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TRAINING OFFERING

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Veritas InfoScale Storage 7.3 for UNIX/Linux: Administration

CODE:

LENGTH:

PRICE:

VER_ISS-7.3 A-U

40 Hours (5 days)

Request Price

Description

The Veritas InfoScale Storage 7.0 for Linux: Administration course is designed for the IT professional tasked with installing, configuring, and maintaining the Veritas InfoScale Storage environments, including Volume Manager (VxVM), File System (VxFS), and Cluster File System (CFS).
This five day, instructor-led, hands-on class covers how to use InfoScale Storage to manage disks, disk groups, and volumes by using a variety of InfoScale Storage user interfaces including the Veritas InfoScale Operations Manager (VIOM) Web console. You learn the basics of online file system administration and recovery from disk failures. In addition, you learn about data replication using Veritas File Replicator and Veritas Volume Replicator. You also learn how to configure Veritas Cluster Volume Manager and Veritas Cluster File System

Objectives

By the completion of this course, you will be able to: · Create, configure, and manage disks, disk groups, and volumes.
· Administer file systems.
· Manage components in the VxVM architecture.
· Manage multiple paths to disk devices.
· Identify types of disk failures and how to resolve them.
· Describe concepts and components specific to Veritas Replicator, and Veritas File Replicator.
· Configure a CFS cluster according to a specified sample design.
· Configure shared disk groups and volumes.
· Configure shared file systems.
· Share local disks among systems in a cluster

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 Storage.

Prerequisites

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

Programme

InfoScale Storage Basics
Virtual Objects
 Operating system storage devices and virtual data storage
 Volume Manager (VxVM) storage objects
 VxVM volume layouts and RAID levels
Creating a Volume and File System
 Preparing disks and disk groups for volume creation
 Creating a volume and adding a file system
 Displaying disk and disk group information
 Displaying volume configuration information
 Removing volumes, disks, and disk groups
Labs
 Exercise A: Creating disk groups, volumes and file systems: CLI

Exercise B: Removing volumes and disks: CLI
Exercise C: Destroying disk data using disk shredding: CLI
Exercise D: (Optional) Creating disk groups, volumes, and file systems: VIOM
Exercise E: (Optional) Removing volumes, disks, and disk groups: VIOM
Working with Volumes with Different Layouts
Volume layouts
Creating volumes with various layouts
Allocating storage for volumes
Labs
Exercise A: Creating volumes with different layouts: CLI
Exercise B: (Optional) Creating volumes with user defaults: CLI
Making Configuration Changes
Administering mirrored volumes
Resizing a volume and a file system
Moving data between systems
Renaming VxVM objects
Labs
Exercise A: Administering mirrored volumes
Exercise B: Resizing a volume and file system
Exercise C: Renaming a disk group
Exercise D: Moving data between systems
Exercise E: (Optional) Resizing a file system only
Administering File Systems
Benefits of using Veritas File System
Using Veritas File System commands
Logging in VxFS
Controlling file system fragmentation
Using thin provisioning disk arrays
Labs
Exercise A: Preparing for "Defragmenting a Veritas File System" exercise
Exercise B: Defragmenting a Veritas File System
Exercise C: Using SmartMove
Exercise D: Observing thin reclamation
Managing Devices
SmartIO
InfoScale Storage 7.3 SmartIO
Support for caching on Solid State Drives (SSDs)
Using SmartAssist Tool
Labs
Exercise A: Configuring VxVM caching
Exercise B: Configuring VxFS read caching
Exercise C: Configuring VxFS writeback caching
Exercise D: Destroying cache area
Dynamic Multi-Pathing
Managing components in the VxVM architecture
Discovering disk devices
Managing multiple paths to disk devices
Labs
Exercise A: Administering the Device Discovery Layer
Exercise B: Displaying DMP information
Exercise C: Displaying DMP statistics
Exercise D: Enabling and disabling DMP paths
Exercise E: Managing array policies
Dynamic Multi-Pathing for VMware
DMP in a VMware ESX/ESXi environment
Managing DMP for VMware
Administering the SmartPool
Performance monitoring and tuning using the DMP console
Resolving Hardware Problems
How does VxVM interpret failures in hardware?
Recovering disabled disk groups
Resolving disk failures
Labs
Exercise A: Recovering a temporarily disabled disk group
Exercise B: Preparing for disk failure labs
Exercise C: Recovering from temporary disk failure
Exercise D: Recovering from permanent disk failure
Exercise E: (Optional) Recovering from temporary disk failure—Layered volume
Exercise F: (Optional) Recovering from permanent disk failure—Layered volume

Exercise G: (Optional) Replacing physical drives—without hot relocation
Exercise H: (Optional) Replacing physical drives—with hot relocation
Exercise I: (Optional) Recovering from temporary disk failure with vxattachd daemon
Exercise J: (Optional) Exploring spare disk behavior
Exercise K: (Optional) Using the Support Web Site
Cluster File System
Storage Foundation Cluster File System Architecture
 SFCFS overview
 SFCFS architecture
 SFCFS communication
 VCS management of SFCFS infrastructure
Cluster Volume Manager
 VxVM and CVM overview
 CVM concepts
 CVM configuration
 CVM response to storage disconnectivity
Labs
 Exercise A: Creating shared disk groups and volumes using CLI
 Exercise B: Creating a shared disk group and volume using VIOM
 Exercise C: Converting a disk group from shared to private and vice versa
 Exercise D: Investigating the impact of the disk group activation modes
 Exercise E: (Optional) Observing the impact of rebooting the master node in a storage cluster
Cluster File System
 Cluster File System concepts
 Data flow in CFS
 Administering CFS Flexible Storage Sharing
 Understanding Flexible Storage Sharing
 FSS storage objects
 FSS case study
 Flexible Storage Sharing implementation
 FSS configuration
Labs
 Exercise A: Creating a shared file system – CLI
 Exercise B: Changing the primary node role – CLI
 Exercise C: Placing the shared file system under the storage cluster control – CLI
 Exercise D: Deleting shared file systems and disk groups
Replication
Disaster Recovery and Replication Overview
 Disaster recovery concepts
 Defining replication
 Replication options and technologies
 Veritas technologies for disaster recovery
Veritas File Replicator
 Understanding Veritas File Replicator
 Setting up replication for a Veritas file system
 Error recovery with Veritas File Replicator
Labs
 Exercise A: Setting up and performing replication for a VxFS file system
 Exercise B: Restoring the source file system using the replication target
Veritas Volume Replicator Components
 Veritas Volume Replicator overview
 Comparing volume replication with volume management
 Volume Replicator components
 Volume Replicator data flow
Labs
 Exercise A: Preparing storage for replication
 Exercise B: Establishing replication
 Exercise C: Observing data replication
 Exercise D: Migrating the primary role
Veritas Volume Replicator Operations
 Replication setup
 Assessing the status of the replication environment
 Migration, takeover, and fast failback

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.