Speed up your Ubuntu!

Back to the home page

Speeding up your Ubuntu is fun! That way, you'll get more performance out of your computer for free.

Note: *are you using Linux Mint? There's a separate page for speed tips for Linux Mint.*

There are several tweaks to make Ubuntu run faster on a slow computer. Some are quite safe, some are risky. Here you'll find only the safe ones.

I don't like risky tweaks, because I think that stability and reliability are much more important than a little speed gain. That's why I've collected a couple of speed tips, that you can apply safely and with which you can make your Ubuntu run considerably faster in many cases.

Those tips are mainly how-to's that can be found elsewhere on this website as well, but scattered all over the site. I've bundled them on this page, that only deals with speed gain.

Note: even though you can apply those tips safely, nothing in life is really for free.... You always pay some "price". You disable a particular system service, a couple of nice visual effects or some feature.

Each tweak therefore has its own "price tag". So you should consider before you apply a tip, whether you're willing to pay the "price" for it.

Contents

This website is being sponsored by Google Ads.

Are you using an ad blocker? Then you're also blocking my earnings from advertisements....

If you wish to support my website, you can configure your ad blocker to make an exception for this website.

Thanks in advance....

Remove the indexing application apt-xapian-index

4. The indexing application apt-xapian-index speeds up certain search operations, but it can slo down older and weaker computers a lot. You can freely remove this package, because it's not essential. In real life you'll hardly miss it. In lightweight Lubuntu it's not even there by default.

If you have installed Synaptic Package Manager: side effect of the removal is, that the "Quick searc box disappears from the panel of Synaptic. This means that you have to use the search button (th one with the magnifying glass icon) in the panel o Synaptic now.

This search button is superior to the Quick search anyway (it produces more search results), so this disappearance is actually an extra advantage.

Removing is easy:

Launch a terminal window.
*(You can launch a terminal window like this: *Clic*

Type (use copy/paste to prevent errors):
sudo apt-get purge apt-xapian-index

Press Enter. When prompted, type your password Your password will remain entirely invisible, not even dots will show, this is normal.
Press Enter again.

Improve usage of the system memory (RAM)

1. You can improve the usage of the system memory with the following tweaks:

The absolute number one: decrease swap use

1.1. This is especially noticeable on computers with relatively low RAM memory (1 GB or less): they tend to be far too slow in Ubuntu, and Ubuntu accesses the hard disk too much. Luckily, this can be helped.

On the hard disk there's a separate partition for virtual memory, called the swap. When Ubuntu uses the swap too much, the computer slows down a lot.

Ubuntu's inclination to use the swap, is determined by a value. The lower the value, the longer it takes before Ubuntu starts using the swap. On a scale of 0-100, the default value is 60. Which is much too high for normal desktop use, and only fit for servers. Decreasing this value on a desktop computer has no negative side effects whatsoever.

A detailed explanation can be found here (link dead? Then download this pdf file with the same content).

Now the how-to:

a. First make sure that you have installed the applications gksu and leafpad:

Launch a terminal window.
*(You can launch a terminal window like this: *Click*)*

Type (or copy/paste):
sudo apt-get install gksu leafpad

Reboot your computer.

Disable Java in Libre Office

5. The performance of Libre Office can be enhanced greatly, when you disable Java in it. Th will disable a few features, but usually you won't even miss those.

Toolbar Libre Office Writer - Tools - Options...

LibreOffice - Advanced - Java options:
remove the tick for: Use a Java runtime environment

Turn off some startup applications

6. You can speed up Ubuntu somewhat, by disabling a couple of system services, that may b superfluous for you. This tweak can be compared tweaking msconfig in Windows.

First make all startup applications visible, because in Ubuntu most of them are hidden by default (not so in Xubuntu and Lubuntu):

Launch a terminal window.
*(You can launch a terminal window like this: *Clic*

Type (use copy/paste):
cd /etc/xdg/autostart/

Press Enter.

Then copy/paste this in the terminal:
sudo sed --in-place 's/NoDisplay=true/NoDisplay=false/g' *.desktop

Press Enter. When prompted, type your password Your password will remain entirely invisible, not even dots will show, this is normal.
Press Enter again.

Now check the Startup Applications:
Click on the grey Ubuntu logo (Dash home).
Query:startup.

Untick what you don't need and reboot your computer (or log out and then log in again).

Note: only remove the ticks, do not remove the application from the list! Keep the tweak easily

Press Enter and submit your password. Please note that the password will remain invisible, not even asterisks will show, which is normal.

b. Now check your current swappiness value. Type in the terminal (use copy/paste):
cat /proc/sys/vm/swappiness

Press Enter.

The result will probably be 60.

c. To change the swappiness into a more sensible setting, type in the terminal (use copy/paste to avoid typo's):
gksudo leafpad /etc/sysctl.conf

Press Enter.

Scroll to the bottom of the text file and add your swappiness parameter to override the default. Copy/paste the following lines:
# Decrease swap usage to a more reasonable level
vm.swappiness=10

d. Save and close the text file. Then reboot your computer.

e. After the reboot, check the new swappiness setting:

Type (use copy/paste):
cat /proc/sys/vm/swappiness

Press Enter.

Now it should be 10.

Note: your machine might benefit from an even bigger decrease in swappiness. A useful rule of thumb might be this:
1 GB RAM or more: swappiness at 10
Less than 1 GB RAM: swappiness at 5**For 1 GB RAM or more: tame the inode cache**

1.2. Computers with 1 GB or more RAM memory, will probably benefit by shrinking the inode cache less aggressively.This is how you do it:
sudo apt-get install gksu leafpad
c. Then type in the terminal (use copy/paste):
gksudo leafpad /etc/sysctl.conf
Press Enter.
defaults, so copy/paste the following blue lines:

reversible (you never know). When in doubt abou particular application: don't do anything, just leave the way it is.

Examples of system services that many people don't need:
- Bluetooth Manager
- NVIDIA X Server Settings

Note: unticking startup applications is a user preference, so repeat in each user account.

Add-ons and extensions: don't turn your web browser into a Christmas tree

7. You can install a lot of add-ons (extensions) in the web browsers Firefox, Chrome and Chromium Those add-ons can be very useful, but they have couple of important disadvantages, because they are "applications within an application":

- they slow your browser down, especially if there are a lot of them;
- they can cause malfunctions; both in each other and in the browser itself;
- it has occurred: add-ons with malicious content. Don't trust them blindly.

So don't turn your browser into a Christmas tree: don't adorn it with lots of add-ons. Limit yourself t only a few add-ons, that are really important for you.

Note: watch out for add-ons that claim that they make your browser faster! Often they do more ha than good. Do not install them: even if one or two them can really make your browser run noticeably faster, they may damage the stability of your browser.

Speed up your wireless internet

8. For some wireless chipsets, a simple tweak is sufficient for increasing the speed and the connection quality of your wireless internet. Name disabling the power management for the wireless chipset. The price you pay is obviously an increas in power consumption, although this increase isn' much.

You can do that as follows:

# Improve cache management
vm.vfs_cache_pressure=50

d. Close the text file and reboot your computer.

For 768 MB RAM or less: enable zRam

1.3. When your computer has very little RAM (768 MB or less), then of course your best choice is a lightweight member of the Ubuntu family, like Lubuntu. But even then the lack of memory will remain a problem, which will cause your system to slow down from time to time. Even when the swappiness has been decreased to 5.

In that case, you might achieve better results by enabling the experimental kernel module zRam. zRam creates a compressed swap file in your RAM. The compression factor is the gain: with that, you "increase" your RAM.

Note: this hack might make your system unstable! So do not apply it on important computers.

The price you pay for this, is threefold:

- Your processor (CPU) is being taxed more heavily, because it'll have to compress and decompress all the time;

- When the system has filled the RAM swap, it'll start swapping on the hard drive as well. With a heavy burden: the chunk of memory that has been sacrificed for the RAM swap.

- For the time being it's still an experimental module, so this extra layer of complexity might cause instability.

That's why, for the time being, I advise zRam only for computers with very little RAM, and even then **only in combination with a swappiness that has been decreased to 5**. Furthermore, zRam isn't suitable yet for production computers, but only for test machines and other, non-essential computers.

You can install it as follows:

Launch a terminal window.
*(You can launch a terminal window like this: *Click**)*

Type (use copy/paste):
sudo apt-get install zram-config

Press Enter. Type your password when prompted; your password will remain entirely invisible, not even dots

a. First make sure that you have installed the applicationsgksu and leafpad:

Launch a terminal window.
*(You can launch a terminal window like this: *Clic*

Type (or copy/paste):
sudo apt-get install gksu leafpad

Press Enter and submit your password. Please no that the password will remain invisible, not even asterisks will show, which is normal.

b. Now find out how Ubuntu calls your wireless chipset:

Click on the grey Ubuntu logo (Dash home).