FreedomBox Foundation Summit
Summary of Proceedings

November 2018

FreedomBox

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1. Introduction

On Tuesday, November 13th, 2018, the FreedomBox Foundation held a summit in New York City. We invited core developers Sunil Mohan Adapa and James Valleroy to join the Foundation's staff for a full day of discussions. Over the course of three formal sessions including a virtual Q&A and two meals spanning 12 hours, participants at the FreedomBox Foundation Summit discussed the wide-ranging challenges facing the project as well as actionable plans. This document provides a summary of the summit's proceedings.

As Sunil observed during the summit, the FreedomBox project has recently reached a state of maturity. Over the past few years, developers have been hard at work integrating new features and expanding the functionality of FreedomBox. In India, Sunil and Joseph Nuthalapati have been empowered by ThoughtWorks to dedicate their time to FreedomBox. And across the globe, the steady contributions of volunteers like James have enhanced the stability of FreedomBox's software and legitimized our system in the eyes of many observers. To top it off, our user interface design has taken great strides, thanks to the talents of Robert Martinez. But we are now entering a phase in which our project has developed so much breadth that we can now focus on improving what we already have.

In order to prepare for both the Debian Buster stable release and the Foundation's efforts in hardware licensing, it is time for us as a community to renew our focus on stability and user experience. But at the same time, we are approaching a future in which users will expect more from us, so we should keep an eye on what comes next for FreedomBox. This will require unity under a shared vision. It is hoped that this document will serve as a call to action and the beginning of an open discussion about our priorities for the next several months and beyond.

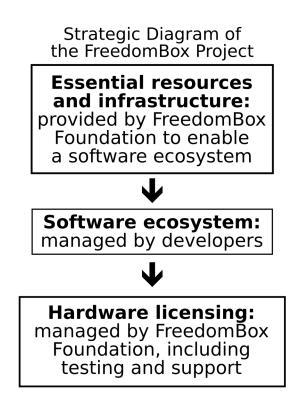FreedomBox

2. Summit Schedule

Tuesday (Nov. 13):
- 9:30am-11:30am: **SESSION I – Discussing our Challenges**
  - Aim: Discuss the main challenges facing the FreedomBox community. We will refer to the agenda on page 3.

- 12:00pm-2:30pm: **Lunch Break**

- 3:00pm-4:00pm: **SESSION II – Q&A with the FreedomBox Community**
  - Aim: Hold a Q&A session with the FreedomBox community hosted over Mumble
    - Begin with an address to the community by Eben Moglen followed by Q&A

- 4:00pm-5:00pm: **SESSION III – Consolidating the Questions Before Us**
  - Aim: Discuss the proceedings of the Q&A session and determine our priorities

- 5:00pm-7:00pm: **Break**

- 7:00pm-9:00pm: **Dinner**

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3. Summary of Conclusions

Several topics were discussed throughout the day. This section organizes the conclusions reached during the summit into nine topics, which are listed below:

3.1 Strategic Diagram: Having hardware in the market will require that we spend more time testing hardware and providing technical support to users. But we do not want this to pull our developers away from our software ecosystem, which already includes two dozen apps and features. In order to keep the software ecosystem isolated from the technical work brought on by hardware sales, Eben Moglen proposed a strategic diagram to structure the collaboration between the FreedomBox Foundation and the FreedomBox community in the long-term:

Strategic Diagram of
the FreedomBox Project

**Essential resources
and infrastructure:**
provided by FreedomBox
Foundation to enable
a software ecosystem

⬇

Software ecosystem:
managed by developers

⬇

Hardware licensing:
managed by FreedomBox
Foundation, including
testing and support

When hardware is sold with our software pre-installed on it, we will need to manage the associated risks to our brand through two tasks: regular quality testing and technical support. These tasks will be time consuming. And we do not want our developers to be consumed by

them because the success of our project has always depended on the richness of our software ecosystem. This is ultimately why the FreedomBox Foundation has chosen to build the infrastructure and resources to manage the extra responsibilities that come with hardware licensing: we want our developers to continue focusing on the software ecosystem.

3.2 Debian's Ecosystem and Its Supplement: Debian contains a lot of energy. We continue to grow because of the richness of its ecosystem. But we are also limited by the packages in its ecosystem. We cannot count on Debian to package everything for us. Given the high demand for apps like Nextcloud, we should explore accommodating alternative package management methods. We ultimately will need to experiment with two package management methods: Debian's and something else. Moglen says that in the long-run, we want an "also" not an "instead of" solution to our problems with Debian.

3.3 Identity Issue: Many users still have questions about exactly what a FreedomBox is. It does so much that non-technical users have trouble understanding what needs it fulfills. We need to find a way to frame FreedomBox in a way that consumers will understand. It is no longer sufficient to say it is a "multipurpose privacy appliance." The theme we converged on follows this line of thinking: "The cloud is not made for you, but FreedomBox makes it for you. FreedomBox makes the cloud work for you instead of you working for it." We are still exploring solutions to this problem, but we can offer two proposals from our discussions:

- **Proposal One:** FreedomBox is the nexus of your inter-device computing. It enables secure sharing and storage between devices without forcing you to go through platforms like Google Drive. For example, it enables collaborative note-taking on your phone and laptop. It enables photo sharing between your devices. Currently, users need to go through Google Drive, Evernote, and other platforms to perform these tasks.

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FreedomBox enables you to take control of your inter-device computing. You can compute without telling the platform company. Your storage is in good hands because it is in your hands.

- **Proposal Two:** FreedomBox is a device that allows you to use the internet without being data-mined. It routes the data away from the telecoms and ISPs. Your location data goes away when you route all of your traffic through your VPN.

3.4 Reachability Problem: Sunil says that it needs to be easier to make a FreedomBox accessible remotely. Many users have trouble setting up a domain. Our current solutions are not sufficient. But we do not want the FreedomBox Foundation to take on unnecessary legal challenges associated with providing domain services itself on its own servers. We could offer more sub-domains. We agreed to work on the reachability issue in the first half of 2019.

3.5 Review Process Time: James notes that our review process of pull requests is too slow. We should be able to review pull requests within one to two days. But we sometimes take weeks, and this drives contributors away from the community.

3.6 Missing Features: There is interest in adding media streaming, Nextcloud, and Mastodon.

3.7 First Boot Problems: There are still issues with accessing freedombox.local on first boot, so some users still need to access their FreedomBox using its local IP address. We may also consider an alternative to the self-signing certificate available on first boot. Security warnings in browsers about the self-signing certificate may undermine our image as a secure device.

3.8 FreedomBox as a Router: We discussed our hesitation to recommend the router use case due to the limitations in wireless hardware. Much of the wireless hardware in the market cannot support several users at one time. But the present absence of good hardware does not mean we should give up on the use case. We will continue to look into this.

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3.9 Use Analytics: Joseph proposes that we collect user surveys and data to inform our future development. We want to be very conservative and safe in data collection. Before any user data is collected, two questions need to be answered: (1) what are the analytics that we want? and (2) how can we collect them without unnecessary risks?

4. Action Items

We have experienced one kind of success so far: building a software ecosystem. But now we need to experience two kinds of success: maintaining a software ecosystem and a hardware ecosystem. To do that, we need to agree to a plan of action. These are the action items that were agreed to during the summit.

4.1 Goals for Debian Buster Freeze:

- The Debian Buster soft-freeze is scheduled for February 12, 2019.

- We have about 30 bugs to fix by the soft freeze.

- **Timeline:** Fixing these bugs will be the development priority from November 2018 to February 12, 2019 (soft freeze) or March 12, 2019 (full freeze).

4.2 FB-branded SBC Hardware Support:

- We should solve the issues with any FB-branded SBC and conduct tests by launch.

- **Timeline:** Problem-solving and testing should be ongoing

4.3 Study of Alternative Packaging Methods:

- Eben Moglen wants us to conduct a study of three to five proposals for alternative packaging methods, including a review of their strengths and weaknesses. The goal is to determine how we will integrate out-of-tree packages.

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- Sunil notes that any alternative needs to meet three conditions: (1) license compatibility, (2) fully FOSS, (3) gets security updates from the upstream.

- **Timeline:** By end of March 2019

4.4 Accelerate Pull Reviewing:

- James and Sunil suggest that we can be faster in our review of pull requests.

- One proposal was to appoint more maintainers to share this work with our team.

- **Timeline:** Can be done in the immediate future

4.5 Reachability Problem:

- After the Buster soft freeze, we will focus on the reachability issue.

- **Timeline:** Begin development on this issue by June 1, 2019

4.6 Use Analytics:

- Before we collect data, we need to answer two questions: (1) what are the analytics that we want? and (2) how can we collect them without unnecessary risks?

- **Timeline:** Discussion can happen on an ongoing basis and goals can be set in discussions

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