VERITAS Volume Manager 4.1 Administration

Cursusduur: 5 Dagen   Cursuscode: ES-311

Beschrijving:

The VERITAS Volume Manager 4.1 Administration course provides students with the essential information and skills to manage Sun disk storage arrays using VERITAS Volume Manager (VxVM) software. Students are introduced to the new 4.1 features and enhancements, installation, configuration of VxVM, and advanced administrative tasks.
The course also covers the VERITAS File System (VxFS) software product, including: installation and configuration, online administrative tasks, modifying kernel tunable parameters, and setting VxFS quotas.

Doelgroep:

Students who can benefit from this course are system administrators or storage administrators responsible for the management of disks on Sun storage arrays, using the VERITAS storage software products.

Doelstelling:

- Upon completion of this course, students should be able to:

- Analyze and document storage configurations

- Optimize the system and volume configurations for availability and performance

- Install and initialize the VxVM software

- Perform VxVM disk drive operations, such as creating a new disk group, adding and removing a disk from a disk group, and displaying properties of VxVM objects

- Create volumes and file systems

- Perform advanced operations, such as performing an online volume relayout, moving a populated disk to a new disk group, and creating layered volumes with a file system

- Analyze basic volume performance

- Perform basic VxFS administration

- Perform advanced VxFS administration

Vereiste kennis en vaardigheden:

To succeed fully in this course, students should be able to:

- Configure the Solaris Operating System (Solaris OS)
- Control Solaris OS run levels
- Understand the Solaris OS file system structure
- Perform basic file ownership and protection using the chgrp, chmod, and chown commands
- Perform common file system administration using the format, mkdir, newfs, and mount commands
- Administer Solaris OS packages using the pkgadd, pkgrm, and patchadd commands
- Use basic OpenBoot programmable read-only memory (PROM) commands
- Cable Sun systems and peripherals

Vervolgcursussen:

Related courses before

- ES-215: Disk Subsystems Fundamentals (ES-215)
- SA-202-S10: System Administration for the Solaris 10 Operating System Part 2 (SA-202-S10)
- SA-225-S10: Solaris 10 Features for Experienced Solaris System Administrators (SA-225-S10)

Related courses after

- ES-338: Sun Cluster 3.1 Administration (ES-338)

Cursusinhoud:

- Sun Storage Concepts
- Describe the major disk storage administration tasks
- Describe Sun storage interface types
- Describe available Redundant Array of Independent Disks (RAID) technologies including:
- Host-based RAID technology
- Controller-based RAID technology
- Describe disk storage concepts that are common to many storage installations, including:
- Hot swapping
- Storage area networking
- Multihost access
- Multipath access
- Identify storage configurations by:
- Conducting a physical inventory
- Displaying storage configurations
- Identifying controller addresses
- Decoding logical device paths
- Verify storage array firmware revisions
- Managing Data
- List the advantages of using virtual disk management
- Describe standard RAID terminology
- List the common features of each supported RAID level including:
- Concatenation - RAID 0
- Striping - RAID 0
- Mirroring - RAID 1
- Mirrored Stripe (Striping plus mirroring) - RAID 0+1
- Mirrored Concatenation - RAID 0+1
- Striped Mirror (Mirroring plus striping) - RAID 1+0
- Concatenated Mirror - RAID 1+0
- Striping with distributed parity - RAID 5
- Describe the optimum hardware configuration for each supported RAID level
- VERITAS Volume Manager Installation

- Identify the new features of VERITAS Volume Manager 4.1
- List the key elements of preinstallation planning
- Research VxVM software patch requirements
- Install the VxVM software
- Describe the three installation methods:
- The installvm method
- The installer method
- The pkgadd method
- Initialize the VxVM software
- Verify the post-installation environment
- Install the VEA client software
- Use the basic VEA features
- Use the VxVM error numbering system
- Describe upgrading the VxVM using Solaris Live Upgrade
- VERITAS Volume Manager Basic Operations
- Describe the function of VxVM disk groups
- List disk group administrative operations including:
- Initialize disk drives for VxVM use
- Create disk groups
- Add and remove disk drives for a disk group
- Import and deport disk groups
- Destroy a disk group
- Rename VxVM disk drives
- Administer disk groups using the vxdiskadm utility
- Administer disk groups using command-line programs
- Administer disk groups using the Veritas Enterprise Administrator (VEA) GUI
- VERITAS Volume Manager Volume Operations
- Interpret volume structure listings
- Describe volume planning activities
- Create volumes using the vxassist command
- Create volumes using the VEA GUI

- Modify volume access attributes
- Add file systems to existing volumes
- Add and remove volume logs
- Use the VEA GUI to analyze volume structures
- VERITAS Volume Manager Advanced Operations
- Encapsulate and mirror the system boot disk
- Administer hot spares and hot relocation
- Evacuate all subdisks from a disk drive
- Move a disk drive without preserving data
- Move a populated disk drive to a new disk group
- Back up and restore a disk group configuration
- Describe how to import a disk group after a system crash
- Perform a volume snapshot backup
- Perform an online volume relayout
- Create VxVM layered volumes
- Perform basic Intelligent Storage Provisioning administration
- Replace a failed disk drive
- VERITAS File System Basic Operations
- Describe basic VxFS features
- Install the VxFS software
- Create VxFS file systems
- Use extended VxFS mount options
- Perform online VxFS administration tasks
- Modify kernel tunable parameters
- Describe Storage Checkpoints
- Describe VxFS file system quotas
- VERITAS Volume Manager Performance Management
- Describe performance improvement techniques
- Use the vxstat and vxtrace performance analysis tools
- Describe RAID-5 write performance characteristics

Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

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