

## Oracle 10g PL/SQL Programming

**Length:** 3 Days

**Audience:** Programmers and Database Administrators responsible for the development or maintenance of application systems which access an Oracle database.

**Prerequisites:** Oracle10g SQL & SQL\*Plus and knowledge of a procedural language (e.g., COBOL, C).

**Overview:** The course provides a comprehensive examination of PL/SQL, Oracle's procedural language extension to SQL. PL/SQL offers procedural integrity, security enhancements, and performance gains in a client-server environment. PL/SQL can be executed from SQL\*Plus, embedded within a host language, or reside and execute on the server. PL/SQL is also used to code triggers in Oracle Forms and Reports. PL/SQL will be of particular interest to individuals developing applications in a client-server environment.

### Topics discussed include:

- Overview of PL/SQL
- Variables and Constants
  - Identifiers
  - Datatypes
  - Variables
  - Expressions
- PL/SQL Executable Statements
  - Control Structures
  - Conditional Statements
  - Loops
- Embedding SQL Within PL/SQL
  - Implicit Cursors
  - Explicit Cursors
  - Parameterized Cursors
  - Transaction Processing
  - Cursor Variables
- PL/SQL in the SQL\*Plus Environment
- Handling Exceptions
  - Predefined Exceptions
  - User-Defined Exceptions
  - RAISE Statement
  - Propagation of Exceptions
- PL/SQL Built-in Functions
- Subprograms
  - Procedures
  - Functions
  - Parameter Modes

- o RETURN Statement
- o Overloading
- o Recursion
- PL/SQL on the Server
  - o Stored Procedures
  - o Stored Functions
  - o Triggers
  - o Packages
- Using Predefined Packages