

The Apache Way



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The Apache Software Foundation

The Apache Way is ...

- A method of developing software
- A method of running communities
- A method of governing a Foundation

Community > Code



Apache Group

- Sharing code patches for the abandoned NCSA httpd ("Scratching your own itch")
- Equals, even from the beginning - no technical lead



Roots



- Created from the beginning to be a flat management structure
- Brian Behlendorf started the httpd project, but was not the technical leader
- Today, projects have a "chair", but that's a secretary/facilitator, not a leader

httpd has grown a little ...



Today (httpd)

- 118 contributors
- About a dozen in the last 60 days
- Very few of the original contributors are still involved
- New members brought on every year, based on the quality of their contributions

Principles

- Collaborative decision making
- Flat organization - everyone has an equal voice
- Resolve conflicts by voting, and move on

Alternative governance models

- BDFL
- Technical lead who (maybe?) cycles out
- Company-driven project management

At the Foundation level ...

Mission

- Provide a means for individual volunteers to be sheltered from legal suits directed at the Foundation's project
- Protect the 'Apache' brand, as applied to its software products, from being abused by other organizations
- Provide legal and technical infrastructure for open source software development and to perform appropriate oversight of such software

Vision

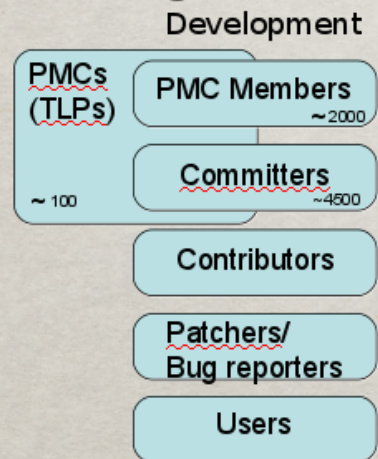
The Apache Software Foundation provides support for the Apache community of open-source software projects. The Apache projects are characterized by a collaborative, **consensus based development process**, an open and pragmatic software license, and a desire to create **high quality software that leads the way in its field**. We consider ourselves not simply a group of projects sharing a server, but rather a community of developers and users.

ASF: Legal Structure



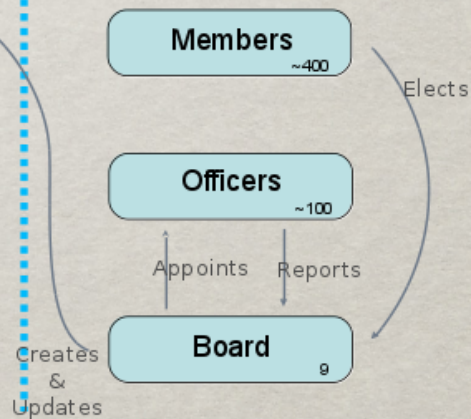
- Member-based corporation - individuals, not companies, can be members
- Members nominate and elect new members
- Members elect a board - 9 seats
- Annual members meetings via IRC. Board meets monthly.
- Each PMC has a Chair - eyes and ears of the board (oversight only)

Technical Oversight



Organizational Oversight

Administrative



From the project's perspective

The foundation is

- Service provider
- Mentor

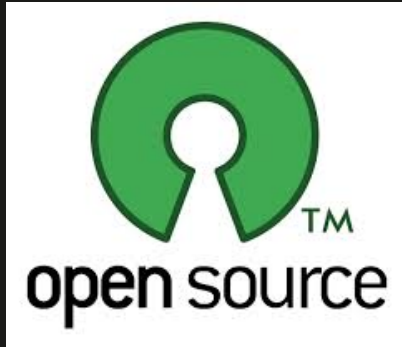
Projects

- Responsible for their own code, community and direction
- Board provides oversight, but has no say on what code gets written, what direction projects take, what new projects we should start etc
- Foundation provides support support (eg infra, branding, press) so that projects can focus just on their code + community

If it didn't happen on the mailing list

...

- All decisions must be done in the open
- Private discussions happen - bring it back to the list!
- Provide time for feedback from those that weren't there

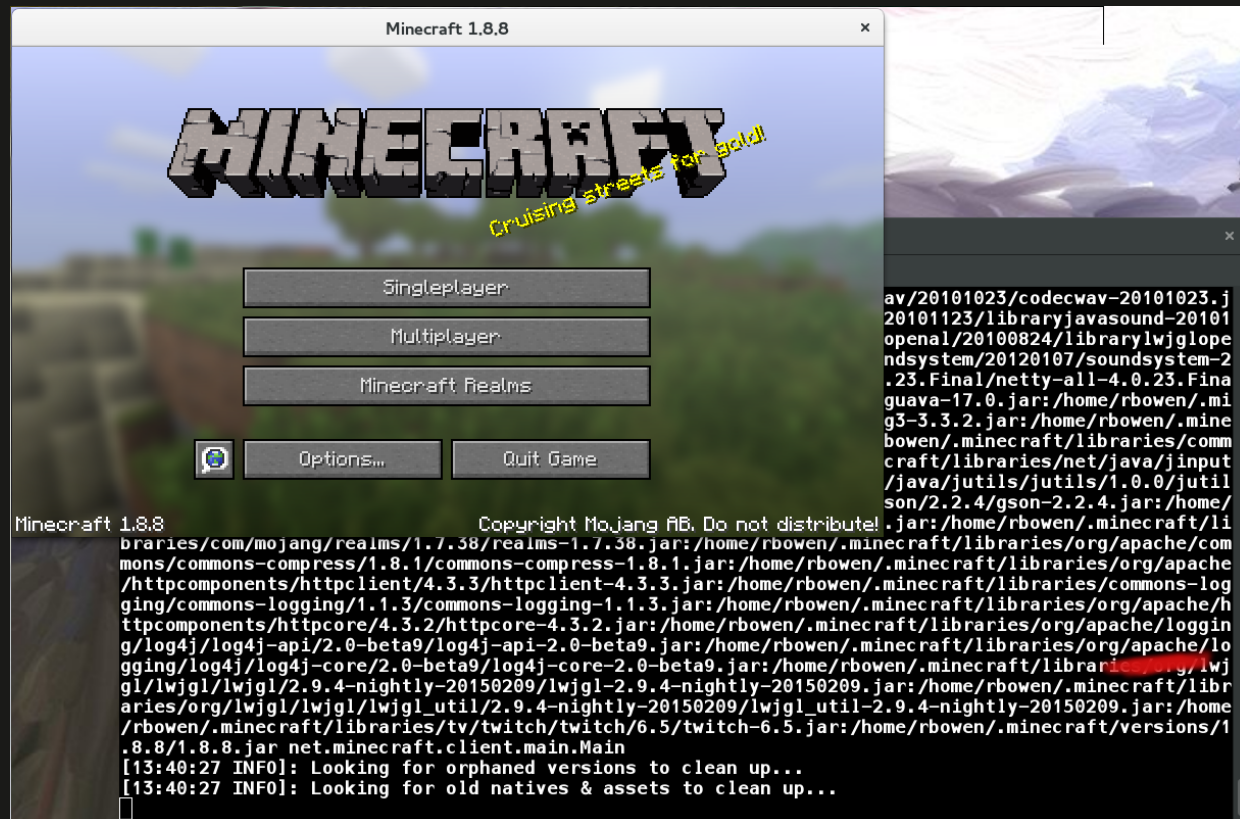


Why Open source?

- Avoid vendor lock-in
- Control your destiny
- Better security record (more eyes)
- Frequent releases
- Direct user input

Apache License

- A liberal open source software license - BSD-like
- Business friendly
- Requires attribution
- Includes Patent Grant
- Easily reused by other projects & organizations



The Apache Way - Why the ASF Works

- Individual Merit
- Transparency
- Community

The Results

- Vendor Neutrality
- Diversity
- Trusted
- Safe

Best ideas win

- Merit is based on what you do, not who you are
- Merit never expires, but you have to stay active
- Those with merit, get more responsibility
- Provides incentive to Do More
- The best ideas win

Merit

- Any constructive contribution earns merit
- Not just code
 - Promotion (Social media, events, etc)
 - Bug reports and triage
 - Testing
 - Documentation
 - Design (product or website, for example)
 - User support
 - Etc.

Community > Code

- Since we are all volunteers, people's time and interests change
- A healthy community is “warm and inviting” and encourages a continued influx of developers as others leave
- Poisonous people/communities turn people off, and the project will die
- End result - better code, long-term code

Collaborative Development

- Code is developed by the community
- Voting ensures at least 3 active developers
- Time requirement on votes ensures representation across many timezones
- Development done online and on-list - If it didn't happen on-list, it didn't happen

Myths

There are many myths that surround the ASF ...

- Too many rules
- Tied to outdated technology
- The Foundation controls everything about your project

Lots Of Rules

- We have few actual rules.
- We have lots of documentation about what we think works, but the board (the governing body of the ASF) doesn't like to interfere
- The board has interfered only 2 or 3 times in the history of the Foundation.



Mailing Lists

- Every project has (at least)
 - dev@ - primary list
 - users@ - user-to-user support
 - commits@
- Archived - <http://mail-archives.apache.org/>
- Asynchronous
- Accommodate all personalities

What do we "control"?

- We protect usage of our marks
- We ensure that projects operate in vendor-neutral ways
- We protect the *provenance* of our code

Non-coding teams

- Infrastructure (not non-coding actually)
- Public relations/Press
- Travel Assistance
- Legal
- Trademarks
- Security
- Fundraising
- Events/Community

(Nearly) All Volunteer

- If you want something done, volunteer and do it
- A few paid contractors (The boring stuff)
 - Press
 - Infrastructure
 - Administration
- Although many developers are paid by companies to work on Apache code, the ASF never pays for code development

Incubator



- Entry point for all new projects
- Indoctrinates the project into the Apache Way
 - Educational: Do they know how we do things?
- Ensures and tracks IP
 - Legal: Can we release the code under our license?
- Community: Is the project diverse and sustainable?

Podlings

Our Current Podlings:

Airflow	Amaterasu	Annotator	AriaTosca	BatchEE	Daffodil
DataFu	Edgent	FreeMarker	Gearpump	Gossip	Griffin
Guacamole	Goblin	HAWQ	Heron	Hivemall	HTrace
Impala	iota	Joshua	Juneau	Livy	Milagro
Mnemonic	MXNet	Myriad	NetBeans	ODF Toolkit	Omid
OpenWhisk	PageSpeed	Pony Mail	PredictionIO	Pulsar	Quickstep
Ratis	Rya	S2Graph	SAMOA	SensSoft	SINGA
Slider	Spot	Superset	Tamaya	Taverna	Tephra
Toree	Traffic Control	Trafodion	Unomi	Wave	Weex

Ways to Contribute

- Documentation, Tutorials and Examples
- Helping others with queries and questions
- Issue / bug tracker triage
- Testing new fixes, helping reproduce problems
- Bug Fixes and New Features
- Writing add-ons and extensions
- Mentoring, volunteering for the Foundation
- Sponsorship

Mentorship - Multiply your impact



How organizations can contribute

- You can allow your employees to participate
- You can sponsor the foundation financially (See me afterwards!)
- You can donate your useful code to the foundation, so the whole world can benefit

Speaking of Sponsors ...



Microsoft

LeaseWeb



Yahoo

Cloudera



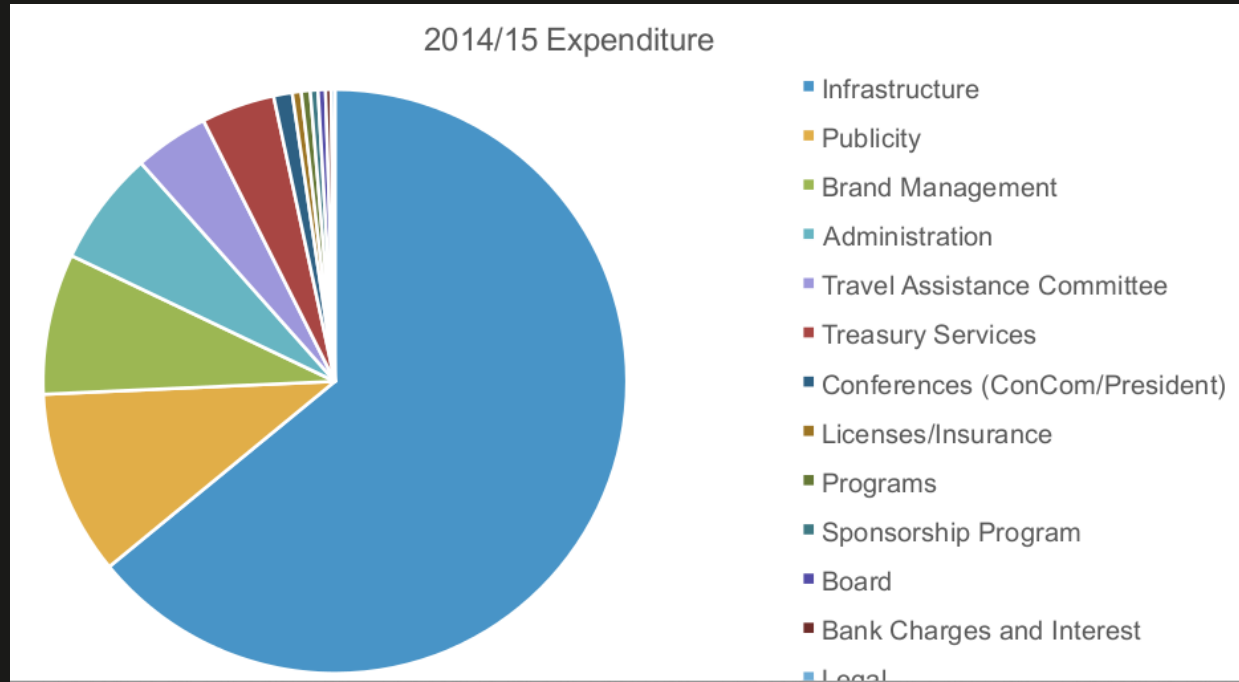
Pivotal

Facebook



Google

Where does it go? (2015)



Why do companies sponsor?

- To "give back" to the community
- Because they understand that it costs money to produce Free Software, and want to ensure the sustainability of the projects they rely on.
- Because they understand the tragedy of the commons
- For publicity and search engine karma (Yes, really)

Questions?

- <http://apache.org/>
- <http://blogs.apache.org/>
- <http://feathercast.apache.org/>
- Twitter - @TheASF
- rbowen@apache.org

A collaborative slidedeck with contributions from Nick Burch, Ross Gardler, Lars Eilebrecht, Justin Erenkrantz, Isabel Drost-Fromm, Sally Khudairi and many others