



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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# Veritas InfoScale Availability 7.3 for UNIX/Linux: Administration

<b>CODE:</b>	<b>LENGTH:</b>	<b>PRICE:</b>
VER_ISA-7.3 A-U	40 Hours (5 days)	Request Price

## Description

The Veritas InfoScale Availability 7.3 for Unix/Linux: Administration course is designed for the IT professional tasked with installing, configuring, and maintaining Veritas Cluster Server (VCS) clusters.

This class discusses how to use InfoScale Availability to manage applications in a high availability environment. After gaining the necessary fundamental skills that are required to manage a highly available application in a cluster, the course enables you to deploy InfoScale Availability in the lab environment to practically implement a sample cluster design and deployment.

## Objectives

By the completion of this course, you will be able to:

- Describe how clustering is used to implement high availability in the data center environment.
- Describe VCS and cluster communication mechanisms.
- Create a cluster, and 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.
- Describe I/O fencing operations, and its implementation.
- Configure VCS to manage an Oracle database and other applications.
- Configure and manage VCS clusters on virtual machines in VMware environment.
- Implement Just in Time Availability for single node VCS cluster on virtual machine in a VMware environment.

## Audience

This course is for UNIX/Linux system administrators, system engineers, technical support personnel, network/SAN administrators, and systems integration/development staff, who will be installing, operating, or integrating InfoScale Availability.

## Prerequisites

Knowledge of and hands-on experience with UNIX/Linux systems administration is required.

## Programme

	High Availability Concepts		
	High availability concepts	VCS Building Blocks	
	Clustering concepts	VCS terminology	
	High availability application services	Cluster communication	
Cluster Server Basics	Clustering prerequisites	VCS architecture	
Labs			VCS Operations
Exercise A: Installing InfoScale Enterprise using the Common Product Installer (CPI)]			Common VCS tools and operations
Exercise B: Running a post-installation check			Service group operations
Exercise C: Adding cluster systems to VIOM as managed hosts			Resource operations

Labs	VCS Configuration Methods	
Exercise A: Displaying cluster information	Starting and stopping VCS	
Exercise B: Displaying status and attributes	Overview of configuration methods	
Exercise C: Performing service group operations	Online configuration	
Exercise D: Manipulating resources	Controlling access to VCS	
	Preparing Services for VCS	
	Preparing applications for VCS	
Labs	Performing one-time configuration tasks	
Exercise A: VCS configuration state and stopping VCS	Testing the application service	
Exercise B: Configuring automatic backup of the VCS configuration	Stopping and migrating an application service	
Exercise C: Setting non default VCS stop options	Collecting configuration information	
	Online Configuration	
Labs	Online service group configuration	
Exercise A: Configuring and examining storage for the service	Adding resources	
Exercise B: Examining the application	Solving common configuration errors	
Exercise C: Manually starting and stopping the application	Testing the service group	
Labs		
Exercise A: Creating a service group for the loopy application		
Exercise B: Configuring resources for the loopy application	Offline Configuration	
Exercise C: Performing a virtual fire drill on the service group	Offline configuration examples	
Exercise D: Testing the service group	Offline configuration procedures	
Exercise E: Setting resources to critical	Solving offline configuration problems	
Exercise F: (Optional) Examining Veritas File System locking by VCS	Testing the service group	
Labs	Configuring Notification	
Exercise A: Editing a copy of the main.cf file using a system editor	Notification overview	
Exercise B: Stopping VCS	Configuring notification	
Exercise C: Restarting VCS using the edited main.cf file	Overview of triggers	
	Handling Resource Faults	
	VCS response to resource faults	
	Determining failover duration	
	Controlling fault behavior	
	Recovering from resource faults	
Labs	Cluster Server Additions	Fault notification and event handling
Exercise A: Configuring and testing the notifier using VIOM		
Exercise B: Configuring trigger scripts		
Intelligent Monitoring Framework		
IMF overview	Labs	
IMF configuration	Exercise A: Examining IMF monitoring on a resource	
Faults and failover with intelligent monitoring	Exercise B: (Optional) Examining the IMF default configuration	
Cluster Communications		
VCS communications review		
Cluster interconnect configuration	Labs	
Joining the cluster membership	Exercise A: Reconfiguring LLT	
Changing the interconnect configuration	Exercise B: Observing jeopardy membership	Cluster Server Applications
Using I/O Fencing for Application Data Integrity		
Data protection requirements	Labs	
I/O fencing concepts	Exercise A: Fencing configuration pre-checks	
I/O fencing operations	Exercise B: Configuring VCS for I/O fencing	
I/O fencing implementation	Exercise C: I/O fencing configuration verification	
Fencing configuration	Exercise D: Verifying data disks for I/O fencing	
Clustering Applications		
Application service overview	Labs	
VCS agents for managing applications	Exercise A: Adding a resource of type Application	
The Application agent	Exercise B: Testing the resource	
IMF support and prevention of concurrency violation	Exercise C: IMF and Application agent monitoring options	
	Labs	
Clustering Databases	Exercise A: Verifying the Oracle configuration	
VCS database agents	Exercise B: Preparing storage and network resources for the Oracle service group	
Database preparation	Exercise C: Testing the Oracle database manually	
The database agent for Oracle	Exercise D: Configuring Oracle under VCS control	
Database failover behavior	Exercise E: Running a virtual fire drill and switching the Oracle service group	
Additional Oracle agent functions	Exercise F: (Optional) Oracle monitoring	
	VMware vSphere high availability architecture	
	VMware administration	
	VMware storage architecture	
In-Guest Clustering VMware vSphere Data Center Architecture	Server and storage migration	
	Veritas High Availability Deployment in VMware	
Labs	Veritas high availability architecture in VMware	
Exercise A: Verifying the VMware vSphere lab environment	Deploying Veritas InfoScale on VMs	
Exercise B: Connecting to the nested virtual machines	Configuring VIOM to manage InfoScale on VMs	
Exercise C: Testing vMotion	Configuring the vSphere Web Client for Veritas HA	

## Labs

Exercise A: Preparing the nested virtual machine lab environment  
Exercise B: Deploying a Veritas cluster on nested virtual machines  
Exercise C: Adding cluster systems as managed hosts to VIOM  
Exercise D: Installing the VIOM Control Host add-on on mgt  
Exercise E: Adding virtualization information to the VIOM management server  
Exercise F: Installing and registering the Veritas HA Plug-in for vSphere Web Client  
Veritas High Availability Configuration and Administration  
Configuring storage for VCS failover clusters  
Configuring shared storage for CFS clusters  
Configuring availability  
Just In Time Availability solution

## Labs

Exercise A: Preparing the nested virtual machine lab environment  
Exercise B: Using the vSphere Web Client to monitor Veritas high availability  
Exercise C: Setting EnableUUID parameter for virtual machine disks  
Exercise D: Configuring a VCS service group with the VMwareDisks resource to manage virtual machine storage  
Exercise E: Managing the VCS service group from the vSphere Web Client  
Exercise F: Testing vMotion with Veritas in-guest clustering  
Exercise G: Exercise G: (Optional) Completing the Oracle service group configuration

## Session Dates

Ved forespørsel. Vennligst [kontakt oss](#)

## Tilleggsinformasjon

[Denne treningen er også tilgjengelig som trening på stedet. Kontakt oss for å finne ut mer.](#)