Veritas High Availability Fundamentals for Windows with Veritas Storage Foundation™ 5.0 and Veritas Cluster Server™ 5.0

COURSE DESCRIPTION
You will learn how to use Veritas high-availability technology to meet the data availability goals of your operations by implementing Veritas Cluster Server™ and Veritas Storage Foundation™. This course describes how to manage storage in a high-availability environment and perform cluster management.

Delivery Method
Instructor-led

Duration
Five days

Course Objectives
By the end of this course, you should be able to:
- Configure and manage disks, disk groups, and volumes by using Veritas Storage Foundation.
- Perform basic Veritas Storage Foundation recovery and troubleshooting operations.
- Manage cluster services with Veritas Cluster Server and perform troubleshooting techniques.
- Describe cluster communications, identify faults, and configure failover behavior.

Who Should Attend
This course is for Windows system administrators, system engineers, network administrators, system integration or development staff, and technical support personnel who will be working with Veritas Storage Foundation and Veritas Cluster Server.

Prerequisites
You should have experience as a system and network administrator working in a Windows environment.

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

COURSE OUTLINE

Part 1: Veritas Storage Foundation 5.0 for Windows

Virtual Objects
- Physical and Virtual Data Storage
- SFW Storage Objects
- SFW RAID Levels

Installation and Interfaces
- Installation Prerequisites
- Adding License Keys
- SFW Software Packages
- Installing SFW
- SFW User Interfaces

Creating a Volume
- Preparing Disks and Disk Groups for Volume Creation
- Creating a Volume
- Adding a File System to a Volume
- Displaying Volume Configuration Information
- Displaying Disk and Disk Group Information
- Removing Volumes, Disks, and Disk Groups

Selecting Volume Layouts
- Comparing Volume Layouts
- Creating Volumes with Various Layouts
- Creating a Partition and Logical Drive

Making Basic Configuration Changes
- Administering Mirrored Volumes
- Resizing a Volume
- Changing a Drive Letter or Path
- Moving Data Between Systems
- Upgrading a Dynamic Disk Group

Offline and Off-Host Processing
- Offline and Off-Host Processing Tasks
- Creating a Volume Snapshot
- Performing Dynamic Disk Group Split and Join
- Enabling Fast Resynchronization
- Implementing Off-Host Processing

Recovery Essentials
- Monitoring Objects and Events
- Maintaining Data Consistency
- Configuration Backup and Restore
- Managing Hot Relocation at the Host Level
- Troubleshooting Disk Replacement and Recovered Volumes
Performance Monitoring
- Monitoring I/O
- Setting Capacity Monitoring Parameters
- Setting Caching for Volumes
- Manipulating Subdisks and Disks

Administering DMP
- Overview of Dynamic Multipathing
- Managing Arrays
- Managing Individual Disks
- Managing Paths
- Specifying Load Balancing and Preferred Path Settings
- Setting the Monitor Interval Option
- Using the Purge Disks Command

Part 2: Veritas Cluster Server, Fundamentals 1
High Availability Concepts
- High Availability Concepts
- Clustering Concepts
- 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 Veritas Cluster Server
- Using the Symantec Product Installer
- VCS Configuration Files
- Viewing the Default VCS Configuration
- Installing the Cluster Manager Java GUI

VCS Operations
- Managing Applications in a Cluster Environment
- Service Group 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
- 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
- Offline Configuration Practices and Tools
- Solving Offline Configuration Problems
- Testing the Service Group

Sharing Network Interfaces
- Parallel Service Groups
- Sharing Network Interfaces
- Using Parallel Network Service Groups
- Localizing Resource Attributes

Configuring Notification
- Notification Overview
- Configuring Notification
- Using Triggers for Notification

Configuring VCS Response to 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
- Ensuring Data Integrity
- Cluster Interconnect Failures

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