

Kali Linux Fundamentals Glossary

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- 1. Change directory (cd) command** - The cd command is one of the most basic and frequently used commands when working on the Linux command line. The cd command, which stands for “change directory” is used to change the current working directory in Linux. <https://www.geeksforgeeks.org/cd-command-in-linux-with-examples/>
- 2. Checksum** - A checksum is a value used to verify the integrity of a file or a data transfer. In other words, it is a sum that checks the validity of data. Checksums are typically used to compare two sets of data to make sure they are the same. Some common applications include verifying a disk image or checking the integrity of a downloaded file. If the checksums don't match those of the original files, the data may have been altered or corrupted. <https://techterms.com/definition/checksum>
- 3. Concatenate(cat) command** - It reads data from the file and gives their content as output. It helps us to create, view, concatenate files. <https://www.geeksforgeeks.org/cat-command-in-linux-with-examples/>
- 4. Disk free (df) command**- Is used to display information related to file systems about total space and available space. <https://www.geeksforgeeks.org/df-command-linux-examples/>
- 5. Echo command** - command in linux is used to display line of text/string that are passed as an argument . This is a built in command that is mostly used in shell scripts and batch files to output status text to the screen or a file. <https://www.geeksforgeeks.org/echo-command-in-linux-with-examples/>
- 6. History command** - Command used to view all previously used commands. Kali Linux Fundamentals Course

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7. **Hypervisor** - A hypervisor is a software program that manages one or more virtual machines (VMs). It is used to create, start, stop, and reset VMs. The hypervisor allows each VM or "guest" to access the physical hardware, such as the CPU, RAM, and storage. It can also limit how many system resources each VM can use so that multiple VMs can run simultaneously on a single system. <https://techterms.com/definition/hypervisor>
8. **ifconfig command** - interface configuration,command is used for displaying current network configuration information, setting up an ip address, netmask or broadcast address to a network interface, creating an alias for network interface, setting up hardware address and enable or disable network interfaces. <https://www.tecmint.com/ifconfig-command-examples/>
9. **Kali Linux** - Kali Linux is an open source project that is maintained and funded by Offensive Security, a provider of world-class information security training and penetration testing services. <https://www.kali.org/about-us/>
10. **Kali Linux Tools** - A range of tools that include information gathering, vulnerability analysis, wireless attacks, web applications, exploitation tools, forensic tools, password attacks, reverse engineering, maintaining access, reporting tools, hardware hacking, sniffing and spoofing. <https://tools.kali.org/tools-listing>
11. **List (ls) command** - ls is a Linux shell command that lists directory contents of files and directories. <https://www.geeksforgeeks.org/practical-applications-ls-command-linux/>
12. **Manual(man)command** - man command in Linux is used to display the user manual of any command that we can run on the terminal. It provides a detailed view of the command which includes name, synopsis, description, options, status, return, values, errors, files, versions, examples, authors. <https://www.geeksforgeeks.org/man-command-in-linux-with-examples/>
13. **Nano** - Is a popular command line text editor that is included in most Linux distributions. Its interface is comparable to GUI-based text editors. <https://www.linode.com/docs/tools-reference/tools/use-nano-text-editor-commands/>
14. **Netstat command** - ("network statistics") is a command-line tool that displays network connections (both incoming and outgoing), routing tables, and many network interface

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(network interface controller or software-defined network interface) and network protocol statistics. It is used for finding problems in the network and to determine the amount of traffic on the network as a performance measurement.

<https://www.computerhope.com/unix/unetstat.htm>

15. Nslookup - It stands for “name server lookup” is a useful command for getting information from DNS server. It also very useful for troubleshooting DNS related issues. It queries to DNS (Domain Name Server) and get the dns records for any domain for ip address.

<https://tecadmin.net/linux-nslookup-command/>

16. Open source software - If a program is open-source, its source code is freely available to its users. Its users – and anyone else – have the ability to take this source code, modify it, and distribute their own versions of the program. The users also have the ability to distribute as many copies of the original program as they want. Anyone can use the program for any purpose; there are no licensing fees or other restrictions on the software.

<https://www.howtogeek.com/129967/htg-explains-what-is-open-source-software-and-why-you-should-care/>

17. ping command - (Packet Internet Groper) The ping command is one of the most used utilities for troubleshooting, testing and diagnosing network connectivity issues. Ping works by sending one or more ICMP (Internet Control Message Protocol) Echo Request packages to a specified destination IP on the network and waits for a reply. When the destination receives the package, it will respond back with an ICMP echo reply. With the ping command, we can determine whether a remote destination IP is active or inactive, find the round-trip delay in communicating with the destination and check whether there is a packet loss.

<https://linuxize.com/post/linux-ping-command/>

18. Print Working Directory(pwd) command - It prints the path of the working directory, starting from the root. <https://www.geeksforgeeks.org/pwd-command-in-linux-with-examples/>

19. Process status (ps)command - The ps command is one of the most frequently used commands in Linux. Usually it is used to get the more and detailed information about a specific process or all processes. For example it is used to know whether a particular process is running or not, who is running what process in system, which process is using

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higher memory or CPU, how long a process is running, etc.

<https://www.computernetworkingnotes.com/linux-tutorials/ps-aux-command-and-ps-command-explained.html>

- 20. Root directory** -The root directory, or root folder, is the top-level directory of a file system. The directory structure can be visually represented as an upside-down tree, so the term "root" represents the top level. All other directories within a volume are "branches" or subdirectories of the root directory. https://techterms.com/definition/root_directory
- 21. Secure shell (ssh)** - SSH is a method of securely communicating with another computer. The "secure" part of the name means that all data sent via an SSH connection is encrypted. This means if a third party tries to intercept the information being transferred, it would appear scrambled and unreadable. The "shell" part of the name means SSH is based on a Unix shell, which is a program that interprets commands entered by a user. <https://techterms.com/definition/ssh>
- 22. Terminal** - With modern computers, the word "terminal" usually refers to a terminal program, or emulator, which provides a text-based interface for typing commands. Terminal programs are available for all major computing platforms and are typically included with the operating system. <https://techterms.com/definition/terminal>
- 23. traceroute command** - Traceroute finds the path network packets take between your computer and a destination. That destination could be a website, server, or another machine on your network. If you can send network packets to it, you can test the path with traceroute. It's a helpful tool for understanding how data flows through a network. <https://linuxconfig.org/traceroute-basics>
- 24. Virtual Box** - Oracle VM VirtualBox is a cross-platform virtualization application, it installs on your existing Intel or AMD-based computers, whether they are running Windows, Mac OS X, Linux, or Oracle Solaris operating systems (OSes). Secondly, it extends the capabilities of your existing computer so that it can run multiple OSes, inside multiple virtual machines, at the same time. As an example, you can run Windows and Linux on your Mac, run Windows Server 2016 on your Linux server, run Linux on your Windows PC, and so on, all alongside your existing applications. A user can install and run as many virtual machines as they like.

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The only practical limits are disk space and memory.

<https://www.virtualbox.org/manual/ch01.html>

25. Virtual machine - A virtual machine (or "VM") is an emulated computer system created using software. It uses physical system resources, such as the CPU, RAM, and disk storage, but is isolated from other software on the computer. It can easily be created, modified, or destroyed without affecting the host computer.

https://techterms.com/definition/virtual_machine

26. VMware - VMware is a virtualization and cloud computing software provider. VMware server virtualization, a hypervisor is installed on the physical server to allow for multiple virtual machines (VMs) to run on the same physical server. Each VM can run its own operating system (OS), which means multiple OSes can run on one physical server. All of the VMs on the same physical server share resources, such as networking and

RAM. <https://searchvmware.techtarget.com/definition/VMware>

<https://www.vmware.com/company.html>

27 Web browser - A web browser, or simply "browser," is an application used to access and view websites. Common web browsers include Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari. https://techterms.com/definition/web_browser

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