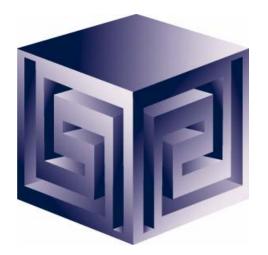
Using Oracle9i Warehouse Builder and Oracle 9i to create OLAP ready Warehouses

IOUG-2003

Paper #416



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Vlamis Software Solutions, Inc.



- Founded in 1992 in Kansas City, Missouri
- A Member of Oracle Partner Program since 1995 along with various Oracle Beta Programs
- Designs and implements databases/data marts/data warehouses using RDBMS and Multidimensional tools
- Specializes in Data Transformation, Data Warehousing, Business Intelligence, Oracle Financials and Applications Development
- Founder Dan Vlamis is former developer at Oracle-Waltham office for Sales Analyzer Application
- Oracle Certified Solutions Provider
 ORACLE

Using OWB to Build Express Databases

- **What is OWB?**
- **Oracle 9i Integration**
- The Process
- **CWM Bridge**
- Demonstration
- Questions

What is Oracle Warehouse Builder?

- Integrated Tool for Data Warehousing
- Based on Common Warehouse Metadata Standard (OMG)
- Supports Design and ETL Functions
- Enterprise Framework for Designing and Deploying Datawarehouses and Datamarts
- Future integration platform for Express

What is OWB? Components: Overview



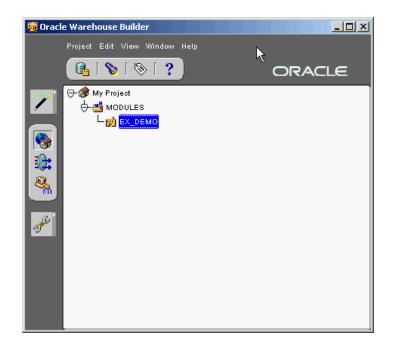
- Repository (CWM)
- Graphical User Interface
- Code Generator
- Integrators
- OWB Bridge



- Based upon Common Warehouse Metadata Standard (CWM)
- Supports Industry Standards
- Oracle 8i/9i based
- Integration point for future products (Designer, Developer, BI Beans ...)

Components: OWB User Interface

- Java Based
- Same look and feel as Designer 6i
- Run on Thin Client Platform





Components: Code Generators

Code Generators are provided for:

- □ Transformations
- □ SQL Loader scripts
- □ User Defined transformations

Components: Integrators

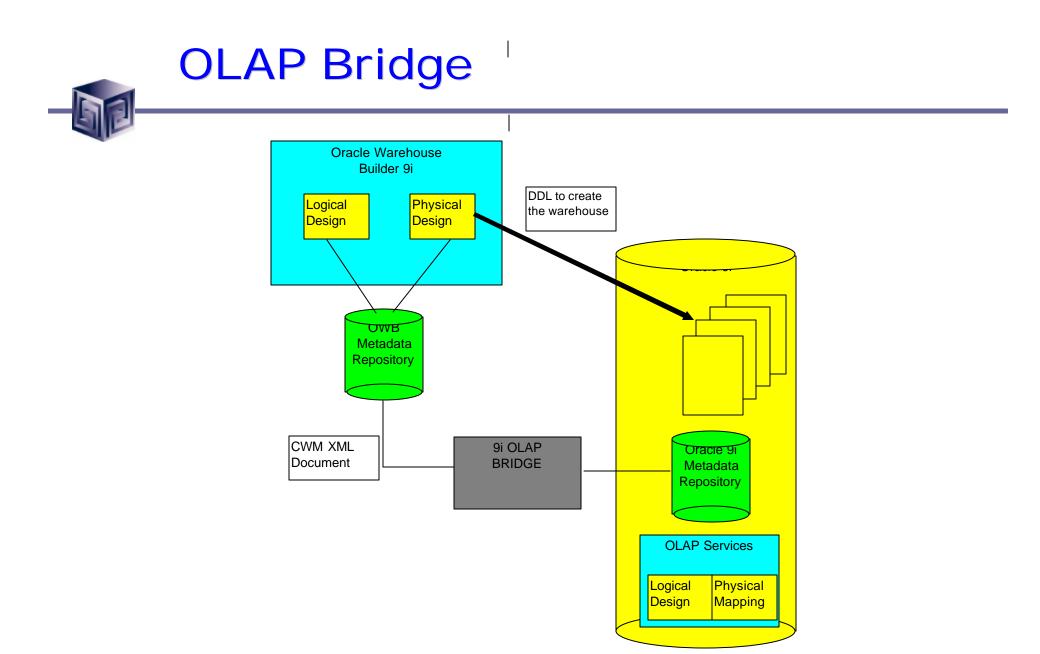
- Several Integrators provided
- Relational and non-relational support
- Oracle Applications Data Source
- SAP R/3 Data Source
- Discoverer
- Express
- CWM
- Oracle 9i OLAP

Components: OWB Transfer Wizard

- Bridging Technology to 9i OLAP, Express, CWM and Discoverer
- Only supports One-Way to 9i OLAP
- At present only supports One Way to Express RAM metadata
- No support for Express MOLAP

9i OLAP Integration

- OWB Bridge transports OWB metadata to Oracle 9i OLAP Metadata
- Creates links to Relational Data for Facts and Dimensions
- User can use OEM Cube Builder to make changes
- Future Bridge will allow Bi-Directional Integration





The Process

- Design or Import Relational Schema
 - Define Fact Table(s)
 - **Define Dimensions**
 - **Define Materialized Views (summary tables)**
- Create Physical Schema
- Create Script for 9i OLAP
- Run Script
- View/Modify in OEM/Cube Builder
- Run Application
- Gather Statistics / Tune

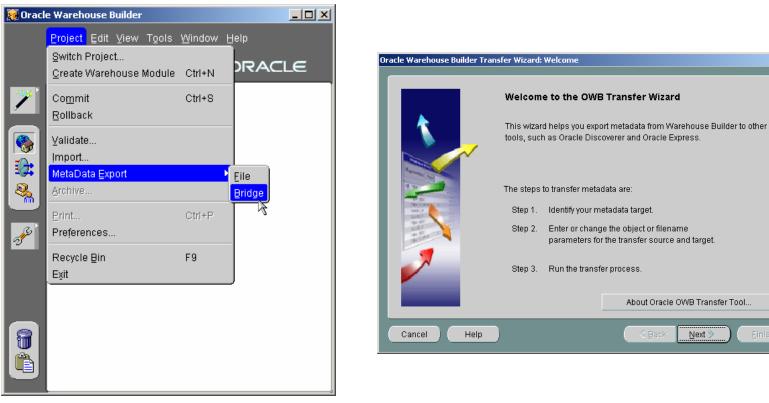


Design and Generate Schema

🛎 Warehouse Module Editor: EX_DEMO	
Module Edit View Window Help	
13 🖉 1 🤅 🖓 1 🗟 🦓 1 🖏 🖓 1 🖇 🧐 1	
EX_DEMO Image: Solution of the second state of the seco	Fact Editor: SALES Fact Edit View Window Help Image: Sales Image: Sales



Metadata Export - Bridge



Next >

×

OWB Transfer Wizard

- What does the OWB to 9i OLAP Transfer do?
 - **Converts Metadata to CWM Format**
 - Create SQL Script to update 9i OLAP Metadata
 - **Executes Script**
 - □ Allows for Building AW Cubes
 - □ Moves Data from relational to AW

OWB Transfer – Choose Destination

Oracle Warehouse Builder Tra	nsfer Wizard, 1 o	of 3: Metadata Source and Target Identification	×
	Source an	d Target Metadata Locations	
	The produ	ct that contains the metadata	
	From:	OWB Export	
A THE COLOR	Select the metadata	product where you want to transfer the	
Aurel The NE	To:	OMG CWM Export	
The XX AND		OMG CWM Export	
		Oracle OLAP Server Import	
	(optional)	Oracle Discoveres	
	Descriptio	Oracle Express Oracle Discoverer4	
Cancel Help		<u> ≪ B</u> ack Next ≫ Ein	ish

OLAP Bridge – Transfer Parameters

Transfer Parameter Name	
	Transfer Parameter Value
OWB Exported Business Areas All Bus	siness Areas 🔤
Username BIBDE	MO
Password *******	
Hostname chris-i	insp4000
Port 1521	
SID orcl	
PL/SQL Output File D:\Pro	pjects\IOUGA-2002\IOUGA-2002.sql
Deploy PL/SQL in database No	
Log Loval Inform	intion 🔽

OLAP Bridge – Transfer Parameters

From:	OWB Export	To: Oracle OLAP Server Import
Description:	My Metadata Transfer	
Tra	nsfer Parameter Name	Transfer Parameter Value
OWB Exported	1 Business Areas	All Business Areas
Username		BIBDEMO
Password		******
Hostname		chris-insp4000
Port		1521
SID		orcl
PL/SQL Outpu	ıt File	D:\Projects\IOUGA-2002\IOUGA-2002.sql
Click Finish to	begin the transfer process.	

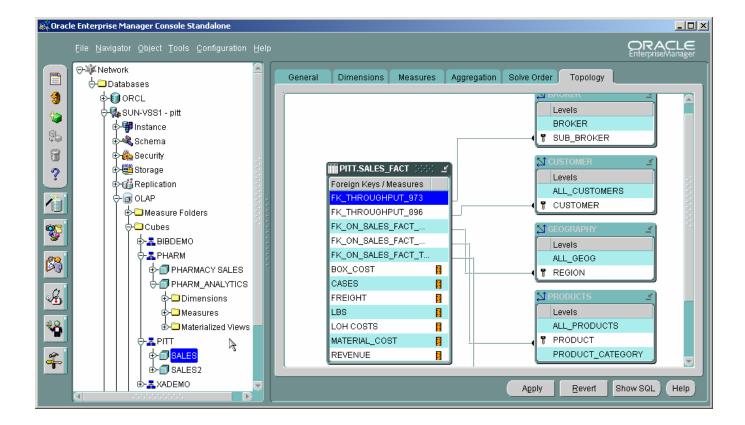


CWM Bridge – Running

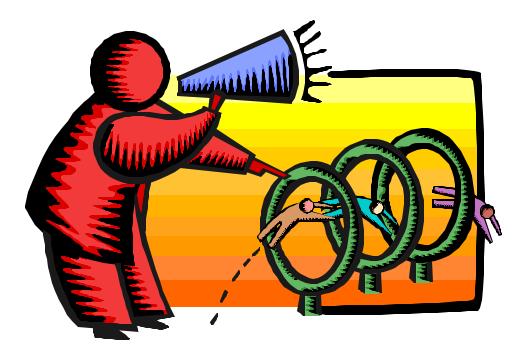
🚵 Oracle WB Transfer - My Metadata Transfer	_ 🗆 X
From: OWB Export To: Oracle OLAP Server Import	
Transfer operation pending execution	
0%	
Ok Cancel View Log File Return to Wizar H	lelp

👌 Log file 📃 🔀
setting parameter: olapimp.username = BIBDEMO
setting parameter: olapimp.password = bibdemo
setting parameter: olapimp.host = chris-insp4000
setting parameter: olapimp.port = 1521
setting parameter: olapimp.sid = orcl
setting parameter: olapimp.inputfilename = C:\TEMP\bridges\OWB_Export-Oracle_OLAP_Import10154476
setting parameter: olapimp.outputfilename = D:\Projects\IOUGA-2002\IOUGA-2002.sql
setting parameter: olapimp.deploy = N
Loading Metadata
Loading XMI input file
processing dim: BROKER_DIM
processing level: BROKERin dimension BROKER_DIM
processing level attribute use: BROKER_BROKER_ID in level BROKER for level attribute BROKER_ID
processing level attribute : BROKER_ID in level BROKER
processing hierarchy: STANDARD in dimension BROKER_DIM
processing dim: CUSTOMER_DIM
processing level: CUSTOMERin dimension CUSTOMER_DIM
processing level attribute use: CUSTOMER_CUSTOMER_ID in level CUSTOMER for level attribute CUSTO
processing level attribute : CUSTOMER_ID in level CUSTOMER
processing level: SITESin dimension CUSTOMER_DIM
processing level attribute use: SITES_SITE_ID in level SITES for level attribute SITE_ID
Ok Save As

OEM Cube Builder – The Results



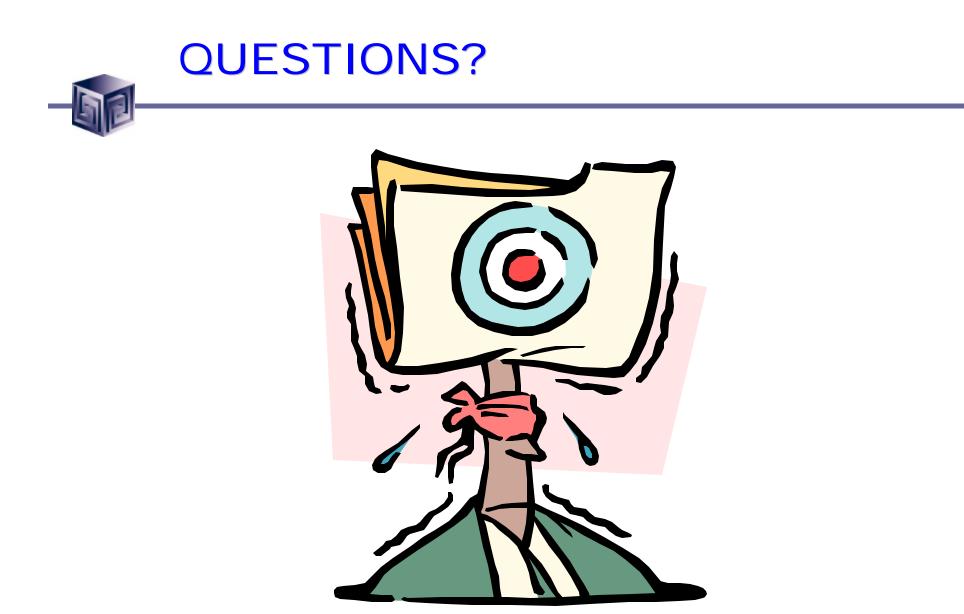
Demonstration







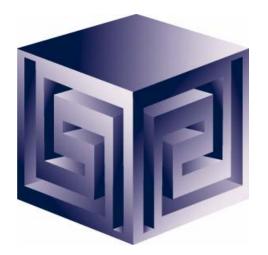
- We can finally design OLAP Solutions
- Support for both ROLAP and MOLAP (AW)
- Strong Foundation for the Future
- Still Lacking all the Pieces
 - □ No Bi-Directional Bridge
 - □ No Migration for Express Databases



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