Oracle DBA course Curriculum:

1. INTRODUCTION to ORACLE Database

Goal Set: In this module you can learn how to explore Oracle Database Architecture, correlate the logical and physical storage structures, and description of ASM storage components.

Topics: Introduction, oracle database administration, exploring the Oracle Database Architecture, List the major architectural components of Oracle Database, Explain the memory structures, describe the background processes, Correlate the logical and physical storage structures, oracle database architecture, Describe ASM storage components.

2. Installing your Oracle Software

Goal Set: By the end of this module, you will be able to understand the database administrator (DBA) role,oracle DBA installation steps and explain the typical tasks and tools, and also learn about Oracle database software.

Topics: Database Administrator: Role, Explanation of tasks & Tools, Plan an Oracle software installation,oracle DBA commands, Install Oracle Grid Infrastructure for a standalone server, Install the Oracle database software.

3. Goal Set: In this module you can learn about the creation of an Oracle Database, plan it, and generate database using DBCA, and also create database using SQL plus, and also understand users and sample schemas.

Topics: Introduction: Plan database creation, Create database & generate database creation scripts using DBCA, Oracle DBA step by step guide, Create database using SQL Plus, Understand database users & sample schemas.

4. Managing the Database Instance

Goal Set: After completion of this database instance, you can learn to manage the database instance, viewing alert log and manage trace files, understand data directory views, and access dynamic performance views and lot more in detail.

Topics: Introduction: Managing database using Oracle Enterprise Manager & SQL*Plus, Commonly used Initialization Parameters, oracle DBA 11g installation steps, Manage database initialization parameters – SPFile & Pfile, Describe the stages of database startup, Start and stop the Oracle database and components, Viewing Alert log & manage Trace files, Understand Data Dictionary Views, Access dynamic performance views.

5. Managing Database Storage Structures

Goal Set: By the end of this module of Oracle DBA online classes, you can understand about storage structures, tablespaces, and data files in detail.

Topics: Introduction: Storage Structures, Segments, Extents & Oracle block, describe the storage of table row data in blocks, Create and manage Tablespaces, Oracle dba Tables-paces and Datafiles, Obtain tablespace information, Oracle Managed Files (OMF), Managing Temporary Tablespace.

6. Administering User Security

Goal Set: By the completion of this module, you can understand administering User Security, create and manage user accounts, authenticate users, grant and revoke privileges, profile creation and management.

Topics: Create and manage database user accounts: Authenticate users, Assign default storage areas (tablespaces), Grant and revoke privileges, Create and manage roles, Create and manage profiles.

7. Managing Data Concurrency

Goal Set: In this module of Oracle DBA online classes you will understand as how to deal data concurrency, monitor and resolve locking conflicts.

Topics: Describe locking mechanism and how Oracle manages data concurrency, Monitor and resolve locking conflicts.

8. Managing Undo Data

Goal Set: After the completion of this session you can understand as how to manage Undo Data successfully, differences between undo data and redo data, Configure and Guarantee Undo retention, and use the undo Advisor.

Topics: Explain DML, Monitor, & Administer Undo Data, Difference between undo data and redo data, Configure undo retention, Guarantee undo retention, Use the Undo Advisor, Configuring the Oracle Network Environment, Oracle Net Services, Configure Listener & Create Oracle Net Service aliases, oracle database administration, Configure connect-time fail over, Control the Oracle Net Listener, Use tnsping to test Oracle Net connectivity, Identify when to use shared servers and when to use dedicated servers, Configuring Communication between Databases, Connecting to another Database using DB Links.

9. Backup and Recovery Concepts

Goal Set: In the module you can understand backup and recovery concepts which begins with the identification of types of the Oracle database failure, and significance of checkpoints redolog files, control files, and archive log files. In addition understand different type of backup, invoke and configure Recovery Manager, and specify the Retention Policy.

Topics: Identification: Types of failure that can occur in an Oracle database, Importance: checkpoints, redolog files, control files & archive log files,oracle 12c database, Understanding: Cold & Hot backup, Configure: ARCHIVELOG mode & Fast Recovery Area, Invoke and configure Recovery Manager (RMAN), Specify Retention policy.

10. Use of RMAN Recovery Catalog & Configuring Backup Settings

Goal Set: In this module you can understand use of RMAN recovery catalog & configuring backup settings.

Topics: Usage of a Recovery Catalog over control file for the RMAN repository, Create and configure a recovery catalog, Register Database & Synchronize with recovery catalog, Use RMAN stored scripts, Enable control file autobackup, Configure backup destinations, Allocate channels for Disk & Tape destinations, Configure backup optimization, Create compressed & encrypted backups

11. Performing Database Backups with RMAN

Goal Set: After the completion of this module, you can understand as how to perform database backups with RMAN.

Topics: Create consistent database backups (offline / cold), back up your database without shutting down (online / hot), Creation: (Image file backups, a whole database backup, a full database backup), Enable fast incremental backup, Create duplex backup sets, Back up a backup set, Create RMAN multi-section backup, Create an archival backup for long-term retention, Monitor Backup jobs, Manage backups and view backup reports, Monitor the fast recovery area.

12. Performing Database Recovery

Goal Set: In this module you can understand as how to perform database recovery.

Topics: Determine the need for performing recovery, describe the causes of file loss and determine the appropriate action, describe major recovery operations, Perform recovery (Control file, Redo log file, Data file), Perform complete recovery when a critical or noncritical data file is lost, Recover using incrementally updated backups, Switch to image copies for fast recovery, Recover using a backup control file.

13. Moving Data

Goal Set: In this module you can understand as how to 'move data' using SQL loader, Usage of external tables, and learn about architecture of Oracle Data Pump, and move data between Oracle databases.

Topics: Describe ways to move data, Create and use directory objects, Use SQL*Loader to load data from a non-Oracle database (or user files), Use external tables to move data via platform-independent files, Explain the general architecture of Oracle Data Pump, Use Data Pump Export and Import to move data between Oracle databases.

14. Implementing Oracle Database Auditing

Goal Set: In this module you can understand the implementation of Oracle Database Auditing in detail and also learn about the associated features that go into doing up Oracle Database Auditing.

Topics: Describe DBA responsibilities for security and auditing, Enable standard database auditing, Specify audit options, Review audit information, and maintain the audit trail.

15. Database Maintenance

Goal Set: After completion of this module, you can learn about the database maintenance.

Topics: Optimizer overview, Manage optimizer statistics, Manage the Automatic Workload Repository (AWR), Use the Automatic Database Diagnostic Monitor (ADDM), Describe and use the advisory framework, Accessing & analyzing Active Session History data.

16. Performance Management

Goal Set: In this module you can understand performance management by getting into topics such as performance related dynamic view and EM to monitor performance, and also managing memory.

Topics: Use performance-related dynamic view & EM to monitor performance, Managing Memory (Describe the memory components in the SGA, Implement Automatic Memory Management, Manually configure SGA parameters, Configure automatic PGA memory management, maintaining different types of Indexes, Managing Partition Tables)

17. Managing Performance by SQL Tuning

Goal Set: In this module you can learn as how to manage the performance by SQL tuning and also into tuning Advisor and the topics are mentioned below.

Topics: SQL Tuning, Row chaining & migration, SQL trace, Tkprof, Explain plan, Use the SQL Tuning Advisor to: (Identify SQL statements that are using the most resources, Tune SQL statements that are using the most resources, Use the SQL Access Advisor to tune a workload)

18. Diagnosing the Database

Goal Set: In this module you can understand as how to diagnose the database and several important topics are described in detail such as set up Automatic Diagnostic Repository (ADR) & run health checks.

Topics: Detect and repair database corruption, Handle block corruption, set up Automatic Diagnostic Repository (ADR) & Run health checks.

19. Managing Space

Goal Set: In this module you can understand as how Oracle database server manages space and in this process there are several methods used, of them, compression, segment creation, segment advisor, segment sink.

Topics: Describe how the Oracle database server automatically manages space, Save space by using compression, Proactively monitor and manage tablespace space usage, Describe segment creation in the Oracle database, Control deferred segment creation, Use the Segment Advisor, Reclaim wasted space from tables and indexes by using segment shrink, Manage resumable space allocation.

20. Managing Space for the Database

Goal Set: After completion of this module you can know in detail everything that is essential for managing space for the database.

Topics: Use transportable tablespaces, describe the concepts of transportable databases.

21. Managing the ASM Instance

Goal Set: In this module, our faculty will deal with the managing of ASM Instance, which includes benefits of ASM and ASM disk groups, and retrieval of ASM Meta data using various utilities.

Topics: Describe the benefits of using ASM; Manage the ASM instance, Create and drop ASM disk groups, Extend ASM disk groups, Retrieve ASM metadata by using various utilities.

22. Duplicating a Database / Cloning Database

Goal Set: In this module, you can understand duplication of Database, and cloning database and the database duplication with RMAN.

Topics: List the purposes of creating a duplicate database, Choose a technique for duplicating a database, Duplicate a database with RMAN.

Oracle DBA training duration

Regular Classes (Morning & Evening)

- Duration : 40 days

Weekend Training Classes (Saturday, Sunday & Holidays)

- Duration : 12-15 Weeks

Fast Track Training Program (5+ hours daily)

- Duration : within 15 days

Oracle DBA trainer Profile

Our Oracle DBA Trainers

- More than 8+ Years of experience in Oracle® DBA Technologies
- Has worked on multiple realtime Oracle DBA projects
- Working in a top MNC company
- Strong Theoretical & Practical Knowledge
- **Oracle** certified professional **(OCA& OCP)**
- Oracle GoldenGate 11g Certified Implementation Exam Essentials
- Oracle GoldenGate 10g Certified Implementation Exam Essentials