

Veritas_Cluster Course Content:35-40hours

Course Outline

High Availability Concepts

- High Availability Concepts
- Clustering Concepts
- Clustering Prerequisites

VCS Building Blocks

- VCS Terminology Cluster Communication VCS Architecture

Preparing a Site for VCS Implementation

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

Installing VCS

- Using the VERITAS Product Installer VCS Configuration Files Viewing the Default VCS Configuration Other Installation Considerations

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 High Availability

- 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

- 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 Faults

- Ensuring Data Integrity
- Cluster Interconnect Failures

I/O Fencing

- Data Protection Requirements
- I/O Fencing Concepts and Components
- I/O Fencing Operations
- I/O Fencing Implementation
- Configuring I/O Fencing
- Stopping and Recovering Fenced Systems

Troubleshooting

- Monitoring VCS
- Troubleshooting Guide
- Cluster Communication Problems
- VCS Engine Problems
- Service Group and Resource Problems
- Archiving VCS-Related Files

Clustering Applications

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

Clustering Databases

- VCS Database Agents
- Database Preparation
- The Enterprise Agent for Oracle

- Database Failover Behavior
- Additional Oracle Agent Functions

Clustering NFS

- Preparing NFS for High Availability
- Testing the NFS Service
- Configuring an NFS Service Group
- NFS Lock Failover

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 Interactions

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

Workload Management

- Startup Rules and Policies
- Failover Rules and Policies
- Configuring Startup and Failover Policies

Alternate Network Configurations

- Alternative Network Configurations
- Additional Network Resources
- Example MultiNIC Setup

Data Center Availability

- Cluster Management Console
- Storage Foundation Management Server
- Disaster Recovery
- Symantec Data Center Foundation