

# Network Administration for the Solaris 9 Operating System (SA-399)

## Product Description

### Product Outline/Details

The Network Administration for the Solaris 9 Operating System (Solaris OS) 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) and IP version 6 (IPv6).

<i>Product ID:</i> <b>SA-399</b>	<i>Duration:</i> <b>5 days</b>	<i>Price:</i> <b>\$3000.00</b>
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## Who Can Benefit

Experienced system administrators who are or will be responsible for administering Sun systems in a networked environment that includes LANs and the Solaris OS.

## Prerequisites

**To succeed fully in this course, students should be able to:**

- Install, configure, and maintain a Solaris OS product line server
- Change system run levels
- Read and edit system resource files

## Skills Gained

**Upon completion of this course, you should be able to:**

- Configure routing and routing tables
- Configure subnet masks, including variable length masks
- Configure DHCP clients and servers
- Configure DNS
- Configure a Network Time Protocol (NTP) server and client
- Configure a system as an IPv6 host or router
- Configure IPv6-over-IPv4 tunnels
- Troubleshoot network problems

## Related Courses

- **Before:** SA-299: Advanced System Administration for the Solaris 9 Operating System
- **After:** SA-400: Solaris System Performance Management
- **After:** SC-300: Administering Security on Solaris 8 Operating System
- **After:** IN-350: LDAP Design and Deployment

## Course Content

### Module 1 - Introducing the TCP/IP Model

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- Describe network model fundamentals
  - Describe the layers of the TCP/IP model
  - Describe basic peer-to-peer communication and related protocols

## **Module 2 - Introducing LANs and Their Components**

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- Describe network topologies
- Describe LAN media
- Describe network devices

## **Module 3 - Describing Ethernet Interfaces**

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- Describe Ethernet concepts
- Describe Ethernet frames
- Use network utilities

## **Module 4 - Describing ARP and RARP**

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- Describe ARP
- Describe RARP

## **Module 5 - Configuring IP**

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- Describe the Internet layer protocols
- Describe the IP datagram
- Describe IP address types
- Describe subnetting and VLSMs
- Describe the interface configuration files
- Administer logical interfaces

## **Module 6 - Configuring Multipathing**

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- Increase network throughput and availability
- Implement multipathing

## **Module 7 - Configuring Routing**

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- Identify the fundamentals of routing
- Describe route table population
- Describe routing protocol types
- Describe the route table
- Configure static routing
- Configure dynamic routing
- Describe classless inter-domain routing (CIDR)
- Configure boot time routing
- Troubleshoot routing

## **Module 8 - Configuring IPv6**

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- Describe IPv6
- Describe IPv6 addressing
- Describe IPv6 autoconfiguration
- Describe IPv6 unicast address types
- Describe IPv6 multicast address types
- Enable IPv6
- Manage IPv6
- Configure IPv6-over-IPv4 tunnels
- Configure IPv6 multipathing

## **Module 9 - Describing the Transport Layer**

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- Describe Transport layer fundamentals
- Describe UDP
- Describe TCP
- Describe TCP flow control

## **Module 10 - Configuring DNS**

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- Describe the DNS basics
- Configure the DNS server
- Troubleshoot the DNS server using basic utilities

## **Module 11 - Configuring DHCP**

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- Describe the fundamentals of DHCP
- Configure a DHCP server
- Configure and manage DHCP clients
- Configure for dynamic DNS
- Configure a DHCP server to support JumpStart clients

## **Module 12 - Configuring NTP**

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- Identify NTP basics
- Configure an NTP server
- Configure an NTP client
- Troubleshoot NTP