# INTRODUCTION TO UBUNTU

LINUX ASSESSMENT - 4

## What Is Ubuntu?

- > Ubuntu is a Linux based open-source operating system. Ubuntu is officially released in three editions: Desktop, Server, and Core for Internet of things devices and robots. All the editions can run on the computer alone, or in a virtual machine.
- > Ubuntu is a popular for operating system and cloud computing. Ubuntu is built on Debian's architecture and infrastructure, and comprises Linux server, desktop and discontinued phone and tablet operating system versions. Ubuntu is generally acknowledged to be the most widely used available version of Linux.

# Security

> Ubuntu aims to be secure by default. User programs run with low privileges and cannot corrupt the operating system or other users' files. Canonical offers a range of tools to enable organization to manage their desktop fleet and cloud with specific compliance requirements.

> Most network ports are closed by default to prevent hacking.A GUI is available to configure it. Ubuntu compiles its packages using GCC features such as PIE and buffer overflow protection to harden its software. These extra features greatly increase security at the performance expense of 1% in 32-bit and 0.01% in 64-bit.

## **Versions**

#### **Ubuntu 4.10 (Warty Warthog)**

Ubuntu 4.10 (*Warty Warthog*), released on 20 October 2004, was canonical's first release of Ubuntu, building upon Debian, with plans for a new release every six months. Ubuntu 4.10's support ended on 30 April 2006. Ubuntu 4.10 was offered as a free download and, through canonical's ShipIt service, was also mailed to users free of charge.

#### **Ubuntu 20.10 (Groovy Gorilla)**

Ubuntu 20.10, codenamed *Groovy Gorilla*, was released on 22 October 2020. This release is based on the Linux kernel 5.8 which introduces support for several modern hardware devices and protocols. Ubuntu 20.10 is the first release to feature desktop images and the Compute Module 4.Older Pi models with less memory may still be able to boot but they are not officially supported.

#### **Ubuntu Software Center**

- > **Ubuntu Software Center**, is a discontinued high-level graphical front end for the APT/dpkg package management system.
- Ubuntu Software is accessible through the launcher as well as the app drawer. Use it to discover thousands of free applications, games, fonts, and other software that has been tested and validated to work seamlessly with Ubuntu. With Ubuntu Software, we can:
- > Search for, download, install, and remove software in a single window.
- > Keep track of installation, update and removal history.
- > Read and write user reviews.
- > Receive software recommendations based on your search and installation history.







```
File Edit View Search Terminal Help

beaver@bionic:~$ apport-bug nautilus-dropbox
beaver@bionic:~$
(/usr/lib/firefox/firefox:5953): dconf-WARNING **: 18:13:55.595: Unable to open
/var/lib/snapd/desktop/dconf/profile/user: Permission denied

beaver@bionic:~$ gnome-screenshot -d 4
```

#### **Ubuntu GNOME Shell**

- > Just like Ubuntu uses the Linux kernel to make software communicate with your computer, it uses GNOME to provide you with an easy-to-use onscreen interface. The panel showing the time, the launcher that opens apps, and the overview screen showing all your open windows are all part of GNOME.
- > The GNOME Shell is the graphical display belonging to the GNOME desktop environment. As graphical shell of the GNOME desktop environment, its design is guided by the GNOME UX-Design Team. Support for HIDPI monitors, A fallback mode is offered in versions 3.0–3.6and an application picker are some it's features.
- > GNOME Shell is written in C and JavaScript as a plugin for Mutter.

## **Installing Ubuntu**

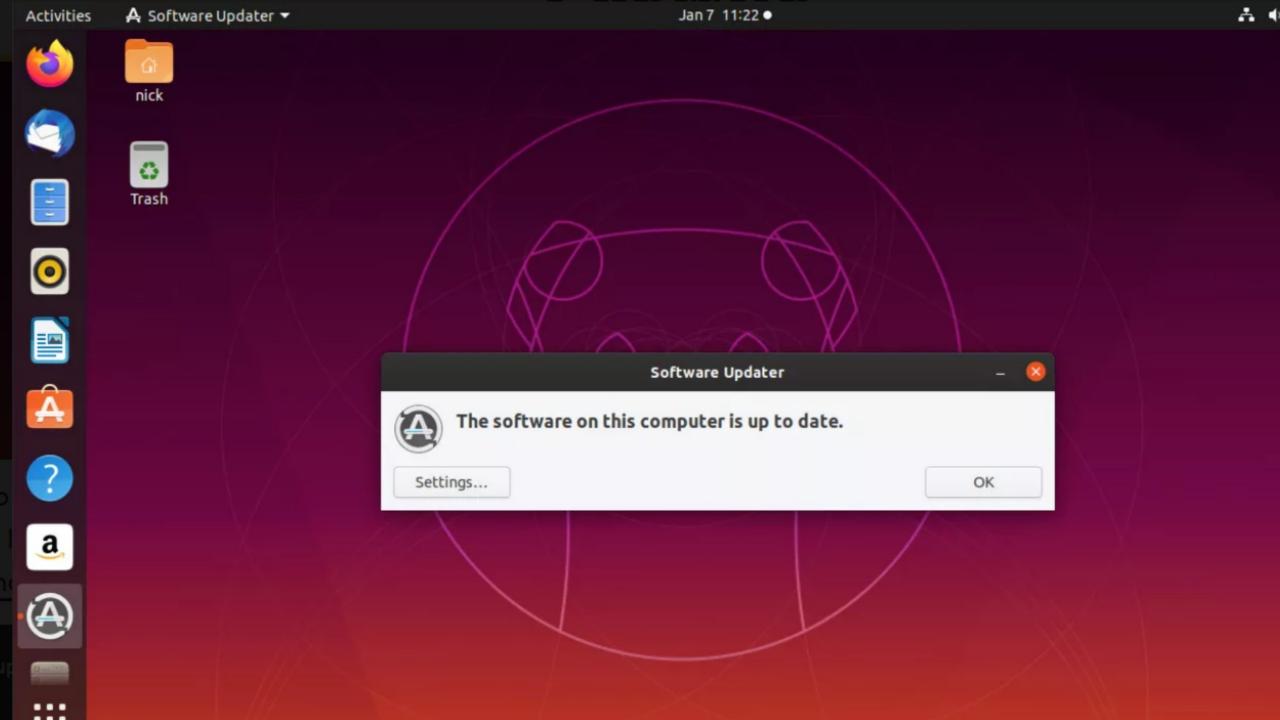
- > There are various ways to install Ubuntu alongside an existing Operating Systems (such as Windows, Mac OS):
- 1. Via a virtualization software such as VirtualBox or VMWare.
- 2. Dual-boot (or multi-boot), with each OS running in its own disk partition.
- 3. The installation procedure changes over the Windows/Ubuntu releases.
- 4. Ubuntu has many flavors: Ubuntu Desktop, Ubuntu Server, Ubuntu Cloud, Ubuntu Netbook, Ubuntu Core, Kubuntu, EdUbuntu, Xubuntu, and others.

#### What are the different kinds of Ubuntu available?

- > Ubuntu GNOME (default Ubuntu flavor)
- > Xubuntu
- > Lubuntu
- > Kubuntu
- > Ubuntu Mate
- > Ubuntu Budgie
- > Ubuntu Kylin
- > Ubuntu Studio
- > these are the 'official' flavors. These flavors are endorsed by Canonical, Ubuntu's parent company. They release a new version at the same time as the main Ubuntu (default GNOME edition) releases. They follow the same development cycle and release schedule.

## **Ubuntu or Ubuntu Default or Ubuntu GNOME**

- > The default Ubuntu version with a unique user experience. It's the main focus of the Ubuntu team. You'll find lots of support on the forums and ton of resources online through blog posts and videos as well. In short, it has more support and available resources.
- > But GNOME requires above-average hardware to function. It's resource hungry (If your system has less than 4 GB of RAM).



#### Features of Ubuntu

- 1. Hardware Auto Configuration Ubuntu comes with the drivers for most hardware built-in.
- 2. multiple desktops virtual desktops are like tabbed web browsers.
- 3. **software repositories** being able to install thousands of applications from Ubuntu's repositories in a few clicks is a huge plus. Besides the fact that the software is free and more secure.
- 4. **ssh client** Having an ssh client built into the operating system is a major plus.
- 5. **no antivirus** Ubuntu is by no means immune to malware, without any expensive antivirus scanners are added on.

## Advantages of Ubuntu

- Ubuntu is relatively secure compared to Windows and OS. There are hundreds of thousands of viruses targeting windows users. Other users who have ill knowledge of viruses become their victims and some have their information compromised as not all kinds of viruses can be detected by anti viruses.
- Ubuntu is open source. Before precise-pangolin was released, every 6 months a new version of Ubuntu used to be released.
- > For users who are used to Windows, they can run their windows apps on Ubuntu as well with softwares such as WINE, Crossover and more. Therefore they will get a similar experience as running the application on a Windows computer.
- Ubuntu comes with all the software pre-installed that one would ever need and use. This is one major advantage with all Linux distros. Unlike Windows which just comes with the recycle bin and other basics like calculator, Wordpad and Windows Player.

## Disadvantages of Ubuntu

- > This is the biggest advantage to Windows. It is not possible to play modern games on Ubuntu. One thing for sure is the thousands of games released by various companies **cannot** run on Ubuntu unless you use an emulator.
- > With Ubuntu (by default) cannot be able to play Mp3 files. Ubuntu will definitely have a bad impression to one who is new to Linux. In windows you do not need to install additional codecs or even if you need its not restricted unlike Ubuntu where by Mp3 formats are restricted. Ubuntu is therefore not as mature as Windows is.
- > With Ubuntu there is less hardware support. Therefore they have to first provide support for the hardware in terms of availability of drivers and other issues.