

# **ORACLE DBA COURSE CONTENT**

## **Oracle Core DBA**

### **What you learn?**

This Course offers students for introduction to the general features and capabilities of Oracle Database 11g Release 2 and also learn the new Features of 12c Release 1. You will learn how to install and administer Oracle Database, and Automatic storage Management, Backup and recovery of their databases, monitor the databases using Enterprise Manager Grid Control.

### **Instructor**

Well experienced, Oracle Certified, real time Oracle Consultant

### **Who can attend?**

Any Graduate/Basic knowledge in SQL  
Database Administrators

### **Course Objectives**

Identify Oracle Database Install, create, administer and monitor single instance and Data guard databases, Configuration and management tools for single instance databases, backup and recovery of their databases with the best practices, and design of the database.

**Course duration: (35-40 hours)**

### **Course Topics/Contents:**

#### **Introduction to linux**

- History of Linux
- Components of Linux
- Linux Basic Commands
- File permission to users

#### **Introduction to DBMS**

- What is a database?
- History of Oracle database

- Role of a Database Administrator

## Basic SQL

- What are DML, DDL and DCL Statement
- Examples on DML, DDL and DCL
- Creation of Table, Views, Sequence, Synonyms & Index

## Oracle Database Architecture

- Detail explanation on components of an Oracle database architecture
- Oracle database memory and process architecture

## Installing Oracle database software (11g R2)

- Pre-requisites for a successful Oracle software installation
- Installation of oracle software using GUI and Manual Method
- Installation of Oracle 11g R2 database software

## Oracle Database Creation

- Introduction
- Planning for an Oracle database creation
- Creating an Oracle database using the MANUAL method
- Creating an Oracle database using the GUI Tool (DBCA)
- Startup and Shutdown Methods
- Best practices using OFA for database creation

## Database storage Management

- Introduction
- Tablespaces creation methods
- Datafiles creation methods
- How to resize/rename the tablespace/datafiles
- How to Change the location of datafiles
- Redolog file architecture and best practices
- How to resize/rename the redolog file
- Benefits of Archiving, how to enable/disable Archivelog mode for a database
- Temporary tablespaces and temporary tablespace groups

## Oracle Networking

- Oracle listener & TNS configuration using NETMGR
- Managing & Distributing by using DB-link concept
- Oracle database connections from other systems
- Oracle Shared server Dispatcher & Architecture

## User Administration and Security

- Create database users
- Database resource management (User's Profile and Role)
- Locking/unlocking a user account

- User's password management

## **User Managed Backup and Recovery**

- Introduction: Backup and Recovery Strategy for user managed backup
- How to backup an Oracle database using COLD BACKUP
- How to backup an Oracle database using HOT BACKUP
- Recovery scenarios using User managed backup

## **RMAN Backup and Recovery**

- RMAN backup of Database, controlfile, Archive logfiles
- Database backup using RMAN with normal and compressed mode
- Database backup using catalog and no-catalog and virtual catalog
- Querying the backup details using Catalog database
- Benefits of Fast Recovery Area using RMAN backup for storage
- How to backup incremental database
- Recovery scenarios using RMAN
- Tablespace Point in time recovery (TSPITR)

## **Oracle Datapump {Logical backup & Restore}**

- Introduction on Datapump(Expdp,Impdp) Utilities
- Benefits of Logical backup & Physical backup
- Exporting/Importing Tables, Schema Tablespace database and Transportable tablespace
- Backup methods using datapump

## **Flashback Feature**

- Types of flashback and their benefits
- Flashback Query, Flashback Table to past time
- Flash back of Recovering Drop tables
- Flashback Archive

## **Oracle Enterprise Manager (grid Control)**

- Introduction
- How to install and configure
- Monitor databases and performance of the databases

## **Cloning**

- Cloning database using RMAN from Active Database
- Cloning database using same datafile storage locations and different datafile storage locations

## **Logminer and SQL Loader**

- Reading/Extracting the content of Redologs (Online/Archived)

## **Oracle Dbase Patching/Patch Management**

- Downloading/Applying Interim & Patchset patches using Opatch
- Applying cpu and psu patches

## Oracle DBase Upgradation and Migration

- Upgrading database from 11g to 12c version

## Oracle Data Guard

- Oracle Dataguard Architecture
- Creation of physical standby database using RMAN and Manual Method
- How to configure Active standby database and snapshot standby database
- Data guard Modes and Switchover/Failover
- Scenarios on restore and recovery

## Oracle Automatic Storage Management (ASM)

- Setup ASM by using Grid Infrastructure Utility
- Database Migration from Non-ASM to ASM

## Oracle Database Performance Tuning

- Basic overview on PT and troubleshooting
- Routine Day-to-Day Health Management tasks
- Introduction on Proactive & reactive Tuning
- Diagnostic tools such as Alert logfile, Trace file, TKPROF
- AWR Report, ADDM Report and ASH Report

## Oracle Golden Gate

- Introduction and Architecture of Oracle Golden gate
- Understanding Oracle golden gate Components
- Installing Oracle golden gate software and using GGSCI
- Managing Oracle golden gate and Troubleshooting

## Oracle 12c New Features

Introduction, Architecture, Installation & Creation of DBase  
Multi-Tenancy Database (PDB,CDBs)  
SQL Statement & Table level recovery(TPITR) in RMAN  
Creating a user, Tablespace & In-memory Area

## Oracle RAC

- Basic Introduction & overview on RAC

## Additional Support

- Resume Preparation
- Study Material
- Interview Questions based on the topics
- Mock interview

