



THE
APACHE®
SOFTWARE FOUNDATION

ANNUAL REPORT

FY2021 (01 May 2020 - 30 April 2021)

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The ASF at-a-Glance

"The Switzerland of Open Source..."

— Matt Asay, InfoWorld

The World's Largest Open Source Foundation

The Apache Software Foundation (ASF) incorporated in 1999 with the mission of providing software for the common good. Today the ASF is the world's largest Open Source foundation, stewarding 227M+ lines of code and providing \$22B+ worth of software to the public at 100% no cost. ASF projects are integral to nearly every aspect of modern computing, benefitting billions worldwide.

Change Agents

The ASF was founded by developers of the Apache HTTP Server to protect the core interests of those contributing to and using our open source projects.

The ASF's all-volunteer community now includes over 8,200 committers, involved in over 350 projects that have been organized by about 200 independent project management committees, and is overseen by 850+ ASF members. The Foundation is a globally-distributed, virtual organization with contributors on every continent.

Apache projects power countless mission-critical solutions worldwide, and have spearheaded industry breakthroughs in dozens of categories, from Big Data to Web Frameworks. More than three dozen future projects and their communities are currently being mentored in the Apache Incubator. The ASF is the top-ranked Open Source not-for-profit organization with the most stars on GitHub.

Global Impact

The ASF provides millions of dollars in value to users each day, with Web requests from every Internet-connected country on the planet. Apache projects power more than half the Internet, manage zettabytes of data, execute teraflops of operations, store billions of objects in virtually every industry, and are essential to personal computing and mobile devices across enterprises and mission-critical applications.

The Apache Way

The ASF's meritocratic process of community-led development, dubbed "The Apache Way", serves as the model for open development and is recognized through

- ✓ *Earned Authority*: all individuals are given the opportunity to participate, but their influence is based on publicly earned merit —what they contribute to the community.
- ✓ *Open Communications*: all communications related to code and decision-making are publicly accessible to ensure asynchronous collaboration, as necessitated by a globally-distributed community.
- ✓ *Consensus Decision Making*: Apache Projects are overseen by a self-selected team of active volunteers who are contributing to their respective projects.
- ✓ *Responsible Oversight*: the ASF governance model is based on trust and delegated oversight.
- ✓ *Independence*: no organization is able to gain special privileges or control a project's direction, irrespective of employing Committers to work on Apache projects or sponsorship status.

The ASF's vendor-neutral, collaborative environment ensures that Apache projects and their communities are governed independently of commercial influence. The ASF does not take sides, endorse, or support any particular vendor, and does not discourage the development of "competing" projects.

The maxim "Community Over Code" is reinforced throughout the ASF: healthy communities are essential to developing long-term projects to satisfy the public's needs in an ever-changing world.

The Apache License

The permissive, commercially-friendly, and popular Apache License v2 is an Open Source industry standard, enabling third parties to create new products that incorporate and extend our work in both for-profit and not-for-profit projects, provide end-user support, and bootstrap new industries..

Support Apache

The ASF is a US 501(c)(3) not-for-profit charitable organization funded by corporate sponsors as well as individual and corporate donations.

President's Report

by David Nalley

Fiscal year 2021 was challenging for the world, and by extension, the ASF. As a volunteer-driven organization, we faced a lot of uncertainty and were forced to change a lot of our plans, as did most of the world. The uncertainty for us centered around our sponsors and our volunteers.

I wondered if our volunteers would continue their open source work? With the widespread disruption I wondered what the impact would be on the ASF and on the broader open source ecosystem. Despite my worries, the statistics displayed a very slight growth in contributions and contributors compared to the previous year. In many ways this disruption highlighted the distributed asynchronous community decision-making structure that defines governance for our projects. I consider the flat governance structure of our project communities a key part of the resilience and their ability to continue to make progress and ship software.

I also worried about whether our sponsors would still care and be able to support us? Many industries were shuttered during the pandemic and while we have adequate reserves in place to weather a disruption, we have ongoing operational costs to provide our services to the public. Some of our sponsors were impacted by the pandemic, and we hope to see them back in the future, but the majority of our existing sponsors continued their support, and a few new sponsors came into the fold.

From rewriting budgets to cancelling in-person conferences the behind the scenes work of the Foundation increased during this fiscal year. I was amazed to see the amount of work involved in cancelling a conference, and then again to see a virtual conference delivered with more content, in more languages, and with more attendees at ApacheCon@Home than we've ever had at an ApacheCon. While I miss getting to talk to folks in person, I am amazed at the sheer number of folks who came together to learn from each other.

We didn't aim for maintaining the status quo. In fact, a significant amount of modernization and process streamlining happened under the direction of the Treasurer this fiscal year. Those changes give the operational bits of the foundation increasing levels of transparency and accountability while dramatically decreasing the amount of work necessary.

This hasn't been the happiest year or the best year the Foundation has enjoyed, but I am happy to report that we've weathered it well and even excelled a bit. The Foundation is in good health fiscally and operationally and continues to execute on its mission of delivering software for the public good and acting as a steward for the tremendous amount of software already developed by our community.



Treasurer's Report

by Myrle Krantz

The Treasurer, Myrle Krantz, and the Assistant Treasurer, Trevor Grant, with the help of our accounting firms, IgniteSpot, and Virtual, continue to provide The Foundation with...

- accounting services,
- financial tooling,
- budgeting and policy advice, and
- financial reports

We maintain and track the financial means that enable our communities to provide software for the public good.

In addition, we provide sponsorship “soft collections” for The Foundation which consists of invoicing sponsors, interfacing with sponsor PO systems, following up when payments aren't made, and providing regular reports on accounts receivable aging to Fundraising.

This last year in collaboration primarily with the President, David Nalley, the Infrastructure Administrator, Greg Stein, and Fundraising, we completely revamped multiple financial processes, financial tools, and relationships within The Apache Software Foundation. We did so while fulfilling our responsibilities, improving our service levels in multiple areas, and also reducing our costs. We are extremely proud of our work over the past year.

Completing Tax and Audit

WernerCPA with support from Virtual created the latest public filings and generated our audit for the fiscal year ending on April 30, 2020. We received an unqualified result. (For those not familiar with accounting-speak, this is a good result.) The full audit report and the 990's were published via GuideStar. We will employ WernerCPA again for the tax filings for the fiscal year that ended on April 30, 2021. Historically, we have undergone an audit every three years. Continuing that pattern, the next audit will be for the fiscal year ending on April 30, 2023.

Budgeting During a Period of Financial Uncertainty

Early in 2020, in an environment of high economic uncertainty, the Treasurer advised officers to minimize expenses. Throughout the fiscal year, officers did so by delaying new investments and freezing costs. This was most notable in the area of Infrastructure spending. Despite our initial concerns, Fundraising had a very successful year. Our sponsors have been very generous; we are grateful. Conferences was also able to reshape successful events and avoid losses. As a result of the good stewardship the officers displayed, the Foundation had ~\$600k more at the end of the fiscal year 2020-2021 than at the beginning of it.

Because of The Foundation's high degree of fiscal discipline, even if our sponsors had been unable to support us, we would still have been able to serve our communities this year.

The Treasurer's office continues to support the President in financial planning processes. We are pleased with the highly effective and cash-efficient execution of the officers in the previous year. We are confident that The Foundation will continue to find the right balance between managing financial risk and investing in our communities.

Changing our Accounting Service Provider

At the end of December, The Foundation switched accounting and fundraising collections from our previous provider Virtual Inc to a new provider IgniteSpot. We are grateful for the many years of service that Virtual has provided us, bringing our books up to date, and initiating many processes at The Foundation necessary for proper governance.

We are thrilled with the work that IgniteSpot has done up until now moving our books to QuickBooks Online, integrating our various systems for better assurances of accuracy and transparency, and making iterative improvements on our financial reporting capabilities to enable better decision-making by the officers. We conduct weekly meetings between The Foundation and IgniteSpot to coordinate the various changes and improvements we've made together in the accounting and tooling for The Foundation. We have also set up shared mailing lists and a shared Slack channel with our new accountants.

The transition was mostly smooth. Our books were imported without difficulties. Thanks to the introduction of bill.com, there were no interruptions in our vendor

payments. And thanks to heightened attention by Sally Khudairi, Daniel Ruggeri, and IgniteSpot, there were no interruptions to sponsor invoicing. We have had some difficulties with transition of some systems previously under Virtual's umbrella, but we have resolved most of them.

In the process of transitioning accountants, we have also transitioned PEO providers. We are now served by ADP TotalSource as the employer of record for our non-contractor employees. In addition, we have transitioned to a new physical mailing address and a new registered agent. We thank Greg Stein, David Nalley, and Ruth Suehle for the truly excellent collaboration which made a change of this extent possible.

Adjusting Accounting and Reporting

We made a technical adjustment to our accounting to recognize the income of \$892,882 from the very generous Pineapple fund donation as a public donation. This is reflected in the financials as a reduction in liabilities and an increase in public donations. The donation was originally made at the beginning of 2018. We have also adjusted reporting to include more detail on the remaining restricted funds, and improved our accounting for project-targeted donations.

We also used the last couple of months of the fiscal year to prepare for a change from cash-based to accrual-based accounting at the beginning of the next fiscal year. To improve transparency in the context of that change we will also be adding a cash flow report to the reports we share with the public and with the board.

We have plans for improving budget-based reporting to the individual officers as well. These service enhancements are enabled by other changes we have made this past year to tooling and service relationships.

Introducing New Tooling

The Treasurer's office, with the assistance of the Infrastructure Administrator, Greg Stein, completed a transition to the vendor invoicing approval system bill.com last year. This has vastly improved the accuracy and auditability of our vendor payments and reduced the level of expertise required of the volunteers and staff who manage vendor payments. We continue to be pleased with the workflows this enables.

The Treasurer's office, with the assistance of Virtual and IgniteSpot, completed a transition from QuickBooks Enterprise to QuickBooks Online. Replacing an on-premise tool with a SaaS tool makes it possible for members of our fully-remote

volunteer team to access our financial data directly without having to go through the accountant for all questions. This in turn creates a higher level of empowerment and transparency for our volunteers. Using a SaaS accounting system also makes automatic integration with other SaaS systems such as bill.com, ramp.com, and our banks easier and cheaper, leading to less opportunities for error in the reconciliation of data between systems.

The Treasurer's office began introducing ramp.com. We spent several months at the beginning of 2021 preparing to make the introduction of virtual credit cards possible. This SaaS finance solution makes it possible for us to issue a separate credit card for each vendor, giving officers more control over our spend. It also makes it possible for us to track pre-approval of credit card spend by our officers. Ramp.com also gives us better functionality for user management than the previous system we had been using. And finally, this service refunds a small portion of our card payments. We evaluated multiple systems before settling on Ramp.

Maintaining our Asset Accounts

During the first half of 2021, we have moved most of our primary banking activities to a new bank account at TDBank, including sponsorships, and bill pay. We plan to close the Citizen's account once the last few sponsorship/donor systems are converted.

The majority of our cash remains in a CDARS account at Boston Private which provides FDIC insurance for the full amount with good liquidity.

We have ended acceptance of cryptocurrencies by The Foundation.

We also performed a review of account access as part of succession planning for our all-volunteer organization. We made multiple minor improvements to ensure that the appropriate officers are listed on all our financial accounts. We documented this landscape to ensure that a full understanding of our tools and the way they interrelate is available to all officers and board members.

FY2021 Financial Statement

Profit & Loss		
The Apache Software Foundation		
	2019/2020	2020/2021
Revenue		
ACA Conference Sponsorship	\$0	\$21,993
Conference/Event Revenue	\$610,161	\$57,595
Programs	\$15,578	\$11,000
Public Donations	\$76,893	\$994,975
Sponsorship Program	\$1,510,100	\$1,949,992
Interest Income	\$20,854	\$12,308
Total Revenue	\$2,233,586	\$3,047,862
Expenses		
Unapplied Cash Bill Payment Expense	\$0	\$9,091
General & Administrative	\$23,666	\$30,737
Taxes (Business)	\$0	\$20
Brand Management	\$49,385	\$93,267
Conferences	\$708,925	\$39,348
Fundraising	\$141,561	\$192,239
Infrastructure	\$1,091,179	\$908,504
Publicity	\$317,855	\$240,362
Programs Expense	\$25,597	\$90
Treasury Services	\$42,509	\$52,953
Travel Assistance Committee	\$50,362	\$17,412
Diversity and Inclusion	\$60,000	\$15,000
Brand Management	\$0	\$297
Total Expenses	\$2,511,038	\$1,599,320
Operating Profit	(\$277,452)	\$1,448,543
Other Income		
Interest Income/Foreign	\$0	(\$39)

Exchange		
Earnings Before Interest & Tax	(\$277,452)	\$1,448,504
Net Income	(\$277,452)	\$1,448,504

Balance Sheet		
The Apache Software Foundation		
	2019/2020	2020/2021
ASSETS		
Cash & Equivalents	\$3,561,269	\$4,095,397
Other Current Assets	\$0	\$95,224
Total Current Assets	\$3,561,269	\$4,190,621
Investments or Other Non-Current Assets	\$24,900	\$24,900
Total Non-Current Assets	\$24,900	\$24,900
Total Assets	\$3,586,169	\$4,215,521
LIABILITIES		
Short Term Debt	\$0	\$2,064
Other Current Liabilities	\$1,425,860	\$604,645
Total Current Liabilities	\$1,425,860	\$606,709
Total Non-Current Liabilities	\$0	\$0
Total Liabilities	\$1,425,860	\$606,709
EQUITY		
Retained Earnings	\$2,437,760	\$2,160,308
Current Earnings	(\$277,452)	\$1,448,504
Total Equity	\$2,160,308	\$3,608,812
Total Liabilities & Equity	\$3,586,169	\$4,215,521

Fundraising

by Daniel Ruggeri

As always, we would like to start our fundraising report by thanking our Sponsors for their continued support. As a 501(c)(3) charity, our Sponsors are our primary source of funding, supported by individual and corporate donations. Everything we are able to do is because their generosity has made it possible. THANK YOU!

As was reported last year at this time, we were entering a very worrisome time as the COVID-19 pandemic gripped the world. Indeed, at the time of writing, the world had mostly been locked down for about two months. Despite this, and in the face of the uncertainty we and our Sponsors faced, we maintained a hopeful outlook as our Sponsors continued to support our important mission by maintaining their sponsorship. To address the potentially troublesome waters ahead, we adjusted our budget targets for a much more conservative approach to the year and assumed that we would remain "flat" as a best-case scenario.

The way our Sponsors and supporters responded was magnificently inspiring! Through the course of the pandemic, we were humbled to see that most of our Sponsors continued to support us exactly as they had in prior years. We even welcomed some new Sponsors to the family. As a result, we not only met our budget target to remain steady, but we modestly exceeded our conservative income target! Seeing our Sponsors keep the mission of providing software for the public good alive through all that has happened is an uplifting note for a very difficult year.

We otherwise continue our focus on keeping "business as usual" activities moving along well. Our Ambassador program remains active with engagement for our sponsors, new/renew sponsorships are processed efficiently, and our internal data management has improved to the point that we're able to use scripts and minor automation to take action on it. We're pleased to also report that processes designed and implemented a few years ago have held up well to the pressures of running virtual conferences. That is to say: we're quite proud that there is little news to share on the process and "back office" front.

As this report began, it's worth repeating in closing: everything we are able to do is because of the generous support of our Sponsors. We are tremendously grateful for the support of our excellent Sponsors. They are:

ASF Sponsors

Platinum Sponsors



FACEBOOK



Gold Sponsors

Anonymous



cloudera



Silver Sponsors



Bronze Sponsors

Bestecasinobonussen.nl
Bookmakers
Cafe24
Casino2k
Cerner
Curity
Goread.io Followers
GridGain
Gundry MD
Host Advice
HotWax Systems

Journal Review
LeoVegas Indian Online Casino
Miro-Kredit AG
Mutuo Kredit AG
Online Holland Casino
Paf
ProPrivacy
PureVPN
RX-M
RenaissanceRe
SCAMS.info

SevenJackpots.com
Start a Blog by Ryan Robinson
The Best VPN
The Blog Starter
The Economic Secretariat
Top10VPN
Twitter
Writers Per Hour



Targeted Sponsors

Targeted Platinum Sponsors



Targeted Gold Sponsors



Targeted Silver Sponsors



Targeted Bronze Sponsors

Bintray
Education Networks of America
Friend of Apache Cordova
Google
Hopsie

No-IP
PagerDuty
Peregrine Computer
Consultants Corporation
Sonic.net

SURFnet
Virtru

Individual Giving

Supporting Apache through one-time or recurring individual donations and corporate contributions are made possible year-round via <https://donate.apache.org/> as well as through annual gifting campaigns that include:



#GIVINGTUESDAY

Giving Tuesday kicks off the ASF's end-of-year Individual Giving and Corporate Gifts campaigns.



The ASF is ranked by GuideStar with a Gold Seal of Transparency for voluntarily and publicly describing its goals, strategies, and accomplishments.



Legal Affairs

by Roman Shaposhnik

The Apache Software Foundation (ASF) Legal Affairs committee has been chartered directly by the Apache Board of Directors to work with our pro-bono legal counsel on answering legal questions and addressing policy issues regarding license compatibility and intellectual property concerns within the Apache Software Foundation communities. Another part of our mission is to help guide the Foundation through an evolving legal landscape and be the first point of contact for any third party individuals or organizations seeking to engage with us in a more formalized legal manner.

In the past year, Roman Shaposhnik continued as a VP Legal Affairs and was joined by Justin Mclean as Assistant VP, Legal Affairs. Of course, the work of the Legal Affairs committee wouldn't be possible without countless hours put in by volunteers. Folks like Roy Fielding, David Nalley, Craig Russell, and Mark Thomas, just to name a few.

We would also like to thank Mark Radcliffe and the DLA Piper team for always being willing to work with us even under very tight deadlines.

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

- Evaluating our Privacy Policy in compliance with GDPR and working closely with VP, Data Privacy on the matter.
- Responding to a handful of subpoenas and C&D requests for data removal.
- Working on the Conflict of Interest policy.
- Educating our sponsors and commercial legal counsels on how to best engage with Apache communities while still protecting their patent portfolios.
- Educating U.S. Federal agencies on the role that open source software in general and ASF communities in particular play in shaping the competitive landscape of the public cloud computing providers.
- Reviewing and advising on ASF entering into relationships with sister Open Source and commercial Foundations.

- Working on the data privacy implications of using technologies similar to Google Analytics on the web properties maintained by the ASF.
- Assisting ASF projects with their questions around the use of licenses in their codebases.
- Clarifying the structure of the Legal Affairs committee and a formal line of communications with our pro-bono legal counsel.
- Continuing to diversify the pool of corporations and legal professionals available to work with the Foundation on a pro-bono basis.
- Continuing a robust dialogue and collaboration between legal committees of ASF and other major open source organizations (Linux Foundation, OSI, and Eclipse Foundation).
- Providing feedback to various individuals and entities around permissible modifications to the Apache License.

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. In the past year, this work has become ever so more important since the world of open source has started seeing vendors experimenting with COSS (Commercial Open Source Software) licenses derived from the Apache License v2.

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.

Infrastructure

by David Nalley

This past year has seen a struggle due to the global pandemic. The Infrastructure team has remained safe and healthy, and were able to continue their work without interruption. As we are normally a work-from-home team, no real changes were required. The Apache community at-large continued their work, and the Infrastructure team kept the systems running to support them.

The Foundation runs a large Jenkins installation, managed by the Cloudbees Operations Center within AWS. This has allowed us to create clusters dedicated to individual projects (where supporters have donated build resources), and a shared cluster for all projects to use. The availability and management of build systems remains a high priority, as usage continues to grow across our many communities. We have started monthly conference calls for interested people, and are looking at new and innovative solutions to increase capacity.

One of our major innovations this past year is a feature we call "asfyaml" which enables communities to self-serve many features around their code repositories (particularly in regards to their presence on github.com). Projects can define/configure website publishing, mailing list notifications, and GitHub metadata such as Topics. This puts management directly in the hands of the community, rather than projects needing the Infrastructure team to apply changes.

The team worked with Marketing and Publicity to create a series of interviews called "Inside Infra" to put a face on our people and the work we do. This was a fun set of blog posts that let us make visible what is normally a faceless series of tasks to support our communities.

In conjunction with the Treasurer's office, we have shifted our back office financial systems over to new platforms: accounting, PEO, invoicing, and credit card handling. This has been a large shift, but has significantly streamlined Infrastructure's operations. While Infrastructure may be the largest cost center, these benefits have extended throughout the Foundations operations, with great success.

Security

by Mark Cox

The Security committee of The Apache Software Foundation (ASF) perform the following functions:

- handling and triage of incoming security reports in our projects
- working closely with the project teams, communities, and reporters to ensure that issues get handled quickly and correctly.
- maintaining a consistent process for projects to follow in handling Vulnerabilities
- providing advice to projects and assisting with complex or critical issues
- being a CVE Project Candidate Naming Authority, allocating CVE names

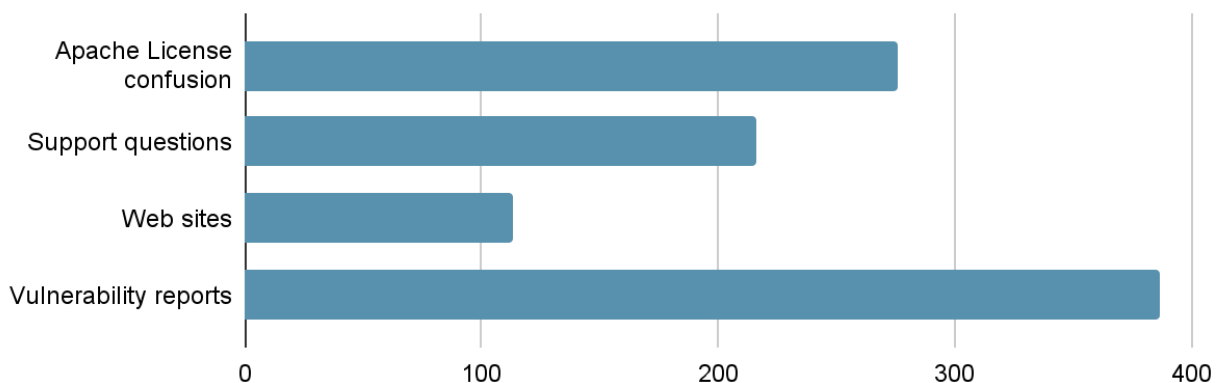
Volume

In the course of the year our security addresses received in total over 17,000 emails.

After spam filtering and thread grouping this becomes 992 non-spam threads, an increase of 40% since last year's report.

Diagram 1 gives the breakdown of those 992 threads.

Breakdown of incoming security email threads



276 of the 992 threads (28%) were people confused by seeing the Apache License on their devices. We continue to get a large number of these reports mostly due to software which has been released under the Apache License but was not created by the ASF (such as the majority of the Android OS).

The next 216 (21%) are threads that were not reports of new vulnerabilities. These are generally people asking support-type questions or how old, public, vulnerabilities were dealt with.

While security@apache.org is not the designated place to report issues affecting our infrastructure such as web sites, we still received 113 reports in this category (11%). The vast majority of these were rejected as they are invalid reports of us having open directory listings, clickjacking attacks, lack of framing protection, public source code, and so on.

That left 387 reports of possible vulnerabilities, and these spanned across 95 of the top level ASF projects. The reports are overseen by the security team through their lifecycle and further triaged and investigated by each project's security team or PMC. Issues that are confirmed valid are addressed with updates and this led to 155 CVE names being issued.

Noteworthy events

During the year there were a few noteworthy events; issues that were severe and high risk, ones that had readily available exploits, issues spanning multiple projects, or otherwise due to media attention. These included:

- May 2020: The Cybersecurity and Infrastructure Security Agency (CISA) released a list of [Top 10 Routinely Exploited Vulnerabilities](#) including [CVE-2017-5638](#), the remote command execution (RCE) vulnerability in Apache Struts 2 disclosed and fixed in 2017. This issue is [known to be exploited in the wild](#), however the first exploitation was discovered after the advisory and fix was published.
- July: Versions of Apache Guacamole 1.1.0 and earlier were vulnerable to issues in RDP, [CVE-2020-9497](#) and [CVE-2020-9498](#). If a user connects to a malicious or compromised RDP server it could lead to memory disclosure and possible remote code execution.
- August: A vulnerability in Apache Struts ([CVE-2019-0230](#)) could lead to arbitrary code execution. In order to exploit the vulnerability, an attacker

would need to inject malicious Object-Graph Navigation Language (OGNL) expressions into an attribute that is used within an OGNL expression. Although Struts has mitigations to address potential injected expressions, versions before 2.5.22 left an attack vector open which was fixed in [updates for this issue](#). A metasploit exploit exists for this issue.

- November: Previously each ASF project was responsible for writing up their own CVE entries and submitting them to Mitre. This leads to many delays in the CVE database being updated with Apache issues as entries are often rejected as the legacy format causes issues. We released an internal tool providing projects dealing with security issues a way to edit, validate, and submit their entries to Mitre. We aim to have the CVE database updated within a day of an issue being published.
- December: The CVE project released a new automation API and the ASF became the first organisation to get a live CVE name using it. Instead of the security team holding a pool of names requested in advance we now allocate them on demand, with the service taking care of emails to the PMC and other previously manual parts of the process. We expect more automation available during 2021 allowing us to streamline the CVE process for projects even further.
- January 2021: A Cross-Site scripting (XSS) flaw affected the default error page of Apache Velocity, [CVE-2020-13959](#). The issue was addressed in the code repository in November, however a version containing the fix was not released or the vulnerability announced until January, leading to a press report about how the issue affected sites using Velocity.

We welcome reports from anyone finding security issues in any Apache project to security@apache.org, or read more about the process at <https://apache.org/security/>

Data Privacy

by Christian Grobmeier

Privacy discussed questions related to committer privacy. Only a few privacy requests have been made and were handled.

We also have a new website: <https://privacy.apache.org> . This website aims to guide committers for maintaining their project websites, but also will publish policies.

We also created a SVN directory where we store log files of privacy activities, DPAs and similar.

In the next months we hope to learn more about our information flow, help to make project websites privacy compliant and collect more DPAs.



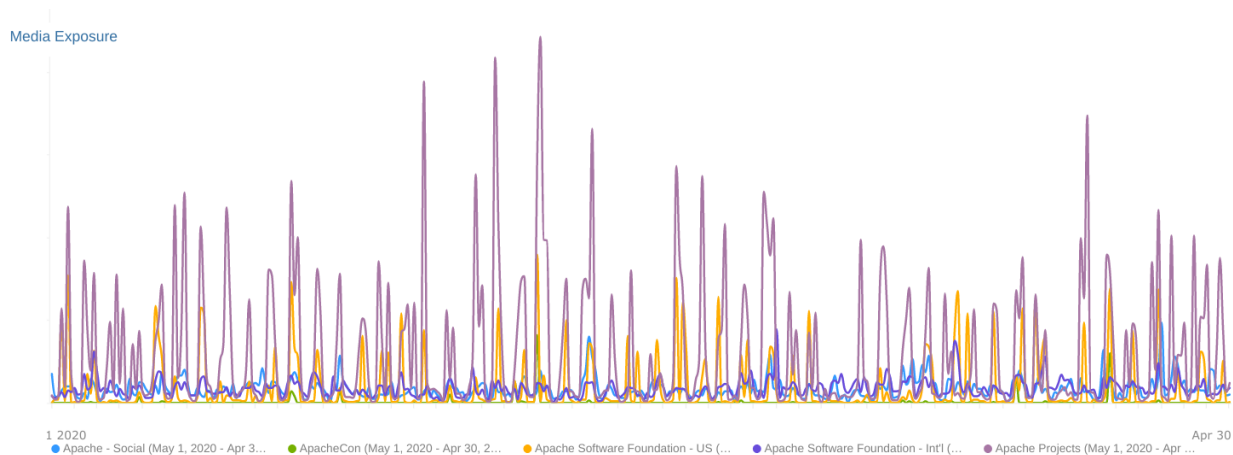
Marketing & Publicity

by Sally Khudairi

The ASF's marketing, publicity, and promotional activities are executed by HALO Worldwide, who have been leading Foundation-level outbound strategic communications and day-to-day tactics since 2006. In addition to performing in-house marketing and publicity, HALO also provides support and counsel to:

- Apache Projects and their Communities
- ASF Fundraising and Sponsor Relations
- ASF Trademarks and Brand Management
- Apache Community Development
- Apache Conferences and Events

FY2021 highlights



- 18 Press Releases
- 74 Informal Announcements
- 257 Tweets
- 59.8K Twitter followers
- 271 LinkedIn posts
- 48.5K LinkedIn followers
- 71 Media Queries
- 31.1K Media Clips
- 22 Analyst Briefings and Queries

- 248 Analyst Reports
- 64 Apache News Summaries (Weekly Round-Ups + Months in Review)
- 7 video highlight summaries posted
- 316 video presentations posted, including ApacheCon and Community events
- 181.6K Apache video views on YouTube
- 3 Quarterly Reports/Operations Summaries
- Published FY2020 Annual Report <https://s.apache.org/FY2020AnnualReport>

Special Projects

Documentary: "Trillions and Trillions Served"



"Trillions and Trillions Served" highlights the ASF's monumental growth from its incorporation by 21 individuals overseeing the Apache HTTP Server in 1999 to becoming the world's largest Open Source foundation. "Trillions" features perspectives and experiences from dozens of individuals from the global Apache community that include ASF Founders, Members, Project Management Committee members, Committers, Sponsors, users, and enthusiasts.

Filmed on location in 2019 during ApacheCon North America in Las Vegas and ApacheCon Europe in Berlin, "Trillions and Trillions Served" is the result of more than 65 hours and 8 terabytes of footage filmed and edited by Wyona Pictures (founded by ASF Member Michael Wechner). The final product is a collection of four films:

- 1) "Why Apache" teaser <https://s.apache.org/WhyApache-short>
- 2) "Apache Everywhere" short <https://s.apache.org/apacheeverywhere>
- 3) "Apache Innovation" short <https://s.apache.org/apacheinnovation>
- 4) "Trillions and Trillions Served" full feature <https://s.apache.org/trillions-feature>



[click image to launch "Why Apache?" promo short]



[click image to launch "Apache Everywhere" promo short]



[click image to launch "Apache Innovation" promo short]



[click image to launch "Trillions and Trillions Served" feature documentary]





Inside Infra



INSIDE INFRA

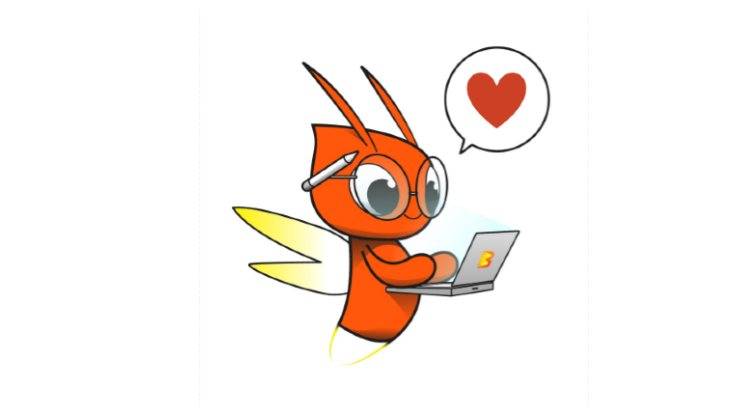


DANIEL GRUNO

The "Inside Infra" interview series launched towards the end of FY2020, and featured members of the ASF Infrastructure team. The project provided rarely experienced insight into the 7-person team who keep the ASF's Infrastructure running 24/7/365 — 99.75% average uptime over FY2021! Meet:

- Chris Thistlethwaite <https://s.apache.org/InsideInfra-Chris>
- Drew Foulks <https://s.apache.org/InsideInfra-Drew>
- Greg Stein
 - Part I <https://s.apache.org/InsideInfra-Greg>
 - Part II <https://s.apache.org/InsideInfra-Greg2>
 - Part III <https://s.apache.org/InsideInfra-Greg3>
- Daniel Gruno
 - Part I <https://s.apache.org/InsideInfra-Daniel1>
 - Part II <https://s.apache.org/InsideInfra-Daniel2>
- Gavin McDonald
 - Part I <https://s.apache.org/InsideInfra-Gavin>
 - Part II <https://s.apache.org/InsideInfra-Gavin2>
- Andrew Wetmore
 - Part I <https://s.apache.org/InsideInfra-Andrew>
 - Part II <https://s.apache.org/InsideInfra-Andrew2>
- Chris Lambertus
 - Part I <https://s.apache.org/InsideInfra-ChrisL>
 - Part II <https://s.apache.org/InsideInfra-ChrisL2>

"Success at Apache"



Launched in 2016, "Success at Apache" focuses on the people and processes behind why the ASF "just works". During FY2021 we augmented the Success at Apache series (posts authored by members of the Apache community) with Inside Infra interviews, as detailed in the above section. In addition, we published our first "Sponsor Success at Apache" post, featuring ASF Targeted Platinum Sponsor Leaseweb.

[Sponsor Success at Apache: The Fork](#)

by Wei Zhou

[Success at Apache: I Became an Apache Solr Committer in 4,662 Days. Here's how you can do it faster!](#)

by Eric Pugh

[Success at Apache: Remote Collaboration in the Time of Coronavirus](#)

by Marvin Humphrey

[Success at Apache: bringing the Apache Beam firefly to life](#)

by Julián Bruno

For more Success at Apache posts, visit

<https://blogs.apache.org/foundation/category/SuccessAtApache>

Did you know?



Launched in 2015, the ASF's "Did you know?" campaign features a trio of Apache-related factoids in every Apache Weekly News Round-up. Highlights in FY2021 include:

- Did you know that Apache projects support COVID-19 pandemic-related efforts in myriad ways, including training large-scale, distributed deep learning libraries over clusters of hospital machines?
- Did you know that Feathercast --the voice of Apache-- features hundreds of recordings on Apache projects and their communities, ApacheCon

presentations, and more? New interviews include Apache Airflow, Ignite, Mahout, OFBiz, and Sling

- Did you know that the permissive and commercially-friendly Apache License 2.0 is one of the most popular Open Source licenses?
- Did you know that Tencent uses Apache Pulsar to process tens of billions of dollars in financial transactions each day?
- Did you know that John Deere's data platform is powered by Apache Flink and Apache Spark to scalably receive and process millions of sensor measurements per second, and adapt to continually increasing volumes of data?
- Did you know that the "Trillions and Trillions Served" feature documentary is now available with Chinese subtitles?
- Did you know that your employer can join companies such as American Express, Bloomberg, IBM, and Microsoft in matching contributions and volunteer hours made by their employees?
- Did you know that projects undergoing development in the Apache Incubator are in a variety of categories that include AI, Annotation, Big Data, Blockchain, Cryptography, Data Visualization, Distributed Computing, Email, Embedded Systems, Geospatial Data, Graphing, Hardware Acceleration, IoT, Messaging, Monitoring, Natural Language Processing, Scheduling, Streaming, Training, Usability Testing, and more?
- Did you know that there were 150 TB+ in source code downloads from Apache mirrors (excludes convenience binaries) in FY2020?
- Did you know that workflows for the Creative Commons Catalog project are powered by Apache Airflow?
- Did you know that you can learn about Apache Beam, Calcite, Camel, CarbonData, Groovy, Hadoop, Karaf, Labs, NetBeans, OFBiz, OpenOffice, PLC4X, Rya, Spark, Tomcat, Unomi, and more in the "Apache Innovation" short segment of the "Trillions and Trillions Served" documentary?
- Did you know that Shopify is building a new streaming analytics pipeline powered by Apache Beam, Druid, and Kafka?
- Did you know that Apache Royale Jewel UI set already provides 60+ components to quickly build Web applications?
- Did you know that Target uses Apache Druid to ingest more than 3 trillion rows of data across 3,500+ data sources?
- Did you know that Apache Kylin enables SQL developers and BI users to achieve sub-second response times for queries against petabytes of data?
- Did you know that Apache MXNet (incubating) was listed among the best machine learning and deep learning libraries for building and training machine learning and deep learning models?

- Did you know that you can download and use a variety of ASF Templates and Badges for personal, project, and corporate promotions?
- Did you know that Apache Druid powers real-time analytics for Airbnb, Alibaba, British Telecom, Cisco, Didi Chuxing, eBay, Hulu, Lyft, Netflix, and many more?
- Did you know that Apache Airflow, Arrow, Druid, and Superset (incubating) were awarded InfoWorld's Bossies for the Most Innovative Open Source Projects & Next Generation Tools?
- Did you know that Pinterest's real-time analytics platform is powered by Apache Druid?
- Did you know that Apache Roadshow China will be held online 24-25 October, alongside COSCon 2020?
- Did you know that the ASF Infrastructure team have added more self-serve features to .asf.yaml?
- Did you know that Salesforce uses Apache Druid as their real-time analytical database to store application performance metrics extracted from billions to trillions of log lines per day?
- Did you know that the Apache OFBiz community is deliberating deployment on AWS production environments?
- Did you know that Oak Ridge National Laboratory uses Apache Spark and Parquet to solve high-performance computing solutions on some of the world's fastest supercomputers?
- Did you know that Orange's media center is powered by Apache Wicket?
- Did you know that Alibaba's real-time computing platform processed data streams totaling 4 billion items per second during Singles Day, the largest global online shopping event, using Apache Flink?
- Did you know that Apache TVM is the ASF's first full stack software and hardware co-optimization project?

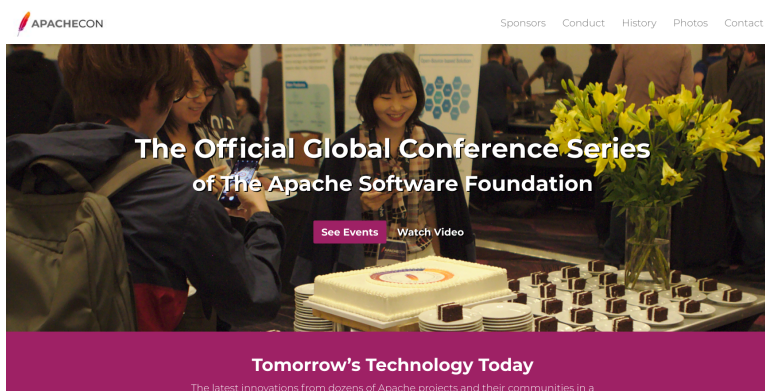
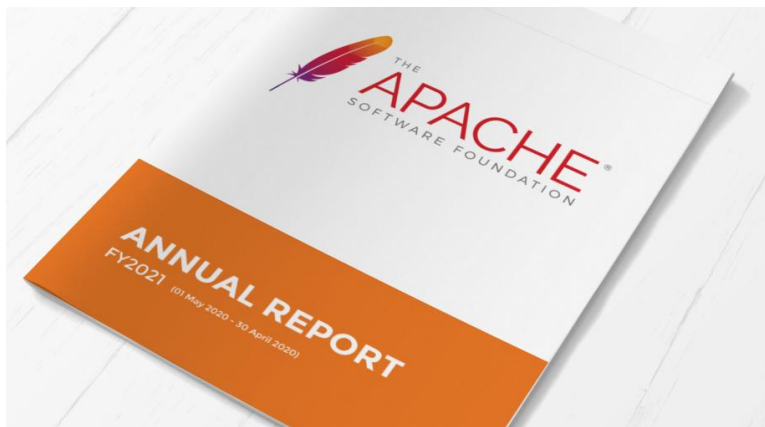
Central Services

Established early 2019, the ASF Central Services team assists in two areas:

- 1) Creative projects that range from logo development to apache.org redesign and content refreshes and support for individual Apache Projects and initiatives.
- 2) Editorial projects that support Marketing & Publicity promotional activities that include Weekly News Round-ups, Months-in-Review, and special reports.

Highlights include:

Graphics and Website Production



Creative projects include updating ASF logo assets, assisting Apache Projects and initiatives with logo updates, "Powered by Apache" project badges, conference signage and event promotional materials, Website redesign, UX optimization, and look-and-feel refreshing. Ongoing activities include updates to the apache.org

Website and master templates, as well as coordination with ASF Infrastructure on the new content management system.

Video Highlights



Apache Software Foundation Q3 FY2021 Report (highlights)

In the latter part of FY2021 we introduced video highlights to provide additional promotion for Foundation news, as well as activities from ASF committees such as Security, and initiatives such as ApacheCon.

1 April 2021: [Apache Month in Review - March 2021 Highlights](#)

22 March 2021: [Apache Software Foundation Q3 FY2021 Report Highlights](#)

1 March 2021: [Apache Month in Review - February 2021 Highlights](#)

23 February 2021: [Apache Software Foundation Security Report: 2020](#)

1 February 2021: [Apache Month in Review - January 2021 Highlights](#)

1 January 2021: [Apache in 2020 - By the Digits](#)

Press Releases

8 April 2021: [The Apache Software Foundation Announces Apache® DolphinScheduler™ as a Top-Level Project](#)

24 March 2021: [The Apache® Software Foundation Celebrates 22 Years of Open Source Innovation "The Apache Way"](#)

4 March 2021: [The Apache Software Foundation Announces Apache® Daffodil™ as a Top-Level Project](#)

23 February 2021: [The Apache® Software Foundation Sustains its Mission of Providing Software for the Public Good through Corporate Sponsorships and Charitable Giving](#)

16 February 2021: [The Apache Software Foundation Announces Apache® Gobblin™ as a Top-Level Project](#)

3 February 2021: [The Apache Software Foundation Announces Apache® DataSketches™ as a Top-Level Project](#)

26 January 2021: [The Apache Software Foundation Announces Apache® ECharts™ as a Top-Level Project](#)

21 January 2021: [The Apache Software Foundation Announces Apache® Superset™ as a Top-Level Project](#)

19 January 2021: [The Apache CloudStack Project Releases Apache® CloudStack® v4.15](#)

30 November 2020: [The Apache Software Foundation Announces Apache® TVM™ as a Top-Level Project](#)

14 October 2020: [The Apache Software Foundation Celebrates 20 Years of OpenOffice®](#)

23 September 2020: [The Apache Software Foundation Announces Apache® IoTDB™ as a Top-Level Project](#)

29 July 2020: [The Apache® Software Foundation Announces Annual Report for 2020 Fiscal Year](#)

15 July 2020: [The Apache Software Foundation Announces Apache® Wicket™ v9](#)

15 July 2020: [The Apache Software Foundation Announces Apache® APISIX™ as a Top-Level Project](#)

4 June 2020: [The Apache Software Foundation Announces Apache® Hudi™ as a Top-Level Project](#)

28 May 2020: [The Apache Software Foundation Announces Apache® CloudStack® v 4.14](#)

13 May 2020: [The Apache Software Foundation Announces the 10th Anniversary of Apache® HBase™](#)

Foundation Statements



Quarterly and Annual Reports, as well as the ASF 2020 Security Report, Apache in 2020 - By The Digits, and select Foundation statements, including the statement on the COVID-19 Coronavirus Outbreak, are available at <http://www.apache.org/foundation/reports.html>



Brand Management

by Mark Thomas

Operations

The work of the Brand Management team falls broadly into one of five Categories:

- providing advice to projects
- helping companies building products based on Apache software use our marks correctly
- trademark registrations
- granting permission to use our marks
- addressing potential infringements of our marks

The statistics suggest activity has been down a little this year compared to the previous year but that isn't something I have noticed. My impression is that things have been about the same.

Compared to many processes at the ASF, trademark related activities take a long time. It isn't unusual for some tasks to take six months or more and some can take years. Our tracking system continues to be up to task - ensuring that even if things take a long time, they do not get forgotten about.

As the year started, the impact of Covid-19 on events triggered a series of updated requests to use our marks for external events as those events moved on-line. We were happy to be able to accommodate all those requests. As with in-person events, we worked with the organisers and the ASF Conferences team to minimise scheduling conflicts.

The remainder of the requests fell into the usual categories of merchandise and publications, with nearly all requests being granted, subject to our Trademark Usage Policy.

This year we also worked with the KAFKA project and counsel to develop a KAFKA specific branding policy for KAFKA clients and connectors.

We provide advice to both ASF projects and podlings. The advice to podlings, and occasionally, prospective podlings is typically around naming. Naming projects is

hard. Fortunately, we don't have to come up with the names. We provide advice around the suitability of a name and how easy it is likely to be to protect going forwards.

This year we received an infringement claim for a non-ASF controlled website that just happened to be hosted on the Apache Web Server. We provided the lawyers with some advice on how to correctly identify the entity that controls a website.

The total expenditure on Brand Management is up this year. This increase has been driven by two more complex - for different reasons - registrations in China and again demonstrates how a small number of tasks can quickly dominate the expenditure. The breakdown of expenditure for this year and the previous two years is:

Area	FY2019	FY2020	FY2021
Registration	30%	70%	60%
Renewal	10%	10%	1%
Assignment	15%	10%	15%
Infringement	45%	10%	10%
Maintenance	—	—	14%

The appearance of maintenance is largely driven by the change in the ASF's registered address. The process for updating registrations can vary considerably by jurisdiction.

Registrations

Our US registration of CLOUDSTACK completed this year, as did the registrations for FLINK in the EU and APACHE in the EU.

We also started a small number of new registrations this year.

Infringements

Potential infringements are brought to our attention from both internal and external sources. The majority of infringements we see are accidental and our project communities are able to resolve these quickly and informally with occasional input from the Brand Management team. A small number of issues take longer to resolve.

This year a number of potentially infringing works were reported as being sold via Amazon. The ASF is in the process of registering our marks with the Amazon Brand Registry which will enable us to tackle these more easily.

And finally...

The Brand Management team welcomes your comments and suggestions as well as any questions you might have. Please see <https://www.apache.org/foundation/marks/contact> for our contact details.



Conferences

by Rich Bowen

During FY2021, we ran one major event, and began planning for the CY2021 event schedule.

ApacheCon 2020, originally planned for New Orleans, was moved online due to the global pandemic. We held ApacheCon @Home, our first online event, September 29 through October 1. There were 5,714 registrations, of which we had a 58% turnout rate. Registrations were from all over the world, and content was delivered in English, German, and, for the first time, Spanish and Hindi.

The event was sponsored by Codethink, RX-M, AWS, IBM, Red Hat, Apple, DataStax, VMWare Tanzu, InstaClustr, and ImPLY. Additionally Manning was a media partner, and Muse.dev hosted a code contest during the event.

We had keynotes from Thomas Huang (Nasa), Jonathan Ellis (DataStax), Camille Fournier, Kim Huang (Red Hat), Catherine McGarvey (VMWare), Edmon Begoli (ORNL), Anil Inamdar (InstaClustr), and Gian Merlino (ImPLY.io).

As of this writing, we are planning ApacheCon @Home 2021, which will be held September 21 - 24, and ApacheCon Asia 2021, which will be held August 6 - 9. Both events will be held online. Registration, and more details, are available at <https://apachecon.com/>

We also run a number of smaller topic/project-focused events throughout the year, and these events are listed at <https://events.apache.org/>

At this time, we fully expect to return to in-person events in 2022, but we will continue to monitor the global travel situation and begin making those decisions closer to the end of 2021.

Community Development

by Sharan Foga

The focus of the first quarter was adapting our approach to help mitigate the impact of the Covid-19 pandemic on our community activities. With the moving of ApacheCon to an online conference we helped to support and promote the event. Our Community track was well supported and attracted a good CFP response.

Our Apache Local Community (ALC) initiative is working and growing, and we were happy to report that we are in the process of establishing a new ALC chapter in Lagos, Nigeria. With the help of Kenneth Paskett from the ASF Central Services team, we have also worked to help strengthen the Apache brand locally by introducing custom branding for the Apache Local Communities (ALC). Each chapter can create a logo customised for their location.

We spent August and September preparing for and participating in ApacheCon@Home. Our Community track ran over 3 days and 2 time zones and began with a presentation in Hindi. This was very significant for us as it was the first time that we have presented community content at ApacheCon in a language other than English. Being accessible in other languages is helping reach other potential contributors. Our track attracted a good audience and many of the sessions achieved good interaction and participation.

During December an Apache Roadshow China was held in conjunction with COSCon. The event was a great success and we are looking forward to participation at future events.

Another key theme in the third quarter was communication and ensuring that our community was being kept informed of what is happening. As a result, we experimented with a new format for the Apache News Roundup and trialled it with the community. A range of short videos were created focussed on different topics. Feedback from the community has been extremely positive so we will be continuing this initiative.

The ASF was once again chosen as a Google Summer of Code (GSoC) mentor organisation and a key responsibility for the Community Development team is to help oversee the involvement of any participating Apache projects. Several students will be mentored by the ASF throughout the coming year.

In April we welcomed a new PMC Chair, Swapnil M Mane as our previous PMC Chair Sharan Foga decided to step down as she was recently elected to the ASF Board.

The latest statistics from our mailing list shows that we have 993 subscribers and during the year we have had over 2,958 emails sent discussing over 1,838 different topics.



Diversity & Inclusion

by **Katia Rojas**

The D&I committee was established in 2019 in order to build equity in our community by developing tools and frameworks to foster inclusion and increase diversity in all phases of Apache projects. The committee selected the following values as the foundation of their work: Respect, empathy, openness, patience, candor & dependability.

Goals

FY 2021 Goals

- Instrument the Apache contributor funnel to establish a participation baseline for underrepresented groups
- Create a toolkit to address the top 3 entry barriers for new contributors from underrepresented groups
- Be the trusted, go-to partner for PMCs when it comes to D&I
- Have committer on-boarding and retention plans, built with and shared with the PMCs
- Improve the accessibility of Apache projects by increasing participation of at least one underrepresented group by 20% across all Apache projects

Noteworthy Achievements

- Enhanced our position as an Outreachy community
 - Hosted 10 Outreachy interns in 8 projects.
 - Developed a work structure to ensure continuity of the program and promote the participation of the community.
 - Created an entry point for newcomers from underrepresented groups.
- Research on the current status of Diversity and Inclusion at the ASF
 - This project was composed of two initiatives: The ASF Community Survey and a User Experience Research for contributors of underrepresented groups.
 - The survey application was wrapped up with 622 completed responses.
 - We recorded a read-out, which you can watch in our official YouTube channel <https://s.apache.org/pnkzw>, and read the slides shared in the D&I wiki

https://cwiki.apache.org/confluence/display/EDI/**+Files+and+Resources

- We conducted 19 one-on-one interviews, which provided insightful information on how we can help our community to ease the challenges experienced by contributors in our Apache community, especially those coming from underrepresented backgrounds. You can find early results on these interviews in this document

<https://docs.google.com/document/d/1aoCCrsWmE-Pp6kxiUgHJ9ITIrM3XQmX4nCDGJ7kyjCI/edit>.

Future Goals

- Improve current work structure to ensure continuity of the Outreachy program. Boost the entry point for underrepresented groups in our community.
- Standardize a friction log feedback process to identify the main barriers for newcomers from underrepresented groups in the Outreachy program.
- Set a two-years cycle process for the survey to keep track of the influential factors on the contributor experience.
- Act on the findings and recommendations from the research done in FY2021. Deal with some of the most common barriers to contribution that were previously identified from underrepresented groups.
- Centralize D&I efforts in Confluence to maximize community outputs.
- Publish a website to improve the visibility of our projects and attract new contributors. Increase the number of contributors by at least 20%.

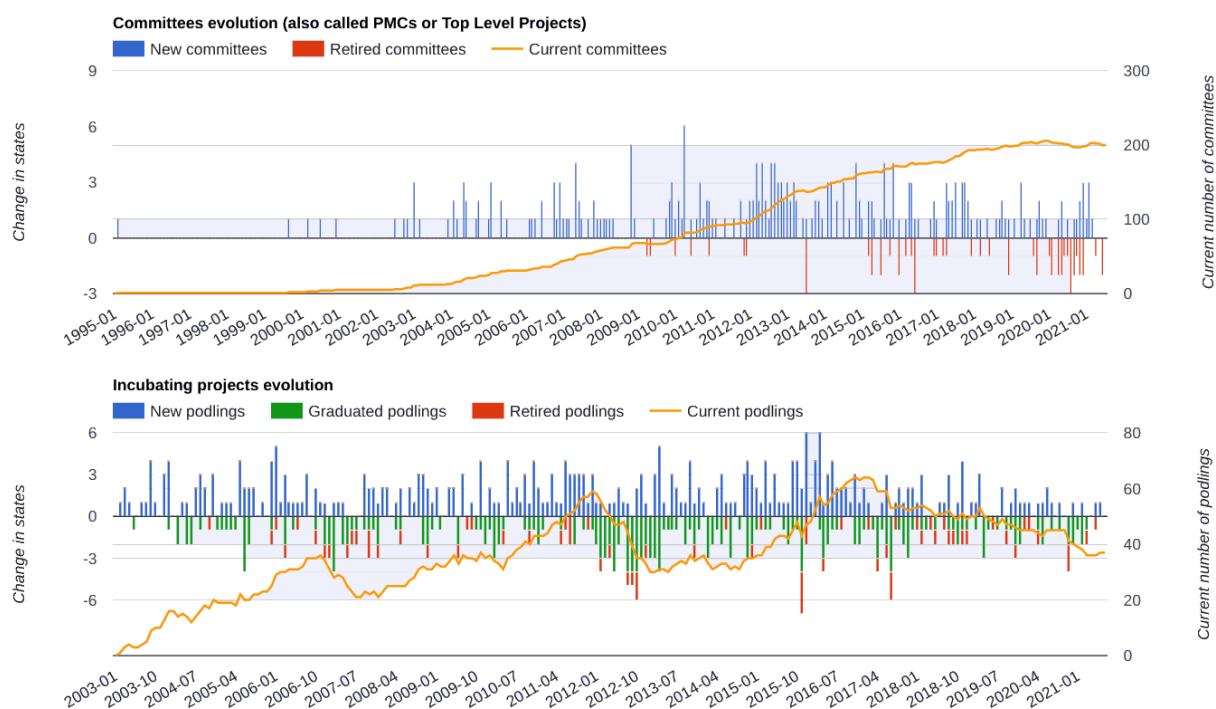
Projects and Code

The ASF stewards 227M+ lines of code in 2,254 Apache repositories across 350+ projects. The ASF served ~2 Petabytes in source code downloads over the past year from Apache mirrors (excludes convenience binaries), 35M+ apache.org page views each week, and Web requests from every Internet-connected country on the planet.

Each Apache Project is overseen by a Project Management Committee (PMC), that guides its day-to-day operations, including community development and product releases..

→ Apache Top-Level Projects —200 PMCs are managing 351 projects and sub-projects; 14 of which are newly-graduated Top-Level Projects. 13 projects retired to the Apache Attic.

→ Incubating podlings —35 projects are currently undergoing development in the Apache Incubator; 8 projects were new entrants to the Incubator, and 2 were retired.



Apache Top-Level Projects



Apache Incubating Podlings

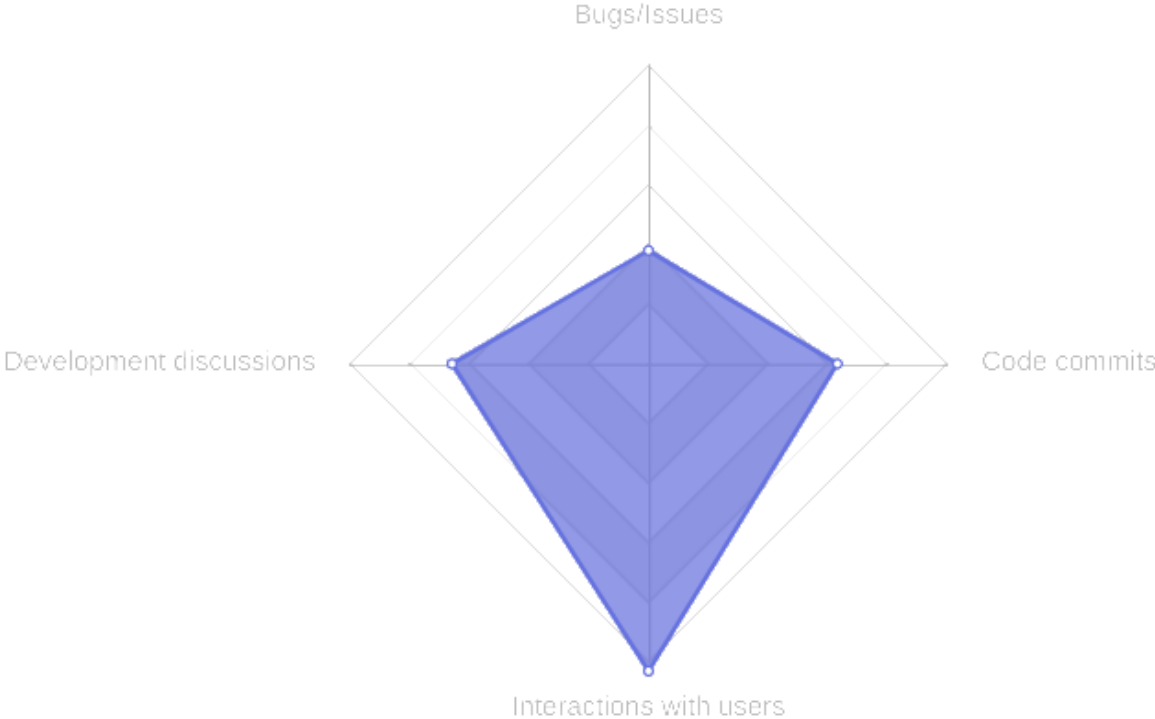


Retired Apache Projects in the Attic

Abdera	Forrest	PredictionIO
ACE	Hama	QuetzalcoatI
Apex	Harmony	Rave
Aurora	HiveMind	Sentry
Avalon	iBATIS	Shale
AxKit	Jakarta	Shindig
Axis Sandesha2/C	Jakarta Cactus	Sqoop
Axis Savan/C	Jakarta ECS	Standard C++ Library (STDCXX)
Axis Savan/Java	Jakarta ORO	Stanbol
Beehive	Jakarta Regexp	Stratos
Chukwa	Jakarta Slide	Tajo
Click	Jakarta Taglibs	Tiles
Open Climate Workbench	Labs	Trafodion
Crimson	Lens	Tuscany
Continuum	Lenya	Twill
Crunch	Lucy	VXQuery
Deltacloud	Marmotta	Whirr
DeviceMap	MetaModel	Wink
DirectMemory	Metron	Wookie
DRAT	MRUnit	WS Muse
Eagle	ODE	Xang
ESME	ObjectRelationalBridge (OJB)	Xindice
Etch	Oltu	XML
Excalibur	Onami	
Falcon	Polygene	

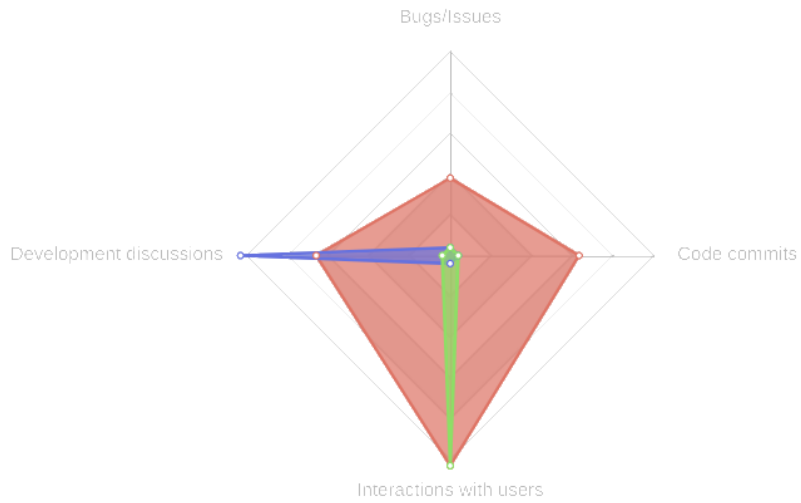
Organizational Activity (at-large)

■ Current activity, organisational average



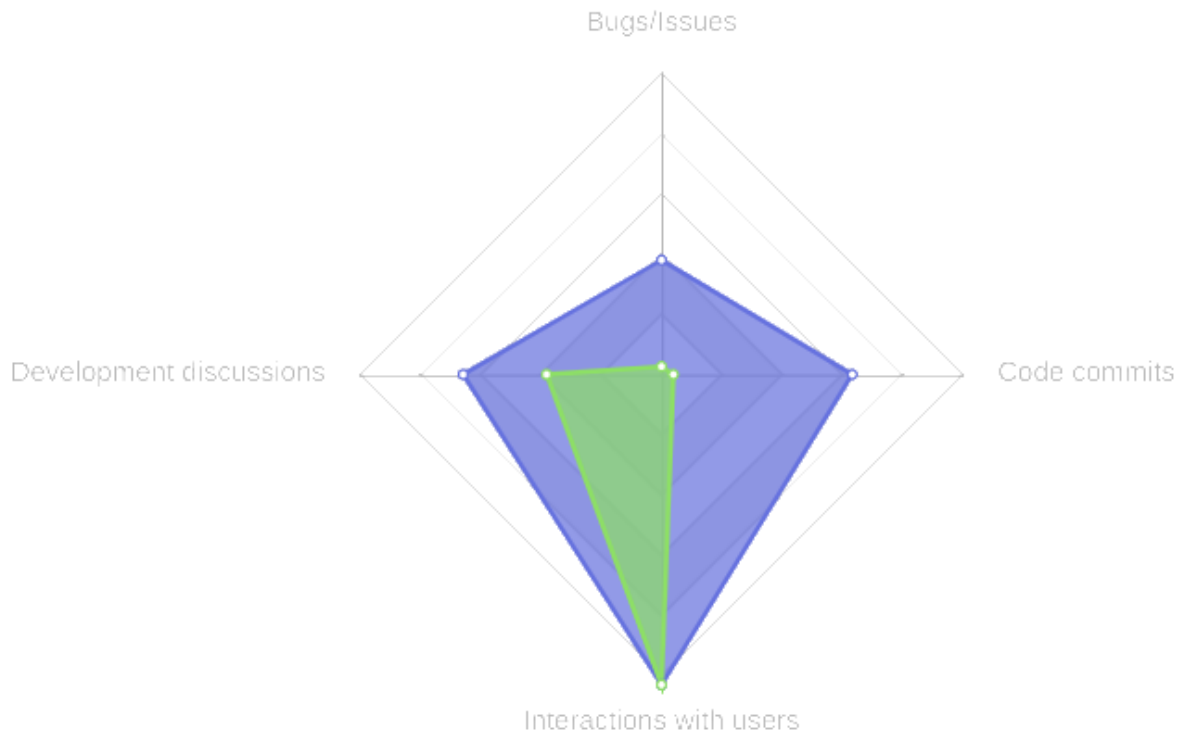
Apache Big Data Projects vis-à-vis ASF at-large

■ Current activity, organisational average ■ Current activity, Big Data Dev Mailing Lists ■ Current activity, Big Data User Mailing Lists



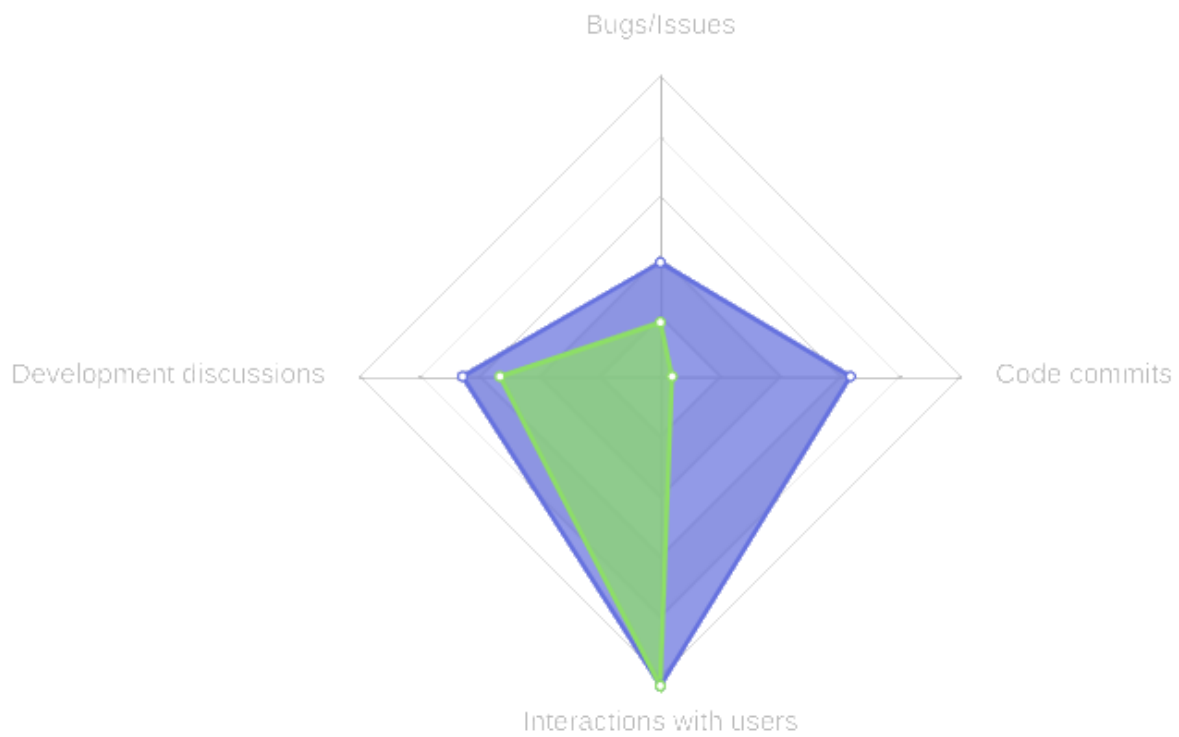
Apache Build Management Projects vis-à-vis ASF at-large

■ Current activity, organisational average ■ Current activity, Build Management



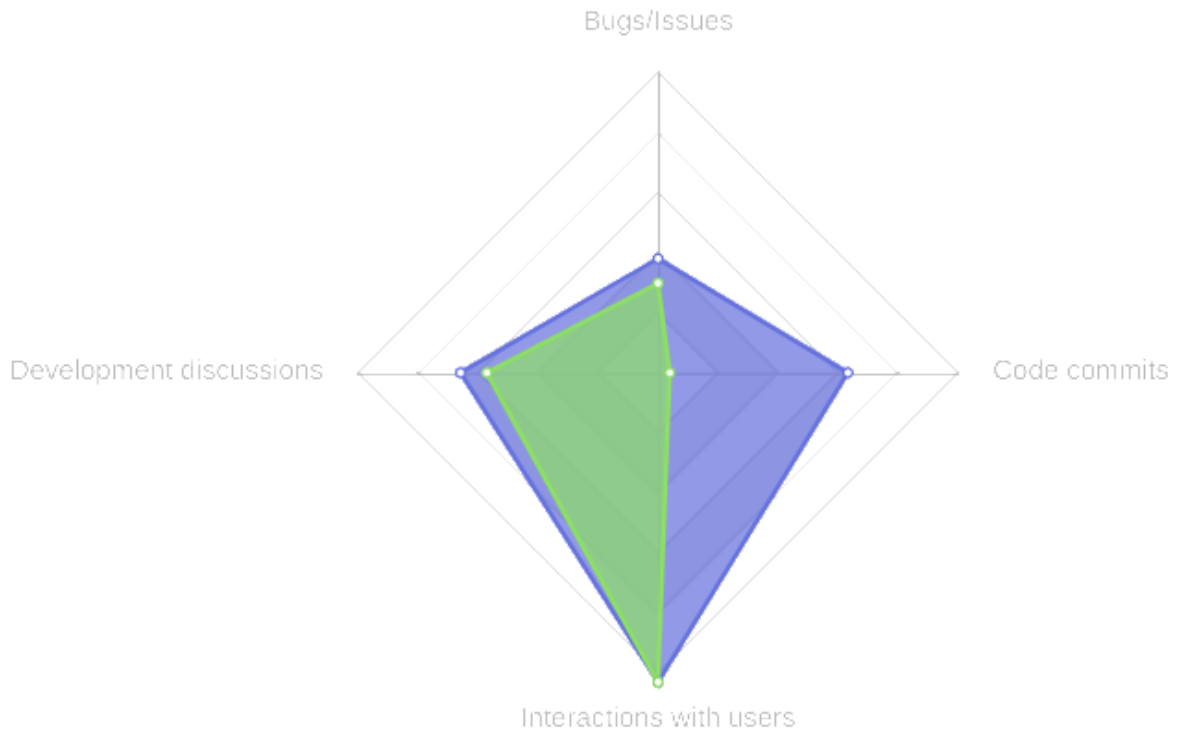
Apache Cloud Computing Projects vis-à-vis ASF at-large

■ Current activity, organisational average ■ Current activity, Cloud Computing



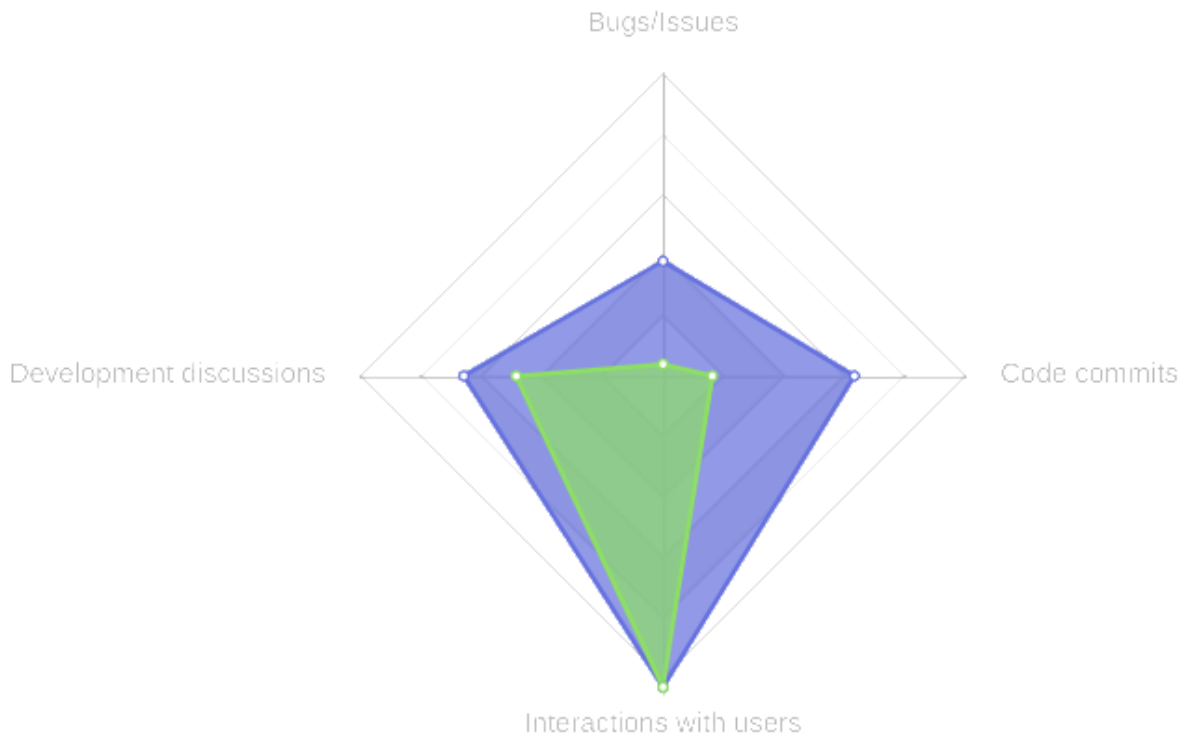
Apache Database Projects vis-à-vis ASF at-large

■ Current activity, organisational average ■ Current activity, Database Projects



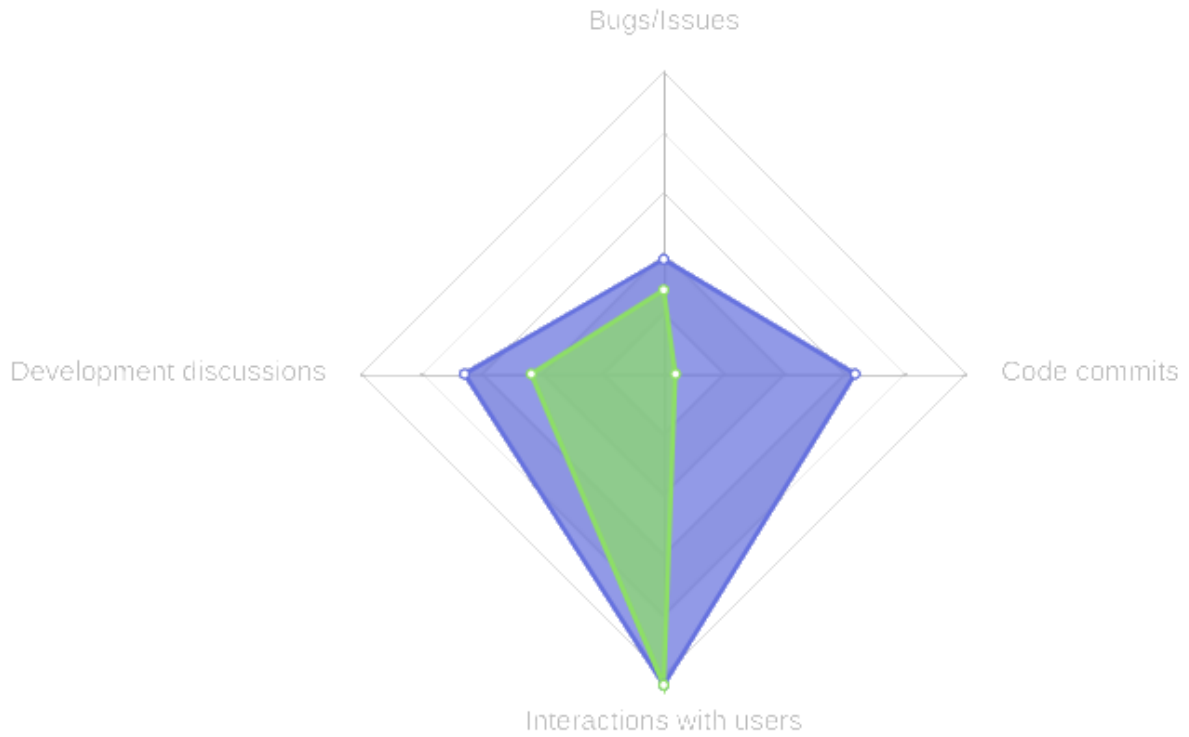
Apache HTTP Server Projects vis-à-vis ASF at-large

■ Current activity, organisational average ■ Current activity, HTTP Servers



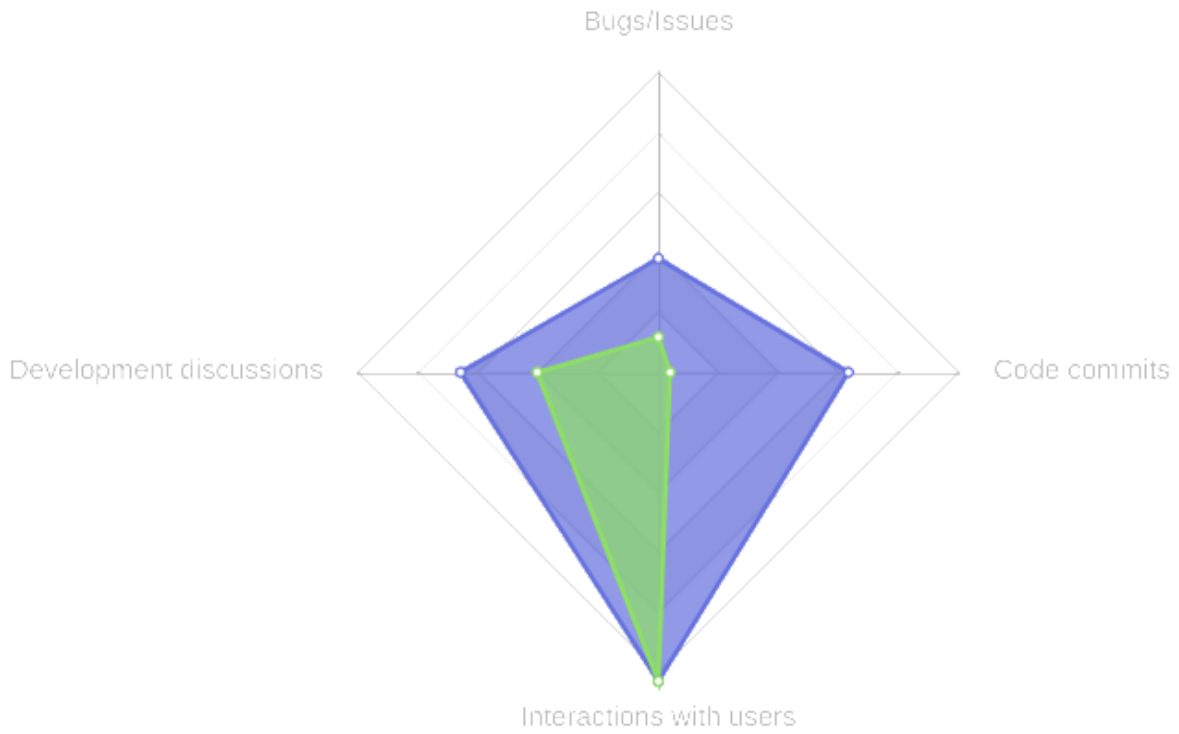
Apache Maven Projects vis-à-vis ASF at-large

■ Current activity, organisational average ■ Current activity, Maven



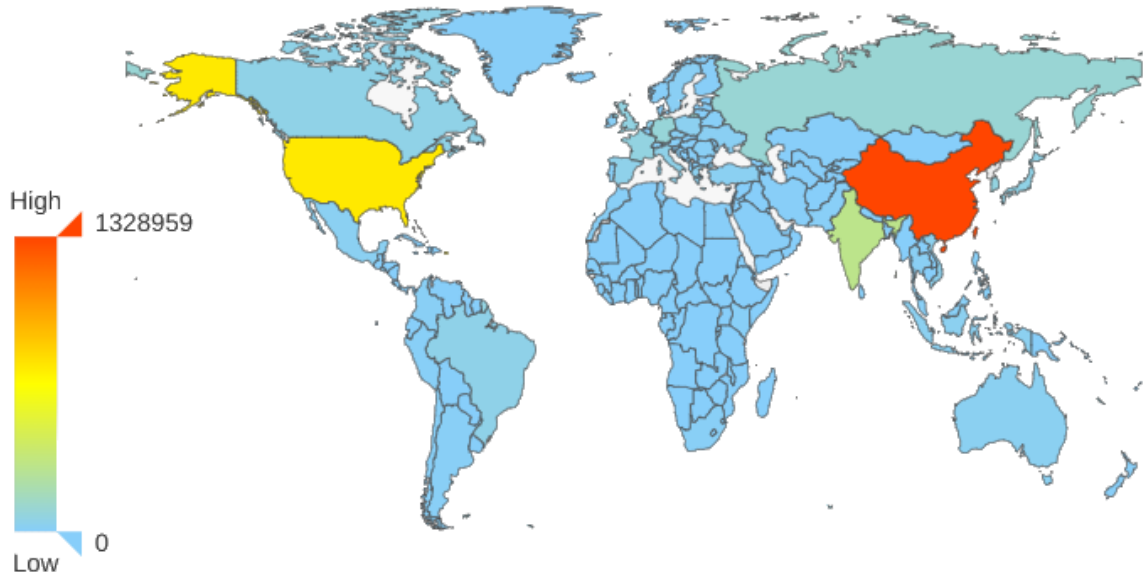
Apache Maven Projects vis-à-vis ASF at-large

■ Current activity, organisational average ■ Current activity, Web Frameworks

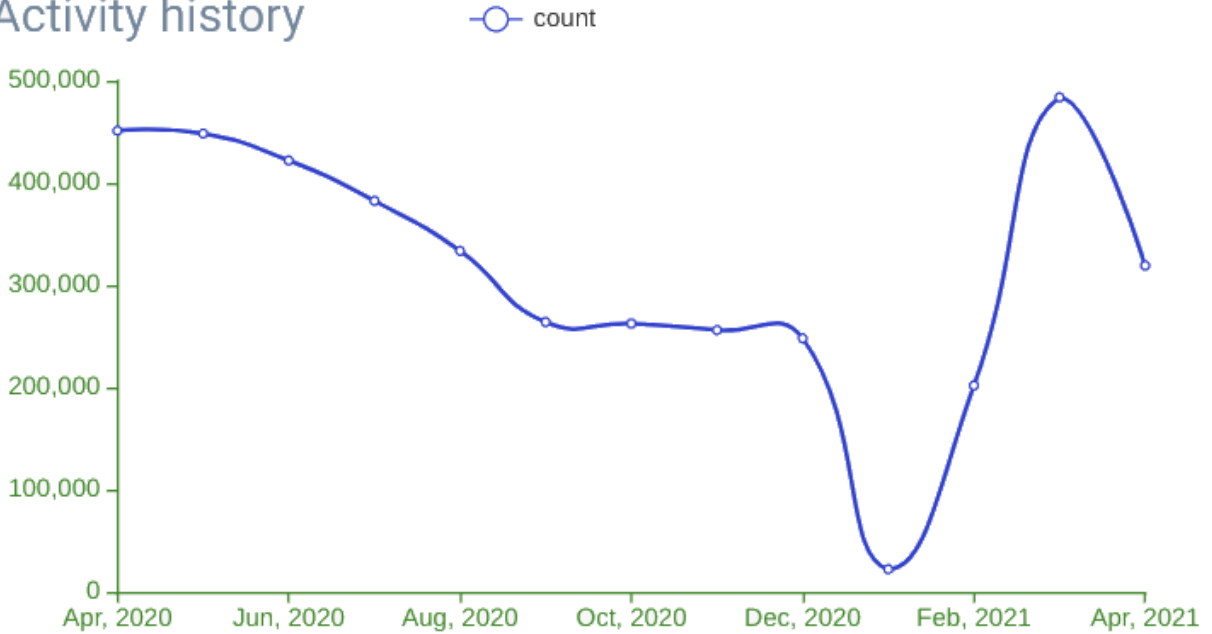


Worldwide Activity

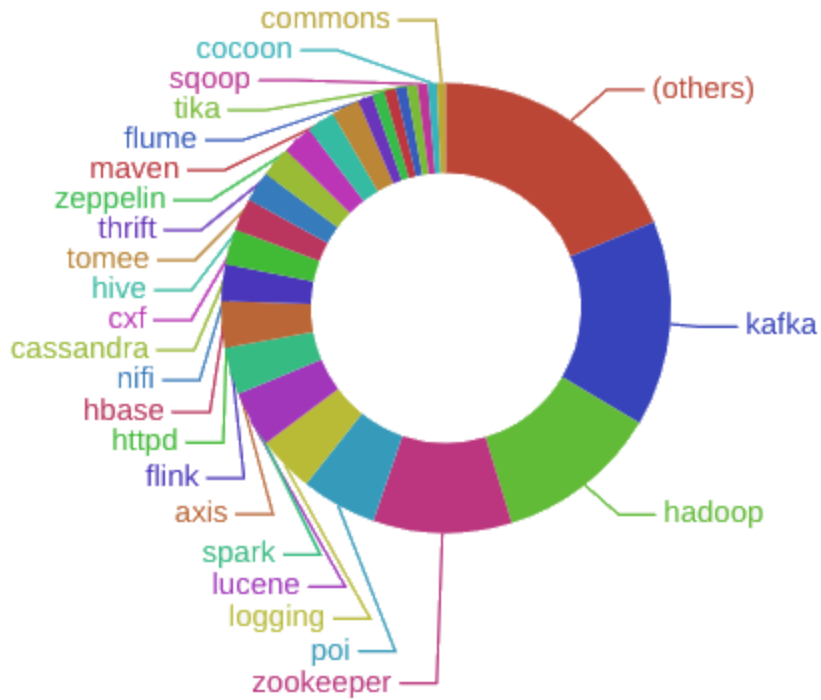
Representing 4,095,908 visits from 228 countries



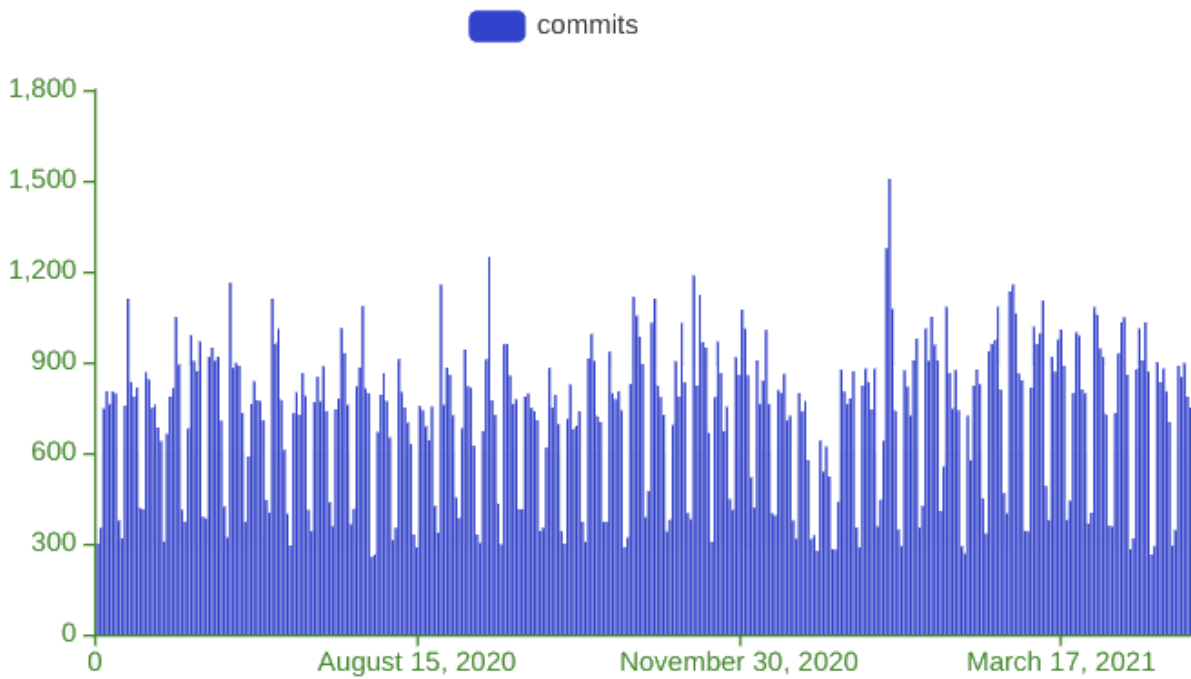
Activity history



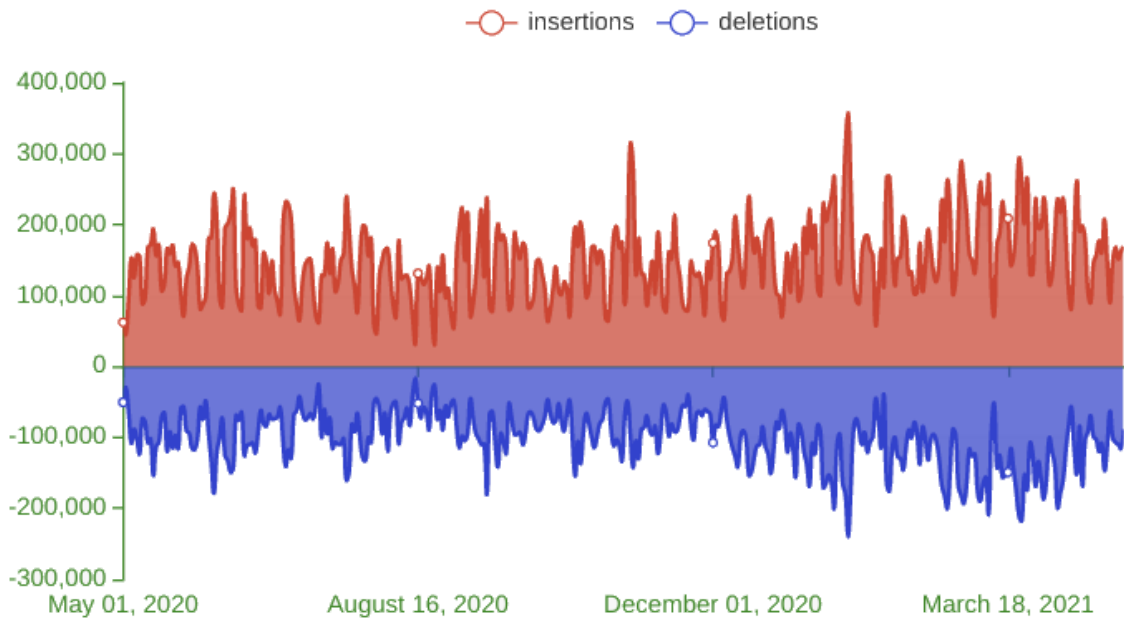
Most Active Sources Accessed



Commit History

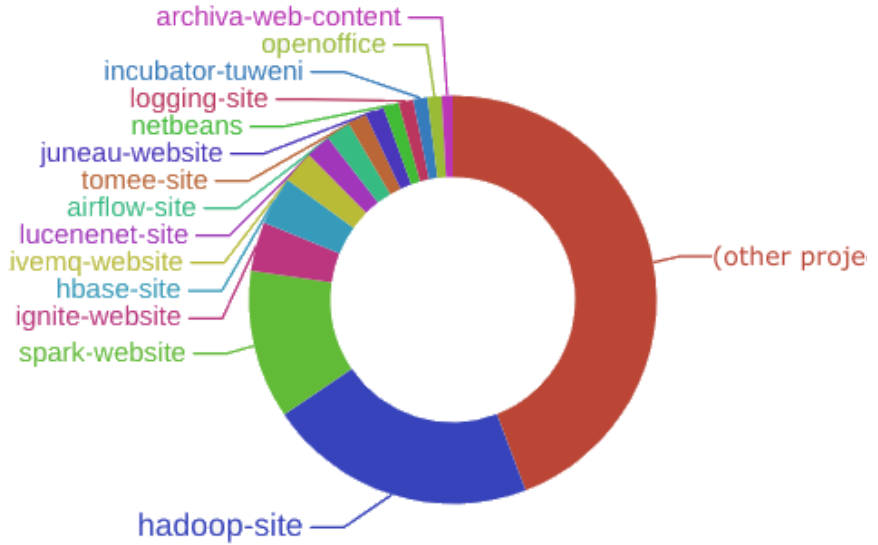


Lines Changed



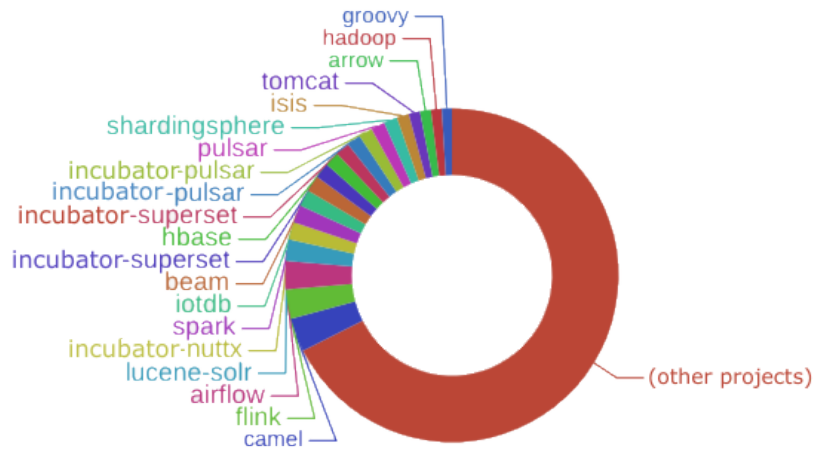
Top Repos by Size (SLoC)

other projects	309388228
hadoop-site	149346920
spark-website	82432488
ignite-website	27274559
hbase-site	26801192
activemq-website	17877988
lucenenet-site	14049745
airflow-site	13735392
tomee-site	10513262
juneau-website	10396946
netbeans	8603630
logging-site	8272989
Incubator-tuweni	7859985
openoffice	7825776
archiva-web-content	6106231



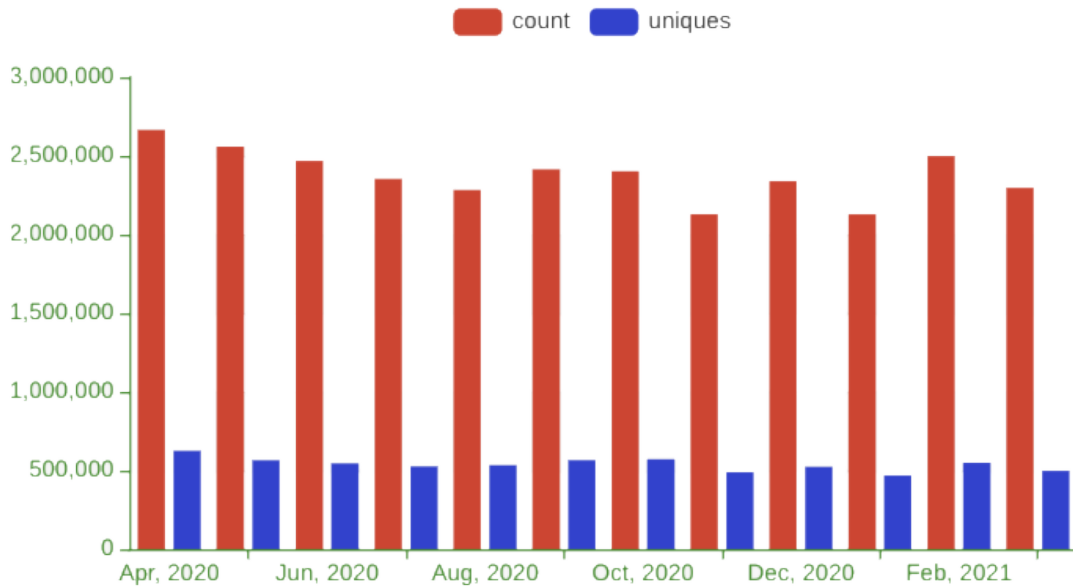
Top Repos by Commits

other projects	176549
camel	8488
flink	7407
airflow	7179
lucene-solr	5396
incubator-nuttx	4466
spark	4412
iotdb	4240
beam	4081
incub-superset	3875
hbase	3715
incub-superset	3610
incubator-pulsar	3500
incubator-pulsar	3500
pulsar	3491
shardingsphere	3412
isis	3090
tomcat	2860
arrow	2779
hadoop	2728
groovy	2545

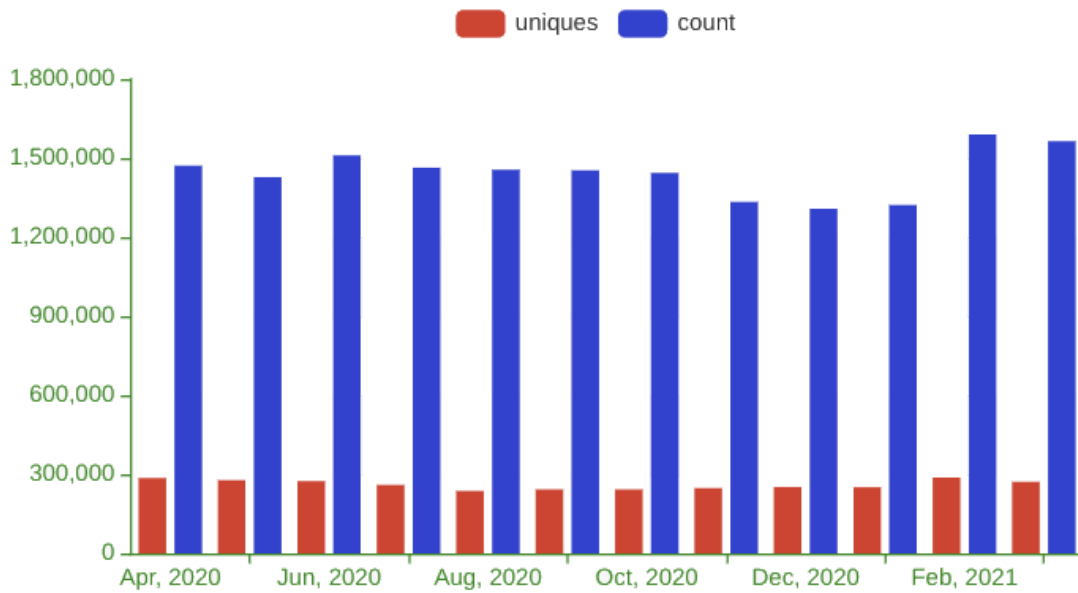


GitHub Traffic

Repository Page Views

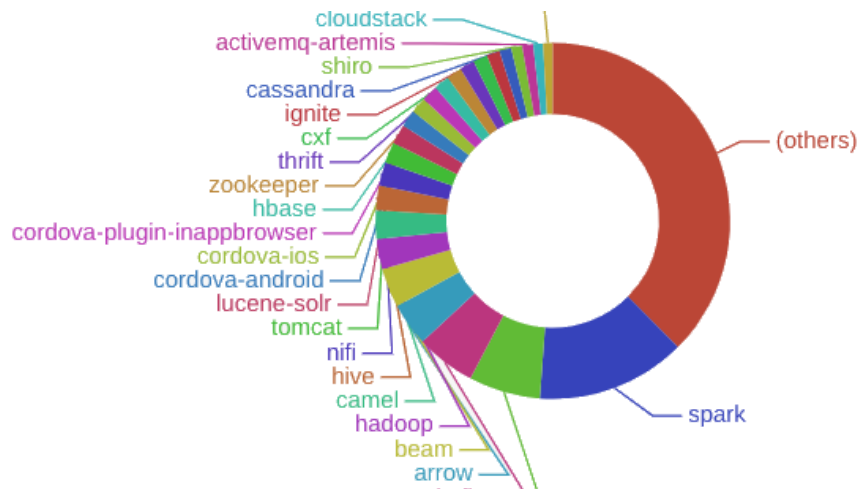


Repository Clones



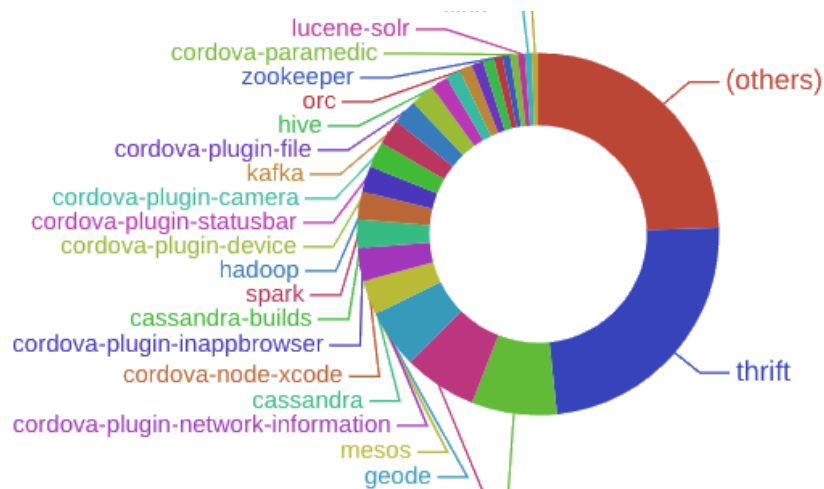
Most Active Sources - Visits

others	10806890
spark	3928065
flink	1878604
kafka	1570104
arrow	1130327
beam	1024981
hadoop	782059
camel	743485
hive	652560
nifi	612910
tomcat	536288
lucene-solr	520806
cordova-android	440896
cordova-ios	427044
cordova-plugin-inappbrowser	422102
hbase	408822
zookeeper	400349
thrift	383713
cxfr	378785
ignite	343793
cassandra	310928
shiro	288286
activemq-artemis	288279
cloudstack	257832
cordova-plugin-camera	254523



Most Active Sources - Clones

(others)	4259989
thrift	4170914
arrow	1329264
beam	1143832
geode	912803
mesos	539545
cordova-plugin...	510269
cassandra	445703
cordova-node...	429572
cordova-plugin...	404861
cassandra-builds	402272
spark	397171
hadoop	387099
Cordova-plugin...	372746
cordova-plugin...	269150
cordova-plugin...	228380
kafka	200927
cordova-plugin...	179756
hive	177677
orc	130511
zookeeper	119187
cordova-para...	117984
lucene-solr	110567
flink	105239
cordova-plugin...	99377



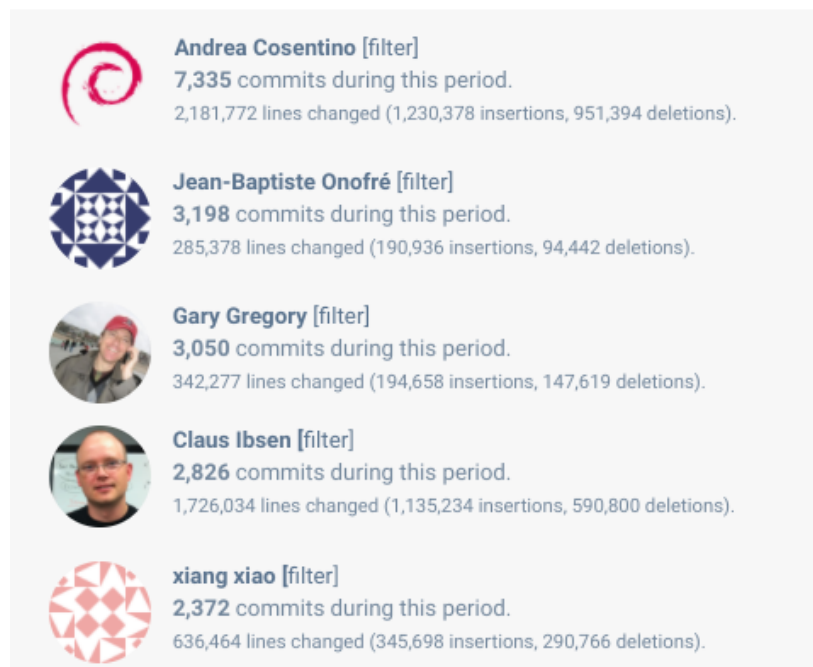
Contributions

Code for all Apache projects is written by more than 8,200 volunteer individuals and employees of corporations across six continents and contributed to the ASF at no cost. During FY2021, 3,058 Committers changed 134,517,884 lines of code over 258,860 commits.

All individuals who are granted write access to the Apache repositories must submit an Individual Contributor License Agreement (ICLA). Corporations that have assigned employees to work on Apache projects as part of an employment agreement may sign a Corporate CLA (CCLA) for contributing intellectual property via the corporation. Individuals or corporations donating a body of existing software or documentation to one of the Apache projects need to execute a formal Software Grant Agreement (SGA) with the ASF. During FY2021, the ASF Secretary processed:

- 672 ICLAs
- 23 CCLAs
- 32 Software Grants

Top 5 Committers



Mailing Lists

"If it didn't happen on-list, it didn't happen..."

The transparency-forward Apache Group set the precedent of collaborating entirely on email lists.

Today, the ASF's day-to-day operations, Apache project development, and community engagement continues on ~1,450 public and ~700 private mailing lists.

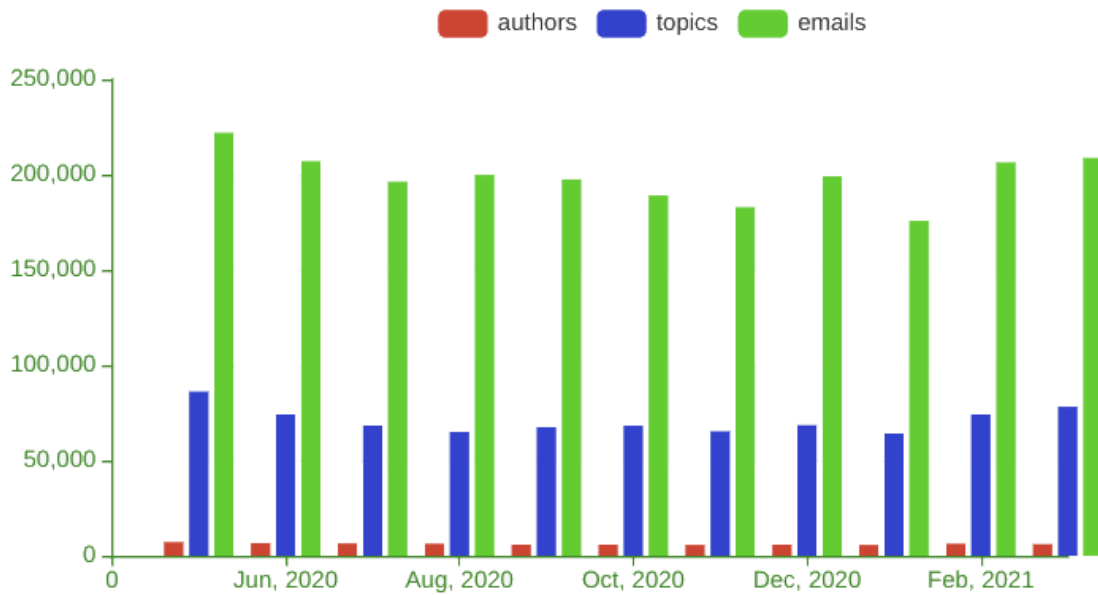
Millions of messages are archived on Apache publicly-accessible mailing lists.

During FY2021, 17,758 authors sent 2,184,671 emails on 780,274 topics.

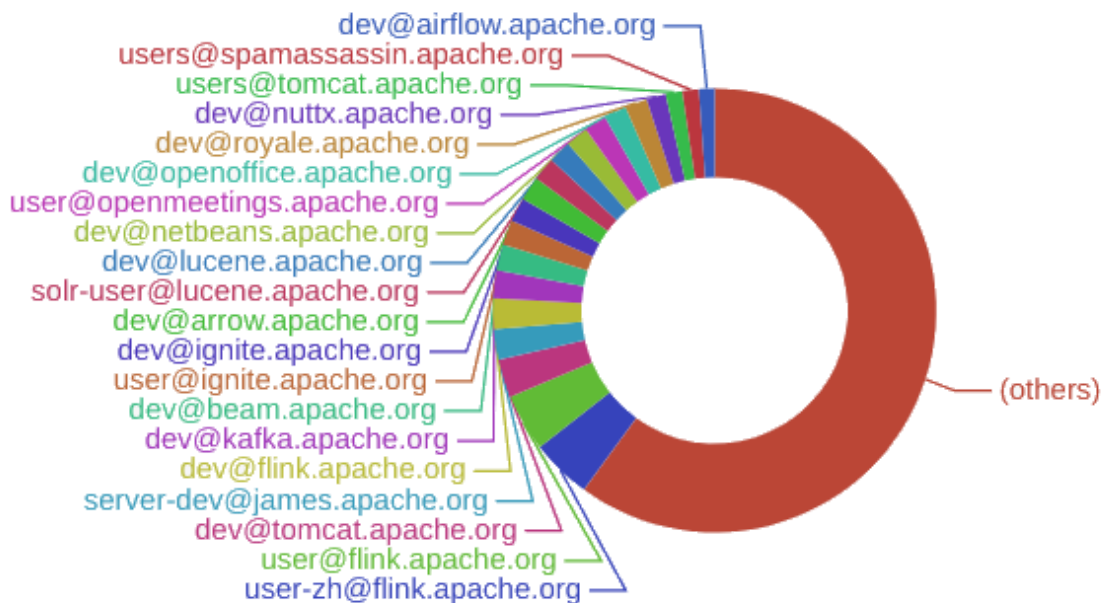
Top 10 Senders

- Andrea Cosentino (11,832 emails)
- Gary Gregory (5,228 emails)
- Jean-Baptiste Onofré (4,586 emails)
- Mark Thomas (4,332 emails)
- Claus Ibsen (4,179 emails)
- Jarek Potiuk (4,166 emails)
- Kaxil Naik (3,413 emails)
- Jim Jagielski (2,712 emails)
- Andi Huber (2,570 emails)
- Mark Miller (2,520 emails)

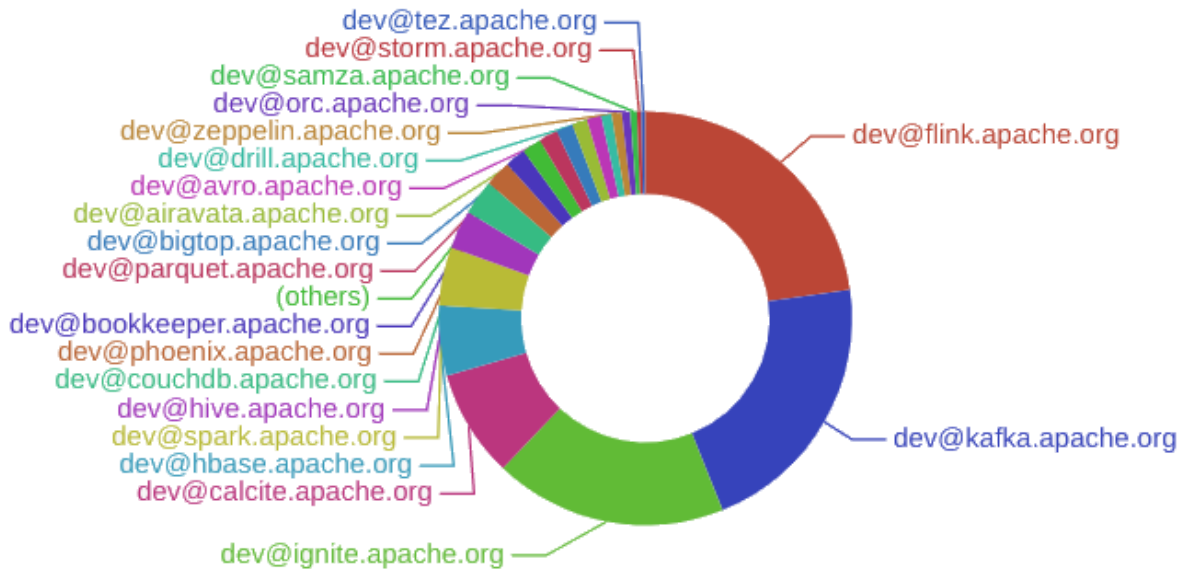
Mail History



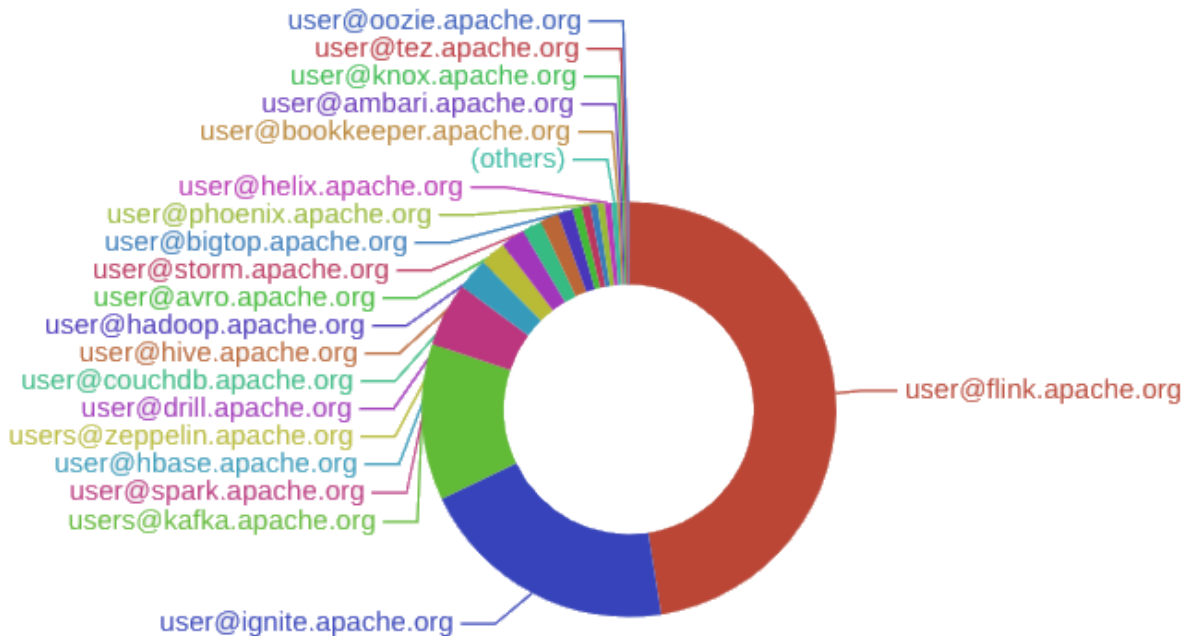
Top 20 ASF Lists (user + dev)



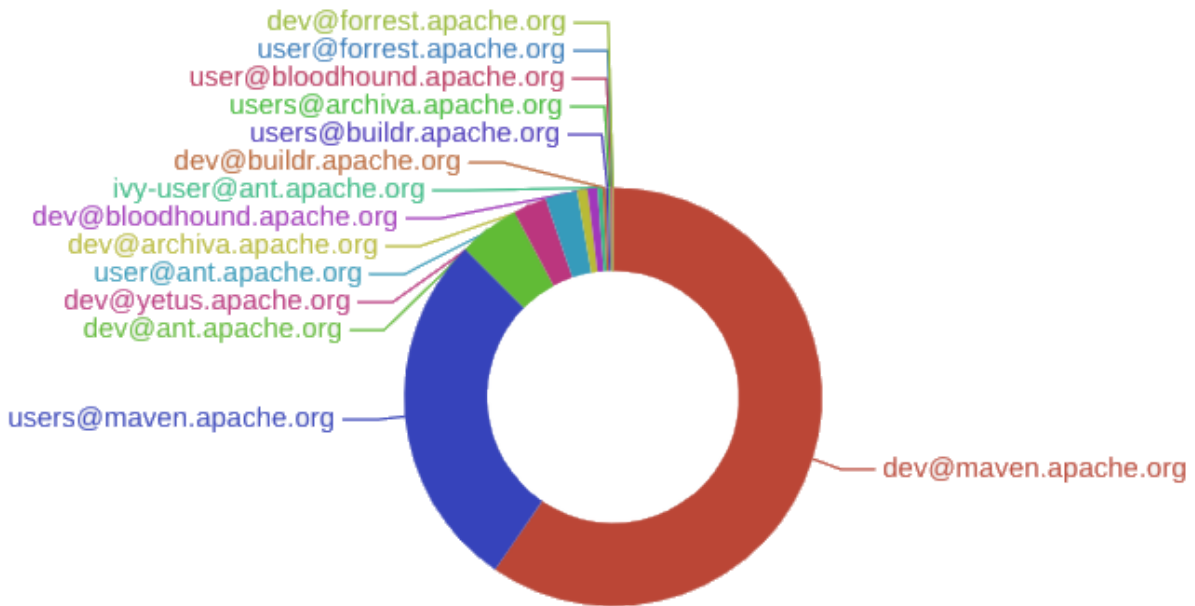
Top 20 Big Data Lists (dev)



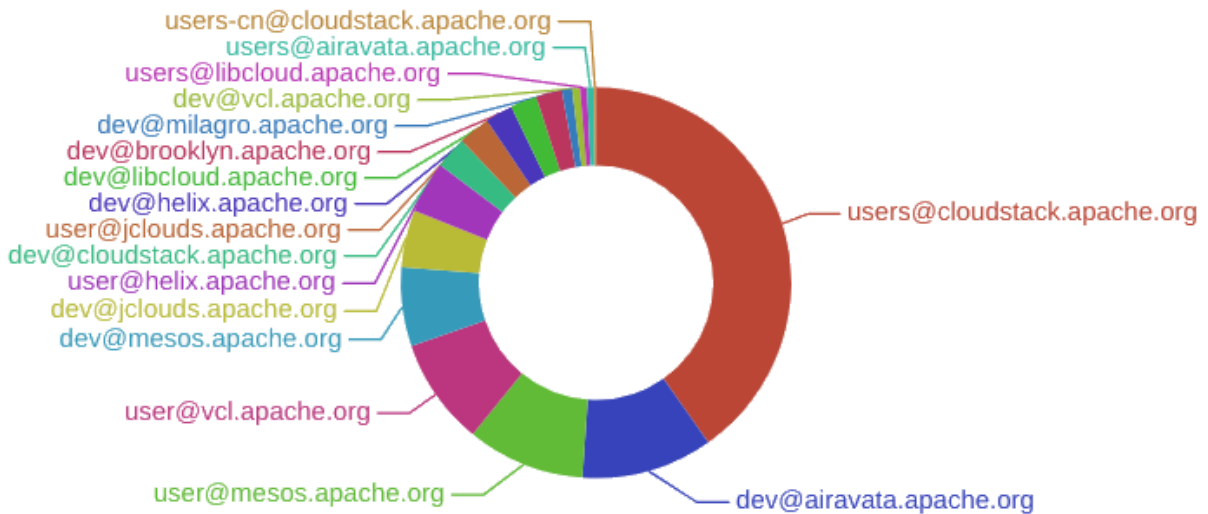
Top 20 Big Data Lists (user)



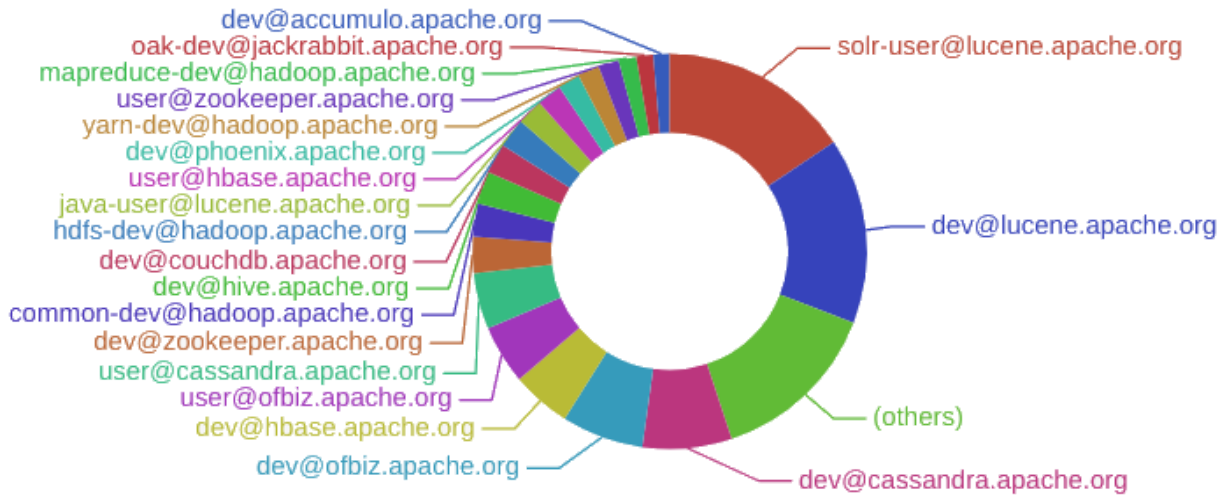
Top 20 Build Management Lists (user + dev)



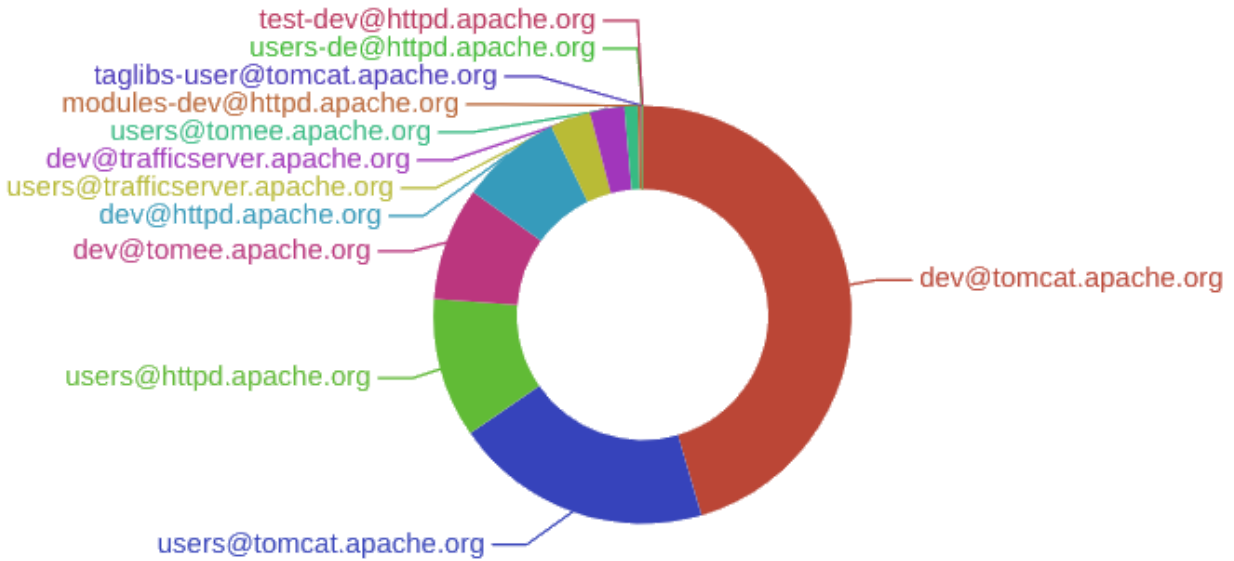
Top 20 Cloud Computing Lists (user + dev)



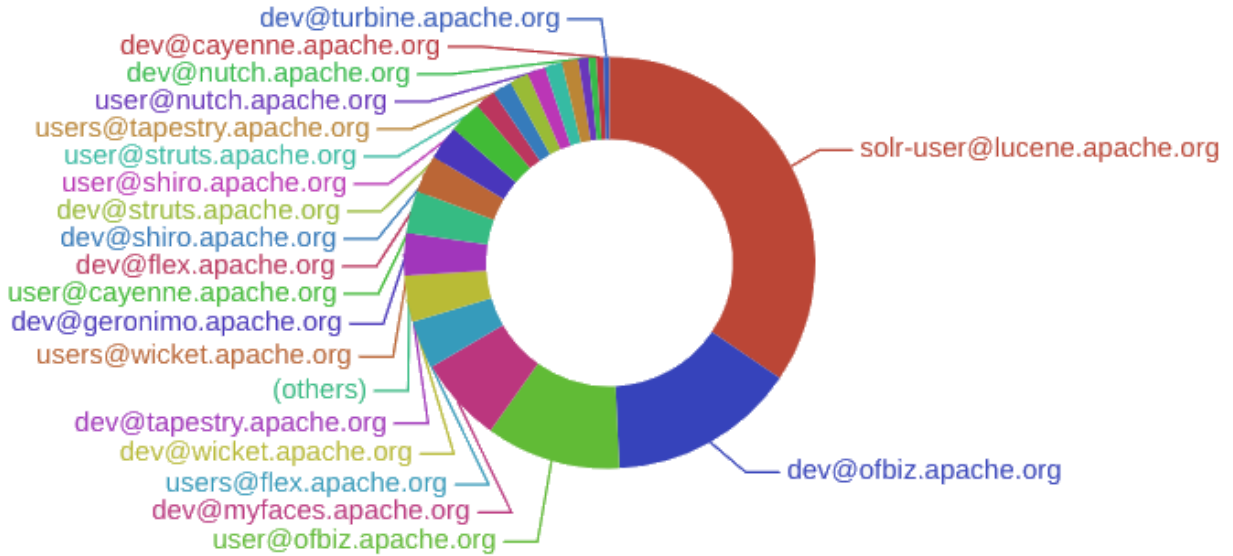
Top 20 Database Lists (user + dev)



Top 20 HTTP Server Lists (user + dev)



Top 20 Web Framework Lists (user + dev)



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Stefan Seelmann
Stefan Sperling
Stefano Mazzocchi
Stephen Colebourne
Sterling Hughes
Stig Bakken
Susan Wu
Ted Husted
Theo Van Dinter
Thies Arntzen
Thomas Neidhart
Tom Barber
Tony Finch
Trustin Lee
Vincent Hardy
Vincent Massol
William Barker
William Glass-Husain
Yoav Shapira

Memorial

We celebrate our departed Members, rejoice in their contributions to our community, and honor them here to keep their memory alive.

Russel Winder	23 January 2021
Henk Penning	29 May 2019
Greg Reddin	30 September 2016
Adrian Crum	1 January 2016
Nóirín Plunkett	29 July 2015
Ian Lynch	24 May 2015
Bruce Atherton	5 September 2013
Dion Gillard	25 September 2008
Maurice Marrink	1 August 2008
Nicolas Chalumeau	4 October 2005
Martin Pöschl	29 January 2004



Contact

For Media/Analyst queries, contact press@apache.org

For Sponsorship/Fundraising queries, contact fundraising@apache.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>
- Receive the ASF's news and announcements by subscribing to announce(at)apache(dot)org at
<http://apache.org/foundation/maillinglists.html#foundation-announce>

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>

ApacheCon

- ApacheCon <https://www.apachecon.com/>
- ApacheCon news mailing list
<http://apache.org/foundation/maillinglists.html#foundation-apachecon>

Other ASF Foundation-level Lists can be found at
<http://apache.org/foundation/maillinglists.html>

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