

Solaris Volume Manager (SVM) Administration

Course Summary

Length: 3 Days

Recommendation Statement:

The student should have completed the Solaris Intermediate System Administration course or should have four months of experience administering the Solaris operating system.

Course Description:

The Solaris Volume Manager Administration course provides the knowledge and skills to ensure proper planning, implementation, administration and support of the Solaris Volume Manager (SVM) software.

This course provides the knowledge and skills to ensure proper planning, implementation, administration and support of the Solaris Volume Manager (SVM) software. The operating system will be Solaris 10 (SunOS 5.10) - Sun's implementation of SystemV release 4. The objective is to prepare the student for administering a SVM on a Solaris system.

Upon completion of this course, you will be able to:

- Administer the Solaris Volume Manager software by using the command-line and GUI interface
- 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

Solaris Volume Manager (SVM) Administration

Detailed Course Summary

Introduction to Managing Data

- Describe the advantages of virtual disk management vs. conventional Unix file systems
- 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

- 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 non-redundant volume characteristics
- 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
- Describe mirrored volume best practices
- Use the `metainit` command to create mirrored volumes
- Configure hot spares for mirrored volumes
- Administer volume submirrors
- Use the Enhanced Storage tool to create mirrored volumes
- Mirror existing file systems
- Mirror 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

- 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