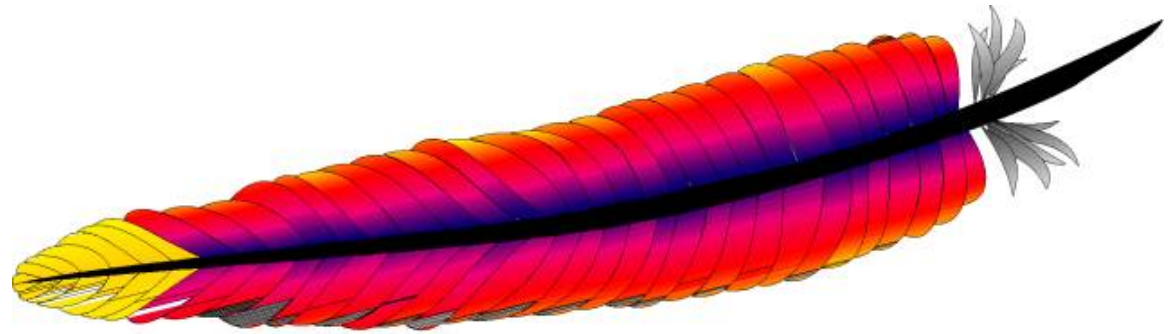


The Apache Web Server Story

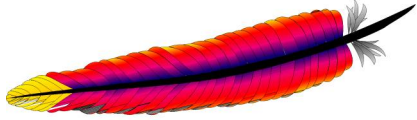


Mark J Cox

Apache Group, C2Net Europe

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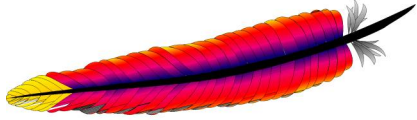
www.awe.com/mark



The Apache Web Server Story

Introduction

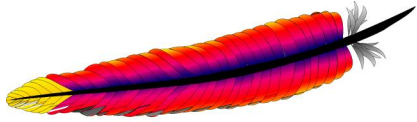
- Who the Apache Group are
- How the group works
- Open Source & Licensing
- Commercial Spin-offs
- What is coming next
- Questions



The Apache Web Server Story

The Apache Group

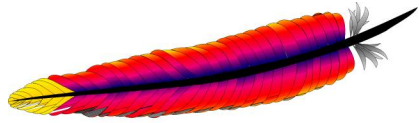
- Apache Web Server
 - ◆ Serves web pages via HTTP
 - ◆ Used by over 50% of all sites
 - ◆ Written because nothing else was available
- Apache Group
 - ◆ Founded in 1995
 - ◆ Small group of programmers
 - ◆ Incorporated in 1999



The Apache Web Server Story

Apache Group Structure

- Over 20 core members
- Many hundred contributors
- Varied Backgrounds
 - ◆ Programmers
 - ◆ Technical
 - ◆ Management
- Distributed geographically
 - ◆ USA, Europe
- Press Perception



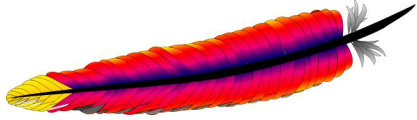
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Apache Group Members



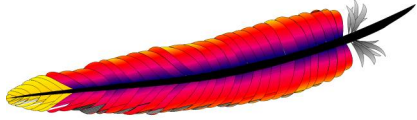
“a loose confederation of programmers ...
working in their spare time over gin and
tonics at home” -- The Wall Street Journal



The Apache Web Server Story

How the group works

- No leader or hierarchy
- Mixed backgrounds
- Mixed agendas
- “Core Group”
- Evolved working practices
- Voting System
 - ◆ +1 / 0 / -1
 - ◆ Not needed for all code changes
- Release procedures

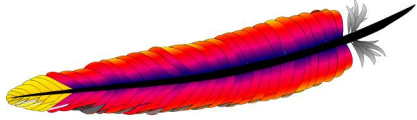


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Problems

- Release Pressures
- When everyone is too busy
- Apathy
- Microsoft Windows
- Differences of Opinion
 - ◆ C / C++ debate
- “Too many cooks”
- Conflict of Interests
- Reasons for changes
 - ◆ Market Led or Technology Led

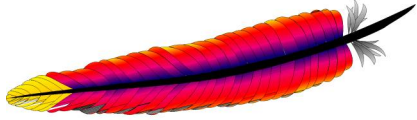


The Apache Web Server Story

Group Activities

- More than just coding
- Deciding direction
- Fixing bugs
- Documentation
- Support
- Release management
- External relationships
- Legal and licensing

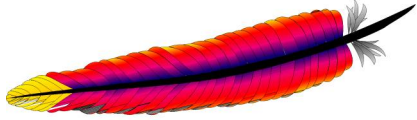
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The Apache Web Server Story

Distributed Working

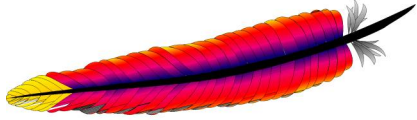
- Evolution
- Mailing Lists
 - ◆ Public
 - ◆ Private
- Web site
- Support tools
 - ◆ CVS for shared code
 - ◆ SSH for security
 - ◆ Bug Database



The Apache Web Server Story

Licensing

- Assumptions
 - ◆ Group not for profit
 - ◆ Authors assign code to group
 - ◆ Commercial use okay
- Apache License
 - ◆ Advertising clause
 - ◆ Commercial use
- Library Issues
 - ◆ GPL & other licenses

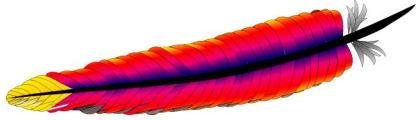


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Commercial Spin-Offs

- Services
 - ◆ ISP's running Apache Servers
 - ◆ Email Support (UK Web)
- Consultancy
 - ◆ Custom design work
- Add-on modules
 - ◆ SSL (RedHat, Covalent)
- Commercial "based-on" servers
 - ◆ Apple
 - ◆ IBM
 - ◆ C2Net



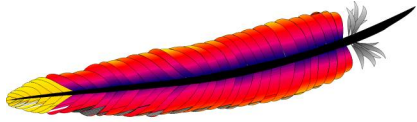
The Apache Web Server Story

Apple

- Mac OS X Server
- Made Apache work with Mac
- Contributed changes back

IBM

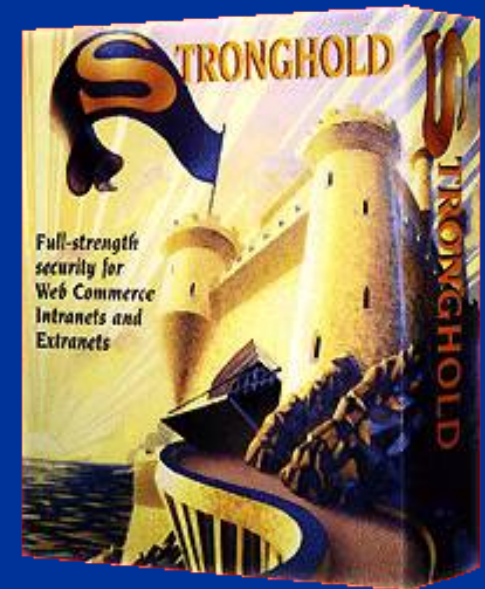
- Had a proprietary web server
- Replaced it with Apache
- Contributed code and resources
- Added value to IBM's version
 - ◆ Security
 - ◆ In-kernel cache

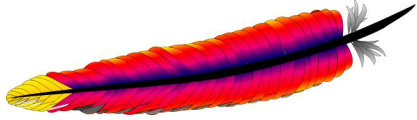


The Apache Web Server Story

C2Net - Stronghold

- Value add
 - ◆ Secure server
 - ◆ Box
 - ◆ Manuals / CD
 - ◆ Support
 - ◆ Bundles
- Core developers
- Gives back code
- Publishes Apache Week
- Ran ApacheCon 98

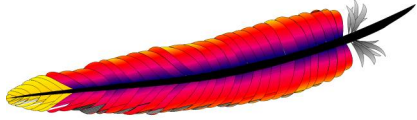




The Apache Web Server Story

What's next

- Coding
 - ◆ New architecture
 - ◆ Apache Runtime
 - ◆ DAV
- People
- Market or Technology led?
 - ◆ Netcraft survey
 - ◆ Microsoft threat



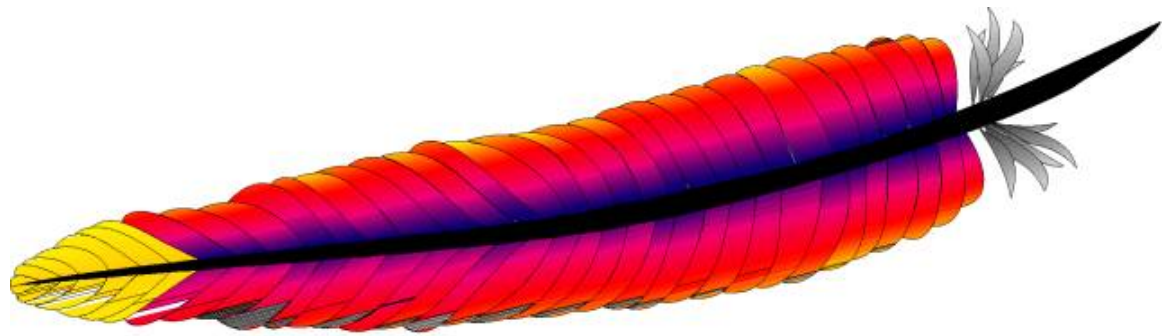
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Why is Apache popular?

- Open Source
- Binaries available
- Customisable and Extendable
- Free
- Proven
- Performance
- Reliable
- Does its job
- Commercial backup available

Questions?



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