

Veritas Storage Foundation 5.1 for Solaris

COURSE DESCRIPTION

In the *Veritas Storage Foundation 5.1 for Solaris* course, you learn to integrate, operate, and make the most of Veritas Storage Foundation, including Veritas Volume Manager (VxVM) and Veritas File System (VxFS), in a UNIX environment.

You learn to install and configure Veritas Storage Foundation and to manage disks, disk groups, and volumes by using the graphical user interface and from the command line. You also learn about recovery from disk failures, online file system administration, remote mirroring across sites, offline and off-host processing using volume snapshots and storage checkpoints, and dynamic storage tiering.

Delivery Method

Instructor-led training (ILT)

Duration

Five days

Course Objectives

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

- Install and configure Veritas Storage Foundation.
- Configure and manage disks, disk groups, and volumes.
- Administer file systems.
- Identify types of disk failure and resolve disk failures.
- Install Storage Foundation Manager and manage multiple Storage Foundation servers.
- Monitor VxVM and change volume layouts to improve performance.
- Manage the dynamic multipathing feature.
- 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.
- Place the boot disk under VxVM control.

Who Should Attend

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

Prerequisites

Knowledge of UNIX system administration

Hands-On

This course includes practical exercises that enable you to test your new skills and begin to transfer them into your working environment.

COURSE OUTLINE

PART 1: Veritas Storage Foundation 5.1: Install and Configure

Virtual Objects

- Physical data storage
- Virtual data storage
- Volume Manager storage objects
- Volume Manager RAID levels

Installing Storage Foundation and Accessing SF Interfaces

- Preparing to install Storage Foundation
- Installing Storage Foundation
- Storage Foundation resources
- Storage Foundation user interfaces
- Managing the VEA software

Creating a Volume and File System

- Preparing disks and disk groups for volume creation
- Creating a volume
- Adding a file system to a volume
- Displaying disk and disk group information
- Displaying volume configuration information
- Removing volumes, disks, and disk groups

Working with Volumes with Different Layouts

- Volume layouts
- Creating volumes with various layouts
- Creating a layered volume
- Allocating storage for volumes

Making Configuration Changes

- Administering mirrored volumes
- Resizing a volume and a file system
- Moving data between systems
- Renaming disks and disk groups
- Managing disk group versions and formats

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

Resolving Hardware Problems

- How does VxVM interpret failures in hardware?
- Recovering disabled disk groups
- Resolving disk failures
- Managing hot relocation at the host level

PART 2: Veritas Storage Foundation 5.1: Manage and Administer

Getting Started with Storage Foundation Manager (SFM)

- Storage Foundation Manager overview
- Installing the Storage Foundation Manager Central Management Server
- Changing an SF server to a managed host
- Administering users in the Central Management Server

Administering Volume Manager

- Introduction to performance monitoring with Storage Foundation
- Changing volume layouts
- Managing volume tasks

Managing Devices Within the VxVM Architecture

- Managing components in the VxVM architecture
- Discovering disk devices
- Managing multiple paths to disk devices

Using Full-Copy Volume Snapshots

- Understanding and selecting snapshot technologies
- Creating and managing full-copy volume snapshots
- Using volume snapshots for off-host processing

Using Copy-on-Write SF Snapshots

- Creating and managing space-optimized volume snapshots
- Creating and managing storage checkpoints
- Examples of using SF snapshot technologies for different application needs

Importing LUN Snapshots

- How Volume Manager detects hardware snapshots
- Managing clone disks
- Using disk tags

Using Site Awareness with Mirroring

- What are remote mirroring and site awareness?
- Configuring site awareness
- Recovering from failures with remote mirrors
- Verifying a site-aware environment

Implementing Dynamic Storage Tiering (DST)

- What is dynamic storage tiering?
- Dynamic storage tiering concepts
- Creating and managing volume sets

- Creating and managing multi-volume file systems
- Creating storage tiers
- Implementing file placement policies

Managing the Boot Disk with Storage Foundation

- Placing the boot disk under VxVM control
- Creating an alternate boot disk
- Administering the boot disk
- Removing the boot disk from VxVM control