

Sun Educational Services—Instructor-led Course Description

Advanced System Administration for the Solaris™ 9 Operating Environment SA-299



The *Advanced System Administration for the Solaris™ 9 Operating Environment* course provides students with the necessary knowledge and skills to perform network basics, manage virtual file systems and core dumps, manage storage volumes, control access and configure system messaging, set up naming services, and perform installation procedures. This course is taken in preparation for Part II of the Sun System Administration certification exam.

Who Can Benefit

Students who can benefit from this course are individuals who are already familiar with core system administration tools and processes and who have a fundamental understanding of the UNIX® operating system, commands, and utilities.

Prerequisites

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

- Manage files and directories
- Control the user work environment
- Archive files
- Use remote commands
- Manage file systems
- Install software
- Perform system boot procedures
- Perform user and security administration
- Manage network printers and system processes
- Perform system backups and restores

Skills Gained

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

- Describe network basics
- Describe remote administration with the Solaris™ Management Console software
- Manage virtual file systems and core dumps
- Manage storage volumes
- Control access and configure system messaging
- Configure role-based access control (RBAC)
- Set up name services
- Perform advanced installation procedures
- Configure the custom JumpStart™ procedure
- Perform a Flash installation

Related Courses

Before:

- SA-239: Intermediate System Administration for the Solaris™ 9 Operating Environment

After:

- SA-399: Network Administration for the Solaris™ 9 Operating Environment
- SA-400: Solaris™ System Performance Management
- ST-350: Sun™ Systems Fault Analysis Workshop

50%
Lab
Lab

5
Days
Duration

Course Outline

Module 1 – *Describing Interface Configuration*

- Control and monitor network interfaces
- Configure Internet Protocol version 4 (IPv4) interfaces at boot time

Module 2 – *Describing the Client-Server Model*

- Describe client-server processes
- Start server processes

Module 3 – *Customizing the Solaris™ Management Console*

- Describe Solaris Management Console toolbox editor actions
- Use the Solaris Management Console toolbox editor

Module 4 – *Managing Swap Configuration*

- Describe virtual memory
- Configure swap space

Module 5 – *Managing Crash Dumps and Core Files*

- Manage crash dump behavior
- Manage core file behavior

Module 6 – *Configuring NFS*

- Describe the benefits of NFS
- Describe the fundamentals of NFS distributed file system
- Manage the NFS server
- Manage the NFS client
- Enable the NFS server logging
- Manage NFS with the Solaris Management Console storage folder tools
- Troubleshoot NFS errors

Module 7 – *Configuring AutoFS*

- Describe the fundamentals of the AutoFS file system
- Use automount maps

Module 8 – *Describing RAID and the Solaris™ Volume Manager Software*

- Describe redundant array of independent disks (RAID)
- Describe Solaris Volume Manager software concepts

Module 9 – *Configuring Solaris Volume Manager Software*

- Distribute the state database replicas
- Build a mirror of the root (/) file system

Module 10 – *Configuring Access Control Lists (ACLs)*

- Describe ACLs
- Manipulate ACLs using the command line
- Manipulate ACLs using the File Manager graphic user interface (GUI)
- Create default ACLs

Module 11 – *Configuring Role-Based Access Control (RBAC)*

- Describe RBAC fundamentals
- Describe component interaction within RBAC
- Manage RBAC by using the Solaris Management Console
- Manage RBAC by using the command line

Module 12 – *Performing Smartcard Authentication*

- Describe Smartcard concepts
- Perform Smartcard administration
- Troubleshoot Smartcard operations

Module 13 – *Configuring System Messaging*

- Describe the fundamentals of the syslog function
- Configure the /etc/syslog.conf file
- Configure syslog messaging
- Use the Solaris Management Console log viewer

Module 14 – *Using Name Services*

- Describe the name service concept
- Describe the name service switch file
- Configure the name service cache daemon (nscd)
- Get name service information

Module 15 – *Configuring Name Service Clients*

- Configure a Domain Name System (DNS) client
- Set up an Lightweight Directory Access Protocol (LDAP) client

Module 16 – *Configuring the Network Information Service (NIS)*

- Describe NIS fundamentals
- Configure the name service switch file
- Describe NIS security
- Configure an NIS domain
- Build custom NIS maps
- Troubleshoot NIS

Module 17 – *Configuring the Custom JumpStart Procedure*

- Describe the JumpStart procedure
- Implement a basic JumpStart server
- Set up JumpStart software configuration alternatives
- Troubleshoot the JumpStart procedure

Module 18 – *Performing a Flash Installation*

- Describe the Flash installation feature
- Manipulate a Flash archive
- Use a Flash archive for installation