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Veritas InfoScale Storage 7.3 for UNIX/Linux: Advanced Administration

CODE:	LENGTH:	PRICE:
VER_ISS-7.3 AA	40 Hours (5 dage)	kr 25,000.00

Description

The Veritas InfoScale Storage 7.3 for UNIX/Linux: Advanced Administration course, discusses how to integrate, manage, operate, and utilize Veritas InfoScale Storage advanced features, which include Dynamic Multi-Pathing, Smart Tiering, Docker support, Performance Tuning, and Snapshots - in a UNIX environment.

You learn how to manage the VxVM Private Region and understand different disk layouts, disk group management, and how to build volumes from scratch. You also learn about disk group split, move and joins, volume relayout, volume sets, multivolume file systems, online file system administration, remote mirroring across sites, offline and off- host processing using volume snapshots and storage checkpoints, and dynamic storage tiering.

Objectives

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

- Manage the advanced features of Veritas Storage Foundation.
- Configure and manage disks, disk groups, and volumes.
- Administer Veritas File System advanced features.
- Manage the Dynamic Multi-Pathing feature.
- Apply performance tuning principles to Veritas Volume Manager, Veritas File System and Dynamic Multi- Pathing.
- Monitor VxVM and change volume layouts to improve performance.
- Create and manage point-in-time copies for off-host and on-host processing.
- Manage LUN snapshots.
- Remotely mirror your data across different sites.
- Use dynamic storage tiering for optimal storage allocation.
- Provision storage in a Docker environment.

Audience

This course is for UNIX system or network administrators, system engineers, technical support personnel, and system integration/development staff who will be administering Veritas Storage Foundation advanced features.

Prerequisites

Veritas InfoScale Storage 7.3 for UNIX Knowledge of UNIX system administration.

Programme

Volume Manager Overview
Supported upgrade paths
Upgrade considerations
Operating system storage devices and virtual data storage

Labs
Exercise A: Installing Storage Foundation
Exercise B: Upgrading from Storage Foundation to InfoScale Storage
Exercise C: Creating disks with different disk types and formats

Managing VxVM Components
Managing components in the VxVM architecture
Volume Manager storage objects
Volume layouts
Viewing object attributes

Labs

Exercise A: Creating a disk group containing non-cds disks	
Exercise B: Converting non-cds disks in a disk group to the CDS disk format	Advanced Disk Group Operations
Exercise C: Creating volumes with different layouts	Disk group information
Exercise D: Creating layered volumes	Disk group split, move, and join
Exercise E: Creating volumes with user defaults	Disk group backup/restore

Advanced Volume Operations

Using vxmake to create volume manager objects
Changing the volume layout
Online relay layout process
Managing volume tasks
Securing data at rest

Labs

Exercise A: Preparing for disk group split/move/join operations
Exercise B: Performing vxdg split and join operations specifying volume objects
Exercise C: Performing vxdg split and join operations specifying disk objects
Exercise D: Performing vxdg join operations when conflicting objects exist
Exercise E: Performing vxdg move operations
Exercise F: Performing configuration backups

File System Architecture

VxFS layout versions	Labs
Components and attributes of Veritas File System	Exercise A: Viewing the file system metadata

File System Advanced Features

Compressing files and directories with VxFS	Labs
Using the FileSnap feature	Exercise A: Compressing files and directories with VxFS
Deduplicating VxFS data	Exercise B: Deduplicating VxFS data
Migrating a native file system to VxFS	Exercise C: Using the FileSnap feature
	Exercise D: Migrating a native file system to VxFS

Dynamic Multi-Pathing Administration Labs

DMP/DDD overview	Exercise A: Perform DMP testing using the vxdmpadm command
Event Source Daemon	Exercise B: Perform DMP testing using the vxcheckasl command
ASL/APM administration	Exercise C: Perform DMP testing using the vxdisk command
DDL/DMP CLI administration	Exercise D: Perform DMP testing using the vxddladm command

Dynamic Multi-Pathing Advanced Operations

Subpath failover groups	Labs
Array/enclosure management	Exercise A: Listing Subpath Failover Groups (SFG)
Online dynamic LUN reconfiguration	Exercise B: Tuning the Low Impact Path Probing (LIPP) attributes
DDL/DMP enhancements	Exercise C: Differentiating manually disabled paths

Volume Sets and MVFS Management

Creating and managing volume sets	
Creating and managing multi-volume file systems	Labs
Volume device visibility	Exercise A: Configuring a volume set with a multi-volume file system
Administering raw device access	Exercise B: Configuring device visibility

Implementing SmartTier (ST)

Introducing SmartTier	
Defining the SmartTier concepts	Labs
Creating storage tiers	Exercise A: Configuring a multi-volume file system and SmartTier
Implementing file placement policies	Exercise B: Testing SmartTier

Co-existence with Array-based Snapshots	Labs
Understanding snapshot technologies	Exercise A: LUN snapshots setup
Identifying hardware snapshots using Volume Manager	Exercise B: Importing clone disk groups
Managing clone disks	Using Full-Copy Volume Snapshots
Using disk tags	Creating and managing full-copy volume snapshots
	Using volume snapshots for off-host processing

Labs

Exercise A: Full-sized instant snapshots
Exercise B: Off-host processing using split-mirror volume snapshots
Exercise C: Traditional volume snapshots

Using Copy-on-Write SF Snapshots

Creating and managing space-optimized volume snapshots	Labs
Creating and managing storage checkpoints	Exercise A: Using space-optimized instant volume snapshots
Serving business requirements	Exercise B: Restoring a file system using storage checkpoints
	Exercise C: Examining storage checkpoint behavior

	Labs	
	Exercise A: Using vxbench and vxstat	
	Exercise B: Tracing I/O	
	Exercise C: Maintaining quality of service	
	Performance Tuning	
	Understanding the environment	
Performance Monitoring and Management	VxVM tunables and volume best practices	
Performance benchmarking tools	VxFS tunables, inode cache and cache advisories	
Ensuring quality of service	DMP tunables	
	Using Site Awareness with Mirroring	
	Introducing remote mirroring and site awareness	
Labs	Configuring site awareness	
Exercise A: Benchmarking	Recovering from failures with remote mirrors	
Exercise B: Isolating performance issues	Verifying a site-aware environment	
Labs		Support for Docker Deployments
Exercise A: Configuring site awareness		Docker overview
Exercise B: Analyzing the volume read policy		Introducing support for Docker deployments
Exercise C: Analyzing the impact of disk failure in a site-consistent environment		Provisioning storage to Docker containers
Exercise D: A manual fire drill operation with remote mirroring		Additional features and limitations
Labs		
Exercise A: Preparing the Docker environment		
Exercise B: Creating volumes for use with Docker containers		
Exercise C: Moving Docker containers		

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.](#)