

VERITAS INFO SCALE AVAILABILITY 7.0 FOR LINUX: ADMINISTRATION

DURATION: 5 DAYS

COURSE OVERVIEW

The Veritas Info Scale Availability 7.0 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 Info Scale 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 Info Scale Availability in a lab environment to implement a sample cluster design.

TARGET AUDIENCE

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 Info Scale Availability.

COURSE OBJECTIVES

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

- 1. Describe how clustering is used to implement high availability in the data center environment.
- 2. Describe VCS and cluster communication mechanisms.
- 3. Create a cluster, and configure service groups and resources.
- 4. Implement and verify failover and failback capability. for application, storage, and network services.
- 5. Configure and optimize cluster behavior.
- 6. Protect data in a shared storage environment.
- 7. Describe I/O fencing operations, and its implementation.
- 8. Configure VCS to manage an Oracle database and other applications.
- 9. Configure a global cluster environment, including remote clusters, global heartbeats, and global service groups.
- 10. Configure notification and failover behavior in a global cluster.



COURSE CONTENT

Cluster Server Basics High Availability Concepts

- 1. High availability concepts
- 2. Clustering concepts
- 3. High availability application services
- 4. Clustering prerequisites

VCS Building Blocks

- 1. VCS terminology
- 2. Cluster communication
- 3. VCS architecture

VCS Operations

- 1. Common VCS tools and operations
- 2. Service group operations
- 3. Resource operations

VCS Configuration Methods

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

Preparing Services for VCS

- 1. Preparing applications for VCS
- 2. Performing one-time configuration tasks
- 3. Testing the application service
- 4. Stopping and migrating an application service
- 5. Collecting configuration information



Online Configuration

- 1. Online service group configuration
- 2. Adding resources
- 3. Solving common configuration errors
- 4. Testing the service group

Offline Configuration

- 1. Offline configuration examples
- 2. Offline configuration procedures
- 3. Solving offline configuration problems
- 4. Testing the service group

Configuring Notification

- 1. Notification overview
- 2. Configuring notification
- 3. Overview of triggers

Cluster Server Additions

- 1. Handling Resource Faults
- 2. VCS response to resource faults
- 3. Determining failover duration
- 4. Controlling fault behavior
- 5. Recovering from resource faults
- 6. Fault notification and event handling

Intelligent Monitoring Framework

- 1. IMF overview
- 2. IMF configuration
- 3. Faults and failover with intelligent monitoring



Cluster Communications

- 1. VCS communications review
- 2. Cluster interconnect configuration
- 3. Joining the cluster membership
- 4. Changing the interconnect configuration

Cluster Server Applications

- 1. Using I/O Fencing for Application Data Integrity
- 2. Data protection requirements
- 3. I/O fencing concepts
- 4. I/O fencing operations
- 5. I/O fencing implementation
- 6. Fencing configuration

Clustering Applications

- 1. Application service overview
- 2. VCS agents for managing applications
- 3. The Application agent
- 4. IMF support and prevention of concurrency violation
- Clustering Databases
- 6. VCS database agents
- 7. Database preparation
- 8. The database agent for Oracle
- Database failover behavior
- 10. Additional Oracle agent functions

Global Clustering

- 1. Global Cluster Architecture and Concepts
- 2. Global cluster architecture
- 3. Global cluster components
- 4. VCS features for global cluster management



5. Inter cluster communication failure

Configuring a Global Cluster

- 1. Linking clusters
- 2. Configuring global cluster heartbeats
- 3. Configuring a global service group
- 4. Managing dynamic IP address updates

Managing a Global Cluster

- 1. Managing clusters in a global cluster environment
- 2. Managing global cluster heartbeats
- 3. Managing global service groups
- 4. Using VIOM for disaster recovery

Notification and Failover Behavior in a Global Cluster

- 1. Notification in a global cluster
- 2. Failover behavior of a global service group
- 3. Cluster state transitions
- 4. Simulating global clusters using the VCS Simulator

COURSE PREREQUISITES

Knowledge of and hands-on experience with Linux systems administration