Free your Android smartphone

Our phones have become real connected computers. They know everything about us, our contacts, our photos, sms, emails, social media, our geographical location, have microphones, a camera...

Do we really have control over it?

We have gathered in these few pages
some tips to get back in control easily
on your applications and data.

Please do not hesitate to improve this document

Inspired by the FSFE freeyourandroid.org campaign · pascal.gascoin@cemea.asso.fr · 1/16 · Version 22/10/2019

The operating system or OS

An operating system is a set of software that allows you to use your mobile phone and run applications. Although Android (developed by Google) is mainly free, many phones come with proprietary components and extensions and we are encouraged every day to install new proprietary applications as well.

No one is allowed to study how they work and what they really do with the phone. Sometimes they don't work exactly the way you want, but they can even contain malicious features.

Changing operating system to a completely free system is therefore a good solution, even if the hardware problem (the physical components of the phone) will remain, but it requires technical skills or support.
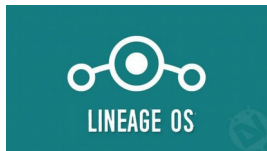
LineageOS is an open source operating system for smartphones and tablets, based on Android. He succeeds CyanogenMod

https://lineageos.org/

/e/ is a non-profit project, in the interest of all. It now provides a credible and attractive alternative, including pre-installed phones and online services. You can also migrate your own phone.

https://e.foundation/

The Android system and the "apps"

The world's best-selling system, Android developed by Google, is based on a Linux system. However, it raises many problems regarding the processing of personal data. The CNIL in France, has just imposed a fine of 50 million euros on Google on this subject (January 2019). We will see throughout these pages how to "limit damage"!

We are regularly asked to install a particular application on our "smartphones".
But do we really know what we're getting into these machines when we install this famous application ?

The Exodus Privacy association offers to help us do this. They are developing a platform, called Exodus, to analyze the presence or absence of trackers in an Android application. A tracker or tracker is a part of the software dedicated to collecting data about you and your uses.

We therefore suggest that you start by first measuring the situation by installing this application and taking note of the results !

This is the last time we invite you to install an app from Google PlayStore. We will see in the next few pages how to get rid of it!

If you have already installed F-Droid, we strongly recommend that you install it from this store!

How to search and install Free apps
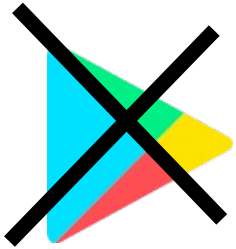
The Google Play Store is considered by many to be the main source of applications. (It must be said that we are left with little choice!) Unfortunately, most applications are proprietary. Using the Google Play Store also requires you to use a Google account, which allows the company, once more, to know a little more about you !

**We encourage you to stop using it
and choose F-Droid.**

F-Droid is a free application store for Android operating systems. It is promoted by the Free Software Foundation Europe.
F-Droid allows you to install applications without requiring an account or prior registration.

How to install it ?

Simply go to https://f-droid.org/ or use the Qr-code under the logo and download the application.
At the time of installation you will be asked to accept the installation of applications from « unknown sources » (from the Play Store...) You can accept without fear !
(see https://liberons-nous.cemea.asso.fr/2018/12/07/liberons-nos-applis-1/) for more (in french...)

Some examples of free apps to install from F-Droid

Because they are free and respect your privacy, we recommend you:

K-9 Mail : Email client that supports multiple accounts, POP3, IMAP and Push IMAP. Can do OpenPGP encryption. Account settings and configurations can be exported.

OsmAnd~ : is an open source browser that can operate offline with access to StreetMap (OSM) open data, with high quality global coverage. All map data can be stored on your device's memory card for offline use. OsmAnd provides GPS routing, with visual and voice guidance, for cars, bicycles and pedestrians. All key features work both online and offline (without an Internet connection).

The public transport companion that respects your privacy and freedom. **Transportr** is a non-profit application developed by people around the world to make using public transport as easy as possible wherever you are. Currently, it works best in Europe, but it also supports many places around the world.

Some examples of free apps to install from F-Droid

Firefox Klar
The fast browser that respects privacy, by Firefox.
Navigate as if no one is watching you. The new Firefox Klar application automatically blocks a wide variety of trackers as soon as you launch it and until you close it. Easily delete your history, passwords and cookies to get rid of things like unwanted ads.

Silence
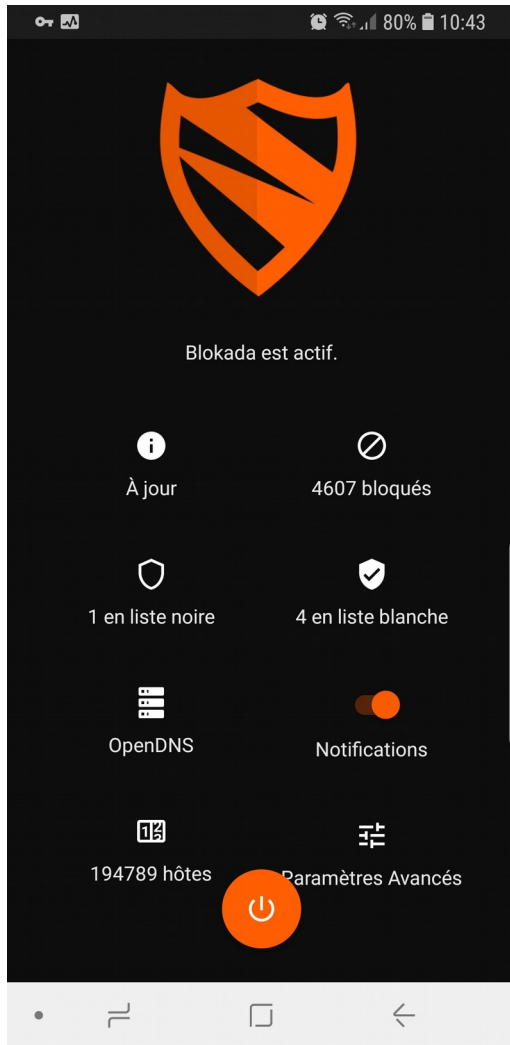Encrypting your SMS messages has never been easier!
Silence is an SMS/MMS application that allows you to communicate with your friends while protecting your privacy. You can send SMS messages and share multimedia files in private. Silence works like any other SMS application. No registration, no need to use a new service, your messages are encrypted locally and end-to-end through the rigorous Signal protocol, so they will be protected if your phone is lost or stolen.

NewPipe
You can play Youtube videos without leaving a trace at Google. He analyzes the YouTube website to get the information he needs and provides it to you...

Some examples of free apps to install from F-Droid

Blokada est actif.

À jour

4607 bloqués

1 en liste noire

4 en liste blanche

OpenDNS

Notifications

194789 hôtes

Paramètres Avancés

Many of us use ad blockers and stop trackers thanks to Firefox extensions (Ublock Origin, Privacy Badger...) But as we have seen, many applications have embedded trackers.

Blokada is an ad, tracer and malware blocker that works with all applications on your computer.

Very easy to use, it allows many settings and works in the background, "silently" both in wifi and on mobile networks.

By blocking many requests, it maximizes the use of our data package and thus reinforces the confidentiality of our data...

Don't look for **Blokada** on Google PlayStore, It was not autorized ! Guess why ?
Direction F-Droid !

I need a non-Free application that is not in F-Droid !

As we have seen, F-Droid only offers free applications. If you want to install a non-free application, you can still search for it on the Play Store
without needing a Google account!

Yalp Store

Yalp Store allows you to download applications directly from Google Play Store. It can check for updates of installed applications and allows you to search for other applications.

By default, Yalp Store connects to Google services using an integrated account, so you don't need a Google account to use it.

From time to time, Yalp will not be abble to connect the PlayStore because Google is changing things… Just wait afew days or try next page !

Warning: Do not download any applications or APKs (this is the name of the installation file extension) outside these repositories. You will not have the updates and you are taking the risk of installing malware.

I need a non-Free application that is not in F-Droid !

Sometimes changes in Google Play Store may prevent Yalp from working properly. Here is an alternative to Yalp (you can use both in parallel!)

Aurora Store

With a design that may not be as austere as Yalp, Aurora Store also allows you to download applications directly from Google Play Store with an anonymous account, so you don't need to have a Google account to use it.

It can check for updates of installed applications and allows you to search for other applications.

Warning: Do not download any applications or APKs (this is the name of the installation file extension) outside these repositories. You will not have the updates and you are taking the risk of installing malware.

What about Social Networks ?

How about we use the opportunity to choose some of them that respect our privacy?

The following applications allow you to connect to other networks, probably less frequented for the moment, but more **ethical, loyal and fair !**
An opportunity to try them out and invite your contacts!

Telegram Messenger is a secure email application hosted on the cloud. Users can exchange messages, photos, videos and documents without any size limit. It is also possible to send end-to-end encrypted messages that are not stored on Telegram's servers.
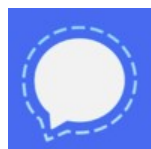
Signal allows users to send written, audio and video messages to other Signal users via Internet, Wi-Fi or mobile connection. It is also possible to call other users.

All communications between Signal users are automatically encrypted end-to-end and encryption keys are generated and stored by users.

Signal allows you to create encrypted groups so you can have private conversations with all your friends at once.

Signal is not yet provided on F-Droid, please use Yalp ou Aurora.

What about Social Networks ?

Mastodon is both an open source micro-blogging software and a decentralized social network, created in 2016, that allows messages of up to 500 characters to be published, called "toots". A free, ethical, loyal and decentralized alternative to Twitter.

o understand how it works, it is best to read the article from our friends **Framasoft** (see Qr-code on the left)

Also to be discovered, the excellent and very complete wiki of the project.   –>

And to use Mastodon on your Android phone, we recommend:

available on F-Droid, **Tusky** is a thin client for Mastodon. It supports all its features, such as photos, videos, lists, personalized emojects.

Lastly, you must know that there are several ways to find your « Twitter friends » who have a Mastodon account, that it is also possible to synchronize your "tweets" and your "toots" etc....

What about Social Networks ?

You no longer trust Facebook ? Try Diaspora* !

Decentralization, freedom and confidentiality.

Diaspora* offers a simple and advertising-free interface. Like Facebook, you can share texts, images, links, videos... and react by commenting, sharing, enjoying publications. It is possible to choose your "audience", share your content with the people you want (circle of friends or public visibility). You can follow news and mark your interests thanks to "hashtags" (for example: #association, #digital, #solidarity).

And above all, you keep control!

Want to test it?
As with Mastodon, there are many "Pods" Diaspora*. We recommend, once again :

Framasoft : **Framasphère** ---->

All you have to do now is install the **Dandelion** application on your Android phone (available on F-Droid) and connect to your account !

And many more apps...

Feel free to browse through F-Droid to make your choices,
and tell us about your discoveries.

Wikipédia, the app

Much more than just the online encyclopédia

- Stream of trend articles, news, reading suggestions and more.
- Search by integrated voice.
- Find out what's around you by selecting points on an interactive map and seeing the items associated with your current position.
- Preview of links, without leaving the current page.
- Table of contents.
- Organize the articles you find in reading lists, you can even access them offline.
- Image gallery,
- Wikitionary Definitions,
- **...**

And finally, contribute !

As you may have noticed, often the description of an application in F-Droid ends with:
"offer a coffee to the developers? »

All the applications offered by F-Droid are free. You do not have to pay anything and, above all, you do not then pay indirectly thanks to the use that will be made of your data.

Free softwares are often developed by volunteer developer communities. Feel free to contribute financially through a donation, or by offering help with translation, testing....

As a reminder, the definition of free software
through its 4 fundamental freedoms:
0: the freedom to execute the program, for all uses;
1: the freedom to study how the program works and adapt it to their needs;
2: the freedom to redistribute copies of the program (which implies the possibility of both giving and selling copies);
3: the freedom to improve the program and to distribute these improvements to the public, for the benefit of the entire community.

Access to the source code (the recipe) is a condition for the exercise of freedoms 1 and 3.

Links...

K-9 Mail
https://f-droid.org/packages/com.fsck.k9/

OsmAnd~
https://f-droid.org/packages/net.osmand.plus/

Transportr
https://f-droid.org/packages/de.grobox.liberario/

Firefox Klar
https://f-droid.org/packages/org.mozilla.klar/

Silence
https://f-droid.org/packages/org.smssecure.smssecure/

NewPipe
https://f-droid.org/packages/org.schabi.newpipe/

Yalp Store
https://f-droid.org/packages/com.github.yeriomin.yalpstore/

Aurora Store
https://f-droid.org/fr/packages/com.aurora.store/

Links...
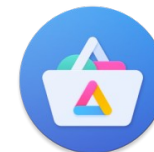
Telegram Messenger
https://f-droid.org/packages/org.telegram.messenger/

Signal
https://www.signal.org/

Tusky
https://f-droid.org/packages/com.keylesspalace.tusky/

Dandelion*
https://f-droid.org/packages/com.github.dfa.diaspora_android/

CEMEA France's website

https://www.cemea.asso.fr

« Libre, Éducation Nouvelle »

https:/liberons-nous.cemea.asso.fr/