An Overview of
The Apache Software Foundation

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Why should I pay attention?

- Committer to Apache HTTP Server, APR, Subversion (now incubating!), and Serf
- President, The Apache Software Foundation
- Chief Architect, Joost
- Ph.D. from UC Irvine
  - Computational REST (next-gen web arch.)
Geographic Diversity

Challenges and advantages arise from this!

http://people.apache.org/map.html
Project Diversity

- Seventy top-level projects (TLPs)
  - Java, C, C++, Perl, etc. projects...
- Over thirty projects currently in “pipeline”
  - Incubator: train new projects
  - Labs: committer sandboxes

*Apache aims to provide a pragmatic non-technical framework to its projects*
Apache’s mission

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.
Apache’s mission (redux)

- Let developers focus on what they do best: code. Foundation exists to do rest.
- “The Apache Way”
  - Open development vs. open source
  - All technical decisions about a project are made in public (mailing lists)
Founding of Apache

- Started as “Apache Group” (8 members)
- Resumed work on NCSA httpd
  - UIUC put httpd in public domain, but essentially abandoned it
  - Chose permissive licensing (more later)
- Informal corporate structure until...
Creation of Foundation

- Incorporated with 21 members in 1999
  - 274 members and 52 emeritus today
- Provides formal corporate structure
- Membership-based organization
- IRS 501(c)3 public charity status
  - Donations by individuals tax-deductible
Organization of ASF

- Each Apache project is independent
- Grouped as ‘top-level’ PMCs (TLP)
  - Board: Social - not technical - guidance
- Some TLPs have ‘sub-projects’; discouraged
- **Karma in one PMC doesn’t grant rights in another PMC - earn karma independently!**
Board of Directors

- Elected yearly by membership

- Shane Curcuru (IBM), Doug Cutting (Cloudera), Justin Erenkrantz (Joost), Roy T. Fielding (Day), Jim Jagielski (VMWare), Geir Magnusson, Jr. (Gilt), Brian McCallister (Ning), Brett Porter (G2iX), Greg Stein (Independent)
Executive Officers and Staff

- Exec officers appointed by Board; unpaid volunteers
  - Chairman, President, Secretary, Treasurer, Executive Vice President
- PR firm to help with publicity
- 2 full-time system administrators
Hardware infrastructure

- Bulk of work done by volunteers
  - If a project wants it, they must volunteer!
- 2 paid system administrators fill “holes”
- Main data centers: OSU OSL, SURFnet (.nl)
- Off-site at UC Irvine; Build farm at Traci.net
- Will be adding Australian presence soon
Committees

- **ConCom**: responsible for events
  - ApacheCon and smaller events
- **Legal**: Deal with lawyers
  - Pro-bono: EFF, SFLC, & Larry Rosen
- **PRC**: Deal with press/outside world
Budget

- 2009-2010FY Budget (May 1 - April 30)
  - Projected income: $540,000
    - Rely upon public and corporate sponsors
  - Projected expenses: $404,000
    - Biggest expense is infrastructure: $150k

http://www.apache.org/foundation/records/
ASF Sponsorship Program

- **Platinum ($100,000 per year)**
  - Yahoo!, Microsoft, Google

- **Gold ($40k/yr): HP**

- **Silver ($20k/yr): Covalent, Progress (IONA)**

- **Bronze ($5k/yr): AirPlus International, BlueNog, Intuit, Joost, Matt Mullenweg, Two Sigma Investments**
Participation in Java Standards

- Many of our projects implement JSRs
- Our goal is to put the “Community” in JCP
- Member, Exec. Committee for J2SE/J2EE
- Harmony and JCK; “field of use”
- Voted JCP Program Member of the Year: 2007, 2008, 2009
Comparison with Eclipse

○ Eclipse: 501(c)6 / trade association
  ○ Corporate members give money and staff
  ○ Pro-active legal review
○ Apache: member-centric organization
  ○ Individuals (not companies) invited to join

In Apache, merit follows individuals!
Contributions

- Apache wants voluntary contributions
  - Not copyleft!
- Many forms of contributions
  - evangelism, bug reports, testing, documentation, code, design feedback
- Contributing is easier than you think!
Where decisions happen

- Can’t kibitz in the morning over coffee
- First time meet face-to-face is at events
- Mailing lists are the pulse of the project
  - IRC, AIM, Jabber, etc. not for decisions
- Roy’s mantra: “If it doesn't happen on-list, it didn’t happen.”
Finding that list!

- Should be listed on every project’s site
- dev@ - dev-to-dev discussions (primary list)
- commits@ - automated source changes
- users@ - user-to-user help (optional)
- private@ - discussion of people (committers)
- http://mail-archives.apache.org/mod_mbox/
Find a bug? File an issue!

- Be descriptive: provide reproduction recipe (step-by-step instructions of what you did!); provide version info (latest version?), etc.
  - Either Bugzilla or JIRA are used
Fetching that latest version

- Subversion is the version control system
    - (DNS load-balanced with US & European server)

- We are experimenting with git-svn
  - [http://wiki.apache.org/general/GitAtApache](http://wiki.apache.org/general/GitAtApache)
Quick guide to Subversion

% svn co http://svn.apache.org/repos/asf/apr/apr/trunk/ apr
% ...make changes...
% svn diff
% ...file patch in issue tracker, email that patch to list, etc...

O’Reilly SVN book (free):
http://svnbook.red-bean.com/
Creating patches for review

- Send to right developer mailing list
- Unified diff (`svn diff` outputs this by default)
- Subject: `[PATCH] <one-line description>`
- Include log message: describe “why”
- Comments in code: describe “how”
Scoping contributions

- Do **not** do “powerplant” contributions
  - Break patches up into small chunks
  - Large changes are hard to review
- Before starting large changes, email plan to developer list - explain how and why
- Try to get feedback early and often
Expectations around feedback

- You may have the greatest and most obvious change in the world, but you get dead silence.

- Not your fault - may be a busy time or ‘right’ person may be on vacation.

- If you don’t get a reply in a week, do try again. Keep trying, but don’t be rude.
Voting

- +1? -1? +0? -0?
- “Binding” vote given to committers
  - Everyone should feel free to vote
- Cast your vote on-list
- ...what about vetos?
The dreaded -1 (veto)

- Power given to all committers to absolutely stop an action
- Code can be vetoed - releases can not
- Some projects have an ‘override’
- Vetos should only be cast as a measure of last resort; use judiciously!!
Rule of 3 and 72

- 3 voters is minimum acceptable quorum
  - Ensures diversity and true community
- 72 hours minimum time frame for votes
  - Accommodate long weekends too
- Generally err on side of caution
Apache commit policies

- **RTC - Review than Commit**
  - 3 +1s (*more + than -*); *no vetos*

- **CTR - Commit than Review**
  - *Lazy consensus - assumed okay*

- *Different policies per PMC or codebases*
  - *Stable: RTC, Trunk: CTR*
Most people are nice; there are dingbats, 
or may just be someone having a bad day

Trolls exist...don’t feed them.

Don’t become a poisonous person.

“How Open Source Projects Survive Poisonous People (And You Can Too)” by Ben Collins-Sussman and Brian Fitzpatrick

http://video.google.com/videoplay?docid=-4216011961522818645
Legal framework

- ASF philosophy is that code can be used commercially without restrictions
  - Just don’t call it Apache Foo!
- Apache License, version 2.0
  - Grants copyright and patent licenses
- Many non-ASF projects use ALv2 now
What am I signing?

- ** Contributor License Agreement (CLA)**
  - Gives ASF ‘license’ - not ownership
  - **Required before getting SVN account**
  - **Fax or email to secretary@apache.org**
- **Corporate CLA form - when needed?**
Incorporating third-party code

- ALv2 is GPLv3-compatible - can be used by GPL projects but no GPL within ASF

  - List of licenses permitted / disallowed
- Questions to legal-discuss@apache.org
Starting new Apache projects

- Incubator - “podlings” can be nominated and eventually “graduate” to be a PMC
  - Needs foundation member to mentor
  - Usually legal and/or community issues
- Labs - once you are a committer, you can have a sandbox (shared mailing list, no non-committers, no releases)
Beyond a committer...

- Once you are committer, you can then become a PMC member, foundation member, Director...even President!

- You can nominate other foundation (or PMC) members; can serve as mentor for Incubating projects; vote for Board.

- Maybe you too can then give this talk!
ApacheCon US 2009

- Oakland Convention Center
- November 2-6, 2009
- Trainings, talks, meetups
- Free BarCampApache and birthday party!
- [http://www.apachecon.com/](http://www.apachecon.com/)

ApacheCon NA ’10; Atlanta, GA
Thanks! Questions?
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Other Recommended Resources

- **Producing OSS**
  by Karl Fogel - http://producingoss.com/

- **Getting Started in Open Source: An Overview for Newbies**
  by Leslie Hawthorn and Cat Allman (at SCALE 7x and OSCON 2009)
  
  - http://scale7x.socallinuxexpo.org/sites/scale7x.socallinuxexpo.org/files/SCALE_Final_allman_lhawthorn.pdf