



Course Content

Course Description:

The primary objective of this course is to provide an introduction to the PL/SQL database programming language, based upon the latest features available with the Oracle database. Syntax, structure and features of the language are discussed in the context of database applications and programming. Major subject areas to be explored are: the environment and context in which PL/SQL operates, advantages and benefits of PL/SQL, program variables and complex data types, Developing logic within PL/SQL program blocks, fetching data from the database into program variables, returning program output to users, handling program exceptions, using explicit and implicit database cursors, using the advanced features of nested blocks and subprograms and taking advantage of advanced features such as regular expression support.

Prerequisites:

Oracle Database 11g: SQL Fundamentals or equivalent knowledge

Topics:

Choosing a SQL & PL/SQL Interface

- Using SQL Developer
- Using SQL Plus
- Using Application Express
- Using JDeveloper Studio

Language Features

- Understanding PL/SQL
- Structure of a PL/SQL Program Block
- Using PL/SQL From SQL Plus

Declare Clause

- About the Declare Clause
- Declare Simple Types
- Declare Complex Types
- Type...Table
- Type Record

Begin Clause

- About the Begin Clause
- Performing Data Manipulation
- Logic Control and Branching
- Loop
- If-Then-else
- Case

Exception Clause

- About the Exception Clause
- Isolating the Specific Exception
- Pragma Exception_Init
- SQL%RowCount & Select...Into

Explicit

- About Explicit Cursors
- Advanced Cursor Techniques

Advanced Programming: Declared Subprograms