

Create your own Linux distribution with Ubuntu Imager

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Distroshare.com, creator of Distroshare Ubuntu Imager, is a website built to allow you to share your customized Ubuntu distribution with others and the process of doing it is incredibly simple.

1. 10 Linux distributions you may not know yet

Script

In the past, there was a tool called Remastersys that easily created Live CD from the installation system. However, the project has been discontinued for a number of reasons. Even if you have a copy, it can't work as expected in new Ubuntu systems. Although Ubuntu has a very detailed guide on how to create a Live CD using manual methods, the process is long, complex and difficult.

Fortunately, people at distroshare.com automate this process, including it in a bash script. With minimal configuration, anyone can create a live environment with editing a text file and running the shell script.

Ubuntu Imager script of Distroshare is stored on GitHub. To get it, type:

```
wget https://codeload.github.com/Distroshare/distroshare-ubuntu-imager/zip/master
```

into a command line window. When downloading the file, unzip the zip.

```
unzip distroshare-ubuntu-imager-master.zip -d / path / to / destination / folder
```

In this example, the command looks like this:

```
unzip distroshare-ubuntu-imager-master.zip -d / home / maketecheasier
```

Configuration

Once the decompression is complete, you can change the script's directory.

```
cd /extract /path /distroshare-ubuntu-imager-master
```

For example:

```
cd /home /maketecheasier /distroshare-ubuntu-imager-master
```

Among the files found here, the files to be considered are 'distroshare-ubuntu-imager.config' and 'distroshare-ubuntu-imager.sh'.

```
maketecheasier@attila-VirtualBox: ~/distroshare-ubuntu-imager-master
maketecheasier@attila-VirtualBox:~$ cd distroshare-ubuntu-imager-master/
maketecheasier@attila-VirtualBox:~/distroshare-ubuntu-imager-master$ ls
distroshare-ubuntu-imager.config  README.md
distroshare-ubuntu-imager.sh     ubiquity_frontend_gtk_dialog_size.patch
gtk_ul.py.orig                   ubiquity.patch
LICENSE                           user-setup-apply.patch
pluginInstall.patch
maketecheasier@attila-VirtualBox:~/distroshare-ubuntu-imager-master$
```

You will start by modifying the first file.

```
nano . /distroshare-ubuntu-imager.config
```

```
maketecheasier@attila-VirtualBox: ~/distroshare-ubuntu-imager-master
GNU nano 2.2.6 File: ./distroshare-ubuntu-imager.config
#Should we install the ubiquity gtk frontend?
#YES for gtk, anything else for QT
GTK="YES"

#The directory where everything will be copied to and set up
WORK="/home/distroshare"

#Patch ubiquity to support distroshare updater. Most people would say NO here
DISTROSHARE_UPDATER="NO"

#Display Manager
#Set to GDM, MDM, KDM, LIGHTDM, LIGHTDM_UBUNTU_MATE, LIGHTDM_ZORIN, or LIGHTDM_KODIBUNTU.
#LIGHTDM is used by most Ubuntu based distros. Specific modifications to the lightdm
#configuration is needed for some distributions.
#DM="LIGHTDM"
#DM="MDM"
#DM="KDM"
#DM="GDM"
#DM="LIGHTDM_UBUNTU_MATE"
#DM="LIGHTDM_ZORIN"
#DM="LIGHTDM_KODIBUNTU"
#DM="LIGHTDM_DEEPI"
DM="LIGHTDM"

#EFI Support
EFI="NO"

#A specific kernel version to use for the Live CD. This could be useful
#if you are using a custom kernel that does not have the aufs module built
#in.
#KERNEL_VERSION="3.13.0-24-generic"
KERNEL_VERSION=$(uname -r)

#The kernel boot parameters of the live cd.
KERNEL_PARAMS=""

#The kernel boot parameters that ubiquity(the installer) will
#set in /etc/default/grub for the installation. Often, this
#will be the same as KERNEL_PARAMS
UBIQUITY_KERNEL_PARAMS=""

#Extra packages to install in the image. Packages must be separated by a space.
EXTRA_PKGS="ubiquity-slideshow-ubuntu"

^G Get Help ^O WriteOut ^R Read File ^V Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^N Next Page ^U UnCut Text ^T To Spell
```

The first line determines if GTK or Qt needs to be installed for Ubiquity, the installer allows you to install the system directly later.

```
GTK = "YES"
```

Change this line with Qt (if you run KDE) to `GTK = "NO"` or even `GTK = "LEAVEMEALONEWITHTHAT"`.

The next line will be the working directory, this is where ISO is located. In this case is the user's home directory. You can change to any folder that is convenient (but make sure it is an existing directory on the system).

```
WORK = "/home/maketecheasier"
```

You can skip patch, but can't ignore Display Manager. By default, LightDM is the manager that displays the use of Ubuntu vanilla.

```
DM = "LIGHTDM"
```

If you run any derivative distribution, you should change the line according to your own settings. (Gnome uses "GDM" and KDE using "KDM", so most derivative versions based on these systems will use such display managers. LinuxMint uses 'MDM' a system. Common derivative).

If you need 'EFI Support', change the lower line to "YES":

```
EFI = "NO"
```

By default, the script uses whatever the system kernel is running. By modifying

```
KERNEL_VERSION = $(uname -r)
```

```
city
```

```
KERNEL_VERSION = "your-custom-kernel-version-here"
```

You can specify any kernel to be used as an old kernel, a newer kernel or even a kernel that you have compiled yourself. Only change this if you know what you're doing. The best way is to leave it at the default settings.

You can specify kernel parameters for the LiveCD:

```
KERNEL_PARAMS = ""
```

or for the system you want to install from the Live CD.

```
UBIQUITY_KERNEL_PARAMS = ""
```

Finally, you can specify additional packages to be installed. It may be useful to want to keep the image live file as small as possible, but make sure that more software is installed with it. Packages separated by spaces.

```
EXTRA_PKGS = "ubiquity-slideshow-ubuntu"
```

The last line allows you to insert a URL for your own notes.

```
RELEASE_NOTES_URL = "https://www.distroshare.com/"
```

Run the script

After you've finished editing the settings, run the script.

```
sudo ./distroshare-ubuntu-imager.sh
```

The script will do some work. After reading the specified configuration details, it will create the necessary directories, install some additional software (namely `xorriso` `squashfs-tools` `dmraid` `lvm2` and `samba-common`), determine the version of GRUB needed, install and install the Ubiquity distribution (and other components that come with it). Then it will clean up the temporary files, delete the ubiquity to start the system, compress the newly created file system with `squashfs`, create an `md5` checksum and `grub` entries for the new system and finally set it to an ISO file.

```
maketecheasier@attila-VirtualBox: ~/distroshare-ubuntu-imager-master
Making filesystem.size
Making md5sum
Creating release notes url
Creating grub.cfg
Creating the iso
xorriso 1.3.2 : RockRidge filesystem manipulator, libburnia project.

Drive current: -outdev 'stdio:/home/maketecheasier/live-cd.iso'
Media current: stdio file, overwriteable
Media status: is blank
Media summary: 0 sessions, 0 data blocks, 0 data, 18.7g free
Added to ISO image: directory '/'='/tmp/grub.TBH0Rh'
xorriso : UPDATE : 280 files added in 1 seconds
Added to ISO image: directory '/'='/home/maketecheasier/CD'
xorriso : UPDATE : 294 files added in 1 seconds
xorriso : NOTE : Copying to System Area: 512 bytes from file '/usr/lib/grub/i386-pc/boot_hybr
ld.img'
libtsofs: NOTE : Automatically adjusted MBR geometry to 1019/119/32
xorriso : UPDATE : 0.52% done
xorriso : UPDATE : 1.69% done
xorriso : UPDATE : 2.88% done, estimate finish Mon Sep 07 12:42:35 2015
xorriso : UPDATE : 3.63% done, estimate finish Mon Sep 07 12:42:45 2015
xorriso : UPDATE : 5.07% done, estimate finish Mon Sep 07 12:42:37 2015
xorriso : UPDATE : 5.92% done, estimate finish Mon Sep 07 12:42:41 2015
xorriso : UPDATE : 6.76% done, estimate finish Mon Sep 07 12:42:43 2015
```

It takes a while for the script to finish running, so you have an ISO image file.

```
maketecheasier@attila-VirtualBox: ~
maketecheasier@attila-VirtualBox:~$ ls
CD                Downloads         Music             settings.properties
Desktop           examples_desktop Pictures          Templates
distroshare-ubuntu-imager-master live-cd.iso      Public           Videos
Documents        mono             rootfs           VSCode
maketecheasier@attila-VirtualBox:~$
```

Start ISO

The created ISO image file can be burned to a CD, mounted to a virtual machine, or run directly from the `grub`. You can also copy it to USB with `dd`.

```
dd if = live-cd.iso of = / dev / sdX bs = 1M
```

`/ dev / sdX` is the path to the USB drive.

Distroshare Ubuntu Imager is a bash script that is easy to configure and replace Remastersys software, allowing you to create custom Ubuntu easily. After editing the configuration file and running the scripts, you can 'show off' your work on distroshare.com for everyone to see and use.

I wish you all success!

You finished reading the article "**Create your own Linux distribution with Ubuntu Imager**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.
