

## O1010 - Oracle 10g DBA Fundamentals I

### Course Objectives

This practical foundation course is an essential toolkit for all Database Administrators covering the practical skills needed by the DBA to perform the Oracle 10g database administration function within their enterprise.

The enhancements and changes that have been introduced in Oracle 10g will be discussed during this course.

Who Should Attend	Prerequisites	Duration
Oracle Database Administrators Oracle Technicians Oracle Support Engineers Oracle Developers	PC Fundamentals Oracle SQL Oracle PL/SQL (recommended)	5 Days

### Course Contents

#### Managing Database Storage

Managing Tables / Data Storage.  
Setting Storage Parameters  
Managing Tablespaces and Data Files  
SYSTEM and SYSAUX tablespaces  
Creating Additional Tablespaces  
Adding Data Files to a Tablespace  
Tablespace Online / Offline  
Locally Managed Tablespaces  
Multiple Block sizes  
Bigfile Tablespaces  
Temporary Tablespaces  
Database Default Tablespaces  
Renaming Tablespaces  
Renaming and Relocating Data Files  
Dropping Tablespaces and Data Files  
Creating / Managing Indexes  
Indexes and Constraints

#### Managing Rollback Segments

Managing Rollback Segments  
Assignments to Rollback Segments  
De-allocation of Rollback Segment Extents  
Types of Rollback Segments  
Acquiring of Rollback Segments  
Rollback Segment States  
Creating Rollback Segments  
Changing Storage Parameters

Bringing Rollbacks Segments Online  
Taking Rollback Segments Offline  
Dropping a Rollback Segment

#### Automatic Undo Management

Setting up Automatic Undo Management  
Monitoring Undo Segments  
Undo Tablespace & Sizing  
Guaranteed Undo Retention

#### Redo Logs and Control Files

Managing Redo Logs  
Types of Redo Log  
Archiving Modes  
Log Switches and Checkpoints  
Creating Online Redo Log Groups  
Creating Log Group Members  
Renaming / Relocating Redo Log Members  
Dropping Redo Log Groups / Members  
Archiving Redo Logs  
Specifying Archived Log Destinations  
Manual Archiving of Redo Logs  
Control Files  
Creating/Dropping Control Files

#### Database Security

Key Concepts  
Users  
Connecting as SYSDBA/SYSOPER  
Password Management

Schemas and Synonyms  
Dropping Users  
Profile Management  
Creating / Altering/ Dropping Roles  
Enabling and Disabling Roles  
Granting / Revoking System Privileges and Roles  
Granting / Revoking Object Privileges

#### EXPORT and IMPORT

Introduction to Utilities  
EXP: The Runtime EXPORT Command  
EXP Parameters and Operation Notes  
Restrictions on Export  
IMP: The Runtime IMPORT Command  
IMP Parameters & Operation Notes  
Using Data Pump Features  
Transportable Tablespaces

#### SQL Loader

Conventional path  
Types of file  
The control file

#### Backup and Recovery Procedures

Basic Concepts  
Backup Guidelines  
Performing Full / Partial Back-ups  
Control File Backups in ARCHIVELOG mode  
Online Backup

### Recovery Mechanisms

- Types of failure
- Appropriate Recovery Procedures
- Restoring Damaged Data Files
- Restoring Archived Redo Log Files
- Restoring a Full Backup
- Closed Database Recovery
- Open Database Recovery
- Incomplete Media Recovery

### Enterprise Manager

- Database Control
- EM Alerts Administration
- ISQL\*Plus
- Advisor Central

### Optimisation

- Introduction to Database Tuning
- Tuning Memory
- Balancing Disk I/O
- Automatic Workload Repository

### Creating the Database

- Steps to create an ORACLE Database
- Manually Creating a Database
- Creating a Database Using DBCA
- After Database Creation