Oracle Program with PL/SQL

Duración: 5 Días **Código del Curso: OPPL**

Temario:

Oracle Program with PL/SQL Course Overview

English - Please note this course is only available in English.
Español - Por favor, tenga en cuenta que esta formación solo está disponible en inglés.
The Oracle Program with PL/SQL training course introduces the delegate to Oracle's PL/SQL programming language and provides practical experi

Dirigido a:

Who will the Course Benefit?

Oracle database administrators,software development personnel and database support staff who need to write PL/SQL scripts and implement or maintain database triggers,program units and packages.

Objetivos:

- Course Objectives
- To provide the skills needed to develop,write and maintain PL/SQL scripts,triggers,stored program units and packages.

Prerequisitos:

- A working knowledge of Oracle SQL or SQL Developer is required along with practical experience in writing SQL statements. This knowledge can be obtained by attendance on the pre-requisite Oracle SQL course. Some previous programming experience will also prove advantageous.

Siguientes cursos recomendados:

Further Learning

- Oracle 19c SQL Performance Tuning
- Oracle Database 19c Administration

Contenido:

Oracle Program with PL/SQL Training Course Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: PL/SQL FUNDAMENTALS

- What is PL/SQL?
- Basic Elements
- Variables and Constants
- Data Types
- Initializing Variables and Assigning Values
- Using SQL Statements in Code
- Generating Output to SQL or SQL Developer

Session 2: PROGRAM LOGIC

- IF THEN ELSE Statements
- CASE Expressions
- The Basic Loop Construct
- WHILE and FOR Loops
- Nested and Labelled Loops
- The GOTO Statement
- The CONTINUE Statement

Session 3: 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 Oracle Program with PL/SQL Training Course Course Contents - DAY 2

Session 4: EXCEPTIONS AND NESTED BLOCKS

- The EXCEPTION Section
- Types of Exception
- Handling Named System-Raised Exceptions
- Handling Unnamed 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

Session 5: 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 Oracle Program with PL/SQL Training Course Course Contents - DAY 3

Session 6: TRIGGERS

- DML Triggers
- The CREATE TRIGGER Statement
- Writing Trigger Code
- INSTEAD OF Triggers
- Calling Procedures from Triggers
- Coding Restrictions
- System Event and DDL Triggers
- Attribute Functions
- Compound Triggers
- Create Trigger Follows Clause
- Managing Triggers
- Privileges required for Triggers
- Dictionary Information Concerning triggers

Session 7: PROCEDURES

- What is a Procedure?
- The CREATE PROCEDURE Statement
- Procedure Parameters
- Invoking Procedures
- Local Subprograms
- Named Association Parameter Passing
- Definer's Right and Invoker's Rights
- Autonomous Transactions
- Managing Procedures
- Privileges Required for Procedures
- Dictionary Information Concerning Procedures
- The Call Statement

Session 8: FUNCTIONS

- What is a Function?
- The CREATE FUNCTION Statement
- Executing Functions
- Invoker's Rights
- Autonomous Transactions
- DBMS_OUTPUT
- Using Functions in SQL Statements
- Deterministic and Parallel-Enabled Functions
- Function Result Cache
- Managing Functions
- Privileges Required for Functions
- Dictionary Information Concerning Functions Oracle Program with PL/SQL

Session 11: CURSOR VARIABLES (REF CURSORS)

- Declare Cursor Variables
- Use Cursor Variables
- Open and Close Cursor Variables
- Fetch Rows
- Cursor Variable Attributes
- Pass Cursor Variables as Parameters
- Open and Close Cursor Variables
- Refcursor Datatype

Session 12: MANAGING DEPENDENCIES

- Dependent and Referenced Objects
- Invalidation and Recompilation
- Local and Remote Dependencies
- Recompilation Considerations Oracle Program with PL/SQL Training Course Course Contents - DAY 5

Session 13: NATIVE COMPILATION AND COMPILE-TIME WARNINGS

- Introduction
- Native Compilation
- Automatic Recompilation
- Automatic program Sublining
- WHEN OTHERS ... THEN NULL
- Data Dictionary Information
- Compiler Warning Categories
- Using the DBMS_WARNING Package

Session 14: ORACLE-SUPPLIED PACKAGES

- Overview of Oracle-Supplied Packages
- Using the DBMS_SQL Package
- Using Native Dynamic SQL
- The DBMS_METADATA Package
- The UTL_MAIL Package
- The DBMS_APPLICATION_INFO Package
- The DBMS_UTILITY Package
- Scheduling Jobs using the DBMS_SCHEDULER Package

Session 15: PL/SQL DESIGN CONSIDERATIONS

- Invoker versus Definer, Rights
- Grant Roles to PL/SQL Packages and Programs
- Programming Standards for Variables,Parameters and Constants
- Standardise Constants with a Package
- Standardise Exceptions with a Package
- Write PL/SQL Code using Local Subprograms
- Use NOCOPY Compiler Hint
- Optimise Code with the PARALLEL ENABLE hint
- Use the AUTONOMOUS TRANSACTION

Training Course 4	Course Contents - DAY	Pragma

Session 9: PACKAGES

- What is a Package?
- Public and Private Components
- Creating a Package
- Example Package
- Persistent States
- One-time-only Procedures
- Overloading
- Purity Level Checking
- Forward Declarations
- Wrapping Packages
- Managing Packages
- Privileges Required for Packages
- Dictionary Information Concerning Packages Features

Session 10: USING PL/SQL RECORDS AND TABLES IN PACKAGES

- Overview of PL/SQL Records,Index-by Tables and Associative Arrays
- Using PL/SQL Records and Tables in Packages
- Table Built-In Functions
- The NOCOPY Hint
- Bulk Collection
- Bulk Binding DML Statements

Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

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