

Veritas Cluster Server 5.1 for Windows: Administration

COURSE DESCRIPTION

The *Veritas Cluster Server 5.1 for Windows: Administration* course is designed for the IT professional responsible for 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 will deploy VCS in a lab environment to implement a sample cluster design.

Delivery Method

Instructor-led training (ILT)

Duration

Five days

Course Objectives

After completing this course, you will be able to:

- Manage highly available application services by using VCS.
- 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 SQL Server, Exchange Server, and other applications.
- Analyze, troubleshoot, and correct cluster problems.
- Configure service group dependencies and failover policies.

Who Should Attend

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.

Prerequisites

You must have experience as a system and network administrator working in a Windows environment. Experience in developing Perl scripts is helpful.

Hands-On

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

COURSE OUTLINE

Part I: Veritas Cluster Server 5.1 – Install and Configure

High Availability Concepts

- High Availability Concepts
- Clustering Concepts
- High Availability Application Services
- Clustering Prerequisites

VCS Building Blocks

- VCS Terminology
- Cluster Communication
- VCS Architecture

Preparing a Site for VCS

- Hardware Requirements and Recommendations
- Software Requirements and Recommendations
- Preparing Installation Information

Installing VCS

- Using the Symantec Product Installer
- VCS Configuration Files
- Viewing the Default VCS Configuration
- Installing the Cluster Manager Java GUI

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 VCS

- Preparing Applications for VCS
- Performing One-Time Configuration Tasks
- Testing the Application Service
- Stopping and Migrating an Application Service

Online Configuration

- Online Service Group Configuration
- Adding Resources
- Solving Common Configuration Errors
- Testing the Service Group

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

Cluster Communications

- VCS Communications Review
- Cluster Membership
- Cluster Interconnect Configuration
- Joining the Cluster Membership
- Changing the Interconnect Configuration

System and Communication Failures

- System Failures
- Cluster Interconnect Failures

Troubleshooting

- Monitoring VCS
- Troubleshooting Guide
- Archiving VCS-Related Files

Part II: Veritas Cluster Server 5.1 – Manage and Administer

Example Application Configurations

Clustering Applications

- Application Service Overview
- VCS Agents for Managing Applications
- The GenericService Agent
- The ServiceMonitor Agent

Clustering SQL Server

- SQL Server in the VCS Environment
- Managing Registry Keys
- The SQLServer2005 Agent
- Installing SQL Server in the Cluster
- Configuring a SQL Server 2005 Service Group
- SQLServer2005 Detail Monitoring

Clustering Exchange Server

- Exchange Server in the VCS Environment
- Configuring the Domain Controller
- Installing Exchange Server
- Configuring an Exchange Service Group

Clustering File Shares

- Preparing File Shares for High Availability
- VCS Resources for Managing File Shares
- Using the FileShare Configuration Wizard

Cluster Management

Workshop — Reconfiguring Cluster Membership

- Task 1: Removing a System from a Running VCS Cluster
- Task 2: Adding a New System to a Running VCS Cluster
- Task 3: Merging Two Running VCS Clusters

Service Group Dependencies

- Common Application Relationships
- Service Group Dependencies
- Service Group Dependency Examples
- Configuring Service Group Dependencies
- Alternative Methods of Controlling Interactions

Startup and Failover Policies

- Startup Rules and Policies
- Failover Rules and Policies
- Limits and Prerequisites
- Modeling Startup and Failover Policies

Data Center Availability

- VCS Management Console
- Storage Foundation Management Server
- Disaster Recovery
- Enterprise Messaging Management