

Software in the Public Interest, Inc.  
2016 Annual Report

July 9, 2017

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.

– *Martin Michlmayr, SPI President*

# Contents

|          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>President's Welcome</b>                 | <b>4</b>  |
| <b>2</b> | <b>Committee Reports</b>                   | <b>5</b>  |
| 2.1      | Membership Committee . . . . .             | 5         |
| 2.1.1    | Statistics . . . . .                       | 5         |
| 2.1.2    | Active membership clean up . . . . .       | 5         |
| <b>3</b> | <b>Board Report</b>                        | <b>7</b>  |
| 3.1      | Board Members . . . . .                    | 7         |
| 3.2      | Board Changes . . . . .                    | 8         |
| 3.3      | Elections . . . . .                        | 8         |
| 3.4      | Face-to-face Meeting . . . . .             | 9         |
| <b>4</b> | <b>Treasury Report</b>                     | <b>10</b> |
| 4.1      | Income Statement . . . . .                 | 10        |
| 4.2      | Balance Sheet . . . . .                    | 15        |
| <b>5</b> | <b>Member Project Reports</b>              | <b>17</b> |
| 5.1      | New Associated Projects . . . . .          | 17        |
| 5.1.1    | ArduPilot . . . . .                        | 17        |
| 5.1.2    | Glucosio . . . . .                         | 17        |
| 5.1.3    | NTPsec . . . . .                           | 17        |
| 5.1.4    | Open MPI . . . . .                         | 18        |
| 5.1.5    | OpenZFS . . . . .                          | 18        |
| 5.1.6    | Performance Co-Pilot . . . . .             | 18        |
| 5.1.7    | Torch . . . . .                            | 18        |
| 5.1.8    | X.Org . . . . .                            | 19        |
| 5.2      | Updates from Associated Projects . . . . . | 19        |
| 5.2.1    | 0 A.D. . . . .                             | 19        |
| 5.2.2    | Chakra . . . . .                           | 19        |
| 5.2.3    | Debian . . . . .                           | 20        |
| 5.2.4    | Drizzle . . . . .                          | 20        |
| 5.2.5    | FFmpeg . . . . .                           | 21        |
| 5.2.6    | Jenkins . . . . .                          | 21        |

|          |                                |           |
|----------|--------------------------------|-----------|
| 5.2.7    | LibreOffice                    | 21        |
| 5.2.8    | NTPsec                         | 22        |
| 5.2.9    | Open Bioinformatics Foundation | 22        |
| 5.2.10   | SproutCore                     | 22        |
| 5.2.11   | Tux4Kids                       | 23        |
| 5.2.12   | YafaRay                        | 23        |
| <b>A</b> | <b>About SPI</b>               | <b>24</b> |

# Chapter 1

## President's Welcome

SPI continues to serve the free software and open source community by supporting the activities of our associated projects.

We've seen a lot of change this year. Several long-term board members retired from the board, including Bdale Garbee who served as SPI's President for many years. There was a lot of interest in SPI's board election and several new contributors joined the board. The board met in person in February to discuss outstanding issues and work on long-term plans.

We've made good progress on moving our accounting process to a workflow based on the ledger-cli software. This will allow us to produce timely reports and give associated projects access to more details.

In order to improve governance of the organization and to enable new board to contribute effectively, SPI created onboarding information.

During 2016, SPI accepted several new FOSS projects as associated projects.

Finally, I'd like to thank the board as well as our volunteers and members for their contributions!

– *Martin Michlmayr, SPI President*

## Chapter 2

# Committee Reports

### 2.1 Membership Committee

#### 2.1.1 Statistics

On January 1, 2016 we had 517 contributing and 520 non-contributing members. On December 31, 2016 there were 246 contributing members and 900 non-contributing members.

#### 2.1.2 Active membership clean up

There has been an issue over the years that it is unclear whether a member is still actively involved in SPI, or has drifted away. In general this has not been a problem but there are certain activities SPI would like to perform, such as cleaning up the bylaws, which require a sufficient percentage of the active membership to vote in favour. As a result the board passed [2009-11-04.jmd.1: Contributing membership expiry](#) allowing for those members who do not vote in the annual board election to be considered potentially inactive, and contacted to confirm their status.

Improvements in the members website at the start of 2016 allowed for this clean up to finally take place. On 15th February 2016 those members which the voting system had no record of ever voting (which means probably not since 2004) were contacted. At that point in time there were 526 contributing members and 245 members were emailed.

A month later, on 14th March, the corresponding clean up took place. 51 members had confirmed they were still active, resulting in 332 contributing members.

A second round of notifications went out on 16th March. These were sent to members who had not voted in the most recent board elections (back in July 2014). 212 members were emailed.

The final set of clean ups took place on 18th April. 95 members had confirmed they were still active, leaving a total of 219 active contributing members (some new members were approved while the clean ups were in progress).

It is intended that this clean up will be performed on an annual basis in the future, after the board election has completed. Members who vote will be automatically considered as still active, and additionally it is possible for a member to update the date the system considers them to have last been active within the membership website at any time.

# Chapter 3

## Board Report

### 3.1 Board Members

Board members as of January 1, 2016:

- Bdale Garbee (President)
- Joerg Jaspert (Vice President)
- Martin Michlmayr (Secretary)
- Michael Schultheiss (Treasurer)
- Robert Brockway
- Joshua D. Drake
- Dimitri John Ledkov
- Gregers Petersen
- Martin Zobel-Helas

Board members as of December 31, 2016:

- Martin Michlmayr (President)
- Joerg Jaspert (Vice President)
- Valerie Young (Secretary)
- Michael Schultheiss (Treasurer)
- Luca Filipozzi
- Jimmy Kaplowitz
- Dimitri John Ledkov



- Andrew Tridgell
- Martin Zobel-Helas

Advisors to the board as of December 31, 2016:

- Software Freedom Law Center (SFLC), legal counsel
- Mehdi Dogguy, Debian Project representative
- Robert Treat, PostgreSQL Project representative

## 3.2 Board Changes

Changes that occurred during the year:

- Robert Brockway resigned from the board at the end of May 2016 due to lack of time. We'd like to thank him for his many contributions over the years!
- Gregers Petersen resigned from the board in June 2016 due to lack of time. We'd like to thank Gregers for his contributions!
- The terms for Joshua D. Drake, Bdale Garbee, Joerg Jaspert and Martin Zobel-Helas expired in July 2016. Joerg and Martin sought, and obtained, re-election. We'd like to thank Joshua D. Drake and Bdale Garbee for their work on the board. Luca Filipozzi, Jimmy Kaplowitz, Andrew Tridgell and Valerie Young joined the board as part of the same election.
- On August 11, 2016 the board voted to appoint the following officers:
  - President: Martin Michlmayr
  - Vice President: Joerg Jaspert
  - Secretary: Valerie Young
  - Treasurer: Michael Schultheiss

## 3.3 Elections

A board membership election was conducted in July 2016. There were 6 board seats up for election. Nominations were received from Philip Balister, R. Tyler Croy, Joshua D. Drake, Peter Eisentraut, Luca Filipozzi, Stephen Frost, Joerg Jaspert, Jimmy Kaplowitz, Tim Potter, Craig Small, Andrew Tridgell, Valerie Young, and Martin Zobel-Helas.

Luca Filipozzi, Joerg Jaspert, Jimmy Kaplowitz, Andrew Tridgell, Valerie Young and Martin Zobel-Helas were elected to the board.

### 3.4 Face-to-face Meeting

The SPI board held a face-to-face meeting on February 12-14, 2016. The meeting was held at the Software Freedom Law Center (SFLC) in New York.

We discussed many topics, including new by-laws, our financial system, and mission and roadmap.



Figure 3.1: Face-to-face meeting in New York: Martin Zobel-Helas, Mishi Choudhary (SFLC), Michael Schultheiss, Dimitri John Ledkov, Martin Michlmayr, Eben Moglen (SFLC), Joshua D. Drake and Bdale Garbee (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).

### 4.1 Income Statement

This covers the Period January 1, 2016 – December 31, 2016

#### Income

##### Ordinary Income

|                       |           |
|-----------------------|-----------|
| 0 A.D.                | 1,432.28  |
| Arch Linux            | 8,256.72  |
| ArduPilot             | 54,849.63 |
| Chakra                | 130.15    |
| DebConf16             | 69,650.00 |
| DebConf17             | 32,546.16 |
| Debian                | 26,940.81 |
| FFmpeg                | 13,806.43 |
| FFmpeg (OPW)          | 190.00    |
| freedesktop.org       | 1,272.05  |
| FreedomBox Foundation | 38.00     |
| Gallery               | 0.33      |
| GNU TeXmacs           | 42.75     |
| GNUstep               | 142.50    |
| haskell.org           | 13569.23  |
| Jenkins               | 11219.50  |
| LibreOffice           | 43,289.79 |
| MinGW                 | 216.22    |

|                                 |           |
|---------------------------------|-----------|
| NTPsec                          | 61.75     |
| Open Bioinformatics             | 25,507.50 |
| Open Voting Foundation          | 80.75     |
| OpenEmbedded                    | 152.00    |
| OpenWrt                         | 1621.13   |
| OpenZFS                         | 123.50    |
| OSUNIX                          | 14.25     |
| Performance Co-Pilot            | 1,702.94  |
| PostgreSQL                      | 24,795.00 |
| Privoxy                         | 23.75     |
| Swathanthra Malayalam Computing | 5,415.00  |
| SPI General                     | 57,111.44 |
| The HeliOS Project              | 12.35     |
| Tux4Kids                        | 6.65      |
| X.Org                           | 33,523.45 |

Total Ordinary Income 427,744.01

Interest Income

|                                    |        |
|------------------------------------|--------|
| Key Business Platinum MM Savings   | 32.58  |
| Chase BusSelect High Yield Savings | 215.76 |
| Fifth Third Business MM 128        | 94.41  |

Total Interest Income 342.75

Gross Income 428,086.76

Expenses

Ordinary Expenses

0 A.D.

|         |              |
|---------|--------------|
| 60.60   | Banking fees |
| 2.25    | Fees         |
| 1024.04 | IT           |
| 6033.07 | Meetups      |

-----  
7119.96

Arch Linux

|         |              |
|---------|--------------|
| 419.14  | Banking fees |
| 2423.24 | IT           |

-----  
2842.38

ArduPilot  
935.21 Banking fees  
1000.00 Development  
-----  
1935.21

Chakra  
7.58 Banking fees

DebConf 15  
3081.63 Meetups

DebConf 16  
2.92 Banking fees  
95646.49 Meetups  
-----  
95649.41

DebConf 17  
40.95 Banking fees  
175.32 Meetups  
-----  
216.27

Debian  
1102.20 Banking fees  
10250.00 Development  
45.00 Fees  
30875.14 IT  
5009.19 Meetups  
225.00 Office  
-----  
47506.53

FFmpeg  
175.63 Banking fees  
2022.00 Development  
2296.87 Meetups  
-----  
4494.50

FFmpeg (OPW)  
9.23 Banking fees

freedesktop.org  
56.87 Banking fees

|                     |              |
|---------------------|--------------|
| 120.00              | Development  |
| -----               |              |
| 176.87              |              |
| FreedomBox          | Foundation   |
| 2.65                | Banking fees |
| Gallery             |              |
| 0.36                | Banking fees |
| GNU TeXmacs         |              |
| 2.21                | Banking fees |
| haskell.org         |              |
| 70.35               | Banking fees |
| 802.26              | IT           |
| -----               |              |
| 872.61              |              |
| Jenkins             |              |
| 257.90              | Banking fees |
| 6949.23             | Meetups      |
| -----               |              |
| 7207.13             |              |
| LibreOffice         |              |
| 157.29              | Banking fees |
| 17339.59            | Meetups      |
| 800.00              | Services     |
| -----               |              |
| 18296.88            |              |
| MinGW               |              |
| 12.25               | Banking fees |
| NTPsec              |              |
| 2.48                | Banking fees |
| Open Bioinformatics |              |
| 1.35                | Banking fees |
| 224.04              | IT           |
| -----               |              |
| 225.39              |              |
| OpenEmbedded        |              |
| 5.62                | Banking fees |

|                                 |               |  |
|---------------------------------|---------------|--|
| Open Voting Foundation          |               |  |
| 3.85                            | Banking fees  |  |
| 284.00                          | Meetups       |  |
| -----                           |               |  |
| 287.85                          |               |  |
| OpenWrt                         |               |  |
| 66.84                           | Banking fees  |  |
| OpenZFS                         |               |  |
| 5.75                            | Banking fees  |  |
| Performance Co-Pilot            |               |  |
| 4.14                            | Banking fees  |  |
| PostgreSQL                      |               |  |
| 35.25                           | Banking fees  |  |
| 1566.57                         | Meetups       |  |
| 299.00                          | Press Release |  |
| -----                           |               |  |
| 1900.82                         |               |  |
| privoxy                         |               |  |
| 1.35                            | Banking fees  |  |
| Swathanthra Malayalam Computing |               |  |
| 2135.00                         | Development   |  |
| SPI                             |               |  |
| 1558.97                         | Banking fees  |  |
| 211.55                          | Fee           |  |
| 6286.63                         | Meetups       |  |
| 1565.50                         | Office        |  |
| 60.00                           | Services      |  |
| -----                           |               |  |
| 9682.65                         |               |  |
| The HeliOS Project              |               |  |
| 0.91                            | Banking fees  |  |
| Tux4Kids                        |               |  |
| 0.52                            | Banking fees  |  |
| X.Org                           |               |  |
| 23.06                           | Banking fees  |  |

|                |            |            |
|----------------|------------|------------|
| 56.00          | Chargeback |            |
| -----          |            |            |
| 79.06          |            |            |
| Total Expenses |            | 203,832.04 |
|                |            | -----      |
| Net Income     |            | 224,254.72 |

## 4.2 Balance Sheet

Balance Sheet as of December 31, 2016

### ASSETS

#### Current Assets

|  |            |
|--|------------|
| Chase Performance Business Checking              | 68,573.71  |
| Chase Business Select High Yield Savings         | 270,027.59 |
| Fifth Third Business Money Market 128            | 152,757.28 |
| Fifth Third Business Elite Checking (SPI)        | 19,650.63  |
| Fifth Third Business Elite Checking (Debian)     | 8,060.58   |
| Fifth Third Business Elite Checking Wiretransfer | 50,000.00  |
| KeyBank Basic Business Checking                  | 8,928.08   |
| Key Business Reward Checking                     | 279,495.52 |
| Key Business Platinum Money Market Savings       | 162,916.47 |
| Key Express Checking                             | 5,131.72   |
| Ameriprise Cash Mgmt Acct                        | 13,406.15  |
| Debian Debit Card                                | 140.00     |

|                      |              |
|----------------------|--------------|
| Total Current Assets | 1,060,871.56 |
|----------------------|--------------|

|              |              |
|--------------|--------------|
| TOTAL ASSETS | 1,060,871.56 |
|--------------|--------------|

### LIABILITIES AND EQUITY

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

#### Equity

|                        |           |
|------------------------|-----------|
| Reserves held in trust |           |
| 0 A.D.                 | 29,528.35 |
| ankur.org.in           | 2,811.13  |
| aptosid                | 251.14    |
| Arch Linux             | 30,603.55 |
| ArduPilot              | 52,914.42 |
| Chakra                 | 674.43    |



|                                  |                  |
|----------------------------------|------------------|
| Debian                           | 207,824.45       |
| DebConf 14                       | 35,962.78        |
| DebConf 15                       | 71,283.80        |
| DebConf 16                       | (15,962.67)      |
| DebConf 17                       | 32,329.89        |
| Drizzle                          | 6,333.99         |
| FFmpeg                           | 18,666.92        |
| FFmpeg (Outreachy)               | 304.62           |
| Fluxbox                          | 995.00           |
| freedesktop.org                  | 17,500.17        |
| FreedomBox Foundation            | 25,049.92        |
| Gallery                          | 8,357.68         |
| GNU TeXmacs                      | 1,122.51         |
| GNUstep                          | 142.50           |
| Haskell                          | 15,978.96        |
| Jenkins                          | 27,435.99        |
| LibreOffice                      | 68,740.43        |
| madwifi-project.org              | 1,494.90         |
| MinGW                            | 4,079.17         |
| NTPsec                           | 59.27            |
| Open Bioinformatics              | 75,217.75        |
| Open Voting Foundation           | 89.71            |
| OpenEmbedded                     | 328.03           |
| OpenVAS                          | 56.21            |
| OpenWrt                          | 6,040.14         |
| OpenZFS                          | 117.75           |
| OSUNIX                           | 17.17            |
| Path64                           | 18.60            |
| Performance Co-Pilot             | 1,698.80         |
| Plan 9                           | 6,500.00         |
| PostgreSQL                       | 92,378.16        |
| Privoxy                          | 213.62           |
| Swathanthra Malayan Comp         | 5,763.62         |
| The HeliOS Project               | 212.83           |
| TideSDK                          | 353.99           |
| Tux4Kids                         | 16,283.63        |
| X.Org                            | 33,444.39        |
| YafaRay                          | 5,849.77         |
| <br>Total held in trust          | <br>889,067.47   |
| <br>General reserves             | <br>171,804.09   |
| <br>Total Equity                 | <br>1,060,871.56 |
| <br>TOTAL LIABILITIES AND EQUITY | <br>1,060,871.56 |

## Chapter 5

# Member Project Reports

### 5.1 New Associated Projects

We have continued to see a reasonable level of interest from projects who wish to become associated with SPI. Over the past year, 8 projects joined the SPI umbrella as an Associated Project.

#### 5.1.1 ArduPilot

ArduPilot is a cross-platform free software autopilot project for all types of small robotic vehicles. With a very active developer and user community ArduPilot provides sophisticated navigation and control for all types of flying vehicles, boats and ground vehicles.

#### 5.1.2 Glucosio

Glucosio is an open source project dedicated to bringing open source apps to smartphone, desktop and web in order to help people with diabetes improve their health outcomes by better self-management of their disease. At the same time, Glucosio offers the opportunity for opt-in to crowdsourcing of anonymized health trends and demographics to support diabetes research. Apps are dual licensed under the GPLv3/MPL 2.0 license.

#### 5.1.3 NTPsec

The NTPsec project is a more secure, hardened, and improved implementation of Network Time Protocol derived from NTP Classic, Dave Mills's original. We

employ best practices and state-of-the art technology in code auditing, verification, and testing to deliver code that can be used with confidence in deployments with the most stringent security, availability, and assurance requirements.

#### **5.1.4 Open MPI**

The Open MPI Project is an open source Message Passing Interface implementation that is developed and maintained by a consortium of academic, research, and industry partners. Open MPI is therefore able to combine the expertise, technologies, and resources from all across the High Performance Computing community in order to build the best MPI library available. Open MPI's plugin-based architecture offers advantages for system and software vendors, application developers and computer science researchers.

#### **5.1.5 OpenZFS**

OpenZFS is an umbrella project which brings together individuals and companies that use and improve the ZFS file system, and encourages the widespread use of ZFS and its development in a true open-source manner.

ZFS is storage software which combines the functionality of traditional filesystems, volume manager, and more. ZFS include protection against data corruption, support for high storage capacities, efficient data compression, snapshots and copy-on-write clones, continuous integrity checking and automatic repair, remote replication with ZFS send and receive, and RAID-Z.

#### **5.1.6 Performance Co-Pilot**

Performance Co-Pilot (PCP) provides a framework and services to support system-level performance monitoring and management. It presents a unifying abstraction for all of the performance data in a system, and many tools for interrogating, retrieving and processing that data.

PCP is a feature-rich, mature, extensible, cross-platform toolkit supporting both live and retrospective analysis. The distributed PCP architecture makes it especially useful for those seeking centralized monitoring of distributed processing.

#### **5.1.7 Torch**

Torch is a scientific computing framework with wide support for machine learning algorithms that puts GPUs first. It is easy to use and efficient, thanks to an simple and fast scripting language, Lua, and an underlying C/CUDA implementation.

### 5.1.8 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.

## 5.2 Updates from Associated Projects

### 5.2.1 0 A.D.

0 A.D. (pronounced “zero ey-dee”) is a cross-platform, real-time strategy (RTS) game of ancient warfare. It’s 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.

Between 1 January 2016 and 31 December 2016, we put out two alpha releases: Alpha 20 Timosthenes and Alpha 21 Ulysses, each available for Windows, OS X, Linux, and BSD. These releases included long awaited features such as ‘Regicide’ and ‘Last Man Standing’ game modes, a new observer mode, lag detection, the integration of SpiderMonkey 38 into the game engine, and more. We also completed the artwork for all planned factions for the game and ended the year by revealing new unit meshes with new animations.

In addition, we further streamlined the development of 0 A.D. by beginning to work with a local instance of Phabricator. This FOSS software suite helps us formalize and ease the review process and automatically test proposed patches.

We also presented the game at a few conferences, including JDLL (Lyon, France), Linuxwochen Wien (Vienna, Austria), Capitole du Libre (Toulouse, France) and the Icon Festival for Science Fiction, Fantasy and Role-Playing (Tel Aviv, Israel). This helped raise awareness of 0 A.D. and facilitated recruitment of developers.

We were able to make much of this progress thanks to our generous donors and the invaluable services of SPI.

*Submitted by Aviv Sharon*

### 5.2.2 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.

Chakra made one release during 2016, and most notably we held our first ever face-to-face meeting in Verzasca, Switzerland, where core contributors came together to socialize and discuss current matters and future points of interest. Several agreements were made concerning both the product, as well as the services provided, which has had a positive outcome and bolstered productivity amongst the contributors.

*Submitted by H W “totte” Tovetjärnfor*

### 5.2.3 Debian

The Debian project continues to remain attached to its Social Contract and places the interests of its users and the free software community first amongst its priorities.

The Reproducible Builds team continues to make notable progress, with funding extended by the Linux Foundation’s Core Infrastructure Initiative to include more developers, including those from other distributions in a collaborative effort.

In addition, the Debian project continues its efforts to run the LTS program for extended security support.

On 16th August 2016, the Debian project celebrated its 23rd anniversary. This is a new milestone for the project and makes it one of the oldest Free and Open Source GNU/Linux distributions.

Debian’s annual gathering, DebConf, was held in Cape Town, South Africa. During DebConf, the Outreach Team welcomed many students selected to be part of the Google Summer of Code and Outreachy. During the rest of the year, tens of smaller MiniDebConfs and Bug Squashing Parties were held throughout the world.

The year contained sad news for the Debian community too with the passing of long-time contributor Kristoffer Rose who passed away in September 2016 after an intense but short battle with myelofibrosis. The contributions of Kristoffer will not be forgotten and the high standards of his work will continue to serve as an inspiration to others.

*Submitted by Chris Lamb, Debian Project Leader*

### 5.2.4 Drizzle

The Drizzle database server is no longer actively developed. However, two of the client libraries were actively developed and used in 2016: 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*

### 5.2.5 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 2016 FFMpeg delivered two formal releases (3.0 and 3.1) and several security updates of old releases. A complete list of changes can be [found in the changelog](#).

In the last year FFMpeg participated into several development programs, including Outreachy and GSoC 2016 (the last one for a total of 7 slots).

*Submitted by Stefano Sabatini*

### 5.2.6 Jenkins

Jenkins project has released its first major new version, Jenkins 2, in March, participated in Google Summer of Code for the first time, and entered into an agreement with Microsoft to migrate our infrastructure to Azure under the Microsoft sponsorship. In terms of development, two key efforts are under way; declarative pipeline, which improves the Jenkins pipeline functionality by making it easier and more approachable, is one. Blue ocean, which redefines the user experience of Jenkins, is another.

*Submitted by Kohsuke Kawaguchi*

### 5.2.7 LibreOffice

2016 was the year that fully established LibreOffice as the reference for free office suites, and another busy year for The Document Foundation, with four new Advisory Board members and a growing team.

In early September, TDF organised the LibreOffice Conference in Brno, a large city in the Czech Republic. Sponsored by Canonical, CIB, Collabora, Red Hat and Google, with the partnership of the Faculty of Information Technology of Brno University of Technology, the conference brought together developers and users to work on code, share ideas and discuss the future of the project.

*Submitted by Sophie Gautier*

### 5.2.8 NTPsec

The NTPsec Project continues with our refactoring and cleanup of the NTP code base. We made 6 point releases in 2016 and continue our drive to 1.0.0.

All the command line tooling has been migrated away from C, Perl, Perl4, and S+ into modern Python. All reported CVEs against NTP Classic were already fixed before discovery, or we addressed and fixed them within a few days. The core protocol statement has been refactored, with many bugs removed and with unsafe and not-security-possible modes removed. We are maintaining a strict mode warnings-free compilation hygiene, and a strict Coverity warnings hygiene.

*Submitted by Mark Atwood*

### 5.2.9 Open Bioinformatics Foundation

The Open Bioinformatics Foundation (OBF) 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.

Our member projects have made several releases including BioPerl 1.70, BioRuby 1.51 and Biopython 1.67 and 1.68, while BioJava held a successful open competition to design their new logo. The OBF acted as a Google Summer of Code (GSoC) 2016 umbrella organization hosting 9 students, of whom 8 completed. We have applied again for 2017.

Our annual Bioinformatics Open Source Conference (BOSC) 2016 was held in Boston ([report](#)).

2016 also saw the launch of the [OBF Travel Fellowship](#), aiming to improve diversity at bioinformatics events.

*Submitted by Peter Cock*

### 5.2.10 SproutCore

SproutCore is an open source framework for building fast, innovative user experiences on the web. In the last year we made two release with bug fixes (1.11.1 and 1.11.2). We are currently preparing a major 2.0 release which will only work with the new NodeJS base build tools. We will continue to provide bug fixes for the stable 1.11.x release which still works with the old build tools. We also are replacing the default image based theme with a pure CSS3 theme. See [the changelog](#) for more information.

*Submitted by Maurits Lamers*

### 5.2.11 Tux4Kids

Tux4Kids develops high-quality software for kids. Tux4Kids effort Tux Paint has not had a new release in 2016 but a number of features have been added, including a color selector tool, one new localization (Kabyle) and a variety of bug fixes and new sound effects. We're desperately seeking a Mac OS X (aka macOS) developer to come on board the project since the latest Apple OS release has caused Tux Paint to break. As schools, especially, upgrade to Sierra, they find themselves unable to run Tux Paint any more, which is very sad.

*Submitted by Bill Kendrick*

### 5.2.12 YafaRay

YafaRay is a free open-source montecarlo raytracing engine released under the LGPL 2.1 license. In general 2016 has been a good year for YafaRay since we again have an active developer who also systematically takes on bug tracker tasks. In fact, it has been the year with the highest number of releases ever. The project is alive but we have important challenges ahead, particularly recovering the user base, updating our project documentation and implanting key features in our software.

*Submitted by Alvaro Luna Bautista*



# 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 should be tax deductible for the American donor.