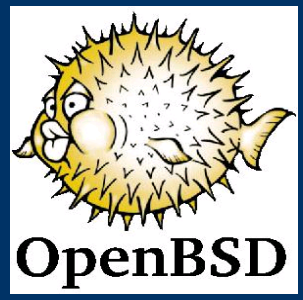
Performance improvement on LAMP platforms



LUGM

11th April 2009

Building big websites with tight budgets

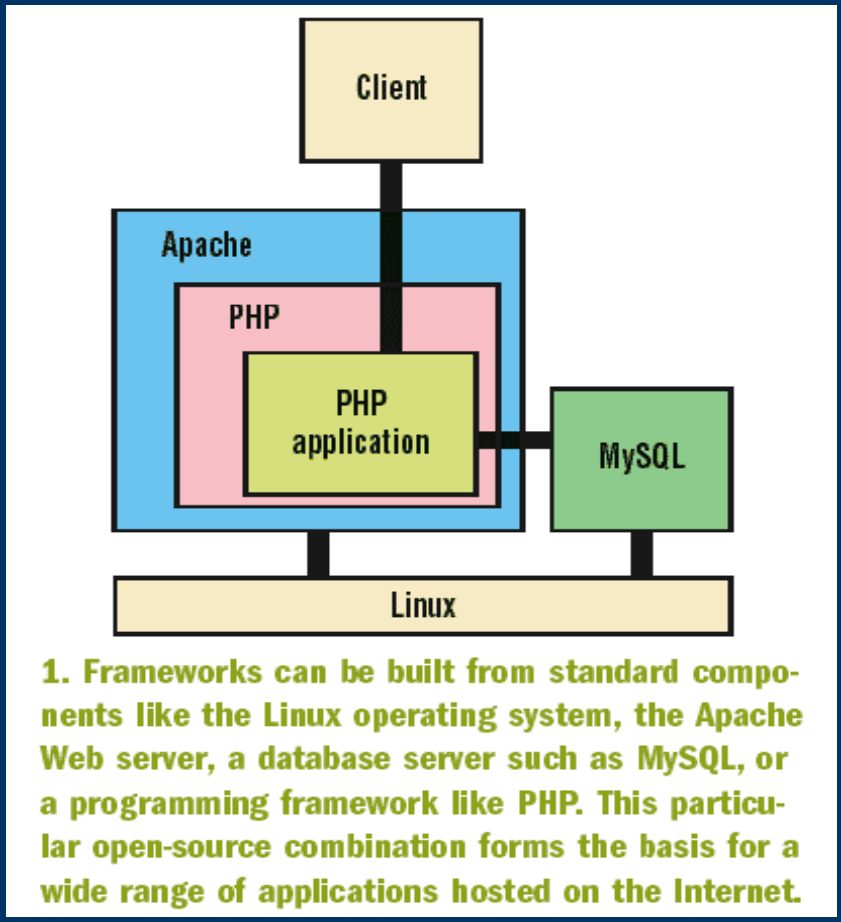
Typical cycle of LAMP server or the tale of the strained little machine

- Web site starts to slow/choke under load
- Customers complain
- (Very quickly) you start to get feedback
- Sysadmin/developer start to tune
- Works fine ? Move to something else
- Cycle repeats itself

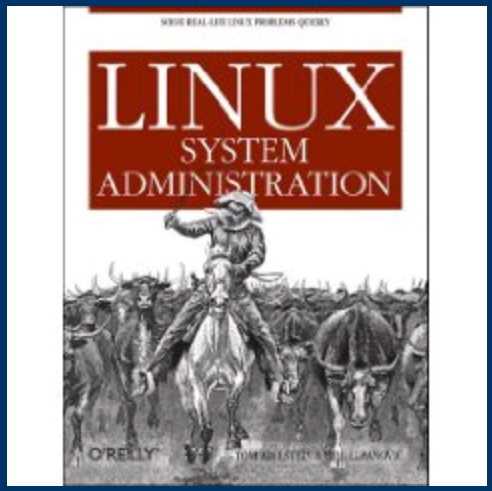
Growth factor

- Typically not considered (short term rules!)
- Difficult to predict/model exactly
- Sysadmins/developers reduced to ``executive”
- ``Server is just a container; it's code that matters" – developers & upper management

Reviewing ``Classic'' LAMP

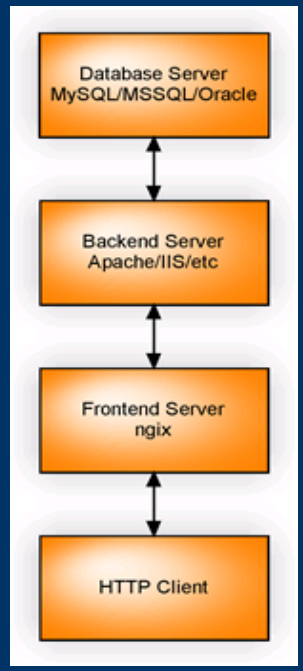


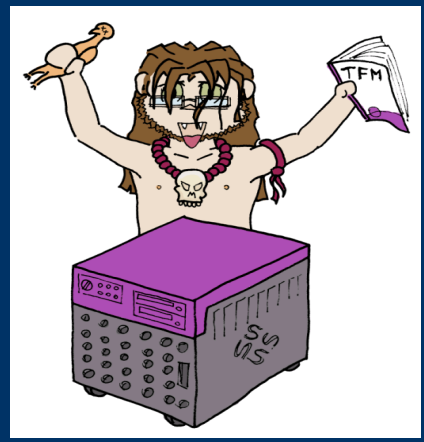
1. Frameworks can be built from standard components like the Linux operating system, the Apache Web server, a database server such as MySQL, or a programming framework like PHP. This particular open-source combination forms the basis for a wide range of applications hosted on the Internet.



Redesign the www server

- Dynamic content (PHP/ASP,...)
- Static content (Js, images,movies, sounds,...)





Observations & conclusions

- Apache is a relative memory hog
- Apache was not built with scalability in mind
- Overall -- Less memory/CPU usage
- Little or no need for lazy developers to change their code (transparent integration)
- Reverse-proxy ships with ``client-caching'' & compression built-in => saves bandwidth
- No need for multiple servers => No $$$
- Some security benefit
- Less maintainance work for me; slashdot marathon :-)

Tips to get it approved

- Remain neutral (Don't get into IIS vs Apache vs foo religious wars)
- Look for companies that already have implemented this architecture & say it (upper management likes to hear big brand names)
- Accept criticism: See where you can improve/ correct your implementation strategy
- Be polite & friendly
- Remain humble

Questions ?