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# Veritas InfoScale Storage 7.3 for UNIX/Linux: Advanced Administration

**CODE:**

VER\_ISS-7.3 AA

**LENGTH:**

40 Hours (5 dage)

**PRICE:**

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    Labs

Compressing files and directories with VxFS    Exercise A: Compressing files and directories with VxFS

Using the FileSnap feature    Exercise B: Deduplicating VxFS data

Deduplicating VxFS data    Exercise C: Using the FileSnap feature

Migrating a native file system to VxFS    Exercise D: Migrating a native file system to VxFS

## Dynamic Multi-Pathing Administration Labs

DMP/DDI overview    Exercise A: Perform DMP testing using the vxddmpadm 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

DDI/DDI 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

DDI/DDI 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 disk tags    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    Labs

Creating and managing space-optimized volume snapshots    Exercise A: Using space-optimized instant volume snapshots

Creating and managing storage checkpoints    Exercise B: Restoring a file system using storage checkpoints

Serving business requirements    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	
	Configuring site awareness	
Labs	Recovering from failures with remote mirrors	
Exercise A: Benchmarking	Verifying a site-aware environment	
Exercise B: Isolating performance issues		
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.](#)