

Advanced System Administration For the Solaris 9 Operating Environment

Course Outline

Advanced Installation

- Performing a Flash Installation
 - Describe a Flash install
 - Manipulate a flash archive
 - Using a flash archive for installation
- Setting up an AutoClient Server
- Adding AutoClient Support
- How an AutoClient System Works
- Setting up the AutoClient Server
- Adding AutoClients to the Server
- Booting an AutoClient System
- Patching an AutoClient System

JumpStart

- Overview
- Preparing a Custom Jumpstart Installation
- What Happens During a Custom JumpStart Installation
- Setting up the Server
- Setting up the Install Server
- Setting up the Boot Server
- The rules File
 - Validating the rules File
 - Begin and Finish Scripts
- Creating Profiles
 - Profile Keywords
 - Testing the profile
- Example Jumpstart Installation

Role Based Access Control (RBAC)

- Describe RBAC fundamentals
- Overview of Roles
 - Authorizations
 - Rights profiles
- Using RBAC
 - Manage RBAC by using the Solaris Management Console
 - Manage RBAC by using the command line
- Describe RBAC components and their interaction within RBAC

The Solaris Management Console (SMC)

- Describe the function of the Solaris Management Console
 - SMC tools
 - SMC commands
- The SMC Toolbox
- Using SMC
- Customizing the SMC

Configuring Access Control Lists (ACL's)

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

Device Administration

- Device Drivers

- Physical Device names
- Device Auto-Configuration
- Instance names
- Major and Minor Device numbers
- Logical Device names
- Meta devices
- Hardware Terminology
 - Ports
 - Terminals
 - Modems
 - Cabling
- Software Terminology
 - Service Access Controller (SAC)
 - Port Monitors
 - ttymon
 - listen
 - Port Monitor Tag (pmtag)
 - Service Tag (svctag)
 - Administering Terminals, Modems, and Ports
 - Adding a Modem Through the Admintool
 - Service Access Facility (SAF)
 - sacadm
 - pmadm
 - ttyadm
 - nlsadmin
- Setting Up Modems and Terminals by Using SAF
- Adding a Terminal to a serial connection

Managing SWAP Space

- Describe swap and virtual memory concepts
- Configure and manage swap space

Managing Crash Dumps and Core Files

- Manage crash dump behavior
- Manage core file behavior

Using the Solaris Volume Manager Software

- Describe redundant array of independent disks (RAID)
 - Define each RAID configuration and where they are applicable
- Describe Solaris Volume Manager software concepts
- Use the SVM utilities to configure disks
 - Distribute the state database replicas
 - Build a mirror of the root (/) file system

Networking

- Network Fundamentals
 - Network Topologies
 - Network Protocols
 - Network Hardware
- Configuring and Monitoring network interfaces
- Planning the Network
- Setting Up the Network
 - /etc/hostname.interface
 - /etc/nodename
 - /etc/defaultdomain
 - /etc/inet/hosts
- Network Security Files
- The secure shell

- IP Addressing
- Name Service
- TCP/IP Commands (ie. telnet, ssh, rlogin, rcp, rsh, rexec, ftp, rwho, finger)
- Network Maintenance

The NFS Environment

- Servers and Clients
- The benefits of NFS on Solaris
- NFS Daemons
- Setting up NFS
- NFS Security
- NFS logging
- Mounting a Remote File System
- WebNFS
 - How to Enable WebNFS Access
 - Using a Browser to Access an NFS URL
- Describe the fundamentals of the AutoFS file system
 - AutoFS Maps
 - Master Map
 - Direct Map
 - Indirect Map
 - When to use Automount

Name Services

- Describe the Name Service concept
 - Local files vs. A naming service
- Structure of the NIS Network
 - Server, slaves, and clients
- Information Managed by NIS
- Planning your NIS Domain
- Configuring an NIS Master Server
 - Creating the Master passwd File
 - Creating the Master group File
 - Creating the Master hosts File
 - Other Source Files
 - Preparing the Makefile
- Setting Up the Master Server With ypinit
- Starting and Stopping NIS on the Master Server
- Name Service Switch
 - Setting up NIS Clients
 - Setting Up NIS Slave Servers
- NIS+
 - Hierarchical Namespace
 - NIS+ Tables
 - NIS+ Security
 - Authentication
 - Authorization
- DNS
 - Configuring the DNS client
- LDAP
 - iPlanet Directory Server
 - Setting up the LDAP client

Configuring System Messaging

- Describe the fundamentals of the syslog function
 - Important system log files
 - Configure syslog messaging
- Using the Solaris Management Console log viewer
- Monitoring Users and System Usage

Monitoring loggins

Describe the trusted host

/etc/hosts.equiv

.rhosts

Securing and restricting super user access

RBAC

SUDU

ASET

Other security issues

Monitoring System Performance

Using Solaris tools to monitor system and network performance

Solaris 9 performance measuring tools to monitor:

CPU

Disk I/O

RAM and SWAP

Overview of the Solaris Certified System Administrator Certification Process

Why become certified?

Overview of the testing process

How to prepare for the 310-015 exam

What to expect on the exams

Each Student will receive a complimentary UnixEd Practice Exam - 310-015A