

# System Administration for the Solaris 10 Operating System Part 1

(SA-200-S10, 5 days)

New Y2010 outline

## Course Description

The System Administration for the Solaris 10 Operating System, Part 1 course gets you further engaged with the most efficient, secure, and reliable operating system ever built. This course gives you direct experience with the most essential system administration tasks in the Solaris 10 OS. You will be instructed in crucial system management skills including: describing the Solaris 10 OS directory hierarchy, managing local disk devices and interface configurations, managing UFS and ZFS file systems, performing mounts and unmounts, installing and removing Solaris packages and patches, and performing system boot procedures. The course also covers user administration, controlling system processes, and performing installation and upgrades. This course is the first of a two-part series that helps you to prepare for Part I of the Sun Certified System Administration for Solaris OS examination.

LAB INFORMATION: The hands-on labs offered in this course may involve accessing equipment that resides at a location other than where the training is delivered.

## Who Can Benefit

Students who can benefit from this course include system administrators who are preparing to perform essential system administration procedures in the Solaris OS.

## Required Prerequisites:

- Perform basic UNIX tasks
- Understand basic UNIX commands
- Use the vi text editor
- Interact with a windowing system
- Solaris 10 Operating System Essentials (SA-100-S10)

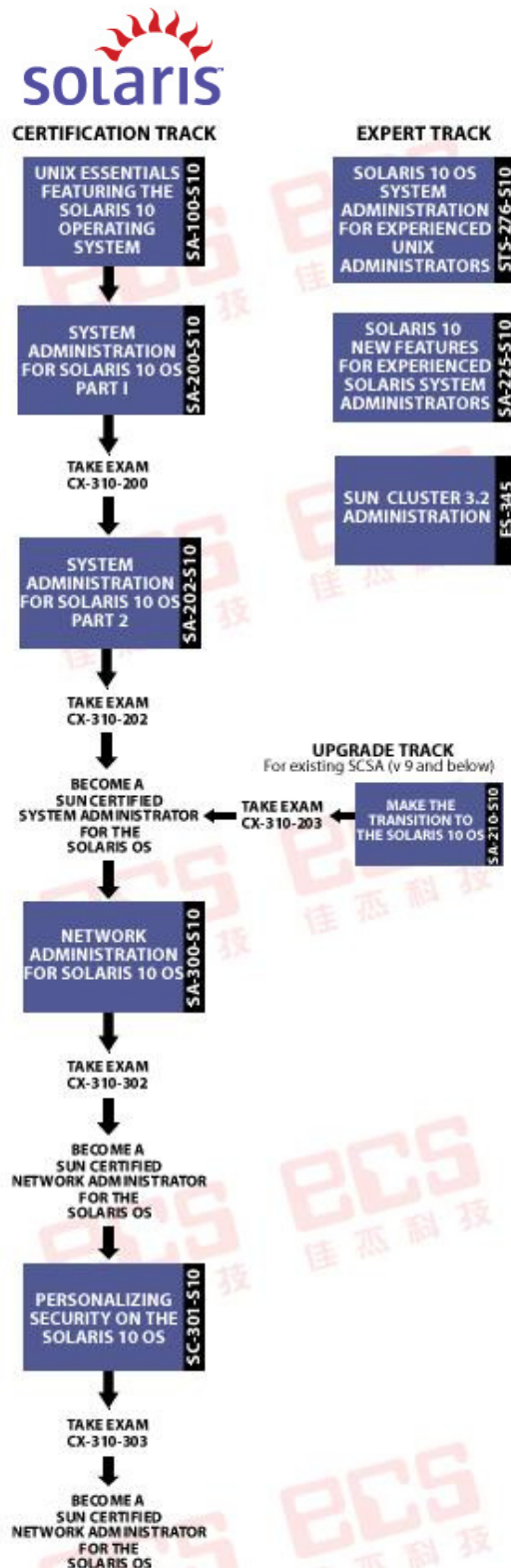
## Skills Gained

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

- Manage disk drives
- Manage interface configurations
- Manage file systems
- Perform mounts and unmounts
- Manage packages and patches
- Perform system boot procedures
- Perform user administration
- Manage system processes
- Install software and upgrades

## Suggested Next Courses:

- System Administration for the Solaris 10 OS Part 2 (SA-202-S10)



## REGISTRATION AND INFORMATION

[education@ecs.com.sg](mailto:education@ecs.com.sg)  
[www.ecs.com.sg/training](http://www.ecs.com.sg/training)

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## Course Topics

### 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
- Manage disk labels
- Describe the naming conventions for devices
- Describe support for iSCSI target devices
- List system devices
- Reconfigure devices
- Perform hard disk partitioning
- Describe EFI disk labels

### Module 3 - Describing Interface Configurations

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

### Module 4 - Managing Solaris OS UFS File Systems

- Identify disk-based, distributed, and pseudo file systems in the Solaris OS
- Describe Solaris OS UFS file systems
- Create a new UFS file system
- Check a file system using the fsck command
- Resolve file system inconsistencies
- Monitor file system use

### Module 5 - Introduction to the ZFS File System

- Understand ZFS terminology
- Describe the Solaris ZFS file system
- Create new ZFS pools and file systems
- Modify ZFS file system properties
- Destroy ZFS pools and file systems
- Work with ZFS snapshots and clones

### Module 6 - Performing Mounts and Unmounts

- Identify mounting basics
- Perform mounts
- Mount ZFS file systems
- Perform unmounts
- Repair important files if boot fails
- Access a mounted diskette, CD-ROM, or DVD
- Restrict access to a mounted diskette, CD-ROM, or DVD
- Access a diskette, CD-ROM, or DVD without volume management (vold)

### Module 7 - Performing Solaris 10 OS Package Administration

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

### Module 8 - Managing Software Patches on the Solaris 10 OS

- Describe patch administration fundamentals
- Describe patch administration best practices
- Obtain patches using SunSolve
- Install and remove patches
- Install recommended patch clusters
- Implement patch management using smpatch command-line

### Module 9 - Using Boot PROM Commands

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

### Module 10 - Using the Grand Unified Bootloader

- Discuss the purpose of the Grand Unified Bootloader (GRUB)
- Describe GRUB terminology and basic functions
- Modify x86 system boot behavior in the Solaris OS
- Use the eeprom command
- Use the kernel command
- Use the findroot command
- Describe and manage GRUB boot archives
- Boot a system in the GRUB-based boot environment
- Interrupt an unresponsive system

### Module 11 - Performing Legacy Boot and Shutdown Procedures

- Describe the Solaris SPARC boot design
- Identify boot process phases
- Identify run level fundamentals
- Control boot processes
- Perform system shutdown procedures

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## Module 12 - Service Management Facility

- Describe the Service Management Facility (SMF) features
- Compare run levels and SMF milestones
- Use SMF administrative commands

## Module 13 - Performing User Administration

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

## 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 - Installation and Upgrades

- Identify hardware requirements for Solaris 10 OS installation
- Identify the fundamentals of the Solaris 10 OS installations
- Identify the Solaris 10 OS software components
- Define guidelines to install the Solaris 10 OS from a DVD
- Describe the Secure by Default installation enhancement