

--:BASIC STEPS TO MAKE USB OS BOOTABLE:--

Prerequisites :

The First Step is to get the latest version of 'Rufus' software and the ISO files of Operating system i.e Windows 10, Ubuntu 18.04 LTS (64 bit), Linux Mint 13.2 Sonya(64 bit). We are going to use 'Rufus-3.1' version.

1. By typing "Rufus free download" on google and then by clicking on any first two link you can download Rufus software. Similary, do this for the ISO files and get it. The other option to get the stuff is take it from your friend.
2. Mount your USB(Pendrive) to your PC/Laptop. Minimum size of USB should be 8GB or more. Kindly mount only one USB stick at a time.
3. Double click on the the 'Rufus-3.1.exe'. You will get a small window of Rufus.
4. Under the "Device" section you will find your USB name, in "Boot selection" you will find a drop down menu, buttons like "SELECT","CLOSE" will be present and rest all things will be disabled. This is how the Rufus will look initially when you double-click on 'Rufus-3.1.exe'.
5. Now the task is to select ISO file of Operating System and make the USB OS Bootable.
6. So, click on the "SELECT" button and browse to the directory where your ISO file is present, select it and then click on "Open".
7. Under the section "Partiion Scheme" select MBR from the drop down menu and in section "Target System" select 'BIOS or UEFI' or 'BIOS (or UEFI-CSM)' from the drop down menu.
8. In "Volume label" specify any name you want or keep previous name as it is, in "File System" section select 'FAT32(Default)', in "Cluster size" select '4096 bytes(Default)'.
9. Now, click on button "START", it will give a message box, from that select radio button as "Write in ISO Image mode(Recommended)" and click on "OK" button. It will again display another message box click on "OK" button again.

10. Then it will take time then after successfully completion it will make your USB(pendrive) as OS Bootable. Now, click on "CLOSE" button.
11. Irrespective of the OS you want to install restart your PC/Laptop. Keep in mind that your OS bootable USB is connected to your PC/Laptop, do not remove it.
12. Press the appropriate Key as per your PC/Laptop Vendor to go into Boot menu and select the USB stick from there.(for eg:-I have a ScanDisk USB so it will display ScanDisk like name in Boot menu).
13. Now the OS Installation starts.

--:WINDOWS INSTALLATION STEPS:--

(Note:--By using Rufus-3.1, it takes approx 14.20 minutes to make a USB(pendrive) Windows Bootable.)

1. After selecting the USB stick from the Boot menu, you will enter into Windows 10 installation.
2. The first window will appear, it will have various sections like "Language to install", "Time and currency format", "Keyboard or input method" keep the default things as it is and click on "Next" button.
3. Then in left-bottom of the window there is a option "Repair your Computer" click on it.
4. A new light-blue screen will appear, there will "Choose an option" section under this there are three options i.e "Continue", "Troubleshoot" and "Turn off your PC", select the "Troubleshoot" option.
5. A new "Advanced options" section will appear, from the various options select "Command Prompt" option from all of the above.
6. Then a new Window with black screen will appear it is termed as "Command Prompt" with a cursor blinking.

7. After "X:\Sources>" in command prompt type "diskpart" and press ENTER, then type "list disk" you will get the list of the present disk attached to your PC/Laptop mainly in our scenario there will be two Disk i.e Disk 0 and Disk 1.
8. Type "select disk 0" and press ENTER, if properly typed it will appear output as "Disk 0 is now the selected disk".
9. Type "clean", if properly typed it will appear output as "DiskPart succeeded in cleaning the disk".
10. Type "convert mbr" and press ENTER, if properly typed it will appear as "DiskPart successfully converted the selected disk to MBR format".
11. Then type "exit" and then again type "exit" and click on "Turn off your PC".
12. Start your PC again. Press the appropriate Key as per your PC/Laptop Vendor to go into Boot menu and select the USB stick from there. After selecting the USB stick from the Boot menu, you will enter into Windows 10 installation. Then it will have various sections like "Language to install", "Time and currency format", "Keyboard or input method" keep the default things as it is and click on "Next" button.
13. Click on the "Install now" button, then a window will appear select "I don't have a product key" and a new window with section "Select the operating system you want to install" will appear with various OS option, select "Windows 10 Pro" from the that and click on "Next" button.
14. Then again a New window will appear, tick the check box of "I accept the license terms" and click on to "Next" button.
15. Again a new window, with two options will appear select the option "Custom: Install Windows only (advanced)" option.
16. Again a new window, with section "Where do you want to install Windows?" will appear.
17. Click on "New" and give size in MB for the C drive where your windows gets installed (for eg:- if you want a 100GB for the C drive then multiply 100×1024 it will give 102400MB as the size for 100GB). Then click on the "Apply" button. Then a message box will appear click on "OK" button.
18. Two drives will get created if successfully executed the above step. Click on the "Next" button. The installation will begin.(Takes 12 minutes to install)

19. After successfully installation the system will restart. Remove your USB(pen drive). The Windows symbol will appear and it will do its processing wait till any option doesn't get appeared.
20. Select your region as "India", a new Window with section "Is this the right keyboard layout" will appear select "English(India)" and click on "Yes", and then on next screen appeared click on "Skip" button.
21. On next screen select on "Skip for now". On appearing next screen it will ask your PC name to be entered, enter the name as you want and click on "Next" and enter the password and click on "Next", again enter the password and click on "Next" and enter the hint for your password, and click on "Next". After appearing next screen click on "Yes" button.
22. Then on next screen it will appear "Choose privacy settings for your device", then click on "Accept". It will do some small initiating processing, wait for it to complete.
23. Finally you are ready with your most favourite Windows Operating System.

--:UBUNTU INSTALLATION STEPS:--

(Note:--By using Rufus-3.1, it takes approx 07.43 minutes to make a USB(pendrive) Ubuntu Bootable.)

0. After selecting the USB stick from the Boot menu, you will enter into Ubuntu 18.04 LTS installation.
1. A welcome window will appear containing sections with buttons like "Try Ubuntu" and "Install Ubuntu".
2. Click on "Try Ubuntu" button, click on left bottom of window and in search panel search "GParted" and press ENTER.
3. A Window of GParted will appear, select the unallocated region and right click on it select "New". A new overlapping window will appear, from various fields select "Create as:" from that select "Primary Partition", and in "File System" Label select 'ntfs' in "New size(MiB):" give the size in MB (for eg:- if you want a 100GB Drive then multiply 100*1024 it will give 102400MB as the size for 100GB), and then click on "Add" Button.
4. Now again select the unallocated region and right click on it select "New". A new overlapping window will appear, from various fields select "Create as:" from that select

"Extended Partition" and then click on "Add" Button. To apply the changes click on green tick, a overlapped window will appear then click on "Apply" button. After completion a new overlapped window will appear then click on "Close" button.

5. Then close the GParted by clicking close button.
6. Now double click on the icon of "Install Ubuntu 18.04 LTS", a new welcome window will appear select language as "English" and click on "Continue" button.
7. The next window will tell you to select the Keyboard Layout, so select "English(US)" in both the regions. and click on "Continue" button. (you can select "Indian" from first region and "Indian-English(India, with rupee)" from second region).
8. The next window will appear, it will ask for Wireless connectivity having two radio buttons select the radio button "I don't want to connect to a wi-fi network right now" and click on "Continue" button.
9. Two sections will appear on window i.e "What apps would you like to install to start with?" and "Other options", ignore the "Other options" section and select a radio button with "Normal installation".
10. Next window will appear with Installation type to select, from that select the "Something else" radio button and click on "Install Now" button.
11. Now a screen appears with previous partitions, now the task is to create partion, from various options present select the "free space" and click on "+" button.
12. A new small window "Create partition" will overlapping the previous window, in "Size" field specify the size in MB (for eg:- if you want a 100GB for the Ubuntu then multiply 100×1024 it will give 102400MB as the size for 100GB). select the "Type for the new partition" as "Logical", then "Location for the new partition" as "Beginning of this space", from the drop down menu of "Use as" select "Ext4 journaling file system" and from drop down menu of "Mount point" select it as "/". Click on the "OK" button.
13. Now, the partition is created for your Ubuntu but the Swap partition is not created. So do Step 11 and after that in "Size" field specify size in MB, the size to be entered can be concluded to a small equation as 'RAM size * 2' (for eg:- if RAM size is 2GB, then the size to give to swap partition is $2\text{GB} \times 2 = 4\text{GB}$). Select the "Type for the new partition" as "Logical", then "Location for the new partition" as "Beginning of this space" and from the drop down menu of "Use as" select "swap area". Click on the "OK" button.

14. Find the "Install Now" button and click on it. A new window overlapping the previous window will appear, two buttons "Go Back" and "Continue" button will appear, from that select the "Continue" button.
15. A new window with section "Where are you" will appear, find your country and select it from the World Map. Click on "Continue" button.
16. A section "Who are you?" will appear Enter your name in front of "Your name:" field. Now enter your password in "Choose a password:" field, for confirmation reenter your password in "Confirm your password:" field. Click on "Continue" button.
17. Your Ubuntu installation process will begin, wait for the completion (approximately it will take 8 minutes).
18. You will get the Pop up click on Restart Now Button .

--:LINUX MINT INSTALLATION STEPS:--

(Note:--By using Rufus-3.1, it takes approx 08.03 minutes to make a USB(pendrive) Linux Mint 18.2 MATE Bootable.)

0. After selecting the USB stick from the Boot menu, you will enter into Linux Mint 18.2 MATE installation.

1. You will boot into Live OS of Linux Mint 18.2 MATE.
2. Double click on Install Linux Mint icon, a new welcome window will appear select language as "English" and click on "Continue" button.
3. The next window will appear, it will ask for Wireless connectivity having two radio buttons select the radio button "I don't want to connect to a wi-fi network right now" and click on "Continue" button.
4. "Preparing to install Linux Mint" window will appear with three buttons "Quit", "Back" and "Continue", select the "Continue" Button.
5. Next window will appear with Installation type to select, from that select the "Something else" radio button and click on "Continue" button.

6. Now a screen appears with previous partitions, now the task is to create partition, from various options present select the "free space" and click on "+" button.
7. A new small window "Create partition" will overlapping the previous window, in "Size" field specify the size in MB (for eg:- if you want a 100GB for the Ubuntu then multiply 100×1024 it will give 102400MB as the size for 100GB). select the "Type for the new partition" as "Logical", then "Location for the new partition" as "Beginning of this space", from the drop down menu of "Use as" select "Ext4 journaling file system" and from drop down menu of "Mount point" select it as "/". Click on the "OK" button.
8. As we have created the swap partition while Ubuntu Installation so there is no need to allocate a new swap partition.
9. Find the "Install Now" button and click on it. A new window overlapping the previous window will appear, two buttons "Go Back" and "Continue" button will appear, from that select the "Continue" button.
10. A new window with section "Where are you?" will appear, find your country and select it from the World Map. Click on "Continue" button.
11. A section "Who are you?" will appear Enter your name in front of "Your name:" field. Now enter your password in "Choose a password:" field, for confirmation reenter your password in "Confirm your password:" field. Click on "Continue" button.
12. Your Linux-Mint installation process will begin, wait for the completion (approximately it will take 8 minutes).