

# Putting it all together: The untold rules of the road



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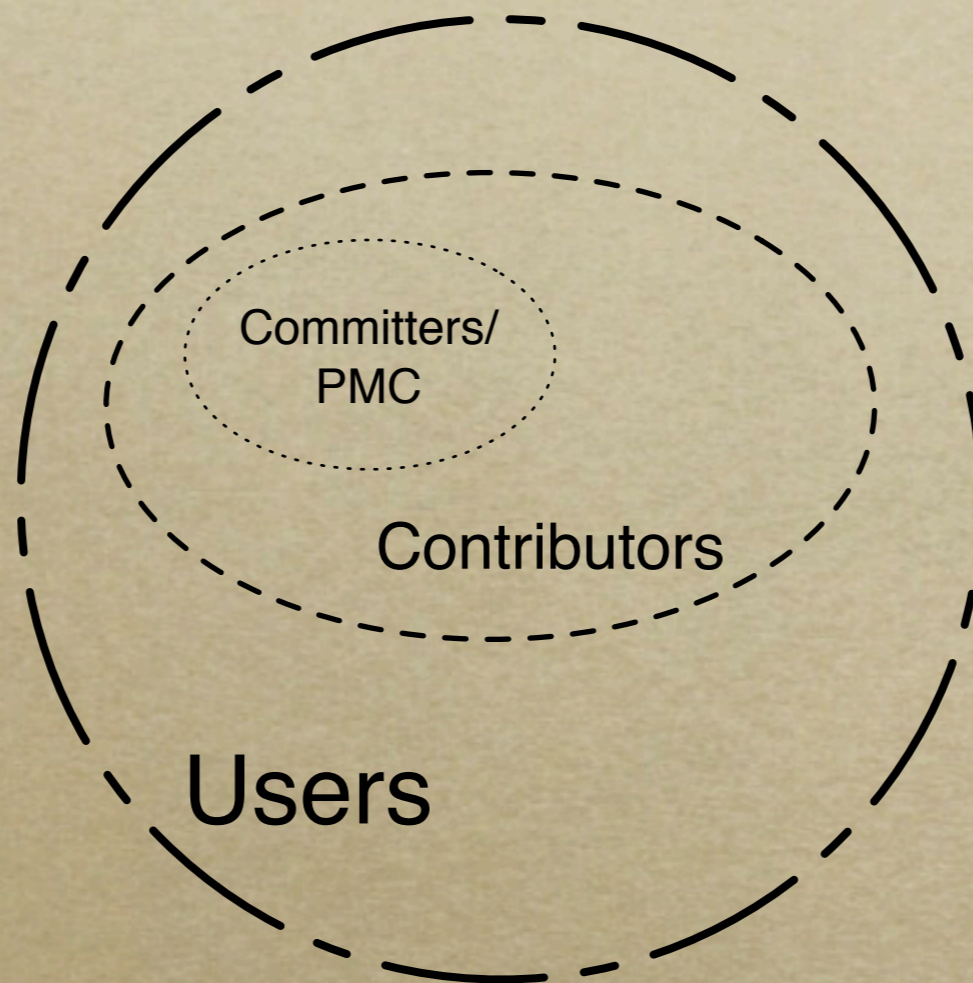
# Why should I pay attention?

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- *Committer to Apache HTTP Server, APR, Subversion, and Serf*
- *President, The Apache Software Foundation*
- *Completing Ph.D. at UC Irvine (Sept. 3rd!)*
  - *Next-generation web architectures*

# Sphere of community

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*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)

# Before open-source...

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- *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?

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

# Roy builds a posse...

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- *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...

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

# Chiming in...

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- *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](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.)*



# Be nice to n00bs.

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- *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...

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- *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!***

# Commit and beyond...

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

# Impact on non-OSS life

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- *Roy: Suggested meeting his thesis advisor at UC Irvine; entered Ph.D. program (**about to finish 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...

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- *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.*

# Contributions

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

# Geographic Diversity



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

*Challenges and advantages arise from this!*

# Organization of ASF

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- *Each Apache project is mostly 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!*

# Where decisions happen

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- *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!

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- *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/](http://mail-archives.apache.org/mod_mbox/)*

# Find a bug? File an issue!

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- *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

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

# Quick guide to Subversion

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*% 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

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- *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

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- *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

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- *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

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- $+1?$   $-1?$   $+0?$   $-0?$
- “*Binding*” vote given to committers
  - *Everyone should feel free to vote*
- *Cast your vote on-list*
- ...*what about vetos?*

# The dreaded -1 (veto)

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- *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

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- *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

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- *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*

# Spotting Poisonous People

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*“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

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- *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?

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- *Contributor License Agreement (CLA)*
  - *Gives ASF 'license' - not ownership*
  - *Required before getting SVN account*
  - *Fax or email to [secretary@apache.org](mailto:secretary@apache.org)*
- *Corporate CLA form - when needed?*

# Incorporating third-party code

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- *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](mailto:legal-discuss@apache.org)*

# Starting new Apache projects

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- *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...

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- *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*
- *Free BarCampApache and birthday party!*
- *<http://www.apachecon.com/>*



***Hope to see you there!***

# Thanks! Questions?

<http://www.erenkrantz.com/oscon/>  
[justin@erenkrantz.com](mailto:justin@erenkrantz.com)

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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](http://scale7x.socallinuxexpo.org/sites/scale7x.socallinuxexpo.org/files/SCALE_Final_allman_lhawthorn.pdf)