



# Oracle Database 12c R2: Program with PL/SQL Ed 2

## CODICE

D80186GC20

## DURATA

5 Giorni

## PREZZO

2.500,00€ (iva escl.)

## LINGUA

Italiano

## MODALITÀ

Virtual Classroom  
e-Learning  
Corso in aula

## SCHEDULAZIONE

- A Richiesta

## PREREQUISITI

- Previous programming experience

## Required Prerequisite

- or Oracle Database: Introduction to SQL

## OBIETTIVI

- Use conditional compilation to customize the functionality in a PL/SQL application without removing any source code
- Design PL/SQL packages to group related constructs
- Create overloaded package subprograms for more flexibility
- Design PL/SQL anonymous blocks that execute efficiently
- Use the Oracle supplied PL/SQL packages to generate screen output, file output and mail output
- Write dynamic SQL for more coding flexibility
- Describe the features and syntax of PL/SQL
- Create and debug stored procedures and functions



- Use PL/SQL programming constructs and conditionally control code flow (loops, control structures, and explicit cursors)
- Manage dependencies between PL/SQL subprograms
- Handle runtime errors
- Create triggers to solve business challenges

## DESTINATARI

- Database Administrator
- Developer
- Implementer
- Systems Administrator

## CONTENUTI

### Introduction

- Course Objectives
- Course Agenda
- Describe the Human Resources (HR) Schema
- PL/SQL development environments available in this course
- Introduction to SQL Developer

### Introduction to PL/SQL

- Overview of PL/SQL
- Identify the benefits of PL/SQL Subprograms
- Overview of the types of PL/SQL blocks
- Create a Simple Anonymous Block
- How to generate output from a PL/SQL Block?

### Declare PL/SQL Identifiers



- List the different Types of Identifiers in a PL/SQL subprogram
- Usage of the Declarative Section to Define Identifiers
- Use variables to store data
- Identify Scalar Data Types
- The TYPE Attribute
- What are Bind Variables?
- Sequences in PL/SQL Expressions

### **Write Executable Statements**

- Describe Basic PL/SQL Block Syntax Guidelines
- Learn to Comment the Code
- Deployment of SQL Functions in PL/SQL
- How to convert Data Types?
- Describe Nested Blocks
- Identify the Operators in PL/SQL

### **Interaction with the Oracle Server**

- Invoke SELECT Statements in PL/SQL
- Retrieve Data in PL/SQL
- SQL Cursor concept
- Avoid Errors by using Naming Conventions when using Retrieval and DML Statements
- Data Manipulation in the Server using PL/SQL
- Understand the SQL Cursor concept
- Use SQL Cursor Attributes to Obtain Feedback on DML
- Save and Discard Transactions

### **Control Structures**

- Conditional processing using IF Statements



- Conditional processing using CASE Statements
- Describe simple Loop Statement
- Describe While Loop Statement
- Describe For Loop Statement
- Use the Continue Statement

### **Composite Data Types**

- Use PL/SQL Records
- The ROWTYPE Attribute
- Insert and Update with PL/SQL Records
- INDEX BY Tables
- Examine INDEX BY Table Methods
- Use INDEX BY Table of Records

### **Explicit Cursors**

- What are Explicit Cursors?
- Declare the Cursor
- Open the Cursor
- Fetch data from the Cursor
- Close the Cursor
- Cursor FOR loop
- The NOTFOUND and ROWCOUNT Attributes
- Describe the FOR UPDATE Clause and WHERE CURRENT Clause

### **Exception Handling**

- Understand Exceptions
- Handle Exceptions with PL/SQL
- Trap Predefined Oracle Server Errors

- Trap Non-Predefined Oracle Server Errors
- Trap User-Defined Exceptions
- Propagate Exceptions
- RAISE\_APPLICATION\_ERROR Procedure

## Stored Procedures

- Create a Modularized and Layered Subprogram Design
- Modularize Development With PL/SQL Blocks
- Understand the PL/SQL Execution Environment
- List the benefits of using PL/SQL Subprograms
- List the differences between Anonymous Blocks and Subprograms
- Create, Call, and Remove Stored Procedures
- Implement Procedures Parameters and Parameters Modes
- View Procedure Information

### Description:

This Oracle Database: Program with PL/SQL training starts with an introduction to PL/SQL and then explores the benefits of this powerful programming language. Through hands-on instruction from expert Oracle instructors, you'll learn to develop stored procedures, functions, packages and more.

### Learn To:

- Conditionally control code flow (loops, control structures).
- Create stored procedures and functions.
- Use PL/SQL packages to group and contain related constructs.
- Create triggers to solve business challenges.
- Use some of the Oracle supplied PL/SQL packages to generate screen output and file output.
- Create custom packages for applications.
- Write Dynamic SQL code for applications.

### Benefits to You

Ensure fast, reliable, secure and easy to manage performance. Optimize database workloads, lower IT costs and deliver a higher quality of service by enabling consolidation onto database clouds.



### **Use Oracle SQL Developer**

You will use Oracle SQL Developer to develop these program units. SQL\*Plus is introduced in this course as optional tools.

### **Course Bundle**

Note: This course is a combination of Oracle Database: PL/SQL Fundamentals and Oracle Database: Develop PL/SQL Program Units courses.

*Prezzi e corsi potrebbero subire variazioni; si consiglia di verificare sul sito [www.novanext.it/training](http://www.novanext.it/training).*