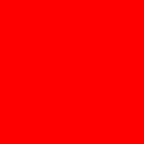


ORACLE®



The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

Database Design Using JDeveloper

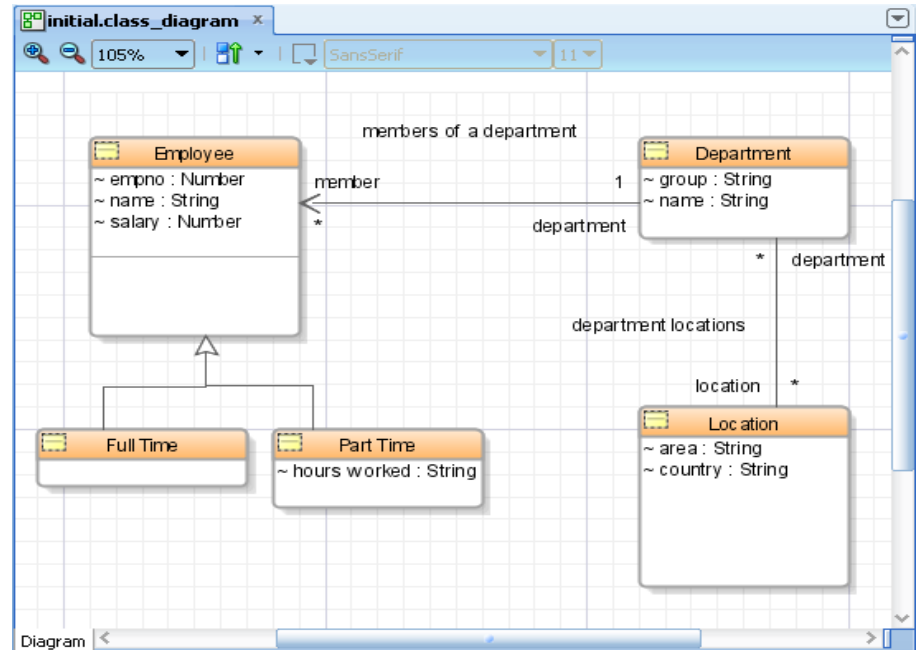
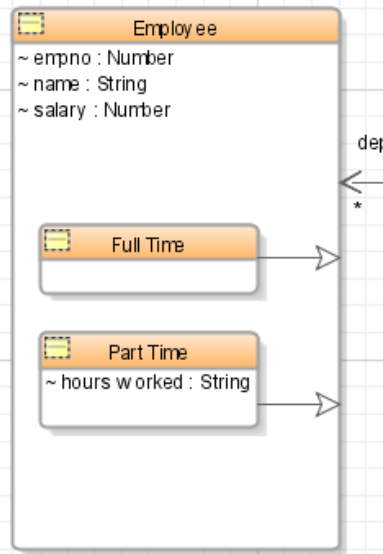
Susan Duncan
Product Manager
Oracle Development Tools
susan.duncan@oracle.com

Topics

- Logical Modeling
- Transform to Physical Models
- Using Templates
- Versioning
- Team Development
- Forward and Reverse Engineering
- Reporting

Logical Modeling

- UML Class Model
 - Associations: relationships
 - Includes m:m
 - Generalizations: sub-types



Transform to Physical DB Model

- Choose
 - Database Type
 - Naming options
 - Quote UML name
 - Use underscores (PART_TIME)
 - Pluralize (EMPLOYEES)
 - Invert UML association role names
 - Sub-type implementation
 - Resolve m:m associations

Templates

- Tables, triggers, sequences....
- Database Type
- Default Templates
 - Example: <tablename>_ID is primary key column
- Customised Templates
 - Example: sequence and trigger for PK column
 - Example2: audit columns on each table
- Sharable between
 - Multiple offline DB
 - Multiple projects
- Use in conjunction with transformed logical model

Versioning

- At object level – classes, tables, sequence, diagram...
- History Viewer
- Pending Changes

The screenshot displays the Oracle SQL Developer interface. The top window is the 'History: EMPLOYEES.table' window, which shows a table with columns: Date, Author, Revision, and Description. The table contains three rows of history data:

Date	Author	Revision	Description
15-Sep-2010 13:26:01	susan	1058	Working Cop
15-Sep-2010 13:26:01	susan	1058	add unique l
14-Sep-2010 17:12:23	susan	1055	to demonstr

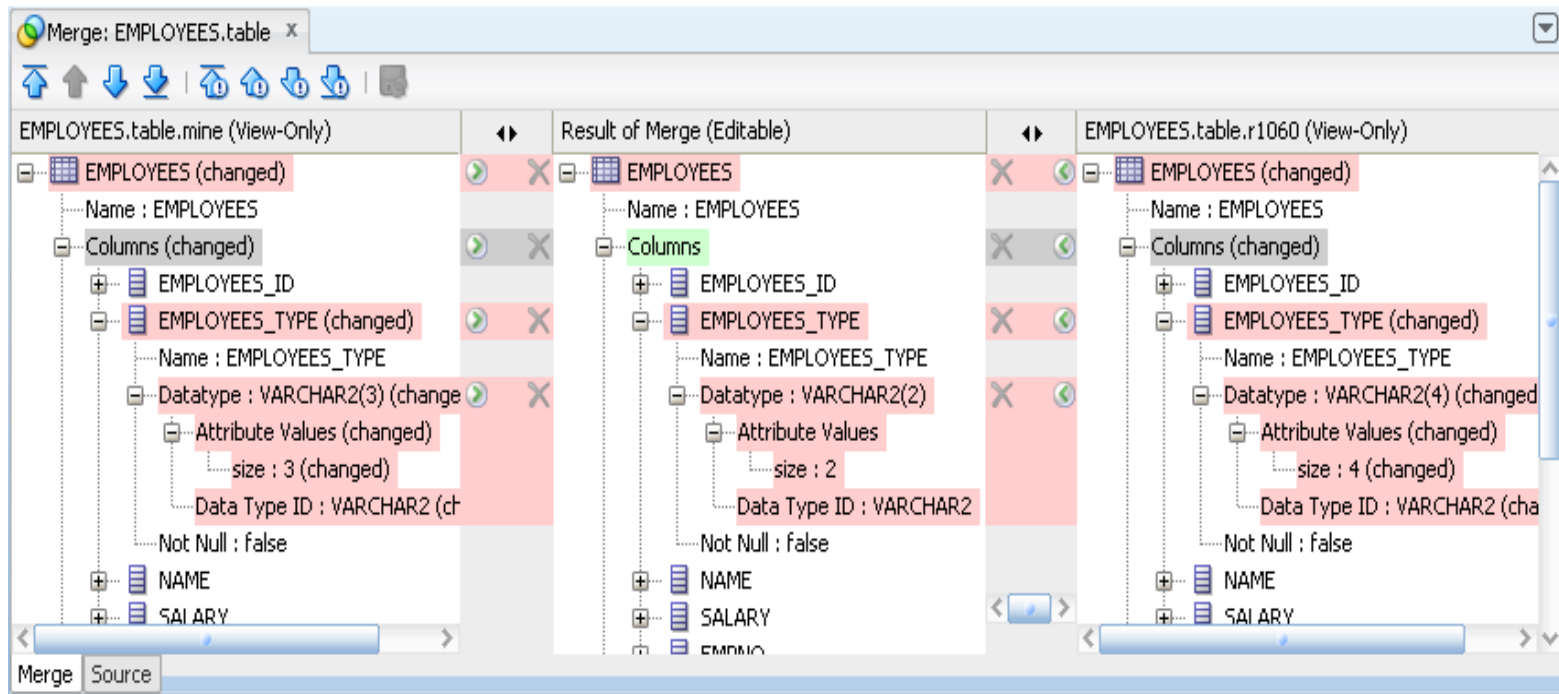
Below the history viewer is the 'Database Object Compare' window, which compares two revisions of the EMPLOYEES table: Revision 1055 (left) and Revision 1058 (right). The comparison shows differences in the EMPLOYEES_TYPE attribute, including its datatype (VARCHAR2(20) vs VARCHAR2(2)), attribute values (size: 20 vs size: 2), and constraints (EMPLOYEES_PK vs EMPLOYEES_PK and MEMBERS_OF_A_DEPARTMENT).

The screenshot shows the 'Pending Changes (Subversion)' window. It displays a table with the following data:

Name	Location	Remote Status	Remote Property
EMPLOYEES.table	D:\JDeveloper\mywork\2010\UML_DB_Profil...	Modified	Unmodified

At the bottom of the window, there are summary statistics: Outgoing: 0, Candidates: 0, and Incoming: 1.

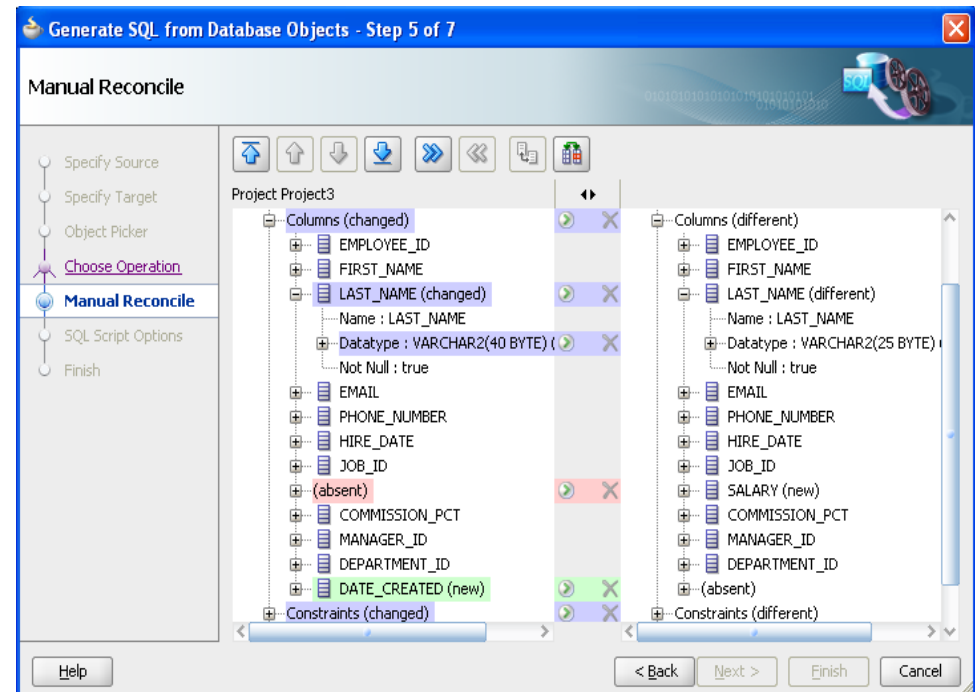
Team Development



- Conflict Resolution Viewer
- Middle panel is common ancestor
- Move changes from right or left panel version

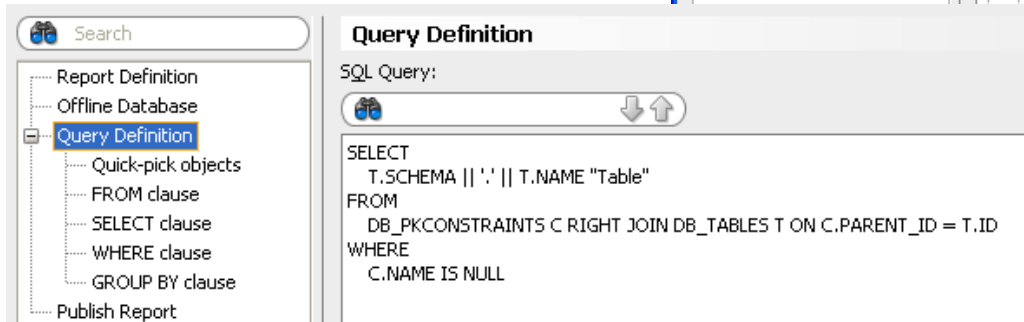
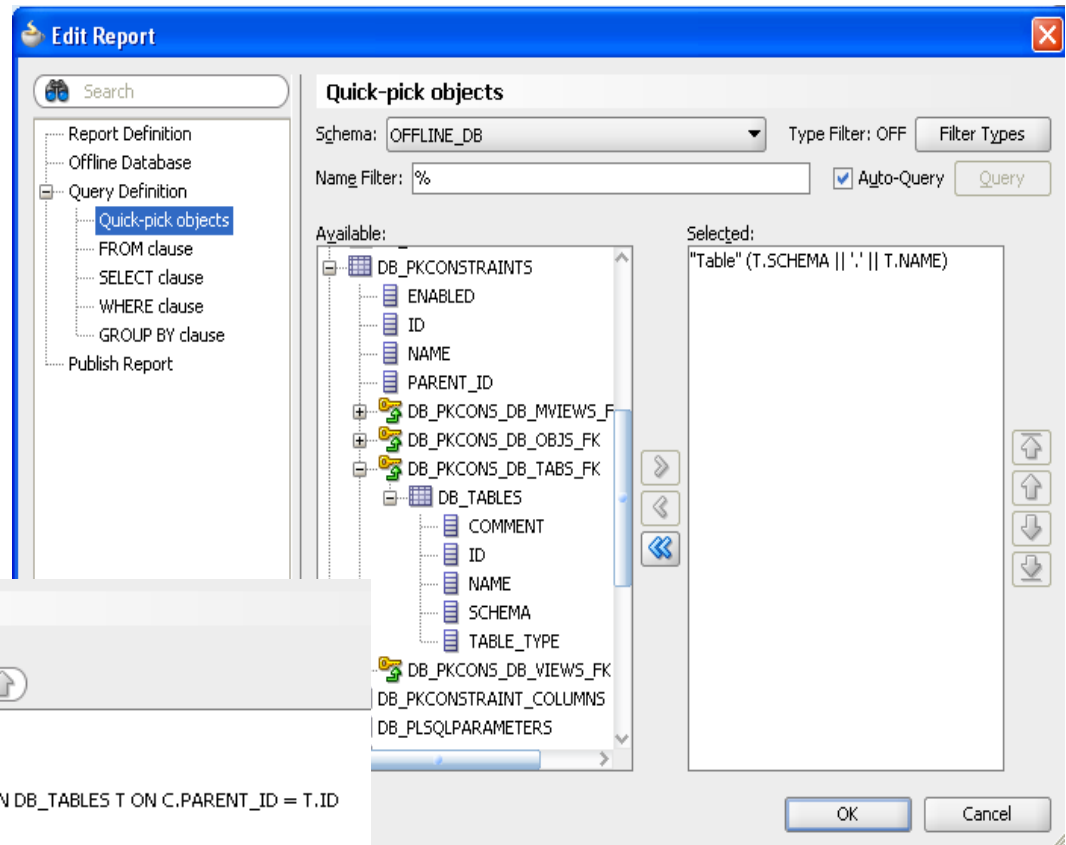
Forward/Reverse Engineering

- CREATE, ALTER, REMOVE
- Direct or SQL Script
- Manual Reconcile
 - Model:Model
 - DB:DB
 - DB:Model
- Foreign Database support



Reporting

- Pre-built reports
 - Objects by type
 - Tables and columns
 - Missing Pk....
- Custom Reports
 - SQL-like interface



Topics

- Logical Modeling
- Transform to Physical Models
- Using Templates
- Versioning
- Team Development
- Forward and Reverse Engineering
- Reporting



QU**E**STIONS
ANS**W**ERS

Q
A