

Practical Task: Red Hat Enterprise Linux Basics

Objective: Demonstrate proficiency in fundamental tasks in Red Hat Enterprise Linux.

Task 1: Accessing the Command Line

1. Access the Terminal:

- Open a terminal on your Red Hat Enterprise Linux system.

Task 2: Managing Files from the Command Line

2. File Operations:

- Create a directory named "my_files."
- Inside "my_files," create two text files: "file1.txt" and "file2.txt."
- List the contents of the "my_files" directory.

Task 3: Getting Help in Red Hat Enterprise Linux

3. Command Documentation:

- Use the `man` command to access the manual page for the 'ls' command.
- Search for information about the 'cp' command using the 'apropos' command.

Task 4: Creating, Viewing, and Editing Text Files

4. Text File Management:

- Create a new text file named "notes.txt" using the command line.
- View the contents of "notes.txt" using the `cat` command.
- Edit "notes.txt" using the 'nano' or 'vim' text editor.

Task 5: Managing Local Linux Users and Groups

5. User and Group Management:

- Create a new user named "testuser."
- Add "testuser" to the "mygroup" group.
- Check the user information for "testuser."

Task 6: Controlling Access to Files

6. File Permissions:

- Change the permissions of "file1.txt" to allow read and write for the owner.
- Verify the updated permissions using the `ls` command.

Task 7: Monitoring and Managing Linux Processes

7. Process Management:

- Display a list of currently running processes using the `ps` command.
- Use the `kill` command to terminate a selected process.

Task 8: Controlling Services and Daemons

8. Service Control:

- Check the status of the 'sshd' service using the `systemctl` command.
- Start or stop the 'sshd' service based on its current status.

Task 9: Configuring and Securing OpenSSH Service

9. OpenSSH Configuration:

- Edit the 'sshd_config' file to change the default SSH port.
- Restart the 'sshd' service to apply the changes.

Task 10: Analyzing and Storing Logs

10. Log Analysis:

- Display the last 15 lines of the system log using the `tail` command.
- Use the `journalctl` command to analyze recent system logs.

Task 11: Managing Red Hat Enterprise Linux Networking

11. Networking Commands:

- Check the IP address configuration of all network interfaces using the `ifconfig` or `ip` command.
- Ping the Google DNS server (8.8.8.8) to test network connectivity.

Task 12: Archiving and Copying Files Between Systems

12. File Archiving and Copying:

- Create a compressed archive of the "my_files" directory using the `tar` command.
- Copy the archive to another location or system using the `scp` command.

Task 13: Installing and Updating Software Packages

13. Package Management:

- Install the 'htop' package using the package manager.
- Update all installed packages on the system.

Task 14: Accessing Linux File Systems

14. File System Navigation:

- Mount a USB drive or another storage device.
- Display information about mounted file systems using the `df` command.

Task 15: Analyzing Servers and Getting Support

15. System Information and Support:

- Use the `uname` command to display basic system information.
- Generate a system report using the 'sosreport' command for potential troubleshooting.