

Oracle Database 11g R2: PL/SQL Fundamentals II - Develop Program Units

Length of Course: 3 Days

This Oracle 11g courseware training guide book will equip students to develop database server-side PL/SQL program units within an Oracle database. In addition to receiving the print copy of this course book, all students will receive e-Learning modules.

Target Audience

Target audience for this course is all Oracle professionals. Among the specific groups for whom this course will be helpful are:

- Application designers and developers
- Database administrators

Prerequisites

The following Sideris courses are mandatory prerequisites for this course:

- ORACLE DATABASE 11G: SQL FUNDAMENTALS – COMPLETE LIBRARY
- ORACLE DATABASE 11G: PL/SQL FUNDAMENTALS I

Certification

This course considers subjects useful for certification as an Oracle Certified Master (OCM), the most advanced and prestigious Oracle database certification level.

Objectives

Major subject areas to be explored and secondary objectives are:

- Understanding application partitioning within a client/server or multi-tiered web-based systems architecture.
- Understanding the basic form and structure of program units stored within the database.
- Building and maintaining database-resident program units.
- Encapsulating program units within packages and taking advantage of accompanying advanced programming techniques such as cursor variables and cursor expressions.
- Handling intricate theoretical challenges, such as mutating tables.
- Building and maintaining DML-event and system-event database triggers, including advanced techniques using both simple triggers and compound triggers.
- Discuss the storage and execution model for database programs and how one can write efficient programs to maximize performance.
- Using system-supplied packages to extend the power of your SQL statements and PL/SQL applications.

Contents

Introducing Database Program Units

- About database program units
- Types of PL/SQL program units
- Types of stored program units
- Advantages of using stored program units



Creating Stored Procedures & Functions

- About stored procedures & functions
- Creating procedures & functions
- Executing procedures & functions

Maintaining Stored Procedures & Functions

- Recompiling & dropping programs
- Data dictionary storage
- Managing dependencies

Creating & Maintaining Packages

- About packages
- Creating packages
- Advanced programming techniques
- Maintaining packages

Advanced Cursor Techniques

- Using cursor variables
- Using cursor expressions

Using System-Supplied Packages

- DBMS_OUTPUT()
- UTL_FILE()

Reating Database Triggers

- About database triggers
- Statement-level triggers
- Row-level triggers
- Examples of triggers
- Instead of triggers
- Employing triggers within an application

Maintaining Database Triggers

- Call syntax
- Trigger maintenance tasks
- Show errors trigger
- Drop trigger
- Alter trigger
- Handling multiple triggers for a table
- Handling mutating table issues

Implementing System Event Triggers

- What are system event triggers?
- Defining the scope
- Available system events
- SYSTEM EVENT ATTRIBUTES

