

Ubuntu Linux Fundamentals

Linux Distributions and the Ubuntu Distro

Let's discuss Linux Distributions or Distro's.

An operating system isn't much use if it doesn't have a suite of applications you can use on it.

A desktop environment, and an office suite for users, or web application servers like Apache, and Nginx, or databases like MySQL are what you need to do or display your work.

Linux is packaged into distributions, or distro's.

A site called DistroWatch.com has been a go-to resource for what's going on in the Distro world for some time.

If you go to DistroWatch.com, then click on Major Distributions in the upper right, you'll be taken to their Top 10 Distributions page.

Scrolling down, we can see that there are many Distro's available.

Linux Mint

Ubuntu

Debian

Mageia

Fedora - A Free, Open source, cutting edge version of Red Hat

openSUSE

archlinux

CentOS - Unbranded version of Red Hat

PCLinuxOS

Slackware Linux

FreeBSD - BSD isn't Linux, as it's not based on the Linux kernel, but it is open source and UNIX like.

That's just the Top 10 from DistroWatch.

There are literally hundreds of distro's out there.

This begs the question.

Why should you choose Ubuntu?

The straight answer is, you shouldn't.

You shouldn't, that is, unless it is the distro that fits your needs.

If you want a unique build for Penetration Testing networks, or ethical hacking, use Kali Linux. It's a great suite of tools and utilities for scanning for and exploiting vulnerabilities on systems.

If you want to dynamically have tiny servers spun up and shut down for Docker images hosting web services in the cloud, have a look at Alpine Linux. Alpine Linux is only about 4 to 5 Megabytes in size!

If you want a secure distro to build a firewall or similar app on, OpenBSD may be for you. Technically, BSD is not Linux, but OpenBSD is also an open source, UNIX like operating system maintained specifically with security in mind.

Wow, with all of those options, why would Ubuntu be a fit?

Ubuntu is an excellent general purpose desktop and server operating system. It has the features you would typically want, and a large packaging system called APT for Advanced Packaging Tool, you can use to install and maintain a vast array of applications.

So where did Ubuntu come from?

Mark Shuttleworth, who made a huge amount of money building then selling VeriSign, decided the need existed for a more user friendly distro of Linux.

He built Ubuntu on another distro called Debian. Debian was a fairly main stream distro, but was not updated or patched as frequently or regularly as the community wanted. It also wasn't easy to install.

Mark Shuttleworth started his new distro under a company named Canonical Ltd, and named it Ubuntu.

Ubuntu means something like "humanity to others" or "I am what I am because of who we all are" in Zulu and Xhosa (pronounced kausa).

You'll find Ubuntu documentation to be rich and user friendly. You can find it at <https://help.ubuntu.com>.

Ubuntu also has active forums where you can search for or ask for help with a specific question you may have. It's at <https://ubuntuforums.org/>.

If you're not familiar with the term RTFM, it stands for Read The F***ing Manual. It's an attitude you're much more likely to encounter in other forums than on Ubuntu's forum.

That said, it is always best to search for an answer yourself than to ask a question right away without even trying.

You'll be learning about the help systems available to you in Ubuntu and all Linux distros in upcoming lessons.

Ubuntu has a regular patch and release cycle.

The latest stable release that provides Long Term Support, as I write this, is version 16.04.

For a Long Term Support, or LTS, stable version, look for an even number major release number. 16 in this case.

The next LTS release will be version 18.04, and it will be available sometime in April, 2018.

Although Ubuntu makes a new release every 6 months, Long Term Supported releases are only released every other year.

LTS releases are supported for 5 years, while other releases are only supported for 9 months.

My recommendation is to always use the LTS releases.

Please download the attached file for this lesson which contains a transcript of the lesson and links for more info.

Helpful Links

Ubuntu Forums

<https://ubuntuforums.org/>

Ubuntu Official Documentation

<https://help.ubuntu.com/lts/ubuntu-help/index.html>

Ubuntu Releases

<https://wiki.ubuntu.com/Releases>

Graphics

Linux Distribution Timeline

https://upload.wikimedia.org/wikipedia/commons/1/1b/Linux_Distribution_Timeline.svg

Mark Shuttleworth

<https://www.unixmen.com/mark-shuttleworth-man-behind-ubuntu-operating-system/>