11 Raspberry Pi acceleration tricks

Raspberry Pi can be very powerful but to get the best speed is not everyone knows.

Is the Raspberry Pi machine in use without the desired speed?Don't worry, you're not the only one who has that situation.Raspberry Pi can be very powerful but to get the best speed is not everyone knows.

No matter how Raspberry Pi is used, if it is not configured to run at maximum speed, it may not be possible to experience it.Here are ways to speed up the Raspberry Pi.

Connect a stable power source

Raspberry Pi 3 needs to connect power via USB micro port, ideally it is via 5V 2.5A adapter.Whether connecting Pi directly via USB port or charging your phone will be more convenient, but the power supply will be unstable.

Use a light operating system

It is recommended to install a distribution that uses as little resources as possible on Pi.Wanting Pi to run fast means keeping everything to a minimum, and a few Linux distributions are created for that purpose.Even Raspbian may be an option, but consider DietPi or RISC OS (not Linux) for the lightest OS experience.

Delete bloatware

Users can use the full set of storage on the microSD card by deleting unnecessary pre-installed software.For example, the Raspberry Pi 3 is perfect for use as a desktop, but you may not need software like LibreOffice, so delete them to free up memory.

Open a terminal window and type:

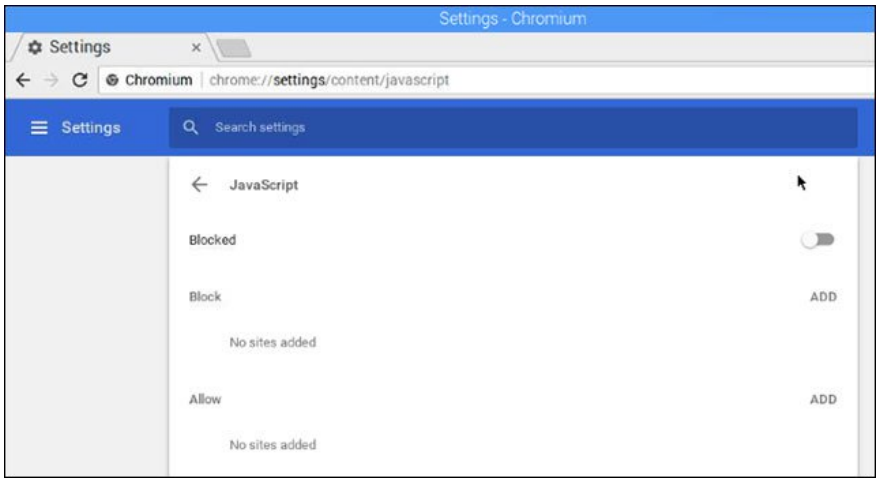
```
sudo  apt purge libreoffice*
sudo  apt clean
sudo  apt autoremove
```

And not only LibreOffice, can you delete both Wolkfram with the same command, replace `libreffice*` with `wolfram-engine,` and either `minecraft-pi` or `sonic-pi` or any other software.

Disable JavaScript

If you need to browse the web on Raspberry Pi, you may be using Chromium, Vivaldi or many other lightweight browsers.Restricting the number of open tabs is also helpful, but another way is to disable JavaScript.Although some functions will be affected, web browsing will be much faster.

To disable JavaScript, on Chromium, select **Menu** > **Setiings** > **Advanced** > **Privacy and Security** > **Connect Settings** > **JavaScript** and switch from **Allowed** to **Blocked.**



Disabling JavaScript is a way to speed up browsing the web on Pi

Overclocking

When you want to speed up, overclocking is an obvious choice and is especially useful when you turn Raspberry Pi into a media center at homeor play a classic game.Although older games are not needed, console games from 1990s to early 2000s will need higher speeds.

There are tools to overclock the Raspberry Pi on most distributions.For example on Raspbian, open the Raspberry Pi Configuration configuration on PIXEL or use `raspi-config` on the command line interface. Here you use the arrow keys to select **Overclock** and then select the speed you want.For best results, choose the level immediately above and save and restart Pi.

When overclocking Raspberry Pi, consider cooling solutions.But it should be noted that overclocking will reduce the life of the machine.Every machine is overclocked, but the best is still the Raspberry Pi 3.

Use microSD card with fast speed

Whether using the Raspberry Pi Zero or Pi 3B +, the speed of the card is also very important.First of all, avoid using small manufacturers' cards, above all choosing Samsung, SanDisk or Kingston for the best quality.

Do not abuse SD card

After power, the SD card is probably the weakest part on Pi.Initially Pi uses SD card, it is very easy to get errors.Later transferred to the microSD card, but still not the problem.First of all, make sure you use a good card, above all microSDHC cards, because they are often able to fix errors and are faster than cheap cards.

Usage is also important.Do not disconnect Pi power without turning off the device.If the OS is running and the power is out, you may make both OS and microSD card error.In addition to the normal shortcut button, the following command can be used:

```
sudo shutdown -h now
```

or set the time to shutdown

```
sudo shutdown  -h 12:01
```

If you are interested in data, look for ways to back up microSD cards for Raspberry.

Running from USB / HDD

Maybe you already know that you can run Raspberry Pi from microSD card, but what about running Pi from USB?This way can help speed up and help the machine run more stable and more stable but still increase memory for Pi.This measure is only possible on Pi 3.

Add external storage

If you have external storage devices such as USB, SSD or HDD, you might consider using them to add storage capacity to Pi.

Use ZRAM as fast storage

Pi hardware can be used to create fast storage.Although the data here is not accessible right away when rebooting the machine, it is not important because we often store it on the cloud or removable storage devices.

ZRAM uses Pi's hardware to convert data, instead of relying solely on the microSD card.Although the microSD card is fast, ZRAM is usually faster.It is rare for all RAM on Pi to be used up, so exploiting this resource is also reasonable.

This is a video tutorial using ZRAM to speed up the Raspberry Pi.

Download the code from Github.*httpss: //github.com/novaspirit/rpi_zram*

```
sudo wget  -O /usr/bin/zram.sh httpss://raw.githubusercontent.com/novaspirit/rpi_
```

Then create the executable file, edit the rc.loacl file and run the downloaded script when starting Pi.

```
sudo chmod  +x /usr/bin/zram.sh
sudo nano  /etc/rc.local
```

Here, find the exit line 0 and the above line, add the code:

```
  /usr/bin/zram.sh &
```

Then press **Ctrl + X** and select save and exit.

Consider, don't make Raspberry Pi difficult

See what the purpose of using Pi is, is it time to stop it doing too much work?Anyway, it is just a small computer, no matter how many things you do, doesn't mean you can do it all.

There are jobs that should be left for PCs, laptops or phones, tablets, or other SBC devices.So even when overclocking, use a high quality card . make sure Pi is an appropriate device.

See more:

1. How to run, Raspberry Pi emulator on computer?
2. 10 operating systems you can run with Raspberry Pi
3. How to install an operating system for Raspberry Pi