



# Course Brochure

## ORACLE 10g/11g

### Overview

•This course will introduce participants to the importance of good initial database design, and the methods used to tune a production of Oracle9i, 10g, 11g database. The focus is on Database and Instance tuning rather than specific operating system performance issues. This course counts towards the Hands-on course requirement for the Oracle 9i, 10g, 11g OCA Certification.

### Pre-requisites

•Knowledge of Operating System. Preferably knowledge of C Language.

### Applications

## COURSE CONTENTS

### SQL

- ❖ Introduction to RDBMS
- ❖ Oracle Data Types
- ❖ Introduction to SQL.
- ❖ Classifications of SQL
- ❖ **DRL, DML ,DDL, TCL, DCL** Commands
- ❖ Integrity Constraints
- ❖ Operators
  - Arithmetic
  - Comparison
  - Character
  - Logical
  - Set
- ❖ Functions
  - Character
  - Number
  - Data
  - Conversion
  - Miscellaneous Using Decode
- ❖ Jsp ( Julian Spell )
- ❖ Joins
- ❖ Tree Walking
- ❖ Databases Objects
- ❖ Sub Queries Using any , some, all, exists not exists, etc

### PL /SQL

- ❖ Introduction to PL/SQL
- ❖ Data types
- ❖ Constructs
- ❖ Exceptions
- ❖ Cursors
- ❖ Subprograms
  - Procedures
  - Functions
  - Packages
- ❖ Triggers

### ORACLE 8i FEATURES

- ❖ OOPS CONCEPTS
- ❖ Data types
- ❖ Large Objects
- ❖ OBJECTS
- ❖ COLLECTIONS
  - Nested Tables
  - Varrays
- ❖ Methods of Collections
- ❖ Table Partitioning
  
- ❖ AUTONOMOUS TRANSACTIONS
  - Advantages of Autonomous Transactions
  - Defining Autonomous Transactions
  - Controlling Autonomous Transactions
  - Using Autonomous Trigger
  - Calling Autonomous function from SQL
  
- ❖ BULK BINDS
  - Advantages of Bulk Binds
  - Using for all Statement
  - Restrictions on for all
  - Using % bulk - row count
  - Using bulk collect clause
  - Bulk Fetches
  - Bulk Returns
  - Restrictions on bulk collect
  
- ❖ Dynamic SQL
- ❖ Invoker Rights
- ❖ New Trigger Features
- ❖ Oracle inter media, Spatial, time series and visual image retrieval
- ❖ Dropping column

### 9i FEATURES

- ❖ New Join Stmt's
- ❖ External Tables
- ❖ Multitable Insert Statements
- ❖ For update Wait Clause
- ❖ long - LOB Migration
- ❖ Using index - in create table
- ❖ New Date - time datatypes
- ❖ **i SQL \* PLUS**
- ❖ Merge Statement
- ❖ Renaming of columns

### 10g FEATURES

- ❖ SQL \* PLUS ENHANCEMENTS
- ❖ SQL Language new Features
- ❖ New Partitioning Features
- ❖ Temporary Tablets with Varray Columns
- ❖ Changing of Varray Size
- ❖ Using Regular Expressions in 10g
- ❖ Using Aggregates in the Returning clause
- ❖ New Connect by Functionality
- ❖ New Merge Clauses
- ❖ Bulk Binding Improvements
- ❖ Dropping of Objects

### 11g FEATURES

- ❖ New Security Enhancements
- ❖ Working with **Virtual Columns**
- ❖ **PIVOT & UN PIVOT**
- ❖ Using of **with** Clause
- ❖ New Data Type Enhancements
- ❖ **CONTINUE** Statement
- ❖ **SEQUENCES** in **PL/SQL** Expressions
- ❖ Dynamic **SQL** Enhancements
- ❖ PL/SQL Subprogram Invocation
- ❖ Trigger Enhancements