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VERITAS

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
- Labs:
- High availability application services
- Exercise A: Connecting to the virtual machines · Exercise B: Verifying network connectivity

Cluster Server Basics • Clustering prerequisites

VCS Building Blocks

 VCS terminology Labs:

- Cluster communication
 Exercise A: Verifying the details of configured iSCSI disks
- VCS architecture

VCS Operations

• Exercise B: Performing a SORT pre-installation verification check

Labs:

Exercise A: Installing InfoScale Enterprise using the Veritas Product Installer (VPI)

Installing InfoScale · Exercise B: Configuring the west cluster

- Introducing the Veritas InfoScale product suite Exercise C: Configuring the east cluster
- Installing InfoScale products
- Exercise D: Adding cluster systems to VIOM as managed hosts

VCS Configuration Methods

· Starting and stopping VCS

· Online configuration

Overview of configuration methods

Labs: • Common VCS tools and operations • Exercise A: Displaying cluster information Service group operations

- Exercise B: Displaying status and attributes Offline configuration
- Resource operations • Exercise C: Exploring the default VCS configuration • Controlling access to VCS

Preparing Services for VCS

· Preparing applications for VCS · Exercise A: Starting and stopping VCS

- · Performing one-time configuration tasks
- Exercise B: Configuring automatic configuration backups Testing the application service
- Exercise C: Configuring VCS stop options · Stopping and migrating an application service

• Exercise A: Configuring storage for an application

- Online Configuration
- Exercise B: Configuring VMDg and MountV resources Online service group configuration
- Exercise C: Recording MAC address of cluster nodes Adding resources
- Exercise D: Setting up the application
- · Solving common configuration errors
- Exercise E: Manually migrating the application
- Testing the service group
- Exercise F: Making the services offline
- 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 Offline Configuration
- Exercise D: Linking all the resources in a service group

· Offline configuration procedures

· Exercise E: Testing a service group

· Solving offline configuration problems

• Exercise F: Setting resources to critical

· Testing the service group

Configuring Notification

• Exercise B: Observing the result of a non-critical resource fault

• Exercise D: Observing the result of faults within frozen service groups

• Exercise E: Observing the result of ManageFaults and FaultPropagation

• Exercise C: Observing the result of a critical resource fault

• Exercise F: Observing the result of RestartLimit behavior

Labs: Notification overview • Exercise A: Adding a resource using the command line interface • Configuring notification

• Exercise B: Testing the FileOnOff resource Using triggers for notification

- 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

Labs: • Exercise A: Modifying the monitor interval of the FileOnOff resource

- 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 Exercise G: (Optional) Observing Intelligent Resource Monitoring
- **Cluster Communications**
- VCS communications overview
- Cluster membership
- Cluster interconnect configuration
- Joining the cluster membership

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

System and Communication Faults • Exercise A: Observing VCS response to single LLT link failure

- System failures • Exercise B: Observing VCS response to multiple LLT link failures (Jeopardy)
- Cluster interconnect failures • 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
- 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
- · 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

- 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 Managing dynamic DNS updates
- Exercise E: Configuring a global service group on west cluster

Managing a Global Cluster

• Exercise F: Configuring a global service group on east cluster Labs:

- Managing clusters in a global cluster environment Exercise A: Testing dynamic DNS updates
- Managing global cluster heartbeats · Managing global service groups
- Exercise B: Adding another lcmp heartbeat link 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.