



SOFTWARE SOLUTIONS

Case Study on OBIEE 11g on JD Edwards Data Session 241

Dan Vlamis

dvlamis@vlamis.com

Vlamis Software Solutions, Inc.

816-781-2880

<http://www.vlamis.com>



Vlamiis Software Solutions, Inc.

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



Vlami Collaborate Presentations

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



Dan Vlamiis Background

- Connected with Oracle product management and developers
- Oracle ACE
- President of Vlamiis Software Solutions, Inc. since 1992
- Speak at national software conferences
- Co-author of book “Oracle Essbase & Oracle OLAP”
- Track chair for 2011 Collaborate conference
- BA Computer Science Brown University
- dvlamiis@vlamiis.com 816-781-2880





Agenda

- Pioneer background
- BI History at Pioneer
- Products evaluated
- Rationale for OBIEE
- Architecture
 - JDE direct or DW
 - Which DB?
 - How move data from JDE to DW?
- Challenges in going live
- Which subject areas to include?
- Current status



Pioneer Balloon Company Background

- Manufacturer of Party Balloons
- Largest manufacturer of latex balloons in US (need picture)
- Manufacture over a billion balloons per year
- 1000+ employees
- Multi-national company
- Does business in US\$, CAN\$, AU\$\$, MXP, GBP, Euros, Yen
- Nine manufacturing facilities across the world
- Multiple markets (mass, distributor, promotional, OEM, etc.)
- Complex company with complex needs
- ERP is JD Edwards World on IBM AS/400
- All facilities online with HQ in Wichita, KS, USA



BI History at Pioneer

- 1999 – Implemented Oracle Sales Analyzer (Still used)
- 2009 – Started looking at BI tools
- 2009 – Evaluated DB2 Web Query / WebFOCUS
- 2010 – Selected Oracle Business Intelligence
- 2010 Aug – Started OBIEE project
- 2011 Feb – First pass at DW built
- 2011 Apr – Still changing DW design, initial go live soon



Justification for BI System

- Sales and Inventory together on dashboard
- Sets up infrastructure for future dashboards
- Allows for information-based decisions
- Replaces OSA
- Allows for better inventory management
- Start of Pioneer data warehouse – single source of truth
- All of Pioneer managing from one place
- Allows for better reporting
- Users can self-service reports
- Better insight into customer profitability
- Lower material costs and lower inventory



Initial Project Scope

- Phase 1a
 - Sales (mostly replicate OSA functionality)
- Phase 1b
 - Inventory (view with sales too)
- Phase 2
 - Expand use of sales and inventory and use more adhoc
- Phase 3
 - Add additional subject areas such as procurement, financial



BI Product Evaluation

DB2 Web Query

- 5 licenses include with DB2
- Simpler product
- Lower price point

Oracle BI EE

- Better transition from OSA
- Expertise from Vlamis
- More polished dashboards
- More powerful adhoc
- JDE now Oracle product



Comparison OSA vs OBIEE

- OSA

- Limited to reports, graphs, forecasts
- No dashboards
- Crosstab reports only
- Has Custom aggregates
- Hierarchical drilldowns
- Only measures reportable
- Simpler U/I esp. adhoc

- OBIEE

- Tables and crosstabs
- Dashboard capabilities
- 11g Hierarchical columns
- 11g Custom groups
- Any columns reportable
- More flexible graphing
- More flexible reporting



Architecture Issues

- Products involved
 - Oracle DB Standard Edition One
 - Oracle Data Integrator
 - Oracle BI Enterprise Edition
- Considerations
 - Run BI from JDE data or DW design?
 - Did not want to slow down transactional system
 - Opted for separate DW for analysis
 - Use ODI to move data from JDE to Oracle-based DW
 - Use OBIEE to report data from DW



Decided to Wait for OBIEE 11g

- New simpler web interface
- OLAP style drilldown ("hierarchical columns")
- Custom aggregates and other similar enhancements
- Strategic BI platform for Oracle
- Selections via steps



High-level Architecture

OBIEE Dashboard

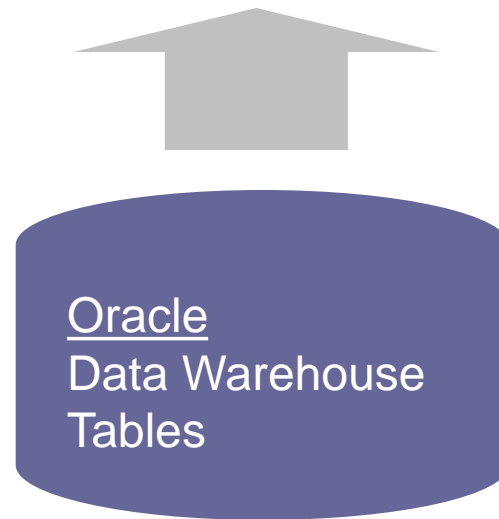


OBIEE Ad-hoc



OBIEE Server with metadata

IBM DB2/400
JD Edwards
Tables





ODI Moves Data from JDE to Oracle DW

by CD Group

- CD Group (www.cdgroup.com) handled ODI work
- Selected for expert knowledge of JDE domain
- Used CD Group Accelerate for OBI (with DW)
- Designed DW in use at Pioneer
- Scripts in ODI transform JDE custom tables into more useable formats (e.g. no Julian dates)



Transformations for DW

- Date format from JDE format to standard
- Create real dimension tables
- Real number fields
- Reduce number of tables
- Decode attributes in simple dimension table
- Build hierarchies
- Create summary tables for performance



Strengths for BI at Pioneer

- Strong knowledge of JDE
- Support from top management
- Strong implementers with CD Group and Vlamis
- CD Group Business Accelerate for JDE
- No drop dead deadline
- Open to making business process changes



Challenges

- Need OLAP capabilities because have in OSA
- Use OBIEE 11g – had to wait for release
- Getting data “right”
- What is “right”?
- How should hierarchies be set up?
- Design dashboards from scratch
- Need more memory on BI Server
- Lack of 64-bit Admin tool



Challenges

- What transactions to include?
- How to handle multiple currencies?
- Product hierarchies reasonably ordered and clean
- Customer hierarchies “challenged” more complex due to multiple markets
- Customers buying in multiple currencies is complex



Solutions

- Report in native currency for each company plus USD
- Simple product hierarchy and separate dimension that includes Item by Branch
- Include extra columns for analysis, but optimize for single hierarchy
- Summarize by Month / Item / Customer, but can drill to transactional data
- Can calculate YTD, change from year ago, but slow
- Use 2 instances – 32-bit for admin, 64-bit for test, prod



Future

- Will likely add more summary tables
- May look at Oracle OLAP
- Will expand to include:
 - Inventory
 - Financial
- Additional hierarchies
- Additional dashboards for other users
- Will investigate BI Publisher
- Will investigate integration with JDE
- Look at moving World to Enterprise One



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