

70+ Vital Linux Commands Every Cybersecurity Analyst Should Master

No	Command	Description	Example
1	pwd	Prints the current working directory.	pwd displays the full path of the current directory.
2	ls	Lists directory contents.	 ls -1 lists files in long format, showing permissions, owner, size, and modification date. ls -a lists files including hidden files (those starting with a dot) ls -la list directory contents in a long format, including hidden files.
3	cd	Changes the current directory.	cd /home/user changes the directory to /home/user.
4	touch	Creates an empty file or updates the timestamp of an existing file.	touch newfile.txt creates an empty file named newfile.txt.
5	echo	Displays a line of text or a variable value.	echo "Hello, World!" prints Hello, World! to the terminal. echo "Hello, World!" > filename.txt creates a new text file named "filename.txt" (or overwrites it if it already exists) and writes the phrase "Hello, World!" into it. echo "Hello, World!" >> filename.txt appends the phrase "Hello, World!" to the end of the existing file named "filename.txt" (or creates the file if it doesn't exist).

6	rm	Removes files or directories.	rm file.txt deletes file.txt.
7	ср	Copies files or directories.	<pre>cp file1.txt file2.txt copies file1.txt to file2.txt. cp file1.txt ./Desktop copies the file named "file1.txt" from the current directory to the Desktop folder.</pre>
8	mv	used for moving and renaming files and directories.	mv oldname.txt newname.txt renames oldname.txt to newname.txt in the current directory. mv file1.txt ./Desktop moves the file named "file1.txt" from the current directory to the Desktop folder.
11	cat	Concatenates and displays file content.	cat file.txt displays the content of file.txt.
9	nano	Open the Nano text editor.	nano file.txt opens file.txt in the Nano editor.
10	vim	Open the Vim text editor.	vim file.txt opens file.txt in the Vim editor.
10	shred	Overwrites a file to hide its contents and optionally deletes it.	shred -u file.txt overwrites and deletes file.txt.
11	mkdir	Creates a new directory.	mkdir newdir creates a directory named newdir.
14	rmdir	Removes an empty directory.	rmdir olddir removes the empty directory olddir.
15	ln	Creates hard and symbolic links.	<pre>ln -s target linkname creates a symbolic link named linkname pointing to target.</pre>

16	clear	Clears the terminal screen.	clear clears the terminal display.
17	whoami	Displays the current logged-in user.	whoami shows the username of the current user.
18	useradd	Adds a new user.	sudo useradd newuser adds a new user named newuser.
19	sudo	Executes a command as another user, typically the superuser.	sudo apt-get update runs the apt-get update command with superuser privileges.
20	adduser	Adds a new user with a more interactive interface.	sudo adduser newuser interactively adds a new user named newuser.
21	su	Switch to another user account.	su - user switches to the user account.
22	exit	Exits the current shell or session.	exit logs out of the current session.
23	passwd	Changes a user's password.	passwd prompts to change the current user's password.
24	apt	Manages packages on Debian-based systems.	sudo apt install package installs the specified package. sudo apt remove package removes the specified package. apt update update the package list apt upgrade upgrade installed packages to their latest versions apt dist-upgrade perform a comprehensive system upgrade

1	ssh	Connects to a remote machine via SSH.	ssh user@hostname connects to the remote machine hostname as user.
25	finger	Displays information about system users.	finger user shows details about user.
26	man	Displays the manual page for a command.	man ls shows the manual for the ls command.
27	whatis	Displays a brief description of a command.	whatis ls provides a short description of the ls command.
28	curl	Transfers data from or to a server.	curl -O http://example.com/file.txt downloads file.txt from the specified URL.
29	zip	Compresses files into a zip archive.	zip archive.zip file1 file2 compresses file1 and file2 into archive.zip.
30	unzip	Extracts files from a zip archive.	unzip archive.zip extracts files from archive.zip.
31	less	Views file content one screen at a time.	less file.txt displays file.txt content one screen at a time.
32	head	Displays the first part of a file.	head -n 10 file.txt shows the first 10 lines of file.txt.
33	tail	Displays the last part of a file.	tail -n 10 file.txt shows the last 10 lines of file.txt.
34	cmp	Compare two files byte by byte.	cmp file1 file2 compares file1 and file2.

35	diff	Compares files line by line.	diff file1 file2 shows the differences between file1 and file2.
36	sort	Sorts lines of text files.	sort file.txt sorts the lines in file.txt.
37	find	Searches for files in a directory hierarchy.	find /home -name "*.txt" finds all .txt files in the /home directory.
38	chmod	Changes file permissions.	chmod 755 script.sh sets the permissions of script.sh to rwxr-xr-x.
39	chown	Changes file owner and group.	chown user:group file.txt changes the owner and group of file.txt to user and group.
40	ifconfig	Display network interface information. Configures network interfaces.	ifconfig eth0 displays the configuration of the eth0 interface.
41	ip address	Displays IP addresses and interfaces.	ip address show shows all IP addresses and network interfaces.
42	grep	Searches for patterns in files.	<pre>grep "pattern" file.txt searches for "pattern" in file.txt.</pre>
43	awk	A programming language for pattern scanning and processing.	awk '{print \$1}' file.txt prints the first field of each line in file.txt.
44	resolvectl status	Shows the current DNS settings.	resolvectl status displays the DNS configuration and status.
45	ping	Sends ICMP ECHO_REQUEST packets to network hosts.	ping google.com sends ping requests to google.com.

46	netstat	Displays network connections, routing tables, and interface statistics.	netstat -tuln shows listening ports and their status.
47	ss	Displays socket statistics.	ss -tuln shows listening sockets. ss -14p displays all listening IPv4 sockets along with the associated processes
48	iptables	Configures packet filtering rules.	sudo iptables -L lists all current iptables rules.
49	ufw	Manages firewall with Uncomplicated Firewall.	sudo ufw enable enables the firewall.
50	uname	Prints system information.	uname -a displays all system information.
51	neofetch	Displays system information with an aesthetic layout.	neofetch shows system information in a visually appealing format.
52	cal	Displays a calendar.	cal shows the current month's calendar.
53	free	Displays memory usage.	free -h shows memory usage in a human-readable format.
54	df	Displays disk space usage of file systems.	df -h shows disk space usage in a human-readable format.
55	ps	Displays information about active processes.	ps aux shows detailed information about all running processes.
56	top	Displays real-time system resource usage.	top shows real-time processes and system resource usage.

57	htop	An interactive process viewer.	htop provides an interactive view of system processes.
58	kill	Terminates a process by PID.	kill 1234 terminates the process with PID 1234.
59	pkill	Terminates processes by name.	pkill firefox terminates all processes named firefox.
60	systemctl	Manages systemd services.	systemctl status nginx shows the status of the nginx service.
61	history	Displays the command history.	history shows the list of previously executed commands.
62	reboot	Reboots the system.	sudo reboot restarts the system .
63	shutdown	Shuts down or reboots the system.	sudo shutdown -h now shuts down the system immediately.
64	traceroute	Traces the route packets take to a network host.	traceroute google.com shows the route to google.com.
65	dig	Queries DNS servers.	dig example.com retrieves DNS information for example.com.
66	host	Performs DNS lookups.	host example.com shows the IP address of example.com.
67	arp	Displays and modifies the ARP table.	arp -a shows the current ARP table.

68	iwconfig	Configures wireless network interfaces.	iwconfig wlan0 shows the configuration of the wlan0 wireless interface.
69	hostname	Displays or sets the system's hostname.	hostname shows the current hostname.
70	whois	Queries the WHOIS database for domain information.	whois example.com retrieves WHOIS information for example.com.