

## Oracle Solaris Cluster 4.x Administration Ed 4

The Oracle Solaris Cluster 4.x Administration Ed 4 course provides students with the essential information and skills needed to install and administer the Oracle Solaris Cluster hardware and software systems. Students are introduced to Oracle Solaris Cluster 4.3 software product features, hardware configuration, software installation along with configuration, data service configuration, and system operation.

## Learn To

The Oracle Solaris Cluster 4.x Administration Ed 4 course provides students with the essential information and skills needed to install and administer Oracle Solaris Cluster 4.3 hardware and software systems. Students are introduced to Oracle Solaris Cluster 4.3 hardware and software product features, hardware configuration, software installation along with configuration, data service configuration, and system operation. Students will get the opportunity to explore various use cases such as integrating Oracle database 12c as failover application, configuring Oracle Solaris cluster using unified archives.

### Learn To:

- Describe Oracle Solaris Cluster hardware and software.
- Establish Cluster node console connectivity.
- Prepare for the Oracle Solaris Cluster installation.
- Configure the Oracle Solaris Cluster software.
- Configure Oracle Solaris Cluster quorum devices and device fencing.
- Use Cluster commands to administer global properties, quorum, disk paths, and interconnect components.
- Configure volume management with ZFS and Solaris Volume Manager.
- Manage the public network with IPMP and link aggregation.
- Describe resources and resource groups, configure a failover data service resource group (Network File System [NFS]), and configure a scalable data service resource group (Apache), Advanced Resource Group Relationships.
- Configure solaris10 branded zone, kernel zones, build zone clusters, migrate scalable application from global zone to zone cluster.
- Explore Oracle Solaris Cluster use cases.

### Benefits to You

This course provides an intensive hands-on experience for key system administration tasks aimed at giving students experience installing, configuring, and managing an Oracle Solaris Cluster 4.3 environment. Students will get the opportunity to explore various use cases integrating Oracle database 12c as failover application, configuring Oracle Solaris cluster using unified archives.

## Audience

- Manager
- Systems Administrator

## Course Objectives

- Describe resources and resource groups
- Establish Cluster Node console connectivity
- Prepare for the Oracle Solaris Cluster installation
- Configure the Oracle Solaris Cluster software
- Configure Oracle Solaris Cluster quorum devices and device fencing
- Configure solaris10 branded zone, kernel zones, build zone clusters, migrate scalable application from global zone to zone cluster
- Explore Oracle Solaris Cluster use cases
- Describe Oracle Solaris Cluster hardware and software
- Configure a scalable data service resource group (Apache), Advanced Resource Group Relationships
- Configure a failover data service resource group (Network File System [NFS])
- Use Cluster commands to administer global properties, quorum, disk paths, and interconnect components
- Configure volume management with ZFS and Solaris Volume Manager
- Manage the public network with IPMP and link aggregation

## Course Topics

### Introduction to the course

- Overview
- Course goals
- Course agenda
- Introduction
- Your Learning Center

### Introducing Oracle Solaris Cluster Hardware and Software

- Describe the role of clustering as a high availability (HA) platform
- Describe the Oracle Solaris Cluster hardware and software environment
- Describe the types of applications supported by Oracle Solaris Cluster
- Describe the Oracle Solaris Cluster software HA framework

### Establishing Cluster Node Console Connectivity

- Describe the different methods for accessing the cluster node console
- Install the pconsole utility

### Preparing for the Oracle Solaris Cluster Installation

- Describe the guidelines for planning Oracle Solaris software installation in a cluster configuration
- Describe the various cluster storage topologies
- Describe the role of quorum devices and quorum votes
- Describe persistent quorum reservations and cluster amnesia
- Identify the cluster transport interconnects
- Identify the public network adapters

### Configuring the Oracle Solaris Cluster Software

- Install the Oracle Solaris Cluster software
- Configure the Oracle Solaris Cluster software
- Describe sample cluster configuration scenarios
- Perform quorum configuration
- Perform post-installation verification

### Administering Oracle Solaris Cluster

- List commands for administering the cluster

- Administer cluster global properties
- Administer cluster nodes
- Administer quorum in a cluster configuration
- Administer disk path monitoring and SCSI protocol settings of storage devices
- Administer cluster interconnect components
- Use the clsetup command
- Perform Cluster Operations

## **Configuring Volume Management With Oracle Solaris ZFS**

- Describe the role of ZFS in data management
- Build ZFS storage pools and file systems
- Use ZFS in the Oracle Solaris Cluster environment

## **Configuring Volume Management with Solaris Volume Manager**

- Describe the role of Solaris Volume Manager in disk space management
- Manage shared disksets in cluster environment
- Build volumes in shared disk sets with soft partitions of mirrors
- Create highly available file systems
- Manage Solaris Volume Manager device group

## **Managing the Public Network**

- Manage the Public Network with IPMP
- Manage the Public Network with Link aggregation

## **Managing Data Services, Resource Groups, and HA-NFS**

- Describe the Oracle Solaris Cluster data services
- Describe the primary purpose of resources, resource groups and resource types
- List the guidelines for using global and highly available local file systems
- Describe standard, extension, and resource group properties
- Configure resources and resource groups
- Control the state of resources and resource groups manually

## **Configuring Scalable Services and Advanced Resource Group Relationships**

- Describe scalable services and shared addresses
- Describe the properties of resource groups and scalable groups
- Describe how the SharedAddress resource works with scalable services
- Review command examples for a scalable service
- Control scalable resources and resource groups
- Describe advanced resource group relationships