THE APACHE® SOFTWARE FOUNDATION (ASF)

Are you powered by Apache? The answer is most likely “yes”.

Apache projects serve as the backbone for some of the world’s most visible and widely used applications in Artificial Intelligence and Deep Learning, Big Data, Build Management, Cloud Computing, Content Management, DevOps, IoT and Edge Computing, Mobile, Servers, and Web Frameworks, among other categories.

Dependency on Apache projects for critical applications cannot go underestimated, from the 2.6-terabyte, Pulitzer Prize-winning Panama Papers investigation to system-wide information management at the US Federal Aviation Administration to capturing 500B events each day at Netflix to enabling real-time financial services at Lloyds Banking Group to simplifying mobile application development across Android/Blackberry/iOS/Ubuntu/Windows/Windows Phone/OS X platforms to processing requests at Facebook’s 300-petabyte data warehouse to powering clouds for Apple, Disney, Huawei, Tata, and countless others.

Every day, more programmers, solutions architects, individual users, educators, researchers, corporations, government agencies, and enthusiasts around the world are choosing Apache software for development tools, libraries, frameworks, visualizers, end-user productivity solutions, and more.

Advancing the ASF’s mission of providing software for the public good, momentum over the past fiscal year includes:

- 35M page views per week across apache.org;
- Web requests received from every Internet-connected country on the planet;
- Apache OpenOffice exceeded 200M downloads;
- Apache Groovy downloaded 12M times during the first 4 months of 2017;
- Nearly 300 new code contributors and 300-400 new people filing issues each month

Bringing value has been a driving force behind Apache’s diverse projects. The ASF’s 100M functional lines of code (out of 150M+ total) have been developed over 65,000 person years, and are valued at US$7B. Apache OpenOffice brings a value of over $25M to individual and organizational users each day. One of the most popular Open Source licenses is the commercially-friendly Apache License, under which millions of software solutions have been distributed to allow for their redistribution and usage.

For 18 years, the ASF’s strong leadership and Apache Way of community-led development have been the hallmarks that continue to draw future innovations that are free from commercial influence. We are deeply committed to remaining a trusted community for dependable Open Source software for years to come, and welcome your participation and support.
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CHAIRMAN’S REPORT

by Brett Porter

Apache projects and their communities are the heroes of our continued success and the longevity of the Foundation, and we continue to see projects thriving at Apache as they build diverse, independent, and growing communities of individual contributors.

Our growth over the last year roughly matched the pace of prior years. We have added several new projects: Twill, Kudu, Geode, Eagle, Beam, Ranger, Metron, Fineract, CarbonData and SystemML. Meanwhile, we retired the inactive projects Etch, Bloodhound, DeviceMap, Stratos, Abdera, and Wink.

We have also elected 64 new Members into the Foundation, bringing us to a total of 684.

We’ve seen some change in the Foundation’s governance and operations, including a number of mid-term changes to the Board and Executive Officer roles. However, these circumstances have highlighted the strength of the Foundation’s structure in that projects were able to continue unimpeded by the needs of our operations.

Later in 2016, we saw Greg Stein step down after 15 continuous years as a Director, to take up the role of Infrastructure Administrator, and we remain incredibly grateful for the work Greg has done and continues to do for the Foundation.

The addition of this role reflects the increasing need for full or part-time staff to help manage key operational needs, ensuring that projects have vital resources available to them.

Sam Ruby has also stepped into the role of President, with Ross Gardler moving to the EVP role. At this year’s Members’ meeting, Ted Dunning and Phil Steitz were elected to the Board for their first term, and we welcome the contributions they are able to make.

We are thankful for the willingness that each of these Members have to serve in whichever capacities are needed. All of these roles have required a significant commitment of volunteer time over the last year.

The changes throughout 2016 have given the Foundation a path forward through a difficult stage of its growth, though certainly many challenges lay ahead as we seek to meet the needs of the projects that call Apache home and to sustain the Foundation for many years to come.

As part of this year’s budget process, we have identified the need to increase our sponsorship levels to meet with the growth of our projects and their requirements. We remain incredibly thankful for the continued support of our Sponsors.

And we do continue to grow! Not only have we increased the number of Top-Level Projects, but we have now hit the milestone of 6,000 committers to Apache projects, illustrating the reach that Apache software has throughout the worldwide developer community. Throughout, we continue to hold fast to the Apache Way. This remains key to maintaining the unique value of The Apache Software Foundation.
PRESIDENT’S REPORT

by Sam Ruby

Last year at this time we had 173 top level communities and 55 in incubation. At the present time, we have 182 top level communities and 59 in incubation. In order to continue this growth without compromising our unwavering focus on independence from external influence, we are continuing to make a number of changes.

For starters, and for the first time, each of our operational areas –Brand Management, Fundraising, Marketing and Publicity, Infrastructure, Conferences, and Travel Assistance– is now supported by professional staff overseen by appointed ASF Members.

Unsurprisingly this lead to another first: we intentionally overran our budget and ran a deficit. We have substantial financial reserves, so this is not an immediate problem, and is something we are fully prepared to address.

These changes include increased tracking of budget to actuals. Making our first ever five-year projection. Evaluating each of the areas in which we have expenditures and determining that the expenditures are not only in line with what we would expect, but if anything, we would like to invest more in many areas.

One of those areas we have increased our investment in is Fundraising. Our Marketing and Publicity and Fundraising teams are working with HALO Worldwide and Virtual Incorporated to update our “Pitch Deck” enumerating the value the Foundation provides. We are increasing our use of CRM tools to ensure that we keep in touch with our Sponsors and are responsive to their needs.

We are increasing our focus on looking for new sponsors outside of our traditional “IT” silo. In particular, we are looking for Sponsors that have benefitted over the years by the software products we have produced for the public good, and appreciate the need for us to remain vendor neutral.

All the while, we are being very careful. While we are listening to our Sponsors and are addressing their feedback, we continue to be committed to providing core services to our projects in a way that is independent of our Sponsors’ interests. We invest equally across all our projects.

We are also retaining our flat organization structure. Our projects continue to remain an all-volunteer effort. These volunteers go well beyond simply contributing code to a codebase. They build sustainable communities that build software that is deployed the range from the smallest portable device to largest datacenters on the planet.

And we continue to set strategy from the bottom up. Project direction is set by those who show up and contribute, be it code, tests, documentation, or simply answering questions on mailing lists. Free to pursue strategies independent of any vendor’s interests.

These values have remained consistent over our 18+ year history as a Foundation.

And I’m honored to have the opportunity to play a small part in making this a success.
TREASURER’S REPORT

by Ulrich Stärk

It has been a year since Chris Mattmann passed me the baton as ASF Treasurer. I am pleased to report that his efforts with Virtual Inc. included instituting significant processes that, along with ongoing support from Virtual, has eased my transition to the role of Treasurer. Along with the support of Assistant Treasurer Kevin McGrail, we are in great shape.

The ASF had another very good year as detailed in the balance sheet. While cash was down year over year, our accounts receivable has increased due to the great work from Fundraising (also partially attributable to the timing of some Sponsor payments, as the Foundation operates on a Cash Basis reporting schedule that can also have an effect on the Profit and Loss statement, as shown). Further evidence of the Foundation’s financial health is noted by the following ratios:

- **Current Ratio** is a measure of an organization’s ability to pay back its short term liabilities with its short term assets. A ratio of 1:1 is the general measuring stick, however, with the Foundation having no true long term or short term obligations, has a ratio of 35:1 at the end of FY17;

- **Cash Ratio** is another conservative measure of the organization’s liquidity. For the ASF it is 24:1 at the end of FY17. As with the current ratio, anything above 1:1 is a very good number; and

- **Debt to Equity Ratio** is a measure of how leveraged an organization is. It is normally a low number that is sought for this ratio, and at .03, is another indication of the ASF’s continued excellent financial health.

An item of note is that the ASAE (American Society of Association Executives) states the non-profit industry average of Operating Cash Reserve is six months. The ASF ended FY17 with a 15.3-month Cash Reserve—more than double the industry average—which is something to be truly proud of as we move into FY18.

With regards to the Profit and Loss statement for FY17, the Foundation in its budgeting, determined, with its healthy financial position to tap FY17 as an investment year. The two main areas that the investment was focused on was Infrastructure, which in turn invests in the projects, and Marketing & Publicity, which benefits the entire Foundation in bringing it the recognition it truly deserves. While we were slightly behind the budgeted Net Income for FY17, expenses were slightly behind budget, so the issue was the timing of the receipt of a few Sponsor payments. ASF Sponsorship is always very much appreciated, though the timing of their receipt, especially at the end of a Fiscal Year, as we are on a Cash Basis, can cause some comparative issues as they did in FY17. That said, the Sponsor payments did arrive in the first month of the new fiscal year, placing the Foundation in a great financial position as it enters FY18.

http://www.apache.org/
# Apache Software Foundation Fiscal Year 2017 Balance Sheet

<table>
<thead>
<tr>
<th></th>
<th>Apr 30, 17</th>
<th>Apr 30, 16</th>
<th>$ Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checking/Savings</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Citizens Money Market</td>
<td>$1,465,787</td>
<td>$1,200,942</td>
<td>$264,845</td>
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<tr>
<td>Citizens Checking</td>
<td>$48,487</td>
<td>$513,957</td>
<td>$(465,471)</td>
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<tr>
<td>Paypal - ASF</td>
<td>$984</td>
<td>$82,757</td>
<td>$(71,774)</td>
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<tr>
<td>Total Checking/Savings</td>
<td>$1,515,257</td>
<td>$1,797,866</td>
<td>$(282,619)</td>
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<tr>
<td>Accounts Receivable</td>
<td>$626,788</td>
<td>$269,941</td>
<td>$356,848</td>
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<tr>
<td>Other Current Assets</td>
<td>$89,603</td>
<td>$74,429</td>
<td>$15,174</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>$2,231,649</td>
<td>$2,142,026</td>
<td>$89,623</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td>$2,231,649</td>
<td>$2,142,026</td>
<td>$89,623</td>
</tr>
<tr>
<td><strong>LIABILITIES &amp; EQUITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
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<tr>
<td>Current Liabilities</td>
<td>$63,722</td>
<td>$49,039</td>
<td>$14,683</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$63,722</td>
<td>$49,039</td>
<td>$14,683</td>
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<tr>
<td>Equity</td>
<td>$2,167,927</td>
<td>$2,092,987</td>
<td>$74,940</td>
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<tr>
<td><strong>TOTAL LIABILITIES &amp; EQUITY</strong></td>
<td>$2,231,649</td>
<td>$2,142,026</td>
<td>$89,623</td>
</tr>
</tbody>
</table>

Unaudited

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# Apache Software Foundation Fiscal Year 2017

**CASH BASIS**

<table>
<thead>
<tr>
<th></th>
<th>May 16-Apr 17</th>
<th>FY17 Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income Summary:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Donations</td>
<td>$105,526</td>
<td>$88,874</td>
<td>$16,652</td>
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<tr>
<td>Sponsorship Program</td>
<td>$777,795</td>
<td>$998,297</td>
<td>$(200,502)</td>
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<tr>
<td>Programs Income</td>
<td>$27,200</td>
<td>$27,200</td>
<td>$0</td>
</tr>
<tr>
<td>Other Income</td>
<td>$825</td>
<td>$825</td>
<td>$0</td>
</tr>
<tr>
<td>Interest Income</td>
<td>$6,209</td>
<td>$3,515</td>
<td>$2,694</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>$917,555</td>
<td>$1,088,711</td>
<td>$(171,156)</td>
</tr>
</tbody>
</table>

**Expense Summary:**

|                          |               |             |                |
| Infrastructure           | $725,849      | $723,067    | $2,782         |
| Sponsorship Program      | $4,750        | $7,750      | $(3,000)       |
| Programs Expense         |               | $27,200     | $(27,200)      |
| Publicity                | $174,347      | $140,900    | $33,447        |
| Brand Management         | $70,182       | $84,219     | $(14,039)      |
| Conferences              | $4,862        | $12,418     | $(7,556)       |
| Travel Assistance Committee | $47,550   | $61,519     | $(13,969)      |
| Tax and Audit            | $7,850        | $10,500     | $(2,650)       |
| Treasury Services        | $37,200       | $37,200     | $0             |
| General & Administrative | $112,464      | $113,904    | $(1,440)       |
| **Total Expense**        | $1,185,054    | $1,218,749  | $(33,695)      |
| **Net Income**           | $(267,499)    | $(130,039)  | $(137,461)     |

Unaudited
FY2017 ANNUAL REPORT

FUNDRAISING REPORT

by Hadrian Zbarcea

As always, we would like to start the ASF fundraising report with expressing our gratitude to our sponsors for their continued support.

This is the last quarter of the fiscal year and fundraising activities operated normally, at levels similar to previous quarters. The VP of Fundraising continued the outreach activities and we improved the individual donation program that was not updated in a few years. We had a few good conversations with potential Sponsors interested in joining our sponsorship program.

The Foundation experiences continued growth both in the number of projects and the number of people involved. The increased needs for services provided by the ASF to its projects led to the ASF closing the fiscal year with a small deficit. Last quarter we announced that we are looking at new ideas for improving the sponsorship program. Extending the individual donation program was a result of that. More changes and improvements are expected so that the fundraising growth exceeds the Foundation’s growth to achieve long term sustainability.

We currently enjoy the support of the following sponsors:

- **7 Platinum Sponsors** -- Cloudera, Facebook, Google, LeaseWeb, Microsoft, Pivotal and Yahoo
- **9 Gold Sponsors** -- ARM, Bloomberg, Comcast, Hewlett Packard, Hortonworks, Huawei, IBM, ODPi and PhoenixNAP
- **14 Silver Sponsors** -- Alibaba Cloud Computing, Budget Direct, Capital One, CashStore, Cerner, Confluent, InMotion Hosting, iSIGMA, Private Internet Access, Produban, Red Hat Software, Serenata Flowers, Target and WanDisco
- **21 Bronze Sponsors** -- Airport Rentals, Basis Technology, Binary Option Robot Info, Bluehost, 01Casinos, Casino2k, ChameleonJohn Coupons, Cloudsoft Corporation, Compoare Forex Brokers, HostingAdvice.com, PromoCodeWatch, Samsung, 7 Binay Options, Stags and Hens, Talend, The Linux Foundation, Tobi, Travel Ticker Hotels, Twitter, Web Hosting Secret Revealed, WebsiteSetup
- **11 Infrastructure Sponsors** -- OSU Open Source Labs, No-IP, Symantec, Rackspace, Quenda, PagerDuty, Bintray, SURFnet, Sonatype, Freie Universitaet Berlin, and HotWax Systems

We again want to express our deepest gratitude to our generous Sponsors along with our promise to continue to strive for excellence.
ASF SPONSORS

PLATINUM SPONSORS

facebook
Google
Yahoo!
Cloudera
Leaseweb
Microsoft
Pivotal

GOLD SPONSORS

ARM
Bloomberg
Comcast
Hortonworks
Hewlett Packard
Huawei
IBM
ODPi
PhoenixNAP
ASF SPONSORS, continued

SILVER SPONSORS

Airport Rentals, Basis Technology, Binary Option Robot Info, Bluehost, 01Casinos, Casino2k, ChameleonJohn Coupons, Cloudsoft Corporation, Compoare Forex Brokers, HostingAdvice.com, PromoCodeWatch, Samsung, 7 Binay Options, Stags and Hens, Talend, The Linux Foundation, Tobi, Travel Ticker Hotels, Twitter, Web Hosting Secret Revealed, WebsiteSetup

BRONZE SPONSORS

Airport Rentals, Basis Technology, Binary Option Robot Info, Bluehost, 01Casinos, Casino2k, ChameleonJohn Coupons, Cloudsoft Corporation, Compoare Forex Brokers, HostingAdvice.com, PromoCodeWatch, Samsung, 7 Binay Options, Stags and Hens, Talend, The Linux Foundation, Tobi, Travel Ticker Hotels, Twitter, Web Hosting Secret Revealed, WebsiteSetup

INFRASTRUCTURE SPONSORS

Airport Rentals, Basis Technology, Binary Option Robot Info, Bluehost, 01Casinos, Casino2k, ChameleonJohn Coupons, Cloudsoft Corporation, Compoare Forex Brokers, HostingAdvice.com, PromoCodeWatch, Samsung, 7 Binay Options, Stags and Hens, Talend, The Linux Foundation, Tobi, Travel Ticker Hotels, Twitter, Web Hosting Secret Revealed, WebsiteSetup
The Infrastructure Team has made significant advances during FY2017 to automate, monitor, and protect the large set of services that are managed for the multitude of projects at The Apache Software Foundation. As noted elsewhere, the Foundation has seen a tremendous growth in the set of projects and podlings that need to be supported.

Through our work in FY2017, we’ve been able to extend and improve our work for this increased load.

To meet the demand for these services, the Foundation converted one of our contractors to full-time in July, and hired an additional system administrator in November. Additionally, we employed a part-time manager to offload many tasks from the volunteer role of VP Infrastructure, to help set policy, and to assist with the activities of the Team.

As set in motion during FY2016, and with the staffing changes, the Foundation has seen a marked increase in uptime, availability, and responsiveness to the needs of its projects. Going forward, the Infrastructure Team will continue to invest in the areas mentioned above: automation, monitoring, and protection.

- **The New "Gitbox" Service** --pulling our various Git services into a single "box", the Gitbox service builds upon our GitHub integration work from last year. The Infrastructure team is now providing a service that allows communities to host their read/write Git repositories on GitHub (rather than Foundation hardware). For provenance and backup reasons, we still keep read-only mirrors on our hardware, but communities can use nearly all of GitHub’s features to manage their repository content.

This new service is in use by a number of Top-Level Projects and several Incubator podlings. For podlings, it is extremely helpful because they can move an existing GitHub repository, with all of its Pull Requests, Issues, and other content, to the Foundation without loss of data.

- **Moving to the Cloud** --FY2017 has seen a large increase in the amount of out-sourced hardware to run our services, along with a commensurate drop in our use of Foundation-owned hardware. This is driving down our costs because we can more finely tune our hardware selection for each provided service. Our goal is to reduce the average cost for each project hosted at the Foundation. The efforts mentioned above (automation, monitoring, and protection) along with Gitbox are all designed with cost reduction as a second-order effect, beyond their clear improvement in the services provided by the Infrastructure Team.

- **Improving our Build Systems** --during FY2017, the Infrastructure Team worked hard on our buildbot and Jenkins build farms. These have historically been used for continuous integration and testing, but a new feature was added to enable automated website generation. Additionally, about two dozen nodes were added for all projects to use, and external groups have contributed another two dozen nodes for use by specific projects.
The ASF Infrastructure Team is distributed across three continents, keeping the Foundation services running 24x7x365 at near 100% uptime at less than US$5,000 per project. As the ASF is a purely virtual organization, it does not have offices or buildings; its only physical existence is the technical infrastructure that enables it to operate. Check out statistics such as our mail volume at http://status.apache.org/

**Mailing List Activity**

Our 1,206 active archived mailing lists have gotten 85,358 new emails in the past two weeks. The most popular dev/user list is dev@lucene.apache.org with 1582 emails.

Top 5 dev/user lists this past fortnight:
1. dev@lucene.apache.org: 1582 emails
2. dev@kafka.apache.org: 1066 emails
3. dev@geode.apache.org: 872 emails
4. dev@ambari.apache.org: 630 emails
5. dev@astrono.apache.org: 630 emails
PROJECTS AND CODE

Each day, programmers, solutions architects, individual users, educators, researchers, corporations, governments, enthusiasts, and others select Apache software as their "go-to" choice for mission critical development tools, libraries, frameworks, visualizers, productivity solutions, and more.

75% of Apache’s 150M lines of code have been developed over 65,000 person years, and are valued at US$7B in effort. The ASF serves approximately 9M source code downloads from Apache mirrors on a yearly basis (excluding convenience binaries, and limited external project downloads such as Apache OpenOffice and Apache Groovy). Worldwide dependency on Apache software continues to grow, with Web requests received from every Internet-connected country on the planet.

Select project highlights include:

- **Apache Commons** --established in 2007, and with 40+ projects under its umbrella, Apache Commons leads in reusable Open Source Java libraries and components.

- **Apache Spark** --a Top-Level Project since 2013, Apache Spark is used for fast, flexible processing and analysis at petabyte scale, and is among the dozens of Apache projects anchoring the enterprise Big Data ecosystem.

- **Apache HTTP Server** --the industry standard for the past 21 years, the ASF's original project powers many of the world’s most popular Web sites and digital assets.

- **Apache Fineract** --the first Apache project developed from within the financial services technology sector for core banking as a platform for billions of unbanked and underbanked individuals worldwide. Fineract graduated from the Apache Incubator in April 2017.

- **Apache OpenOffice** --an Apache project since 2012, the world’s most popular freely available office productivity suite has been downloaded more than 36M times over the past year, and surpassed the 200M total download milestone. Apache OpenOffice comprises nearly 8 million lines of code, and is available in 41 languages. Downloads are managed by SourceForge.
PROJECTS AND CODE, continued

To date, millions of software solutions have been distributed under the Apache License to allow for their free use, modification, and sharing.
NEW APACHE TOP-LEVEL PROJECTS IN FY2017

beam
CarbonData
Eagle
Apache Fineract
GEODE
KUDU
METRON
Apache Ranger
SystemML
Twill
This year, the Apache Incubator reached a record high of 64 "podlings" undergoing development. These innovations spanned Big Data, communication protocols, connected devices, cryptography, data science/machine learning/analytics, development frameworks, microfinances, remote desktop access, and serverless computing, among other categories.

Projects undergoing incubation as of 30 April 2017 include:

- Airflow
- Annotator
- Atlas
- BatchEE
- Blur
- DataFu
- DistributedLog
- Edgent
- Fluo
- FreeMarker
- Gobblin
- Gossip
- Griffin
- Guacamole
- HAWQ
- HORN
- Impala
- Juneau
- MADlib
- Milagro
- Mnemonic
- MXNet
- Mynewt
- NetBeans
- ODF Toolkit
- Pony Mail
- PredictionIO
- Quickstep
- Ratis
- RocketMQ
- Rya
- S2Graph
- SensSoft
- Sirona
- Slider
- Streams
- SystemML
- Tephra
- Toree
- Traffic Control
- Unomi
- Weex

A total of 283 projects have gone through the ASF's Incubation process.

http://incubator.apache.org/
APACHE PROJECT ACTIVITY

There are more than 350+ projects and initiatives at the ASF:

- **Apache Top-Level Projects** – 181 committees* managing 306 projects and sub-projects
- **Podlings** – 60 projects are currently undergoing development in the Apache Incubator

All Apache software is released under the Apache License v2.0 and is overseen by a self-selected team of active contributors to the project.

*A Project Management Committee (PMC) guides the Project's day-to-day operations, including community development and product releases.
Over FY2017, 3,300 code Committers changed 65,529,757 lines of code (LOCs) over 214,398 commits.

The scale of the ASF is enormous: 31M (20%) of all Apache lines of code are comments -- that’s nearly three times the size of the entire Linux codebase!

Top repositories by size
APACHE PROJECT ACTIVITY, continued

Lines of Code Changed

Code Evolution

Languages
APACHE PROJECT ACTIVITY, continued

Top repositories by commits

Most active projects (visited)
- **Github Traffic** -- the ASF uses Subversion as the main version control infrastructure, and provides support to users of the Git version control system as detailed in the Infrastructure report.

Most active sources (clones)

Most active sources (visits)
Project highlight -- Apache HTTP Server

Web server developers: Market share of active sites

- **Emails** -- in FY2017, 25,154 authors sent 2,105,992 emails on 834,045 topics

Top email lists

dev@beam.apache.org
dev@openoffice.apache.org
users@nifi.apache.org
dev@nifi.apache.org
dev@maven.apache.org
dev@uima.apache.org
dev@ofbiz.apache.org
users@tomcat.apache.org
dev@ignite.apache.org
user@cassandra.apache.org
users@cassandra.apache.org
dev@commons.apache.org
dev@kafka.apache.org
dev@tomcat.apache.org
dev@geode.apache.org
user@flink.apache.org
user@ignite.apache.org
users@kafka.apache.org
dev@flex.apache.org
solr-user@lucene.apache.org

(others)
APACHE PROJECT ACTIVITY, continued

- **Project Issues** -- 15,695 people created 101,654 new issues; 4,070 people closed 83,853 issues.

![Graph showing created vs. closed issues](image)

**Top 5 creators**
- Wes McKinney [filter] 392 issues created during this period.
- Jean-Baptiste Onofré [filter] 389 issues created during this period.
- Vladimir Czerov [filter] 360 issues created during this period.
- Hudson [filter] 346 issues created during this period.
- Claus Ibsen [filter] 337 issues created during this period.

**Top 5 closers**
- Sean Owen [filter] 1,317 issues closed during this period.
- Claus Ibsen [filter] 728 issues closed during this period.
- Reynold Xin [filter] 555 issues closed during this period.
- Deepak Dixit [filter] 547 issues closed during this period.
- Jean-Baptiste Onofré [filter] 482 issues closed during this period.
CONTRIBUTIONS

In order for a project to become hosted at Apache it has to be licensed to the ASF with a grant or contributor agreement in order for the ASF to gain the necessary intellectual property rights for the development and distribution of its projects. Whist all contributors of ideas, code, or documentation to the ASF must sign a Contributor License Agreement (CLA), copyright remains with the contributor --a license for reuse is given to the Foundation.

- **Individuals** --a signed Individual CLA (ICLA) is required before an individual is given commit rights to an ASF project to clearly define the terms under which intellectual property has been contributed, and allow the project to be defended should there be a legal dispute regarding its software. 976 ICLAs have been signed during FY2017.

- **Corporations/Institutions** --organizations whose employees are assigned to work on Apache projects as part of an employment agreement may sign a Corporate CLA (CCLA) to contribute intellectual property via the corporation. In addition, every developer must also sign their own ICLA to cover any of their contributions as an individual that are not owned by the corporation signing the CCLA. 42 new Corporate CLAs have been signed, totaling 384 overall.

- **Software Grants** --individuals or corporations that donate a body of existing software or documentation to an Apache project need to execute a formal Software Grant Agreement (SGA) with the ASF. Typically, this is done after negotiating approval with the ASF Incubator or one of the PMCs, as the ASF will not accept software without a viable community to support a collaborative project. 30 SGAs have been signed during FY2017.
CONTRIBUTORS

The meritocratic "Contributor-Committer-Member" approach is the central governing process across the Apache ecosystem. Additions to the original core Apache Group of 21 individuals from 1999 grew with developers who contributed code, patches, or documentation.

Some of these contributors were subsequently granted "Committer" status by the Membership, providing them the ability to 1) commit (write) directly to the Apache code repository; 2) vote on community-related decisions; and 3) propose other active users/contributors for Committership.

All development is done on a volunteer basis --some Committers may be paid by their employers for their time and code contributions, but the ASF does not pay for software or project oversight.

Top 5 contributors

- **Shad Storhaug** [filter] 2,743 commits during this period. 1,029,583 lines changed (1,105,384 insertions, 824,199 deletions).
- **Claus Ibsen** [filter] 2,508 commits during this period. 928,400 lines changed (618,030 insertions, 312,430 deletions).
- **Mark Thomas** [filter] 2,391 commits during this period. 173,486 lines changed (103,493 insertions, 69,993 deletions).
- **Christopher Collins** [filter] 1,905 commits during this period. 1,222,914 lines changed (387,881 insertions, 835,053 deletions).
- **Colm O hEigearnacht** [filter] 1,810 commits during this period. 491,769 lines changed (237,010 insertions, 254,759 deletions).
Over the past year, more than half of all contributions have been made by individuals who are new to Apache: this amounts to more 300 new code contributors and 300-400 new people filing issues each month.
COMMUNITY GROWTH

In February 2017, the ASF surpassed 6,000 Committers contributing code and/or documentation. Our tagline “Community Over Code” (or “Community > Code”) underscores our commitment to inclusivity and welcoming new participants through various community development activities that include:

- **Google Summer of Code**, where the ASF has served as a mentoring organization since the program’s inception in 2005. In 2016, ASF Members and Committers mentored 35 students working on numerous Apache projects such as Zeppelin (Big Data visualization), Brooklyn (framework for modeling, monitoring, and managing Cloud applications), Syncope (enterprise identity management), Open Climate Workbench (algorithms, libraries, and interfaces to standardize climate model evaluation), and OpenNLP (machine learning toolkit for processing natural language text), as well as podlings that include Mynewt (IoT operating system) and Taverna (tools for designing and executing data-driven scientific workflows).

- **ASF Travel Assistance**, which provides travel and lodging support for those seeking to attend ApacheCon but are unable to do so for financial reasons. Since the program’s launch ten years ago, the ASF has been successful in attracting and engaging 153 new participants to the Apache Community, 27 of whom became Apache committers for the first time, 37 joined various Apache Project Management Committees (PMCs), and 23 who have become ASF Members since receiving support.

In FY2017, 19 awards were provided for ApacheCon North America (16 individuals attended), and 14 awards were provided for ApacheCon Europe (13 attended). Since participating in these events, 3 individuals have been elected as ASF Members, 2 have joined PMCs, and 2 have become new Apache Committers.

In addition, the Community Development team maintains the Foundation’s Code of Conduct, runs the ASF Community blog and social channels, and initiated a new Diversity survey. [http://community.apache.org/](http://community.apache.org/)
During the last 12 months, we have produced 2 ApacheCon events - ApacheCon North America, in Vancouver (11-13 May 2016) and ApacheCon Europe, Seville (16-18 November 2016), and investigated closer relationships with third-party events, to support their Apache messaging. At the end of this financial year, we are about to have ApacheCon North America in Miami (14-18 May 2017).

ApacheCon North America, Vancouver -- in May of 2016, we held ApacheCon North America in Vancouver, BC, Canada. The event was marketed as two separate events - ApacheCon, and Apache: Big Data - for the purpose of targeting more focused audience segments.

Additionally, had three co-located events - Apache Traffic Server Spring 2016, Apache Milagro Crypto Security Workshop at Mobify HQ, and, as always BarCampApache. These events were able to do independent marketing, as well as benefiting from the overall event promotion. As you will see below, this type of multi-pronged event marketing will expand going forward, as it becomes harder to promote an event about “Apache”, when we have 200+ projects.

Keynotes from Todd Moore (IBM), Sam Ramji (Cloud Foundry), Stephen O’Grady (RedMonk), and others, told the story of how the Apache development and governance model is the way that the entire technology industry does Open Source. Details of this event may be seen at http://events.linuxfoundation.org/events/archive/2016/apachecon-north-america (This event, and the others in this timeframe, were produced by the Linux Foundation events planning team.)

ApacheCon Europe, Seville -- returning to Europe, in November we held ApacheCon in Seville, Spain. Here, again, we had the dual marketing between ApacheCon and Apache: Big Data, and had good turnout for each in this beautiful location.

Among many other great keynotes, we had a fascinating talk by Gema Parreño, who talked about her work analysing data to find objects in space which are on possible collision trajectories with Earth, and from Alan Gates, from Hortonworks, talking about training his engineers to work with Open Source projects. And Mayank Bansal spoke about how Uber runs on Apache software. Details of this event may be seen at http://events.linuxfoundation.org/events/apache-big-data-europe

(Upcoming) ApacheCon North America, Miami
At the time of this report, we are planning to hold ApacheCon North America in Miami, Florida. Once again, the event is divided into several sub-events, for purposes of marketing to targeted audiences, and harnessing the power of our developer communities to market the event to their specific constituencies. These events are:

- ApacheCon -- focused on community content, and the Incubator
- Apache: Big Data -- our Big Data projects such as Hadoop, Spark, and friends
- Apache: IoT -- Internet of Things projects, a rapidly expanding area at the ASF
- CloudStack Collaboration Conference -- the Apache CloudStack Cloud computing project
- FlexJS Summit -- Flex is a Web development framework
- TomcatCon -- the popular Tomcat application server
CONFERENCES, continued

These project-centric events also make ApacheCon more attractive to sponsors, who can target their message for the audience that they want to reach, rather than the entire range of Apache projects.

Planning for the future

Looking forward to future events, we are looking to expand our involvement in third-party events.

There are dozens of events that are built around Apache software, but which are run by organizations outside of the ASF. This is a very good thing for our communities, and we need to do a better job of ensuring that the messaging of these events is in line with Apache messaging. To this end, we have approached some of these events, while at the same time being proactively approached by some others, to provide Apache Software Foundation messaging in keynotes, or sometimes in dedicated tracks. We are also crafting recommended agendas for such tracks, so that events that want this content can quickly receive an example of what might be covered.

In this way, projects and communities that are large enough to run their own events are still included in the larger family, and continue to hear the Apache Way message at their events. Secondarily, the vendor communities around these projects can learn about the ASF, and be encouraged to support and participate in the larger family of communities.

If you run an event based on an Apache Software Foundation project, and wish to have representatives from the Foundation attend and speak at your event, contact Rich Bowen, Vice President Conferences, at rbowen(at)apache(dot)org.

Conclusion

Thank you to all of our Sponsors and other organizations that have participated in our events by speaking, attending, and sponsoring. We look forward to seeing you at future events, as well as participating in your events.
MARKETING AND PUBLICITY

by Sally Khudairi

The ASF’s promotional activities are led by HALO Worldwide, who oversee all strategic planning and day-to-day execution. Highlights from FY2017 include:

- **Media & Analyst Relations** -- outreach and engagement; Apache project introductory liaison and fact checking; launched “Success at Apache”, featuring personal insights from ASF Members on how/why the ASF "just works"; and the addition of LinkedIn as a new outreach channel, which garnered 342K organic impressions as of January 2017.

  Total Press Releases: 26 | Blogs and Social Media posts: 813 | Weekly News Round-ups: 52
  Media Queries: 104 | ASF Press Clips: 16,001 | Apache Project Press Clips: 42,506
  Analyst Briefings: 20 | Analyst Reports: 656

- **Project/Community Support** -- advisory services and messaging oversight; Media & Analyst training; and launching Snoot analytics services Foundation-wide (Snoot is the source of the graphics used in the ASF Annual and Quarterly Reports).

- **Visual Identity/Graphics Support** -- continued rollout of new ASF logo and assets; produced ASF Identity Style Guide; launched call for new Apache Incubator logo; and created new 6’ 3-D signage of the ASF Feather (debuting at ApacheCon/Miami in May 2017).

- **Conference Support** -- securing community partnerships at Apache project and industry events such as CloudStack Collaboration Conference, In-Memory Computing Summit, and IoTFuse; creating signage and promotional giveaways for ApacheCon and events such as FOSDEM; and secured professional editing services to support Feathercast recordings at ApacheCon.

- **Fundraising Support** -- launching new communications platform for individual donations; reinstituting Sponsor outreach program; and establishing “Support Apache” campaign.
ASF PRESS RELEASES

Official ASF Press Releases are distributed via NASDAQ GlobeNewswire and the ASF “Foundation” blog at https://blogs.apache.org/foundation/, in addition to select mailing lists and social media channels.

2017
- 25 April - The Apache Software Foundation Announces Apache® cTAKES™ v4.0
- 24 April - The Apache Software Foundation Announces Apache® Metron™ as a Top-Level Project
- 24 April - The Apache Software Foundation Announces Apache® Fineract™ as a Top-Level Project
- 17 April - The Apache® Software Foundation Recognizes Apache Innovations Integral to the Pulitzer Prize-winning Panama Papers Investigation
- 28 March - The Apache® Software Foundation Announces 18 Years of Open Source Leadership
- 14 February - The Apache Software Foundation Announces Apache® MyFaces™ Tobago 3
- 8 February - The Apache Software Foundation Announces Apache® Ranger™ as a Top-Level Project
- 11 January - The Apache Software Foundation Announces Apache® Zest™ Renamed to Apache Polygene
- 10 January - The Apache Software Foundation Announces Apache® Beam™ as a Top-Level Project
- 10 January - The Apache Software Foundation Announces Apache® Eagle™ as a Top-Level Project

2016
- 21 November - The Apache Software Foundation Announces Apache® Geode™ as a Top-Level Project
- 15 November - The Apache Software Foundation Announces Apache® jclouds™ v2.0
- 12 October - The Apache OpenOffice Project Announces Apache® OpenOffice™ v4.1.3
- 13 September - The Apache Software Foundation Announces Apache® Syncope™ 2.0
- 20 September - The Apache Software Foundation Announces Apache® Kudu™ v1.0
- 3 October - Apache® POI™ Celebrates 15 Years at The Apache Software Foundation
- 22 August - Announcing Apache® CloudStack™ v4.9
- 27 July - The Apache Software Foundation Announces Apache® Mesos™ v1.0
- 27 July - The Apache Software Foundation Announces Apache® Twill™ as a Top-Level Project
- 26 July - The Apache Software Foundation Announces Apache® Kudu™ as a Top-Level Project
- 29 June - The Apache Software Foundation Announces Apache® Bahir™ as a Top-Level Project
- 29 June - The Apache Software Foundation Announces Apache® OODT™ v1.0
- 22 June - The Apache Software Foundation Announces Apache® Libcloud™ v1.0
- 6 June - The Apache® Software Foundation Announces Annual Report for 2015-2016 Fiscal Year
- 25 May - The Apache Software Foundation Announces Apache® Zeppelin™ as a Top-Level Project
- 23 May - The Apache Software Foundation Announces Apache® TinkerPop™ as a Top-Level Project
TRADEMARKS AND BRAND MANAGEMENT

by Shane Curcuru

Operational Trends
We continue to field both general questions and permissions requests for a wide variety of brand uses. Along with questions about using Apache project marks in unusual places, including television, movies, and a variety of academic papers and vendor marketing, we’ve had questions about the applicability of the APACHE® trademark to licenses themselves. While we have the expertise to help answer these questions, it is still difficult to keep all our operations proceeding speedily while relying solely on volunteers for all work that doesn't directly require counsel.

Some projects continue to do a good job of policing and addressing potential misuses of their brands, and the strength of the Apache brand continues to get good results when we request the trademark credit our volunteer communities deserve.

New Policy Initiatives
A small group of stalwart volunteers has discussed and written new policies to clarify proper uses of Apache brands and to address many new permissions requests for apparel featuring Apache project brands.

While the ASF is firmly committed to providing free access to our source code and all resources, we are happy to allow respectful vendors to use selected Apache trademarks on non-computer related goods, like apparel, stickers, and the like. These uses can both publicize project brands as well as encourage a sense of community for Apache project fans.

Free giveaways are generally fine, and the ASF now has a policy for licensing specific brands to apparel or sticker companies with a clear license and profit sharing arrangement. See the new Apache Non-Software Merchandise Branding Policy https://www.apache.org/foundation/marks/merchandise

Our new Third Party Services Naming Branding Policy https://www.apache.org/foundation/marks/services clarifies the use of Apache brands in services, for example the many cloud or hosting providers who offer services around Apache software products. In addition, a greatly expanded Apache Product Name Usage Guide https://www.apache.org/foundation/marks/guide will help marketers and technologists alike better refer to Apache communities and the software products they produce.

Statistics and Registrations
With several guides for how Apache project communities can improve their brands, better attract new contributors, and register their project name as a trademark, we offer comprehensive advice for all Apache projects and podlings. The Brand Management team is happy to work with all Apache projects to answer questions or submit registration applications, but it’s still up to the individual Apache communities to take the first step and request registration.
TRADEMARKS AND BRAND MANAGEMENT, continued

In the past year, 11 new projects have made trademark applications in the US and other countries. 5 projects have had their registrations granted, and two incoming podlings have had their existing trademark registrations transferred to the ASF as part of their graduation to top level project status.

Please contact the Apache Brand Management team https://www.apache.org/foundation/marks/contact with your questions or suggestions!
by Chris Mattmann

The ASF Legal Affairs team works diligently with our pro-bono legal counsel and answers legal questions, and addresses policy issues regarding license compatibility for The Apache Software Foundation.

Over the past year, the team has worked through a number of issues including:

1. Answering questions regarding OpenSSL and its dependencies and their inclusion in Apache products.
2. Deciding on a policy that allows “dual master” ASF projects within the Foundation to be hosted on external repositories, at present allowing GitHub first experimentally, and now, in coordination with Apache infrastructure, available widely to projects within the Foundation.
3. Dealing with patent trolls and providing community advice on how to deal with them.
4. Helping PMCs, contributors, and outside entities understand the differences between Individual Contributor License Agreements (ICLAs), Corporate Contributor License Agreements (CCLAs) and Software Grants to the ASF.
5. Identifying and setting a policy that ASF projects cannot include software licensed under the JSON license as it violates core principles of the ASF legal policy.
6. Adding the ACE license to our Category-A software (software that is considered to be licensed under terms similar to the Apache License, version 2.0).

In general, the goal of the Legal Affairs committee is to provide support to Apache projects as they consider inclusion of dependencies in their products, and understanding of how those dependencies are or are not compatible with the Apache License. We provide a list of “resolved” questions, available at https://www.apache.org/legal/resolved.html which can be thought of as a “Frequently Asked Questions (FAQ)” page that represents decided policy as recorded over the years. We frequently cite and inform others of this page and infrequently we update policy based on understanding and the needs of our projects. In addition, the Legal Committee encourages its customers to use our JIRA instance, available at http://issues.apache.org/jira/browse/LEGAL for discussion that may lead to a policy decision.

The committee is a Board committee and reports directly Apache Board of Directors. We have had a busy year and are eager to meet and serve the needs of our projects, in collaboration with our pro-bono counsel.
CONTACT INFORMATION

For Media/Analyst queries, contact press(at)apache(dot)org
For Sponsorship/Fundraising queries, contact fundraising(at)apache(dot)org

Official ASF Communication Channels

- The Apache Software Foundation https://apache.org/
- ASF Blog https://blogs.apache.org/
- @TheASF Twitter feed https://twitter.com/TheASF
- The ASF on LinkedIn https://www.linkedin.com/company/the-apache-software-foundation

ASF Community

- Apache Community Development http://community.apache.org/
- Apache Community Facebook page https://www.facebook.com/ApacheSoftwareFoundation/
- Apache Community Twitter feed https://twitter.com/ApacheCommunity

Keep up with the ASF's news and announcements by subscribing to announce(at)apache(dot)org at http://apache.org/foundation/mailinglists.html#foundation-announce

This report was prepared by Sally Khudairi, Vice President Marketing & Publicity, in collaboration with Brett Porter, ASF Chairman; Sam Ruby, ASF President; Ulrich Stärk, ASF Treasurer; Tom Pappas, ASF Member/Senior Vice President Virtual Inc.; Hadrian Zbarcea, Vice President Fundraising; David Nalley, Vice President Infrastructure; Greg Stein, Infrastructure Administrator; Craig Russell, ASF Secretary; Daniel Gruno, ASF Member; Rich Bowen, Vice President Conferences; Melissa Warnkin, ASF Administrative Assistant/Vice President Travel Assistance Committee; Nick Burch, ASF Member; Shane Curcuru, Vice President Brand Management; and Chris Mattmann, ASF Vice Chairman.

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