Oracle DataBase Administration Contents

Oracle Core DBA Training

Overview

Database Administrators (DBAs) are responsible for the design, implementation, support and maintenance of computerized databases in today's organizations. The role also includes architecting, building and scaling databases for future data growth and capacity. They are also responsible for security, performance and availability of data to users and customers. .

All the above tasks are performed with the help of a Database Management System (DBMS) and the leading and most widely used DBMS across the world today are the Oracle Database, Microsoft SQL Server, MySQL database etc. Out of the three DBMS technologies, Oracle Database is the most popular and widely used database in the world today.

Oracle DBA Training

We are currently offering a world class oracle database administration training programme for interested students and professionals. Registration for our Oracle classes is open for anyone in the world because it is an Offline & Online course.

Oracle DBA Concepts

Introduction to Oracle Database

- ✓ Overview of Oracle Grid Architecture
- ✓ Difference between a cluster and a grid
- ✓ Responsibilities of Database Administrators

Creating Oracle Database

- ✓ Creating Oracle 11g / 10g Database using SQL commands
- ✓ Creating Oracle Container Database in 12c using DBCA

Managing Table spaces and Data files

- ✓ Creating New Table spaces
- ✓ Big file Tables paces (Introduced in Oracle Ver. 10g)
- ✓ To Extend the Size of a tablespace
- ✓ To decrease the size of a tablespace
- ✓ Coalescing Tablespaces
- ✓ Taking tablespaces Offline or Online
- ✓ Making a Tablespace Read only.
- ✓ Renaming Tablespaces
- ✓ Dropping Tablespaces
- ✓ Viewing Information about Tablespaces and Datafiles
- ✓ Relocating or Renaming Datafiles
- ✓ Renaming or Relocating Datafiles belonging to a Single Tablespace
- ✓ Procedure for Renaming and Relocating Datafiles in Multiple Tablespaces

Temporary Tablespace

- ✓ Increasing or Decreasing the size of a Temporary Tablespace
- ✓ Tablespace Groups
- ✓ Creating a Temporary Tablespace Group
- ✓ Assigning a Tablespace Group as the Default Temporary Tablespace

Diagnosing And Repairing Locally Managed Tablespace Problems

- ✓ Scenario1: Migrating from a Dictionary-Managed to a Locally Managed Tablespace

Transporting Tablespaces

- ✓ Procedure for transporting tablespaces
- ✓ Transporting Tablespace Example

Managing REDO LOGFILES

- ✓ Adding a New Redo Logfile Group
- ✓ Adding Members to an existing group
- ✓ Dropping Members from a group
- ✓ Dropping Logfile Group
- ✓ Resizing Logfiles
- ✓ Renaming or Relocating Logfiles
- ✓ Clearing REDO LOGFILES
- ✓ Viewing Information About Logfiles

Managing Control Files

- ✓ Multiplexing Control File
- ✓ Changing the Name of a Database
- ✓ Creating A New Control File

Managing The UNDO TABLESPACE

- ✓ Switching to Automatic Management of Undo Space
- ✓ Calculating the Space Requirements For Undo Retention
- ✓ Altering UNDO Tablespace
- ✓ Dropping an Undo Tablespace
- ✓ Switching Undo Tablespaces
- ✓ Viewing Information about Undo Tablespace

Export And Import

- ✓ Invoking Export and Import
- ✓ Command Line Parameters of Export tool
- ✓ Example of Exporting Full Database
- ✓ Example of Exporting Schemas
- ✓ Exporting Individual Tables
- ✓ Exporting Consistent Image of the tables

DATA PUMP Utility

- ✓ Using Data Pump Export Utility
- ✓ Example of Exporting a Full Database
- ✓ Example of Exporting a Schema
- ✓ Exporting Individual Tables using Data Pump Export
- ✓ Excluding and Including Objects during Export
- ✓ Using Query to Filter Rows during Export
- ✓ Suspending and Resuming Export Jobs (Attaching and Re-Attaching to the Jobs)

Flash Back Features

- ✓ Flashback Query
- ✓ Using Flashback Version Query
- ✓ Using Flashback Table to return Table to Past States
- ✓ Purging Objects from Recycle Bin
- ✓ Flashback Drop of Multiple Objects With the Same Original Name
- ✓ Flashback Database: Alternative to Point-In-Time Recovery
- ✓ Enabling Flash Back Database
- ✓ To how much size we should set the flash recovery area
- ✓ How far you can flashback database

Example: Flashing Back Database to a point in time

BACKUP AND RECOVERY

- ✓ Opening the Database in Archivelog Mode
- ✓ Bringing the Database again in NoArchiveLog mode
- ✓ Taking Offline (COLD) Backups
- ✓ Taking Online (HOT) Backups
- ✓ Recovering from the Loss of a Datafile
    1. When the Database is running in Noarchivelog Mode
    2. When the Database is running in Archivelog Mode
- ✓ Recovering from loss of Control File
- ✓ Rman and conventional Backup / Recovery
- ✓ Defining backup strategy
- ✓ Complete understanding of RMAN and conventional backups

RMAN and Conventional Cloning

- ✓ Cloning database using conventional methods
- ✓ Cloning database using rman
- ✓ Create image file backups
- ✓ Create a whole database backup
- ✓ Enable fast incremental backup
- ✓ Create duplex backup and back up backup sets
- ✓ Create an archival backup for long-term retention
- ✓ Create a multisession, compressed and encrypted backup
- ✓ Report on and maintain backups

- ✓ Identify situations that require RMAN recovery catalog
- ✓ Create and configure a recovery catalog
- ✓ Synchronize the recovery catalog
- ✓ Create and Use RMAN stored scripts
- ✓ Back up the recovery catalog
- ✓ Creating a duplicate database
- ✓ Using a duplicate database

ASM overview and benefits

- ✓ Complete Overview of ASM
- ✓ Understand the need of ASM
- ✓ ASM instance parameters

Applying patches

- ✓ Different types of Patches
- ✓ How to apply patch to database

Database upgrade

- ✓ Upgrade Database from 11g to 12c

Oracle networking and shared process overview

- ✓ Configuring and maintaining listeners
- ✓ Configured Dispatchers and Shared servers
- ✓ Understanding tnsnames.ora / sqlnet.ora

Physical and logical Standby/ Data guard

- ✓ Configure physical standby database
- ✓ Understanding logical and snapshot standby database

Database Administrator Job Growth

DBAs play an important and responsible role in every company's Information Technology (IT) department. DBAs are also very well paid and the average annual salary is more than $1,00,000 (apox 65,00,000 LA India)in the USA.

Among all the IT/computer best jobs in a recent CNN.com Best Jobs in America report, Database Administrator job has the highest job growth forecast (30% increase) for the next 10 years until 2023.. www.cnn.com also published an article recently that Database Administrators stand # 14 out of 100 BEST AMERICA JOBS ***(In All Fields)***