

## Network Administration for the Oracle Solaris 10 Operating System

**Duration:** 5 Days

### What you will learn

The Network Administration for the Oracle Solaris 10 Operating System course provides students with the knowledge and skills necessary to perform network administration tasks, such as configuration and troubleshooting of a local area network (LAN). This course also provides hands-on experience with topics, such as Internet Protocol (IP) routing, Domain Name System (DNS), Dynamic Host Configuration Protocol (DHCP), IP version 6 (IPv6) and the Solaris IP Filter firewall.

### Learn To:

Configure and manage network applications

Configure the Data Link layer

Configure the Internet and Transport layers

### Audience

Administrator

Network Administrator

System Administrator

### Related Training

#### *Required Prerequisites*

Install, configure, and maintain an Oracle Solaris server

Change system run levels

Read and edit system resource files

System Administration for the Oracle Solaris 10 OS Part 1

System Administration for the Oracle Solaris 10 OS, Part 2

### Course Objectives

Configure the Network Interface layer

Configure the network (Internet and Transport layers)

Configure and manage network applications

## Course Topics

### Introduction

- Overview
- Course Goals
- Course Agenda
- Introduction
- Your Learning Center

### Introducing the TCP/IP Model

- Introducing Network Model Fundamentals
- Introducing the Layers of the TCP/IP Model
- Describing Basic Peer-to-Peer Communication
- TCP/IP Protocols

### Introducing LANs and Their Components

- Introducing Network Topologies
- Introducing LAN Media
- Introducing Network Devices

### Describing Ethernet Interfaces

- Introducing Ethernet Concepts
- Using Network Utilities

### Describing ARP and RARP

- Introducing ARP
- Introducing RARP

### Configuring Internet Protocol

- Introducing Internet Layer Protocols
- Introducing the IP Datagram
- Introducing the IP Address Types
- Introducing Subnetting and VLSM
- Exploring Interface Configuration Files
- Administering Logical Interfaces

### Configuring IP Network Multipathing

- Increasing Network Availability
- Configuring IP Network Multipathing

### Configuring Routing

- Identifying the Fundamentals of Routing
- Introducing the Routing Table
- Introducing Routing Protocol Types
- Working With the Routing Table
- Configuring Static Routes
- Configuring Dynamic Routing
- Introducing Classless Inter-Domain Routing (CIDR)
- Configuring Routing at Boot Time

### Configuring IPv6

- Describing IPv6

- Describing IPv6 Addressing
- Describing IPv6 Autoconfiguration
- Describing the IPv6 Unicast Address Types
- Describing IPv6 Multicast Address Types
- Enabling IPv6
- Configuring IPv6 6to4 Router
- Managing IPv6

### **Describing the Transport Layer**

- Introducing Transport Layer Fundamentals
- Introducing UDP
- Introducing SCTP
- Introducing TCP
- Introducing TCP Flow Control
- Introducing Secure by Default

### **Configuring DNS**

- Introducing DNS Basics
- Configuring a DNS Server
- Troubleshooting a DNS Server by Using Basic Utilities

### **Configuring DHCP**

- Fundamentals of DHCP
- Configuring a DHCP Server
- Configuring and Managing DHCP Clients
- Troubleshooting a DHCP Server
- Troubleshooting a DHCP Client

### **Configuring NTP**

- Identifying the Fundamentals of NTP
- Configuring an NTP Server
- Configuring an NTP Client
- Troubleshooting NTP

### **Configuring the Solaris IP Filter Firewall**

- Identifying the Solaris IP Filter Firewall Basics
- Configuring the Behavior of the Solaris IP Filter Firewall