CS502 is a cSAGE Certification Preparatory Course!

CS502-# Solaris OE Advanced System Administration

- CS502-8   Solaris 8
- CS502-9   Solaris 9

Length: 5 Days

Description

This course provides information and hands-on exerciese for performing Solaris OE advanced system administration tasks. Attendess will learn how to use the Solaris Management console, manage software, perform hard drive management, set up auto mounting filesystems, set up and use Role Based Access Control, configure the system logging facility, identify methods of securing a Solaris system, and perform system troubleshooting and correct problems.

This course is applicable to both Solaris 8 and Solaris 9 Operating Environments.

Course Objectives

Upon completion of this course the student will be able to:

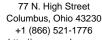1. Set up and use the Solaris Management Console
2. Install and update software packages
3. Install patches on the operating system and installedapplications
4. Set up Network File System Shares
5. Set up the Auto Mounting facility
6. Install new hard drives
7. Partition hard drives
8. Create new filesystems on new or existing hard drives
9. Manage swap space
10. Set up and use Role Based Access Control
11. Set up and use the System Logging Facility
12. Identify Solaris Security Issues
13. Determine if a system has been compromised
14. Implement system security recommendations
15. Troubleshoot and correct system problems

Prerequisites:

Before attending this course, attendees must be able to:

1. Perform basic system administration tasks
2. Use the vi or equivalent editor
3. read and interpret shell scripts

■
77 N. High Street
Columbus, Ohio 43230
+1 (866) 521-1776
http://www.corder.com

SAGE certification   PREFERRED TRAINING PROVIDER

SAGE certification   PREFERRED TRAINING PROVIDER

CS502-# Solaris OE Advanced System Administration

Course Content:

Unit 1 - Solaris Management Console

1. Introduction
2. The Solaris Management Console Overview
3. Why Use the Solaris Management Console?
4. Solaris Management Console Organization
   - A   Changing the Solaris Management Console Window
   - B   Solaris Management Console Documentation
5. Adding Tools to the Solaris Management Console
   - A   How to Add a Legacy Tool to a Toolbox
6. Troubleshooting the Solaris Management Console
7. Unit Conclusion

Unit 2 - Software Management

1. Introduction
2. Overview of Software Packages
3. The Software Installation Database
4. Signed Packages and Patches
5. Tools for Managing Software Packages
6. Guidelines for Adding Software Packages
   - A   Key Points About Adding Software Packages
7. Guidelines for Removing Packages
8. Using an Administration File
   - A   Administrative File Example
   - B   Using a Response File
9. Package Tools
10. Installing A Package Using The pkgadd Command
11. Alternate Installation Methods
12. Obtaining Package Information Using The pkginfo Command
13. Obtaining Package Information Using The pkgparam Command
14. Checking A Package Using The pkgchk Command
15. Removing A Package Using The pkgrm Command
16. Package Administration Using admintool
17. Package Administration Using prodreg
18. Package Installation Using Web Start
19. Patch Management
20. What Is a Patch?
21. What Is a Signed Patch?
22. Accessing Solaris Patches
23. Patch Management Tools
    - A   Features of Solaris Patch Manager Tool:
24. Selecting the Best Method for Adding Signed Patches
25. Patch Pro Patch Manager
    - A   How to Download the Patch Management Tools From SunSolve Online
    - B   How to Install and Configure the Patch Management Tool

26. Installing Patches Using the SMC
    A   Analyizing and Adding Patches
    B   List of Recommended Patches
    C   Download Patches
    D   Specifying a Backout Directory
    E   List of Patches
    F   Installing Patches
27. Unit Conclusion

Unit 3 - Network File System

1. Introduction
2. NFS - Network File System
3. NFS Terminology
4. NFS Daemons
    A   Controlling NFS Daemons
5. File System Sharing and Exporting
6. NFS Commands and Files
    A   The /usr/sbin/share Command
    B   The /etc/dfs/dfstab File
    C   The /etc/mount Command
7. Notes on NFS File System Options
8. Configuring NFS
9. Setting Up the NFS Server
10. Setting Up A NFS Client
11. Removing a NFS Resource
12. Unit Conclusion

Unit 4 - Auto Mounting File Systems

1. Introduction
2. What is Automounting Filesystems?
3. How AutoFs Works
4. The Navigation Process
    A   The /etc/auto_master File
    B   The /etc/auto_home File
    C   Notes About NIS
5. Automounting User Home Directories
6. Exporting the Users Home Directories
7. Changing the Users Home Directory
8. Setting up The Automount Maps
9. Unit Conclusion

Unit 5 - Hard Drive Management

1. Introduction
2. Hard Drive Management
3. Installing the Drive
   - A   Installing a Hard Drive - General
   - B   IDE Drive Installation Notes
   - C   SCSI Drive Installation Notes
4. Post Installation
5. Partitions and Slices
   - A   Slice Naming
6. Slice Assignments
   - A   SPARC Slices
   - B   x86 Slices
7. Determining Slice Information
   - A   Creating Slices
   - B   Creating Slices Using fmthard
8. Creating the Filesystems
9. Labeling A Filesystem
10. Checking the New Filesystem
11. Mounting the New Filesystem
12. Verifying the Mount
13. Notes About New Filesystems
    - A   The lost+found Directory
    - B   Filesystem Permissions
14. The /etc/vfstab and /etc/mnttab Files
15. The /etc/vfstab File
16. Unmounting a Filesystem
17. Logical Volumes
    - A   Concatenation and Striping
18. Installing Solstice DiskSuite 4.2.1
    - A   Getting Solstice DiskSuite 4.2.1
    - B   Installing Solstice DiskSuite 4.2.1
    - C   Post-Installation Procedures
19. Creating Logical Volumes
20. Managing Pseudo Filesystems
    - A   The Cache File System
    - B   The Temporary File System
    - C   The Loopback File System
    - D   The Process File System
21. Swap Space
    - A   Swap Space and Virtual Memory
    - B   Swap Space and the TMPFS File System
    - C   Determining if More Swap Space is Needed
    - D   How Swap Space Is Allocated
    - E   The /etc/vfstab File
    - F   Planning for Swap Space
    - G   Monitoring Swap Resources

22. Adding More Swap Space
    A   Creating a Swap File
    B   Activating the Swap File.
    C   Updating /dev/vfstab
    D   Removing Extra Swap Space
23. Unit Conclusion

Unit 6 - Role Based Access Control

1. Introduction
2. Overview of Role-Based Access Control
    A   The Extended User Attributes Database
    B   The Authorizations Database
    C   The Execution Profiles Database
    D   The Execution Attributes Database
3. How to Assume Role-Based Access Control
4. Tools for Managing Role-Based Access Control
5. Managing Roles
6. Modifying a Role
7. Deleting a Role
8. Unit Conclusion

Unit 7 - System Logging

1. Introduction
2. The syslogd Facility
3. The /etc/syslog.conf File
4. syslogd Functions
5. syslogd Actions
6. Log Messages Security
7. Message Storage Policy
8. Prepare Files To Store Log Messages
9. Configuring syslogd
    A   Marking Messages
    B   Starting, Stopping, and Restarting the syslogd Facility
    C   Testing the syslogd Configuration
    D   Additional syslogd Information
10. Unit Conclusion

Unit 8 - Solaris System Security

1. Unit Overview
2. Security Documentation and Resources
    A   Books & Publications
    B   Solaris Manual Pages and System Documentation
    C   Web Sites
3. Why is a System Compromised?
4. How are Systems Compromised?
5. How is Compromise Prevented?
6. Has Your System Been Compromised?

7. What To Do if Your System is Compromised
   A Stop the Damage
   B Damage Assessment and Control
   C Bring the System Back On-Line
8. Controlling Access - Users
   A Login and Password
   B Network Programs
9. Auditing User and Group Accounts
   A Password Check - pwck
   B Group Check - grpck
10. File System Security
   A Incorrect File/Directory Permissions
   B Incorrect File/Directory Ownership
   C Incorrect File/Directory Group Ownership
   D Set User Id and Set Group Id
11. Access Control ListsListing ACL Attributes
   A Setting ACL Permissions on a File
   B Other ACL Operations
   C Checking If a File Has an ACL
12. Filesystem Integrity Checking
   A Filesystem Integrity Checking Programs
   B Tripwire
   C Tripwire Policies
13. Unit Conclusion

Unit 9 - System Troubleshooting

1. Introduction
2. System Efficiency
3. System Troubleshooting
4. Recovering From System Problems
5. Troubleshooting a System Crash
   A What to Do if the System Crashes
   B Gathering Troubleshooting Data
   C System Crash Checklist
   D Viewing System Messages
   E How to View System Messages
6. Troubleshooting Miscellaneous Software Problems
   A What to Do If Booting/Rebooting Fails
   B What to Do if a System Hangs
   C What to Do if a File System Fills Up
   D Troubleshooting Backup Problems
   E Troubleshooting File Access Problems
   F Solving File Access Problems
   G Forgotten Root Password or Corrupted Password File(s)
7. Corrupted Root Filesystem
8. Unit Conclusion