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VERITAS

Veritas InfoScale Storage 7.3 for UNIX/Linux: Administration - På anmodning

CODE: LENGTH: PRICE:

VER ISS-7.3 A-U 40 Hours (5 dage) kr 25,100.00

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

Virtual Objects
Operating system storage devices and virtual data storage
Volume Manager (VxVM) storage objects

InfoScale Storage Basics 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 Working with Volumes with Different Layouts

Exercise C: Destroying disk data using disk shredding: CLI Volume layouts

Exercise D: (Optional) Creating disk groups, volumes, and file systems: VIOM Creating volumes with various layouts

Exercise E: (Optional) Removing volumes, disks, and disk groups: VIOM Allocating storage for volumes

> Making Configuration Changes Administering mirrored volumes Resizing a volume and a file system

Labs Exercise A: Creating volumes with different layouts: CLI Moving data between systems

Exercise B: (Optional) Creating volumes with user defaults: CLI Renaming VxVM objects

Administering File Systems

Exercise A: Administering mirrored volumes Benefits of using Veritas File System Using Veritas File System commands Exercise B: Resizing a volume and file system

Exercise C: Renaming a disk group Logging in VxFS

Exercise D: Moving data between systems Controlling file system fragmentation Exercise E: (Optional) Resizing a file system only 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

Labs

SmartIO Exercise A: Configuring VxVM caching InfoScale Storage 7.3 SmartIO Exercise B: Configuring VxFS read caching Support for caching on Solid State Drives (SSDs) Exercise C: Configuring VxFS writeback caching

Using SmartAssist Tool Exercise D: Destroying cache area

Exercise A: Administering the Device Discovery Layer

Exercise E: Managing array policies

Exercise B: Displaying DMP information Dynamic Multi-Pathing Exercise C: Displaying DMP statistics Managing components in the VxVM architecture Exercise D: Enabling and disabling DMP paths

Discovering disk devices

Managing multiple paths to disk devices

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

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

Cluster File System

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 Labs

FSS storage objects Exercise A: Creating a shared file system - CLI FSS case study Exercise B: Changing the primary node role - CLI

Flexible Storage Sharing implementation Exercise C: Placing the shared file system under the storage cluster control – CLI

FSS configuration Exercise D: Deleting shared file systems and disk groups

Disaster Recovery and Replication Overview

Disaster recovery concepts Veritas File Replicator

Defining replication Understanding Veritas File Replicator Replication options and technologies Setting up replication for a Veritas file system Error recovery with Veritas File Replicator

Replication Veritas technologies for disaster recovery

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 Exercise A: Preparing storage for replication

Comparing volume replication with volume management Exercise B: Establishing replication Volume Replicator components Exercise C: Observing data replication Volume Replicator data flow 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

På anmodning. Kontakt os venligst

Yderligere Information

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