# **PRAGATHI TECHNOLOGIES**

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# Redhat Linux Administration (RH - 124)

# 1. Managing Files From the Command Line

- ➤ The Linux File System Hierarchy
- Practice : File System Hierarchy
- Locating Files by Name
- Practice : Locating Files and Directories
- ➤ Managing Files Using Command –Line Tools
- > Practice : Command -Line File Management
- Matching File Names Using Path Name Expansion
- > Practice : Path Name Expansion
- Lab: Managing Files with Shell Expansion

## 2. Getting Help in Red Hat Enterprise Linux

- Reading Documentation Using man Command
- Practice : Using the man Command
- Reading Documentation Using pinfo Command
- Practice : Using the pinfo Command
- Reading Documentation in/usr/share/doc
- Practice : Viewing Package Documentation
- Getting Help From Red Hat
- Practice : Creating and Viewing an SoS Report
- Lab: Viewing and Printing Help Documentation

## 3. Creating, Viewing, and Editing Text Files

- Redirecting Output to a File or Program
- Practice : I/O Redirection and Pipelines
- Editing Text Files From the Shell Prompt
- Practice : Editing Files with Vim
- > Editing Text Files with a Graphical Editor
- Practice : Copying Text Between Windows

Lab : Creating, Viewing, and Editing Text Files

# 4. Managing Local Linux Users and Groups

- Users and Groups
- Practice : User and Group Concepts
- Gaining: Super user Access
- Practice : Running Commands as root
- Managing Local User Accounts
- Practice : Creating Users Using Command –Line Tools
- Managing User Passwords
- Practice : Managing User Password Aging
- Lab: Managing Local Linux Users and Groups

# 5. Controlling Access to Files with Linux File System Permissions

- Linux File System Permissions
- Practice : Interpreting File and Directory Permissions
- Managing File System Permissions from the Command Line
- Practice : Managing File Security from the Command Line
- Managing Default Permissions and File Access
- Practice : Controlling New File Permissions and Ownership
- ➤ Lab: Controlling Access to Files with Linux File System Permissions

# **6. Monitoring and Managing Linux Processes**

- Processes
- Practice : Processes
- Controlling Jobs
- Practice : Background and Foreground Processes
- Killing Processes
- Practice : Killing Processes
- Monitoring Process Activity
- Practice : Monitoring Process Activity
- Lab: Monitoring and Managing Linux Processes

# 7. Controlling Services and Daemons

- Identifying Automatically Started System Processes
- Practice : Identify the Status of systemd Units
- Controlling System Services

- Practice : Using systemct1 to Manage Services
- Lab: Controlling Services and Daemons

# 8. Configuring and Securing OpenSSH Service

- Accessing the Remote Command Line with SSH
- Practice : Accessing the Remote Command Line
- Configuring SSH Key-Based Authentication
- Practice : Using SSH Key-Based Authentication
- Customizing SSH Service Configuration
- Practice : Restricting SSH Logins
- ➤ Lab: Configuring and Securing OpenSSH Service

## 9. Analyzing and Storing Logs

- System Log Architecture
- Practice : System Logging Components
- Reviewing Syslog Files
- Practice : Finding Log Entries
- Reviewing system Journal Entries
- Practice : Finding Events With journalctl
- Preserving the system Journal
- Practice : Configure a Persistent system Journal
- Maintaining Accurate Time
- Practice : Adjusting System Time
- Lab : Analyzing and Storing Logs

# 10. Managing Red Hat Enterprise Linux Networking

- Networking Concepts
- Practice : Networking Concepts
- Validating Network Configuration
- Practice : Examining Network Configuration
- Configuring Networking with nmcli
- Practice : Configuring Networking with nmcli
- Editing Network Configuration Files
- Practice : Editing Network Configuration Files
- Configuring Host Names and Name Resolution
- Practice : Configuring Host Names and Name Resolution
- Lab: Managing Red Hat Enterprise Linux Networking

## 11. Archiving and Copying Files Between Systems

- Managing Compressed tar Archives
- Practice : Backing Up and Restoring Files From a tar Archive
- Copying Files Between Systems Security
- Practice : Copying Files Over the Network with scp
- Synchronizing Files Between System Securely
- Practice : Synchronizing Two Directories Securely with rsync
- ➤ Lab: Archiving and Copying Files Between Systems

## 12. Installing and Updating Software Packages

- Attaching System to Subscription for Software Updates
- Practice : Red Hat Subscription Management
- > RPM Software Packages and Yum
- Practice : RPM Software Packages
- Managing Software Updates with yum
- Practice : Installing and Updating Software with yum
- > Enabling **yum** Software Repositories
- Examining RPM Package Files
- Practice : Working with RPM Package Files
- Lab: Installing and Updating Software Packages

# 13. Accessing Linux File Systems

- Identifying File Systems and Devices
- Practice : Identifying File Systems and Devices
- Mounting and Unmounting File Systems
- Practice : Mounting and Unmounting File Systems
- Making Links Between Files
- Practice : Making Links Between Files
- Locating Files on the System
- Practice : Locating Files on the System
- ➤ Lab: Accessing Linux File Systems

## 14. Using Virtualized Systems

- Managing a Local Virtualization Host
- > Practice: Managing a Local Virtualization Host
- Installing a New Virtual Machine
- Practice : Installing a New Virtual Machine