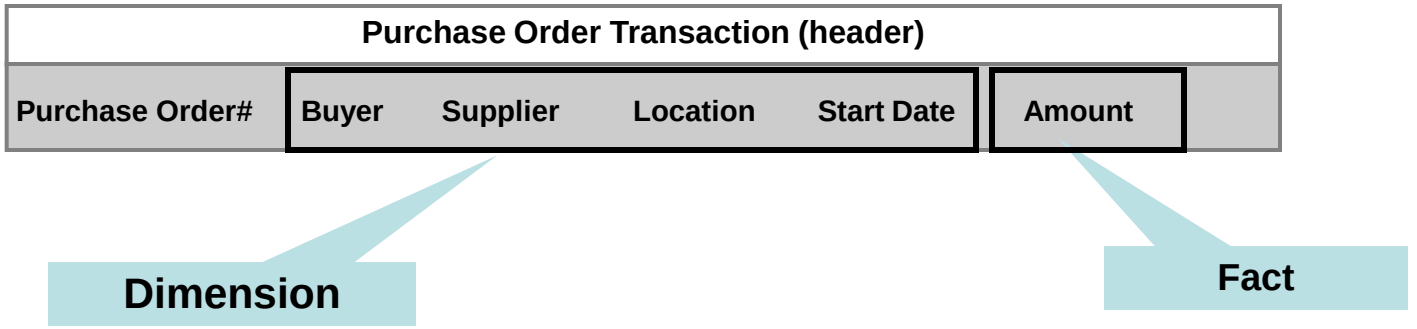
- Why knowledge of Oracle EBS (or the source system) is important?
- Reports are as good as its configuration
- How to configure Financial Reports using the Chart of Account Grouping?

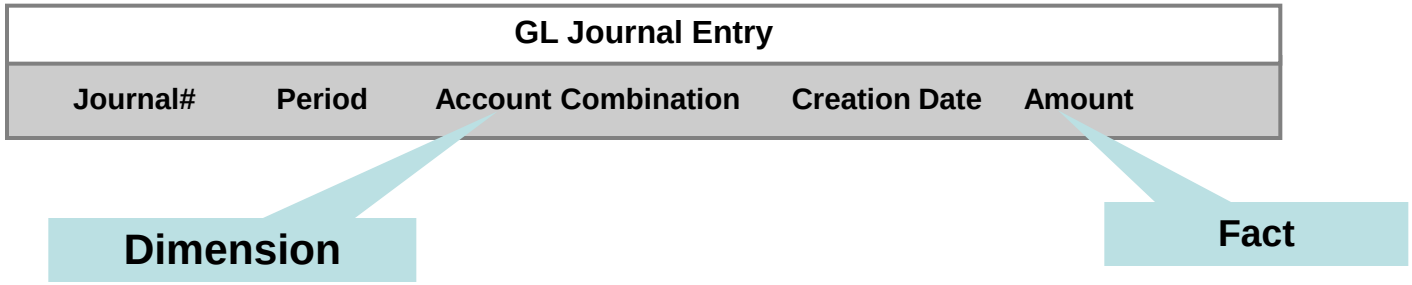
Source: Mohit S, Oracle

Group Account Number Configuration

- EBS GL doesn’t contain business attributes that represent a real world entity such as Supplier, Customer, and Employee etc.
- This information generally resides in the sub ledgers. For example, Supplier dimension in Accounts Payables (AP) and Customer dimension in Account Receivables (AR).
- In Oracle GL, the transactions are tracked at an account level and used more for book keeping purposes.
- To facilitate reporting on the GL TX’s in DW environment, Fina Apps uses Group Account Number to categorize the accounting TX’s.

Group Account Number Configuration





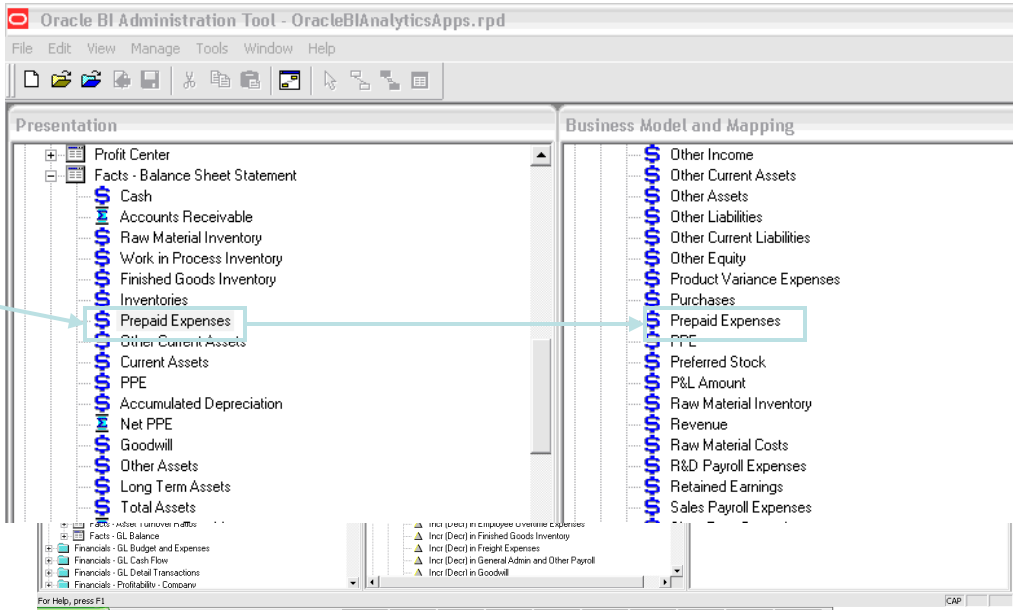
Group Account Number Configuration

Out of the box Balance Sheet report

Monthly Balance Sheet

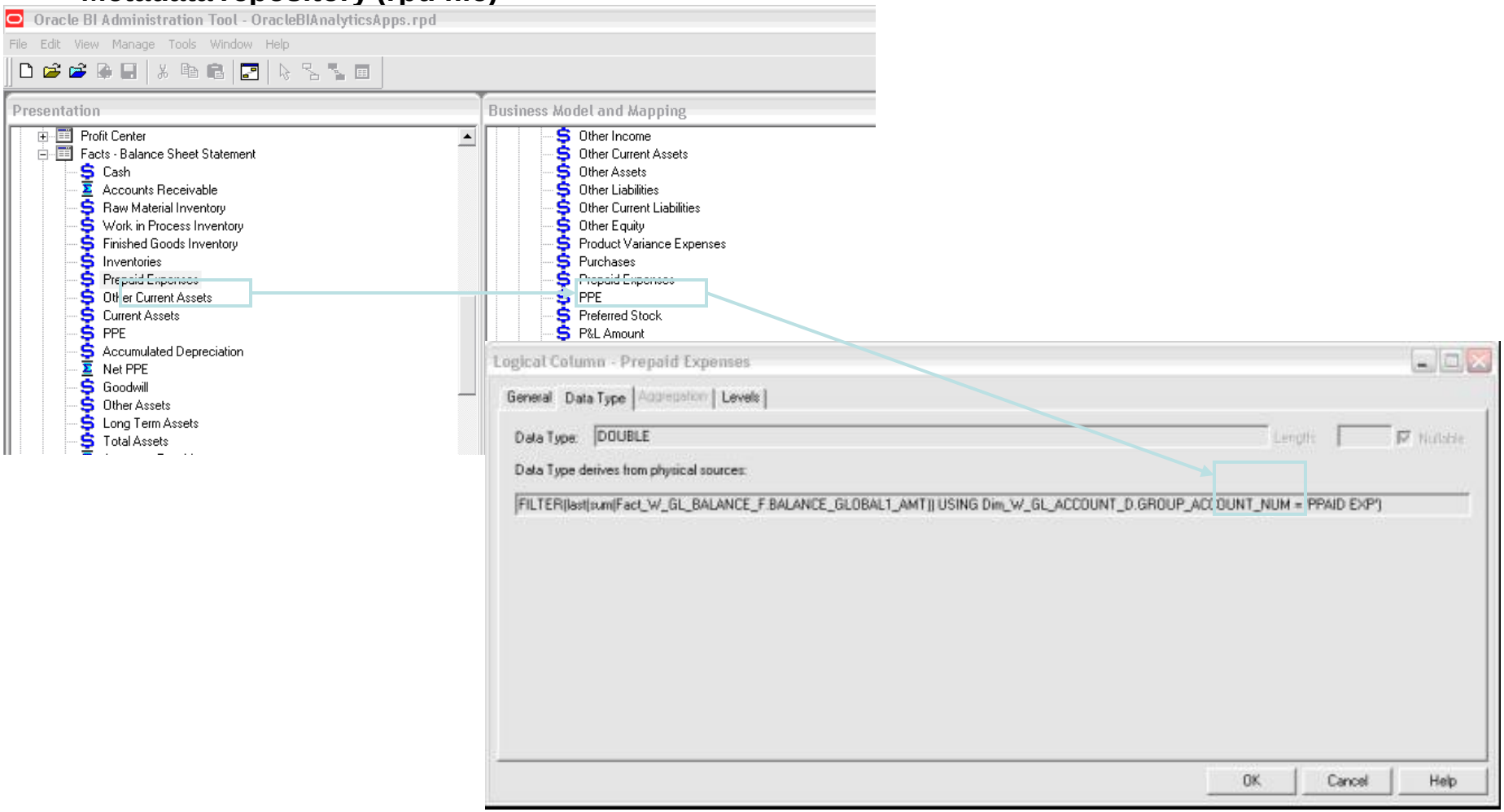
	2005 / 07	2005 / 08	2005 / 09
Cash	$2,516,851,372	$2,516,648,175	$2,516,648,325
Accounts Receivable	$3,099,478,936	$2,756,469,938	$3,172,745,234
Inventories	$204,383,845	$204,383,845	$204,383,845
Prepaid Expenses	$6,418,553	$6,418,553	$6,418,553
Other Current Assets	$1,866,680	$1,866,680	$1,866,680
Current Assets	**$2,871,999,300**	**$2,915,657,603**	**$3,250,566,751**
Net PPE	$45,206,743	$45,206,743	$45,206,743
Goodwill	$4,719,952	$4,719,952	$4,719,952
Other Assets	$76,850	$76,850	$76,850
Long Term Assets	**$11,843,974**	**$11,843,974**	**$11,843,974**
Total Assets	**$2,883,843,274**	**$2,927,501,577**	**$3,270,510,724**
Accounts Payable	($3,276,930,709)	($779,579,526)	$2,626,996,604
Accrued Liabilities	($18,690)	$0	$0
Short Term Borrowing	$6,657,360	$6,683,549	$6,683,549
Other Current Liabilities	($919,958)	$87,204	$87,204
Current Liabilities	**($3,271,211,996)**	**($772,808,774)**	**$2,633,767,356**
Long Term Debt	$2,096	$5,053	$5,053
Other Liabilities	$63,627,720	$63,627,720	$63,627,720
Long Term Liabilities	**$63,629,816**	**$63,632,773**	**$63,632,773**
Preferred Stock	($15,111)	$0	$0
Common Stock	$175,846,389	$175,846,389	$175,846,389
Retained Earnings	$19,800,759	$19,800,759	$19,800,759
Other Equity	($17,892)	$0	$0
Total Shareholders Funds	**($33,003)**	**$0**	**$0**
Total Liabilities	**($3,207,582,180)**	**($709,176,001)**	**$2,697,400,129**

Metadata repository (rpd file)



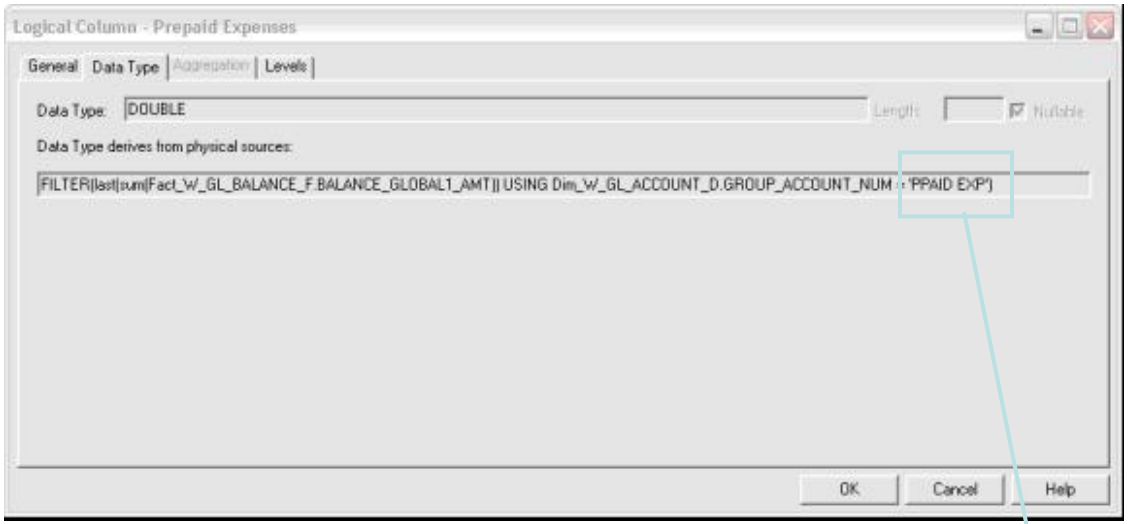
Group Account Number Configuration

Metadata repository (rpd file)

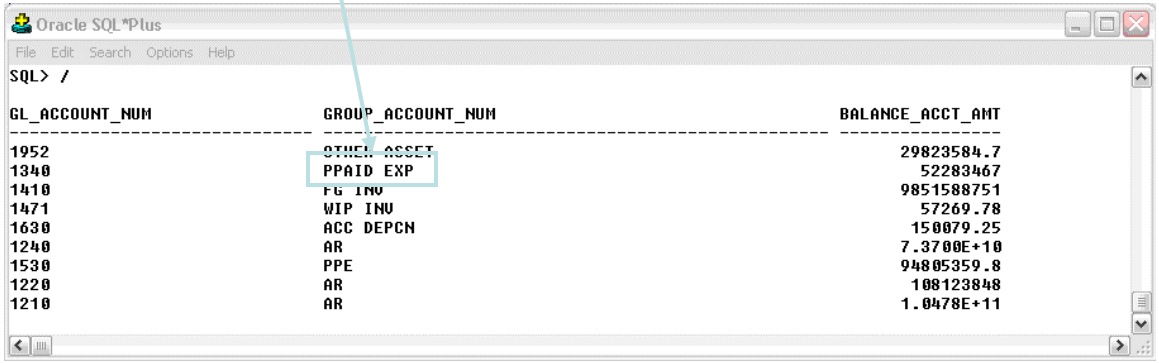


Group Account Number Configuration

Metadata repository (rpd file)



W_GL_BALANCE_F table



Group Account Number Configuration

W_GL_BALANCE_F table

Oracle SQL*Plus

File Edit Search Options Help

```
SQL> /

GL_ACCOUNT_NUM            GROUP_ACCOUNT_NUM
------------------------- ------------------------------
1952                      OTHER ASSET
1340                      PPAID EXP
1410                      FG INV
1471                      WIP INV
1630                      ACC DEPCN
1240                      AR
1530                      PPE
1220                      AR
1210                      AR
```

file_group_acct_codes_ora.csv

Microsoft Excel - file_group_acct_codes_ora.csv

File Edit View Insert Format Tools Data Window Help

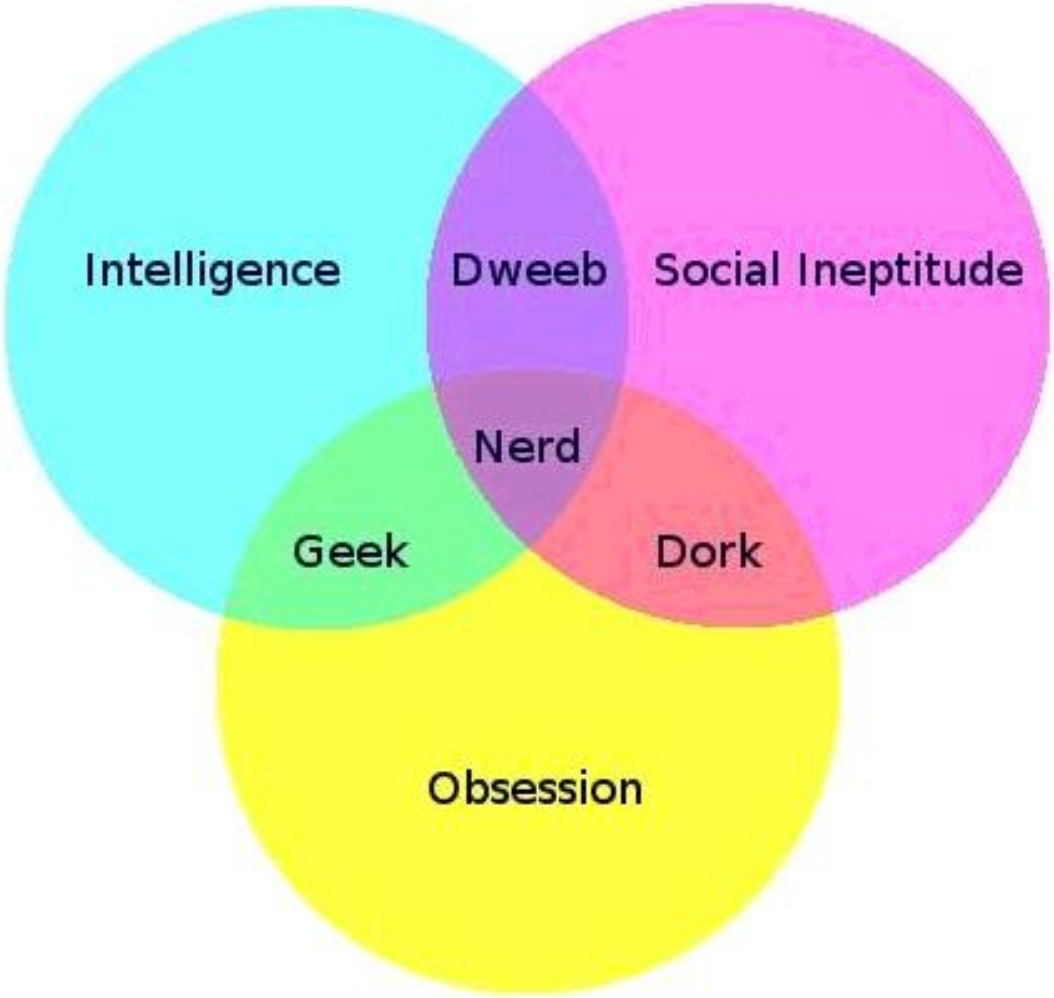
A6 = 101

	A	B	C	D
1	Description			
2	Examples			
3	Last Updated By			
4	Last Updated On			
5	CHART OF ACCOUN	FROM ACCT	TO ACCT	GROUP_ACCT_NUM
75	101	7820	7820	INT EXP
76	50194	1110	1110	CASH
77	50194	1210	1210	AR
78	50194	1220	1220	AR
79	50194	1240	1240	AR
80	50194	1280	1280	OTHER CA
81	50194	1340	1340	PPAID EXP
82	50194	1410	1410	FG INV
83	50194	1471	1471	WIP INV
84	50194	1530	1530	PPE
85	50194	1630	1630	ACC DEPCN
86	50194	1770	1770	GOODWILL
87	50194	1950	1950	SLS PAYROLL
88	50194	1951	1951	MKTG PAYROLL
89	50194	1952	1952	OTHER ASSET
90	50194	1953	1953	SLS PAYROLL
91	50194	1954	1954	R&D PAYROLL
92	50194	1955	1955	GEN PAYROLL
93	50194	1956	1956	EMP BENFT
94	50194	1957	1957	EMP SUPP
95	50194	1958	1958	CONT EXP
96	50194	1959	1959	OTHER R&D EXP
97	50194	1960	1960	CONT EXP
98	50194	220220	220220	TAX
99	50194	2210	2210	AP
100	50194	2370	2370	MKGT PAYROLL
101	50194	2700	2700	OTHER LIAB
102	50194	2990	2990	ST BORR
103	50194	2991	2991	LT DEBT
104	50194	2992	2992	CASH
105	50194	2993	2993	PREF STOCK
106	50194	2994	2994	ACC LIAB

file_group_acct_codes_ora

Ready

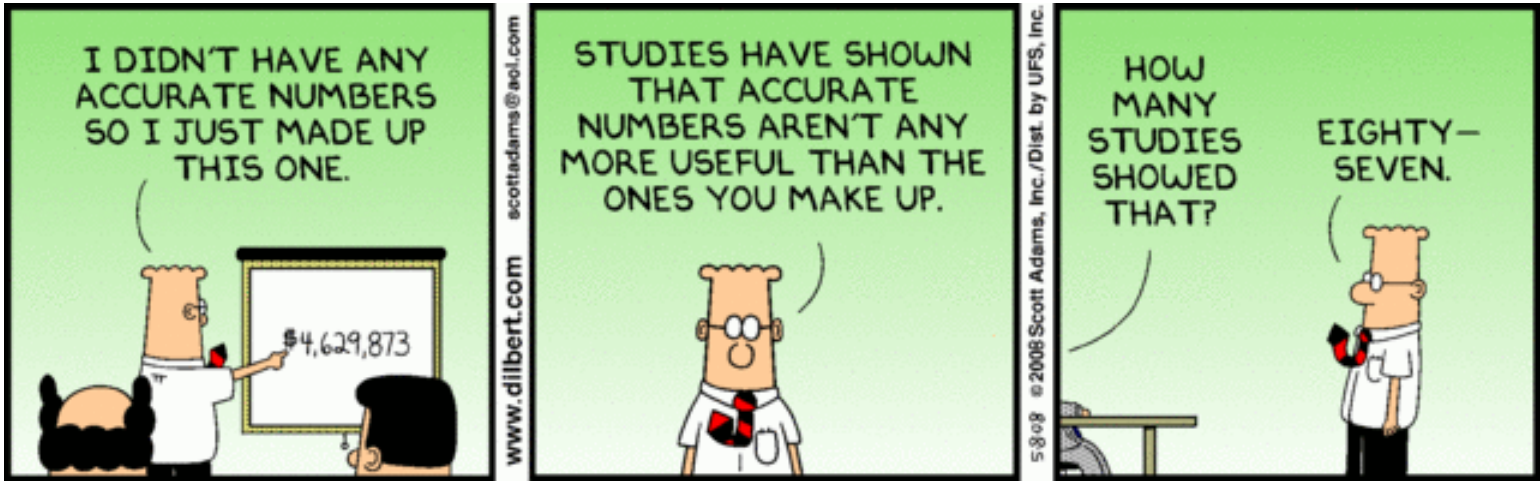
Summing up Account Hierarchy



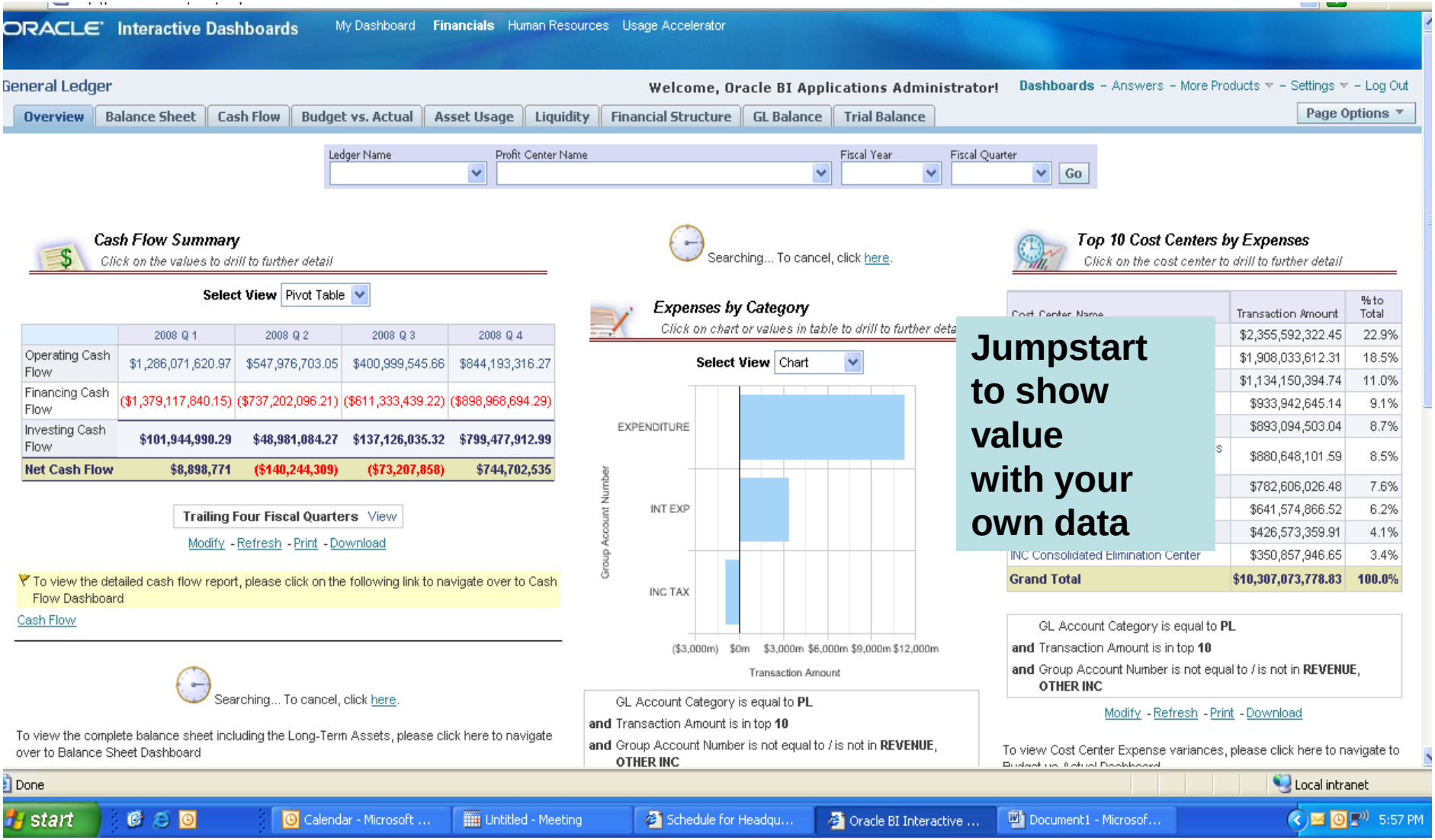
The nerd/geek/dork/dweeb population hierarchy

Managing the OBIEE Project

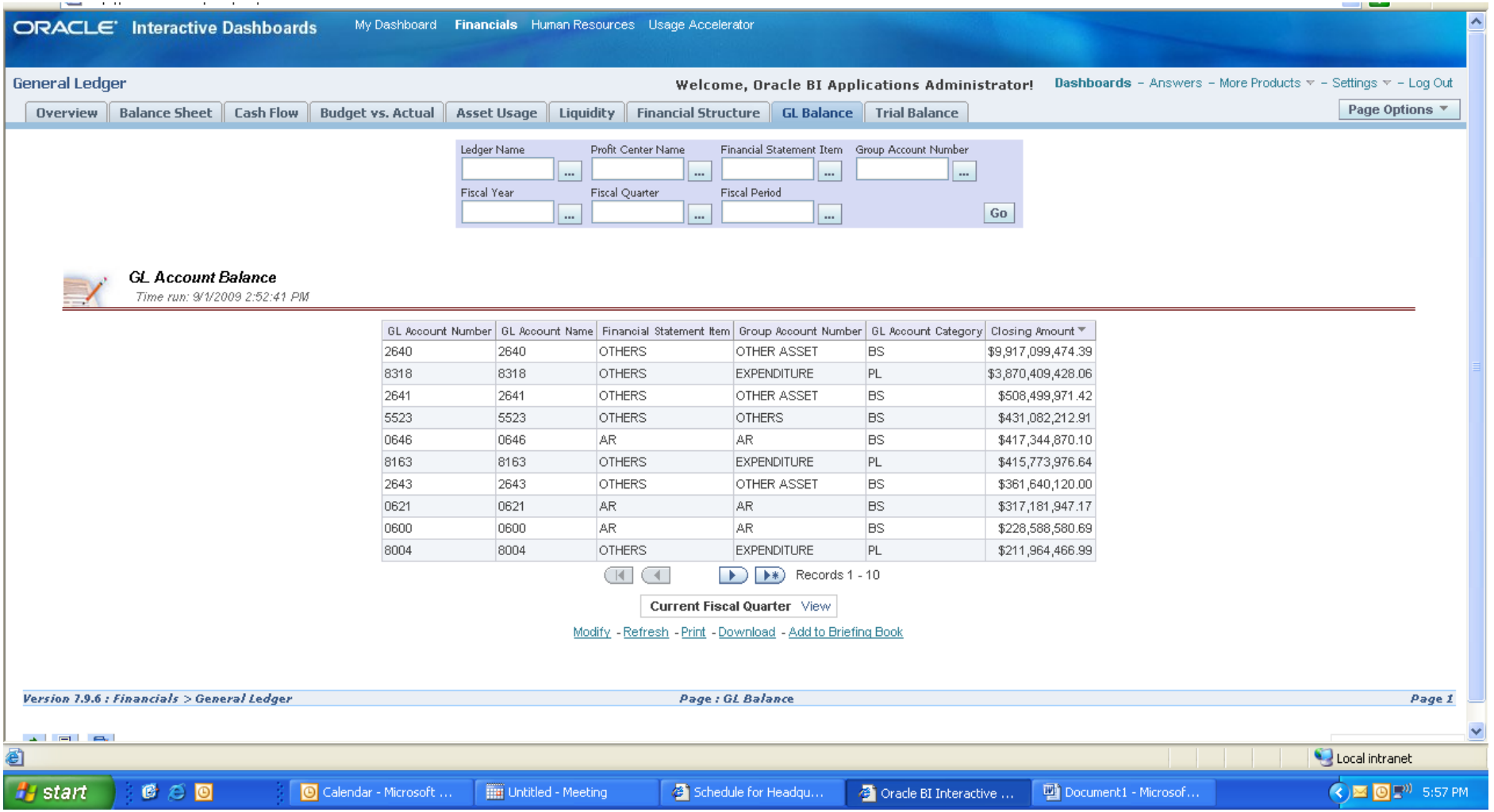
- Quick Dev / Test environment install for **OBIEE Socialization**
- Show customer's data and invite users to start playing with it to **Create a Dashboard Envy**
- Fit Gap Analysis
- Iterate and fine tune the system



General Ledger - Overview



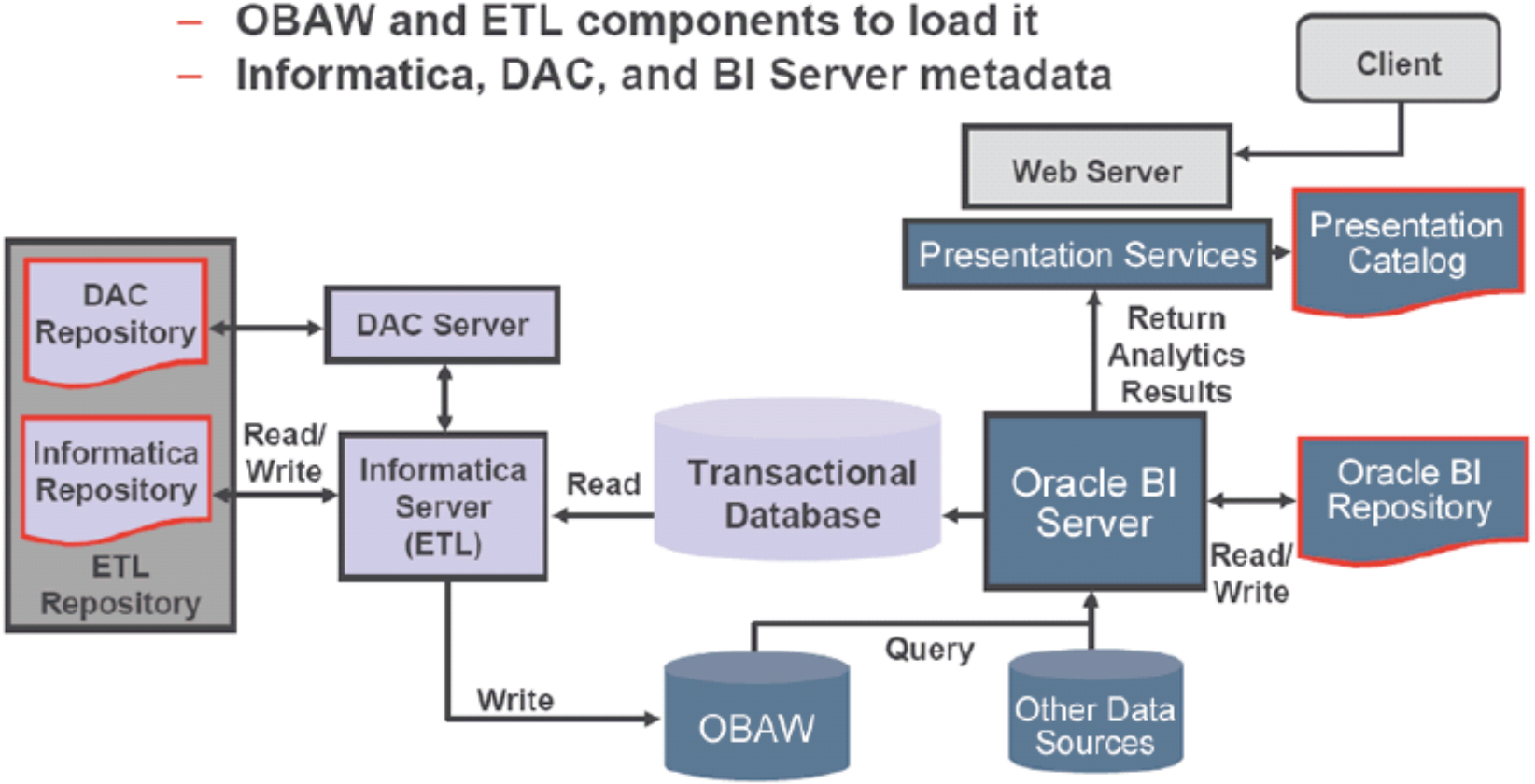
GL Balance Dashboard Page

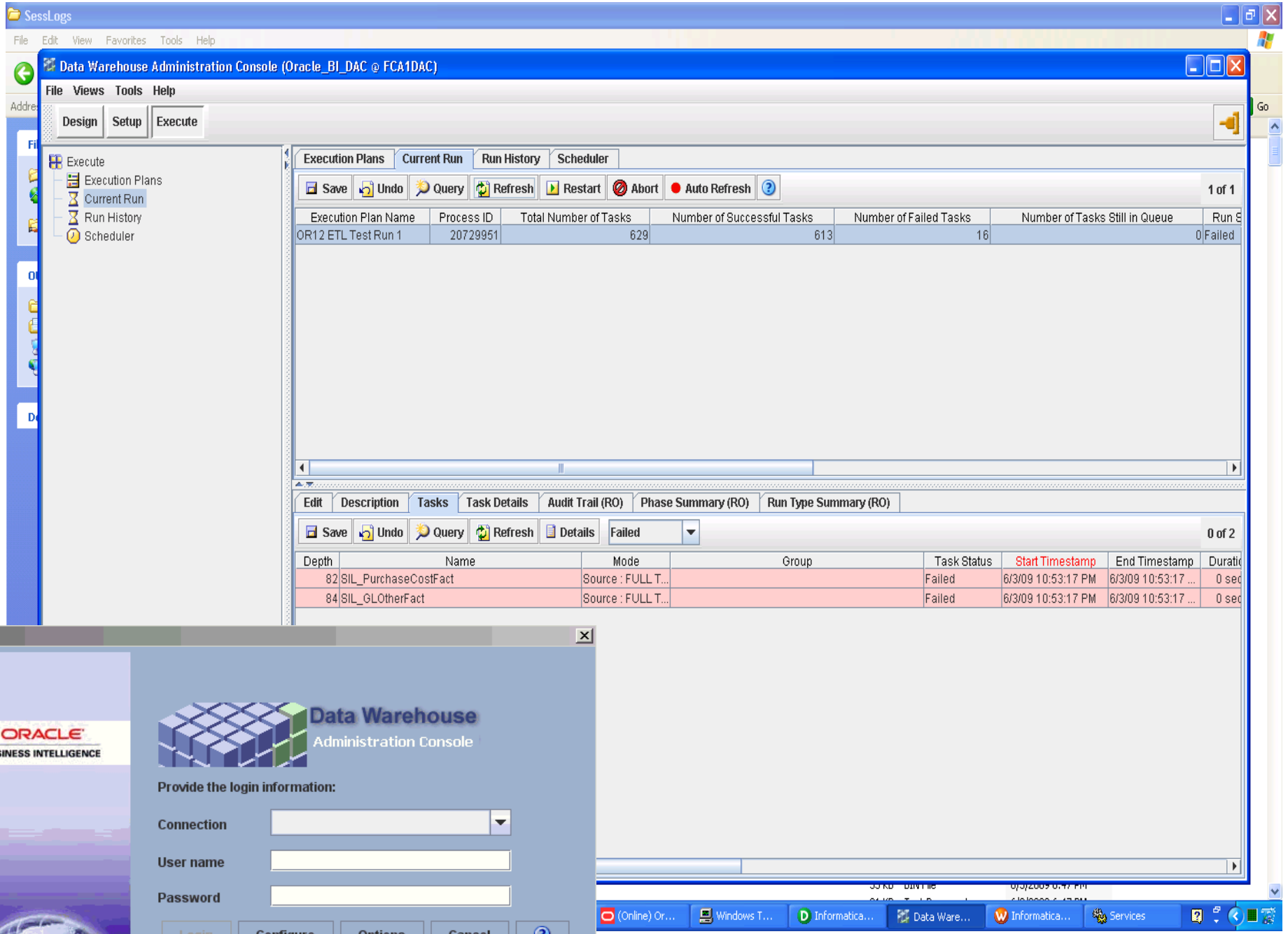


Accounts Payable Related

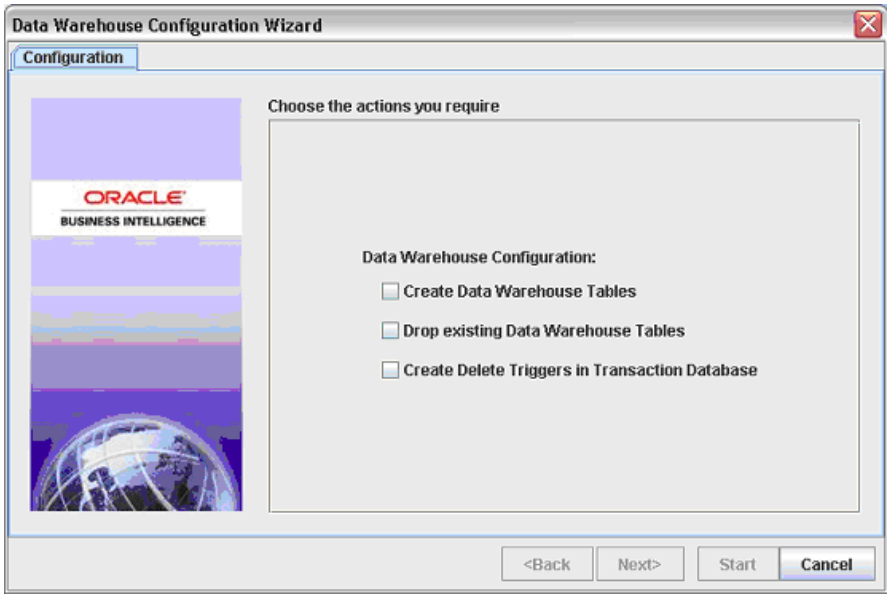
OBIA - Flow

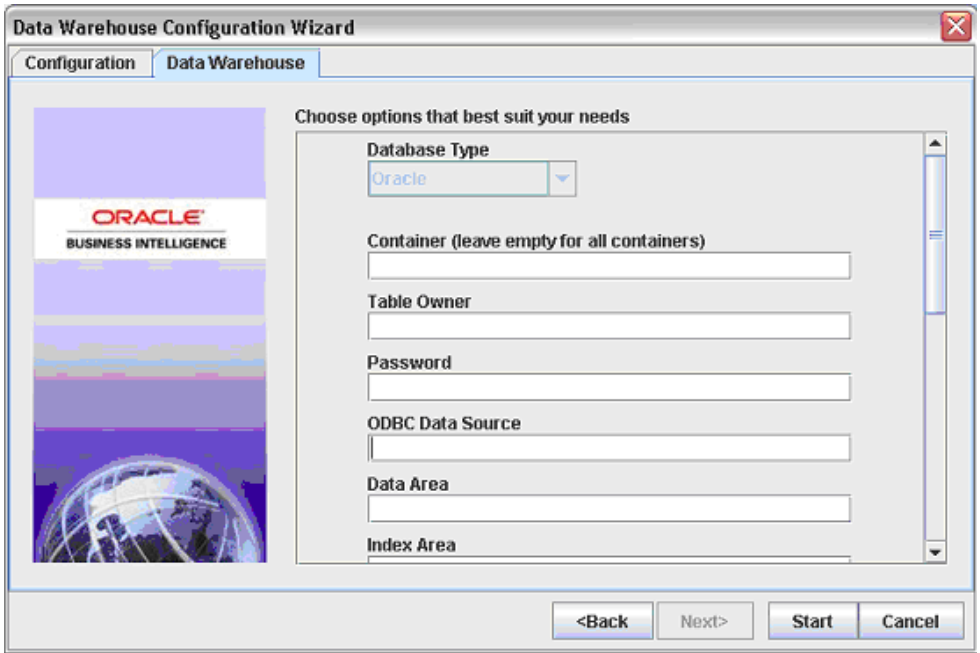
- Includes infrastructure components and:
  - OBAW and ETL components to load it
  - Informatica, DAC, and BI Server metadata

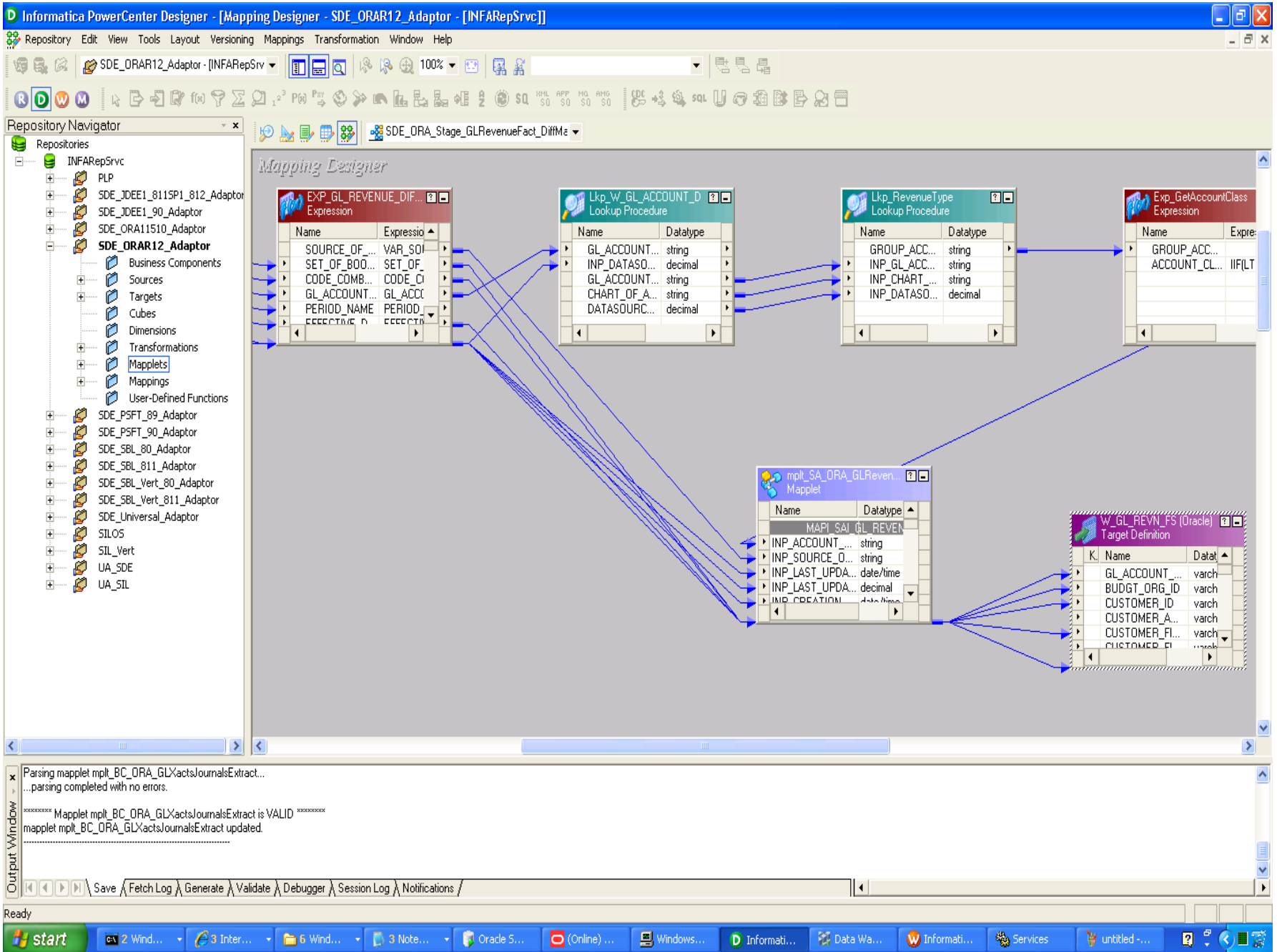



SessLogs
File Edit View Favorites Tools Help
Data Warehouse Administration Console (Oracle_BI_DAC @ FCA1DAC)
File Views Tools Help
Design Setup Execute
Execute
Execution Plans
Current Run
Run History
Scheduler
Execution Plans Current Run Run History Scheduler
Save Undo Query Refresh Restart Abort Auto Refresh
1 of 1
Execution Plan Name Process ID Total Number of Tasks Number of Successful Tasks Number of Failed Tasks Number of Tasks Still in Queue Run S
OR12 ETL Test Run 1 20729951 629 613 16 0 Failed
Edit Description Tasks Task Details Audit Trail (RO) Phase Summary (RO) Run Type Summary (RO)
Save Undo Query Refresh Details Failed
0 of 2
Depth Name Mode Group Task Status Start Timestamp End Timestamp Duratio
82 SIL_PurchaseCostFact Source : FULL T... Failed 6/3/09 10:53:17 PM 6/3/09 10:53:17 ... 0 sec
84 SIL_GLOtherFact Source : FULL T... Failed 6/3/09 10:53:17 PM 6/3/09 10:53:17 ... 0 sec
Login ...
ORACLE
BUSINESS INTELLIGENCE
Data Warehouse
Administration Console
Provide the login information:
Connection
User name
Password
Login Configure Options Cancel
(Online) Or...
Windows T...
Informatica...
Data Ware...
Informatica...
Services

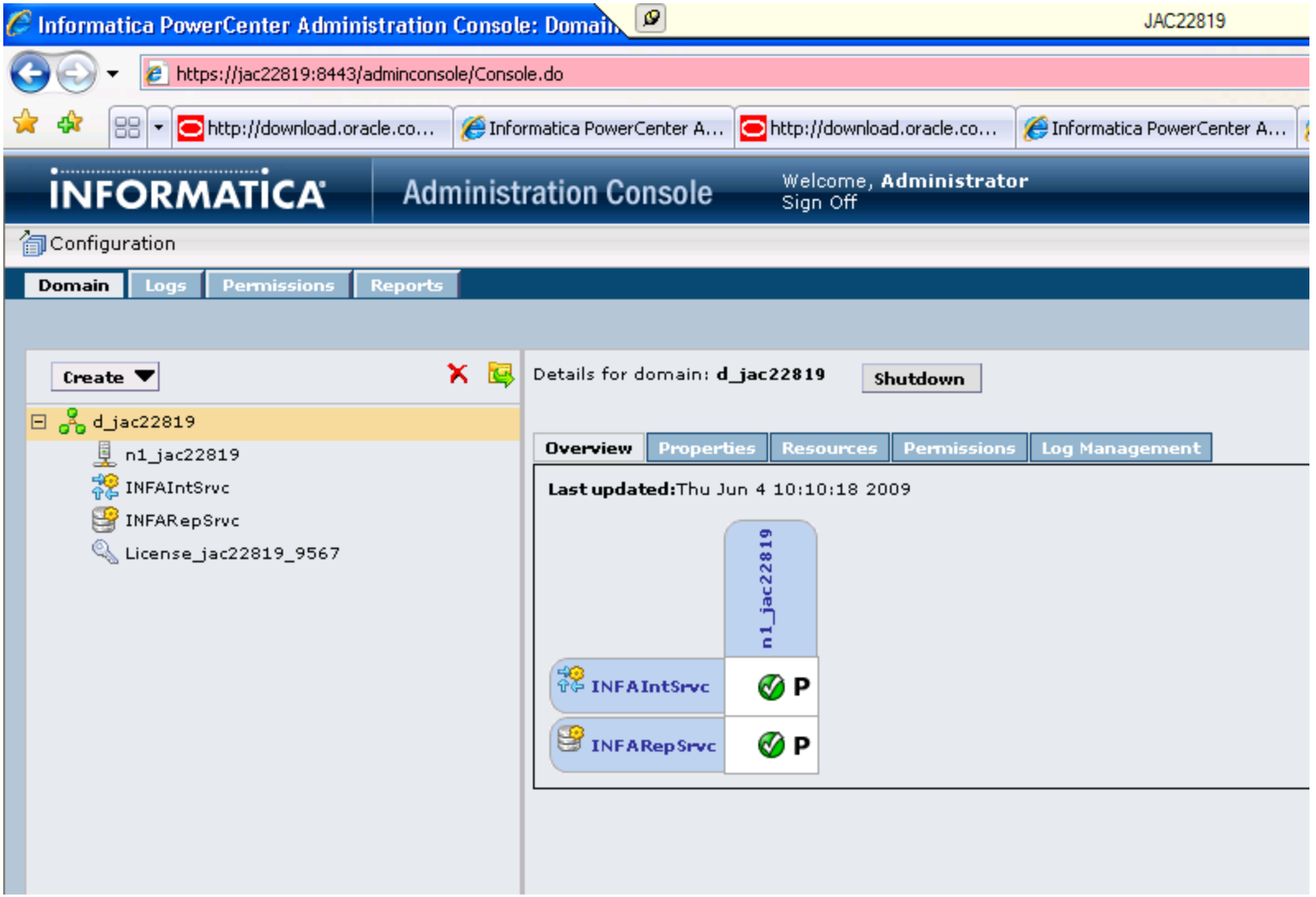
Creating the Data Warehouse Tables



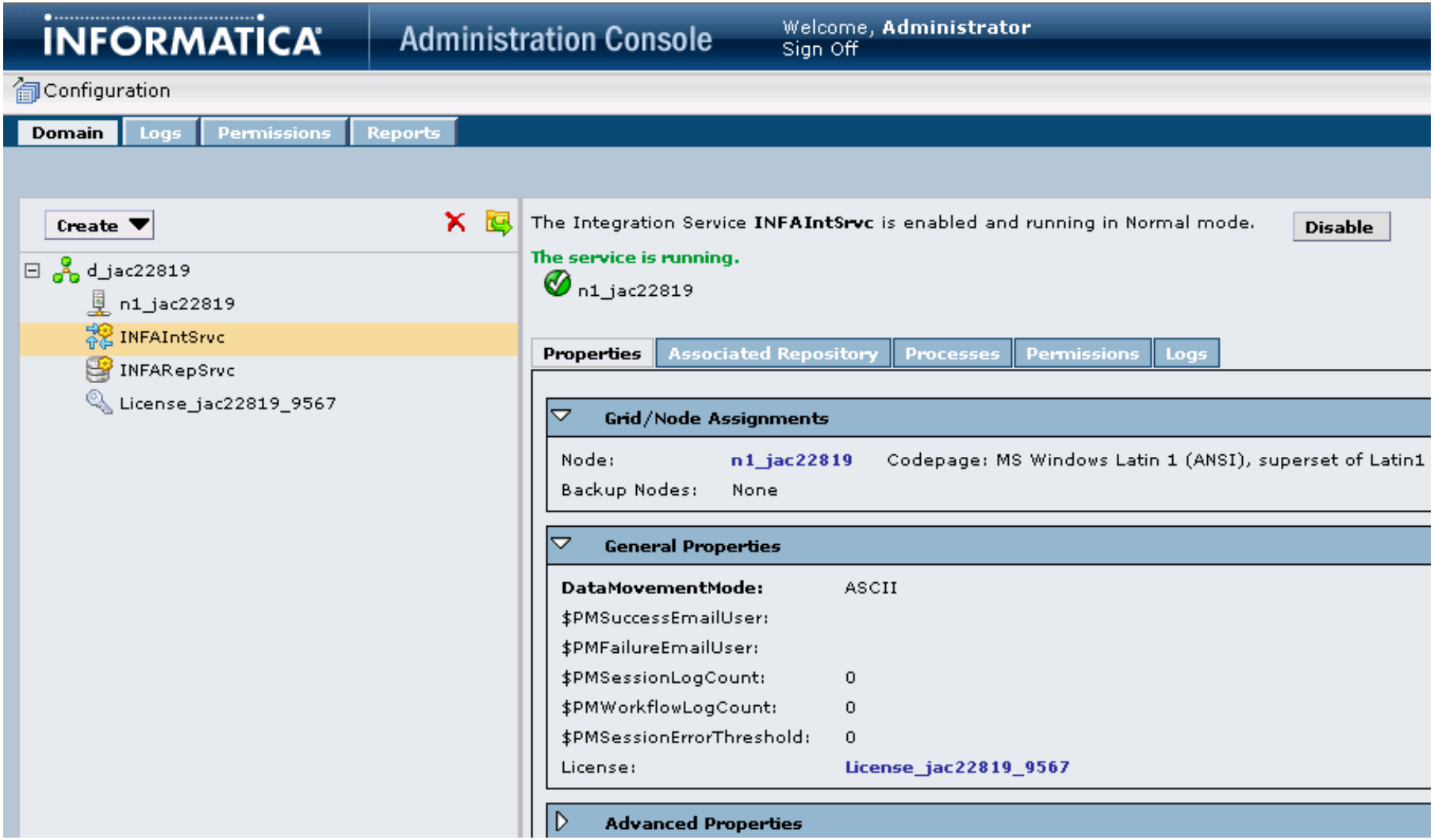



Informatica PowerCenter Designer - [Mapping Designer - SDE_ORAR12_Adaptor - [INFARepSrvc]]
Repository Edit View Tools Layout Versioning Mappings Transformation Window Help
Repository Navigator
Repositories
INFARepSrvc
PLP
SDE_JDEE1_811SP1_812_Adaptor
SDE_JDEE1_90_Adaptor
SDE_ORA11510_Adaptor
SDE_ORAR12_Adaptor
Business Components
Sources
Targets
Cubes
Dimensions
Transformations
Mapplets
Mappings
User-Defined Functions
SDE_PSFT_89_Adaptor
SDE_PSFT_90_Adaptor
SDE_SBL_80_Adaptor
SDE_SBL_811_Adaptor
SDE_SBL_Vert_80_Adaptor
SDE_SBL_Vert_811_Adaptor
SDE_Universal_Adaptor
SILOS
SIL_Vert
UA_SDE
UA_SIL
SDE_ORA_Stage_GLRevenueFact_DiffMa
Mapping Designer
EXP_GL_REVENUE_DIF... Expression
Lkp_W_GL_ACCOUNT_D Lookup Procedure
Lkp_RevenueType Lookup Procedure
Exp_GetAccountClass Expression
mplt_SA_ORA_GLReven... Mapplet
W_GL_REVN_FS (Oracle) Target Definition
Parsing mapplet mplt_BC_ORA_GLXactsJournalsExtract...
...parsing completed with no errors.
******** Mapplet mplt_BC_ORA_GLXactsJournalsExtract is VALID ********
mapplet mplt_BC_ORA_GLXactsJournalsExtract updated.
Output Window
Save Fetch Log Generate Validate Debugger Session Log Notifications
Ready
start

Informatica PowerCenter – Administration Screens



Informatica Administration Console



Data Model Documentation – e.g. W_EMPLOYEE_D

Table 2–2 Table Types Used by the Oracle Business Analytics Warehouse

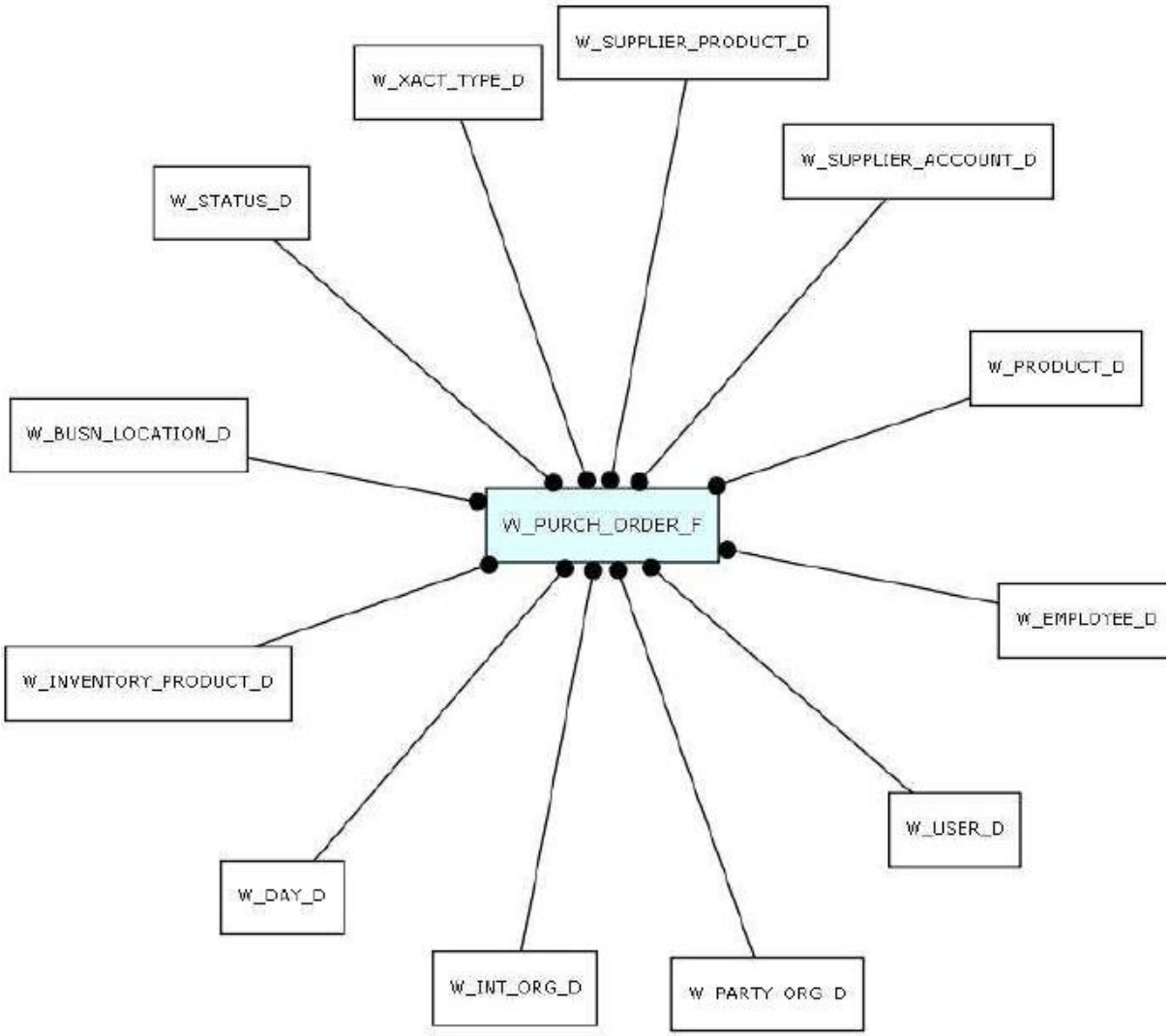
Table Type	Description
Aggregate tables (_A)	Contain summed (aggregated) data.
Dimension tables (_D)	Star analysis dimensions.
Staging tables for Dimension (_DS)	Tables used to hold dimension information that have not been through the final ETL transformations.
Staging tables for Usage Accelerator (WS_)	Tables containing the necessary columns for the ETL transformations.
Dimension Hierarchy tables (_DH)	Tables that store the dimension's hierarchical structure.
Dimension Helper tables (_DHL)	Tables that store M:M relationships between two joining dimension tables.
Staging tables for Dimension Helper (_DHLS)	Staging tables for storing M:M relationships between two joining dimension tables.
Fact tables (_F)	Contain the metrics being analyzed by dimensions.
Fact Staging tables (_FS)	Staging tables used to hold the metrics being analyzed by dimensions that have not been through the final ETL transformations.

Column Name Convention

Table 2–6 Standard Column Suffixes

Suffix	Description	In Table Types
_CD	Code field.	_D, _DS, _FS, _G, _GS
_DT	Date field.	_D, _DS, _FS, _G, _DHL, _DHLS
_I	Language Independent Code. In the transactional database, list of value (LOV) information is stored with both language-independent and display values. A Language Independent Code column references the language-independent LOV, which may be different from the displayed value in both the transactional system and the data warehouse.	_D, _MD
_ID	_ID columns are used in _FS tables. They correspond to the _WID columns of the corresponding _F table.	_FS
_FLG	Indicator or Flag.	_D, _DHL, _DS, _FS, _F, _G, _DHLS
_WID	Identifier generated by Oracle BI linking dimension and fact tables, except for ROW_WID.	_F, _A, _DHL
_NAME	Name corresponding to the code column (columns ending with _CODE)	_D, _F, _A
_DESC	Long Description corresponding to the code column (columns ending with _CODE)	_D, _F, _A

Star Data Model



Data Dictionary

W_PURCH_ORDER_F

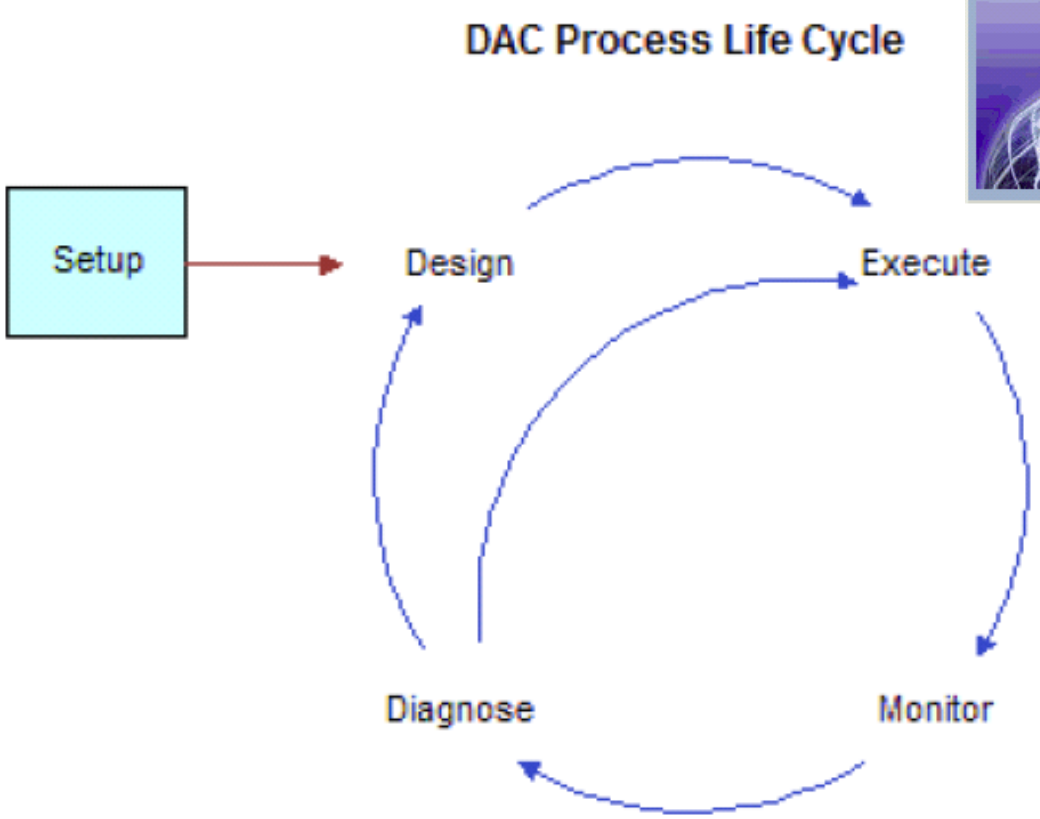
Business Name: Purchase Order

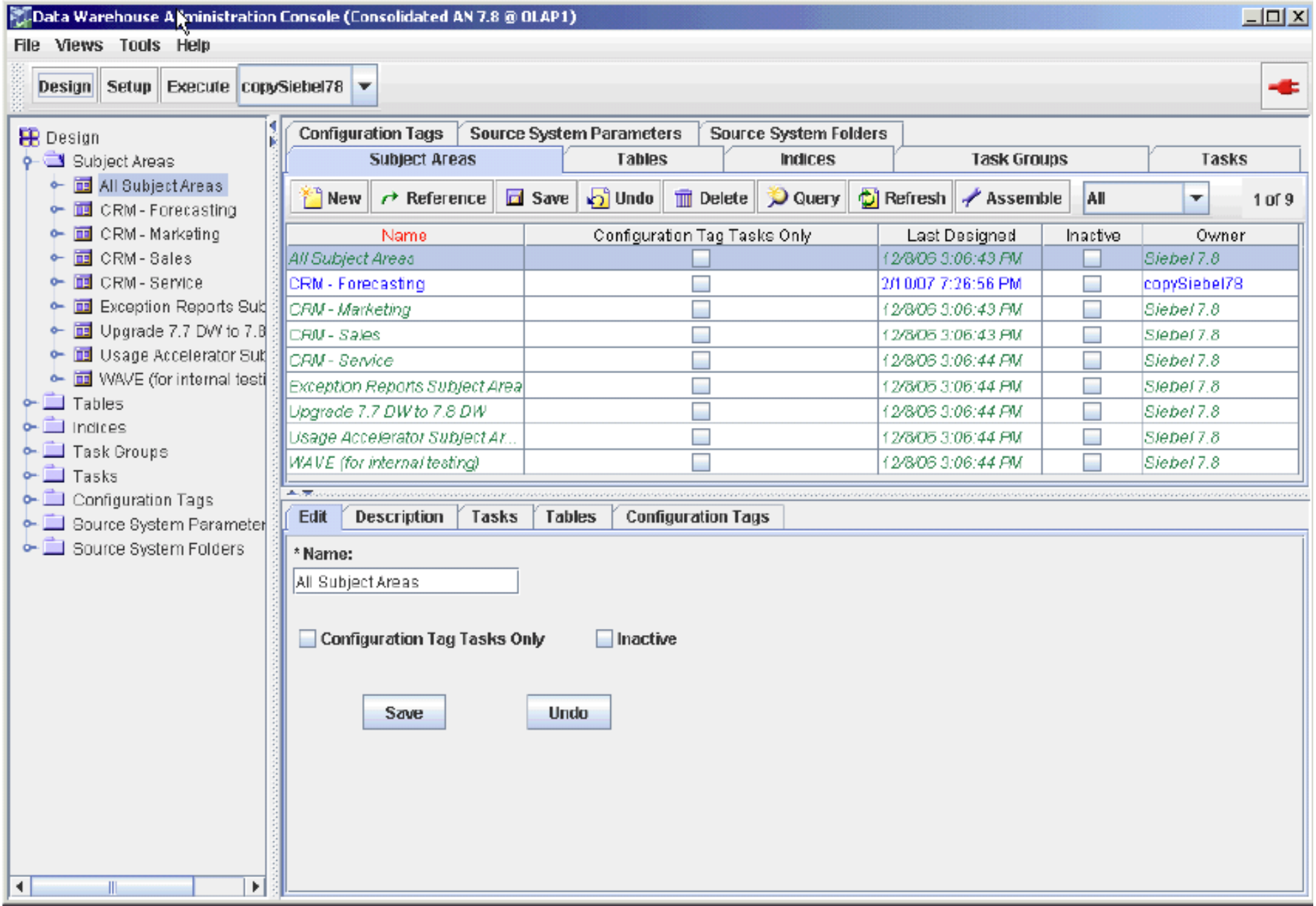
Description:
W_PURCH_ORDER_F fact table is used to capture all the purchase orders that are raised on suppliers by the purchasing unit of a business organization (purchasing organization). The types of purchase orders can be many and would typically include one-time, regular, blanket, release etc. The data in this table is stored at the purchase order product line item level. The purchase order lines in this table are in turn referenced by fact rows in the W_PURCH_RCPT_F table. The data in this table is expected to be dynamic in nature during the lifecycle of a specific purchase order and its receipt related cycles. Columns like RECEIVED_QTY, ACCEPTED_QTY and STATUS_WID represent the current status/information related to a purchase order line item.

Table Columns:

Column Name	Description	Datatype	Lookup Table
SUPPLIER_WID Supplier Surrogate Key	This indicates the supplier on whom the purchase order has been placed. The link to the W_SUPPLIER_D dimension. Lookup: W_SUPPLIER_D Example : Circuit City, Good Guys etc. for any electronic equipment	NUMBER(10)	W_PARTY_ORG_D
PRODUCT_WID Product Surrogate Key	This indicates the product which is being sourced from the supplier on the purchase order line item. Lookup: W_PRODUCT_D Example :Spray paint, auto exhaust pump, IBM laptop T-Series 230	NUMBER(10)	W_PRODUCT_D
INVENTORY_PROD_WID Inventory Product Surrogate Key	This indicates the business location -- product combination against which the purchase order item will be received.	NUMBER(10)	W_INVENTORY_PRODUCT_D

DAC LifeCycle




Data Warehouse Administration Console (Consolidated AN 7.8 @ OLAP1)
File Views Tools Help
Design Setup Execute copySiebel78
Design
Subject Areas
All Subject Areas
CRM - Forecasting
CRM - Marketing
CRM - Sales
CRM - Service
Exception Reports Sub
Upgrade 7.7 DW to 7.8
Usage Accelerator Sub
WAVE (for internal testi
Tables
Indices
Task Groups
Tasks
Configuration Tags
Source System Parameter
Source System Folders
Configuration Tags
Source System Parameters
Source System Folders
Subject Areas
Tables
Indices
Task Groups
Tasks
New
Reference
Save
Undo
Delete
Query
Refresh
Assemble
All
1 of 9
Name
Configuration Tag Tasks Only
Last Designed
Inactive
Owner
All Subject Areas 12/8/05 3:06:43 PM Siebel 7.8
CRM - Forecasting 2/10/07 7:26:56 PM copySiebel78
CRM - Marketing 12/8/05 3:06:43 PM Siebel 7.8
CRM - Sales 12/8/05 3:06:43 PM Siebel 7.8
CRM - Service 12/8/05 3:06:44 PM Siebel 7.8
Exception Reports Subject Area 12/8/05 3:06:44 PM Siebel 7.8
Upgrade 7.7 DW to 7.8 DW 12/8/05 3:06:44 PM Siebel 7.8
Usage Accelerator Subject Ar... 12/8/05 3:06:44 PM Siebel 7.8
WAVE (for internal testing) 12/8/05 3:06:44 PM Siebel 7.8
Edit
Description
Tasks
Tables
Configuration Tags
* Name:
All Subject Areas
Configuration Tag Tasks Only
Inactive
Save
Undo

DAC Execution Plans

Execution Plans

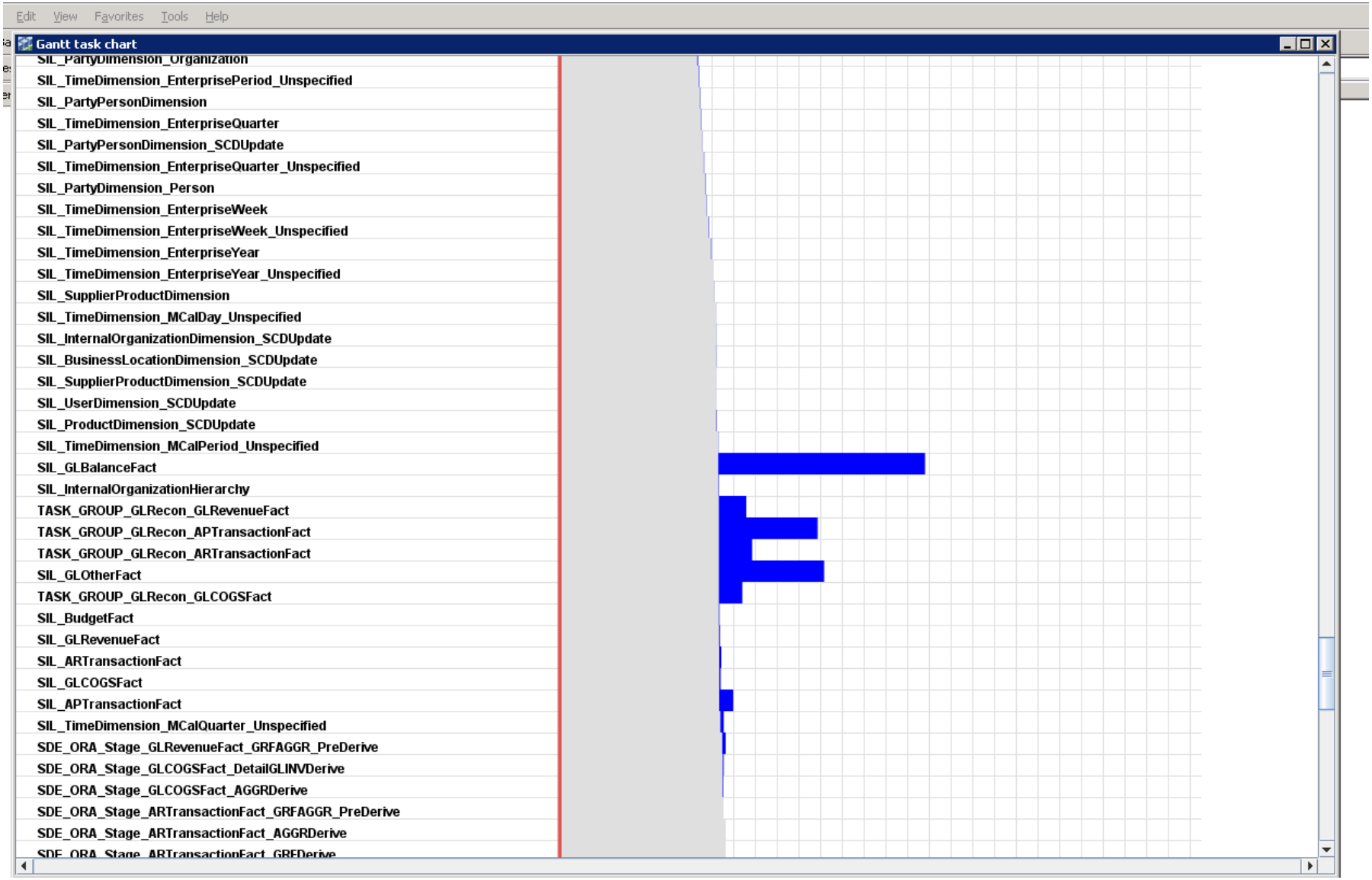
An execution plan is a unit of work that enables you to organize, schedule, and execute ETL processes. An execution plan comprises the following objects: subject areas, ordered tasks, indexes, tags, parameters, source system folders, and phases.

DAC supports single-source and multi-source execution plans, which are described in the following sections:

- About Single-Source Execution Plans
- About Multi-Source Execution Plans

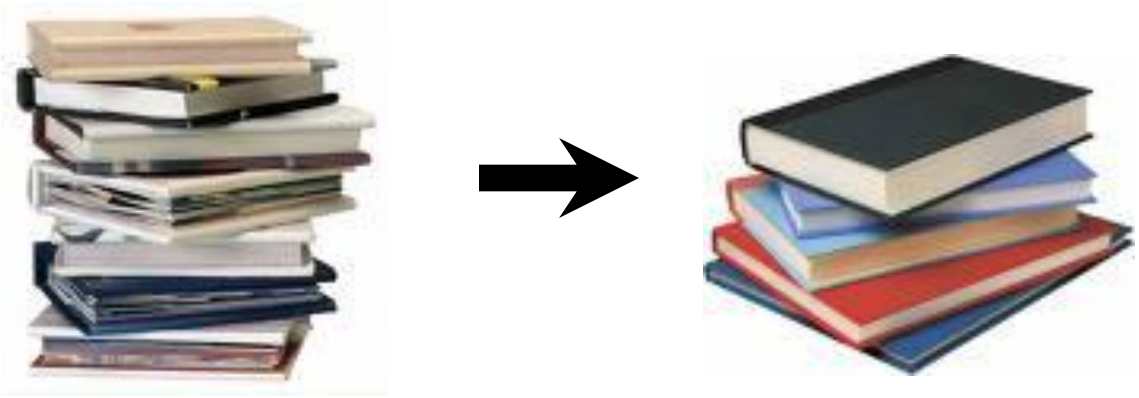
- Single Source and multi-source scenarios

Monitoring / Tuning the ETL



Full ETL / Incremental ETL

- Full ETL and Reset DW
- Why full and incremental may take comparable time?
- Analogy of stack of books
- Real-time, how real?



Micro-ETL (Near Real-Time)

- Micro ETL execution plans are frequent ETL processes scheduled such as hourly or half-hourly
- Usually handle small subject areas or subsets of larger subject areas.
- DAC tracks refresh dates for tables in micro ETL execution plans separately from other execution plans and uses these refresh dates in the change capture process
- After a micro ETL execution plan runs, DAC populates refresh date values in the Refresh Dates child tab of the Execution Plans tab.
- DAC automatically detects the last refresh date for the tables common to both execution plans and intelligently extracts only the most recent records for the micro ETL execution plan.

Micro ETL Pitfalls

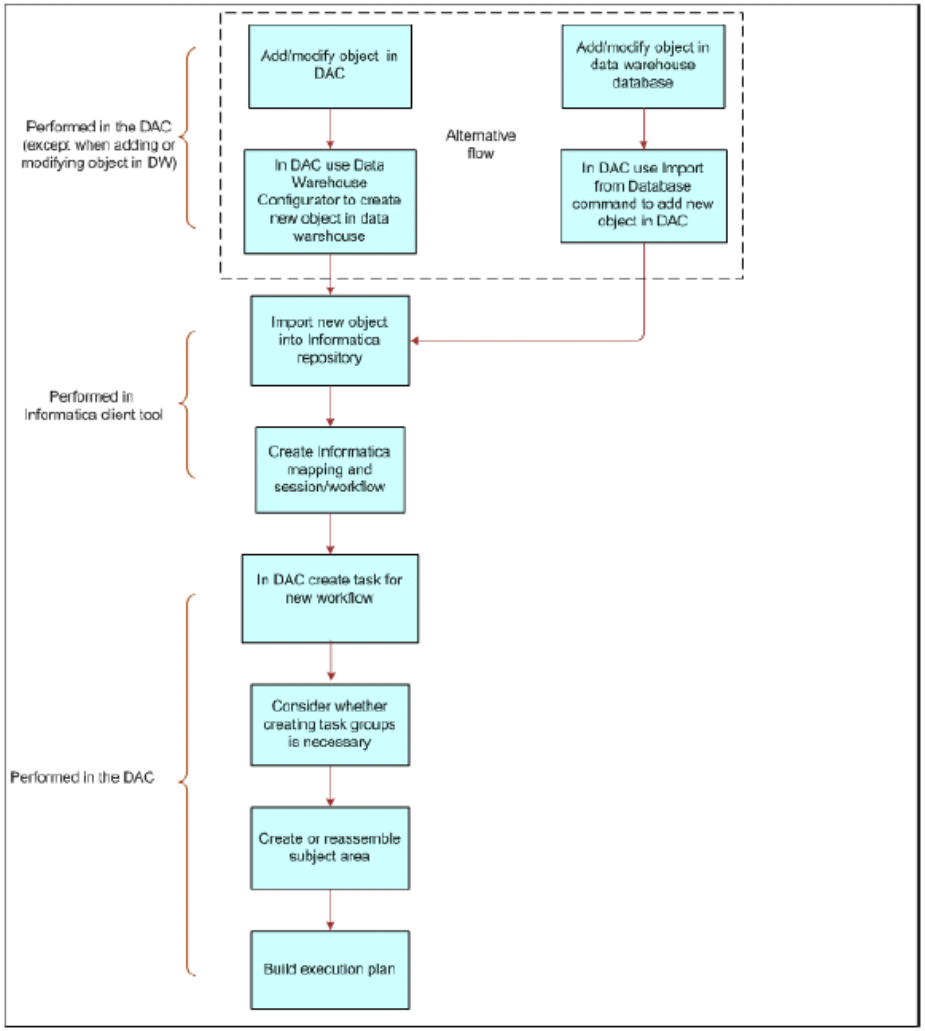
- For related star schemas, if one schema is omitted from a micro ETL, the cross-star reports may be inaccurate. E.g. if the Person fact table is refreshed more frequently than Revenue fact table, report spanning Person and Revenue star schemas may produce inconsistent results.

- If you omit dimension tables from a micro ETL, FK's keys for fact tables will point to Unspecified rows for the new dim records. FK references will be resolved when the Complete ETL execution plan is run.

- If you do not include aggregate tables in micro ETL, reports that use data from these tables will be inconsistent with the detailed fact tables. However, if aggregate tables are included in the micro ETL , the aggregate calcs are performed taking longer time.

Process Flow for New OBAW Objects

- Add in OBAW
- Import in Infa
- Configure DAC



Index and Analyze Table Syntaxes

- **Customsql.xml** file is located in the ..\BIFOUNDATION\DAC\CustomSQLs directory. **To edit the Analyze Table syntax**

  - **1.** Open the customsql.xml file,locate the Analyze Table syntax for DB type.

```
<SqlQuery name = "ORACLE_ANALYZE_TABLE" STORED_PROCEDURE = "TRUE">

    DBMS_STATS.GATHER_TABLE_STATS(ownname =>
      '@TABLEOWNER', tabname => '%1', estimate_percent => 30,
      method_opt => 'FOR ALL COLUMNS SIZE AUTO',cascade => true )
</SqlQuery>
```

  - **2.** Edit the syntax. E.g., to gather statistics for only the indexed columns:

```
<SqlQuery name = "ORACLE_ANALYZE_TABLE" STORED_PROCEDURE = "TRUE">

    DBMS_STATS.GATHER_TABLE_STATS(ownname =>
      '@TABLEOWNER', tabname => '%1', estimate_percent => 10,
      method_opt => 'FOR ALL INDEXED COLUMNS',cascade => true )
</SqlQuery>
```

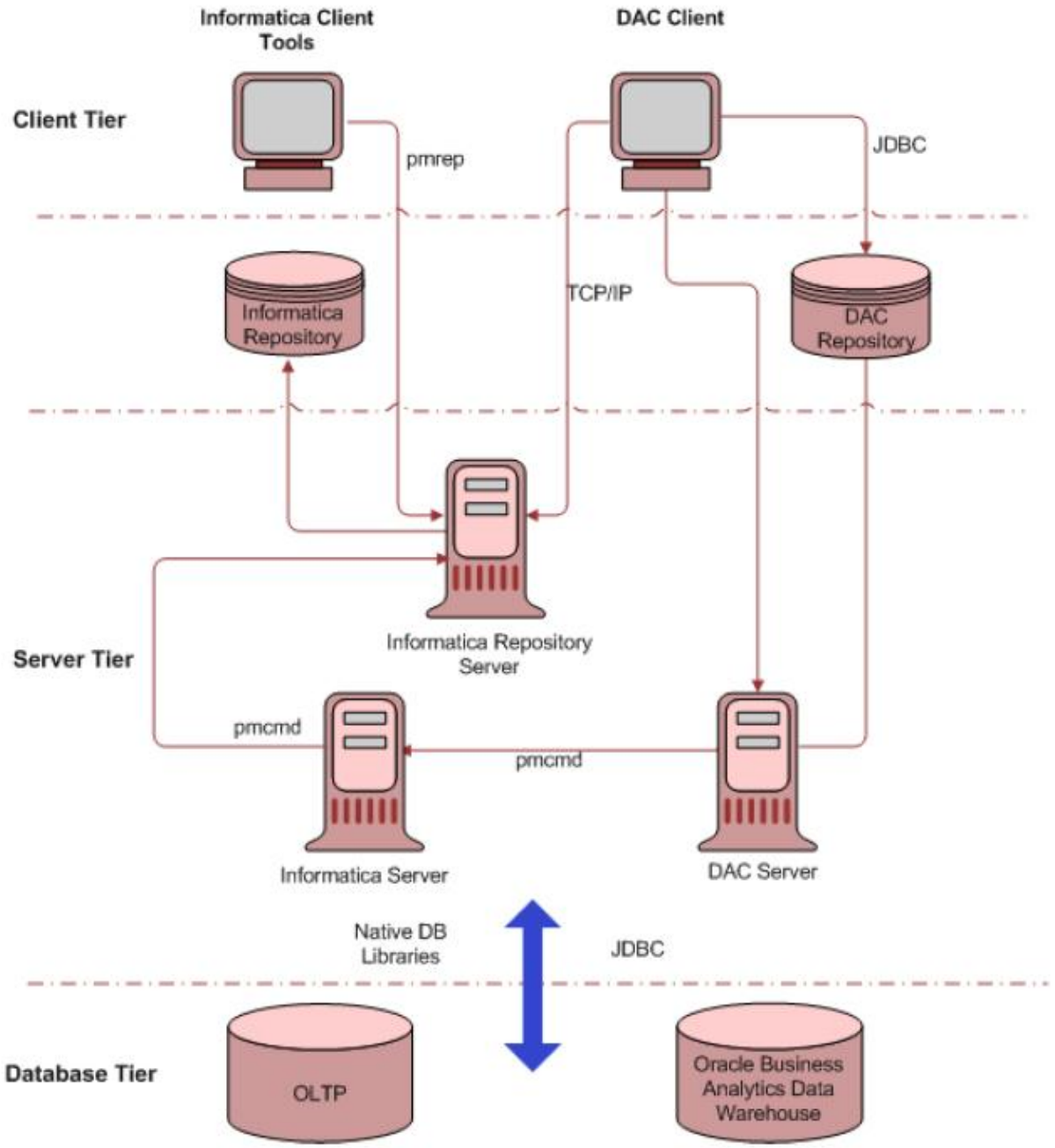
OBIA List of Docs

- Main Page for Documents

(http://www.oracle.com/technology/documentation/bi_ee.html)

- OBIA install guide (**E14217-01)**
- OBIA Config guide (**E14216-01)**
- DMR 7.9.6
- Data Lineage 7.9.6
- Business Definitions of Metrics
- Sample Reports – Product Guides

Trouble Shooting



7.9.6 Issues

- Unzip of Informatica 8.6 hotfix is asking for password – (do not use Windows uncompress)
- BUG 8557986: DAC SETUP INFORMATICA SERVERS SCREEN IS NOT UPDATED FOR OBIA 7.9.6 GUIDE

Oracle Support - May 22, 2009 11:41:42 AM GMT-04:00

Hello Shyam,

Thank you for contacting Oracle Support. Your service request has been assigned to me.

In previous cases we found that the "password protected" message only appears when extracting with Extraction Wizard. Please use Winzip or Winrar program to extract the files.
I also found that the extraction may give an error for some file due to a path too long. To avoid this error please change the names of the folders to something shorter.

I hope this information helps.

Regards,
Maria Pia Soto

…Issues

- Need for PARAM_OLTP_ORA11I in EBS R12 Source

Oracle Support - June 3, 2009 7:17:14 PM GMT-04:00

Following is summary of call with Shyam:

After log of debugging we finally narrowed it down to following defect -

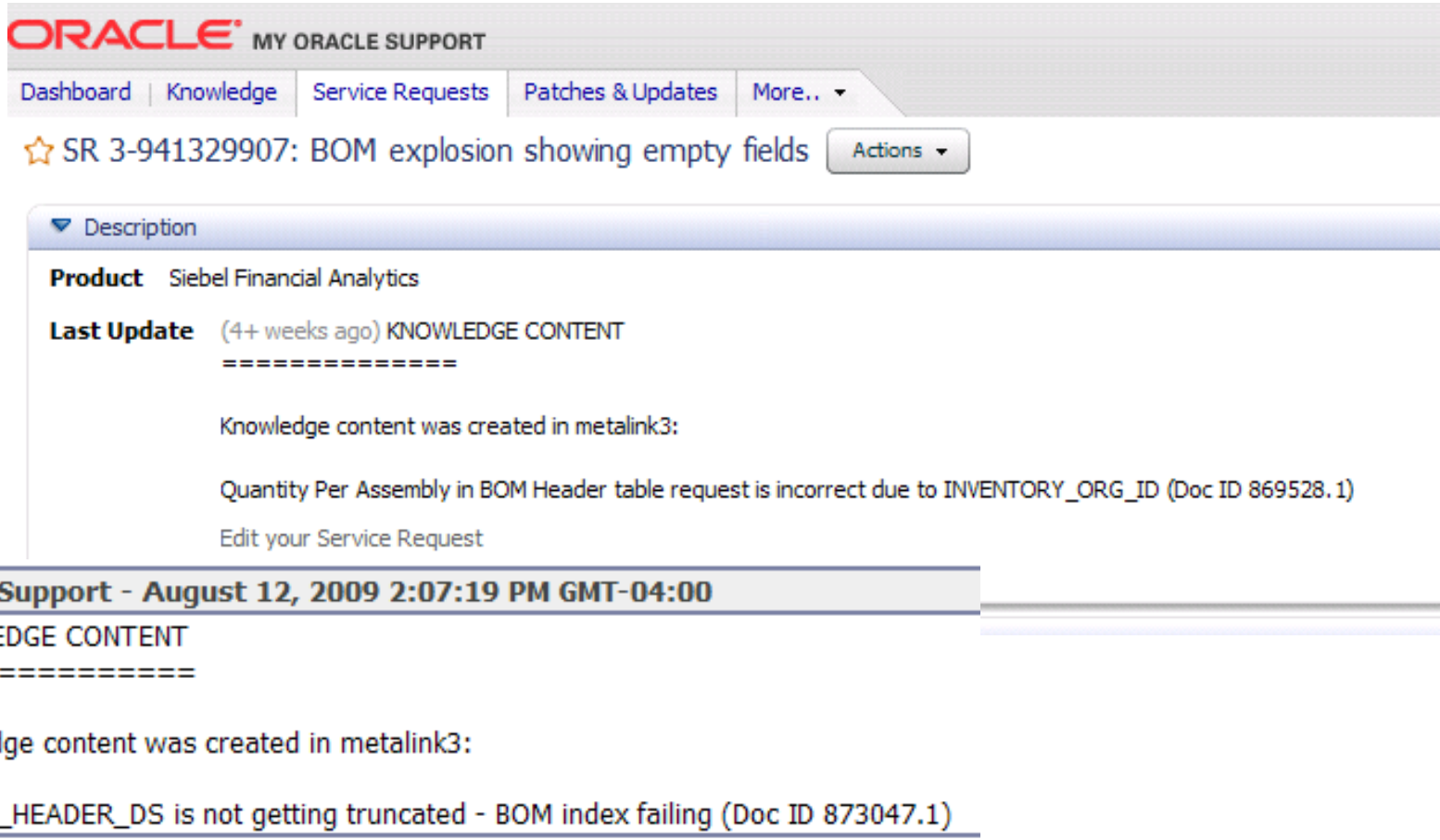
Bug 8314065: REG: EBS11.5.10: SDE_ORA_ARTRANSACTIONFACT_ARSCHEDULE_DERIVE TASK FAILS

The woraround is to manually add PARAM_OLTP_ORA11I connection in Workflow and after that the tasks completed fine.

regards,
-Rajesh.

BOM related

- Bill Of Material Related, missing join in the RPD
- Another one EBS side table _DS not truncated every night



Importance of Metalink3 – Oops Support.Oracle.com

Product Siebel Financial Analytics

Last Update (13+ weeks ago) Hi Shyam,

Per our conversation yesterday I've created a documentation bug to handle this issue and also a knowledge document in metalink3.

Now I'm going to close this service request as...

Edit your Service Request

History

Sort by **New to Old**

Hi Shyam,

Per our conversation yesterday I've created a documentation bug to handle this issue and also a knowledge document in metalink3.

Now I'm going to close this service request as we discussed yesterday.

Thank you,
Luis

Oracle Support - May 28, 2009 6:47:49 PM GMT-04:00

BUG 8557986: DAC SETUP INFORMATICA SERVERS SCREEN IS NOT UPDATED FOR OBIA 7.9.6 GUIDE

Q&A

- Questions => Follow up via:
  http://oraclebiwasig.blogspot.com/
- Contact Info

Shyam Varan Nath
ShyamVaran@Gmail.com
(954) 609 2402

OBIEE 11g Features

- OBIEE 11g is expected in next year
- Support for unbalanced/ragged hierarchy
- Better integration with Essbase
- Cross subject area reporting
- OBI Apps for HFM and so on…
- More details here http://www.rittmanmead.com/2008/09/26/oracle-open-world-day-4-obiee-action-framework-and-obiee-performance-tuning/

…OBIEE 11g

- “…new addition to the web catalog in 11g, “conditions”, which are defined against data items and can be used by actions and other processes to run checks like “is the customer profitable”, “do they have a checking account” and so on, I used a variation on this when doing my BI and SOA articles and it’s a similar idea to the conditions that you can define in the Discoverer EUL.”