

# RH253 Training Class Content

## Unit 1: Introduction to System Services

- · Service Management
- · Types of Services
- · Fault Analysis
- · SELinux control and contexts
- · Hands-on lab: Introduction to System Services

## Unit 2: Securing Networks

- · Packet Filtering Capabilities
- · Netfilter Architecture
- · Chain Operations
- · Connection Tracking
- · Network Address Translation (NAT)
- · Hands-on lab: Securing Networks

## Unit 3: Organizing Networked Systems

- · DNS Basics
- · Internet DNS Hierarchy
- · Name Server Hierarchy
- · Berkeley Internet Name Domain (BIND)
- · Chrooted BIND
- · rndc
- · Zone Files
- · Delegating Subdomains
- · BIND Syntax Utilities
- · Advanced BIND features
- · Configuring the DHCP server
- · Hands-on lab: Organizing Networked Systems

## Unit 4: Network File Sharing Services

- · Configuring NFS services
- · Configuring FTP services
- · Samba Services
- · Hands-on lab: Network File Sharing Services

## Unit 5: Electronic Mail Services

- · Operational Overview
- · Security and "Anti-Spam" Features
- · sendmail Configuration with the m4 Macro Language
- · sendmail Client Configuration
- · Debugging sendmail
- · Postfix
- · Configuring postfix
- · Additional postfix Configuration

- · Hands-on lab: Electronic Mail Services

### **Unit 6: The HTTP Service**

- · Apache Features
- · Apache Server Configuration
- · Virtual Hosts
- · Apache Namespace Configuration
- · Using .htaccess Files
- · CGI
- · Apache Encrypted Web Server
- · Squid Web Proxy Cache
- · Hands-on lab: The HTTP Service

### **Unit 7: Security Concerns and Policy**

- · Definitions of Security
- · Basic Network Security
- · Diagnostic Utilities
- · Remote Service Detection
- · Security Policy
- · Response Strategies and Resources
- · Hands-on lab: Security Concerns and Policy

### **Unit 8: Authentication Services**

- · Authentication and Account Basics
- · PAM Operation
- · Core PAM Modules
- · Authentication Modules
- · Password Security
- · Authentication Troubleshooting
- · NIS Server Configuration
- · NIS Client Configuration
- · NIS Troubleshooting
- · Hands-on lab: Authentication Services

### **Unit 9: System Monitoring**

- · Introduction to System Monitoring
- · File System Analysis
- · System Log Files
- · syslogd and klogd configuration
- · Log File Analysis
- · Monitoring and Limiting Processes
- · System Activity Reporting
- · Hands-on lab: System Monitoring

### **Unit 10: Securing Services**

- · System V Startup Control

- · Securing the Service
- · tcp\_wrappers Configuration
- · xinetd Access Control
- · Advanced Security Options
- · Hands-on lab: Securing Services

### **Unit 11: Securing Data**

- · The Need For Encryption
- · Cryptographic Building Blocks
- · Symmetric Encryption
- · Asymmetric Encryption
- · Public Key Infrastructures
- · Digital Certificates
- · Generating Digital Certificates
- · OpenSSH Overview
- · OpenSSH Authentication
- · The OpenSSH server and clients
- · Protecting Your Keys
- · Hands-on lab: Securing Data