Ubuntu Installation

Ubuntu is a popular operating system which is open source and has easy installation. It is quite flexible thanks to its unlimited customization options and it highly secure in nature. For many developers, journey on Linux begins at Ubuntu which is why today we will give you a tutorial on how to install Ubuntu along with Windows 10.

Pre-Requisites

Following are the pre-requirements of Ubuntu 18.04 LTS installation:

- 1. Connect your machine to a power source
- 2. Make sure that you have enough space in your disk i.e. a minimum of 5GB
- 3. You must have the version of Ubuntu you want to install in a USB drive
- 4. Have a backup of your data

There are two ways you can install Ubuntu as follows:

- 1. Install Ubuntu alongside Windows 10 [dual-boot]
- 2. Install Ubuntu App inside Windows 10 [Single-boot]

1. Install Ubuntu alongside Windows 10 [dual-boot]

First of all, make a backup of your Windows 10 operating system. Because this is a risky process and any error during installation may leave your system into an inconsistent state.

Creating a backup of the Windows 10 operating system is an optional process but it is highly recommended. Once the backup is completed, it's time to prepare the Ubuntu for installation alongside Windows 10. To make a backup of whole Windows 10 system, you can use windows default backup utility through which you can create a backup and restore it in case of any error.

Now do the following steps:

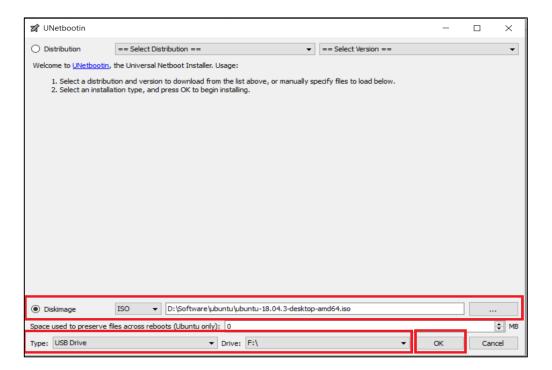
Download Ubuntu ISO

- 1. Open your browser and enter the following URL: https://www.ubuntu.com/download/desktop
- 2. Once the URL is opened, click on the "Download" button to start the download.



Create a bootable USB Drive

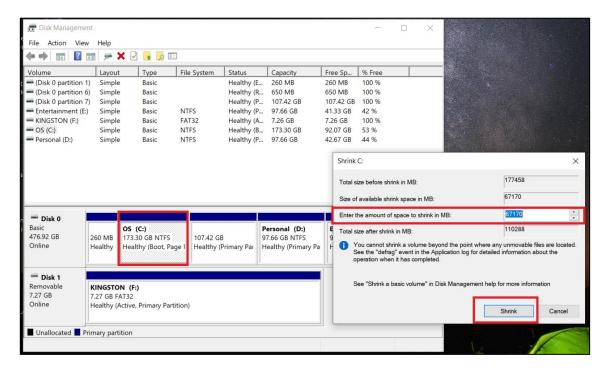
- 1. To create a bootable USB drive, we will use a tool called "unetbootin". If you don't have this software then please download and install it from: https://unetbootin.github.io/
- 2. Plugin your USB Drive and format it. If the File system is not FAT32, select the FAT32 for formatting.
- 3. Once the "unetbootin" has been downloaded, you need to install & run it.
- 4. Select the option "DISK IMAGE" and then browse & select the downloaded Ubuntu ISO path. In addition to this, also select the USB drive in which you want the Ubuntu setup to be installed. Once done, Click OK.



Shrink space for Ubuntu

The tool we will use to shrink space for Ubuntu is "Windows Disk management tool". Following are the steps to use this tool.

- 1. Start "Disk Management" tool by doing a right click on the Windows start button on the bottom left on the screen and select the "Disk Management" option.
- 2. A window will appear like this displaying all of the available drives.
- 3. Right click on the drive usually "C:" which has the biggest free space and select the "Shrink Volume" Option.
- 4. A window will appear, showing up the best possible size.
- 5. Adjust the size as per requirement and click on "Shrink".
- 6. The shrinking process will be started and a new unallocated partition is created once the shrinking process has been completed. This partition will be used to install the Ubuntu.



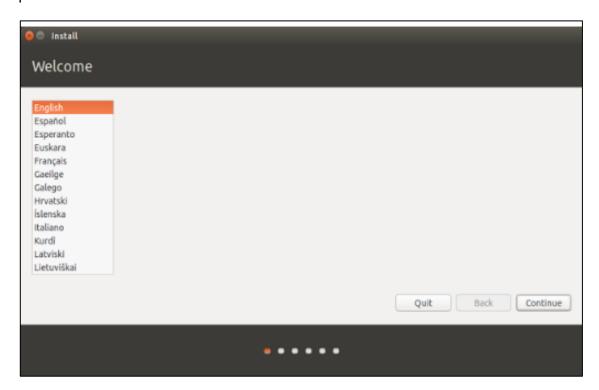
Once the shrinking process has been completed its time to run the Ubuntu live environment and then install it.

Run & Install the Ubuntu

The first step to install Ubuntu is to run the Ubuntu live environment. To run the Ubuntu live environment, we have to reboot our PC and load the boot-up menu. Usually, in most of the machines the boot-up menu comes from "F12" shortcut key, however, in some machines, the boot-up menu appears from "ESC", "F2", "F10" key as well. For the actual confirmation, refer to the user manual of your machine.

- 1. Once the boot-up menu appears, select the option to boot from "USB FLASH DRIVE" and press enter.
- 2. The booting process will start and once the booting process has been completed you will have an option of how you want to use Ubuntu.
- 3. Select the "Try Ubuntu" option and press enter.
- 4. The Ubuntu live session has been started. You can try the Ubuntu live session but this live session will be destroyed once you restart your machine so to keep it persistent and we have to install the Ubuntu in our hard disk drive.

After clicking the Install Ubuntu option, a wizard will appear, and the Ubuntu installation process has been started.



Once the setup has been completed, it will ask to reboot the system. Once the system has been rebooted, you can see that the bootloader will ask which operating system you want to start. Select windows or ubuntu as per your requirement.

2. Install Ubuntu App inside Windows 10 [Single-boot]

The wonderful Ubuntu terminal is freely available for Windows 10.

As any Linux user knows, it's the command line terminal where the magic happens. It's perfect for file management, development, remote administration and a thousand other tasks.

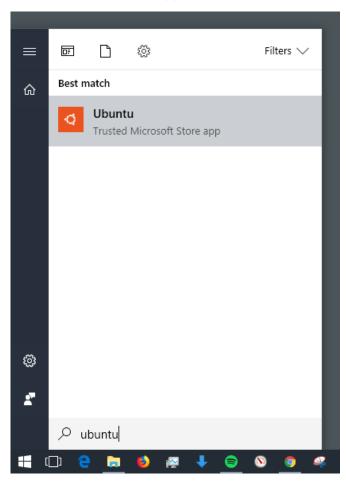
The Ubuntu terminal for Windows has many of the same features you'll find using the terminal on Ubuntu:

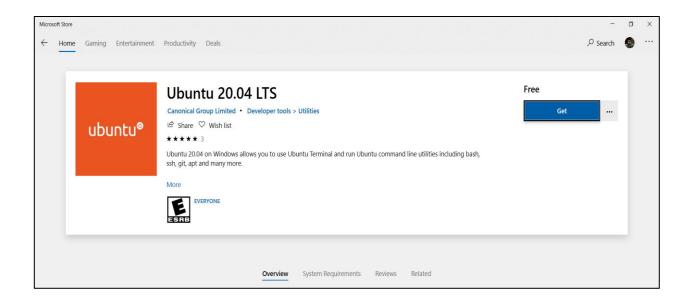
- 1. Unrivalled breadth of packages, updates and security features
- 2. Bash, Z-Shell, Korn and other shell environments without virtual machines or dual-booting
- 3. Run native tools such as SSH, git, apt and dpkg directly from your Windows computer
- 4. A huge community of friendly, approachable users

• Install Ubuntu for Windows 10

Ubuntu can be installed from the Microsoft Store:

- 1. Use the Start menu to launch the Microsoft Store application.
- 2. Search for Ubuntu and select the first result, 'Ubuntu', published by Canonical Group Limited.
- 3. Click on the Install button.
- 4. Ubuntu will be downloaded and installed automatically. Progress will be reported within the Microsoft Store application.



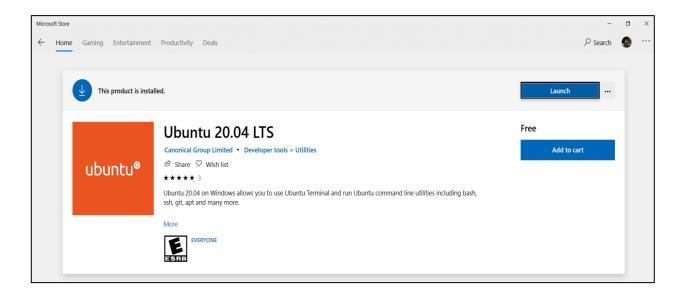


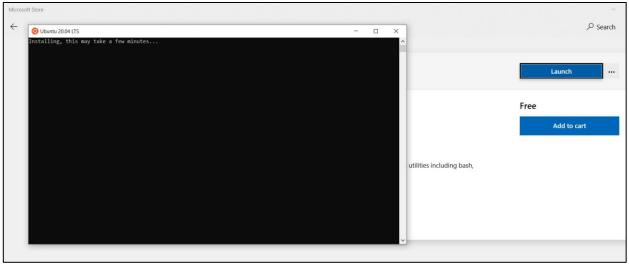
• Launch Ubuntu on Windows 10

When launched for the first time, Ubuntu will inform you that it's 'Installing' and you'll need to wait a few moments.

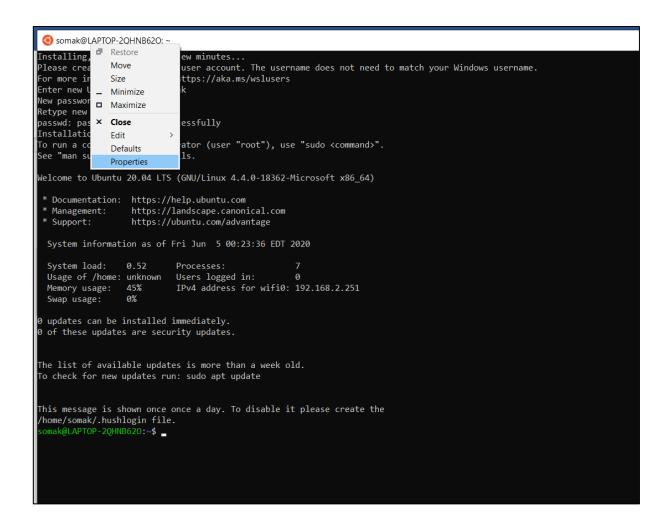
When complete, you will be asked for a username and password specific to your Ubuntu installation. These do not need to be the same as your Windows 10 credentials. With this step complete, you will find yourself at the Ubuntu bash command line.

Later you can right click on the terminal to change the properties such as you can change the font, color etc.





```
somak@LAPTOP-2QHNB62O: ~
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: somak
New password:
Retype new password:
passwd: password updated successfully
Installation successful!
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo root" for details.
Welcome to Ubuntu 20.04 LTS (GNU/Linux 4.4.0-18362-Microsoft x86_64)
 * Documentation: https://help.ubuntu.com
 * Management:
                   https://landscape.canonical.com
https://ubuntu.com/advantage
 * Support:
  System information as of Fri Jun 5 00:23:36 EDT 2020
  System load: 0.52
                             Processes:
  Usage of /home: unknown Users logged in:
                                                      0
  Memory usage: 45%
                             IPv4 address for wifi0: 192.168.2.251
  Swap usage:
                  0%
0 updates can be installed immediately.
0 of these updates are security updates.
The list of available updates is more than a week old.
To check for new updates run: sudo apt update
This message is shown once once a day. To disable it please create the
/home/somak/.hushlogin file.
somak@LAPTOP-2QHNB620:~$ _
```



If you need some guidance getting started with the Ubuntu terminal, look at the following website:

https://ubuntu.com/tutorials/tutorial-ubuntu-on-windows#1-overview