Oracle Database 10g PL/SQL Program Units

Course information

Days: 3

Total lessons: 12

Suggested Prerequisites:

- Oracle Database 10g: PL/SQL Fundamentals
- Previous programming experience

Training includes:

- Experienced trainer(s)
- Pre-test and Post-test
- Practices and solutions

Public price:

12,000 baht(THB): 1 person

In-house price:

- 36,000 baht (THB) : Economic Class : 1 5 people
- 67,000 baht(THB): Small Class: 6 10 people
- 86,000 baht(THB): Middle Class: 11 20 people
- 105,000 baht(THB): Large Class: 21 30 people

All prices exclude VAT 7 %

Course details

Day 1

Introduction

Lesson 1 : Creating Stored Procedures Lesson 2 : Creating Stored Functions

Lesson 3: Creating Packages

Lesson 4: Using More Package Concepts

Day 2

Lesson 5: Using Oracle-Supplied Packages in Application Development

Lesson 6: Dynamic SQL and Metadata

Lesson 7: Design Considerations for PL/SQL Code

Lesson 8 : Managing Dependencies

Day 3

Lesson 9: Manipulating Large Objects

Lesson 10 : Creating Triggers

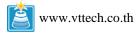
Lesson 11: Applications for Triggers

Lesson 12: Understanding and Influencing the PL/SQL Compiler

Lesson details

Lesson 1 : Creating Stored Procedures

- Describe and create a stored procedure
- Create procedures with parameters
- Differentiate between formal and actual parameters
- Use different parameter-passing modes
- Invoke a procedure
- Handle exceptions in procedures
- Remove a procedure



Lesson 2: Creating Stored Functions

- Describe the uses of functions
- Create stored functions
- Invoke a function
- Remove a function
- Differentiate between a procedure and a function

Lesson 3: Creating Packages

- Describe packages and list their components
- Create a package to group together related variables, cursors, constants, exceptions, procedures, and functions
- Designate a package construct as either public or private
- Invoke a package construct
- Describe the use of a bodiless package

Lesson 4: Using More Package Concepts

- Overload package procedures and functions
- Use forward declarations
- Create an initialization block in a package body
- Manage persistent package data states for the life of a session
- Use PL/SQL tables and records in packages
- Wrap source code stored in the data dictionary so that it is not readable

Lesson 5: Using Oracle-Supplied Packages in Application Development

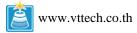
- Describe how the DBMS_OUTPUT package works
- Use UTL_FILE to direct output to operating system files
- Use the HTP package to generate a simple Web page
- Describe the main features of UTL MAIL
- Call the DBMS_SCHEDULER package to schedule PL/SQL code for execution

Lesson 6: Dynamic SQL and Metadata

- Describe the execution flow of SQL statements
- Build and execute SQL statements dynamically using Native Dynamic SQL (that is, with EXECUTE IMMEDIATE statements)
- Compare Native Dynamic SQL with the DBMS_SQL package approach
- Use the DBMS_METADATA package to obtain metadata from the data dictionary as XML or creation DDL that can be used to re-create the objects

Lesson 7: Design Considerations for PL/SQL Code

- Use package specifications to create standard constants and exceptions
- Write and call local subprograms
- Set the AUTHID directive to control the run-time privileges of a subprogram
- Execute subprograms to perform autonomous transactions
- Use bulk binding and the RETURNING clause with DML
- Pass parameters by reference using a NOCOPY hint
- Use the PARALLEL ENABLE hint for optimization



Lesson 8: Managing Dependencies

- Track procedural dependencies
- Predict the effect of changing a database object on stored procedures and functions
- Manage procedural dependencies

Lesson 9 : Manipulating Large Objects

- ADDM
- Compare and contrast LONG and LOB (large object) data types
- Create and maintain LOB data types
- Differentiate between internal and external LOBs
- Use the DBMS_LOB PL/SQL package
- Describe the use of temporary LOBs

Lesson 10: Creating Triggers

- Describe the different types of triggers
- Describe database triggers and their uses
- Create database triggers
- Describe database trigger-firing rules
- Remove database triggers

Lesson 11: Applications for Triggers

- Create additional database triggers
- Explain the rules governing triggers
- Implement triggers

Lesson 12: Understanding and Influencing the PL/SQL Compiler

- Describe native and interpreted compilations
- List the features of native compilation
- Switch between native and interpreted compilations
- Set parameters that influence PL/SQL compilation
- Query data dictionary views on how PL/SQL code is compiled
- Use the compiler warning mechanism and the DBMS_WARNING package to implement compiler warnings

For more information please contact : VT Technology Co.,Ltd. Tel +66 0 2594 5185 contact@vttech.co.th

To see other available Oracle courses Please go to www.vttech.co.th/course.html

