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

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