Training America Corporation

Solaris 9 Advanced System Administration Course Outline (5 days)

Course Description: Building on the material from Solaris 9 System Administration, this course moves beyond the stand-alone workstation into the networked environment. Students gain the knowledge and skills needed to configure and manage shared file systems, distributed services, client-server applications and other more advanced system administration tasks.

Audience: System administrators, network administrators, webmasters, and other IT professionals with day-to-day responsibility for a network of Solaris 9 systems.

Certification: This is the last of three courses that prepare students to take the exams, *Sun Certified System Administrator for the Solaris 9 OE, Part I (CX-310-014)* and *Sun Certified System Administrator for the Solaris 9 OE, Part II (CX-310-015).*

Prerequisites: Completion of both the Solaris 9 Fundamentals and Solaris 9 System Administration courses or six to twelve months of hands-on Solaris 9 experience.

Classroom Hardware/Software Requirements:

- Solaris workstation per student (Intel or SPARC)
- CD-ROM for installation of course files
- Second hard disk for each workstation (PCI or SCSI)
- Local area network cables and hub
- Solaris 9 operating system media per student (Intel or SPARC)

Course Objectives:

- Describe the operation and configuration of a TCP/IP network
- Administer remote systems with commands and the Solaris Management Console (SMC)
- Describe the distributed client-server model
- Manage core and panic memory dumps
- Configure and monitor system logging daemons
- Manage swap space and virtual files systems
- Describe and configure the network file system
- Configure the automount file system
- Manage RAID configurations with Solaris Volume Manager (SVM) software
- Describe and use Access Control Lists (ACLs)
- Configure Role Based Access Control (RBAC)
- Describe and configure the Network Information Name Service (NIS)
- Configure a JumpStart server

Course Content:

Module 1: Solaris Network Model
- Network Fundamentals
- Configuring a Network Interface

Module 2: Client Server Model
- Client-Server Model
- OSI and TCP/IP Network Model
- Starting Network Services
- inetd Daemon
- Network Ports

Module 3: Managing Crash & Core Files
- Crash Dumps
- dumpadm
- core Files
- coreadm

Module 4: System Logging Service
- syslogd Daemon
- syslog.conf
- Severity Levels and Facilities
- logger Command

Module 5: Managing Swap Space
- Virtual Memory
- Managing Swap Space

Module 6: Managing NFS
- NFS Fundamentals
- NFS Server
- NFS Client

Module 7: AutoFS
- AutoFS Fundamentals
- Configuring a Master Map
- Configuring Direct Maps
- Configuring Indirect Maps

Module 8: CacheFS
- Advantages of CacheFS
- Creating a Cached File System
- Mounting a Cached File System

Module 9: RAID
- RAID Fundamentals
- RAID Levels
- Creating a Mirrored File System

Module 10: Solaris Volume Manager
- SVM Fundamentals
- State Databases

Module 11: Access Control List
- ACL Fundamentals
- Manipulating ACLs
- Creating Default ACLs

Module 12: Role Based Access Control
- Roles, Rights Profiles and Authorizations
- RBAC Files
- Configuring RBAC
- Configuring RBAC with SMC

Module 13: Name Services
- Advantages of Name Services
- Supported Name Services
- nsswitch.conf

Module 14: Network Information Name Service
- NIS Fundamentals
- Configuring NIS
- NIS Security
- Creating a NIS map

Module 15: Custom JumpStart Installation
- Fundamentals of a JumpStart Installation
- Boot Server
- Identification Server
- Configuration Server
- Installation Server