The Apache Way
Apache Asia Roadshow :: 14 AUG 2010
J. Aaron Farr
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道可道非常道
名可名非常名
無名天地之始
阿帕奇
What is Apache?
Apache Software Foundation

- Independent US non-profit
- Volunteer organization
- Virtual world-wide organization
- Currently hosts more than 70 software projects
- More than 2000 contributors and almost 300 members
- Began as the Apache Group in 1996
- Incorporated as the ASF in 1999
Apache Committers

1999

3,000

2,250

1,500

750

0
Apache Members

• Foundation shareholders
• Elected by peers
• Currently 274
Virtual World-Wide Org

North America: 55%
Europe: 32%
South America: 4%
Australia: 7%
Africa: 1%
Asia: 1%
Infrastructure

• Bulk of work done by volunteers
• If a project wants it, they must volunteer!
• 2 paid system administrators fill “holes”
• ~30 servers for websites, svn, mail, ...
• Main data centers: OSU OSL, SURFnet (.nl)
• Build farms at Traci.net and Yahoo!
• Off-site backups at UC Irvine
Org Chart

Board Members

Committees

- Legal
- Security
- Publicity
- Brand Management
- Sponsorship
- Infrastructure
- Conference Planning

- 9 Members Elected Annually to Board
- Exec Officers chosen by board (unpaid!)
Finances

• 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/
Finances

- Apache does not pay for development
- Many (not all!) developers are paid by a third-party to work on the project
  - Participate in Google Summer of Code
- Foundation bears indirect support costs
  - Infrastructure, publicity, etc.
Sponsorship

- **Platinum** ($100,000 per year): Yahoo!, Microsoft, Google
- **Gold** ($40k/yr): HP, Facebook
- **Silver** ($20k/yr): VMWare, Progress (IONA)
- **Bronze** ($5k/yr): AirPlus International, BlueNog, Intuit, Joost, Matt Mullenweg, Two Sigma Investments
Apache Projects
Apache Projects

Abdera
ActiveMQ
Ant
APR
Archiva
Axis
Buildr
Camel
Cassandra
Cayenne
Click
Cocoon
Commons
Continuum
CouchDB
CXF
DB (Derby)
Directory
Excalibur
Felix
Forrest
Geronimo
Gump Hadoop
Harmony
HC
HTTP Server
iBATIS
Jackrabbit
Jakarta
James
Lenya
Logging
Lucene
Maven
Mina MyFaces
ODE
OFBiz
OpenEJB
OpenJPA
OpenWebBeans
PDFBox
Perl (mod_perl)
Pivot
POI
Portals
Qpid
Roller
Santuario
ServiceMix
Shindig
Sling
SpamAssassin
STDCXX
Struts
Subversion
Synapse
Tapestry
TCL
Tiles
Tomcat Turbine
Tuscan Velocity
Wicket
Web Services
Xalan
Xerces
XML
XMLBeans
XML Graphics
# Incubating Projects

<table>
<thead>
<tr>
<th>Ace</th>
<th>Empire-db</th>
<th>Lucene</th>
<th>SocialSite</th>
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<tbody>
<tr>
<td>Amber</td>
<td>Etch</td>
<td>Connector</td>
<td>Stonehenge</td>
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<tr>
<td>Aries</td>
<td>ESME</td>
<td>Framework</td>
<td>Tashi</td>
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<td>Bean</td>
<td>Hama</td>
<td>Luci</td>
<td>Thrift</td>
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<td>Validation</td>
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<td>Olio</td>
<td>VCL</td>
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<td>Bluesky</td>
<td>Imperius</td>
<td>OODT</td>
<td>VXQuery</td>
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<td>JSPWiki</td>
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<td>Whirr</td>
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<td>Kato</td>
<td>RAT</td>
<td>Wink</td>
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<tr>
<td>Clerezza</td>
<td>Libcloud</td>
<td>River</td>
<td>Wookie</td>
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<tr>
<td>Deltacloud</td>
<td></td>
<td>Shiro</td>
<td>Zeta</td>
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<tr>
<td>Droids</td>
<td></td>
<td>SIS</td>
<td>Components</td>
</tr>
</tbody>
</table>
Apache License

• “Liberal” open source software license
• Grants copyright and patent licenses
• Requires appropriate attribution
• Protects brand
  • Cannot call your product “Apache XYZ”
Apache People
<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Vadim Gritsenko</td>
</tr>
<tr>
<td>Vincent Hardy</td>
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<tr>
<td>Vincent Hennebert</td>
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<td>Vidyanand Murunikkara</td>
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<tr>
<td>Viet Nguyen</td>
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<td>PKivas Roonwal</td>
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<tr>
<td>Lionel Villard</td>
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<td>Vinay Chandran</td>
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<td>Vincenzo Gianferrari</td>
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<td>Pini</td>
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<td>Thomas Johnson</td>
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<td>Stephen Vinoski</td>
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<td>Vishal Mahajan</td>
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<tr>
<td>Travis Vitek</td>
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<tr>
<td>Valentin Kuznetsov</td>
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<td>Vivek Kumar</td>
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<td>Vladimir Bossicard</td>
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<td>Vincent Massol</td>
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<td>Valery Maisutin</td>
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<td>William Victor Mote</td>
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<td>Vasily Zakharov</td>
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<td>V. Narayanan</td>
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<td>Vincent Salvato</td>
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<td>Vincent Siveton</td>
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<td>Vincent Tence</td>
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<td>Vairamuthu Thayapavan</td>
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<td>James Waldo</td>
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<td>Rob Walker</td>
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<td>Martin Walluer</td>
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<td>Walter Hoehn</td>
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<td>David Fisher</td>
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<td>Warwick Burrows</td>
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<td>Wouter Clothens</td>
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<td>Scot Weaver</td>
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<td>Volker Weber</td>
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<td>Bob McWhirter</td>
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<td>Werner Dittman</td>
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<tr>
<td>Werner Punz</td>
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<tr>
<td>Robin Wesley McKeen</td>
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<td>Wesley Wannenmacher</td>
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<tr>
<td>William Glass-Husain</td>
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<tr>
<td>Mark Whitlock</td>
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<tr>
<td>Wolfgang Hoschek</td>
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<tr>
<td>William Charles</td>
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<tr>
<td>Reichard</td>
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<tr>
<td>David J. Wisneski</td>
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<tr>
<td>Wojciech Janiszewski</td>
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<tr>
<td>Weldon Washburn</td>
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<tr>
<td>Andreas Wombacher</td>
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<tr>
<td>Roy Wood</td>
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<tr>
<td>Peter Lin</td>
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<tr>
<td>WoonSan Ko</td>
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<tr>
<td>William A. Rowe Jr.</td>
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<td>Wilfredo Sanchez</td>
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Purpose of the ASF

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.
Purpose of the ASF

- Infrastructure for open source development
- Legal entity for donation purposes
- Shelter from law suits
- Protection of the Apache brand
What is the Way?
The Apache Way

- Meritocracy
- Respect for fellow developers
- Consensus
- Transparency
- Non-Affiliation
- Responsible Oversight
How the ASF Works

• Collaborative Software Development
• Commercial Friendly Standard License
• Consistent High Quality Software
• Respectful, honest, technical-based interaction
• Faithful implementation of standards
• Security as a mandatory feature
What is Apache *not* about?

- Flame someone to shreds
- Make code decisions on IRC
- Demand someone else fix your bugs
Meritocracy

Govern of Merit
It’s about what you do.
Those who do, decide.
When to Commit?
Commit Bits

• When? It depends.

• In Apache, when contributor shows consistent commitment

• The ASF averages 15 new committers a month, but most of that is through new projects entering.

• Many projects only add 2 committers a year
Commit Then Review
Review Then Commit
Consensus Decision Making

• Most decisions made on mailing list without voting, sometimes by way of lazy consensus.

• Voting rules

<table>
<thead>
<tr>
<th>Yes</th>
<th>Abstain</th>
<th>No (veto)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
</tbody>
</table>

• For releases, 3 +1’s required, no vetos

• A -1 veto requires proposal of alternate solution
Decisions in Apache

- Email discussion
- Proposal on the wiki
- More email
- If necessary, vote
- Can veto a technical change
- Did I mention email?
Apache Voting

- Usually limited to
  - Releases
  - Inviting a new committer
- 3 voters is minimum quorum
- 72 hours minimum time
- If you have to resort to votes often, something is wrong
Open Communication

- Communication is done online.
- Email lists are preferred form of communication.
  - dev@, commits@, users@
- Most communication is publicly archived.
- Most lists are open to any subscriber.
Responsible Oversight

• Small commits, peer reviewed
• Security is mandatory
• Ensure license compliance
• Release only high quality software
• No abuse of Apache brand or community
Peer to Peer

- We work with *people*, not companies.
- Committers and members should hold one another with respect.
- All votes hold the same weight.
- Community over code.
The Apache Way

- Meritocracy
- Peer to Peer
- Consensus decision making
- Open, online communication
- Responsible oversight
The Apache Way
阿帕奇
Emergent Culture of the Apache Community
A Culture that values Collaboration.
Open Source begins with a license.
Apache is more than its license.
Apache serves as a model of collaborative development.
The Apache Way is the living, breathing culture we create through our emails, our commits, our behavior.
As we change, so does the Apache Way.
Therefore, we attempt to codify it to add stability and longevity.
All things which live must balance between the twin deaths of chaos and order.
The Edge of Chaos
The Apache Way is complex.
阿帕
奇道
The Apache Way

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- Consensus
- Transparency
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- Responsible Oversight
Purpose of the ASF

- Infrastructure for open source development
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The Way Forward
Grow
Grow up
Gentrification of Apache
The Apache House
It's not the house. It's the people.
Thank You

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