

# **Veritas Cluster Server 6.0 for UNIX: Administration**

**Duration: 5 Days** Course Code: HA0434

#### Overview:

The Veritas Cluster Server 6.0 for UNIX: Administration course is designed for the IT professional tasked with installing, configuring, and maintaining VCS clusters.

This five-day, instructor-led, hands-on class covers how to use Veritas Cluster Server 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 deploy VCS in a lab environment to implement a sample cluster design.

This course includes practical, hands-on lab exercises that enable you to test your new skills and begin to transfer them into your working environment.

# **Target Audience:**

This course is for system administrators, system engineers, network administrators, system integration or development staff, and technical support personnel whowill be working with Veritas Cluster Server.

## Objectives:

- By the end of this course, you will be able to:
- Install VCS and create a cluster.
- 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.
- Configure VCS to manage an Oracle database, an NFS share, and other applications.
- Implement four-node clusters.
- Configure service group dependencies and workload management.
- Implement alternative network configurations.

### Prerequisites:

You must have experience as a system or network administrator working in a UNIX environment, and basic knowledge of UNIX system administration.

#### Content:

Part 1: Veritas Cluster Server 6.0 for UNIX: Install and Configure (three-day course)

#### High Availability Concepts

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

### VCS Building Blocks

- VCS terminology
- Cluster communication
- VCS architecture

### Preparing a Site for VCS Implementation

- Hardware requirements and recommendations
- Software requirements and recommendations
- Preparing installation information
- Preparing to upgrade

## Installing VCS

- Using the Common Product Installer
- VCS configuration files
- Viewing the default VCS configuration
- Veritas Operations Manager
- Other installation considerations
- Upgrading to 6.0

## VCS Operations

- Common VCS tools and operations
- Service group operations
- Resource operations
- Using the VCS Simulator

#### VCS Configuration Methods

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

## Preparing Services for High Availability

- 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 procedure
- Adding resources

#### Offline Configuration

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

#### Configuring Notification

- Notification overview
- Configuring notification
- Using triggers for notification

## 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 membership
- Cluster interconnect configuration
- Joining the cluster membership
- Changing the interconnect configuration

## Data Protection Using SCSI 3-Based Fencing

- Data protection requirements
- I/O fencing concepts and components
- I/O fencing operations
- I/O fencing implementation
- Configuring I/O fencing

#### Coordination Point Server

- Coordination point concepts
- Installing and configuration CP servers
- Configuring client clusters
- CPS administration
- Coordination point agent

## Part 2: Veritas Cluster Server 6.0 for UNIX: Manage and Administer (two-day course)

#### Veritas Cluster Server: Example Application

#### **Clustering Applications**

- Application service overview
- VCS agents for managing applications
- The Application agent

### **Clustering Databases**

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

## Clustering NFS

- Preparing NFS for high availability
- Testing the NFS service
- Configuring NFS resources
- NFS lock failover
- Alternative NFS configurations

Veritas Cluster Server for UNIX: Cluster

#### Service Group Dependencies

- Common application relationships
- Service group dependencies
- Service group dependency examples
- Configuring service group dependencies
- Alternative methods of controlling interactions

### Reconfiguring Cluster Membership

- Adding a new system to a running VCS
- Merging two running VCS clusters
- Additional reconfiguring tasks

#### Startup and Failover Policies

- Startup rules and policies
- Failover rules and policies
- Limits and prerequisites
- Modeling startup and failover policies

## Alternate Network Configurations

- Alternative network configurations
- Multiple interface configurations

#### High Availability in the Enterprise

- Veritas Operations Manager
- Disaster recovery enhancements
- Virtualization support

- Solving common configuration errors
- Testing the service group

## Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142  $\underline{training@globalknowledge.com.eg}$ 

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