

11g DBA Course Contents

- Introduction to Databases & RDBMS
- Introduction to Oracle & difference between Oracle versions.
- Oracle Physical Structures
- Memory structures and Processes of Oracle
- Dedicated Server and Multithreaded Server
- Installation of Oracle10g, 11g under Linux and Win.
- Networking Clients
- Creation of a database from scratch and using DBCA
- Managing Tablespaces and Data files
- Managing Log files and Control file
- Introduction to Data Blocks, Extents and Segments
- Locally Managed Tablespaces and Auto Segment Space mgmt.
- Managing Undo Space and Flashback Features
- Security Management, User Accounts and Privileges
- Managing Profiles and Resource Manager
- SQL*Loader, loading data from other data sources
- Exporting and Importing data between Oracle Databases
- Migrating databases
- Analyzing the Impact of Database Changes on SQL Performances.
- Auditing Database usage using Audit features, FGA, triggers.
- Introduction to Oracle Database Control using Enterprise Manager through Web Browser

Tuning

- Top mistakes people do with Oracle Databases
- Tuning SQL Statements
- Tuning Indexes
- Rule based & Cost based Optimizer Mode
- Viewing and Understanding Execution Plans
- AUTOTRACE, SQL Analyze Utilities
- Tuning Memory Structures SGA, Buffer Cache, Log buffers
- Tuning I/O Storage
- Tuning conflicts and contention tuning
- Tuning PGA, Sorts and miscellaneous objects
- Using Automatic Database Diagnostic Monitor

Backup and Recovery

- Developing Backup and Recovery Strategies.
- Understanding Offline (Cold) and Online (Hot) Backups
- Taking Offline backups and understanding No archive log mode
- Taking database in Archive log mode and taking Online backups
- Performing Time based, Cancel based and Change based recovery
- Introduction to RMAN
- Taking backups and performing recovery using RMAN.
- New features in RMAN in 10g and 11g versions
- Maintaining Backup sets in RMAN
- Block Media Recovery in RMAN.
- Data Guard and Standby Database in 10g, 11g
- Basics Replication and Advance Replication
- Using DATA PUMP utility