Top 10 Oracle SQL Developer Tips and Tricks

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Agenda

- Overview
- Top 10 Tips & Tricks
- Demonstration
- SQL Developer 4.0 New Features
Oracle SQL Developer
Overview
Oracle SQL Developer

Overview

- Free graphical tool for Database Development
- Enhances productivity and simplifies database development tasks
- Browse database objects
- Run SQL Statements and Scripts
- Edit and Debug PL/SQL
- Run provided reports and create custom reports
Release History

SQL Developer 1.x
- 2006: Initial Release
- 2007: Database Migration
- 2008: Version Control, File Management, Translation Support

SQL Developer 2.x
- 2009: PL/SQL Unit Testing, Data Modeler Viewer, Updated Data Grids, New SQL Worksheet

SQL Developer 3.x
- 2011: Schema Browser, Query Builder, PDF Support, DBA Navigator, DBMS Scheduler

SQL Developer 4.0
- 2013: Now available!
  - Java 7 JDK
  - Subversion 1.7
  - Better Command Line
  - Find DB Object
  - Database Cart
  - Better Reports
Database Connections

- Connection Support
  - Basic, TNS, LDAP, Advanced
  - External authentication
  - Proxy connections
  - Third-party database
  - Kerberos Authentication
- Create, save and test
- Import and export
- Cloud Connections
Creating and Browsing Objects

- Connection Navigator
- Tree based object browser
- Context menu utilities
- Create and edit database objects
  - Tables, Views, Indexes, Sequences
  - Packages, Procedures, Functions, Triggers, Types
  - Directories, Database Links (includes Public)
  - Application Express
  - … and more
Data Grids: Querying and Updating Data

- Browse table and views
- Filter, Sort
- Context menus offer
  - Single record view
  - Duplicate row
  - Count rows
  - Save Grid as a report
- Manage columns
- Single value updates
Exporting and Importing

- Context menu DDL and data export
  - Text, CSV, Insert, Loader, XML, HTML, XLS, PDF
- Import Data
  - MS Excel data import
  - Create table on import
- Export wizard
  - Parameters to include schema owner, drop statements, storage syntax, inline constraints syntax, export data, export grants
- Bulk upload to Database Cloud using Cart functionality
Exporting to PDF

- New data format support for PDF
  - Configure PDF file format using preferences
  - Customizable Layouts
  - Provides security to encrypt and password-protect
  - Provides option to include BLOBs
SQL Worksheet

- Execute queries and scripts
- Command support for SQL*Plus and SQL and PL/SQL
- Code insight
- Code refactoring options
- Syntax highlighting
- Supporting windows for
  - SQL Tuning Advisor, Explain Plan and Auto trace
  - HTP and OWA output
Query Builder

- Drag and drop query building
  - Integrated with SQL worksheet
  - Multiple object selection
  - Switch from Query Builder and Worksheet
  - Repeated tables
  - Union, intersect, minus and sub queries
  - Aggregates, Alias, Order By, Group By, Where clauses
File Based Development

- SQL Developer supports file based development
  - Explore files in the Files navigator
  - Open files in the SQL Worksheet
  - Place files under version control
  - Execute against a connection
  - Syntax formatting
Integrated Version Control Support

- Integrated support for versioning and source control systems
  - Subversion

- Use Check for Updates to add:
  - CVS (Concurrent Versions System)
  - Perforce
  - Serena Dimensions

- Access using
  - View > Team > Versioning Navigator
  - Versioning menu
Top 10
Oracle SQL Developer Tips and Tricks
#10 Configure Your Preferences

- Make things look nice
- Look & Feel
- Disable unused extensions
- Automatic can be ‘bad’
- I like ‘more’ grids
Right Click in the Editor Tab:

- Split gives you two independent views of the editor
- New Tab Group lets you see multiple editors at once
#8 Recall Previous SQL via the Keyboard

- Cycle through your recent SQL statements just using these magic key strokes! Ctrl+Up or Ctrl+Down.
#7 Extend SQL Developer With Extensions

- Write your own (XML + SQL)
- Check for Updates
- Extension Exchange
- Free and commercial Extensions
#6 Formatted Query Results

- Format query results directly to XML, CSV, HTML, etc.
- Add Comment
  
  ```
  /*csv*/ /*xml*/ /*html*/
  ```
- Execute via F5 (Script)
- Comment labels match grid export formatter labels
- ONLY works in SQLDev
#5 Viewing PL/SQL Output (Include Ref Cursors)
#4 Object Search to Quick Open an Object

- Ctrl+Click, Shift+F4
  - Hold down Ctrl...
  - Mouse over object text...
  - Click to open object editor
  OR SHIFT+F4
  OR View > Find DB Object
#3 Drag & Drop Multiple Tables to Worksheet

Drag & Drop Effects

Choose the type of statement created when dragging this table:

- Select
- Update
- Individual statements

Prompt every time

Worksheet

```
1 | SELECT 6.PROD_ID,
2 | 6.CUST_ID,
3 | 6.TIPE_ID,
4 | 6.CHANNEL_ID,
5 | 6.PROMO_ID,
6 | 6.QUANTITY_SOLD,
7 | 6.AMOUNT_SOLD,
8 | A.CITY_ID,
9 | A.CUST_FIRST_NAME,
10 | A.CUST_LAST_NAME,
11 | A.CUST_GENDER,
12 | A.CUST_YEAR_OF_BIRTH,
13 | A.CUST_MARITAL_STATUS,
14 | A.CUST_STREET_ADDRESS,
15 | A.CUST_POSTAL_CODE,
16 | A.CUST_CITY,
17 | A.CUST_STATE_ID,
18 | A.CUST_STATE_PROVINCE_ID,
19 | A.COUNTRY_ID,
20 | A.CUST_PHONE_NUMBER,
21 | A.CUST_PHONE_NUMBER,
22 | A.CUST_INCOME_LEVEL,
23 | A.CUST_CREDIT_LIMIT,
24 | A.CUST_CREDIT,
25 | A.CUST_Total,
26 | A.CUST_Total_ID,
27 | A.CUST_SPC_ID,
28 | A.CUST_SPC_ID,
29 | A.CUST_SPC_ID,
30 | FROM SH.CUSTOMERS_A,
31 | WHERE A.CUST_ID = B.CUST_ID;
```
#3 Drag & Drop Multiple Tables to a Model

- Shift, Select, Drag, Drop OR
- Ctrl+Select, Drag..
- Ctrl walks the dependency tree
- Preview DDL, save, export, etc.
#2 Excel Export and Import

- Export data to Excel
- Import from Excel to table
  - Existing
  - Build New One
- CSV Exports are Faster
#1 APEX Integration

- Report on APEX meta data
- Gather statistics on APEX apps
- Review application details
- Import and Deploy applications
- Export applications and pages
- Publish reports to APEX
#1 APEX Integration - Remote Debugging

- Remote Debug APEX Apps from SQL Developer
- Compile PL/SQL function for Debug
- Enable Remote Debugging in SQL Developer
- Load APEX page in browser
- Trace execution in SQL Dev
Oracle SQL Developer 4.0
New Features
Oracle SQL Developer 4.0

New Features

- JDK 1.7
  - Support for JDK 7 and above

- Database Performance Monitoring
  - Interface for Oracle Database Enterprise Edition’s Diagnostic pack
  - Automatic Database Diagnostic Monitor (ADDM)
  - Active Session History (ASH)
  - Accessible from the DBA panel
  - Manage snapshots, baselines, and baseline templates
Oracle SQL Developer 4.0

New Features

- Find Database Object - Search
  - Redesigned database search
  - New tree layout allows for searches on
    - multiple schemas,
    - object types,
    - identifier types
    - usages.
  - History of searches stored for later access
Oracle SQL Developer 4.0

New Features

- Command Line
  - Command Line extended to Reporting and Cart
  - Run Reports and generate into HTML
  - Cart commands offer the ability to export objects and data
  - Apply predefined DDL generation options and data formats
Oracle SQL Developer 4.0

New Features

- Reports
  - Create new report dialog with tree layout for easier navigation
  - Advanced option to instantly create Child and Drill Down reports
  - More chart types
  - Charts can be previewed in design mode
  - HTML Report can be generated for any report
Oracle SQL Developer 4.0

New Features

- UI Enhancements
  - Enhanced Look and Feel
  - Set window border color dynamically for database connections
  - New floating Editor and Navigation windows

- Data Modeler 4.0
  - Support for 12c IDENTITY columns
  - Masking of sensitive data with redaction policy definitions at table and column level
  - Create Transparent Sensitive Data Protection (TSDP) policies