



# Software in the Public Interest, Inc. 2018 Annual Report

March 11, 2019



Software in the Public Interest, Inc.



Software in the Public Interest, Inc.

To the membership, board and friends of Software in the Public Interest, Inc:

As mandated by Article 8 of the SPI Bylaws, I respectfully submit this annual report on the activities of Software in the Public Interest, Inc. and extend my thanks to all of those who contributed to the mission of SPI in the past year.

– *Jimmy Kaplowitz, SPI President*



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## Chapter 1

# President's Welcome

SPI serves the free software and open source community by facilitating the administrative and financial needs of its associated projects.

During the current board term SPI continues to strive for self-improvement and renewal. Treasury team sprints, bank visits, and legal consultations during in-person meetings have helped keep the wheels turning. An overhaul of our corporate bylaws that better meets our needs is being presented to the members for their approval. And we have improved our reimbursement workflow with a view toward speedier and smoother processing.

Every month we welcome new associated projects to SPI, along with donations large and small for them and for our general fund. A few projects have ceased operating or are shifting to other organizational homes, as is normal when needs change. But in general, our model still fills a unique niche and remains appreciated by the community.

At the same time, our scale is growing beyond what an all-volunteer organization can smoothly handle. We are not planning to abandon the volunteer nature of our officer and director roles, but we are exploring both short-term and long-term possibilities for paid help to keep SPI healthy into the future.

On a personal note, I want to highlight and thank Martin Michlmayr for his sustained dedication to SPI, including two years as SPI President before the current board term and service as SPI Secretary before that. He remains a valuable asset to SPI as a director, a treasury team volunteer, and possibly in other roles as well going forward.

Thanks very much as well to all our officers, directors, volunteers, and members for your contributions! We wouldn't be here without you.

– *Jimmy Kaplowitz, SPI President*



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## Chapter 2

# Committee Reports

### 2.1 Membership Committee

#### 2.1.1 Statistics

On January 1, 2018 we had 255 contributing and 960 non-contributing members. On December 31, 2018 there were 212 contributing members and 1082 non-contributing members.

#### 2.1.2 Active membership clean up

After the 2018 board election the membership committee performed an activity ping on members who didn't vote, as per [resolution 2009-11-04.jmd.1](#), in order to determine inactive contributing members. As a result of this, 55 inactive contributing members were moved to the non-contributing members category.

## Chapter 3

# Board Report

### 3.1 Board Members

Board members as of January 1, 2018:

- Martin Michlmayr (President)
- Luca Filipozzi (Vice President)
- Valerie Young (Secretary)
- Michael Schultheiss (Treasurer)
- Joerg Jaspert
- Jimmy Kaplowitz
- Tim Potter
- Andrew Tridgell
- Martin Zobel-Helas

Board members as of December 31, 2018:

- Jimmy Kaplowitz (President)
- Luca Filipozzi (Vice President)
- Tim Potter (Secretary)
- Michael Schultheiss (Treasurer)
- Stephen Frost
- Dimitri John Ledkov
- Martin Michlmayr
- Andrew Tridgell
- Martin Zobel-Helas

Advisors to the board as of December 31, 2018:

- Software Freedom Law Center (SFLC), legal counsel
- Chris Lamb, Debian Project representative



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- Robert Treat, PostgreSQL Project representative

## 3.2 Board Changes

Changes that occurred during the year:

- Joerg Jaspart resigned from the board in February 2018 due to lack of time. We'd like to thank Joerg for his contributions!
- The board appointed R. Tyler Croy as an interim director in March 2018.
- Luca Filipozzi generously offered to resign early to reset the election of board members to three per year. SPI typically elects three (out of nine) board members each year but this got out of sync over the years.
- The terms for R. Tyler Croy and Michael Schultheiss expired in July 2018.
- Croy, Filipozzi and Schultheiss sought re-election. Filipozzi and Schultheiss were re-elected. Stephen Frost joined the board as part of the same election.
- On August 13, 2018 the board voted to appoint the following officers:
  - President: Jimmy Kaplowitz
  - Vice President: Luca Filipozzi
  - Secretary: Tim Potter
  - Treasurer: Michael Schultheiss
- Valerie Young resigned from the board in September 2018 due to lack of time. We'd like to thank Valerie for her contributions!
- The board appointed Dimitri John Ledkov as an interim director in September 2018.

## 3.3 Elections

A board membership election was conducted in July 2018. There were 3 board seats up for election. Nominations were received from R. Tyler Croy, Luca Filipozzi, Stephen Frost, and Michael Schultheiss. Luca Filipozzi, Stephen Frost, and Michael Schultheiss were elected for a 3 year term.

## 3.4 Face-to-face Meetings

The SPI board held a face-to-face meeting on October 5-6, 2018. The meeting was kindly hosted by Hudson River Trading in New York.

We discussed many topics, including treasurer activities, IT infrastructure, the need for various policies, and more paid help for SPI's operations.

We also held a treasurer sprint immediately before the board meeting. The venue for the sprint was provided by Crunchy Data.





Figure 3.1: Face-to-face meeting in New York (October 2018): Martin Zobel-Helas, Martin Michlmayr, Jimmy Kaplowitz, Luca Filipozzi, Michael Schultheiss, Stephen Frost, and Tim Potter (left to right)

## Chapter 4

# Treasury Report

This report uses a cash-based method of accounting, recording donations when deposited (not when the check was written or received by us) and recording expenses when sent or scheduled for payment (not when incurred).

*These figures are provisional and subject to change.*

### 4.1 Income Statement

This covers the Period January 1, 2018 – December 31, 2018

#### Income

##### Ordinary Income

|                 |            |
|-----------------|------------|
| O A.D.          | 3,190.54   |
| Ankur           | 0.00       |
| Aptosid         | 147.70     |
| Arch Linux      | 294,268.56 |
| ArduPilot       | 40,465.51  |
| Chakra          | 388.34     |
| DebConf         | 18,654.20  |
| DebConf17       | 9,975.00   |
| DebConf18       | 116,635.08 |
| DebConf19       | 4,750.00   |
| Debian          | 337,196.28 |
| Drizzle         | 0.00       |
| FFmpeg          | 105,606.05 |
| FFmpeg (OPW)    | 1,140.00   |
| Fluxbox         | 1.15       |
| freedesktop.org | 203.78     |
| Gallery         | 0.00       |
| Glucosio        | 3.42       |
| GNU TeXmacs     | 161.50     |
| GNUstep         | 0.00       |
| haskell.org     | 57.00      |
| Jenkins         | 6,202.25   |
| LibreOffice     | 16,786.97  |
| MadWifi         | (1,494.90) |
| MinGW           | 29.90      |
| NTPsec          | 674.54     |



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|                                    |                  |
|------------------------------------|------------------|
| Open Bioinformatics                | 5,451.18         |
| Open MPI                           | 95.00            |
| Open Voting Foundation             | 29.00            |
| OpenEmbedded                       | 313.79           |
| OpenVAS                            | 9.50             |
| OpenWrt                            | 2,368.48         |
| OpenZFS                            | 22,168.48        |
| OSUNIX                             | (17.17)          |
| Path64                             | (18.60)          |
| Performance Co-Pilot               | 4,940.00         |
| PostgreSQL                         | 30,961.05        |
| Privoxy                            | 1.04             |
| Swathanthra Malayalam Computing    | 0.00             |
| SPI General                        | 205,298.29       |
| systemd                            | 190,004.75       |
| The HeliOS Project                 | 0.00             |
| Torch                              | 1.47             |
| Tux4Kids                           | (19.00)          |
| X.Org                              | 39,981.73        |
| YafaRay                            | 0.00             |
| <br>Total Ordinary Income          | <br>1,456,257.87 |
|                                    | -----            |
| Interest Income                    |                  |
| Ameriprise Brokerage               | 54.48            |
| Key Business Platinum MM Savings   | 89.03            |
| Chase BusSelect High Yield Savings | 108.33           |
| Fifth Third Business MM 128        | 14.96            |
| <br>Total Interest Income          | <br>266.80       |
|                                    | -----            |
| <br>Gross Income                   | <br>1,456,524.67 |
|                                    | -----            |
| Expenses                           |                  |
| Ordinary Expenses                  |                  |
| 0 A.D.                             |                  |
| 182.84                             | Banking fees     |
| 1,283.34                           | IT               |
| 576.97                             | Meetups          |
| -----                              |                  |
| 2,043.15                           |                  |
| <br>Ankur                          |                  |
| 0.00                               |                  |
| <br>Aptosid                        |                  |
| 6.17                               | Banking fees     |
| <br>Arch Linux                     |                  |
| 492.94                             | Banking fees     |
| 4,191.95                           | IT               |



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```
-----
4,684.89

ArduPilot
 1,252.28    Banking fees
24,482.40    Development
 6,916.33    IT
 8,856.31    Meetups
-----
41,507.32

Chakra
   8.89      Banking fees
 681.72      IT
-----
 690.61

DebConf
 848.05      Banking fees

DebConf 17
   92.05      Banking fees
12,037.01      Meetups
-----
12,129.06

DebConf 18
   50.88      Banking fees
 608.53      IT
112,653.01      Meetups
-----
113,312.42

DebConf 19
4,083.53      Meetups

Debian
 1,565.78      Banking fees
19,500.00      Development
27,326.93      IT
23,764.93      Meetups
 6,323.12      Office
-----
78,480.76

Drizzle
   0.00

FFmpeg
 213.47      Banking fees
5,430.60      Development
2,418.69      Meetups
-----
8,062.76
```



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|                     |              |  |
|---------------------|--------------|--|
| FFmpeg (OPW)        |              |  |
| 51.15               | Banking fees |  |
| Fluxbox             |              |  |
| 0.33                | Banking fees |  |
| freedesktop.org     |              |  |
| 9.79                | Banking fees |  |
| 1,500.00            | Development  |  |
| 7,384.60            | IT           |  |
| -----               |              |  |
| 8,894.39            |              |  |
| Gallery             |              |  |
| 0.00                |              |  |
| Glucosio            |              |  |
| 1.58                | Banking fees |  |
| GNU TeXmacs         |              |  |
| 7.59                | Banking fees |  |
| haskell.org         |              |  |
| 2.75                | Banking fees |  |
| Jenkins             |              |  |
| 78.49               | Banking fees |  |
| 300.00              | IT           |  |
| 3,589.78            | Meetups      |  |
| -----               |              |  |
| 3,968.27            |              |  |
| LibreOffice         |              |  |
| 213.52              | Banking fees |  |
| 32,041.54           | Meetups      |  |
| -----               |              |  |
| 32,255.06           |              |  |
| MinGW               |              |  |
| 2.23                | Banking fees |  |
| NTPsec              |              |  |
| 28.16               | Banking fees |  |
| 6,100.00            | Development  |  |
| -----               |              |  |
| 6,128.16            |              |  |
| Open Bioinformatics |              |  |
| 0.87                | Banking fees |  |
| 3,961.67            | IT           |  |
| 906.00              | Meetups      |  |
| -----               |              |  |
| 4,868.54            |              |  |



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|                                 |              |  |
|---------------------------------|--------------|--|
| OpenEmbedded                    |              |  |
| 17.51                           | Banking fees |  |
|                                 |              |  |
| Open MPI                        |              |  |
| 4.35                            | Banking fees |  |
|                                 |              |  |
| Open Voting Foundation          |              |  |
| 1.45                            | Banking fees |  |
|                                 |              |  |
| OpenVAS                         |              |  |
| 1.05                            | Banking fees |  |
|                                 |              |  |
| OpenWrt                         |              |  |
| 39.49                           | Banking fees |  |
|                                 |              |  |
| OpenZFS                         |              |  |
| 355.92                          | Banking fees |  |
| 1,289.46                        | IT           |  |
| 19,324.27                       | Meetups      |  |
| 359.90                          | Office       |  |
| -----                           |              |  |
| 21,329.55                       |              |  |
|                                 |              |  |
| Performance Co-Pilot            |              |  |
| 0.30                            | Banking fees |  |
| 681.22                          | Development  |  |
| 4,493.73                        | Meetups      |  |
| -----                           |              |  |
| 5,175.25                        |              |  |
|                                 |              |  |
| PostgreSQL                      |              |  |
| 33.68                           | Banking fees |  |
| 1,082.79                        | Development  |  |
| 774.00                          | Meetups      |  |
| -----                           |              |  |
| 1,890.47                        |              |  |
|                                 |              |  |
| privoxy                         |              |  |
| 0.32                            | Banking fees |  |
|                                 |              |  |
| Swathanthra Malayalam Computing |              |  |
| 0.00                            |              |  |
|                                 |              |  |
| SPI                             |              |  |
| 1,162.14                        | Banking fees |  |
| 15,681.81                       | Meetups      |  |
| 4,303.68                        | Office       |  |
| -----                           |              |  |
| 21,147.63                       |              |  |
|                                 |              |  |
| systemd                         |              |  |
| 0.55                            | Banking fees |  |



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|                |              |              |
|----------------|--------------|--------------|
| Torch          |              |              |
| 0.63           | Banking fees |              |
| Tux4Kids       |              |              |
| (0.44)         | Banking fees |              |
| X.Org          |              |              |
| 682.54         | Banking fees |              |
| 2,774.03       | Development  |              |
| 8,868.02       | Meetups      |              |
| 25.00          | Office       |              |
| -----          |              |              |
| 12,349.59      |              |              |
| YafaRay        |              |              |
| 746.37         | IT           |              |
| Total Expenses |              | 384,732.54   |
|                |              | -----        |
| Net Income     |              | 1,071,792.13 |

## 4.2 Balance Sheet

Balance Sheet as of December 31, 2018

### ASSETS

#### Current Assets

|  |              |
|--|--------------|
| Ameriprise Cash Mgmt Acct                        | 13,498.19    |
| Bank of America Business Advantage Checking      | 250,000.00   |
| Chase Business Select High Yield Savings         | 55,333.94    |
| Chase Performance Business Checking              | 101,078.17   |
| Fifth Third Business Elite Checking (Debian)     | 131,899.39   |
| Fifth Third Business Elite Checking (SPI)        | 91,569.24    |
| Fifth Third Business Elite Checking Wiretransfer | 164,060.11   |
| Fifth Third Business Money Market 128            | 30,019.88    |
| KeyBank Basic Business Checking                  | 8,919.08     |
| Key Business Platinum Money Market Savings       | 1,000,066.46 |
| Key Business Reward Checking                     | 301,857.93   |
| PayPal (Debian)                                  | 3,400.73     |
| PayPal (SPI)                                     | 3,331.07     |

|                      |              |
|----------------------|--------------|
| Total Current Assets | 2,155,034.19 |
|----------------------|--------------|

|              |              |
|--------------|--------------|
| TOTAL ASSETS | 2,155,034.19 |
|--------------|--------------|

### LIABILITIES AND EQUITY

|                                 |      |
|---------------------------------|------|
| General and current liabilities | 0.00 |
|---------------------------------|------|

#### Equity

|                        |           |
|------------------------|-----------|
| Reserves held in trust |           |
| 0 A.D.                 | 32,430.79 |



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|                          |              |
|--------------------------|--------------|
| ankur.org.in             | 2,819.84     |
| aptosid                  | 485.50       |
| Arch Linux               | 337,213.85   |
| ArduPilot                | 63,797.78    |
| Chakra                   | 553.85       |
| DebConf                  | 17,806.15    |
| DebConf 14               | 35,962.78    |
| DebConf 15               | 70,218.51    |
| DebConf 16               | (15,395.06)  |
| DebConf 17               | (17,163.37)  |
| DebConf 18               | 3,322.66     |
| DebConf 19               | 666.47       |
| Debian                   | 463,443.61   |
| Drizzle                  | 6,148.60     |
| FFmpeg                   | 113,443.53   |
| FFmpeg (Outreachy)       | 1,737.38     |
| Fluxbox                  | 997.96       |
| freedesktop.org          | 6,575.52     |
| FreedomBox Foundation    | 23.52        |
| Gallery                  | 0.00         |
| Glucosio                 | 1.84         |
| GNU TeXmacs              | 1,300.86     |
| GNUstep                  | 142.50       |
| Haskell                  | 16,537.14    |
| Jenkins                  | 31,906.58    |
| LibreOffice              | 31,508.76    |
| MadWifi                  | 0.00         |
| MinGW                    | 4,160.53     |
| NTPsec                   | 631.67       |
| Open Bioinformatics      | 84,508.17    |
| Open MPI                 | 636.90       |
| Open Voting Foundation   | 144.27       |
| OpenEmbedded             | 732.07       |
| OpenVAS                  | 73.49        |
| OpenWrt                  | 8,662.19     |
| OpenZFS                  | 583.44       |
| OSUNIX                   | 0.00         |
| Path64                   | 0.00         |
| Performance Co-Pilot     | 5,353.20     |
| PostgreSQL               | 148,292.82   |
| Privoxy                  | 1,735.96     |
| Swathanthra Malayan Comp | 5,763.32     |
| systemd                  | 190,004.20   |
| The HeliOS Project       | 212.83       |
| TideSDK                  | 0.00         |
| Torch                    | 0.84         |
| Tux4Kids                 | 16,284.59    |
| X.Org                    | 66,298.49    |
| YafaRay                  | 6,229.96     |
| Total held in trust      | 1,746,796.49 |
| General reserves         | 408,237.70   |





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|                              |              |
|------------------------------|--------------|
| Total Equity                 | 2,155,034.19 |
| TOTAL LIABILITIES AND EQUITY | 2,155,034.19 |



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## Chapter 5

# Member Project Reports

### 5.1 New Associated Projects

In 2018, systemd joined the SPI umbrella as an associated project.

#### 5.1.1 systemd

systemd is a suite of basic building blocks for a Linux system. It provides a system and service manager that runs as PID 1 and starts the rest of the system. systemd provides aggressive parallelization capabilities, uses socket and D-Bus activation for starting services, offers on-demand starting of daemons, keeps track of processes using Linux control groups, maintains mount and automount points, and implements elaborate transactional dependency-based service control logic.

### 5.2 Projects No Longer Associated with SPI

- Fresco (originally named the Berlin Project) was a windowing system derived from a powerful structured graphics toolkit originally based on InterViews. The project hasn't been active for many years.
- MadWifi was a project to coordinate development of the Atheros drivers for Linux. The MadWifi driver has been obsoleted by ath5k and ath9k, which are both part of the Linux kernel now.
- Open64 is an open source compiler based on Pro64. SPI has not provided any services to Open64 in several years.
- OSUNIX was an open source OpenSolaris technology distribution. The project is no longer active.
- Path64 was the open source community version of PathScale's compiler. The project is no longer active.
- TideSDK was an HTML5, CSS3 and JavaScript framework. The project is no longer active.
- The HeliOS Project rescued computers and refurbished them and gave them to disadvantaged children in Central Texas. The HeliOS Project no longer exists as a standalone project and its activities have been taken on by the Reglue project.

## 5.3 Updates from Associated Projects

### 5.3.1 0 A.D.

0 A.D. (pronounced “zero ey-dee”) is a cross-platform, real-time strategy (RTS) game of ancient warfare. It is a historically-based war/economy game, in which the player must lead an ancient civilization, gather resources from the map, and raise a military force to conquer enemy factions. 0 A.D. is open source software licensed under the GPL, and its art and sound assets are licensed under CC BY-SA. It is developed by Wildfire Games, a global community of game developers.

In mid-2018, we released Alpha 23 Ken Wood, available for Windows, macOS, and Linux, named in memory of one of the original gameplay designers of 0 A.D. This alpha version introduced a new faction, the Kushites, several new maps, and many improvements to the gameplay, the user interface, the artwork, the security of the multiplayer mode, and more. Importantly, this new version also came with a mod downloader, which allows users to download and install mods without leaving the game. This is achieved using mod.io, a new and powerful cross-platform modding API. 0 A.D. was one of the few inaugural game titles to support this innovative modding solution with its launch.

A few months after the release of Alpha 23 Ken Wood, we issued an additional minor release to fix several critical bugs and to address important security and legal issues, including GDPR compliance.

According to our records, Alpha 23 Ken Wood was downloaded over 110,000 times in 2018. (That figure is a conservative estimate, as it does not include downloads performed through the Linux distributions’ package managers.) Additionally, the in-game mod installer was used tens of thousands of times in 2018.

The 0 A.D. soundtrack became available on several music streaming services (Spotify, Amazon, Google Play Music, iTunes, and Deezer). This was accomplished through Materia Collective, a video game soundtrack record label and music publisher.

Last but not least, members of Wildfire Games attended two FOSS community events in 2018, and presented the game to the attendees: FOSDEM (Brussels, Belgium) and LDLL (Lyon, France). This helped raise awareness of 0 A.D. and facilitated recruitment of developers.

We wish to extend our thanks to our generous donors and to SPI for helping us achieve this progress.

### 5.3.2 ArduPilot

ArduPilot is a cross-platform free software autopilot project for all types of small robotic vehicles. ArduPilot continues to thrive, with a global and growing community of users, partners and developers. Significant effort over the past year has seen a successful transition to the ChibiOS RTOS, and the addition of a new generation of micro controller to the standard builds (ARM Cortex M7). Many new features have been added, with new vehicle types (such as Balance Bots, Sailboats, and complex Hybrid VTOL Airplanes), new sensors, and increased support for ROS (Robot Operating System) interaction. The 2018 Developers Conference was a great success, with the 2019 Conference promising to build upon it, and be the largest conglomeration of ArduPilot developers yet.

*Submitted by James Pattison*

### 5.3.3 Chakra

Chakra is a GNU/Linux distribution with an emphasis on KDE and Qt technologies that focuses on simplicity from a technical standpoint and free software.

In February, we carried out rebuilds for the GCC ABI changes. In April, Pacman 5 with its new features such as hooks and file database operations was made available to our users. In July, we received a sponsorship by GitLab Inc., giving us access to all the features of the enterprise edition of their software. In December, Linux 4.19 with the patch set by Con Kolivas was made available to our testers. These are



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patches designed to improve system responsiveness and interactivity with specific emphasis on the desktop, but configurable for any workload. Finally, Chakra has now been registered as a group on the Freenode network. This represents an official relationship between Chakra and Freenode, and indicates that we are maintaining an official presence on their network.

*Submitted by H W “totte” Tovetjärnfor*

### 5.3.4 Debian

The next stable release of the Debian distribution (“buster”) has been taking shape throughout 2018 and we tentatively plan to release in Q2 in 2019.

In addition, the large migration to a new hosting infrastructure platform (based on the GitLab platform) was completed with many tangible improvements to workflows, etc. Debian’s “DebConf” annual gathering was successfully held in Hsinchu, Taiwan too.

On Thursday 16th August 2018 the Debian project celebrated its [25th anniversary](#). This is a new milestone for the project and makes it one of the oldest Free and Open Source GNU/Linux distributions.

*Submitted by Chris Lamb, Debian Project Leader*

### 5.3.5 Drizzle

The Drizzle database server is no longer actively developed. However, two of the client libraries are still in active use and development: drizzle-jdbc (Java) and libdrizzle-redux (C). One motivation for continued use of these libraries is that they provide permissively licensed client libraries compatible with the MySQL protocol.

*Submitted by Henrik Ingo*

### 5.3.6 FFmpeg

FFmpeg is a complete, cross-platform solution to record, convert and stream audio and video. It is used as the platform foundation of many projects dealing with multimedia, both open source and proprietary, and used extensively by several multimedia web-based multimedia conversion and processing services.

In the year 2018 FFmpeg delivered two formal releases (4.0 and 4.1) and several security updates of old releases. A complete list of changes can be [found in the changelog](#). Also, as usual, FFmpeg joined the GSoC program, with total of 5 assigned projects.

FFmpeg attended various conferences and meetups during the year. Several developers attended to represent and connect the project with our users and fellow open source projects. These include venues in Europe and abroad, covering pure end-user conferences, developer meetups of fellow projects to the annual summit of GSoC affiliate program. FFmpeg ordered various merchandise stock to give away during these attendances. Also, some promotional items are kept in stock and extended for necessities depending on the corresponding venue.

*Submitted by Stefano Sabatini and Thilo Borgmann*

### 5.3.7 GNU TeXmacs

GNU TeXmacs is a free scientific office suite with a professional typesetting quality. Our focus in 2018 has been on the preparation of a new major version that we plan to release during 2019. As a consequence, we have fixed many bugs, improved the robustness of TeXmacs on the platforms that we support, and started the generation of our own packages for various GNU/Linux distributions.

*Submitted by Joris van der Hoeven*



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### 5.3.8 Jenkins

Jenkins continues to play a major role in pushing the automation forward, after 14+ years since its birth, and if anything the pace of growth seems to be accelerating. In this dog year industry, that's truly remarkable. Being a part of this achievement truly makes me proud. That faster pace results in what I call "5 super powers":

- [Jenkins X](#) is probably the most visible innovation of this year, making it much easier to create modern cloud applications on Kubernetes. This also represents the significant expansion of the [Jenkins community and its mission](#).
- [Jenkins Configuration as Code](#) hit a major milestone 1.0 this year, and it's continuing to gain more momentum and traction.
- "Cloud Native Jenkins" is the term I gave to a new effort that I'm calling to transform Jenkins into a general purpose CI/CD engine that runs at scale on Kubernetes. There's still much to be defined here, but you can already see some great things like Serverless Jenkins.
- [Evergreen](#) is another young and upcoming project that has an ambitious thesis — drastically simplifying the adoption and operation of Jenkins.
- Pipeline effort formed a new SIG and I'm looking forward to the impact this will drive in 2019.

The not-so-secret sauce of the Jenkins community that threads together all these improvements from user visible changes to the community improvements is our ability to evolve. As I look forward to 2019, no doubt these things I mentioned will evolve, morph, merge, and split as we continue to learn and adopt.

*Submitted by Kohsuke Kawaguchi*

### 5.3.9 MinGW

In 2018, the focus of MinGW has been on updating our core tools to the latest upstream versions, and in the migration of file release hosting from SourceForge.net to OSDN.net. While older releases will remain on SourceForge.net, the latest are distributed exclusively via OSDN.net

To accompany these updates, originating upstream, our own supporting MinGW Windows System Libraries (comprising mingwrt and w32api), have been updated to version 5.2 (with a critical 5.2.1 patch release, in January 2019).

*Submitted by Keith Marshall*

### 5.3.10 LibreOffice

In 2018, the LibreOffice project released two new versions of the software (6.0 and 6.1) along with several smaller bug fix updates. LibreOffice 6.0 introduced an ePUB export filter for saving documents as eBooks, along with experimental document signing with OpenPGP. Meanwhile, LibreOffice 6.1 introduced new icon themes, a revamped image handling engine, and parallel formula compiling in the spreadsheet for improved performance.

Throughout the year, the community organized events, such as the LibreOffice Conference in Tirana, Albania, which took place in September. There were also hackfests in Hamburg and Munich, bringing developers together, while local communities organized translation sprints, bug hunting sessions and other meetups in Japan, Nepal, Taiwan, Turkey and other locations.

*Submitted by Sophie Gautier*

### 5.3.11 NTPsec

NTPsec continues to progress from our 1.0.0 release in late 2016. We are now at version 1.1.3. Through 2017 we continue to clean up and refactor the codebase, and have maintained our record of immunity and



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rapid fixes to CVEs discovered against NTP Classic. We added support for the internet draft features “draft-ietf-ntp-mac” and “draft-ietf-ntp-data-minimization”. We negotiated a grant from Cisco to implement the new Network Time Security (NTS) specification, and design work on NTS is ongoing right now.

*Submitted by Mark Atwood*

### **5.3.12 OFTC**

OFTC has continued to operate the IRC network. We are slowly gaining more staff, and the spam waves over the past months have not had any impact on the generally good atmosphere among the operators.

*Submitted by Christoph Berg*

### **5.3.13 Open Bioinformatics Foundation**

The Open Bioinformatics Foundation is a non-profit, volunteer-run group dedicated to promoting the practice and philosophy of open source software development and Open Science within the biological research community. The OBF’s most visible activities are running the annual Bioinformatics Open Source Conference (BOSC), participating in the Google Summer of Code program, and running the OBF Travel Fellowship program. The Travel Fellowship program, launched in 2016, aims to improve diversity at bioinformatics events. As of January 2019, there have been 85 applicants over nine application rounds, and a total of twelve fellowships were awarded. The OBF functions as a GSoC umbrella organization for bioinformatics projects. 38 students have participated in summer internships under the OBF umbrella since 2010.

*Submitted by Nomi Harris*

### **5.3.14 OpenEmbedded**

OpenEmbedded is a build system that creates custom Linux distributions for devices running Linux. Traditionally used for creating images for embedded devices, OpenEmbedded is now used all over to create small images for internet of things (IoT) devices, to large images pushing into the desktop space. Over the past year, we see additional users who build edge routers for IoT applications and images to deploy in popular containers systems.

To support the OpenEmbedded developer community, we work with the Yocto Project to arrange developer meetings twice a year. Developer meetings bring people together to review challenges facing the project and create better relationships in the community. Moving forward, we are planning to hold developer summits to improve communication of our capabilities and new features.

*Submitted by Philip Balister*

### **5.3.15 Open MPI**

The Open MPI community is a collection of academics, researchers, and vendors who continue to develop cutting-edge technology for today’s most-demanding High Performance Computing (HPC) environments. This community had a busy year in 2018: we had eleven releases of our signature project (Open MPI). We had new minor releases of our v2.1.x series: v2.1.3 through v2.1.5. We also had new minor releases of our v3.0.x series (v3.0.1 through v3.0.3), and introduced the v3.1.x series with releases up through v3.1.3. Our all-new v4.0.0 release in November kicked off our v4.0.x series. The Hardware Locality (hwloc) sub-project also had several releases including contributions from both the overall community and several vendors: the legacy v1.11 series had several releases (v1.11.9 through v1.11.12), and the all-new v2.0.x series debuted along with several followup bug-fix releases (up through v2.0.3).

*Submitted by Jeff Squyres*



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### **5.3.16 Open Voting**

As in recent years, in 2018 we focused mainly on advocacy work. The open source voting effort has faced significant opposition from existing vendors. Despite this, we saw success inspiring San Francisco to proceed with getting their own open source voting system built and certified. The work is in early stages. Several people, including a project manager, have been hired so far. The Mayor has assigned San Francisco's Technology Director to lead the project. State money has been made available for the project, although not yet allocated.

*Submitted by Alan Dechert*

### **5.3.17 OpenZFS**

OpenZFS held its annual Developer Summit in September 2018. With around 100 attendees and 14 speakers, it was a great event for educating the community about new features in OpenZFS, as well as for folks to interact face to face with other developers and plan the next year's activities. We also started holding monthly leadership meetings (via video conference) which accomplish similar goals but with a focus on discussion rather than presentations. On the development front, 2018 saw the integration of device removal, special devices for metadata, zpool checkpoint, and sequential scrub/resilver.

*Submitted by Matthew Ahrens*

### **5.3.18 Performance Co-Pilot**

2018 was another successful year for the PCP community; we ran our first conference! It was held in Tokyo, Japan and was very well received. Plans began immediately afterwards for next years conference, to be held on March 1st 2019, in Melbourne, Australia.

We released a major version (4.0) update to PCP, followed by several minor releases over the course of the year. We added new analysis tools (including a revived dstat utility), many new performance metrics and significant new core functionality.

Once again we participated as a Google Summer of Code organization and mentored six students and their projects this year.

*Submitted by Nathan Scott*

### **5.3.19 PostgreSQL**

During 2018, PostgreSQL 11 was released, which added stored procedures and improved partitioning and parallelism. A multi-year project to add just-in-time compilation was started that will greatly enhance the data warehouse abilities of PostgreSQL in the coming years.

Quarterly minor releases were also produced. The community development process continues to flourish, with new people and companies constantly joining.

After languishing for years, our website was finally updated with a fresh appearance and new backend technology. We adopted a code of conduct in 2018, and our international event and user group activities continued to grow.

*Submitted by Bruce Momjian*

### **5.3.20 Privoxy**

In 2018 we released Privoxy 3.0.28 which scales better in multi-user environments and brings a couple of new tuning directives.

*Submitted by Fabian Keil*

### 5.3.21 SproutCore

SproutCore is an open source framework for building fast, innovative user experiences on the web. The main focus of the core team has been to see how the way SproutCore uses JavaScript to realize its programming model can be best transferred into the era of ES6 classes and modules. It has become clear that some syntactical change is likely to be necessary, and that any ‘native’ version will have to wait till the arrival of the function like `import()` because of runtime dependencies. SproutCore has moved to a new default theme which doesn’t require automated image slicing, making its build tools less dependency-heavy. The documentation has been improved to reflect these changes.

*Submitted by Maurits Lamers*

### 5.3.22 Swathanthra Malayalam Computing (SMC)

Swathanthra Malayalam Computing(SMC) works as an umbrella organization of various free and open source language technology projects in Indian languages. In 2018 SMC continued its active work on development, research, standardization and technology policy ensuring digital rights of native language users.

An SMC developer community meetup was held in April 2018. The Indic keyboard project had a major release with bug fixes and support for Santali in August 2018. Indic keyboard recently received a Mozilla Open Source Support (MOSS) award. Mlmorph, a library for morphological analysis for Malayalam, was released in December 2018. Mlphon, a Malayalam phonetic analyzer, was also released in December 2018. A popular input method, Swanalekha, is now available on all operating systems and devices. SMC’s 12+ Indian language fonts are actively maintained and new font development projects are in progress. SMC is actively involved in technology policy consultations on privacy and data protection in India and organized public discussions on these topics. SMC’s localization team contributed to GNOME and Firefox Lite Malayalam localization projects. We restarted the work on a Malayalam language bibliography open data project, Grandham, this year. Our community members published papers and presented them at various conferences, such as Grafematik 2018, State of the Map Asia 2018, DebUtsav 18 etc.

*Submitted by Anivar Aravind*

### 5.3.23 systemd

In 2018 we published four major releases of systemd (see [complete list of changes](#)). We received a 200,000 US dollar donation from Handshake.org. At the *All Systems Go!* conference in Berlin, many systemd contributors and maintainers participated in a successful hackfest.

*Submitted by Lennart Poettering*

### 5.3.24 The Mana World

The Mana World (TMW) is an effort to create an innovative free and open source MMORPG (massively multiplayer online role-playing game). The Mana World made further progress in [backporting](#) more [legacy TMW content](#) to the [Evol-Hercules engine](#), while also adding new content and features that were not possible under the older engine. Players can now have their own personal rowboat to navigate on water and other means of transportation may be added in the future. To ensure continued operation of the legacy server while the new one is still being built, numerous security updates have been backported to the deprecated tmwAthena engine.

*Submitted by Pascal Beauchamp*

### 5.3.25 Tux4Kids

A new released of Tux Paint, a drawing program for children, was published in the latter half of 2018. This release brings back compatibility with macOS, adds 5 new localizations (Bengali, Bodo, Dogri, Kabyle,





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Urdu), a set of star shapes in the shape-drawing tool, and a color picker (eyedropper).

*Submitted by Bill Kendrick*

### **5.3.26 X.Org**

The X.Org community creates a free and open accelerated graphics stack, including major components such as the DRM kernel graphics subsystem, Mesa 3D graphics library, Wayland compositor and the X.Org Window System.

The Foundation supported the community through travel grants for the X Developer Conference in La Coruña, Spain, organized by Igalia and GPUL in September. 5 students successfully completed their GSoC/EVoC/Outreachy internships within the X.Org community, and most could attend XDC in Spain and present their work thanks to travel grants from X.Org.

This year we've looked for sponsors for XDC for the first time since years again, made possible thanks to SPI as our fiscal sponsors. This was extremely successful and we managed to secure one Platinum, seven Gold sponsors and two local sponsors at the Bronze level to support our conference

The X.org board has spent a lot of time working together with the freedesktop.org project to prepare our merger, which aims to streamline and improve how we run both of our communities.

*Submitted by Daniel Vetter*



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## Chapter 6

# Acknowledgements

We would like to thank all donors who contribute to the operations of SPI and its associated projects. We'd also like to thank the volunteers who passionately contribute to SPI and its associated projects.

In particular, we'd like to thank Handshake for donating one million US dollars to SPI — \$900,000 to SPI associated projects (Arch Linux, Debian, FFmpeg and systemd) and \$100,000 to SPI's general fund. Thanks also to the craigslist Charitable Fund for its contributions to PostgreSQL and SPI's general fund.

We'd like to thank Jonathan McDowell for running SPI's membership system, Valessio Brito for creating the artwork for this annual report, and all past and current board members and volunteers of SPI and its associated projects.

Everyone who supports SPI and its mission to help free and open source software projects — *thank you!*



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## Appendix A

### About SPI

SPI is a non-profit organization which was founded to help organizations develop and distribute open hardware and software. We encourage programmers to use the GNU General Public License or other licenses that allow free redistribution and use of software, and hardware developers to distribute documentation that will allow device drivers to be written for their product.

SPI was incorporated as a non-profit organization on June 16, 1997 in the state of New York. Since then, it has become an umbrella organization for projects from the community.

In 1999, the Internal Revenue Service (IRS) of the United States government determined that under section 501(a) of the Internal Revenue Code SPI qualifies for 501(c)(3) (non-profit organization) status under section 509(a)(1) and 170(b)(1)(A)(vi). This means that donations made to SPI and its supported projects are tax-deductible as charitable donations for US taxpayers.



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