

Oracle Database 11g: RAC Administration

Duration: 5 Days

What you will learn

This course offers students an introduction to the general features and capabilities of Oracle Database 11g Release 1 for Oracle Real Application Clusters (RAC). Students learn how to install and administer Oracle Clusterware, Real Application Clusters, and Automatic Storage Management. Students also learn how to administer their Database in a Real Application Clusters environment using Enterprise Manager Grid Control. Increase your efficiency by learning how to configure and use database services as well as the Load Balancing Advisory in a RAC environment. Learn how to add and remove nodes in clusters and how to patch both Oracle Clusterware and Real Application Clusters software in a rolling fashion.

This course counts toward the Hands-on course requirement for the following certifications

Oracle Database 11g Administrator Certification

Oracle Database 10g: Real Application Clusters Administrator Certified Expert

Only instructor-led inclass or instructor-led online formats of this course will meet the Certification Hands-on Requirement. Self Study CD-Rom and Knowledge Center courses are excellent study and reference tools but DO NOT meet the Hands-on Requirement for certification.

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

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

Audience

Data Warehouse Administrator

Database Administrators

Support Engineer

Technical Administrator

Prerequisites

Required Prerequisites

Oracle Database 11g: New Features for Administrators

Oracle Database 11g: Administration Workshop I

Suggested 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