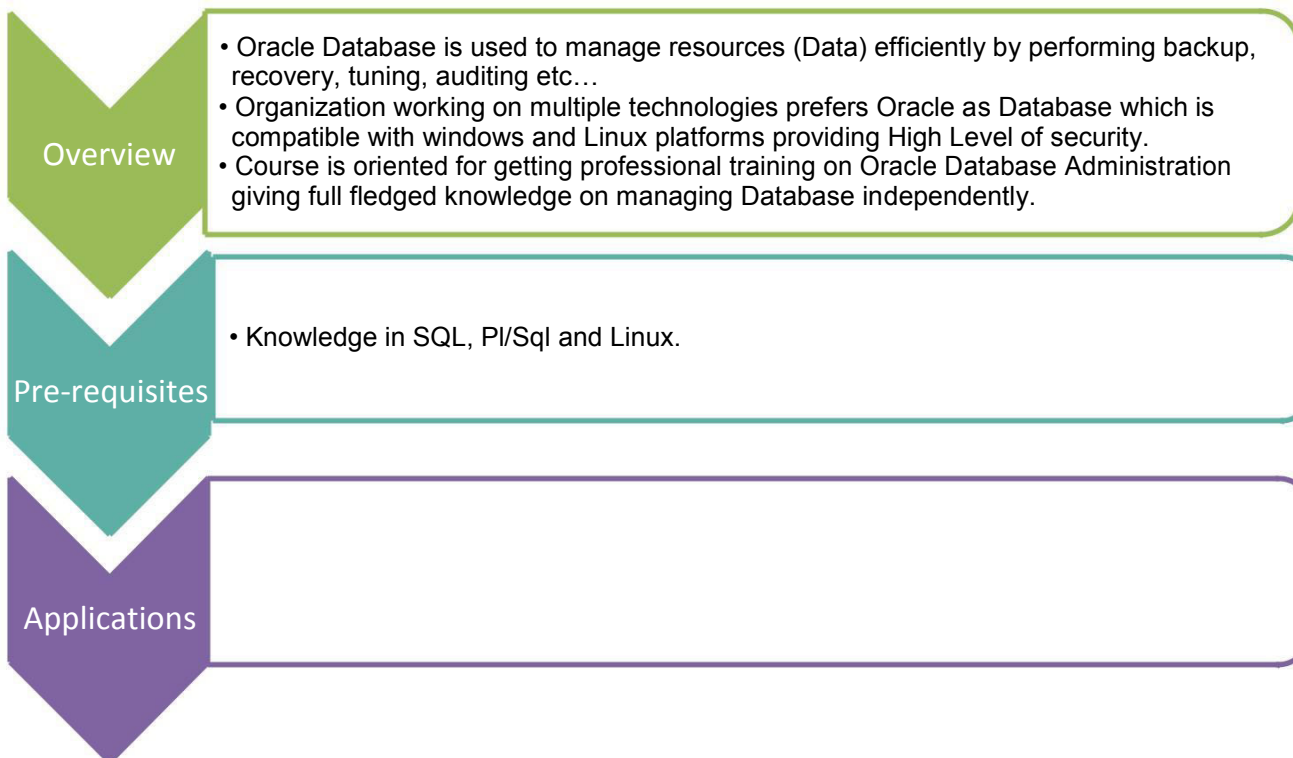


Course Brochure

ORACLE 12C DBA



COURSE CONTENTS

Introduction to Oracle DBA

- ❖ Popular database management system (DBMS) software and why Oracle DBMS.
- ❖ History and Current trends of DBMS and Database Administration.
- ❖ Oracle database market share and about its current competitive landscape.
- ❖ Roles and Responsibilities of a DBA.

Oracle Database Architecture

- ❖ Oracle Database & Instance
- ❖ Memory Structures of SGA, PGA
- ❖ Background Processes
- ❖ Server Processes
- ❖ Database Files System
- ❖ Database Physical Structure
- ❖ Database Logical Structure

Installing Oracle Database 11g / 12c Software

- ❖ Requirements for Installation
- ❖ Installation of Oracle Enterprise Linux 6 (OEL 6)
- ❖ Installation of Oracle Database 11gR2 database software on OEL 6
- ❖ Installation of Oracle 12c Database software (Latest Release) on OEL 6

Creating Oracle Database

- ❖ Database Creation Planning
- ❖ Prerequisites for Database Creation
- ❖ Installation of Database Software and Creating Database by using GUI
- ❖ Creating Database by using DBCA
- ❖ Creating Database Manually
- ❖ Drop a Database Manually and Using DBCA

Instance and Database Startups and Shut down

- ❖ Startup & Shutdown modes
- ❖ Starting a Database --> Startup Nomount
- ❖ Mounting a Database --> Startup Mount
- ❖ Open a Database --> Startup Open
- ❖ Close a Database
- ❖ Dismounting a Database
- ❖ Shut down normal a Database
- ❖ Shut down Immediate a Database
- ❖ Shut down Transactional a Database
- ❖ Shut abort a Database
- ❖ Read-only & Restricted modes

SPFile / PFile Management

- ❖ What Is a Server Parameter File?
- ❖ What are Initialization Parameters
- ❖ What are Static and Dynamic Parameters
- ❖ Creating a Server Parameter File
- ❖ How to Maintain SPFile
- ❖ How to Maintain PFile
- ❖ The SPFILE Initialization Parameter
- ❖ Changing Initialization Parameter Values
- ❖ Clearing Initialization Parameter Values
- ❖ Recovering a Lost or Damaged Server Parameter File

Data Dictionary

- ❖ Understanding Data Dictionary
- ❖ Static & Dynamic Performance Views
- ❖ Using Data Dictionary

Tablespaces & Datafile Management

- ❖ Overview of Tablespaces
- ❖ Different Types of Tablespaces.
- ❖ Architecture of Tablespace like Segments, Extents, Blocks.
- ❖ Understanding Space Management
- ❖ Creating & Managing Tablespace with Datafiles.
- ❖ Adding a Datafiles to Existing Tablespace with fixed size and autoextend option.
- ❖ Renaming a Datafile and Resizing Datafiles.
- ❖ Creating Big file Tablespaces
- ❖ Assing Tablespace Quotas to Users
- ❖ Configuring Multi-Block Support

Undo Management

- ❖ What Is Undo?
- ❖ Creating Undo Tablespace
- ❖ Configuring Undo Retention
- ❖ Guarantee Undo Retention
- ❖ Dropping Undo Tablespace
- ❖ Change the default Undo Tablespace to New Undo Tablespace
- ❖ Discussion On Snapshot Too Old Error

COURSE CONTENTS

Temporary Tablespaces Management

- ❖ Understanding Temporary Tablespaces
- ❖ Creating and Managing Temporary Tablespaces
- ❖ Assigning Temporary Tablespace to Temporary Tablespace Groups.
- ❖ Set Default Temporary Tablesapce to Database

Control File Management

- ❖ Understanding Control Files
- ❖ Creating Control Files
- ❖ Multiplexing Control Files
- ❖ Backing Up Control Files
- ❖ If Control file was lose, then How to Recreate Controlfile.
- ❖ Recovering a Control File Using a Current Copy
- ❖ Dropping Control Files
- ❖ Displaying Control File Information

Online Redo Log File Management

- ❖ What Is the Redo Log?
- ❖ Creating Redo Log Groups and Members
- ❖ Managing Online Redo Log Files
- ❖ Relocating and Renaming Redo Log Members
- ❖ Dropping Redo Log Groups and Members
- ❖ Forcing Log Switches
- ❖ Verifying Blocks in Redo Log Files
- ❖ Check Status of Redo Log File
- ❖ Resizing Online RedoLogs by using Script

Archivelog Management

- ❖ What Is the Archived Redo Log?
- ❖ Configuring Database Between NOARCHIVELOG and ARCHIVELOG Mode
- ❖ Specifying Archive Destinations
- ❖ How to Enable / Disable Archive logs
- ❖ Managing Archive Destination Failure
- ❖ Viewing Information About the Archived Redo Log

Oracle Net working

- ❖ Database Logical Structure
- ❖ Introduction to Oracle Net Services
- ❖ Oracle listener configuration (Dynamic and Static Listeners).
- ❖ Dynamic Service Registration and Naming Methods configuration in sqlnet.ora.

- ❖ Oracle database connections from other computers.
- ❖ Using Oracle NETCA, (Network Configuration Assistant) and NETMGR for network configuration file and Configuring Listener & Naming methods.
- ❖ Establishing Database connectivity from Oracle Database Clients
- ❖ Oracle listener administration and TNS_ADMIN environment variable.

User Administration and Security

- ❖ How to create database user Accounts
- ❖ How to GRANT or REVOKE Role / Privileges To user or From User.
- ❖ Managing Roles / Privileges
- ❖ Creating Roles and Assign Privileges to Roles
- ❖ Oracle database authorization using object and system privileges
- ❖ Oracle database authorization using database roles
- ❖ Managing Schemas, Session, Killing Sessions.
- ❖ How to set database profile limits for a user for efficient resource management.
- ❖ Unlocking a user account and enabling password management.

Database Backups & Recovery

- ❖ Introduction and planning for a robust Backup and Recovery Strategy.
- ❖ How to take an Oracle database backup in offline mode (COLD BACKUP).
- ❖ Hot to take an Oracle database backup in online mode (HOT BACKUP).
- ❖ Logica Backups (Exp and Imp)
- ❖ DataPump (Expdp and Impdp)

Oracle DataPump

- ❖ Concepts of Logical backups & Refresh
- ❖ Data Pump Exports Process
- ❖ Data Pump Imports Process
- ❖ Parameters Available to Export / Import's Command-Line Mode
- ❖ Commands Available in Import's Interactive-Command Mode
- ❖ Examples of Using Data Pump Full Database, Schema, Object Level backups & Restore.

COURSE CONTENTS

RMAN Backup and Recovery

- ❖ Advantages of RMAN method compared to manual method.
- ❖ Database backup using RMAN in normal and compressed mode.
- ❖ Oracle database backup metadata.
- ❖ Database Backup & Recovery Concepts
- ❖ Database Recovery Catalog
- ❖ Database Full & Incremental Backups
- ❖ Database Image Copy & Backup Set backups
- ❖ How to restore and recover a database using its backup in the event of a media failure.
- ❖ Oracle database backup retention policies and backups to Tape/offsite.
- ❖ Fast Recovery Area for better management of backups and archive log files.

Transportable Tablespaces

- ❖ Concepts of Transportable Tablespaces
- ❖ Transporting Tablespaces across Databases

Cloning Oracle Database

- ❖ Overview of Cloning Methods
- ❖ Cloning Techniques
- ❖ Cloning an Oracle Database Using Recovery Manager (RMAN) Backup
- ❖ Cloning an Oracle Database Using Staging Areas
- ❖ Cloning an Oracle Database Using an Existing Backup
- ❖ Manual Database Cloning

Dataguard Setup (Disaster Recovery)

- ❖ Overview of Data Guard
- ❖ Benefits of Implementing Data Guard
- ❖ Standby Database Concepts
- ❖ Implementing Physical Standby database

Oracle Database Patches

- ❖ Patching Concepts
- ❖ Interim Patches, CPU, PSU patches
- ❖ Patch Sets
- ❖ Downloading & Analysing Patches
- ❖ Applying Patches

Database Upgrade

- ❖ Understanding the upgrade process
- ❖ Upgrade methods
- ❖ Upgrading Oracle11g to Oracle 12c

12c New Features

- ❖ Multitenant Container Database and Pluggable Databases
- ❖ Managing Tablespaces and Users in CDB and PDBs
- ❖ Backup, Recovery, and Flashback CDBs and PDBs
- ❖ Automatic Data Optimization and Storage Enhancements
- ❖ In-Database Archiving and Temporal
- ❖ Privilege Analysis new feature and new administrative privileges ADR and Network enhancements
- ❖ Oracle Data Redaction
- ❖ High Availability using RMAN
- ❖ Tables, Indexes, and Online Operations enhancements
- ❖ Major enhancements in Data Pump, SQL Loader & External tables

SOME OF TRAININGS HIGHLIGHTS :

- ❖ Real time support.
- ❖ 100% placement assistance
- ❖ Discussion of interview questions
- ❖ Complete Real time oriented training
- ❖ Dealing the topics which are very advanced in the industry
- ❖ Making a candidate 100% job ready