VERITAS CLUSTER SERVER 6.0 FOR UNIX: ADMINISTRATION

DURATION: 5 DAYS

COURSE 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 who will be working with Veritas Cluster Server.

COURSE OBJECTIVES

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

1. Install VCS and create a cluster.
2. Configure service groups and resources.
3. Implement and verify failover and failback capability for application, storage, and network services.
4. Configure and optimize cluster behavior.
5. Protect data in a shared storage environment.
6. Configure VCS to manage an Oracle database, an NFS share, and other applications.
7. Implement four-node clusters.
8. Configure service group dependencies and workload management.
9. Implement alternative network configurations.

COURSE CONTENT

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

High Availability Concepts

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

VCS Building Blocks

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

Preparing a Site for VCS Implementation

1. Hardware requirements and recommendations
2. Software requirements and recommendations
3. Preparing installation information
4. Preparing to upgrade

Installing VCS

1. Using the Common Product Installer
2. VCS configuration files
3. Viewing the default VCS configuration
4. Veritas Operations Manager
5. Other installation considerations
6. Upgrading to 6.0

VCS Operations

1. Common VCS tools and operations
2. Service group operations
3. Resource operations
4. Using the VCS Simulator

VCS Configuration Methods

1. Starting and stopping VCS
2. Overview of configuration methods
3. Online configuration

4. Offline configuration

5. Controlling access to VCS

Preparing Services for High Availability

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 procedure

2. Adding resources

3. Solving common configuration errors

4. Testing the service group

Offline Configuration

1. Offline configuration procedures

2. Solving offline configuration problems

3. Testing the service group

Configuring Notification

1. Notification overview

2. Configuring notification

3. Using triggers for notification

Handling Resource Faults

1. VCS response to resource faults

2. Determining failover duration

3. Controlling fault behavior

4. Recovering from resource faults

5. 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 membership
3. Cluster interconnect configuration
4. Joining the cluster membership
5. Changing the interconnect configuration

Data Protection Using SCSI 3-Based Fencing

1. Data protection requirements
2. I/O fencing concepts and components
3. I/O fencing operations
4. I/O fencing implementation
5. Configuring I/O fencing

Coordination Point Server

1. Coordination point concepts
2. Installing and configuration CP servers
3. Configuring client clusters
4. CPS administration
5. Coordination point agent

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

Veritas Cluster Server: Example Application Configurations (book)

Clustering Applications

1. Application service overview
2. VCS agents for managing applications
3. The Application agent

Clustering Databases

1. VCS database agents
2. Database preparation
3. The database agent for Oracle
4. Database failover behavior
5. Additional Oracle agent functions

Clustering NFS

1. Preparing NFS for high availability
2. Testing the NFS service
3. Configuring NFS resources
4. NFS lock failover

5. Alternative NFS configurations

Veritas Cluster Server for UNIX: Cluster Management (book)

Service Group Dependencies

1. Common application relationships
2. Service group dependencies
3. Service group dependency examples
4. Configuring service group dependencies
5. Alternative methods of controlling interactions

Reconfiguring Cluster Membership

1. Adding a new system to a running VCS cluster
2. Merging two running VCS clusters
3. Additional reconfiguring tasks

Startup and Failover Policies

1. Startup rules and policies
2. Failover rules and policies
3. Limits and prerequisites
4. Modeling startup and failover policies

Alternate Network Configurations

1. Alternative network configurations
2. Multiple interface configurations

High Availability in the Enterprise

1. Veritas Operations Manager
2. Disaster recovery enhancements
3. Virtualization support

COURSE PREREQUISITES

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