



# ORA\_PLSQL AD - Oracle Database PL/SQL Advanced

Oracle - Oracle Sviluppo - Sviluppo

Durata: Lingue: Certificazione:

3 Giorni Italiano -

# Descrizione del corso

This course teaches you how to use the advanced features of PL/SQL to design and tune PL/SQL to interface with the database and other applications.

# Programma

#### Introduction

- Course Objectives
- Course Agenda
- Describe the development environments
- Identify the tables, data, and tools used in this course

# PL/SQL Programming Concepts: Review

- Identify PL/SQL block structure
- Packages, procedures and functions
- Cursors
- Handle exceptions
- Dependencies

#### **Designing PL/SQL Code**

• Describe the predefined data types

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- Create subtypes based on existing types for an application
- List the different guidelines for cursor design
- Describe cursor variables
- White List

#### **Overview of Collections**

- Overview of collections
- Use Associative arrays
- Navigate using associative methods
- Use Nested tables
- Use Varrays
- Compare nested tables and varrays

# **Using Collections**

- Write PL/SQL programs that use collections
- Use Collections effectively
- Enhancements to PL/SQL Type Binds

#### **Manipulating Large Objects**

- Working with LOBs
- Overview of SecureFile LOBs

# **Using Advanced Interface Methods**

- Calling External Procedures from PL/SQL
- Benefits of External Procedures
- Understand how an external routine is called from PL/SQL
- C advanced interface methods
- Java advanced interface methods

# **Performance and Tuning**

- Understand and influence the compiler
- Tune PL/SQL code
- Enable intra unit inlining
- Identify and tune memory issues

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Recognize network issues

### **Improving Performance with Caching**

- Describe result caching
- Use SQL query result cache
- Use PL/SQL function cache
- Review PL/SQL function cache considerations

#### **Analyzing PL/SQL Code**

- Finding Coding Information
- PL/Scope Concepts
- DBMS METADATA Package
- PL/SQL Enhancements

# Profiling and Tracing PL/SQL Code

- Tracing PL/SQL Execution
- Tracing PL/SQL: Steps

# Implementing VPD with Fine-Grained Access Control

- Understand how fine-grained access control works overall
- Describe the features of fine-grained access control
- Describe an application context
- Create an application context
- Set an application context
- List the DBMS\_RLS procedures
- Implement a policy
- Query the dictionary views holding information on fine-grained access

# Safeguarding Your Code Against SQL Injection Attacks

- SQL Injection Overview
- Reducing the Attack Surface
- Filtering Input with DBMS\_ASSERT

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