ORACLE SQL DEVELOPER 3.1

Oracle SQL Developer is free and fully supported graphical tool that enhances productivity and simplifies database development tasks. Using SQL Developer, users can browse, edit and create database objects, run SQL statements, edit and debug PL/SQL statements, build PL/SQL unit tests, run reports, and place files under version control.

Audience

Oracle SQL Developer, initially designed with a focus on database developers who spend large portions of their working days involved in database tasks, now also supports advanced users and DBAs. For all users, the role of SQL Developer is to simplify database development tasks and increase developer productivity.

Benefits

Developed in Java, SQL Developer runs on Windows, Linux and Mac OS X. This is a great advantage to the ever-increasing numbers of developers using multiple platforms. Multiple platform support also means that users can install SQL Developer on the same system as the database and connect remotely from their desktops, thus avoiding client-server network traffic. Default connectivity to the database is through the JDBC thin driver, so no Oracle Home is required. To install SQL Developer simply unzip the downloaded file. With SQL Developer, users can connect to any supported Oracle Databases including Oracle Express Edition. Users can create database connections for non-Oracle databases (IBM DB2 LUW, MySQL, Microsoft SQL Server, Microsoft Access, Sybase Adaptive Server and Teradata) for object and data browsing and migration. SQL Developer is a supported product for all customers with Oracle Database Support contracts.

SQL Developer 3.1 New Features

Data Pump – To enable very high speed movement of data and metadata from one database to another, SQL Developer has added the Oracle Data Pump technology. Use SQL Developer's Data Pump UI to import and export your Database, Tablespaces, Schemas, and Tables. Select the option to import and export just the DDL, Data or both. Data Pump also offers scheduling capabilities.

Database Diff – Completely redesigned, DB Diff now provides a more reliable comparison and difference management support of your DDL. Select what to include in your DDL Generation and select from various comparison options such as match constraints by name or by definition. Objects can be further filtered. Scripts are generated to synchronize the source and target destinations.

Database Copy – Database Copy is redesigned to enhance performance and offer more flexibility. Choose from various copy options: copy objects, copy a schema or consolidate multiple schemas into one, copy tablespaces, copy DDL, data or both. Further refine your copy by using the filtering capability.

RMAN – Oracle Recovery Manager is now part of the DBA navigator. An easy to use wizard takes you through the scheduling of a full database backup. Backups can be stored to disk,

KEY FEATURES
- Browse, edit, create database objects using a Graphical User Interface
- Create and run SQL scripts
- Edit and debug PL/SQL; build and run PL/SQL unit tests
- Tune SQL queries
- Create and run SQL Reports
- Place files under version control
- Manage users and roles
- Migrate from IBM DB2, MySQL, Microsoft SQL Server, Microsoft Access and Sybase Adaptive Server and Teradata to Oracle

KEY BENEFITS
- One environment to browse, edit, create, tune and test SQL and PL/SQL
- Connect to all supported Oracle Databases
- Open platform support
- No charge
- Fully supported
- One environment to browse and query Oracle and non-Oracle Databases
- Extensible

tape or a combination. RMAN scripts are generated to restore or recover a whole database, tablespaces, datafiles and archived logs. Reports are available to manage backup jobs, backup sets, image copies and RMAN settings.

Migrations – A number of new features support the migration from non-Oracle databases to the Oracle Database. Teradata support has expanded to include a SQL Translator, Enterprise Capture and Offline Migration. Sybase now offers TSQL Translation with support for outer join syntax including legacy outer join syntax and triggers.SQL Tuning – The SQL Tuning Advisor analyzes high-volume SQL statements and offers tuning recommendations.

PDF Reports – The Reports dialog is enhanced for ease of use and flexibility to create or update a report. The PDF feature allows the user to change and save their PDF options for a specific report in the Reports Navigator. Customize the visual layout and apply security with password protected encryption to your PDF Reports.

Key Features

SQL Developer has two main navigation tabs. The first, the Connections navigator, allows users to browse database objects and users that they have access to. The second is a Reports navigator, where users can run predefined reports or create and add their own reports. In addition to these are a number of other navigation tabs that users can open depending on the task. These tabs include:

Data Modeler browser – Provides access to all elements that make up a data model design

Data Miner connections – Allows users to browse and review their Data Mining components

DBA navigator – Allows users with access to a privileged account to browse and review all aspects of their database

Files navigator – Allows users to browse the file system and open files directly in SQL Developer

Versioning navigator – Allows users to work with open source version control systems such as Subversion, Concurrent Versions System (CVS), Serena Dimensions and Perforce

Unit Test navigator – Provides a navigator for browsing, creating and running unit tests

Using one or more of the navigators described, SQL Developer supports the following features.

Creating and Editing Objects

Users can connect to any target Oracle database schema using standard Oracle database authentication. While default connectivity is through the JDBC thin driver, users can also make connections using advanced authentication methods, such as LDAP and OS Authentication. Once connected, they can create, edit and update database objects. As new objects are created or existing objects edited, the DDL for those adjustments is available for review. An Export DDL option is available for users wanting to create the full DDL for one or more objects in the schema.

SQL Worksheet

The SQL Worksheet supports the use of SQL, PL/SQL and SQL*Plus commands. These can be run individually or consecutively. A SQL History option makes recalling previous commands easy, while the Explain Plan option allows users to see the execution plan for selected statements and to find and display the differences between two explain plans. The SQL Worksheet also supports the ability to generate trace information through the Autotrace option.

ORACLE®

PLSQL Editing and Debugging

In this robust editing environment, users can create and edit PL/SQL, take advantage of the code formatting, add bookmarks and use code insight. When it comes to debugging PL/SQL, breakpoints, smart data, a debugger stack and watches are all available. These features allow the user to set a break point, and run and test the code, supplying alternate data at runtime while debugging.

Creating PL/SQL in the editor or using the SQL Worksheet is made easier by the availability of snippets. Snippets are code fragments, such as SQL functions, optimizer hints or miscellaneous PL/SQL programming techniques, which users can drag onto the PL/SQL Editor or the SQL Worksheet.

PL/SQL Unit Testing

The PL/SQL unit-testing feature allows users to create unit tests and save them to a unit test repository. The advantage of this is that users can run and rerun the tests whenever required. Single tests can be grouped together in a suite of tests, thus providing a power test bed for running regression tests for PL/SQL in an application.

Reporting

SQL Developer provides a number of predefined reports about the database and its objects. Any report can be pushed over to a SQL Worksheet and manipulated further. SQL Developer allows users to create, save and share user-defined reports for repeated use. Report styles include charts and master-detail reports.

Version Control

SQL Developer provides tight integration with Subversion version control systems. There is provision for additional extensions for connecting to Concurrent Versions System (CVS), Serena Dimensions and Perforce. Once a connection is made to the version control system of choice, users can open files in SQL Developer and bring them under version control. Once under version control, files can be checked out, modified and checked back in.

Migration from Non-Oracle Databases

Oracle SQL Developer provides users with the ability to migrate database objects and data from IBM DB2 LUW, MySQL, Microsoft SQL Server, Microsoft Access, Sybase Adaptive Server and Teradata to Oracle.

Using the Migrations Projects to encapsulate the activity and the migrations wizard to control the flow, SQL Developer captures detail from the third-party database into a repository. Using the interactive migration, users can customize the converted model before progressing to the next stage. With the captured metadata stored in the migrations repository, SQL Developer generates the converted model, which is used for the DDL script that users run to create the new objects in Oracle. The final stage of migration is to move the data to the newly converted objects.

SQL Developer provides a Translation Scratch Editor where users can enter third-party database SQL statements and translate them to their Oracle equivalent. A Translation Difference Viewer provides a full-color side-by-side comparison of the original and translated SQL code.

Architecture

SQL Developer was developed in Java leveraging the Oracle Fusion Client Platform. As such, it was the first independently branded product based on this IDE. There is a separate distribution available bundled with JRE 1.6, with an additional tools.jar to support Microsoft Windows clients. Non-Windows clients only need JDK 1.6 (update 11 or later).

ORACLE®

Getting Started

Download SQL Developer from OTN, unzip it into a directory of your choice and create a database connection. All you need is the schema name and password of the schema you have access to and the host and SID of the database, and you are ready to go. Download the software, read the white paper, review the demos and try the tutorials available from OTN at: http://www.oracle.com/technetwork/developer-tools/sql-developer/overview

Contact Us

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

Hardware and Software, Engineered to Work Together

ORACLE®