ORACLE SQL DEVELOPER DATA MODELER

A COMPLETE MODEL-TO-IMPLEMENTATION SOLUTION FOR DATA RELATED MODELING

KEY FEATURES

- Create, browse, and edit database models
- Synchronized forward and reverse engineering between Logical and Relational models
- Model compare and merge facilities
- Diagram support for subject areas, and a choice of notations
- Large model printing facilities
- Name standardization and Design rules
- Collaborative development through integrated version control

KEY BENEFITS

- Supports developers on multiple platforms:
  Windows, Linux and MAC OS X
- Import DDL
- Import from data dictionary: Oracle, IBM DB2/390, IBM DB2 LUW, Microsoft SQL Server or ODBC/JDBC
- Import multi-dimensional Cube Views metadata and XMLA
- Import models from CA ERwin® Data Modeler and Oracle Designer

Oracle SQL Developer Data Modeler is a graphical tool that enhances productivity and simplifies data modeling tasks. Using Oracle SQL Developer Data Modeler users can create, browse and edit, logical, relational, physical, multi-dimensional, and data type models. The Data Modeler provides forward and reverse engineering capabilities and supports collaborative development through integrated source code control.

Audience

Oracle SQL Developer Data Modeler is designed for all database data modelers, from business architects to DBAs and from database to application developers. The role of Oracle SQL Developer Data Modeler is to simplify data modeling development tasks and serves as a powerful communication tool between developers and business users.

Benefits

Oracle SQL Developer Data Modeler runs on Windows, Linux and Mac OS X. This is a great advantage to the increasing numbers of developers using multiple platforms. To install Oracle SQL Developer Data Modeler simply unzip the downloaded file.

Using Oracle SQL Developer Data Modeler users can connect to Oracle Databases 9.2.0.1 and above, Oracle Database 10g and Oracle Database 11g. There is also support for IBM DB2 LUW V7 and V8, IBM DB2/390, Microsoft SQL Server 2000 and 2005 or a standard ODBC/JDBC driver for selective import of database objects.

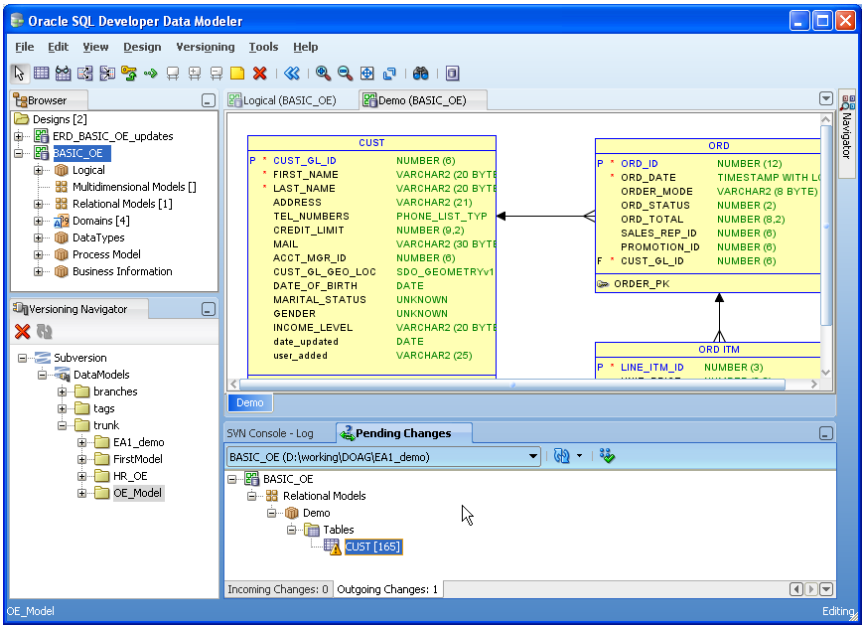

Figure 1: SQL Developer Data Modeler Supports Collaborative Development

Key Features

Oracle SQL Developer Data Modeler has a number of interrelated modeling techniques. The main, central diagram is the logical model for creating Entity Relationship Diagrams (ERD) using either the Barker or Bachman notations, or partial support for Information Engineering. Linked to the logical model is the multi-dimensional model, used to model star schemas (facts, dimensions and levels). The datatypes model allows users to model structured types (SQL99), which can be used in the logical or relational models as data types. The relational model, supporting tables, columns and relationships, can be built from scratch or forward engineered from the logical model. Users can build one or more synchronized relational models from the central logical model. In turn each relational model supports one or more physical models. The advantage is that developers can generate different database or platform specific DDL scripts depending on the physical model selected. The physical model supports specific data constructs in Oracle databases, IBM DB2 and Microsoft SQL Server.

Creating Models

Users import existing logical models, multi-dimensional, or relational models or create them from scratch. Relational models are also created by importing script files (DDL) or by importing directly from the data dictionary. Oracle SQL Developer Data Modeler can import directly from the Oracle Designer repository or CA ERwin Data Modeler logical models. Multi-dimensional models can be imported using Cube Views or XMLA files, or created from Oracle SQL dimensions imported from database or DDL script. Data types models can also be created using import from database or DDL script, for Oracle and DB2/UDB.

Extensive and wizard-led engineering capabilities allow you to re-engineer a relational model to a logical model or to engineer a logical model to one or more relational models, where both models can be kept synchronized.

Generating Output from Models

Oracle SQL Developer Data Modeler generates DDL scripts for Oracle, DB2 and SQL Server, providing a number of export options. Users can generate:

- Database specific DDL scripts from the physical models
- Cube Views Metadata or XMLA files for multi-dimensional models
- XML files for Oracle OLAP or directly to create Oracle Analytical Workspace
- Compare and Merge

Oracle SQL Developer Data Modeler allows users to compare and optionally merge the two versions of the same relational model. This utility also supports the ability to create database update scripts.

Diagrams: Formatting, Subject Areas and Displays

When working with diagrams, users can control colors, fonts and the dimensions of a single or collection of objects. A subview is a group of, often related, objects on a diagram and can be thought of as subject areas within a larger model. Any changes in the subview are reflected in the main model. A relational model subview is automatically created per database schema when several schemas are imported at once. Subviews make it easier to maintain larger models.

Naming Standardization and Transformations

Naming rules can be defined and used with a glossary to check the logical and relational models for their compliance. The glossary can be built from scratch by hand, imported or

generated from an existing logical model. Glossaries can be used during forward engineering to apply or enforce naming standards. SQL Developer Data Modeler 3.0 allows users to build and apply custom transformation scripts using a choice of scripting languages.

Design Rules

A predefined set of design rules are available to give users warnings or raise errors in the design. These can be run just before DDL generation or at any time during the design phase, and can be targeted at specific areas of the design. Users can navigate directly from the design rules results window to the object displaying an error or warning to correct the issue. SQL Developer Data Modeler 3.0 provides the ability to create user defined design rules. Further, users can create named sets of design rules made up of user defined and predefined rules and apply just the rule sets.

Collaborative Development

SQL Developer Data Modeler 3.0 introduces tight integration with open source version control software, Subversion. This integration allows users to place the full design under source code control, check out designs, make modifications and check changes back to the central Subversion repository. Subversion supports collaborative development, thus allowing multiple users to work on the same design.

Reports

Oracle SQL Developer Data Modeler supports a reporting repository, allowing users to save and run SQL queries to gather details of the designs. A set of predefined reports are available as an extension to Oracle SQL Developer, where users can run the reports against their designs or write their own SQL query reports.

SQL Developer Data Modeler 3.0 also includes integrated reports, providing users with the ability to run reports against their designs and open the reports in Microsoft Word.

Packaging

Oracle SQL Developer Data Modeler is a standalone, independent product, available for download from the Oracle Technology Network (OTN) or as an extension to Oracle SQL Developer 3.0, where users can create their own designs or open, review and update designs previously created.

Getting Started

Download Oracle SQL Developer Data Modeler from OTN and unzip it into a directory of your choice.

Contact Us

For more information about Oracle SQL Developer Data Modeler, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

Oracle is committed to developing practices and products that help protect the environment

Hardware and Software, Engineered to Work Together