Szkolenie: Oracle

Oracle Database: Develop PL/SQL Program Units

FORMA SZKOLENIA          MATERIAŁY SZKOLENIOWE          CENA             CZAS TRWANIA
Stacjonarne             Tradycyjne                   4425 PLN NETTO* 3 dni
Stacjonarne             Tablet CTAB                   5025 PLN NETTO* 3 dni
Metoda dlearning        Tradycyjne                   4425 PLN NETTO* 3 dni
Metoda dlearning        Tablet CTAB                   4425 PLN NETTO* 3 dni

* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00
Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

Cel szkolenia:

This Oracle Database: Develop PL/SQL Program Units course is designed for developers with basic
PL/SQL and SQL language skills. You will learn to develop, execute and manage PL/SQL stored
program units, which include: procedures, functions, packages and database triggers.

Plan szkolenia:

- Introduction
  - Course Objectives, Course Agenda and Appendixes Used in this Course
  - Describe the full Human Resources (HR) Schema
  - Review the online Oracle Database 12c SQL and PL/SQL documentation and the
    additional available resources
  - List the PL/SQL development environments Available in this course
  - Use the SQL Worksheet
  - Execute SQL Statements
  - Work With Script Files
  - Create and Execute Anonymous Blocks

- Creating Stored Procedures
  - Describe PL/SQL blocks and subprograms
  - Describe the uses and benefits of procedures
  - Create, call, and remove procedures
- Use formal and actual parameters
- Identify the available parameter-passing modes
- Pass parameters using the positional, named, or combination techniques
- Handle exceptions in procedures
- View the procedure information

- Creating Functions and Debugging Subprograms
  - Creating Stored Functions
  - The Difference Between Procedures and Functions
  - Developing Functions
  - Creating and Executing and Removing Functions
  - Identifying the Advantages of Using Stored Functions in SQL Statements
  - Using User-Defined Functions in SQL Statements
  - Using a PL/SQL Function in the SQL WITH Clause
  - Restrictions When Calling Functions from SQL statements

- Creating Packages
  - Using PL/SQL Packages
  - The Components of a PL/SQL Package
  - The Visibility of a Package’s Components
  - Developing a PL/SQL Package
  - Creating the Package Specification and Package Body
  - Invoking the Package Constructs
  - Creating and Using Bodiless Packages
  - Removing a Package

- Working With Packages
  - Overloading Subprograms
  - Using Forward Declarations to Solve Illegal Procedure Reference
  - Initializing Packages
  - Using Package Functions in SQL and Restrictions
  - Controlling Side Effects of PL/SQL Subprograms
  - Persistent State of Packages
  - Persistent State of Package Variables and Cursors
  - Using PL/SQL Tables of Records in Packages

- Using Oracle-Supplied Packages in Application Development
  - Using Oracle-Supplied Packages
  - Examples of Some of the Oracle-Supplied Packages
  - How Does the DBMS_OUTPUT Package Work?
Using the UTL_FILE Package to Interact With Operating System Files
Using the UTL_MAIL Package

Using Dynamic SQL
- The Execution Flow of SQL
- Working With Dynamic SQL
- When Do You Need Dynamic SQL?
- Using Native Dynamic SQL (NDS)
- Declaring Cursor Variables
- Executing a PL/SQL Block Dynamically
- Using Native Dynamic SQL to Compile PL/SQL Code

Design Considerations for PL/SQL Code
- Standardize constants with a constant package
- Standardize exceptions with an exception package
- Write PL/SQL code that uses local subprograms
- Grant Roles to PL/SQL Packages and Standalone Stored Subprograms
- Use the NOCOPY compiler hint to pass parameters by reference
- Use the PARALLEL ENABLE hint for optimization
- Use the AUTONOMOUS TRANSACTION pragma to run independent transactions within a single transaction
- Describe the differences between invoker rights and definer rights

Creating Triggers
- Describe different types of triggers
- Describe database triggers and their use
- Create database triggers
- Describe database trigger firing rules
- Remove database triggers

Creating Compound, DDL, and Event Database Triggers
- Describe compound triggers
- Describe mutating tables
- Create triggers on DDL statements
- Create triggers on system events
- Display information about triggers

Using PL/SQL compiler
- Using the PL/SQL Compiler
- Using the Initialization Parameters for PL/SQL Compilation
- Using the PL/SQL Compile Time Warnings
- Viewing the Current Setting of PLSQL_WARNINGS
- Viewing the Compiler Warnings: Using SQL Developer, SQL*Plus, or the Data Dictionary
Views
- Guidelines for Using PLSQL_WARNINGS
- Managing Dependencies
  - Describe dependent and referenced objects
  - Track procedural dependencies with dictionary views
  - Predict the effect of changing a database object upon stored procedures and functions
  - Manage local and remote procedural dependencies

Wymagania:

Wymagane prerekwizyty:
- Basic Knowledge of PL/SQL
- Familiarity with programming languages
- Oracle Database 12c: Introduction to SQL Ed 1.1
- Oracle Database: PL/SQL Fundamentals

Sugerowane prerekwizyty:
- Oracle SQL Tuning for Developers Workshop

Poziom trudności

Certyfikaty:

Uczestnicy szkoleń otrzymują zaświadczenia o ukończeniu kursu sygnowane przez firmę Oracle.

Prowadzący:

Autoryzowany wykładowca Oracle.