As we said before, the term Linux doesn’t respond to an Operating System. Linux is actually a Kernel, is what mediates between the software and the hardware and once we put some more software on top of it, then we can call it a complete OS (Operating System). There are different distributions of the Kernel, or core named Linux like Debian, Ubuntu, that are used for things like desktop set ups, and there are other OSs that are used for more specific ends, like Parrot OS and Kali Linux, which are used mainly for cybersecurity, and hacking.

We can install Linux in mainly everything. There are three main types of devices that we can do so:

|  |  |  |
| --- | --- | --- |
| PCs:   * Desktop * Server * Laptop   Raspberry PI | Embedded:   * Kindle * Roku * Android Phones | Cloud:   * Underneath * Instances * Services |

Linux Kernel

|  |  |  |
| --- | --- | --- |
| Debian Based  Ubuntu  Ubuntu Variants  Any **.deb**-based systems | Red Hat Based  RHEL  Fedora  CentOS  RPM based systems | Other  Arch  Slackware  SUSE  Android  Embedded systems |

Open-source software:

The term open source refers to the philosophy freedom. Freedom for everybody to get access to something. An open-source code, or an open-source OS, is basically something that is distributable, modifiable, and usable for who ever wants to, no matter if they pay for it or not. Open-source distributions are also bounded to licenses, and we sometimes use the term **Copyleft** to refer to it, as in Copyright for the non-open-source distributions. Copyleft refers to a more restricted use of the software, meaning that the licenses are more restrictive. What we mean by that is that if you use a code that is open source and Copyleft and you modify it, then you must release your version of the code for everybody else.