

How to upgrade Ubuntu from the command line

Sometimes you cannot use the graphical utility to upgrade Ubuntu, in which case you must use the command line to upgrade it.

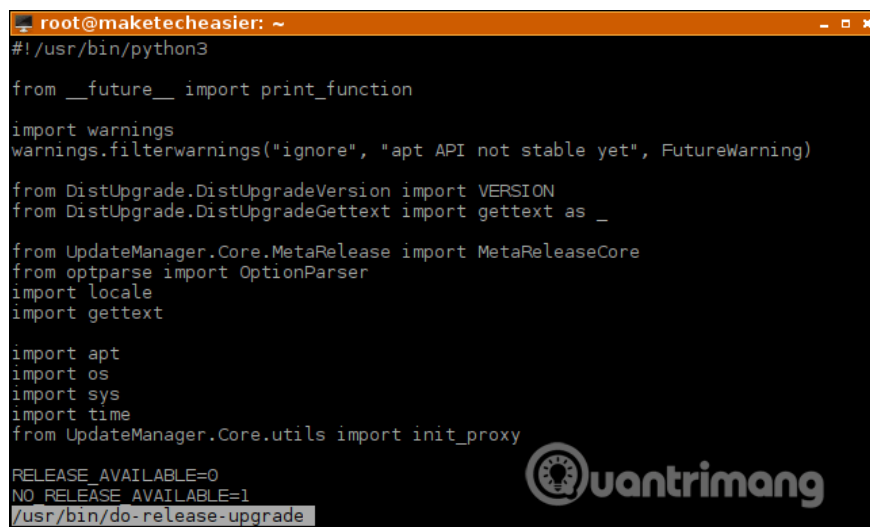
Ubuntu's update manager makes it easier to upgrade the installation to the main release. The utility's graphical interface guides users to upgrade step-by-step, making it easier to follow and implement.

However, sometimes you cannot use the graphical utility on the server because there is no access to the graphical interface. In this case you must use the command line to upgrade Ubuntu.

1. Instructions for managing programs in Ubuntu via the command line
2. How to enable automatic system update mode on Ubuntu
3. Simple way to update Ubuntu ISO file

Do-release-upgrade command with -d switch

The Ubuntu upgrade utility from the old version to the new version is called do-release-upgrade. This is a script written in Python programming language.

A terminal window titled 'root@maketecheasier: ~' showing the content of the do-release-upgrade script. The script is a Python file located at /usr/bin/python3. It includes imports for print_function, warnings, DistUpgrade, UpdateManager, argparse, locale, apt, os, sys, time, and init_proxy. At the bottom, it shows environment variables: RELEASE_AVAILABLE=0 and NO_RELEASE_AVAILABLE=1, and the file path /usr/bin/do-release-upgrade. A watermark for 'uantrimang' is visible in the bottom right corner of the terminal window.

```
root@maketecheasier: ~
#!/usr/bin/python3

from __future__ import print_function

import warnings
warnings.filterwarnings("ignore", "apt API not stable yet", FutureWarning)

from DistUpgrade.DistUpgradeVersion import VERSION
from DistUpgrade.DistUpgradeGettext import gettext as _

from UpdateManager.Core.MetaRelease import MetaReleaseCore
from argparse import OptionParser
import locale
import gettext

import apt
import os
import sys
import time
from UpdateManager.Core.utils import init_proxy

RELEASE_AVAILABLE=0
NO_RELEASE_AVAILABLE=1
/usr/bin/do-release-upgrade
```

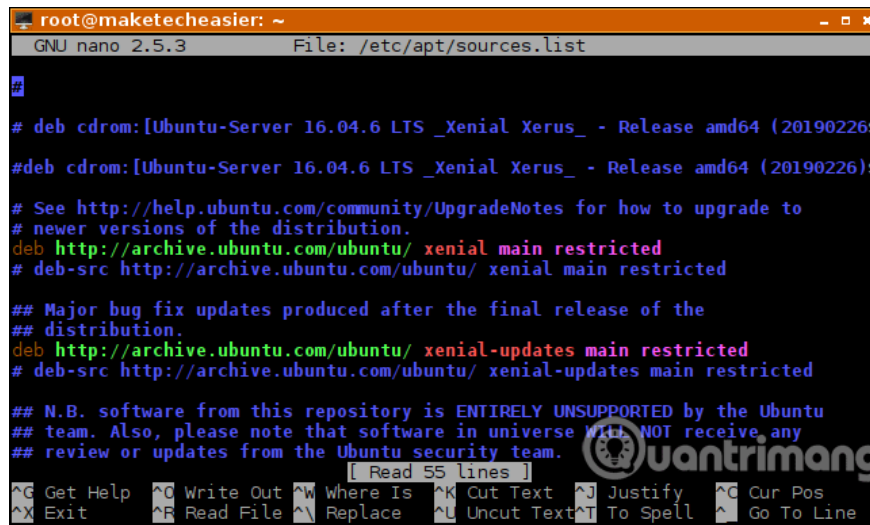
Typically, this script will upgrade from a stable release (or LTS - Long-term Support) to the next release. For example, it can update Ubuntu 16.04 to Ubuntu 18.04. However, when a new LTS version appears, you cannot upgrade it until the first point release is released. For example, if you are using version 16.04.5, you cannot upgrade to version 18.04 but wait until version 18.04.1 is released. The first new LTS release still has bugs, but if you really need the new LTS, you can use the command line switch to force the utility to update. So when you

just released version 18.04 you can update it with the following command:

```
sudo do-release-upgrade -d
```

How to upgrade Ubuntu with the do-release-upgrade command

Before upgrading, you should temporarily disable a third-party repository (PPA) or entries you have added `/etc/apt/sources.list` and `/etc/apt/sources.list.d/` . If you don't add any software repositories other than the repositories provided by Ubuntu, you can skip this step.



```
root@maketecheasier: ~
GNU nano 2.5.3 File: /etc/apt/sources.list
#
# deb cdrom:[Ubuntu-Server 16.04.6 LTS _Xenial Xerus_ - Release amd64 (20190226)$
#deb cdrom:[Ubuntu-Server 16.04.6 LTS _Xenial Xerus_ - Release amd64 (20190226)$
# See http://help.ubuntu.com/community/UpgradeNotes for how to upgrade to
# newer versions of the distribution.
deb http://archive.ubuntu.com/ubuntu/ xenial main restricted
# deb-src http://archive.ubuntu.com/ubuntu/ xenial main restricted

## Major bug fix updates produced after the final release of the
## distribution.
deb http://archive.ubuntu.com/ubuntu/ xenial-updates main restricted
# deb-src http://archive.ubuntu.com/ubuntu/ xenial-updates main restricted

## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
## team. Also, please note that software in universe WILL NOT receive any
## review or updates from the Ubuntu security team.
[ Read 55 Lines ]
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^Y Replace ^L Uncut Text ^T To Spell ^_ Go To Line
```

Some packages from these software repositories may affect new packages from the next Ubuntu release. Therefore you should run **sudo apt update** to refresh package information. Then, use commands like **sudo apt autoremove nginx** to delete the programs you have installed from third-party providers.

If there is no do-release-upgrade command on your system, install it with the following command:

```
sudo apt install update-manager-core
```

Usually it is installed by default. You need to update the software package before upgrading to a new version of Ubuntu. To update all packages on the system, run the following command:

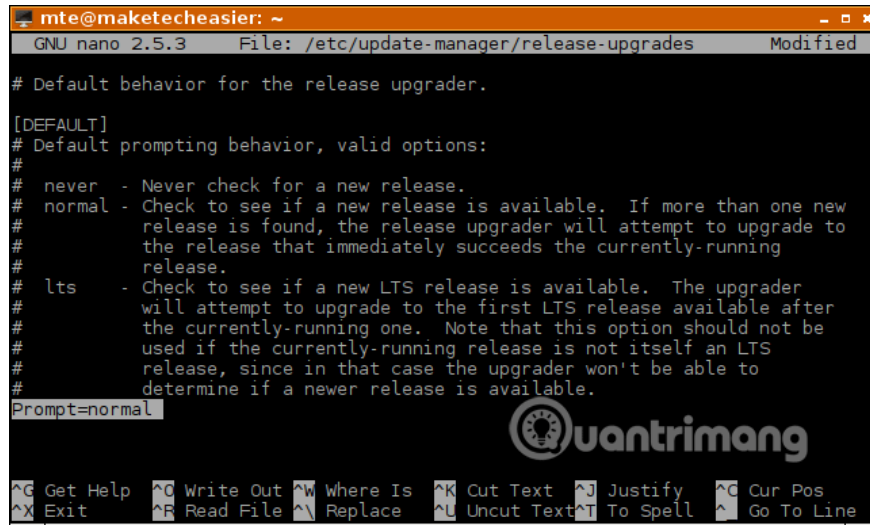
```
sudo apt update && apt upgrade sudo
```

Update to Ubuntu for short-term support (Optional)

Even numbers, such as 18.04, are used for long-term support releases (LTS). odd numbers such as 19.04 are used for short-term releases. If the version you are using is long-term and wants to upgrade to the next long-term version, skip this step. If you are using a long-term version such as 18.04 and want to upgrade to version 18.10 or 19.04 (any subsequent versions available), edit this file:

```
sudo nano / etc / update-manager / release-upgrades
```

Change **Prompt = lts** to **Prompt = normal** , press **Ctrl + X** , then type **y** and press **Enter** to save the file.



```
mte@maketecheasier: ~
GNU nano 2.5.3 File: /etc/update-manager/release-upgrades Modified

# Default behavior for the release upgrader.

[DEFAULT]
# Default prompting behavior, valid options:
#
# never - Never check for a new release.
# normal - Check to see if a new release is available. If more than one new
# release is found, the release upgrader will attempt to upgrade to
# the release that immediately succeeds the currently-running
# release.
# lts - Check to see if a new LTS release is available. The upgrader
# will attempt to upgrade to the first LTS release available after
# the currently-running one. Note that this option should not be
# used if the currently-running release is not itself an LTS
# release, since in that case the upgrader won't be able to
# determine if a newer release is available.
Prompt=normal

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^\ Replace ^L Uncut Text ^T To Spell ^_ Go To Line
```

Upgrade local computer

Although you can open terminal emulator software on a graphical computer, there is a problem. When the graphics server is upgraded, it can restart, causing the terminal session to be lost. So you should log out of that graphics session, then press **Alt + Ctrl + F2** or **Alt + Ctrl + F3** and log in to the TTY control panel before starting to use the upgrade script below.

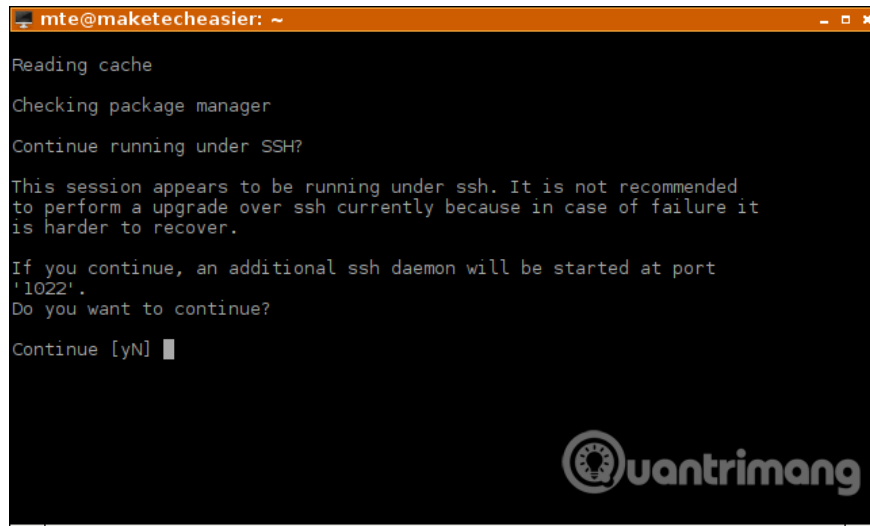
Upgrade Ubuntu

Run the following upgrade script:

```
sudo do-release-upgrade
```

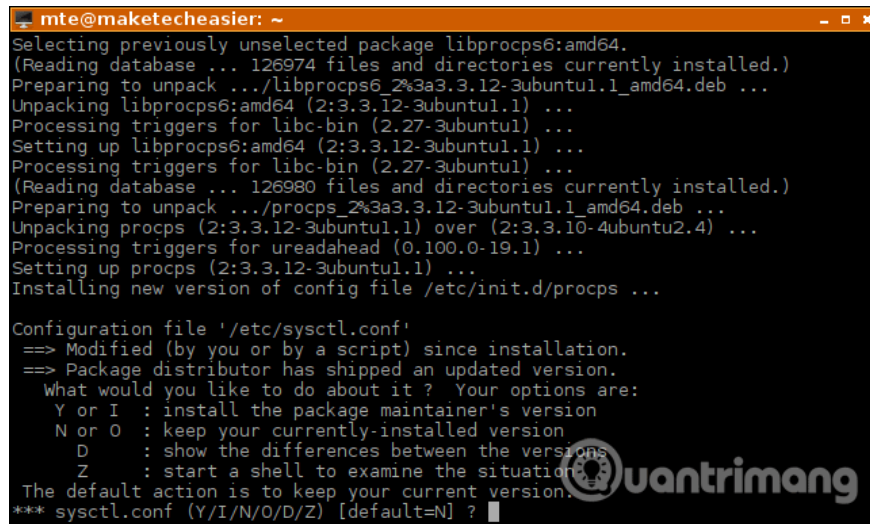
Now carefully follow the instructions on the screen. This tutorial will be slightly different depending on your upgrade script. For example, when connecting to an SSH session, you need to take one more step like the image below.

```
mte@maketecheasier: ~  
Reading cache  
Checking package manager  
Continue running under SSH?  
  
This session appears to be running under ssh. It is not recommended  
to perform a upgrade over ssh currently because in case of failure it  
is harder to recover.  
  
If you continue, an additional ssh daemon will be started at port  
'1022'.  
Do you want to continue?  
Continue [yN]
```



The next step, you need to handle the configuration file changes in the new package version.

```
mte@maketecheasier: ~  
Selecting previously unselected package libprocps6:amd64.  
(Reading database ... 126974 files and directories currently installed.)  
Preparing to unpack .../libprocps6_2%3a3.3.12-3ubuntu1.1_amd64.deb ...  
Unpacking libprocps6:amd64 (2:3.3.12-3ubuntu1.1) ...  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
Setting up libprocps6:amd64 (2:3.3.12-3ubuntu1.1) ...  
Processing triggers for libc-bin (2.27-3ubuntu1) ...  
(Reading database ... 126980 files and directories currently installed.)  
Preparing to unpack .../procps_2%3a3.3.12-3ubuntu1.1_amd64.deb ...  
Unpacking procps (2:3.3.12-3ubuntu1.1) over (2:3.3.10-4ubuntu2.4) ...  
Processing triggers for ureadahead (0.100.0-19.1) ...  
Setting up procps (2:3.3.12-3ubuntu1.1) ...  
Installing new version of config file /etc/init.d/procps ...  
  
Configuration file '/etc/sysctl.conf'  
==> Modified (by you or by a script) since installation.  
==> Package distributor has shipped an updated version.  
What would you like to do about it? Your options are:  
Y or I : install the package maintainer's version  
N or O : keep your currently-installed version  
D      : show the differences between the versions  
Z      : start a shell to examine the situation  
The default action is to keep your current version.  
*** sysctl.conf (Y/I/N/O/D/Z) [default=N] ?
```



If you have changed the configuration file mentioned, you can press **N** to keep the changes. If the server provider changes those files, press **N**. In case you and the provider do not make any changes, type **Y** to get the updated configuration file.

The upgrade process is not complicated, but there may be some problems depending on the level of 'clean' on your system (no third-party software repositories). After the update utility is complete, you need to restart the computer. Usually this script will provide options to reboot, otherwise you can run:

```
sudo systemctl reboot
```

Or more simply with the command:

```
sudo reboot
```

If there are no upgrade errors with the new software, everything will work when the machine restarts. If an error occurs, refer to the article [How to fix Ubuntu update errors](#)

I wish you all success!

You finished reading the article "**How to upgrade Ubuntu from the command line**" 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.
