Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå os her

.

Email: training.ecs.dk@arrow.com
Phone: +45 7025 4500

Veritas InfoScale Availability 7.3.1 for Windows: Administration

CODE:	LENGTH:	PRICE:
VER_ISA-7.3.1 A-W	40 Hours (5 dage)	kr 25,000.00

Description

The Veritas InfoScale Availability 7.3.1 for Windows: Administration course is designed for IT professionals tasked with installing, configuring, and maintaining the Veritas InfoScale Availability environments.

This course discusses how to use InfoScale Availability to manage applications for high availability. It provides you with the necessary fundamental skills that are required to manage a highly available application in a cluster, and also 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 applications are managed in a high availability environment and the key requirements.
- Describe VCS architecture.
- Install InfoScale Enterprise (Availability and Storage)
- Manage applications under the control of VCS service groups.
- Manage resources within VCS service groups.
- Compare and contrast VCS configuration methods.
- Prepare and test applications before placing them under VCS control.
- Stop resources and manually migrate an application.
- Create a service group using online configuration tools.
- Configure notification using the NotifierMngr resource.
- Describe how VCS responds to resource faults.
- Control fault behavior using resource type attributes.
- Recover from resource faults, configure fault notification and triggers.
- Learn how to configure IMF.
- Describe how components communicate in a VCS environment.
- Describe how cluster application services work in a high availability environment.
- Describe how agents manage applications in a VCS environment.
- Describe how VCS manages Exchange Server, SQL Server and SharePoint Server in a clustered environment.
- Describe how VCS manages global cluster components.
- Describe how VCS handles intercluster communication failures in a global cluster.
- Configure the Global Cluster Option on a running cluster.
- Administer global cluster heartbeats

Audience

This course is for system administrators, system engineers, technical support personnel, network/SAN administrators, and systems integration/development staff, who will be installing, operating, managing, and working with InfoScale Availability.

Prerequisites

Knowledge of and hands-on experience with Microsoft Windows operating system administration is required. Working knowledge networking is also required.

Programme

High Availability and Clustering Concepts
• High availability concepts
• Clustering concepts
• High availability application services

Cluster Server Basics
• Clustering prerequisites

VCS Building Blocks
• VCS terminology
• Cluster communication
• VCS architecture

Installing InfoScale
• Introducing the Veritas InfoScale product suite
• Installing InfoScale products

VCS Operations
• Common VCS tools and operations
• Service group operations
• Resource operations

Labs:
• Exercise A: Connecting to the virtual machines
• Exercise B: Verifying network connectivity

Labs:
• Exercise A: Verifying the details of configured iSCSI disks
• Exercise B: Performing a SORT pre-installation verification check

Labs:
• Exercise A: Installing InfoScale Enterprise using the Veritas Product Installer (VPI)
• Exercise B: Configuring the west cluster
• Exercise C: Configuring the east cluster
• Exercise D: Adding cluster systems to VIOM as managed hosts

Labs:
• Exercise A: Displaying cluster information
• Exercise B: Displaying status and attributes
• Exercise C: Exploring the default VCS configuration

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
• Performing one-time configuration tasks
• Testing the application service
• Stopping and migrating an application service

Labs:
• Exercise A: Starting and stopping VCS
• Exercise B: Configuring automatic configuration backups
• Exercise C: Configuring VCS stop options

Labs:
• Exercise A: Configuring storage for an application
• Exercise B: Configuring VMDg and MountV resources
• Exercise C: Recording MAC address of cluster nodes
• Exercise D: Setting up the application
• Exercise E: Manually migrating the application
• Exercise F: Making the services offline

Online Configuration
• Online service group configuration
• Adding resources
• Solving common configuration errors
• Testing the service group
• Service group dependencies

Labs:
• Exercise A: Creating a service group
• Exercise B: Adding NIC and IP resources
• Exercise C: Adding VMDg, MountV, and Process resources to a service group
• Exercise D: Linking all the resources in a service group
• Exercise E: Testing a service group
• Exercise F: Setting resources to critical

Offline Configuration
• Offline configuration procedures
• Solving offline configuration problems
• Testing the service group

Labs:
• Exercise A: Adding a resource using the command line interface
• Exercise B: Testing the FileOnOff resource

Configuring Notification
• Notification overview
• Configuring notification
• Using triggers for notification

Labs:
• Exercise A: Configuring SNMP Trap Receiver
• Exercise B: Configuring a NotifierMngr type resource on west cluster
• Exercise C: Configuring a NotifierMngr type resource on east cluster
• Exercise D: Testing notifications

Cluster Server Additions

Handling Resource Faults
• VCS response to resource faults
• Determining failover duration
• Controlling fault behavior
• Recovering from resource faults
• Fault notification and event handling
• Introducing Intelligent Resource Monitoring

Labs:
• Exercise A: Modifying the monitor interval of the FileOnOff resource
• Exercise B: Observing the result of a non-critical resource fault
• Exercise C: Observing the result of a critical resource fault
• Exercise D: Observing the result of faults within frozen service groups
• Exercise E: Observing the result of ManageFaults and FaultPropagation
• Exercise F: Observing the result of RestartLimit behavior
• Exercise G: (Optional) Observing Intelligent Resource Monitoring

Cluster Communications
• VCS communications overview
• Cluster membership
• Cluster interconnect configuration
• Joining the cluster membership
• Changing the interconnect configuration

Labs:
• Exercise A: Verifying the low-priority LLT link communication in west cluster

System and Communication Faults
• System failures
• Cluster interconnect failures

Labs:
• Exercise A: Observing VCS response to single LLT link failure
• Exercise B: Observing VCS response to multiple LLT link failures (Jeopardy)
• Exercise C: Observing VCS response to multiple LLT link failures (Network Partition)

Clustering Applications
• Application service overview
• VCS Agents for managing applications
• The GenericService agent
Cluster Server Applications • The ServiceMonitor agent
Labs:
Lab 13a:
• Exercise A: Configuring shared storage for a GenericService resource
Lab 13b:
• Exercise A: Creating a service group
• Exercise B: Adding NIC and IP resources
• Exercise C: Adding VMDg, MountV, and GenericService resources to a service group
• Exercise D: Linking all the resources in service group websg
• Exercise E: Testing the service group
• Exercise F: Setting resources to critical
Clustering Exchange Server
• Exchange Server in the VCS environment
• VCS agent for Exchange Server
• Supported Exchange Server configurations Labs:
• Installing Exchange Server • Exercise A: Configuring storage for Exchange application
• Configuring an Exchange Server service group • Exercise B: Configuring an Exchange Server service group
Clustering SQL Server
• SQL Server in the VCS environment
• VCS database agents for SQL Server
• Managing registry keys Labs:
• Installing SQL Server in the cluster • Exercise A: Configuring storage for SQL application
• Configuring a SQL Server service group • Exercise B: Configuring a SQL Server service group
• Monitoring databases • Exercise C: Testing the service group
Clustering SharePoint Server
• SharePoint Server in the VCS environment
• VCS agent for SharePoint Server
• Installing SharePoint Server in a clustered environment Labs:
• Configuring SharePoint Server service groups • Exercise A: Configuring a SharePoint Server farm
• Verifying the SharePoint cluster configuration • Exercise B: Configuring a SharePoint Server service group
Global Cluster Architecture and Concepts
• Global cluster architecture Labs:
• Global cluster components • Exercise A: Verifying the lab environment for global clustering
• VCS features for global cluster management • Exercise B: Configuring a local service group on west cluster
Global Cluster Option • Inter-cluster communication failure • Exercise C: Configuring a local service group on east cluster
Labs:
• Exercise A: Configuring GCO on west and east cluster
Configuring a Global Cluster • Exercise B: Linking clusters
• Configuring the Global Cluster Option • Exercise C: Verifying DNS server access from cluster systems
• Linking clusters • Exercise D: Reconfiguring vcshelper user account on east cluster
• Configuring a global service group • Exercise E: Configuring a global service group on west cluster
• Managing dynamic DNS updates • Exercise F: Configuring a global service group on east cluster
Managing a Global Cluster Labs:
• Managing clusters in a global cluster environment • Exercise A: Testing dynamic DNS updates
• Managing global cluster heartbeats • Exercise B: Adding another Icmp heartbeat link
• Managing global service groups Notification and Failover behavior in a Global Cluster
Labs:
• Exercise A: Verifying notification configuration
• Exercise B: Testing local failover
• Notification in a global cluster • Exercise C: Testing intercluster failover with ClusterFailOverPolicy set to Manual
• Failover behavior of a global service group • Exercise D: Testing intercluster failover with ClusterFailOverPolicy set to Connected
• Cluster state transitions • Exercise E: Testing intercluster failover with ClusterFailOverPolicy set to Auto

Session Dates

På anmodning. Kontakt os venligst

Yderligere Information

Denne træning er også tilgængelig som træning på stedet. Kontakt os for at finde ud af mere.