

RHCSA I & II



Course Description:

A large percentage of the servers hosting websites, cloud-based services and virtualization services are powered by Linux. The Linux operating system is favored by many IT departments due to its reputation for stability, its open source model, and low cost of ownership.

This Red Hat Certified Systems Administrator training course from INTEGER Innovation will teach you everything you need to know to become a Red Hat Certified System Administrator (RHCSA). This course is designed for users that are familiar with Red Hat Enterprise Linux environments.

You will start by learning the fundamentals, such as basic shell commands, creating and modifying users, and changing passwords. The course will then teach you about the shell, explaining how to manage files, use the stream editor, and locate files. Here you will also cover system management, including booting and rebooting, network services, and installing packages.

Other topics that are covered include storage management, server management, virtual machines, and security. Once you have completed this computer based training course, you will be fully capable of taking the RHCSA exam and becoming a Red Hat Certified System Administrator.



Course Prerequisites:

There are no formal prerequisites for this course; however, previous operating system administration experience will be very beneficial.

Target Audience:

This course is specially designed for the B.Tech/B.E(CSE/IT/EEE/ECE/Mech) and all other IT related Graduates and Post Graduate students. Mission Professionalism has conquered the job scenario and companies seek for well qualified, professional and skilled manpower. Quality Education and Performance Oriented Training is our motto.

What Student/Professionals Will Learn?

- Understand and use essential tools for handling files, directories, command-line environments, and documentation
- Operate running systems, including booting into different run levels, identifying processes, starting and stopping virtual machines, and controlling services
- Configure local storage using partitions and logical volumes
- Create and configure file systems and file system attributes, such as permissions, encryption, access control lists, and network file systems
- Deploy, configure, and maintain systems, including software installation, update, and core services
- Manage users and groups, including use of a centralized directory for authentication
- Manage security, including basic firewall and SELinux configuration

COURSE-CONTENT:

Red Hat System Administration I - RH124

- Access the command line
 - Log in to a Linux system and run simple commands using the shell.



- Manage files from the command line
 - Copy, move, create, delete, and organize files from the bash shell prompt.
- Get help in Red Hat Enterprise Linux
 - Resolve problems by using online help systems and Red Hat support utilities.
- Create, view, and edit text files
 - Create, view, and edit text files from command output or in an editor.
- Manage local Linux users and groups
 - Manage local Linux users and groups, and administer local password policies.
- Control access to files with Linux file system permissions
 - > Set Linux file system permissions on files and interpret the security effects of different permission settings.
- Monitor and manage Linux processes
 - Obtain information about the system, and control processes running on it.
- Control services and daemons
 - > Control and monitor network services and system daemons using systemd
- Configure and secure OpenSSH service
 - Access and provide access to the command line on remote systems securely using OpenSSH
- Analyze and store logs
 - ➤ Locate and accurately interpret relevant system log files for troubleshooting purposes.



- Manage Red Hat Enterprise Linux networking
 - ➤ Configure basic IPv4 networking on Red Hat Enterprise Linux systems.
- Archive and copy files between systems
 - Archive files and copy them from one system to another.
- Install and update software packages
 - Download, install, update, and manage software packages from Red Hat and yum package repositories.
- Access Linux file systems
 - Access and inspect existing file systems on a Red Hat Enterprise Linux system.
- Use virtualized systems
 - Create and use Red Hat Enterprise Linux virtual machines with KVM and libvirt.
- Comprehensive review
 - ➤ Practice and demonstrate the knowledge and skills learned in this course.

COURSE-CONTENT:

Red Hat System Administration II with RHCSA Exam - RH135

- Automate installation with Kickstart
 - Automate the installation of Red Hat Enterprise Linux systems with Kickstart.



- Use regular expressions with grep
 - Write regular expressions that, when partnered with grep, will allow you to quickly isolate or locate content within text files.
- Create and Edit text files with vim
 - Introduce the vim text editor, with which you can open, edit, and save text files.
- Schedule future Linux tasks
 - Schedule tasks to automatically execute in the future.
- Manage priority of Linux processes
 - Influence the relative priorities at which Linux processes run.
- Control access to files with access control lists (ACL)
 - Manage file security using POSIX access control lists.
- Manage SELinux security
 - Manage the Security Enhanced Linux (SELinux) behavior of a system to keep it secure in case of a network service compromise.
- Connect to network-defined users and groups
 - Configure systems to use central identity management services.
- Add disks, partitions, and file systems to a Linux system
 - Manage simple partitions and file systems.
- Manage logical volume management (LVM) storage
 - Manage logical volumes from the command line.



- Access networked attached storage with network file system (NFS)
 - Access (secure) NFS shares.
- Access networked storage with SMB
 - > Use autofs and the command line to mount and unmount SMB file systems.
- Control and troubleshoot the Red Hat Enterprise Linux boot process
- Limit network communication with firewall
 - Configure a basic firewall.
- Comprehensive review
 - > Practice and demonstrate knowledge and skills learned in this course.

INTEGER Innovation will provide:

- Training Slides taught during training by trainers
- Programmatic Examples
- Assignments of each topic in a module
- Demos executed during training session.
- Software's and installation guide (for future help)
- E-books for further reading in depth
- Reference links
- 24X7 online support for any queries or doubts.