LINUX Commands

🔍 ***Troubleshooting*** is crucial for ***DevOps engineers*** managing Linux environments!
Here's an expanded list of commonly used troubleshooting commands with more examples:

1. dmesg: Kernel messages for hardware and system errors.
—Example: `dmesg | grep -i error`

2. top/htop: Real-time system resource monitoring.
—Example: `htop`

3. free: Memory usage overview.
—Example: `free -m`

4. df: Disk space usage analysis.
—Example: `df -hT`

5. netstat: Network connections and routing tables.
—Example: `netstat -tuln`, `netstat -s`

6. ping: Testing network connectivity.
—Example: `ping -c 4 google.com`

7. traceroute/mtr: Tracing network routes and latency.
—Example: `mtr google.com`

8. ifconfig/ip: Network interface configuration.
—Example: `ip addr show`, `ifconfig -a`

9. journalctl: Viewing system logs.
—Example: `journalctl -u sshd.service`

10. lsof: Checking open files and associated processes.
—Example: `lsof -i :port_number`

11. ps: Process status and information.
—Example: `ps -ef | grep process_name`

12. systemctl: Managing systemd services.
—Example: `systemctl start/restart/stop service_name`

13.grep: Searches for patterns in files.

— Example: `grep "pattern" file.txt`, `grep -r "pattern" directory/`

Here are some Linux commands that are commonly used on a daily basis along with examples:

1. ls: Lists files and directories in the current directory.
—Example: `ls`, `ls -l`, `ls -a`

2. cd: Changes the current directory.
—Example: `cd Documents`, `cd ..` (moves up one directory)

3. pwd: Prints the current working directory.
—Example: `pwd`

4. mkdir: Creates a new directory.
—Example: `mkdir new_folder`

5. rm: Removes files or directories.
—Example: `rm file.txt`, `rm -r directory`

6. cp: Copies files or directories.
—Example: `cp file.txt new_location/`

7. mv: Moves or renames files or directories.
—Example: `mv file.txt new_location/`, `mv old_name.txt new_name.txt`

8. touch: Creates a new empty file.
—Example: `touch new_file.txt`

9. grep: Searches for patterns in files.
—Example: `grep “pattern” file.txt`, `grep -r “pattern” directory/`

10. cat: Displays the contents of a file.
—Example: `cat file.txt`

11. nano or vim: Text editors for creating and editing files.
—Example: `nano file.txt`, `vim file.txt`

12. chmod: Changes file permissions.
—Example: `chmod +x script.sh` (gives execute permission to a script)

13. sudo: Executes a command with superuser privileges.
—Example: `sudo apt update`, `sudo rm protected_file`

14. apt or yum: Package managers for installing, updating, and removing software packages.
—Example: `sudo apt install package_name`, `sudo yum install package_name`

15. find: Searches for files in a directory hierarchy.
—Example: `find . -name “*.txt”`

Some other commands along with examples:

1. clear: Clears the terminal screen.
—Example: `clear`

2. man: Displays the manual pages for a command.
—Example: `man ls` (displays the manual for the `ls` command)

3. history: Displays the command history of the current session.
—Example: `history`

4. date: Prints the current date and time.
—Example: `date`

5. sleep: Delays execution for a specified amount of time.
—Example: `sleep 5` (pauses for 5 seconds)

6. uptime: Displays system uptime and load average.
—Example: `uptime`

7. whoami: Prints the current username.
—Example: `whoami`

8. id: Displays user and group information for the current user or specified user.
—Example: `id`

9. groups: Lists the groups the current user belongs to.
—Example: `groups`

10. passwd: Allows users to change their passwords.
—Example: `passwd`

11. who: Shows who is logged on.
—Example: `who`

12. last: Displays a list of last logged in users.
—Example: `last`

13. kill: Sends a signal to terminate a process.
—Example: `kill PID` (where PID is the process ID)

14. cat: Concatenates and displays the content of files.
—Example: `cat file.txt`

15. more: Displays the content of a file one page at a time.
—Example: `more file.txt`

16. rm: Removes files or directories.
—Example: `rm file.txt`

17. ln: Creates links between files.
—Example: `ln -s /path/to/file /path/to/link`

18. hostname: Prints or sets the system's hostname.
—Example: `hostname`, `hostname new_host_name`

These commands are fundamental for managing and interacting with a Linux system. Experiment with them to get familiar with their functionalities! 🐧✨