

## **ORA500 - PL/SQL Develop Database Objects**

*Enhance processing with database stored procedural code.*

Hands-on **3 day course**

### **Course Description**

Create database level applications. Create PL/SQL object constructs such as stored database procedures, functions, packages, and database triggers. Enforce business rules within the database and perform value based auditing. Participants have the opportunity to gain practical hands-on experience.

### **You Learn to...**

- Develop Server Level Applications
- Create and Execute Database Procedures
- Create and Execute Database Functions
- Create and Execute Database Packages
- Pass Values Between Applications
- Compile Applications
- Debug Applications
- Manage Application Dependencies
- Create and Implicitly Execute Database Triggers
- Create Reusable Object Types
- Manipulate Large Object Types

### **Who Needs to Attend**

- Data Analysts
- Data Administrators
- System Administrators
- Developers
- Support Staff

### **Prerequisites:**

You must have knowledge of SQL and PL/SQL or attend the Oracle8 SQL and PL/SQL course.

### **Follow-On Courses**

SQL Tuning Techniques, Oracle8 Database Administration, Oracle Developer: Forms I



**Global Business Solutions, Inc.**  
**Toll Free: 877-446-4274**

## **Course Content:**

### **1. PL/SQL Review**

- PL/SQL Objects
- Anonymous Blocks
- Subprogram Development Tools

### **2. Creating Procedures**

- Procedure Development Steps
- Procedure Creation
- Procedure Execution
- Displaying Compile Errors
- Procedure Argument Notation
- Describing a Procedure
- Dropping a Procedure

### **3. Creating Functions**

- When to Use a Function
- Function Development Steps
- Function Creation
- Function Execution
- Displaying Compile Errors
- Function Argument Notation
- Describing a Function
- Dropping a Function

### **4. Creating Packages**

- Package Advantages
- Package Development Steps
- Package Specification Creation
- Package Body Creation
- Package Execution
- Package Objects
- Package State
- Displaying Compile Errors
- Describing a Package

### **5. Advanced PL/SQL Concepts**

- Over Loading
- One-Time Only Procedure
- Cursor Variables
- Subprogram Wrapping
- Package Function Restrictions

- Purity Level
- Oracle Supplied PL/SQL Packages

### **6. Creating Database Triggers**

- Purpose and Usage of Database Triggers
- Trigger Development Steps
- Statement Trigger Creation
- Trigger Execution
- Trigger Design
- Row Trigger Execution
- Mutating and Constraining Tables
- Compiling Triggers
- Dropping a Trigger

### **7. Managing Database Subprograms**

- Granting Direct and Indirect Access
- Managing Stored Objects
- Understanding Dependencies
- Viewing Dependencies
- Remote Dependency Handling
- Recompilation and Dependency Issues

### **8. Creating Object Types**

- Object Type Usage
- Object Type Development Steps
- Object Type Specification Creation
- Object Type Body Creation
- Calling Object Methods
- Nested References
- Selecting with Object Types
- Inserting with Object Types
- Updating and Delete with Object Types
- Describing an Object Type
- Dropping an Object Type

### **9. Using Large Objects**

- LONG vs. LOB
- Lob Components
- Internal LOBs
- External LOBs
- Using DBMS\_LOB



**Global Business Solutions, Inc.**  
**Toll Free: 877-446-4274**

- Creating Directory References
- Populating LOBs
- Setting LOBs to NULL
- Removing LOBs



**Global Business Solutions, Inc.**  
**Toll Free: 877-446-4274**