Putting it all together: The untold rules of the road

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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*

- *Ph.D. from Univ. of California, Irvine*

   - *Computational REST (next-gen web arch.)*

      - *http://www.erenkrantz.com/CREST/*

Sphere of community

Committers/
PMC

Contributors

Users
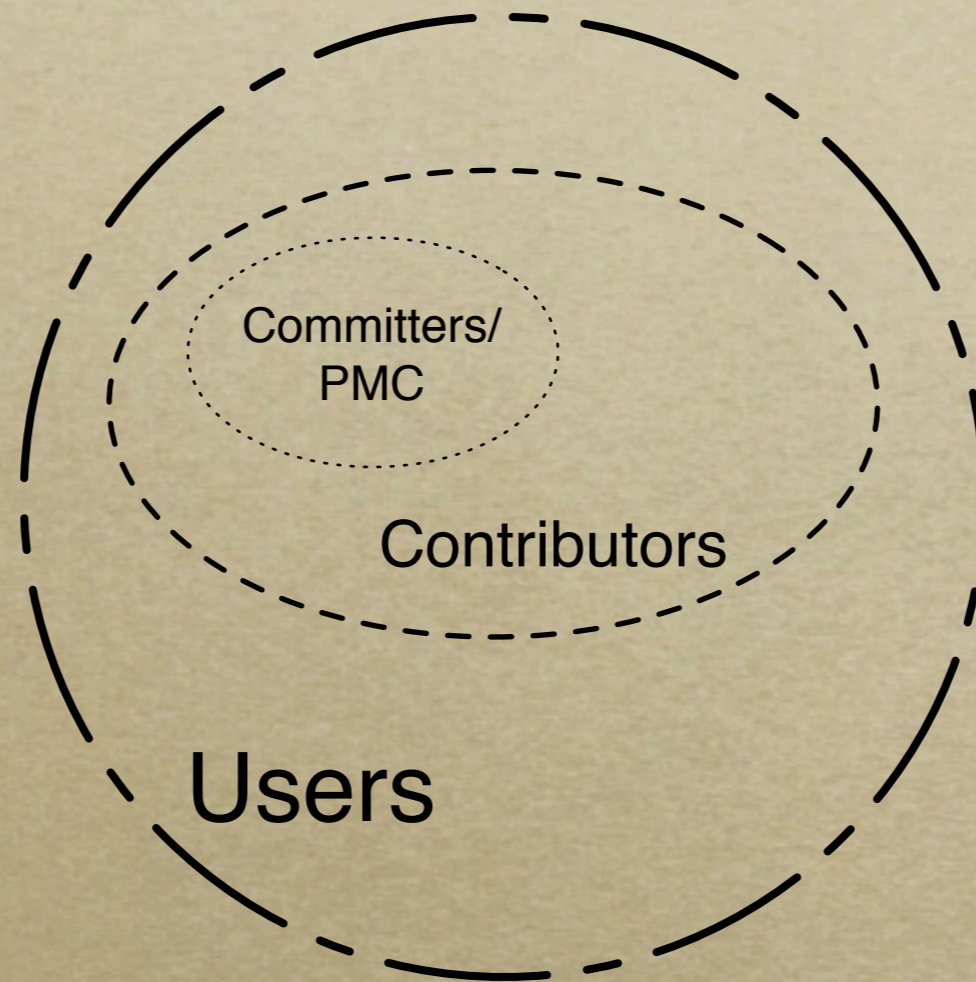
How do you 'jump' between 'spheres'?

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

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

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Before open-source...

- *Had various paying programming jobs (WinNT sysadmin, CORBA, EJBs, & VB!)*

- *Joined eBuilt (now dead!) in 2000 while doing my undergrad at UC Irvine*

- *After 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: 1st time writing 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.*

○ *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...

- *February 6, 2001: First post (and patch!)*
- *Subject: mod_example patch for Apache 2.0*
- *Start small: playing around with httpd and example module didn't compile.*
- *I attempted to fix it...and I posted a patch...*
  - *(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! Wow, this is getting easy!*

Impact on non-OSS life

- *Roy: Suggested meeting his thesis advisor at UC Irvine; entered Ph.D. program (**just finished after seven years!**)*

- *Greg: Interned at Google to work on Serf*

- *Sander, Garrett, Paul: Worked with at Joost*

- *Short-hand of working together via Apache*

What Apache means to me...

- *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.*

- *Proud to see our community grow...*

- *I hope that this talk helps reduces the 'barrier' of entry to our community.*

Geographic Diversity

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

Challenges and advantages arise from this!

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!*

Project Diversity in Apache

○ *Seventy top-level projects (TLPs)*

  ○ *Java, C, C++, Perl, etc. projects...*

○ *It's okay for projects to be in "same" space*

○ *Over thirty projects currently in "pipeline"*

Apache aims to provides a pragmatic non-technical framework to its projects

Apache's Mission

- *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)*

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.*
  - *How to report bugs effectively: http://www.chiark.greenend.org.uk/~sgtatham/bugs.html*
- *http://issues.apache.org/*
  - *Either Bugzilla or JIRA are used*

Fetching that latest version

- *Subversion is the version control system*
- *http://svn.apache.org/repos/asf/*
  - *(DNS load-balanced with US & European server)*
  - *ViewVC Browser: http://svn.apache.org/viewvc/*
- *We are experimenting with git-svn*
  - *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

- *Vote on releases, code, and ideas…*
- *+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*

No Jerks Allowed!

"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*

- *Trolls exist...don't feed them.*

- *Don't become a poisonous person.*

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*

Incorporating third-party code

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

- *http://www.apache.org/legal/3party.html*

- *http://www.apache.org/legal/resolved.html*

  - *List of licenses permitted / disallowed*

- *Questions to legal-discuss@apache.org*

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?*

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!*

Thanks! Questions?

http://www.erenkrantz.com/

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Other Recommended Resources

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

o *Getting Started in Open Source: An Overview for Newbies*
by Leslie Hawthorn and Cat Allman (at SCaLE 7x and OSCON 2009)

   o *http://scale7x.socallinuxexpo.org/sites/scale7x.socallinuxexpo.org/files/
SCALE_Final_allman_lhawthorn.pdf*