

ORACLE PL/SQL 2 Day Course

Overview

The Oracle PL/SQL course is designed to introduce Oracle DBAs, software development personnel and database support staff to the primary features and constructs of the PL/SQL Programming Language.

Delegates will practice:

- Writing and running PL/SQL programs from SQL*Plus or SQL Developer
- Declaring and using variables and constants
- Assigning and manipulating values
- Using SQL statements within PL/SQL
- Implementing conditional execution and loop constructs
- Declaring and using cursors with and without parameters
- Updating data with cursors
- Trapping and handling errors and exceptions in code
- Implementing nested and labelled loops and blocks
- Raising exceptions
- Handling PL/SQL records and tables
- Using PL/SQL table built-in functions

Audience

Oracle database administrators, software development personnel and database support staff who need to write PL/SQL scripts to enhance their productivity in manipulating data.

Course Objectives

By the end of the course, delegates will have the knowledge and skills needed to write stand-alone programs using the main features of Oracle's PL/SQL Programming Language.

Prerequisites

A working knowledge of SQL*Plus or SQL Developer and Oracle SQL is required along with practical experience in writing SQL statements (via our Oracle SQL course). Some previous programming experience will also prove handy.

Course Contents (2 days)

- **PL/SQL FUNDAMENTALS**
 - What is PL/SQL?
 - Basic Elements
 - Variables and Constants
 - Data Types
 - Initialising Variables and Assigning Values
 - Using SQL Statements in Code
 - Generating Output to SQL or SQL Developer
- **PROGRAM LOGIC**
 - IF THEN ELSIF ELSE Statements
 - CASE Statements
 - The Basic Loop Construct
 - WHILE and FOR Loops
- Nested and Labelled Loops
- The GOTO Statement
- The CONTINUE Statement
- **USING CURSORS**
 - What is a Cursor?
 - Implicit and Explicit Cursors
 - Cursor Operations
 - Declaring, Opening and Closing Cursors
 - Fetching Rows
 - Status Checking
 - Using Cursors FOR UPDATE
 - The Cursor FOR Loop
 - Parameterised Cursors

- **EXCEPTIONS AND NESTED BLOCKS**

- The EXCEPTION Section
- Types of Exception
- Handling Named System-Raised Exceptions
- Handling Un-named System-Raised Exceptions
- User-Declared Exceptions and Application Errors
- WHEN OTHERS THEN NULL
- Nested and Labelled Blocks
- Propagation of Exceptions
- Scope of Variables and Cursors
- Scope of Goto Statements

- **PL/SQL RECORDS AND INDEX-BY TABLES**

- Declaring Record Types
- Handling PL/SQL Records
- Nested Records
- Declaring PL/SQL Index-By Tables or Associative Arrays
- PL/SQL Table Built-in Functions
- Manipulating PL/SQL Tables or Associative Arrays

Course Materials

Enliten IT will provide each delegate with a workbook and other useful reference materials where applicable.