

# Solaris Administration

## System Administration for the Solaris 10 Operating System Part 1

Course Code: SA-200-S10

Exam Code: CX-310-200

### Module 1 - Introducing the Solaris 10 OS Directory Hierarchy

- Describe / (root) subdirectories
- Describe file components
- Describe file types
- Use hard links

### Module 2 - Managing Local Disk Devices

- Describe the basic architecture of a disk
- Describe the naming conventions for devices
- List devices
- Reconfigure devices
- Perform hard disk partitioning
- Manage disk labels
- Describe the Solaris Management Console
- Partition a disk by using the Solaris Management Console

### Module 3 - Managing Solaris OS File Systems

- Describe Solaris OS file systems
- Create a new ufs file system
- Check the file system using the fsck command
- Resolve file system inconsistencies
- Monitor file system use

### Module 4 - Performing Mounts and Unmounts

- Identify mounting basics
- Perform mounts
- Perform unmounts
- Access a mounted diskette or CD-ROM
- Restrict access to a mounted diskette or CD-ROM
- Access a diskette or CD-ROM without Volume Management (vold)

### Module 5 - Installation Requirements for the Solaris 10 OS

- Identify fundamentals of DVD installation
- Solaris 10 OS installation and upgrade options
- Hardware requirements for Solaris OS installation

#### **Module 6 - Performing Solaris 10 OS Package Administration**

- Describe the fundamentals of package administration
- Administer packages using the command-line interface

#### **Module 7 - Managing Software Patches on the Solaris 10 OS**

- Describe the fundamentals of patch administration
- Install and remove patches and patch clusters

#### **Module 8 - Executing Boot PROM Commands**

- Identify boot programmable read-only memory (PROM) fundamentals
- Use basic boot PROM commands
- Identify the system's boot device
- Create and remove custom device aliases
- View and change NVRAM parameters from the shell
- Interrupt an unresponsive system

#### **Module 9 - Using GRUB**

- Introduction to GRUB
- Influencing boot behavior with GRUB

#### **Module 10 - Performing Boot and Shutdown Procedures**

- Describe the features of the Service Management Facility
- Identify run level fundamentals
- Compare run levels and SMF milestones
- Identify the phases of the boot process
- Use SMF administrative commands
- Control boot processes
- Perform system shutdown procedures

#### **Module 11 - Performing User Administration**

- Describe user administration fundamentals
- Manage user accounts
- Manage initialization files

#### **Module 12 - Introducing System Security**

- Monitor system access
- Switch users on a system
- Control system access
- Restrict access to data in files

### Module 13 - Configuring and Using Printer Services

- Identify network printing fundamentals
- Configure printer services
- Administer printer services
- Start and stop the line printer (LP) print service
- Specify a destination printer
- Use the LP print service

### Module 14 - Controlling System Processes

- View system processes
- Kill frozen processes
- Schedule an automatic one-time execution of a command
- Schedule an automatic recurring execution of a command

### Module 15 - Performing File System Backups

- Identify the fundamentals of backups
- Back up an unmounted file system

### Module 16 - Performing File System Restores

- Restore ufs file systems
- Explain disaster recovery fundamentals

### Module 17 - Backing Up a Mounted File System With a UFS Snapshot

- Create a UFS snapshot
- Back up the snapshot file

## System Administration for the Solaris 10 Operating System (Part 2)

Course Code: SA-202-S10

Exam Code: CX-310-202

### 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 - Introducing Sun Connection Services

- Describe signed packages and patches
- Introduce Sun Connection
- Describe Sun Connection modes
- Using Update Manager
- Installing updates with Update Manager
- Administering patches from the command line

### 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 the NFS distributed file system
- Manage an NFS server
- Manage an 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 RAID
- Describe Solaris Volume Manager software concepts

## Module 9 - Configuring Solaris Volume Manager Software

- Describe Solaris Volume Manager software concepts
- Build a RAID-0 (concatenated) volume
- Build a RAID-1 (mirror) volume for the root (/) file system

## Module 10 - 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 11 - 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 12 - Using Name Services

- Describe the name service concept
- Describe the name service switch file /etc/nsswitch.conf
- Describe the name service cache daemon (nscd)
- Get name service information

## Module 13 - Configuring Name Service Clients

- Configure a DNS client
- Configure an LDAP client

## Module 14 - 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 15 - Introduction to Zones

- Identify the different zones features
- Understand how and why zone partitioning is used
- Configure zones
- Install zones
- Boot zones

### Module 16 - Introduction to the ZFS File System

- Describe ZFS and its related terms
- Understand components of a storage pool
- Create and destroy storage pools
- Query storage pool status
- Create and destroy ZFS file systems
- Manage ZFS properties
- Mount and unmount ZFS file systems
- Work with snapshots and clones
- Use ZFS datasets with Solaris zones