Solaris Volume Manager Administration

Duration: 3 Days

What you will learn

The Solaris Volume Manager Administration course provides Sun partners, resellers, and customers with the knowledge and skills to ensure proper implementation and support of the Solaris Volume Manager software. These skills include, but are not limited to, planning, configuration, and administration.

Students who can benefit from this course:

Post-sales channel resellers, Value-Added Resellers (VAR), Field Service Engineers (FEs), and End Users

Related Training

Required Prerequisites

Backup and restore file systems

Change system run levels

Use the OPEN LOOK graphical user interface (GUI)

Administer disks and file systems

Suggested Prerequisites

Configure UNIX file systems (UFS)

Configure environmental variables

Use basic OpenBoot commands

Course Objectives

Administer the Solaris Volume Manager software by using command-line programs and the Enhanced Storage tool

Administer the Solaris Volume Manager software state databases

Create and administer simple, striped, concatenated, and mirrored volumes

Create volume structures using both hard and soft partitions

Verify the status of the Solaris Volume Manager software volumes and state databases

Create and administer the Solaris Volume Manager software file systems

Replace failed volume components

Replace a failed disk

Describe the features of the Solaris Volume Manager software disksets

Course Topics

Introduction to Managing Data
Describe the advantages of virtual disk management
Describe RAID technology standards and terminology
Describe the appropriate use of each supported RAID level
Optimize system configurations for each supported RAID level

Introduction to the Solaris Volume Manager Software
Describe the upgrade process for the Solaris 10 OS
Perform basic Solaris Management Console operations
Perform basic Enhanced Storage tool operations
Describe state database features
Initialize the Solaris Volume Manager software

Administer the State Database
Describe the state database consensus algorithm
Describe state database best practices
Describe the Solaris Volume Manager software configuration files
Analyze state database status flags
Add state database replicas
Recover from state database failures

Administer Concatenated and Striped Volumes
Describe concatenated and striped volume best practices
Describe logical volume naming conventions
Use the metainit command to create non-redundant volumes
Use the md.tab file to create non-redundant volumes
Use the Enhanced Storage tool to create non-redundant volumes
Display volume properties and status
Add file systems to new volumes
Create soft partitions

Administer Mirrored Volumes and Hot Spares
Describe mirrored volume characteristics and best practices
Describe optimized mirror resynchronization
Describe mirrored volume read, write, and synchronization policies
Use the metainit command to create mirrored volumes
Configure hot spares for mirrored volumes
Use the Enhanced Storage tool to create mirrored volumes
Mirror existing file systems and the system boot disk
Use soft partitions with mirrored volumes

Administer RAID-5 Volumes
Describe RAID-5 volume characteristics
Describe RAID-5 volume best practices

Create RAID-5 volumes
Create soft partitions on top of RAID-5 volumes

Performing Advanced Operations
Modify the mdmonitord daemon error reporting behavior
Describe using soft partitions with hardware RAID devices
Describe how to recover from soft disk errors
Expand existing file systems
Use the metassist command to perform top-down volume creation
Un-mirror the system boot disk
Replace a failed disk drive