

Oracle Database 11g: RAC Administration

Duration: 5 Days

What you will learn

This course will introduce you to the general features and capabilities of Oracle Database 11g Release 1 for Oracle Real Application Clusters (RAC). You'll learn how to install and administer Oracle Clusterware and more.

Learn To:

Install Oracle Clusterware and Real Application Clusters.

Administer a RAC Database.

Administer Database Services in a RAC environment.

Administer Oracle Clusterware.

Add/Remove a node to/from a cluster.

Patch Oracle Clusterware and RAC software.

Administer your Database in a Real Application Clusters environment using Enterprise Manager Grid Control.

Configure and use database services, along with the Load Balancing Advisory in a RAC environment.

Benefits to You

Ensure fast, reliable, secure and easy to manage performance. Optimize database workloads, lower IT costs and deliver a higher quality of service by enabling smooth and rapid consolidation within your Datacenter.

Add & Remove Nodes in Clusters

This course will also teach you how to add and remove nodes in clusters. Learn how to patch both Oracle Clusterware and Real Application Clusters software in a rolling fashion.

This course is appropriate for a 10g audience, too. There are few minor changes between 10g and 11g features.

Audience

Data Warehouse Administrator

Database Administrators

Support Engineer

Technical Administrator

Related Training

Required Prerequisites

General understanding of database administration

Course Objectives

Identify Real Application Clusters components

Install, create, administer, and monitor a Real Application Clusters database

Use configuration and management tools for Real Application Clusters databases

Setup services for workloads management, and applications high availability

Develop a backup and recovery strategy for Real Application Clusters databases

Configure and monitor Oracle Clusterware resources

Review high availability best practices

Course Topics

Oracle Clusterware Installation

Oracle RAC 11g Installation

Cluster Setup Tasks

Using Raw Partitions

Cluster Configuration

RAC Installation

Installing Automatic Storage Management

Configure ASM Storage

Install the Database Software

Database Creation

Management Agent Installation

Storage Options for Database Files

Create the Database

Single Instance to RAC Conversion

RAC DB Administration

Cluster Database Instance Administration

Topology Viewer

Automatic Undo Management and RAC

Quiescing RAC Databases

Transparent Data Encryption and Wallets in RAC

ASM Instance and Crash Recovery in RAC

Backup and Recover a RAC DB

Protecting Against Media Failure

Oracle Recovery Manager

RAC DB Monitoring and Tuning

CPU and Wait Time Tuning Dimensions

Dynamic Reconfiguration

ADDM Analysis

Services

- Workload Dispatching
- High Availability of Services in RAC
- Services and Resource Manager with EM
- Change Service Thresholds
- Using Distributed Transactions with RAC

High Availability of Connections

- Fast Application Notification
- Load Balancing Advisory
- Transparent Application Failover

Oracle Clusterware Administration

- Controlling the Oracle Clusterware Stack
- Back Up and Recover Your Voting Disks
- Back Up and Recover Oracle Cluster Registry
- Prevent Automatic Instance Restarts

Diagnosing the Oracle Clusterware components

- Oracle Clusterware Main Log Files
- RAC Diagnostic Infrastructure

Node Addition/Removal

- Add and Delete Nodes and Instances
- Clone Oracle Clusterware

Design for High Availability

- Maximum Availability Architecture
- RAC and Data Guard Topologies
- Extended RAC Connectivity
- Extended RAC disk mirroring
- Patch your RAC system in a rolling fashion

Workshop

- Extend your cluster using Grid Control
- Patch Oracle Clusterware