# Veritas InfoScale Availability 7.4.2 for Unix/Linux: Administration

5 day course

### **Description**

The Veritas InfoScale Availability 7.4.2 for Linux: Administration course is designed for the IT professional tasked with installing, configuring, and maintaining Veritas Cluster Server (VCS) clusters.

This five day, instructor-led, hands-on class covers how to use InfoScale Availability to manage applications in a high availability environment. After gaining the fundamental skills that are needed to manage a highly available application in a cluster, you can deploy InfoScale Availability in a lab environment to implement a sample cluster design.

# **Participants**

This course is for 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 Linux systems administration

### **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 a global cluster environment, including remote clusters, global heartbeats, and global service groups.
- Configure notification and failover behavior in a global cluster.

#### **Programme**

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

**Global Clustering** 

Global Cluster Architecture and Concepts

Global cluster architecture

Global cluster components

VCS features for global cluster management

Intercluster communication failure

Configuring a Global Cluster

Linking clusters

Configuring global cluster heartbeats

Configuring a global service group

Managing dynamic IP address updates

Managing a Global Cluster

Managing clusters in a global cluster environment

Managing global cluster heartbeats

Managing global service groups

Using VIOM for disaster recovery

Notification and Failover Behavior in a Global Cluster

Notification in a global cluster

Failover behavior of a global service group

Cluster state transitions

Simulating global clusters using the VCS Simulator