Report on the use of Free and Open Source Software in the OpenStreetMap Foundation

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Introduction

The Free and Open Source Software (FOSS) Policy Special Committee of the OpenStreetMap Foundation has been asked by the Board of Directors to assess the degree to which Free and/or Open Source Software or Services are being used within the OpenStreetMap Foundation (OSMF), the board itself, the different working groups, and committees. This analysis focuses on collaborative services to be used over the Internet. The FOSS Policy Special Committee was explicitly excluding the software used by the community at large, local chapters, or systems running on personal computers.

Indicators

The committee has defined two indicators that cover the most important aspects of freedom and openness of software. These are:

1. Programs or Services released under a Free and/or Open Source Software license: Are the programs or services used released under licenses that have been officially approved by either the Free Software Foundation or the Open Source Initiative. Only these licenses are following the standards to be considered free and/or open.

2. Control over data stored at hosted services: The key aspect of hosted services is the ability of the OSMF and the community to fully control the data hosted and to prevent this data being used for other purposes by a third party. Some of such services are based on open-source software and can be self-hosted by the OSMF, then offering full control and ownership of the data. Non-open services usually do not offer this ability and the full control of the data is at least questionable if not completely impossible.

Inventory

The committee investigated the programs and services used by the different groups: Board of Directors, Communications Working Group, Data Working Group, Engineering Working Group, Licensing Working Group, Local Chapter and Communities Working Group, Operations Working Group, and State of the Map Organizing Committee. A total of 51 different programs or services were identified. The overall percentage of programs and services matching the two indicators are:

57% of the collaboration software in the OSMF is **Free and/or Open Source Software**.
31% of the collaboration software is being **hosted by or under control of the OSMF**.

Looking into each of the different groups separately leads to the following results:

Group	Indicator 1: FOSS	Indicator 2: Hosting
Board of Directors	77% (10 of 13)	46% (6 of 13)
Communications Working Group	33% (6 of 18)	17% (3 of 18)
Data Working Group	100% (4 of 4)	75% (3 of 4)
Engineering Working Group	67% (6 of 9)	33% (3 of 9)
Licensing Working Group	50% (2 of 4)	25% (1 of 4)
Local Chapter and Communities Working Group	67% (8 of 12)	25% (3 of 12)
Membership Working Group	57% (4 of 7)	43% (3 of 7)
Operations Working Group	38% (3 of 8)	50% (4 of 8)
State of the Map Organizing Committee	59% (13 of 22)	23% (5 of 22)

Recommendations

The FOSS Policy Special Committee would like to provide practical, feasible and impactful recommendations. The committee has identified several programs to be used and services that the OSMF should be hosting or subcontracting their hosting with a trusted partner. All selected programs and services can be considered as standards in the open-source world and beyond.

To make things easy, the committee suggest to evaluate the services offered by trustworthy providers such as *cloud68.co*, that is already a partner for the OSMF hosting the BigBlueButton video chat. The committee considers the mentioned providers below as good possible partners that together have most of the following services in their portfolios:

1. osmfoundation.org email addresses

Emails have always been the core and often times the fallback for communication in and around OpenStreetMap and the OSMF. All osmfoundation.org email addresses are currently hosted by the Google Suite, either as simple email address or group. Hosting an email server by the OSMF or a trusted partner seems to be the most urgent and important step for moving towards FOSS and retaining the control over the communication data. The committee sees this as the most relevant item and would like to encourage the OSMF to pursue this as soon as possible.

2. Code collaboration platform

Currently, most OSM(F)-related software is being hosted on *github.com*, and this has a high lock-in potential, it is not FOSS and far away from OSMF having any control over it. It seems that this is mostly due to a lack of alternatives. Therefore the committee recommends that the OSMF hosts or subcontract the hosting to have an own OSM-related software collaboration platform (similar to [Debian's platform Salsa](#)) using *GitLab*. This is a great opportunity to build a coding community around OSM and to not depend on a commercial offer that likely monetize on user behavior and, in violation of the true openness of OSM, exclude contributors from certain countries. This platform should become the place to go for OSM-related software.

3. Social media (microblogging)

Microblogging is dominated by *Twitter*. While the committee does not argue to abandon *Twitter*, it likes to suggest to support the distributed (*Twitter*-like) social network based on *Fediverse* running on the *Mastodon* software. The OSMF can tap into an existing initiative on en.osm.town, currently serving 350 users and 1300 followers of the @openstreetmap account. The operation of cross-posters will allow everybody to use the free and open *Fediverse* first, while simultaneously sending and publishing their social-media messages to commercial market leaders, such as *Twitter*, *Facebook* and *Instagram*. The active OSM-mapper *"Rorym"* is administrating the en.osm.town instance and has expressed openness to move it under a domain and the control of the OSMF.

The committee recommends to endorse this instance as the official social media platform for OSM and to establish cross-posters to existing commercial platforms. Thus living the spirit of open-first with subsequent inclusion of everybody else.

4. Collaborative editing and document sharing

The foreclosure and monetization of user data by *Google* is well known. The open *Nextcloud* can replace most of the *Google* services the working groups depend on (e.g. Docs, Drive, Calendar, Forms). The *Nextcloud* should become the "swiss-army knife" of the OSMF. Combined with *OnlyOffice*, *LibreOffice online* or *Collabora*, it can offer rich-text word-processing, spreadsheets, and presentations. It contains a comfortable team calendar, surveys, etc. and it is developed by a vibrant community. Relying on *Nextcloud* will move a lot of the collaboration in the OSMF towards Free and/or Open Source Software, while maintaining the overall functionality and comfort people are used to.

5. Meeting scheduler

For scheduling meetings proprietary services most often used. These are hosted everywhere. Consideration should be given to deploying the software *Framadate* hosted by or under the control of OSMF.

6. Online surveys

Currently, there is no consistent tool for surveys in the OSMF groups. *Limesurvey* is already successfully used by the Board and hosted through a paid plan. It is recommended to extend this offer to all groups in OSMF for complex surveys and to rely on the *Forms App* included in *Nextcloud* for more simple polls, this to protect the data of survey participants.

In summary, the six recommendations suggest evaluating the provision of hosting for the following five online software tools:

Purpose	Potential software	Potential provider(s)
osmfoundation.org email server	There are [many](#) [good](#) [solutions](#) to choose from	mailbox.org, servercow.de
Code collaboration platform	[GitLab](#)	cloud68.co
Social media platform	[Mastodon](#)	Self-hosted (Rorym)
Collaboration suite	[Nextcloud](#)	cloud68.co
Meeting scheduler	[Framadate](#)	Self-hosting needed

Conclusions

The six recommendations formulated ensure that the OSMF follows its FOSS policy of preferably using Free and/or Open Source software over any proprietary options. This would guarantee inclusive global participation and protect all active people from having their data used for purposes other than OpenStreetMap.

By following the recommendations the overall numbers of the inventory would change to:

79% of the collaboration software in OSMF were **Free and/or Open Source Software**. **68%** of the collaboration software were being **hosted by or under control of OSMF**.

And this would lead to the following results for each of the groups:

Group	Indicator 1: FOSS	Indicator 2: Hosting
Board of Directors	92% (12 of 13)	77% (10 of 13)
Communications Working Group	56% (9 of 16)	50% (8 of 16)
Data Working Group	100% (4 of 4)	75% (3 of 4)
Engineering Working Group	88% (7 of 8)	88% (7 of 8)
Licensing Working Group	100% (4 of 4)	100% (4 of 4)
Local Chapter and Communities Working Group	90% (9 of 10)	70% (7 of 10)
Membership Working Group	71% (5 of 7)	57% (4 of 7)
Operations Working Group	86% (6 of 7)	100% (7 of 7)
State of the Map Organizing Committee	72% (13 of 18)	50% (9 of 18)