

## Solaris 8 System Administration 2

### Detailed Course Outline

#### **Introducing the Client-Server Relationship**

- Describe the client-server computing model within the Solaris 8 Operating Environment
- Describe network capabilities

#### **Introducing the Solaris Network Environment**

- Describe the function of the network models
- Define the layers of the network models
- Compare and contrast the seven-layer International Organization for Standards/Open System Interconnect (ISO/OSI) model to the five-layer Transmission Control Protocol/Internet Protocol (TCP/IP) model
- Identify which protocols fit at each layer, and briefly define the protocols
- Use block diagrams to depict encapsulation and de-encapsulation
- Demonstrate knowledge of how host names, IP addresses, and media access control (MAC) addresses are interrelated
- List the current system configuration using the `ifconfig -a` command
- Monitor for network activity using the `netstat -i` command and the `snoop -a` command

#### **syslog**

- Define the function of the `syslogd` daemon
- Configure the `/etc/syslog.conf` file to define where to log events
- Extract information from the `/etc/syslog.conf` file to identify the facility and level of events that are logged by the system
- Modify the configuration file to reroute logs to an alternate location
- Parse messages to `syslog`

#### **Introducing Disk Management**

- List the three utilities used to create, check, and mount file systems
- Identify the physical path name differences between physical disks and virtual disks
- List the potential advantages of any virtual disk management application
- List the basic difference between Solstice DiskSuite and Sun StorEdge Volume Manager
- List the main advantages of using a concatenated virtual file system
- List the main advantage of using a striped virtual file system
- Install and configure the Solstice DiskSuite applications

#### **Solaris Pseudo File Systems and Swap Space**

- List Solaris random access memory (RAM) -based file systems
- Create and add a swap file to the swap space
- Remove a swap file

#### **NFS**

- Describe the functions of an NFS server and an NFS client
- List the three conditions that must be met before sharing files in the NFS environment
- Make resources available and unavailable for mounting
- Provide read and write Internet access to an NFS resource through a Web browser
- Enable the sharing of resources by editing the `/etc/dfs/dfstab` file on an NFS server
- Display server resources that are available for mounting
- Mount a resource from another system
- Use the `/etc/vfstab` file to mount resources on an NFS client
- Describe the function of these commands: `mountall`, `umountall`, `shareall`, and `unshareall`

### **AutoFS**

- Describe three benefits of using the `automount` command
- Describe the purpose of each `automount` map type
- Set up `automount` to read a direct map
- Describe when the `automountd` daemon should be restarted

### **CacheFS File Systems**

- Describe the native characteristics of the CacheFS file system
- Collect CacheFS file system statistics
- Perform CacheFS file system consistency checks
- Configure CacheFS file system logging

### **Solaris Management Console**

- List the capabilities of the Solaris Management Console
- Use the Solaris Management Console Editor to modify server toolboxes
- Add legacy applications, such as command-line interfaces, X applications, and Hypertext Markup Language (HTML) to the Solaris Management Console using the Solaris Management Console Editor
- Demonstrate the use of the Solaris management applications using the Solaris Management Console

### **Role-Based Access Control**

- Build an association between users and roles with authorizations and execution profiles
- Define authorizations and their attributes
- List a profile's assigned authorizations
- Define the privileged operations that are assigned to a profile
- Identify help files that are associated with profiles and authorizations
- Configure a user's execution profile to allow access to a specified subset of system administrator privileges

### **Naming Services Overview**

- Explain the name service concept

- List the name services available
- Describe the DNS
- Describe NIS service
- Describe the function of NIS+
- List the table objectives of a NIS+ domain
- Differentiate between directory services and name services
- Explain the name service switch process and state which configuration is appropriate for a given network scenario

### **Network Information System**

- Describe the NIS components, master server, slave server, and client
- Match selected NIS processes to their respective yp daemons
- Demonstrate understanding of the structure of the make utility and makefile
- Configure a NIS master, slave, and client
- Access and test the NIS service
- Add custom maps to the existing NIS configuration
- Demonstrate adding and removing slave servers
- Delineate the steps required to change the NIS master
- Move source files from /etc to /etc/nis

### **JumpStart Automatic Installation**

- Describe the features of JumpStart
- List the main components for setting up a network to use automatic installation
- Set up the network to automatically provide the information necessary to configure a system
- Create an install server on the network
- Create a boot server on a subnet
- Create a configuration directory with a customized rules file and class files
- Add install clients to install servers and boot servers
- Boot install clients

### **Monitoring and Tuning System and Network Performance**

- Concepts in performance monitoring
- Tools to monitor your system's performance
- Tuning the kernel

### **Overview of the Solaris Certified System Administrator Certification Process**

Why become certified?

Overview of the testing process

How to prepare for the 310-012 exam

What to expect on the exams

**Each Student will receive a complimentary UnixEd Practice Exam - 310-012A**