

## Symantec Cluster Server 6.x for Unix: Advanced Administration

**Duration: 5 Days** Course Code: HA0414

#### Overview:

The Symantec Cluster Server 6.x: Advanced Administration course is designed for the IT professional tasked with managing, configuring, and using clusters in an enterprise environment.

This class covers how to set up advanced network and data protection configurations, customize VCS behavior using triggers and service group dependencies, and manage system outages.

Students also learn how to control VCS behavior for service group startup and failover. In addition, students learn how to reconfigure cluster membership, upgrade a cluster, and configure campus clusters.

### Objectives:

- By the completion of this course, you will be able to:
- Set up alternative configurations for the public and private networks.
- Use triggers and service group dependencies to control service groups.
- Implement different types of fencing configurations for data protection.
- Reconfigure cluster memberships.

- Customize service group startup, shutdown, and failover.
- Manage system outages.
- Administer campus clusters.
- Upgrade a cluster.

## Prerequisites:

#### Content:

#### Reviewing an Existing VCS Environment

- Understanding the VCS architecture
- Building the cluster configuration
- Configuring VCS

#### Configuring LLT

- LLT over bonded interfaces
- LLT over UDP
- LLT over RDMA
- LLT with different network interfaces
- Manually configuring LLT

#### Using Multiple Public Network Interfaces

- Configuring multiple service groups with network resources
- MultiNICB and IPMultiNICB
- MultiNICA and IPMultiNIC

Using Triggers to Customize VCS Behavior

- Understanding triggers
- Configuring triggers
- Using multiple trigger scripts
- Controlling applications with triggers

#### Managing Service Group Dependencies

- Common application relationships
- Service group dependencies
- Service group dependency examples
- Configuring service group dependencies
- Limitations of service group dependencies

# Using I/O Fencing for Application Data Integrity

- Data protection requirements
- I/O fencing concepts
- I/O fencing operations
- I/O fencing implementation
- Fencing configuration

Using Coordination Point Server for Application Data Integrity

- Coordination point concepts
- Server-based fencing architecture
- CPS operations
- Installing and configuring a CP server
- Configuring I/O fencing with CPS
- Coordination point agent

#### Administering Fencing Configurations

- Installing and configuring clustered CP servers
- Administering CPS
- Administering disk-based I/O fencing
- Configuring preferred fencing

Reconfiguring Cluster Memberships

- Removing a cluster node
- Adding a cluster node
- Merging clusters

Controlling Application Startup and Shutdown

- Resource online and offline processes
- Cluster startup
- Startup rules and policies
- Limits and Prerequisites

#### Controlling Application Failover

- Failover rules and policies
- Limits and Prerequisites
- AdaptiveHA

Customizing Application Failover Behavior

- VCS response to resource faults
- Controlling failover with service group attributes
- Controlling failover with resource type attributes

#### Managing System Outages

- Differentiating between a system shutdown and an outage
- Controlling cluster shutdown
- Controlling applications during a system outage

## Administering Campus Clusters

- Disaster recovery solutions with SFHA
- Preparing to set up a campus cluster configuration
- Configuring Storage Foundation for campus clustering
- Configuring a VCS service group for campus clusters
- Testing site-awareness
- Failure scenarios with campus clusters
- Legacy campus clustering

Upgrading Storage Foundation High Availability

- Planning to upgrade SFHA
- Online upgrade
- Full upgrade
- Rolling upgrade
- Phased upgrade
- Finding and installing SFHA patches

# Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142 <a href="mailto:training@globalknowledge.com.eg">training@globalknowledge.com.eg</a>

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