

4 Days

Oracle Database 12c: Clusterware Administration

The Oracle Database 12c: Clusterware Administration training helps participants explore the basic concepts of Oracle Clusterware architecture. Through a perfect blend of interactive classes and hands-on exercises, this training will reinforce your ability to install manage and configure a Clusterware infrastructure. This 12c Clusterware Administration course will also introduce participants to Oracle Database Exadata Cloud Service.

Completion of this training course will enable candidates to:

- Perform Grid Infrastructure pre-installation tasks.
- Install both Standard and Flex clusters.
- Add and remove nodes from a cluster
- Manage and administer both Standard Clusters and Policy-Managed Clusters.
- Use of Oracle Clusterware to make applications highly available.
- Gain an understanding of the Oracle Database Exadata Cloud Service.

Course Benefits:

Attaining certification of the Oracle Database 12c Clusterware course will equip participants with the ability to install, configure, manage and troubleshoot both standard and flex clusters. Moreover, this course will also help in developing the skills to upgrade and patch Clusterware environments.

Course Details

Course Outline

1. Introduction to Grid Infrastructure

- Cluster & Flex Cluster
- Describing Clusterware Characteristics
- Describing Oracle Clusterware
- Describing Hardware and Software Concepts (High level)
- Overview of Shared Storage

2. Oracle Clusterware Architecture

- Cluster Storage Requirements

- Clusterware Initialization and OHASD
- Clusterware Process Architecture
- Shared GNS Background and Architecture
- Configuring shared GNS
- Migrating to shared GNS
- Moving GNS to Another Cluster
- Location Independent Names, Addresses and Name Resolution (GNS, SCAN, VIP..)

3. Flex Cluster Architecture

- Flex Cluster Architecture
- Configure Flex Cluster
- Flex Clusters and Node Failure

4. Grid Infrastructure Pre-Installation Tasks

- Shared Storage for Oracle Clusterware
- Check System Requirements
- Redundant Interconnect Usage
- Kernel Requirements
- Single Client Access Name for the Cluster
- Shell Settings
- Groups and Users
- Oracle Validated Configuration

5. Installing Grid Infrastructure

- Installing Flex Cluster
- Installing Oracle Grid Infrastructure
- Verifying the Oracle Clusterware Installation

6. Managing Cluster Nodes

- Add Oracle Clusterware Homes
- Running addNode.sh Prerequisites
- Add a Node with addNode.sh
- Node Role Configuration
- Remove a Node from the Cluster

7. Traditional Clusterware Management

- Startup and Shutdown of Oracle Clusterware
- Voting Disk File Administration

- Oracle Cluster Registry Disk File Administration
- Network Administration
- Review Clusterware Admin Tools
- What-If Command Evaluation

8. Policy-Based Cluster Management

- Overview of Policy-Based Cluster Management
- Server Categorization & Policy Set

9. Patching Grid Infrastructure

- Out-of-Place Oracle Clusterware Upgrade
- Patches Types
- Obtain Oracle Clusterware Patches
- Roll Patches
- Install a Rolling Patchset with OUI
- Overview of OPatch
- OPatch Automation
- Install a Rolling Patch with OPatch

10. Troubleshooting Oracle Clusterware

- Diagnostic Framework Support for CRS
- Overview of Cluster Health Monitor Enhancements
- Component level checks - cluvfy with -comp
- Java Tools and Dynamic Debugging
- Node Evictions Troubleshooting
- The oclumon Utility
- Log files and Diagnostic Collection

11. Making Applications Highly Available

- Use Oracle Clusterware to Enable HA
- Components of Oracle Clusterware HA
- Options in Resource Management
- Server Pools
- Flow diagram of HA lifecycle (crs_profile, crs_register, crs_start....)
- Clusterware Resource Modeling
- ONS and FAN overviews
- Create an Application VIP

12. Oracle Database Exadata Cloud Service Overview

- Introduction to Exadata Cloud Service
- Service Configuration & Connection Options
- Architecture & Availability
- Management Responsibilities
- Simple Web-Based Provisioning & Management
- Storage Configuration & Management Details
- Migrating to Exadata Cloud Service
- REST APIs

Who Should Attend

The Oracle Database 12c Clusterware Administration Training Course is ideal for those working with the profiles of:

- Database Administrators
- Administrator

Pre Requisite

Required:

- Working knowledge of Oracle Database 11g: Release 2 on Linux Operating System

Suggested Prerequisites:

- Oracle Grid Infrastructure 11g: Manage Clusterware and ASM - Release 2
- Oracle Database 11g: RAC Administration Release 2
- Working knowledge of Oracle Clusterware, ASM & RAC on Linux

464, Udyog Vihar Phase
V, Gurgaon (Delhi
NCR)-122016, India

+91 8882 233 777

training@mercury.co.in

www.mercurysolutions.co

Date - Apr 19, 2024