

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Value Added Course on Red Hat Linux

21.02.2022 to 26.02.2022

RED HAT LINUX

42 Hours

Course Objectives:

- To Learn and build core Linux skills.
- To Learn basic Linux system administrator knowledge
- To Understand the essential tools for handling files, directories, command-line environments, and documentation
- To Manipulate software packages with RPM
- To Create and maintain the Linux file system

UNIT 1 : Get started with Red Hat Enterprise Linux (8)

Describe and define open source, Linux distributions, and Red Hat Enterprise Linux- Access the command line - Manage files from the command line - Create, view, and edit text files and Directory Operations - Control access to files

UNIT 2 : Managing Basic Storage (8)

Manage basic storage- Create and manage storage devices, partitions, file systems, and swap spaces from the command line -Mounting and Unmounting - Mapping file system with Mount Point - Manage logical volumes- Create and manage logical volumes containing file systems - Swap - Create swap spaces from the command line.

UNIT 3 : Managing Local users and groups (8)

Manage local users and groups - Create, manage, and delete local users and groups, as well as administer local password policies- Control access to files with ACLs - Interpret and set access control lists (ACLs) on files to handle situations requiring complex user and group access permissions- Breaking Root Password Schedule future tasks - Schedule commands to run in the future, either one time or on a repeating schedule. - Archive and Compression - Backup Files and Directories by Zipping.

UNIT 4 : Managing network (9)

Manage networking -Configure network interfaces and settings on Red Hat Enterprise Linux servers- Control services and daemons- Manage network security - Control network connections to services using the system firewall- Configure and secure SSH - Configure secure command line service on remote systems, using Open SSH- Secure Copy - Securely copying Files & Directories from one machine to another in Network

UNIT 5: Installation and Updation of Software (9)

Install and update software - Download, install, update, and manage software packages from Red Hat and yum package repositories- Manage SELinux security - Protect and manage the security of a server by using SELinux- Tune system performance-Improve system performance by setting tuning parameters and adjusting scheduling priority of processes- Implement advanced storage features - Control the boot process -Install Red Hat Enterprise Linux -Install Red Hat Enterprise Linux on servers and virtual machines-Run Containers

Course Outcomes:

At the end of the course, the students will be able to

- Perform user and group administration.
- Integrate a workstation with an existing network.
- Illustrate and configure file systems and file system attributes, such as permissions, encryption, access control lists, and network file systems
- Demonstrate local storage using partitions and logical volumes