

CPE 802

Open Source Office Productivity Tools

Meeting Seven, July 3 2006

Review

- Questions from Lab #3:
 - What is an ISO file?
 - Why/how do I check for file integrity?
 - How do I put an ISO on to a CD?
 - Are all ISO files bootable?
 - Setting up a bootable thumbdrive containing Linux

Public Key Infrastructure

- What is it?
 - It is a scheme that allows for the deployment of an electronic means to sign documents that one can then check that it authentic
 - Accepted by governments and businesses

Public Key Infrastructure

- Why has it not taken off in a big way?
 - People have not seen a critical need for it.
 - “No itch to scratch” yet
 - Easy and transparent way to use it has not evolved yet
 - No legal requirement to mandatorily to use it
 - Should governments run it? Would you trust the government to run this well?

Public Key Infrastructure

- Web of Trust
 - Pretty Good Privacy by Phil Zimmerman
 - <http://www.philzimmermann.com/EN/background/index.html>
 - Built on the mathematical principle of public and private key made possible by Ron Rivest, Adi Shamir, and Leonard Adleman
 - The mathematical algorithm uses two prime numbers
 - <http://world.std.com/~franl/crypto/rsa-guts.html>
 - <http://en.wikipedia.org/wiki/RSA>

LAMP

- LAMP
 - Linux
 - Apache
 - MySQL/PostgreSQL
 - Perl/Python/PHP/Ruby
- LAMP forms the bedrock of applications that go “up the stack” to provide highly reliable and scalable performance
- The concept of 4 Nines, 5 Nines, 6 Nines, 7 Nines

Number of Nines

Number of 9s	Uptime (sec)	Downtime (sec)
4 = 99.99	31532846.4	3153.6
5 = 99.999	31535684.64	315.36
6 = 99.9999	31535968.46	31.54
7 = 99.99999	31535996.85	3.15
8 = 99.999999	31535999.68	0.32

Open Source Collaboration Tools

- Collaboration involves the need to track and manage contributions by many authors 24 hours a day.
- You need to have access control to it, rights as to who can view, change, modify, add, remove
- Open Source software development is an example of this and some of the tools that do this include:
 - Git/Subversion/CVS/Darcs, RSS, Wikis, Blogs