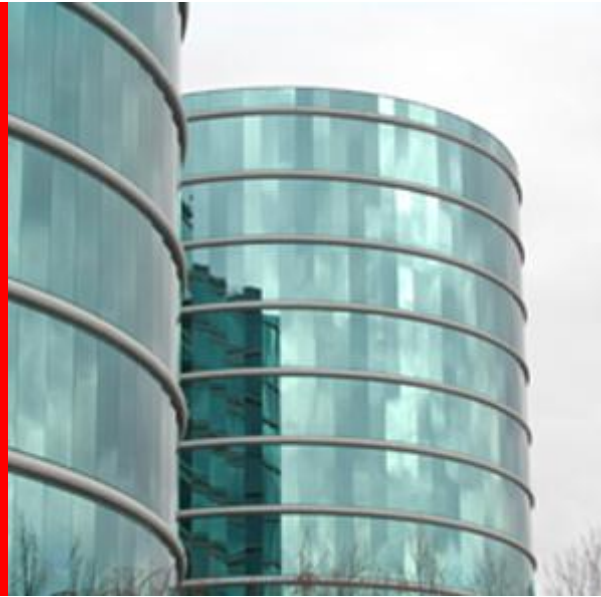
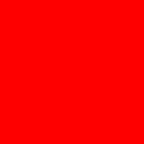


ORACLE®



ORACLE[®]

**Move to Oracle Database with
Oracle SQL Developer Migrations**

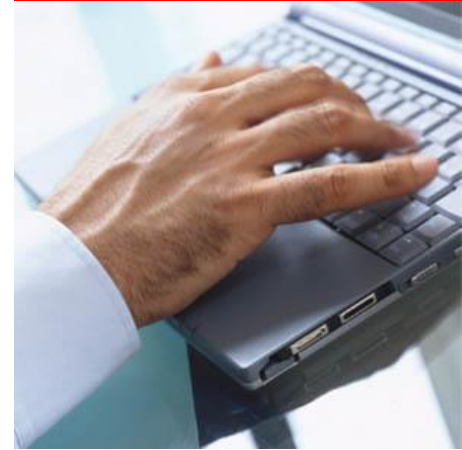


The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development,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

Agenda

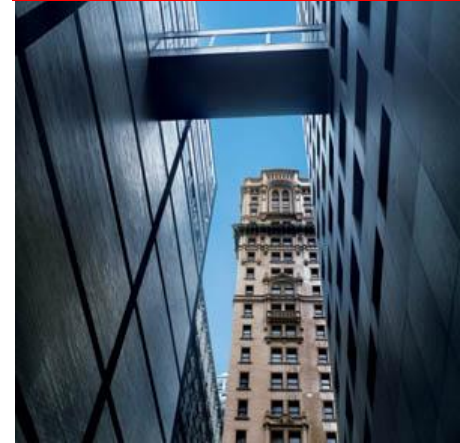
- Types of migrations
- Migration space and project risk
- Project costs overview
- Exadata and database consolidation
- Predictable and measurable projects
- SQL Developer Migration functionality
- More information
- Summary

Introducing Migrations

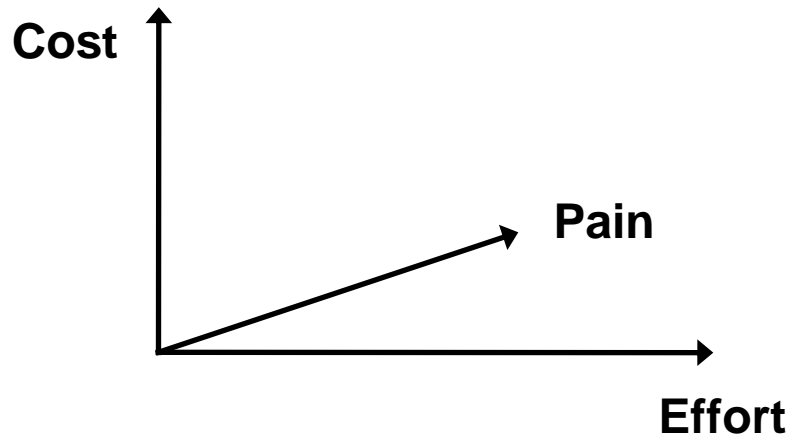


Types of Migration

- A migration is required when you have an application system that you wish to move to another technology and/or platform
- You can migrate applications from:
 - Windows to Linux
 - Mainframe to UNIX
 - Sybase to Oracle Database 11g
 - Visual Basic to Java
 - Microsoft SQL Server to Oracle Database 11g on Linux
 - Microsoft Access to Oracle Application Express
 - Teradata to Exadata
- Migration includes moving objects, data and application code

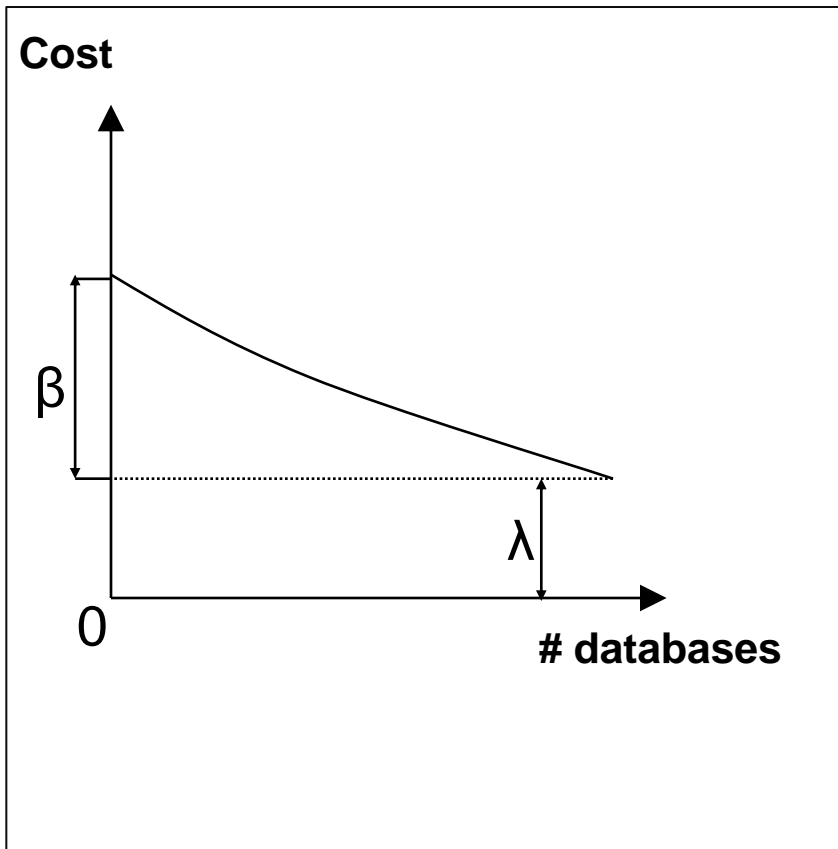


Migration Space and Project Risk



- What factors are forcing us to look at migration?
- How much pain is involved?
- How much effort is involved? Is it measurable?
- How much will it cost? Is it worth it?

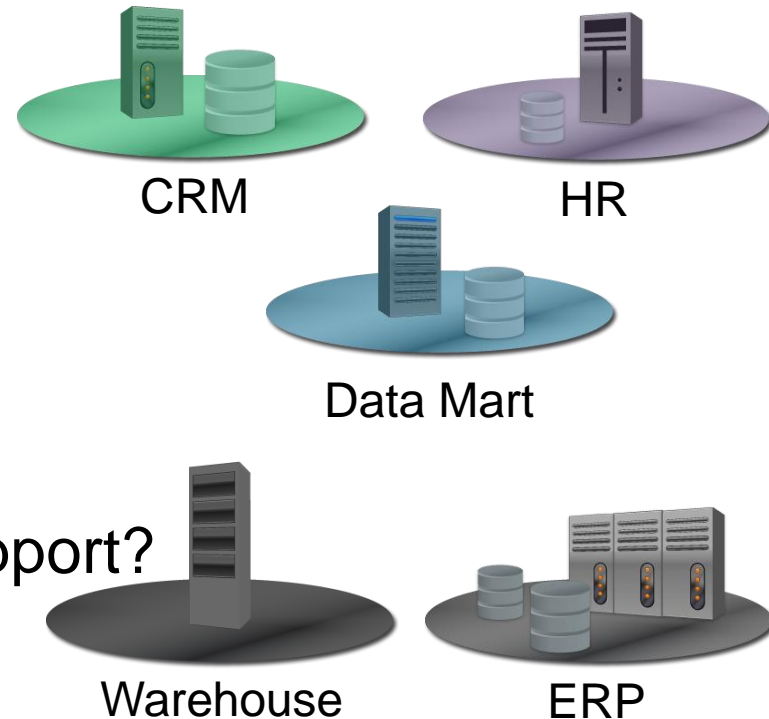
Project Costs



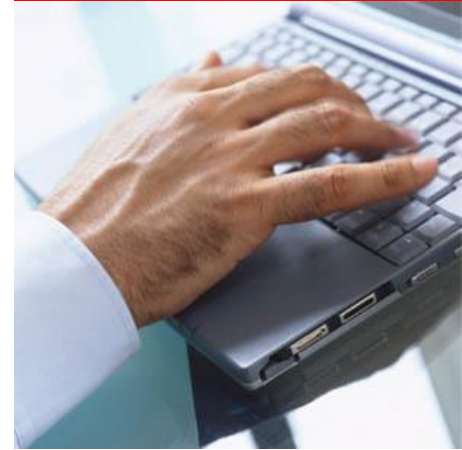
- Consolidation
 - Many platforms to one
 - Hardware and software consolidation
 - Centralized IT management
- Reliability - Scalability - Performance
 - Core competencies of Oracle
 - Key customer concerns
- Cost of Ownership
 - The more databases you have, the lower the relative cost of migration

Choices, Choices

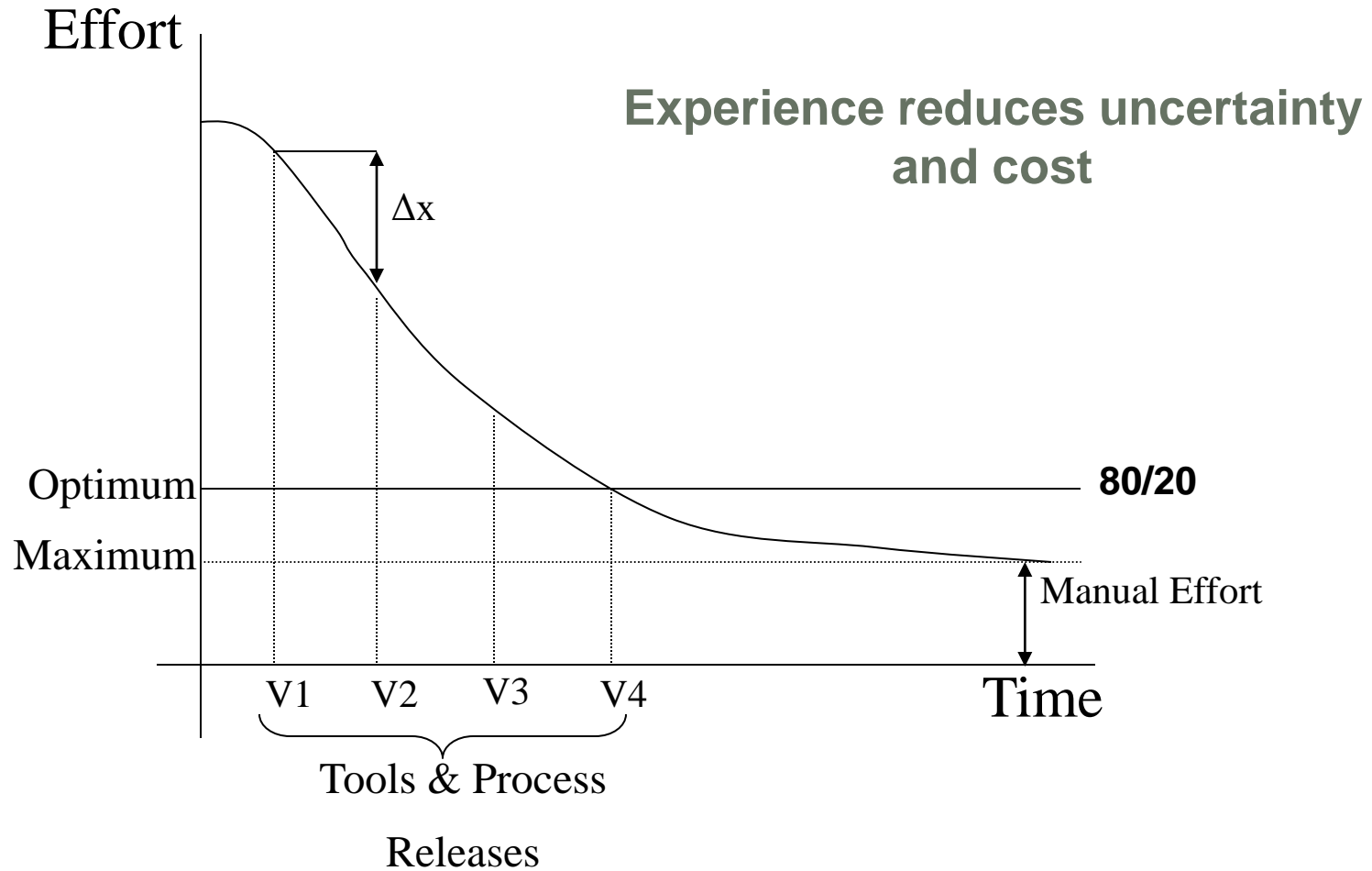
- How do you save money?
 - Consolidation of hardware
 - License reduction
 - Retire systems you can do without
 - Skill consolidation in your teams
- How many systems need to support?
 - Which are critical?
 - Where are the problems?
 - Is there a flexible way to reduce footprint over time, but have the ability to grow over time when required?



Automating Migrations

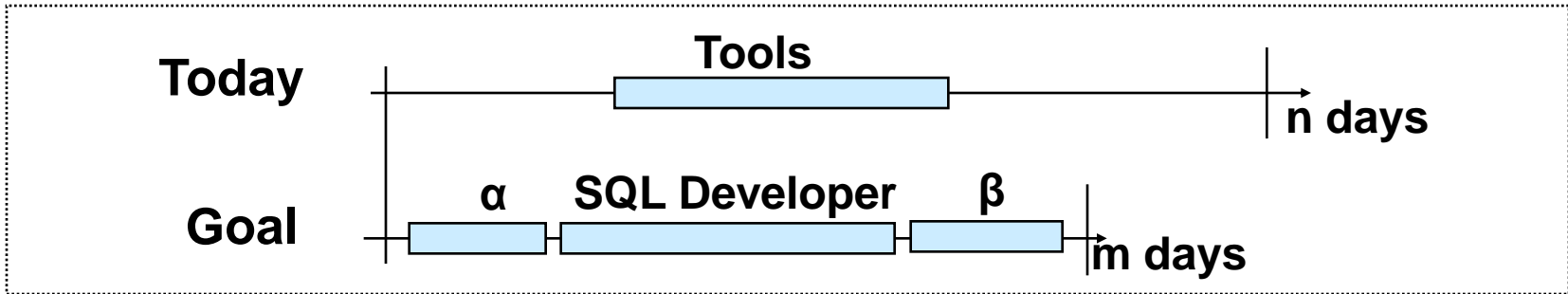


Predictable and Measurable Projects



Automation in Projects

SQL Developer lowers cost and effort in projects

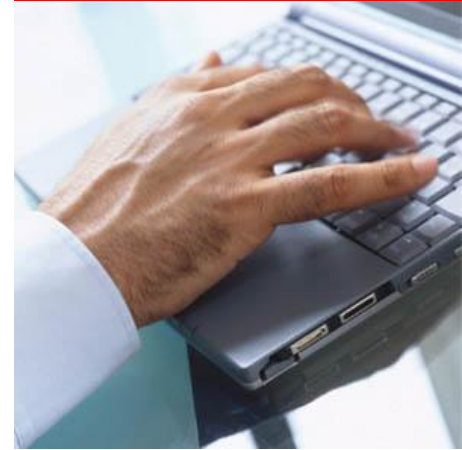


$$Efficiency = 100 \left(\frac{(n - m)}{n} \right) \text{ where } \begin{cases} \alpha = \text{Pre - migration} \\ \text{Automation} \\ \beta = \text{Post Migration} \\ \text{Automation} \\ x = \% \text{ Improvement} \end{cases}$$

- Goals
 - Maximize complex migration issues
 - Minimize manual intervention to minimum and standardize where possible



SQL Developer Migrations

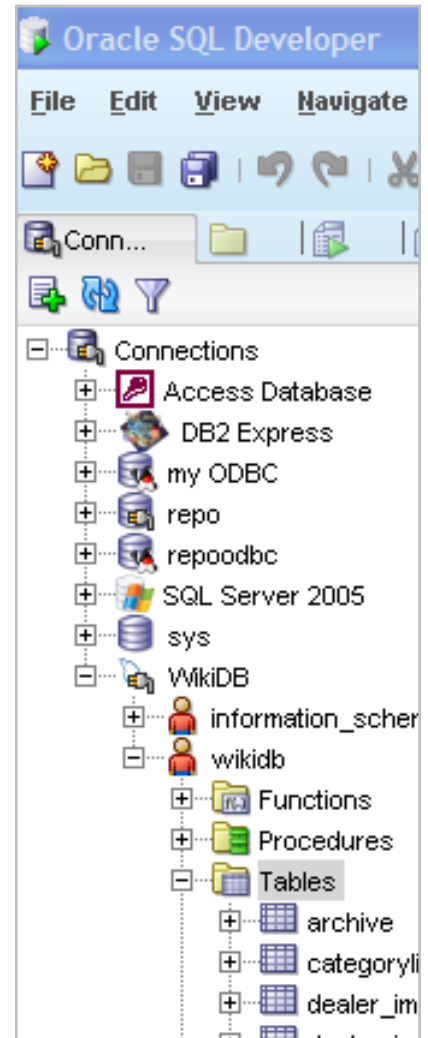


Oracle SQL Developer

Completing the lifecycle

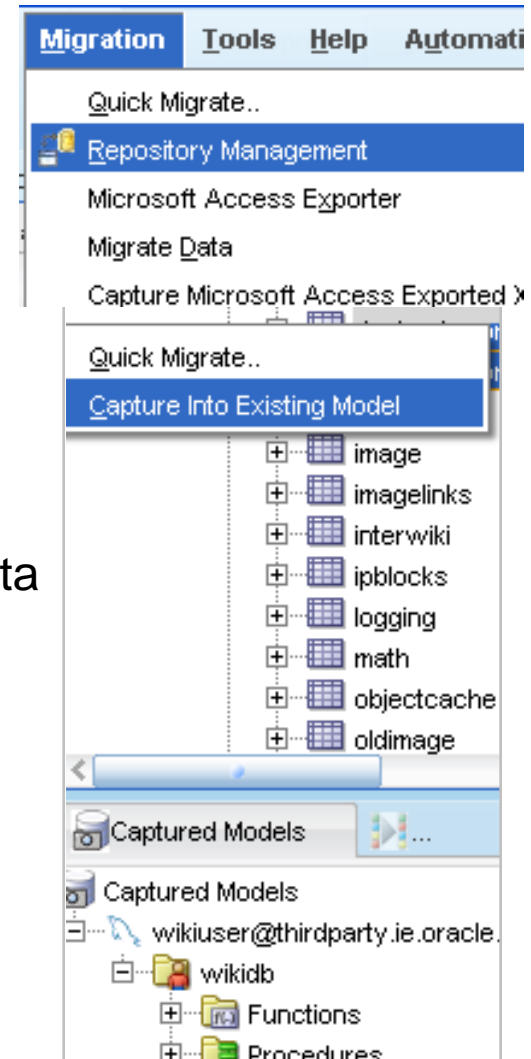
1.5 Million users
and growing

- Migration technology built on SQL Developer
- Migrate third party databases to Oracle in 5 stages
 - Connect, capture, convert, generate, data move
- Native 3rd party database support
 - Create database connections
 - Create and browse third party database objects
 - SQL Worksheet support
 - Powerful reporting on objects migrated



SQL Developer Migrations

- Logical equivalence
- Simple and expert modes using repository
- Least Privilege Migration
 - Users can migrate any object they can access
- Sync Mode
 - Capture a snapshot of 3rd party database metadata
 - Static target used in the migration
 - Visual correlation of derived database objects
- All existing functionality supported
 - Offline data migration using generated scripts
 - Offline meta data load using SQL scripts
- Tailored generation of emulation package



Multiple projects, Concurrent users and Customizable

SQL Developer: Integrated Platform

- Create database connections
- Create and browse objects
- Query and update data
- Import data, export data and objects
- Use the SQL Worksheet
- Tune SQL using
 - Autotrace, Explain plan and monitor session
- Create, run and test PL/SQL
- Run and define reports
- Build extensions
- Importing data, exporting data and objects
- Working with files and version control

The screenshot displays the Oracle SQL Developer interface. On the right, the 'Connections' pane shows a connection to 'HR_ORCL'. The main window shows a table with columns 'DEPARTMENT_ID', 'DEPARTMENT...', 'MANAGER_ID', and 'LOCATION_ID'. The table contains 14 rows of data. A 'Sort...' button is circled in red. Below the table, a 'Filter:' field contains the value '103', also circled in red. At the bottom, the 'SQL Worksheet' shows a PL/SQL script for creating a package body named 'emp_main' with procedures 'change_sal', 'remove_emp', and 'g_user'.

DEPARTMENT_ID	DEPARTMENT...	MANAGER_ID	LOCATION_ID
1	10 Administration	200	1700
2	20 Marketing	201	1800
3	30 Purchasing	114	1700
4	40 Human Reso...	203	2400
5	50 Shipping	121	1500
6	60 IT	103	1400
7	70 Public Relatio...	204	2700
8	80 Sales	145	2500
9	90 Executive		
10	100 Finance		
11	110 Accounting		
12	120 Treasury		
13	130 Corporate		
14	140 Control And		

```
1 create or replace PACKAGE BODY emp_main
2
3   g_counter NUMBER := 1;
4
5   PROCEDURE change_sal
6   (pEmpID IN NUMBER,
7    pSal IN NUMBER)
8   IS
9   BEGIN
10    UPDATE employees
11    SET salary = pSal
12    WHERE employee_id = pEmpID;
13  END change_sal;
14
15  DELETE FROM employees
16  WHERE employee_id = pEmpID;
17  END remove_emp;
18  BEGIN
19  SELECT USER
20  INTO emp_main.g_user
21  FROM dual;
22  END;
```


SQL Developer Migrations: Supported Databases

Database	Versions
Sybase Adaptive Server	12.5,15.x
Microsoft SQL Server	7.0, 2000, 2005
Microsoft Access	97, 2000, 2002, 2003
MySQL	3.x, 4.x, 5.x
IBM DB2 UDB	8 and 9
Teradata	12

SYBASE®

Microsoft®
SQL Server®



MySQL®

DB2

TERADATA®

SQL Developer Migrations Roadmap

- Current platforms
 - Microsoft SQL Server, Microsoft Access, MySQL, Sybase Adaptive Server, IBM DB2 UDB, Teradata
- Future Releases
 - Additional third party database support
 - JDBC and ODBC support
 - IBM DB2 ZSeries/iSeries
 - Informix Dynamic Services
 - Visual modeling of captured and converted data
 - Migration verifier integration – Is your migrated data intact?
 - VLDB data move support
 - Application migration support

Finding More Detail

www.oracle.com/technology/products/database/sql_developer

- SQL Developer on OTN
 - White papers, Oracle by Example (OBE) and online demos
 - Team Blogs: [Blogs, Magazine Articles & Podcasts](#)
 - http://www.oracle.com/technology/products/database/sql_developer
- SQL Developer Exchange
 - Share reports, snippets, code, and add feature requests
 - <http://sqldeveloper.oracle.com>
- Forums
 - SQL Developer
<http://forums.oracle.com/forums/forum.jspa?forumID=260>
 - Migration Workbench
<http://forums.oracle.com/forums/forum.jspa?forumID=1>
- Migration Sites
 - <http://otn.oracle.com/migration>

SQL Developer Exchange

<http://sqldeveloper.oracle.com>

ORACLE
TECHNOLOGY NETWORK

Snippets Reports Tips & Tricks News F.A.Q. **Features** Welcome Harper ([Sign Out](#) | [Account](#))

[Downloads](#) [Documentation](#) [Discussion Forums](#) [Articles](#) [Sample Code](#) [Training](#) [RSS](#) [XML](#) [Resources For](#)

[Home](#) » [Feature Request](#)

Feature Requests

Features requested here are not guaranteed to be implemented. The Product Development team will be using these requests to assist in deciding the product direction.

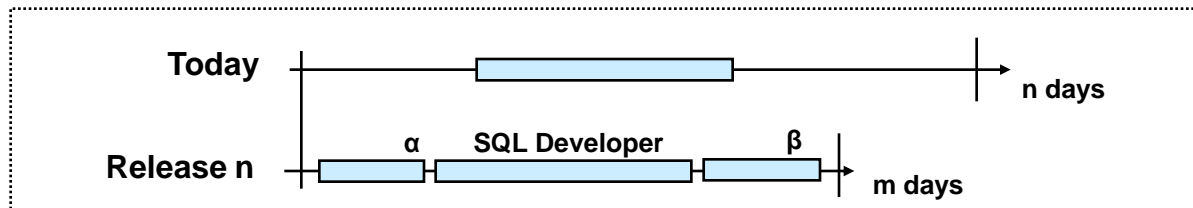
Do not log bugs here. This is for new functionality to be implemented. Use the [SQL Developer Forum](#) or [Metalink](#) for bug reports.

Rows

Title	Description	Created	Updated	Weight	Status
Better PL/SQL Formatting	Much like Toad does, with the proper formatting of a select statement with each additional column na	07-SEP-06	24-APR-08	269.0	In Release 1.5
Code Insight for Aliased Tables	Please allow code insight/complete to work on aliased table names in the sql editor. SELECT x.	22-AUG-06	15-NOV-06	248.0	In Release 1.1
Add data(base) modelling features	As it is called sql DEVELOPER I think it should support more of the development cycle. This includes	07-SEP-06	24-APR-08	230.0	Accepted
Add sortable columns	Would like to be able to click on column header and sort	31-JUL-06	23-OCT-06	209.0	In Release 1.1
Integration with Subversion	Would really like the ability to connect to Subversion repositories from within SQL Developer.	31-AUG-06	24-APR-08	187.0	In Release 1.5
Run/debug PL/SQL file	Add the ability to run/debug in a file-based code editor. From the forum (Posted Nov 15, 2006): 1.1	14-DEC-06	25-JUN-07	179.0	Awaiting Community Votes
Team Coding	That would be nice to have some kind of Team Coding feature as a cooperative source control feature.	01-NOV-06	24-APR-08	175.0	In Release 1.5

Summary

- Migration to Oracle is easy, configurable, faster and repeatable
- All data sources supported
- One development tool for all databases
- Migration Technology Center: <http://otn.oracle.com/migration>
- SQL Developer Page: <http://sqldeveloper.oracle.com>
- SQL Developer Forum:
<http://forums.oracle.com/forums/forum.jspa?forumID=260>



For More Information

search.oracle.com

sqldeveloper migration



or

oracle.com



ORACLE IS THE INFORMATION COMPANY

ORACLE®