



## UXS-104: Solaris™ 11 Administration Part 2

### Course Details

**Course Code:** UXS-104

**Duration:** 2 days

#### Notes:

- This course syllabus should be used to determine whether the course is appropriate for the students, based on their current skills and technical training needs.
- Course content, prices, and availability are subject to change without notice.
- Terms and Conditions apply

*Elements of this syllabus are subject to change.*

#### About this course

This two-day course is designed to cover the essential network administration tasks confronting today's Sun network systems administrators and is an extension to the Solaris 11 System Administration (Part 1) course which covers all the non-network issues. This course covers networking from initial connection through basic commands, security, monitoring and up to Network File System (NFS) and the Network Information Service (NIS+), with full hands-on experience at all stages. The use of the Admintool and Adminsuite visual tools is included.

#### Course Objective

To take trainees who have completed the Solaris 11 System Administration (Part 1) course and add network administration knowledge to their portfolio.

#### Prerequisites

Knowledge of Solaris up to a level taught in the Introduction to Solaris and Solaris 11 System Administration (Part 1) courses is important.

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### **Introduction to Ethernet and Networking**

Overview. Simplest Ethernet. Ethernet options. The ISO/OSI 7 layer model.

### **The IP network.**

IP addresses, sockets and ports, multicast addresses. Hardware requirements/options. Twisted pair & fibre optic. Facts and Figures. Troubleshooting.

### **Network Configuration**

Client/server concepts, processes and control. Configuring a machines IPv4 interfaces manually for network connection. Understanding Internet Address classes and formulating Internet addresses. Configuring logical interfaces. Multipathing configuration and operation. Configuring an Internetwork Router. Examples of route commands for manual routing. in.routed for dynamic routing. Subnets and netmasks. Network basic commands and the associated security files. Running GUI programs using X-Windows facilities. Network daemons. Inetd. The /etc/inetd.conf file. Network Monitoring utilities (snoop, netstat, traceroute, etc)

### **Network File System (NFS) and AutoFS**

Overview. Benefits and uses of NFS. NFS Installation. NFS Administration. Sharing file systems. The mount command. NFS security. NFS logging. NFS strategies. Introduction and basic use of the automounter (AutoFS). Using SMC with NFS.

### **SAMBA Server Overview**

A brief overview of this powerful and impressive free open-source server now included with Solaris 11, which effectively turns a Solaris machine (or other UNIX/Linux machine) into a Windows NT server. A working SAMBA installation will be created, with graphical configuration using swat via a web browser.

### **Overview of Solaris name services**

NIS. NIS+, LDAP and DNS - how they work, advantages and disadvantages of each. The Name Service Switch and /etc/nsswitch.conf. The Name Service Cache Daemon (nscd).

### **Network Information Service (NIS)**

Introduction. Creating a fully-functioning NIS service. Using the ypinit command to create Master and Slave servers. Updating the NIS information from the command line. Using SMC

with NIS to manage users, groups and hosts. Adding NIS clients. NIS file policies. Creating and using netgroups with /etc/netgroup. Adding your own data to NIS. Modifying the NIS Makefile. Disabling NIS.

### **DNS and LDAP clients**

Configuring clients to use DNS and LDAP name services.

### **Introduction to the Apache web server**

Major Components. Browser invocation and configuration. Apache Web Server installation and activation. Installing a custom web site. Enabling the Jakarta Tomcat java facility. Examples of common Apache configuration directives.

### **Setting up Electronic Mail**

Overview. How to use mail. Mail routing. Files and programs involved. Setting up mail - local network. Name Service considerations. Using NFS to mount mail boxes. Testing mail delivery. Mail aliases. External links and connecting to the Internet.