QUICKSTART

Over 35 Years Of Technology Training

Document Generated: 12/08/2025

Learning Style: Virtual Classroom

Technology:

Difficulty: Beginner

Course Duration: 5 Days

Enterprise Linux Network Services (L-275)

About This Course:

This beginner level 5 day course has been designed to help students understand and gain practical experience with a variety of aspects of the installation, configuration, implementation, and troubleshooting of network services. As the course progresses, students will be introduced to the most widely used Unix and Linux network services including email services such as Simple Mail Transfer Protocol, Internet Message Access Protocol, and Post Office Protocol.

Being a comprehensive introductory course, students will also be introduced to web and Windows networking services among others including FTP, SMB, DNS, and LDAP. Additionally, students will also be taught how to troubleshoot and administer the network services mentioned, making the Enterprise Linux Network Services course ideal for IT ops training.

Course Objectives:

- Name resolution on networks through BIND and DNS configuration

- OpenLDAP directory service configuration

- HTTP and HTTPS traffic management through Apache web server configuration

- Squid proxy service configuration

- Filtering spam and sendmail configuration for email server clients

- Windows shared printer and folder access management through Samba configuration

Audience:

This course is intended for

- Network administrators dealing with Linux network services

- Students interested in Linux network service installation, configuration, and troubleshooting

Prerequisites:

- Understanding, familiarity, and experience with Linux and Unix concepts

- Knowledge and experience with Linux process management, filesystem, and file manipulation

- Understanding and experience with networking protocols

- Completion of or knowledge regarding the concepts and skills taught in the Introduction to Linux Operating System and Enterprise Linux Systems Administration courses

Course Outline:

DAY 1

- DNS history and theory
- The domain name space
- Delegation and Zones
- Resolving names and reverse lookups
- Configuring BIND named.conf
- Configuring BIND zones
- DNS heirarchies: subdomain delegation
- Securing BIND DNS
- BIND 9 Views
- Restricting queries
- Restricting zone transfers
- DDNS and nsupdate

DAY 2

- LDAP Directory services
- LDAP Schema
- Referenceing LDAP entries
- LDAP security
- Implementing OpenLDAP server
- Defining global parameters
- Restricting access
- Database configuration and indexing
- Querying LDAP databases
- HTTP theory
- Apache history and status
- Apache architecture
- Apache configuration files
- Using Apache modules

DAY 3

- Apache logs and analysis
- Apache virtual hosting
- Virtual host security issues
- Apache authentication
- Intro to cryptography
- Using HTTPS with Apache
- Dynamic content

- Extending Apache with PHP and Tomcat
- Dynamic content and security
- Implementing FTP services

DAY 4

- Configuring a squid proxy
- Squid ACLs, and hierarchies
- Bandwidth metering and monitoring
- Samba 3 foundation
- SMB protocol theory
- NetBIOS and NetBEUI
- NetBIOS naming
- SMB shares with Samba
- Mounting SMB shares on Linux
- Password encryption issues

DAY 5

- SMTP theory
- Implementing SMTP with Sendmail
- Sendmail configuration
- Sendmail ESMTP AUTH and encryption
- Implementing SMTP with Postfix
- Postfix configuration
- Postfix ESMTP AUTH and encryption
- Email services: POP3 and IMAP4
- Encrypting client access
- Spam and virus filtering
- Web mail client access

[Return to Top](#)