High-performance PHP on Apache using mod_proxy_fcgi and php-fpm

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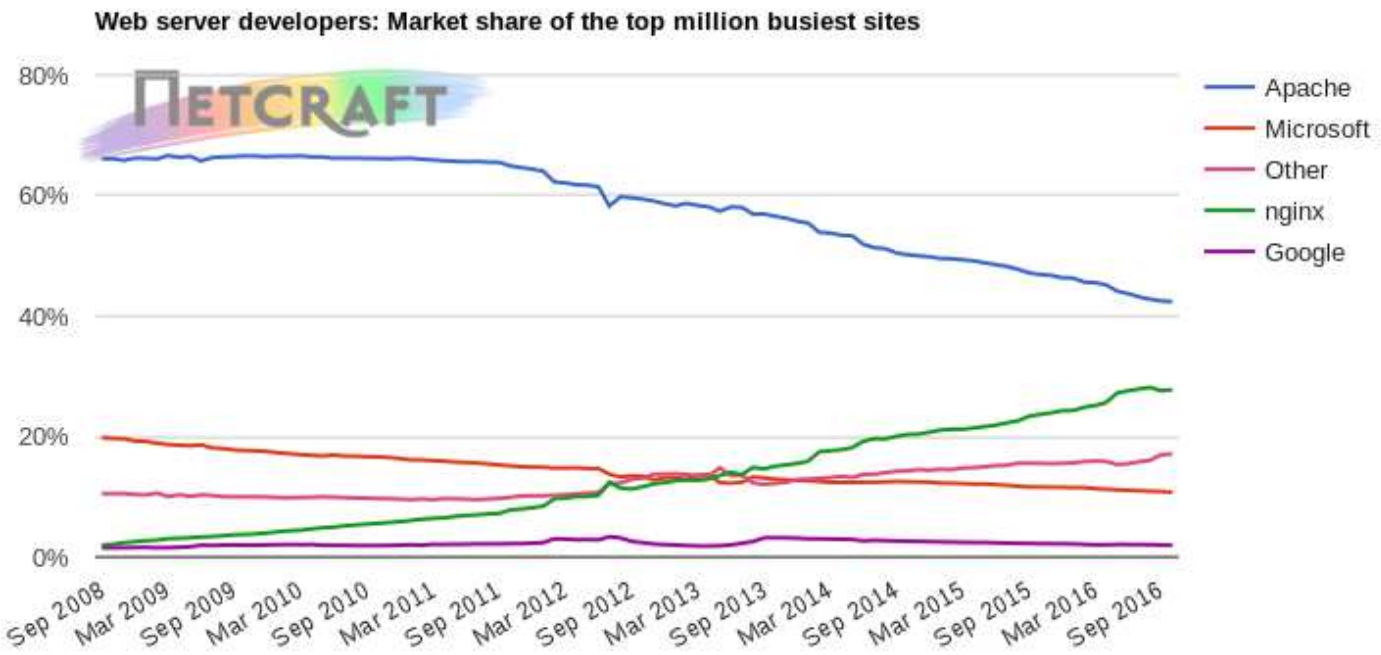
On-line version of this presentation:
http://www.CJFearnley.com/Apache.PHP.PLUG.November2016.pdf

Mature, Stable Apache is losing Market Share, Why?



Developer	September 2016	Percent	October 2016	Percent	Change
Apache	425,289	42.53%	423,959	42.40%	-0.13
nginx	275,966	27.60%	277,975	27.80%	0.20
Microsoft	108,869	10.89%	107,419	10.74%	-0.14
Google	19,825	1.98%	19,479	1.95%	-0.03

Source: `https://news.netcraft.com/archives/2016/10/21/october-2016-web-server-survey.html`

New Best Practices???

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- Why?
- Can’t Apache do it?
- Has Apache been too slow to meet the needs of high-concurrency AJAX systems running PHP?

Apache Multi-Processing Modules (MPMs)

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- mpm_event
  - Like worker, but moved from ’experimental’ to ’stable’ status in Apache 2.4
  - Great for concurency because it uses a dedicated thread to deal with keep-alive connections (in addition to benefits of worker)

Source: `http://serverfault.com/questions/383526/how-do-i-select-which-apache-mpm-to-use`

Apache with the event MPM can service PHP

Source: `https://wiki.apache.org/httpd/PHP-FPM`

```
install mariadb-server apache2 php5-fpm php5-mysql \
    php5-gd php5-curl php5-pspell php5-intl php-pear \
    php5-imagick php5-mcrypt
a2enmod proxy_fcgi
In Apache configuration (use sockets):
  <FilesMatch \.php$>
  SetHandler "proxy:unix:/var/run/php5-fpm.sock|fcgi://localhost"
  </FilesMatch>
sudo service apache2 restart
In test.php: <?php phpinfo() ?>
sudo /usr/sbin/php5-fpm --fpm-config \
    /etc/php5/fpm/php-fpm.conf -t
i=1;while [ "$i" -lt 5000 ]; do curl --output /dev/null \
    http://example.com/test.php & \
    echo "Increment i: $((i++))";done
sudo service php5-fpm status
sudo apache2ctl status
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It works!

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Any Questions?

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