Putting it all together

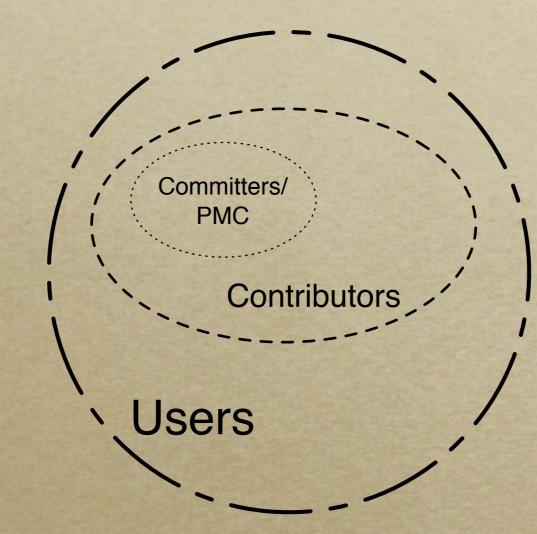
Stand B. Ash

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Why should I pay attention?

Committer to Apache HTTP Server, APR, Subversion, and Serf
President, The Apache Software Foundation
Completing Ph.D. at UC Irvine
Senior Software Engineer, Joost

Sphere of community



How do you 'jump' between 'spheres'?

Before we begin, here's my story...

Most of us - except for Roy (more on him in a bit) - started out as n00bs. Really...







http://www.flickr.com/photos/x180/2704965763/ (James Duncan Davidson)

http://www.flickr.com/photos/bluxte/2103773754/ (Sylvain Wallez) 4

Before open-source...

o Had various paying programming jobs (WinNT sysadmin, CORBA, EJBs, & VB!) o Joined eBuilt (now dead!) in 2000 while doing my undergrad at UC Irvine o After my six months or so on my initial project, I got tasked to a new project and asked to write an Apache module. Huh?

...open sores?

December 2000: First time using open source
Spent two or three weeks working on custom Apache module; got it barely working...

 Roy Fielding (also at eBuilt) rewrote it as a protocol handler in a few hours. A quarter of the size and far more elegant.

o Uh-oh...who is this guy?

Roy builds a posse...

• I've been blessed throughout my career with terrific mentors and colleagues.

- Roy wrangled me and Aaron Bannert to join httpd as part of our day jobs
- Aaron and I were able to talk to each other and ask Roy all of our stupid questions. This support was crucial.





My first words...

o February 6, 2001: First post (and patch!) o Subject: mod_example patch for Apache 2.0 o Start small: playing around with httpd and example module didn't compile. o I attempted to fix it ... and I posted a patch... o (FWIW, it never got committed...)

> http://mail-archives.apache.org/mod_mbox/httpd-dev/200102.mbox/ %3c20010205173935.A16359@ebuilt.com%3e

Chiming in...

February 13, 2001: First public reply
Subject: Working platforms - HP-UX 11.00
Jeff & Bill asked: "Do we have any HP-UX sysadmins in the audience?"

• Say what you know: I admin'd an HP-UX box at UC Irvine...so I (foolishly) weighed in.

> http://mail-archives.apache.org/mod_mbox/apr-dev/ 200102.mbox/%3c20010213093636.C20330@ebuilt.com%3e

Know who you talk to!

Gave feedback re: HP-UX
In my reply, I also said:

- "If desired, I can also dig up some time on an IBM AIX 4.3 box to test...Not sure if anyone has confirmed AIX yet."
- What I didn't know (then) is that Jeff and Bill worked for...IBM. (Doh.)



"On the Internet, nobody knows you're a dog."

Be nice to n00bs.

• Jeff replied (kindly!) and inserted a subtle hint that he worked at IBM. (Doh!)

• My reply led to a good discussion between Jeff, Greg, Tony, and Cliff.

 Treat folks kindly: In retrospect, even though I wasn't directly adding value to the thread, no one made me feel marginalized.

Translating to other projects...

 Roy told me about Subversion. They used APR. But, that was it...

 Sander forwarded a dev@apr post I did to Subversion's list in September 2001

 Didn't subscribe until December 2001, posted some patches, by end of month, I had commit access! Damn, this is getting easy!

http://svn.haxx.se/dev/archive-2001-09/0670.shtml

Commit and beyond...

o Commit to APR: May 2001 o Commit to HTTP Server: July 2001 o Member of Foundation: May 2002 o Director: May 2005 o Treasurer: June 2005 o President: June 2007

What Apache means to me...

o I've had the good fortune to work with some of the best programmers in the world on software used by millions. More importantly, they are even better friends. o Proud to see our community grow ... o I hope that this talk helps reduces the 'barrier' of entry to our community.

Contributions

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

Geographic Diversity



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

Challenges and advantages arise from this!

Organization of ASF

• Each Apache project is mostly independent o Grouped as 'top-level' PMC (TLP) o Board: Social - not technical - guidance o Some TLPs have 'sub-projects'; discouraged o Karma in one PMC doesn't grant rights in another PMC - earn karma independently!

Where decisions happen

o Can't kibitz in the morning over coffee o First time meet face-to-face is at events o Mailing lists are the pulse of the project o IRC, AIM, Jabber, etc. not for decisions o Roy's mantra: "If it doesn't happen onlist, it didn't happen."

Finding that list!

• Should be listed on every project's site o dev@ - dev-to-dev discussions (primary list) o commits@ - automated source changes o users@ - user-to-user help (optional) o private@ - discussion of people (committers) o 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.

 How to report bugs effectively: http://www.chiark.greenend.org.uk/~sgtatham/bugs.html

o http://issues.apache.org/

o Either Bugzilla or JIRA are used

Fetching that latest version

o Subversion is the version control system o http://svn.apache.org/repos/asf/ o European mirror: http://svn.eu.apache.org/repos/asf/ o ViewVC Browser: http://svn.apache.org/viewvc/ o We are experimenting with git-svn o 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 o Break patches up into small chunks o Large changes are hard to review o Before starting large changes, email plan to developer list - explain how and why o 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)

o Power given to all committers to absolutely stop an action o Code can be vetoed - releases can not o Some projects have an 'override' o 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

o RTC - Review than Commit $\circ 3 + 1s$ (more + than -); no vetos o CTR - Commit than Review o Lazy consensus - assumed okay o Different policies per PMC or codebases o Stable: RTC, Trunk: CTR

Starting new Apache projects

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

Spotting Poisonous People

"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

• Most people are nice; there are dingbats, or may just be someone having a bad day

o Trolls exist...don't feed them.

o Don't become a poisonous person.

Legal framework

• ASF philosophy is that code can be used commercially without restrictions o Just don't call it Apache Foo! o Apache License, version 2.0 o Grants copyright and patent licenses o 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

o ALv2 is GPLv3-compatible - can be used by GPL projects but no GPL within ASF o http://www.apache.org/legal/3party.html o http://www.apache.org/legal/resolved.html o List of licenses permitted / disallowed o Questions to legal-discuss@apache.org

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!

Thanks! Questions?

http://www.erenkrantz.com/apachecon/ justin@erenkrantz.com

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 (@ SCaLE 7x, will also be at OSCON 2009)
 - http://scale7x.socallinuxexpo.org/sites/scale7x.socallinuxexpo.org/files/ SCALE_Final_allman_lhawthorn.pdf