

Oracle Database 11g: 2 Day DBA Release 2

Duration: 2 Days

What you will learn

The goal of this course is to teach Database Administrators how to install the Oracle Database 11g software and perform the tasks required to manage an Oracle database. Enterprise Manager is used throughout to teach students how to quickly accomplish the required task. Emphasis is on the self-managing capabilities and automatic features of Oracle Database 11g. This course is targeted towards Database Administrators of small to medium sized businesses.

Learn To:

- Install Oracle Database 11g software and create a database
- Use Enterprise Manager Database Control to manage the database
- Manage database storage structures and schema objects
- Administer users and security
- Back up and recover the Oracle database
- Monitor the database and use the Advisors

Audience

- Database Administrators
- Support Engineer
- Technical Administrator
- Technical Consultant

Prerequisites

Suggested Prerequisites

- Basic knowledge of Linux Operating System

Course Objectives

- Install Oracle Database 11g
- Create a Database
- Use Enterprise Manager Database Control to manage the database
- Configure and manage the Oracle Network environment
- Manage database storage structures
- Administer users and security
- Manage schema objects
- Backup and recover the database
- Monitor the database
- Use the Support Workbench
- Manage the Oracle Database software
- Use the Advisors

Course Topics

Overview of Oracle Database Administration

Relational Databases: Introduction

What is SQL?

Overview of Oracle Instance and Database

Common Tasks of an Oracle Database Administrator (DBA)

Tools for Administering an Oracle Database

Installing the Database and Creating the Database

Using Oracle Universal Installer

Installation Prerequisites

Setting Environment Variables

Installing the Oracle Database Software: Steps

Using the Database Configuration Assistant (DBCA)

Using the DBCA to Create a Database

Performing Other Actions with the DBCA

Using the DBCA to Manage Templates

Using Oracle Enterprise Manager Database Control and SQL-Based Management Tools

Oracle Database 11g Release 2 Management Framework: Components

Administering the Database by Using Enterprise Manager: Overview

Starting the Database Control Console Process

Accessing Enterprise Manager Database Control

Oracle Enterprise Manager: Navigation

Granting Enterprise Manager Administrative Privileges

Configuring Enterprise Manager Settings and Preferences

Using SQL*Plus and SQL Developer to Access Your Database

Configuring the Oracle Network Environment

Tools for Configuring and Managing the Oracle Network

Accessing the Enterprise Manager Net Services Administration Page

Managing the Oracle Net Listener with Enterprise Manager

Using the Listener Control Utility

Connecting to an Oracle Database

Oracle Net: Naming Methods

Using Enterprise Manager to Configure Local Naming

Using Oracle Net Manager to Configure Local Naming

Managing the Oracle Instance

Oracle Instance Management

Oracle Processes

Oracle Memory Structures

Starting the Instance and Opening the Database

Shutting Down an Oracle Database Instance

Viewing and Modifying Initialization Parameters

Managing Memory Components

Viewing the Alert Log

Managing Database Storage Structures

Oracle Database Structures

Exploring the Storage Structure

Multiplexing the Redo Log

Enlarging the Database

- Creating, Modifying, and Dropping Tablespaces
- Reclaiming Space in Your Tablespace
- Managing Undo Data
- Using the Undo Advisor to Compute the Minimum Undo Tablespace Size

Administering Users and Security

- Overview of Users and Security
- Oracle-Defined Users
- Creating, Modifying, and Dropping Users
- Locking and Unlocking Accounts
- Unlocking a User Account and Resetting the Password
- Setting the Password Policy
- Modifying the Default Password Policy
- Administering Privileges and Roles

Managing Schema Objects

- Creating, Modifying, and Dropping Tables
- Understanding Data Integrity and Defining Constraints
- Viewing the Contents of a Table
- Creating and Dropping Indexes
- Managing Views
- Managing Program Code Stored in the Database
- Managing Access to Schema Objects
- Loading Data

Performing Backup and Recovery

- Backup, Restore, and Recovery Concepts
- Configuring the Database for Backup and Recovery
- Configuring Backup Settings
- Backing Up the Database
- Using the Oracle-Suggested Backup Strategy
- Performing Backup Maintenance Tasks
- Using Oracle Advised Recovery to Recover the Database
- Performing Flashback Table and Flashback Drop

Monitoring the Database and Using the Advisors

- Monitoring General Database State, Workload, and Performance
- Setting Metric Thresholds
- Setting Up Direct Alert Notification
- Diagnosing Performance Problems
- Viewing ADDM Performance Analysis and Responding to Findings
- Using the SQL Tuning and SQL Access Advisors
- Configuring the Automatic SQL Tuning Advisor
- Viewing Automatic SQL Tuning Results

Investigating, Reporting, and Resolving Problems

- Using the Enterprise Manager Support Workbench
- Workflow for Investigating, Reporting, and Resolving a Problem
- Performing the Tasks to Investigate and Report a Critical Error

Managing Oracle Database Software

- Understanding Software Management and Patch Releases

Patching Oracle Database Software
Using the Database Upgrade Assistant to Upgrade the Database