

Veritas Cluster Server 6.0 for Windows: Administration

COURSE DESCRIPTION

The *Veritas Cluster Server 6.0 for Windows: Administration* course is designed for the IT professional responsible for installing, configuring, and maintaining VCS clusters. This class covers how to use Veritas Cluster Server (VCS) 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.

Delivery Method

This course is available in the following delivery methods:

- Instructor-led training (ILT) – 5 days
- Virtual Academy (VA) – 5 days

Course Objectives

After completing this course, you will be able to:

- Manage highly available application services 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.

COURSE OUTLINE

Part I - Install and Configure

High Availability and Clustering 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
- Licensing scheme
- Preparing installation information

Installing and Upgrading VCS

- Installing VCS
- Upgrading VCS
- Configuring VCS
- Viewing the default VCS configuration
- Installing the Cluster Manager Java GUI

VCS Operations

- Common VCS tools and operations
- Service group operations
- Resource operations
- Using a 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

- 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

- Introducing the notification resource
- Configuring notification
- Using triggers for notification

Handling Resource Faults

- Introducing intelligent resource monitoring
- 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

System and Communication Faults

- System failures
- Cluster interconnect failures

Monitoring and Troubleshooting

- Monitoring VCS
- Troubleshooting guide
- Archiving VCS-related files

Part II - Manage and Administer***Example Application Configurations*****Clustering Applications**

- Application service overview
- VCS Agents for managing applications
- The GenericService Agent
- The ServiceMonitor Agent

Clustering File Shares

- Preparing file shares for high availability
- VCS resources for managing file shares
- Configuring file shares

Clustering SQL Server

- SQL Server in the VCS environment
- VCS Agents for SQL Server 2005
- VCS Agents for SQL Server 2008
- Managing registry keys
- Installing SQL Server in the cluster
- Configuring a SQL Server service group
- Monitoring databases

Clustering Exchange Server

- Exchange Server in the VCS environment
- Introducing the VCS Application Agent for Exchange Server 2007
- Introducing the VCS Database Agent for Exchange Server 2010
- Supported Exchange Server configurations for high availability
- Configuring the domain controller
- Installing Exchange Server
- Configuring an Exchange service group

Clustering SharePoint Server (Optional)

- SharePoint Server in the VCS environment
- Installing SharePoint Server 2010 in a SFW HA 6.0 cluster environment
- Configuring SharePoint Server service groups
- Verifying the SharePoint cluster configuration

Cluster Management**Service Group Dependencies**

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

Startup and Failover Policies

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

Managing Data Centers

- Need for managing data centers
- Veritas Operations Manager: Overview
- Preparing a setup for Veritas Operations Manager
- Installing Veritas Operations Manager
- Using Veritas Operations Manager