**LINUX**

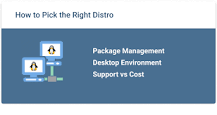
**What is Linux and its distribution?**

A Linux distribution -- often shortened to "Linux distro" -- is a version of the open source Linux operating system

**What are 4 common distributions of Linux?**

There are commercially backed distributions, such as Fedora (Red Hat), openSUSE (SUSE) and Ubuntu (Canonical Ltd.), and entirely community-driven distributions, such as **Debian, Slackware, Gentoo and Arch Linux**.

**What are three Linux distributions?**



There are three main “families” of Linux distributions: **Debian, Red Hat, and SUSE**. Most other Linux distributions use one of these three distributions as their foundation.

What is the full meaning of Linux?

Lovable Intellect Not Using XP

The full form of LINUX is **Lovable Intellect Not Using XP**. Linux was built by and named after Linus Torvalds. Linux is an open-source operating system for servers, computers, mainframes, mobile systems, and embedded systems. Requests from device software are handled by Linux and relayed to computer hardware.

What is Linux structure?

The Linux architecture is largely composed of elements such as the **Kernel, System Library, Hardware layer, System, and Shell functions**. Kernel: The kernel is one of the fundamental parts of an operating system. It is responsible for each of the primary duties of the Linux

Which is best Windows vs Linux?



**Linux offers great speed and security, on the other hand, Windows offers great ease of use**

What are the disadvantages of Linux?

Disadvantages of Using Linux  
  
**It is a bit more difficult to find distributions of Linux where you have vendor support**. Much of the commercial desktop software does not run on Linux. It has gotten better, but there is still a pretty steep learning curve to move to Linux from Windows, or even MacOS

What is the heart of OS?

Detailed Solution. The correct answer is Kernel. **The kernel** is the heart of the Operating System, which allocates time and memory to programs, handles communication and file storage. Shell is the interface between the user and the kernel

Can Linux be hacked?

The clear answer is **YES**. There are viruses, trojans, worms, and other types of malware that affect the Linux operating system but not many. Very few viruses are for Linux and most are not of that high quality, Windows-like viruses that can cause doom for you.

Is kernel heart of OS?

**The kernel is the heart of the operating system** and controls all the important functions of hardware – this is the case for Linux, macOS and Windows, smartphones, servers, and virtualizations like KVM as well as every other type of computer.

What is the most vital component of OS?

One of the most important component of an operating system is its **command interpreter**. The command interpreter is the primary interface between the user and the rest of the system. Command Interpreter System executes a user command by calling one or more number of underlying system programs or system calls.

Why operating system is the soul of the computer?

The operating system is called the “soul of the computer” because **it controls how you enter data into your computer, perform meaningful work, and obtain results**.

CLI:

* Command Line Interface
* Command Line Interpreter
* Command Line Input

Command Line Input

CLI is a command line program that accepts text input to execute operating system functions.

In the 1960s, using only computer terminals, this was the only way to interact with computers.

In the 1970s an 1980s, command line input was commonly used by Unix systems and PC systems like MS-DOS and Apple DOS.

Today, with graphical user interfaces (GUI), most users never use command-line interfaces (CLI).

However, CLI is still used by software developers and system administrators to configure computers, install software, and access features that are not available in the graphical interface.

Use CLI commands with great attention!!!

Wrong use can easily delete files or destroy your computer system completely.

Basic Linux CLI Commands

|  |  |  |
| --- | --- | --- |
| **Command** |  | **Description** |
| ls |  | List the directory (folder) system. |
| Cd *pathname* |  | Change directory (folder) in the file system. |
| Cd .. |  | Move one level up (one folder) in the file system. |
| Cp |  | Copy a file to another folder. |
| Mv |  | Move a file to another folder. |
| Mkdir |  | Creates a new directory (folder). |
| Rmdir |  | Remove a directory (folder). |
| Clear |  | Clears the CLI window. |
| Exit |  | Closes the CLI window. |
| Man *command* |  | Shows the manual for a given command. |

Basic Windows CLI Commands

**MY Study:**

**To connect to a Online Linux or over the internet**

\***Syntax:** ssh<username>@<ipaddress>

Where:

Username: Linux Distribution we are using

Ip-address: which address you are using over the Internet

PUBLIC Key:

Cloud Provides the Public Key

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-I - To insert a file

ls - list all files, folders and directories

l - list all files, folders and directories with /,@ and blank

cd - change directory

cd .. - move back 1 step

cd ../../.. - move back n-steps

mkdir <folder-name> - create a folder with name <folder-name>

mkdir - p <folder-name>/<folder-name1>/<folder-name2> - create a folder with name

<folder-name>

and all respective sub

folders

rm -r <directory-name> - remove directory recursively

(rm -dir) rmdir <directory-name> - remove empty directories

pwd - show my present working directory

clear - clear the screen

man <command-name> - brings up the manual for the given command

<command-name> --help - brings up the help menu for the given command

nano <new.txt> -

mv <source-to-file/folder> <destination> - moves files/folders from source to destination

cp <source-to-file/folder> <destination> - copies files/folders from source to destination

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|  |  |
| --- | --- |
| **Command** | **Description** |
| dir | List the directory (folder) system. |
| cd *pathname* | Change directory (folder) in the file system. |
| cd \ | Move to the root folder of the file system. |
| cd .. | Move one level up (one folder) in the file system. |
| copy | Copy a file to another folder. |
| move | Move a file to another folder. |
| type *filename* | Type a file. |
| mkdir or md | Creates a new directory (folder). |
| rmdir or rd | Removes a directory (folder). |
| cls | Clears the CLI window. |
| exit | Closes the CLI window. |
| help *command* | Shows the manual for a given command. |

To Connect TO online Linux Through Cloud Or any Website

Syntax: ssh <username> @<ipaddress>

User Name: Centos,Ubuntu,REdHAt,