

Oracle for Developers PLSQL

Lesson 00:

People matter, results count.



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Document History

Date	Course Version No.	Software Version No.	Developer / SME	Change Record Remarks
13-Nov-2008	1.0	Oracle9i	Rajita Dhumal	Content Creation.
28-Nov-2008	1.1	Oracle9i	CLS team	Review.
14-Jan-2010	1.2	Oracle9i	Anu Mitra,	Review
14-Jan-2010	1.2	Oracle9i	Rajita Dhumal, CLS Team	Incorporating Review Comments
Jun-2011	2.0	Oracle 9i	Anu Mitra	Integration Refinements

Course Goals and Non Goals

- Course Goals
 - To understand RDBMS Methodology
 - To code PL/SQL Blocks for Implementing business rules
 - To create Stored Subprograms using Packages, Procedures and Functions.
 - To implement Complex Business Rule using Triggers, Constraints

Course Goals and Non Goals

- Course Non Goals
 - Object Oriented programming concepts (ORDBMS) are not covered as a part of this course.

Pre-requisites

- Required a fair proficiency level in Relational Database Concepts.
- Required good proficiency in DBMS SQL

Intended Audience

- Software Programmers
- Software Analysts



Day Wise Schedule

- Day 1
 - Lesson 1: Introduction to Oracle Architecture
- Day 2
 - Lesson 2: Introduction to Data Dictionary
 - Lesson 3: PL/SQL Basics
 - Lesson 4: Introduction to Cursors (Till SELECT..FOR UPDATE)

Day Wise Schedule

- Day 3
 - Lesson 4: Introduction to Cursors contd..
 - Lesson 5: Exception Handling and Dynamic SQL
 - Lesson 6: Procedures, Functions, and Packages (Till Functions)
- Day 4
 - Lesson 6: Procedures, Functions, and Packages contd..
 - Lesson 7: Database Triggers
 - Lesson 8: Locks

Day Wise Schedule

- Day 5
 - Lesson 9: Built-in packages in Oracle
 - Lesson 10: SQL*Plus Reports
 - Lesson 11: SQL * Loader
 - Lesson 12: Oracle Tools

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- Lesson 1: Introduction to Oracle Architecture
 - 1.1: Overview of Primary Components
 - 1.2: Oracle Server
 - 1.3: Oracle Instance
 - 1.4: Creating a Session
 - 1.5: Oracle Database and its components
- Lesson 2: Introduction to Data Dictionary
 - 2.1: Data Dictionary
 - 2.2: Contents of Data Dictionary

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- Lesson 2: Introduction to Data Dictionary contd..
 - 2.3: Structure of Oracle Data Dictionary
 - 2.4: Examples of Data Dictionary
 - 2.5: Queries for Data Retrieval from Data Dictionary
- Lesson 3: PL/SQL Basics
 - 3.1: Introduction to PL/SQL
 - 3.2: PL/SQL Block Structure
 - 3.3: Handling Variables in PL/SQL

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- Lesson 3: PL/SQL Basics contd..
 - 3.4: Declaring a PL/SQL table
 - 3.5: Scope and Visibility of Variables
 - 3.6: SQL in PL/SQL
 - 3.7: Programmatic Constructs
- Lesson 4: Introduction to Cursors
 - 4.1: Introduction to Cursors

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- Lesson 4: Introduction to Cursors contd..
 - 4.2: Implicit Cursors
 - 4.3: Explicit Cursors
 - 4.4: Cursor Attributes
 - 4.5: Cursor with Parameters
 - 4.6: Usage of Cursor Variables
- Lesson 5: Exception Handling and Dynamic SQL
 - 5.1: Error Handling (Exception Handling)

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- Lesson 5: Exception Handling and Dynamic SQL contd..
 - 5.2: Predefined Exception
 - 5.3: Numbered Exceptions
 - 5.4: User Defined Exceptions
 - 5.5: OTHERS Exception Handler
 - 5.6: Dynamic SQL
- Lesson 6: Procedures, Functions, and Packages
 - 6.1: Subprograms in PL/SQL
 - 6.2: Anonymous Blocks versus Stored Subprograms
 - 6.3: Procedures

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- Lesson 6: Procedures, Functions, and Packages (contd.)
 - 6.4: Functions
 - 6.5: Packages
 - 6.6: Autonomous Transactions
- Lesson 7: Database Triggers
 - 7.1: What is a Trigger?
 - 7.2: Types of Triggers
 - 7.3: Where are Triggers Used?

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- Lesson 8: Locks
 - 8.1: Data Concurrency and Consistency
 - 8.2: Locking in Oracle
 - 8.3: Types of Locks
 - 8.4: DDL and DML Locks
- Lesson 9: Built-in Packages in Oracle
 - 9.1: Overview
 - 9.2: DBMS_OUTPUT: Displaying Output
 - 9.3: UTL_FILE
 - 9.4: DBMS_LOB

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- Lesson 10: SQL * Plus Reports
 - 10.1: SQL * Plus Reporting
 - 10.2: SQL * Plus Commands
- Lesson 11: SQL * Loader
 - 11.1: What is SQL * Loader?
 - 11.2: SQL * Loader as a Utility
 - 11.3: SQL * Loader Environment
 - 11.4: The Bad File and Discard File

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- Lesson 11: SQL * Loader contd..
 - 11.5: Invoking SQL * Loader
 - 11.6: SQL * Loader Examples
- Lesson 12: Oracle Tools
 - 12.1: Oracle Provided Management Tools
 - 12.2: Oracle Enterprise Manager

References

- Oracle PL/SQL Programming, Third Edition; by Steven Feuerstein
- Oracle 9i PL/SQL: A Developer's Guide
- Oracle9i PL/SQL Programming; by Scott Urman



Next Step Courses

- Data Warehousing Concepts
- Reporting / ETL tools
- Database Administration / Database Performance Tuning



Other Parallel Technology Areas

- Microsoft SQL Server
- IBM DB2