Red Hat Enterprise Linux (RHEL) Systems Administration 1
Course Summary

Length: 5 Days   **Prerequisite**: No prerequisites for this class.

Recommendation Statement:
There are no prerequisites for this class other than basic computer skills.

Course Description:
This course teaches the introductory topics required to administering a Red Hat ® Enterprise Linux system. If you are new to administering a Linux server, this is the first course you should take after completing a Linux / Red Hat fundamentals course. Topics in this course also apply to the SUSE and CentOS distributions. Students will learn how to install, configure and administer a Red Hat ® Enterprise system.

This course teaches all of the topics that are included in the Red Hat ® RH124 course

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

- The command line vs. the desktop environments
- Linux commands for the system administrator
- Control access to file systems and directories
- Manage and control access to files and directories
- Manage user accounts
- Monitor and manage system processes
- Manage network interfaces and services
- Monitor and manage system log files
- Understand system archiving tools
- Install and update the OS
- Install, manage and update software packages and services
- Understand virtual environments
- Manage virtualized environments

Follow up Course: Red Hat Enterprise Linux (RHEL) Systems Administration 2

Red Hat Enterprise Linux Systems Administration 1
Detailed Course Outline

1. **Linux Commands for the System Administrator**
    a. Access the command line
    b. The login process and shell initialization files
    c. The bash shell
    d. Linux command syntax
    e. View and edit text files
    f. Manage files (view,copy, move, create, delete)
    g. Getting Help at the command line
2. **Administer Linux Users and Groups**
    a. Create and manager user accounts and groups
    b. Understand file and directory permissions
3. **Monitor and Manage System Processes**
    a. Display system processes and process attributes
    b. Manage system processes
4. **Control System Services and Daemons**
    a. Control and monitor network services and system daemons (systemd)
5. **Configure and secure OpenSSH**
    a. Access remote systems through OpenSSH
    b. Control remote access through OpenSSH
6. **Monitor and Manage System Logs**
    a. Understand where system log files are located
    b. Perform routing maintennacne on system logs
    c. Analyze system logs for troubleshooting
7. **Manage Network Components**
    a. Configure the network interfaces
    b. Configure network services (DNS, DHCP, routing)
    c. Perform routine network diagnostics
8. **Linux Standard Archive Utilities**
    a. Understand the Linux archiving utilities
    b. Migrate data between systems using standard archive utilities
9. **Administer File Systems**
    a. Understand the types of file systems and file system structures
    b. Create file systems
    c. Mount / Unmount file systems automatically and manually
    d. Understand and Manage XFS file systems
    e. Manage the file system table (fstab)
10. **Manage Virtualized environments**
    a. Create and administer a Red Hat virtual machine using KVM and libvirt
    b. Perform common tasks on virtual systems using virsh, guestfish and libguestfs
11. **Lab Exercises**
    a. Lab exercises will be provided at the completion of each section