

PeerTube 1.0 : the free/libre and federated video platform

At the end of 2014, the French non-profit association Framasoft started a crazy challenge: what if we de-google-ified the Internet?

[For French version of this article, see here]

Three years later, more than thirty alternative services to Google, Facebook, and others were available and released to the public. Based on free/libre software only, without advertising, respectful of privacy, maintained by a non-profit association and totally independent.

However, in the « missing » services, one important actor remained: YouTube. Because how one can produce or make available a YouTube alternative without, tomorrow, collapsing in the face of problems? Explosion of online storage space (which costs a fortune), explosion of bandwidth costs (which costs two fortunes!), moderation problems, etc.

A solution had to be found.

The origins of PeerTube

In October 2017, Framasoft has hired the PeerTube developer for a few months on a full-time basis. PeerTube was then only a personal project of a free/libre and federated video distribution platform, in alpha version. The promise was a beta version, usable by the most courageous, for March 2018. The particularity of PeerTube is that the software allows to connect several « instances » of PeerTube between them (thus forming a « federation »), allowing them to exchange information without the user having to change between websites.

By March 2018, the beta version was ready. The association (which lives only on donations) then took the financial risk of extending the developer's contract, in order to be able to launch a version 1.0 in October 2018. Since Framasoft could not finance this development on its own, a crowdfunding was launched in May 2018 with different levels. 45 days later, the association had collected 53 100€

through 1 381 donations.

In October 2018, the Framasoft non-profit is proud to announce the release of version 1.0 of PeerTube!

Video introducing to PeerTube. For a video with English subtitles, click here.
Realisation : Association LILA (CC by-sa)

But then, what does this 1.0 version offer?

First of all, and to avoid misunderstandings, let us remind you that PeerTube is **not a single centralized platform** (as YouTube, Dailymotion or Vimeo can be), but **a software** that brings together many PeerTube instances (i.e. different installations of the PeerTube software, thematic or community based) within what is called a federation. You must therefore look for the PeerTube instance that suits you best to view or upload your videos or, failing that, set up your own PeerTube instance, on which you will have full rights.

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Basic functionalities

- Peertube allows you to watch videos with WebTorrent, to prevent the saturation of the broadcast servers. If several people are watching the same video at the same time, they download small pieces of the video from your server, but also from the devices of other people who are watching the same video in the same time!
- **Federation** between PeerTube instances. If the PeerTube instance A subscribes to the PeerTube instances B and C, from a search on A, you can find and watch videos of B and C, without leaving A.
- The software has fairly detailed settings that allow the **governance** to be adjusted: each instance can be organized as it wishes. Thus, the instance administrator can define:
 - a disk space quota for each videographer;
 - the number of accepted accounts;
 - the role of users (administration, moderation, use, video upload).
- PeerTube can run on a **small server**. For example, you can install it on a VPS-like hardware with two cores and 2GB of RAM. The storage space required obviously depends on the number of videos you want to host personally.
- PeerTube has a stable and robust code, tested and proven on many systems, which makes it **powerful**. For example, a PeerTube page often loads much faster than a YouTube page.
- Your videos can be automatically converted into different definitions (e. g. 240p, 720p or 1080p. or even 4K) to suit the speed and equipment of the visitors. This step is called **transcoding**.
- A « **Theater** » **mode** as well as a « **night** » **mode** are available for better viewing comfort.
- PeerTube does not spy on you or lock you up: indeed, the application does not collect personal information for commercial purposes, and above all PeerTube does not lock you in a « filter bubble ». In addition, it does not use a biased recommendation algorithm to keep you online indefinitely. It may be a detail (or a weakness) for you, but for us it is a strength that means a lot!

- There isn't - yet - any dedicated smartphone application. However, the **web version** of PeerTube works just as fast on smartphones and adapts perfectly to your device.
- Visitors can comment on the videos. This feature can be disabled either by the instance administrators on any video or locally by the person who uploads the videos.
- Since PeerTube uses the W3C standard ActivityPub exchange protocol, it is possible to **interact** with other software using the same protocol. For example, the PeerTube video platform can interact with the Mastodon social network, an alternative to Twitter. Thus, it is possible to « track » a PeerTube user from Mastodon, or even comment on a video directly from your Mastodon account.

PeerTube demo with Mastodon

- A dedicated button allows you to support the author of a video. In this way, videographers can pick the financing method that suits them.
- We may not have insisted on this point, but PeerTube is of course **free/libre software** □ This means that its source code (its recipe) is available and open to everyone. This means you can contribute to the code or, if you think the software is not going in the right direction, copy

it and make the changes that suit **your** needs.

Functionalities financed through crowdfunding

- **Subtitling**: possibility to add multiple language files (in .srt format) to provide subtitles for videos.
- Instance **redundancy**: it is possible to « help » a designated instance by activating the redundancy of all or part of its videos (which will then be duplicated on your instance). Thus, if the linked instance is overloaded because too many people are watching the videos it hosts, your instance can support it by making its bandwidth available.
- **Import** from other video platforms by simply copying and pasting: YouTube, Vimeo, Dailymotion, etc. On some platforms, the retrieval of the title, description or keywords is even automatic. It is of course also possible to import videos by direct link or from another PeerTube instance. Finally, PeerTube also allows import from .torrent files.

- Several **RSS feeds** are available to you according to your needs: one for videos globally, another for those of a channel and one for comments on a video.
- Peertube has become **international** and now speaks 13 languages including Chinese. Translations into other languages are in progress.
- The **search** feature is more relevant. It takes into account certain typographical errors and provides filters.

Upcoming features

We have excellent news: although the third level of our crowdfunding wasn't reached, Framasoft has decided to **hire the PeerTube developer on a permanent contract** in order to ensure the sustainability of the software development. Other functionalities are therefore planned for 2019.

- A **plugin system** to customize Peertube. This is an essential development, as it will allow everyone to develop their own plugins to adapt PeerTube to their needs. For example, it will become possible to propose recommendation plugins with specific algorithms or completely different graphic themes.
- We will probably develop a mobile application (or some motivated contributors will)
- It will quickly be possible to **improve the video import tool**, so that you can « synchronize » your YouTube channel with your PeerTube channel (PeerTube will be able to check if new videos have been added and will automatically add them to your PeerTube account, including title and descriptions). In fact, this feature is already available for those who host their PeerTube instance and master the command line.
- **Statistics** by instance or by account may be made available.
- The improvement of moderation tools for big instances

To go further

It's up to you! PeerTube belongs to you, take advantage of its possibilities. Submit quality videos (preferably under a free license, or for which you have the broadcasting rights or an explicit agreement) to one of the existing instances. Let your contacts and subscribed YouTubers know about PeerTube. And if you can,

install your own instance to further expand the federated network!

Supporting Framasoft also means supporting PeerTube

PeerTube

- FramaTube, Framasoft's PeerTube instance
- [Joinpeertube.org](https://joinpeertube.org)
- Instances open for registration
- List of instances and their information
- Frequently Asked Questions
- PeerTube Git Repository
- How to install PeerTube on your own server (only in English for now)
- Submit « issues » (request for technical corrections)
- PeerTube forum of [framacolibris](https://framacolibris.org) to discuss about the software (in English)

Framasoft

- Home page
- Presentation article in English on [OpenSource.com](https://opensource.com) Part 1 - Part 2 (thanks to Scott Nesbitt)
- Presentation videos in English at FOSDEM 2017 (De-google-ify Internet) and FOSDEM 2018 (Contributopia)
- De-google-ify Internet
- [Contributopia.org](https://contributopia.org)