

**Module Title** : Veritas InfoScale Availability 7.3 for UNIX/Linux:Administration

**Duration** : 5 days

## Overview

The Veritas InfoScale Availability 7.3 for Unix/Linux: Administration course is designed for the IT professional tasked with installing, configuring, and maintaining Veritas Cluster Server (VCS) clusters.

This class discusses how to use InfoScale Availability to manage applications in a high availability environment. After gaining the necessary fundamental skills that are required to manage a highly available application in a cluster, the course enables you to deploy InfoScale Availability in the lab environment to practically implement a sample cluster design and deployment.

## Course Objectives

By the completion of this course, you will be able to:

- Describe how clustering is used to implement high availability in the data center environment.
- Describe VCS and cluster communication mechanisms.
- Create a cluster, and configure service groups and resources.
- Implement and verify failover and failback capability for application, storage, and network services.
- Configure and optimize cluster behavior.
- Protect data in a shared storage environment.
- Describe I/O fencing operations, and its implementation.
- Configure VCS to manage an Oracle database and other applications.
- Configure and manage VCS clusters on virtual machines in VMware environment.
- Implement Just in Time Availability for single node VCS cluster on virtual machine in a VMware environment.

## Who Should Attend

This course is for UNIX/Linux system administrators, system engineers, technical support personnel, network/SAN administrators, and systems integration/development staff, who will be installing, operating, or integrating InfoScale Availability.

## Prerequisites

Knowledge of and hands-on experience with UNIX/Linux systems administration is required.

## Hands-On

This course includes practical lab exercises that enable you to test your new skills and begin to transfer those skills into your working environment.

## Course Outline

### *Cluster Server Basics*

#### High Availability Concepts

- High availability concepts
- Clustering concepts
- High availability application services
- Clustering prerequisites

#### VCS Building Blocks

- VCS terminology
- Cluster communication
- VCS architecture

#### VCS Operations

- Common VCS tools and operations
- Service group operations
- Resource operations

#### VCS Configuration Methods

- Starting and stopping VCS
- Overview of configuration methods
- Online configuration
- Controlling access to VCS

#### Preparing Services for VCS

- Preparing applications for VCS
- Performing one-time configuration tasks
- Testing the application service
- Stopping and migrating an application service
- Collecting configuration information

#### Online Configuration

- Online service group configuration
- Adding resources
- Solving common configuration errors

- Testing the service group

#### Offline Configuration

- Offline configuration examples
- Offline configuration procedures
- Solving offline configuration problems
- Testing the service group

#### Configuring Notification

- Notification overview
- Configuring notification
- Overview of triggers

### ***Cluster Server Additions***

#### Handling Resource Faults

- VCS response to resource faults
- Determining failover duration
- Controlling fault behavior
- Recovering from resource faults
- Fault notification and event handling

#### Intelligent Monitoring Framework

- IMF overview
- IMF configuration
- Faults and failover with intelligent monitoring

#### Cluster Communications

- VCS communications review
- Cluster interconnect configuration
- Joining the cluster membership
- Changing the interconnect configuration

### ***Cluster Server Applications***

#### Using I/O Fencing for Application Data Integrity

- Data protection requirements
- I/O fencing concepts
- I/O fencing operations
- I/O fencing implementation

- Fencing configuration

#### Clustering Applications

- Application service overview
- VCS agents for managing applications
- The Application agent
- IMF support and prevention of concurrency violation

#### Clustering Databases

- VCS database agents
- Database preparation
- The database agent for Oracle
- Database failover behavior
- Additional Oracle agent functions

#### *In-Guest Clustering*

##### VMware vSphere Data Center Architecture

- VMware vSphere high availability architecture
- VMware administration
- VMware storage architecture
- Server and storage migration

##### Veritas High Availability Deployment in VMware

- Veritas high availability architecture in VMware
- Deploying Veritas InfoScale on VMs
- Configuring VIOM to manage InfoScale on VMs
- Configuring the vSphere Web Client for Veritas HA

##### Veritas High Availability Configuration and Administration

- Configuring storage for VCS failover clusters
- Configuring shared storage for CFS clusters
- Configuring availability
- Just In Time Availability solution