

Course Description: Students are prepared to install and maintain a local-area network of Sun workstations running the Solaris operating system. Students learn how to install software for a server, how to add devices, how to configure the client server environment, how to add terminals, and how to configure the NIS+ name service.

Who Should Attend: This course is for those Solaris users who are tasked with System Administration responsibilities or anybody who wishes to gain an in depth practical knowledge of Solaris System Administration.

Prerequisites: Students should be able to use OpenWindows, edit files with either vi or the text editor, use fundamental UNIX commands, and have had three months or more experience with a Solaris system.

Benefits of Attendance: Upon completion of this course, students will be able to:

- Custom install a Solaris server.
- Use the Solaris device naming conventions.
- Use the format Utility to display partition information.
- Change system run levels.
- Add startup files for customized services.
- Install and remove software packages.
- Add peripheral devices such as terminals and modems.
- Administer disks and file systems.
- Configure the NFS.
- Use the automounter.
- Add and remove diskless clients.
- Backup and restore file systems.
- Perform basic recovery and troubleshooting procedures.
- Use scripts to configure and administer the NIS+ environment.

Course Outline:

Introduction To UNIX

The history of UNIX
Kernel
Shell
File System
The network
Distributed processing

Client/Server Model

Time sharing vs. Central vs. Distributed
Configurations

Installing The Operating System

Introduction
Client/Server relationship
Solaris Installation Options
Hardware Requirements
Installation
Booting with the CD-ROM
Configuring the workstation
File Systems
The final states
The root password

The Boot Process

SPARC bootstrap procedure
/sbin/init Process
Run control scripts
The start files
The kill files
Adding a new run control file
Disabling a run control file

Changing Run Levels

Changing run levels
shutdown command
init command
halt command
reboot command

Reconfiguring The Kernel

The kernel
/kernel directory
/platform directory
/usr/kernel directory
/etc/system file
Kernel parameters

Device Configuration And Naming

About device drivers
physical device names
logical device names
instance device names
dmesg Command
format Command

prtconf Command

Configuring A Local File System

Disk terminology
Disk slices
format Utility
partition menu
Viewing the VTOC
mounting a file system

Configuring A Network File System

About NFS
NFS Server tasks
sharing and unsharing the file system
NFS Server daemons
NFS Client tasks
mounting and unmounting
NFS Client daemons

Configuring The Automounter

The Automounter
The automount command
The autofs filesystem
The automountd daemon
Master map
Direct map
Indirect map

Volume Manager

Volume Management
Access to diskettes
Access to CDs
The vold daemon
The /etc/vold.conf file

Backup And Recovery

Backups
The ufsdump command
Incremental backups
The ufsrestore command
Other archiving commands

Software Administration

Software administration
How is a package added?
Verification of a package
How to remove a package
Admintool

Device Administration

Peripherals
Adding a new device
Serial ports
DTE and DCE
Hard and soft carrier

Modems

The Service Access Facility

Services and SAF
Serial port managers
Setting up terminals with admintool
Setting up terminals with Solstice AdminSuite
The sacadm command
The tyadm command
The pmadm command

Security

Common sense rules to security
Restricted shells
User status
Restricted root access
The /etc/default/su file
Automated Security Enhancement Tool
ASET security
ASET tasks
ASET reports
ASET master files
The aset command

The NIS/NIS+ Environment

The Domain Name Service
What is the Network Information Service
NIS maps
What is NIS?
NIS and NIS+ working together

Setting Up Nis

Setting up the NIS root master
Setting up a NIS client
Additional NIS+ commands