Red Hat System Administration I & II

Red Hat System Administration I

1: Accessing the Command Line

- Recognize the BASH shell based on the default prompt.
- Use Linux efficiently by switching between virtual consoles.
- Display usage messages and be able to interpret a command's syntax.

2: Managing Files from the Command Line

- Recognize and Find Familiarity in a File-system Tree,
- Learn Terms Like “root” Directory and Subdirectory.
- Introduction to Different types of Data in Separate System Directories.

3: Getting Help in Red Hat Enterprise Linux

- Learn “man” Terminology, Including Topics and Sections.
- Become Aware of The importance of less-noticed man sections.

4: Creating, Viewing and Editing Text Files

- Describe the Technical Terms Standard Output, and Standard Error. Use Redirection
Characters to Control Output to Files.
- Use Pipe to Control Output to Other Programs.

5: Manage Local Linux Users and Groups

- Explain the Role of Users and Groups on a Linux System and How They are understood by the Computer.

6: Controlling Access to Files with Linux File-system Permissions

 Explain How the Linux File Permissions Model Works.

7: Monitoring and Managing Linux Processes

 Learn the Processes Lifecycle, in Order to better Comprehend Process States.

8: Controlling Services and Daemons

 List System Daemons and Network Services Started by System services and Socket

9: Configuring And Securing Open-ssh Service

 Log into a Remote System Using ssh to Run Commands From a Shell Prompt.

10: Analyzing and Storing Logs

 Describe the Basic “syslog” Architecture in RHEL7

11: Managing RHEL Networking

 Explain Fundamental Concepts of Computer Networking.

12: Archiving and Copying Files between Systems

 To Create Backups and Transfer Files Over The Network..

13: Installing and Updating Software Packages

 Register System With Your Red Hat Account and Entitle Them to Software Updates
For Installed Products.

14: Accessing Linux File-systems

 Determine which Directories in the File-system Hierarchy are Stored on Which Storage
Devices.

15: Using Virtualized Systems

 Recognize the Consistent Use of KVM Architecture Throughout of Red Hat Product
Line.

16: Accessing the Command Line

Red Hat System Administration II

1: Automating Installation with Kickstart

- Explain Kickstart Concepts and Architecture
- Install and configure Linux using Kickstart

2: Using Regular Expressions with “grep”

- Create a Regular Expressions that match desired data.

3: Creating and Editing Text files with vim

- Explain the three main modes of “vim”.

4: Scheduling Future Linux Tasks

- Scheduling tasks using at and cron.

5: Managing Priority of Linux Processes

- Explain about Linux Processes and nice values.

6: Controlling Access to Files with Access Control Lists (ACL)

- Describe ACL's and file system mount options..

Managing SELinux Security

- Explain the Basics of Se-Linux permissions and Context Transitions.
- Display Current Se-Linux Modes.
- Correctly Interpret the Se-Linux Context of a File.
- Identify Current Se-Linux Boolean Settings.

Connecting to Network-Defined Users and Groups

 User authentication using centralized Identity Management Services.

Adding Disks, Partitions, and File Systems to a Linux System
 Create and Delete disk Partitions on disks with an MBR Partitioning Scheme Using
 “fdisk”.
 Create and Delete disk Partitions on disks with an GPT Partitioning Scheme Using
 “gdisk”.
 Format Devices Using “mkfs”
 Mount File System into the Directory Tree

Managing Logical Volume Management (LVM) Storage

 How to manage high performance LVM storage.

Accessing Network Attached Storage with Network File System (NFS)

 Access , Mount and unmount NFS Shares .

Accessing Network Storage with SMB

 How to mount and unmount smb file-system using the command line.

Controlling and Troubleshooting the Red Hat Enterprise Linux Boot Process

 Describe and Influence the RHEL Boot Process..

Limiting Network Communication with Firewalled

 Configure the Basic Firewall Using “firewalld”, “firewalld-config”and “firewalld-cmd”.