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## Symantec High Availability Fundamentals with Veritas Storage Foundation 6.0 and Veritas Cluster Server 6.0 for Unix

**Duration: 5 Days**    **Course Code: HA0433**

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### Overview:

The Symantec High Availability Fundamentals with Veritas Storage Foundation 6.0 and Veritas Cluster Server 6.0 for UNIX course describes how to manage storage in a high availability environment, perform cluster management, and practice basic file system administration. This five-day, instructor-led, hands-on class covers how to use Veritas high availability technology to meet data availability goals of your operations by implementing Veritas Cluster Server and Veritas Storage Foundation, which includes Veritas Volume Manager and Veritas File System. This course includes practical exercises that allow you to test your new skills and begin to transfer them into your working environment.

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### Target Audience:

This course is for UNIX system or network administrators, system engineers, technical support personnel, and system integration/development staff who will be installing, operating, or integrating Veritas Storage Foundation and Veritas Cluster Server.

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### Objectives:

- **By the end of this course, you will be able to:**
  - Install and configure Veritas Storage Foundation High Availability.
  - Configure and manage disks, disk groups, and volumes by using Veritas Volume Manager.
  - Perform online file system administration by using Veritas File System tools and commands.
  - Identify types of disk failure and resolve disk failures.
  - Manage cluster services with Veritas Cluster Server and perform troubleshooting techniques.
  - Describe cluster communications, identify faults, and configure failover behavior.
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### Prerequisites:

Knowledge of UNIX system administration.

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## Content:

### PART 1: Veritas Storage Foundation 6.0: Install and Configure

#### Virtual Objects

- Operating system storage devices and virtual data storage
- Volume Manager storage objects
- VxVM volume layouts and RAID levels

#### Installing Storage Foundation and Accessing SF Interfaces

- Preparing to install Storage Foundation
- Installing Storage Foundation
- Storage Foundation resources
- Storage Foundation user interfaces

#### Getting Started with Veritas Operations Manager (VOM)

- VOM overview
- Installing the VOM management server
- Installing additional functionality using VOM add-ons
- Changing Storage Foundation hosts to managed hosts

#### Creating a Volume and File System

- Preparing disks and disk groups for volume creation
- Creating a volume and adding a file system
- Displaying disk and disk group information
- Displaying volume configuration information
- Removing volumes, disks, and disk groups

#### Working with Volumes with Different Layouts

- Volume layouts
- Creating volumes with various layouts
- Creating a layered volume
- Allocating storage for volumes
- Using the Storage Provisioning add-on in VOM

#### Making Configuration Changes

- Administering mirrored volumes
- Resizing a volume and a file system
- Moving data between systems
- Renaming disks and disk groups
- Managing disk group versions and formats

#### Administering File Systems

- Benefits of using Veritas File System
- Using Veritas File System commands
- Logging in VxFS
- Controlling file system fragmentation
- Using thin provisioning disk arrays

### PART 2: Veritas Cluster Server 6.0 for UNIX: Install and Configure

#### High Availability Concepts

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

#### VCS Bundling 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
- 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

#### 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

#### I/O 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 configuring CP servers
- Configuring client clusters
- CPS administration
- Coordination point agent

## Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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