Using Oracle9i Warehouse Builder and Oracle 9i to create OLAP ready Warehouses
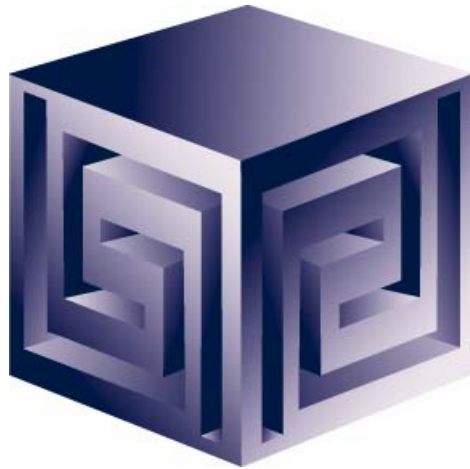
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Paper #416

Chris Claterbos

claterbos@vlamis.com

Vlamis Software Solutions, Inc.

(816) 729-1034

http://www.vlamis.com

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® | CERTIFIED SOLUTION PARTNER

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

Components of Oracle Warehouse Builder

❑ Repository (CWM)

❑ Graphical User Interface
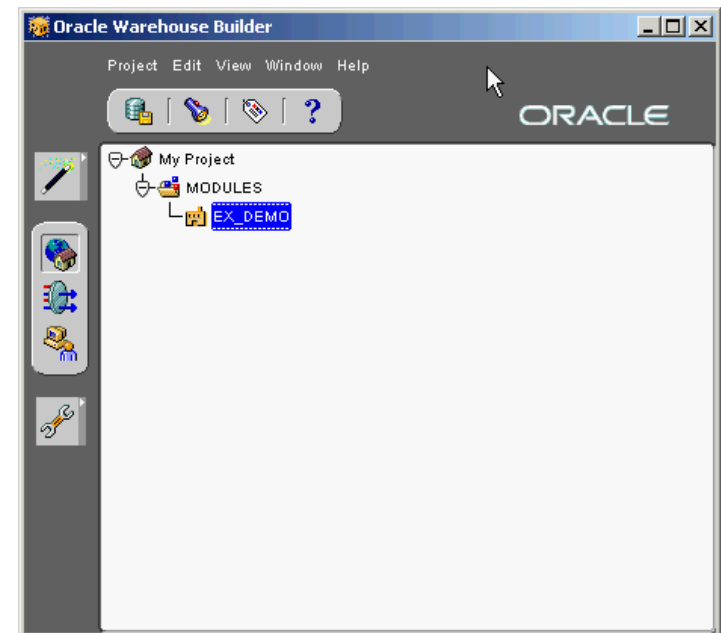
❑ Code Generator

❑ Integrators

❑ OWB Bridge

Components: *OWB Repository*

- **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**

- ❑ **DDL**

- ❑ **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**

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OLAP Bridge

Oracle Warehouse
Builder 9i

Logical
Design

Physical
Design

DDL to create
the warehouse

OWB
Metadata
Repository

CWM XML
Document

9i OLAP
BRIDGE

Oracle 9i
Metadata
Repository

OLAP Services

Logical
Design
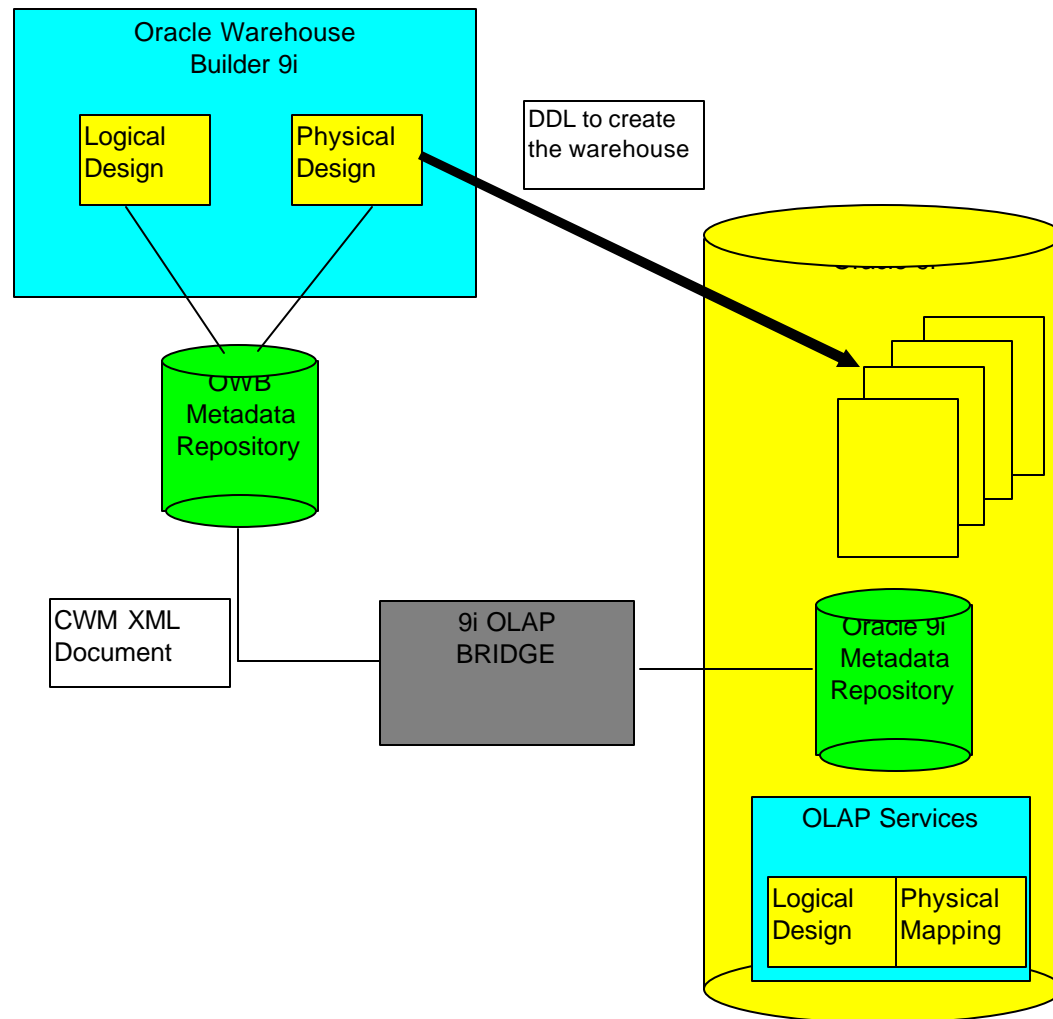
Physical
Mapping

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

Metadata Export - Bridge

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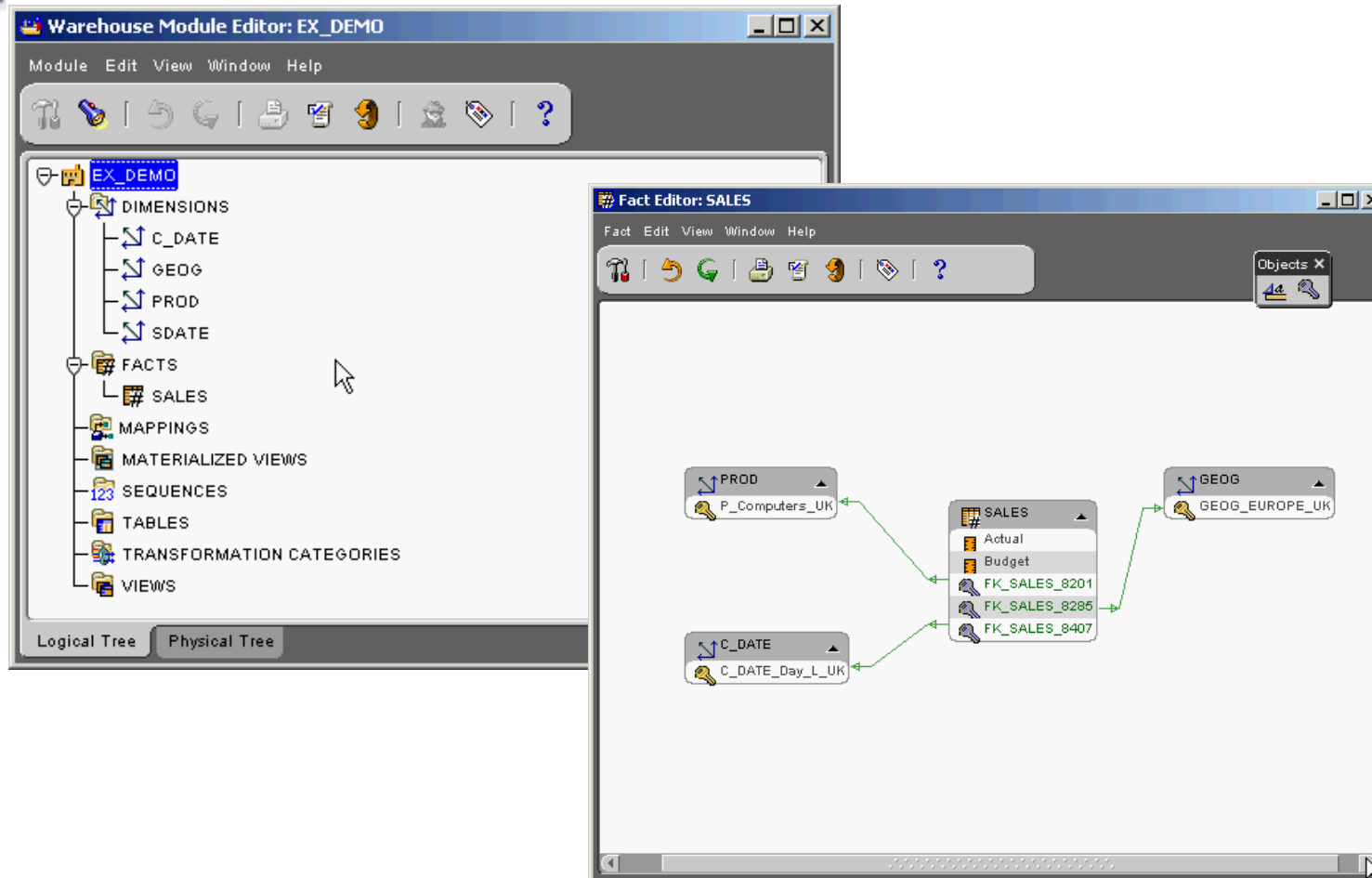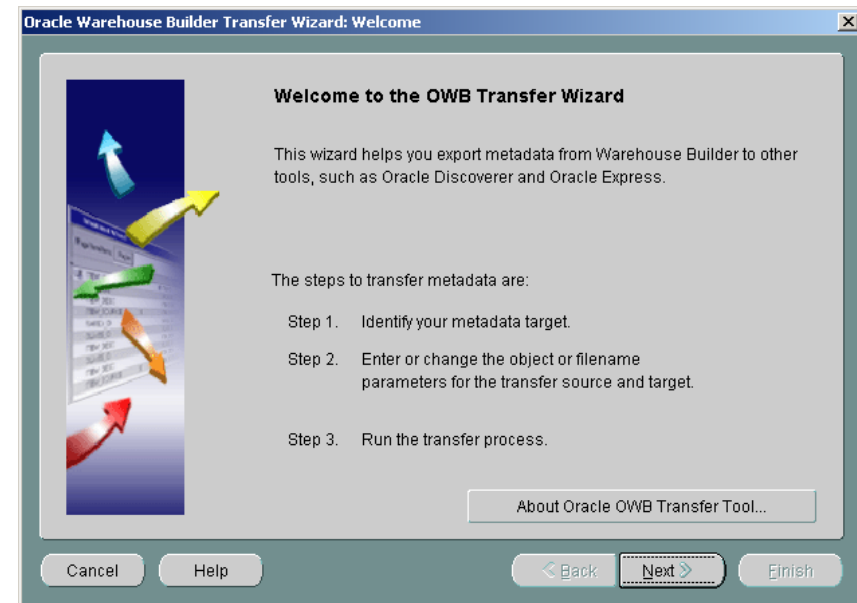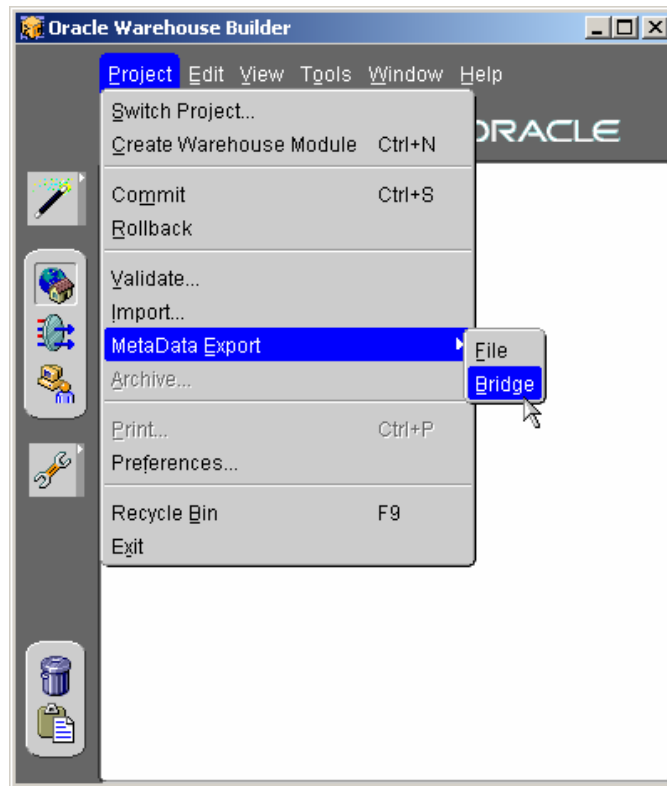
OWB Transfer Wizard

- **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

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OLAP Bridge – Transfer Parameters

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OLAP Bridge – Transfer Parameters

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CWM Bridge – Running

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OEM Cube Builder – The Results

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Demonstration

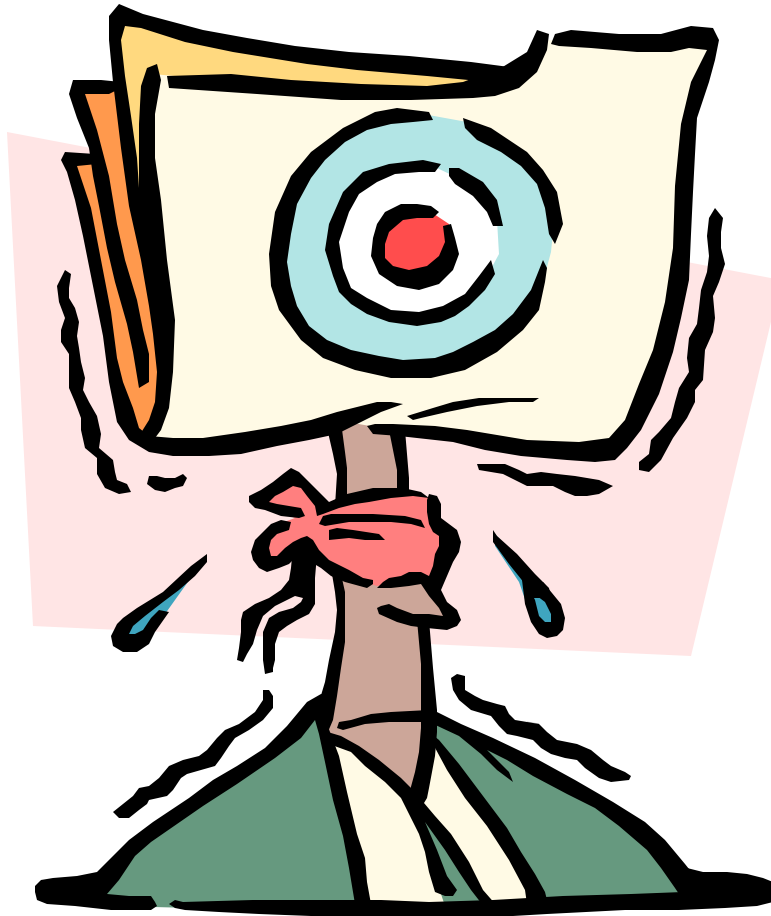©Vlamis Software Solutions, Inc.
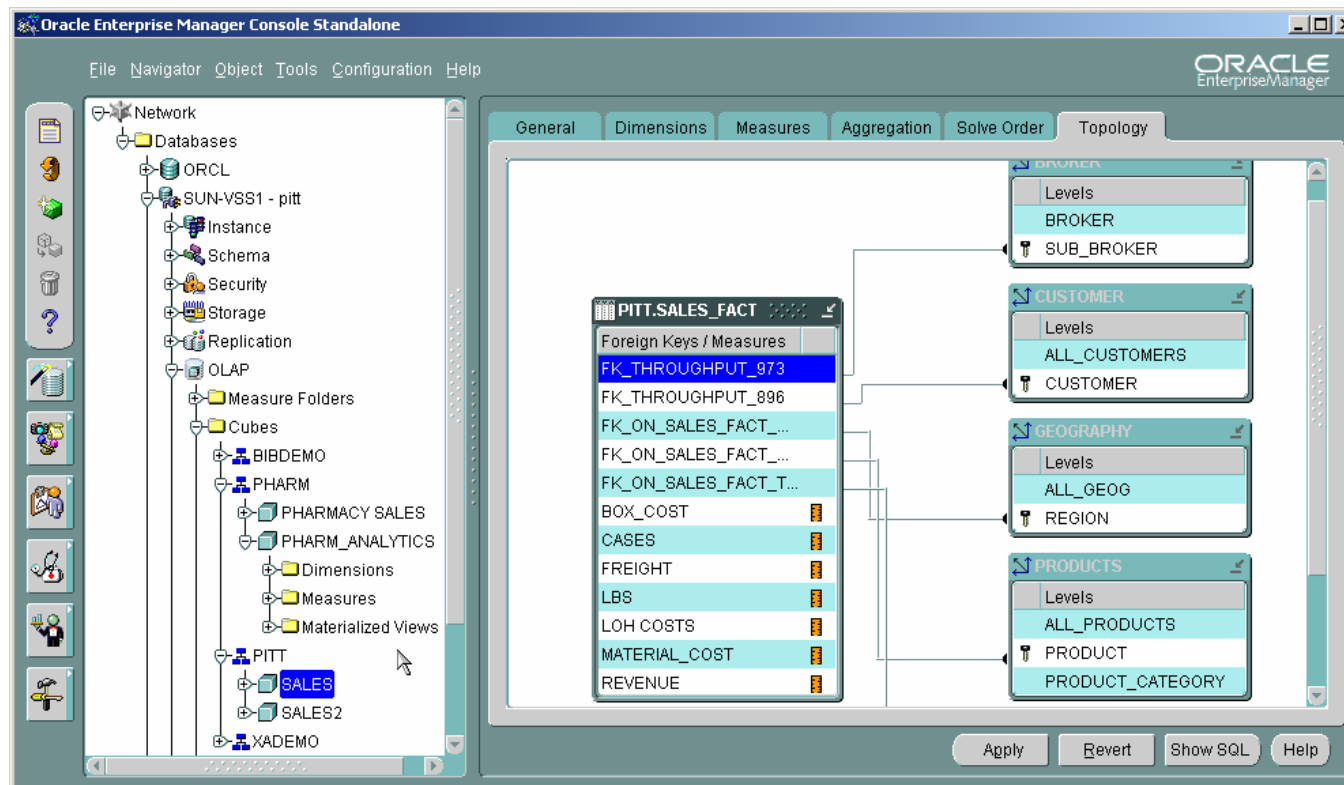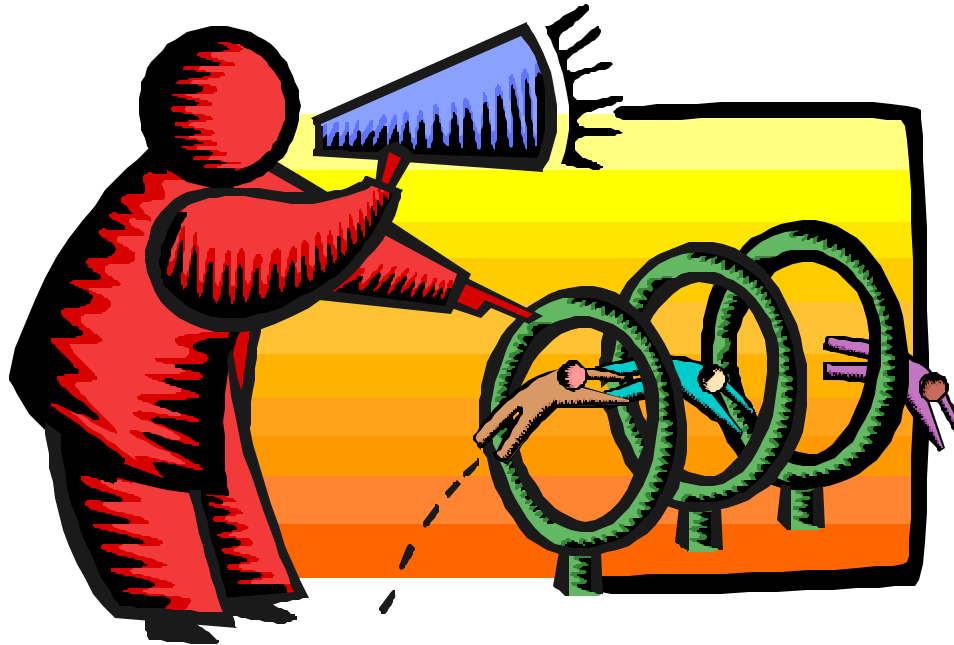
Conclusions

- **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**
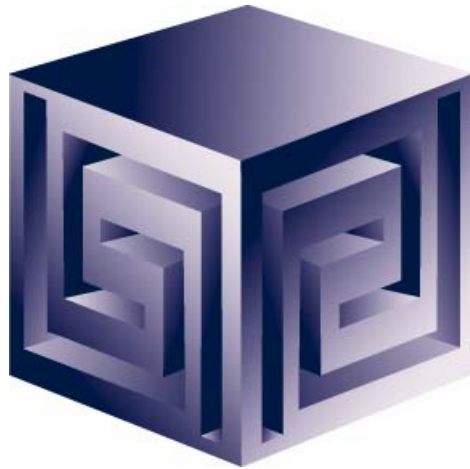 - ❑ **No Migration for Express Databases**

QUESTIONS?

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