

## Oracle Grid Infrastructure 11g: Manage Clusterware and ASM Release 2 NEW

**Duration:** 5 Days

### What you will learn

This Oracle Grid Infrastructure 11g: Manage Clusterware and ASM Oracle Grid Infrastructure training helps you develop a deeper understanding of Oracle Grid Infrastructure components. Expert Oracle University instructors will help you explore the Oracle Automatic Storage Manager (ASM), ASM Cluster File System and Oracle Clusterware.

### Learn To:

Describe the Oracle Database 11g grid infrastructure.

Administer ASM and ACFS using both command line and graphical user interface clients.

Configure and manage ASM and ACFS.

Install and configure grid infrastructure.

Use Oracle Clusterware to make applications highly available.

Describe grid plug and play.

Troubleshoot grid infrastructure.

Add and remove nodes.

Upgrade or patch the grid infrastructure environment.

### Benefits to You

By investing in this course, you'll learn how to leverage Oracle Clusterware to make applications highly available, supporting monitoring and failover to other nodes. You'll develop the skills to troubleshoot the Oracle Clusterware by examining log files, enabling debugging and enabling tracing for various utilities. This course is based on Oracle Database 11g Release 2.

### Live Virtual Class Format

A Live Virtual Class (LVC) is exclusively for registered students; unregistered individuals may not view an LVC at any time. Registered students must view the class from the country listed in the registration form. Unauthorized recording, copying, or transmission of LVC content may not be made.

### Audience

Data Warehouse Administrator

Database Administrators

Database Designers

Support Engineer

Technical Administrator

## Related Training

### *Required Prerequisites*

Oracle Database Administration experience

Oracle Database 11g: Administration Workshop I Release 2

### *Suggested Prerequisites*

Oracle Database 11g: Administration Workshop II Release 2

Oracle Database: Introduction to SQL

## Course Objectives

Understand Oracle Clusterware architecture

Describe how Grid Plug and Play affects Clusterware

Describe Automatic Storage Management (ASM) architecture

Perform Grid Infrastructure installation and create RAC database

Demonstrate Clusterware management proficiency

Manage application resources

Troubleshoot Oracle Clusterware

Administer ASM Instances and disk groups

Administer ASM Cluster File Systems

## Course Topics

### **Grid Infrastructure Concepts**

What is a Cluster

Grid Foundation Components

Oracle Clusterware Architecture

Oracle Clusterware Software and Storage

Describe ASM Architecture

Creating and Managing ASM Disk Groups

Creating and Managing ASM Cluster File systems

Job Role Separation

### **Grid Infrastructure Installation and Configuration**

Hardware Requirements

Network Requirements

DNS and DHCP Configuration

Grid Plug and Play Considerations

Single Client Access Names

Post installation tasks

### **Administering Oracle Clusterware**

Managing Clusterware with Enterprise Manager

Determining the Location of the Oracle Clusterware Configuration Files

Backing Up and Recovering the Voting Disk

Adding, Deleting, or Migrating Voting Disks

Locating the OCR Automatic Backups

Oracle Local Registry

Migrating OCR Locations to ASM

Managing Network Settings

### **Managing Oracle Clusterware**

Prerequisite Steps for Extending a Cluster

Using addNode.sh to Add a Node to a Cluster

Rolling Patches, And Rolling Upgrades

Comparing Software Versions With the Active Version

Installing A Patchset With the OUI Utility

Installing A Patch With The opatch Utility

### **Oracle Clusterware High Availability**

Oracle Clusterware high availability components

Contrasting policy-managed and administration managed databases

Server pool functionality

The Generic and Free Server Pools

Application placement policies

Application Virtual IPs

Managing application resources

High availability events

### **Troubleshooting Oracle Clusterware**

Oracle Clusterware Log Files

Gathering Log Files Using diagcollection.pl

Resource Debugging

Component-level Debugging

Tracing For Java-based Tools

Troubleshooting the Oracle Cluster Registry

### **Administering ASM Instances**

ASM Initialization Parameters

Adjusting ASM Instance Parameters in SPFILEs

Starting and Stopping ASM Instances Using srvctl

Starting and Stopping ASM Instances Using ASMCA and ASMCMD

Starting and Stopping ASM Instances Containing Cluster Files

Starting and Stopping the ASM Listener

### **Administering ASM Disk Groups**

Creating And Deleting ASM Disk Groups

ASM Disk Group Attributes

ASM Disk Group Maintenance Tasks

Preferred Read Failure Groups

Viewing ASM Disk Statistics

Performance And Scalability Considerations For ASM Disk Groups

### **ASM Files, Directories, and Templates**

Using Different Client Tools to Access ASM Files

Fully Qualified ASM File Name Format

Creating and Managing ASM files, Directories and Aliases

Managing Disk Group Templates

Managing ASM ACL With Command Line Utilities

Managing ASM ACL with Enterprise Manager

### **Administering ASM Cluster File Systems**

ASM Dynamic Volume Manager

Managing ASM Volumes

Implementing ASM Cluster File System

Managing ASM Cluster File System (ACFS)

ACFS Snapshots

Using Command Line Tools To Manage ACFS