Linux is a family of [free and open-source software](https://en.wikipedia.org/wiki/Free_and_open-source_software) [operating systems](https://en.wikipedia.org/wiki/Operating_system) built around the [Linux kernel](https://en.wikipedia.org/wiki/Linux_kernel). Typically, Linux is [packaged](https://en.wikipedia.org/wiki/Package_management_system) in a form known as a [Linux distribution](https://en.wikipedia.org/wiki/Linux_distribution) (or *distro* for short) for both desktop and server use. The defining component of a Linux distribution is the [Linux kernel](https://en.wikipedia.org/wiki/Linux_kernel),[[11]](https://en.wikipedia.org/wiki/Linux#cite_note-13) an [operating system kernel](https://en.wikipedia.org/wiki/Kernel_(computing)) first released on September 17, 1991, by [Linus Torvalds](https://en.wikipedia.org/wiki/Linus_Torvalds).

Linux gets everywhere. Android is based on Linux and more than one-third of the Virtual Machines on Microsoft’s Azure cloud platform are running Linux.

**Advantages:**

**1. Linux is very free**! as in no licensing fees, but also free as in open source code, so anyone can modify and customise the software, compile and run on their machines

Because most distros are open source, you have access to the source code and can customize Linux to be whatever you want it to be; you can even create your own distro if you like!Linux is easy to install!  In many instances, it is actually easier to install Linux to your computer than Windows

#### 2. Linux is very stable!

Linux systems rarely crash, and when they do, the whole system normally does not go down. The “[blue screen of death](http://en.wikipedia.org/wiki/Blue_screen_of_death)” familiar to Windows users is not a worry for Linux users.

**3. Linux is less vulnerable to computer malware!**

**4.** **Linux typically does not slow down over time!**

more efficient OS, Linux distributions could be fitted to a range of systems (low-end or high-end). In contrast, Windows operating system has a higher hardware requirement.

**5. Linux can breathe new life into old computers!**

**6. better choice for programmer**s Linux supports almost all of the major programming languages (*Python, C/C++, Java, Perl, Ruby, etc*.). Moreover, it offers a vast range of applications useful for programming purposes.

The Linux terminal is superior to use over Window’s command line for developers. You would find many libraries developed natively for Linux. Also, a lot of programmers point out that the [package manager](http://en.wikipedia.org/wiki/Package_manager) on Linux helps them get things done easily.

Interestingly, the ability of bash scripting is also one of the most compelling reasons why programmers prefer using Linux OS.

Linux also brings in native support for [SSH](http://en.wikipedia.org/wiki/Secure_Shell), which would help you manage your servers quickly. You could include things like apt-get commands which further makes Linux one of the most popular choices of the programmers.

**7. Variety Of Distributions**

There are no flavors of Windows. In contrast, you will find tons of Linux distribution catered for a different set of needs. So, you can choose to install any of the available Linux distros according to your requirements.

For example, there are [Linux distributions for hackers](https://itsfoss.com/linux-hacking-penetration-testing/), there are [Linux distributions for programmers](https://itsfoss.com/semicode-os-linux/), there are [Linux distributions for extremely old computers](https://itsfoss.com/lightweight-linux-beginners/). There is a Linux for everyone.

### **8. Better Community Support**

You do not need to hire an expert to solve a problem you are facing on your Linux system. You just need to search for a similar thread on the web for a solution or post a thread to let others solve the problem. Within minutes of posting a thread on [any of the Linux forums](http://askubuntu.com/), you may expect a reply along with a detailed solution which would finally help resolve your problem at no cost!

### **9. Privacy**

Even if you opt out to send Microsoft information about your data, it is still being collected. First of all, Linux distributions do not collect much data (or none). Moreover, you will not be needing additional tools to protect your privacy.

**Disadvantages**

#### Many Windows programs will not run in Linux.

#### There is a smaller selection of peripheral hardware drivers for Linux.

#### There is a learning curve for people who are new to Linux.

source:

<https://renewablepcs.wordpress.com/about-linux/advantages-of-using-linux/>

<https://itsfoss.com/linux-better-than-windows/>