INTRODUCTION TO OPEN SOURCE SOFTWARE

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August 23, 2012

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Outline

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What is Open Source?

It's free software!
...but what is "free" ?

What is Free ?

- Free as in beer
- Free as in freedom:
  - Freedom to modify, fix and redistribute
  - Freedom from corporate control
  - Freedom of expression
  - Freedom to integrate, ads, vendor lock-in ....

Not all open source software is cost-free, and not all cost-free software is open source.

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Definition of Open Source

- **Technical definition**
  Source code is available to users
- **Functional definition**
  - Usually free or cheap to acquire and use
  - Primarily developed by volunteers
  - Anyone can modify and customize
  - Users have direct input into development

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Examples

Some familiar, some widely used, some recently emerging:

- Operating Systems: Linux,(Mac OS X)
- Web & email server: Apache and Sendmail/Postfix/Qmail
- Web & DB languages: PHP/Perl and MySQL/PostgreSQL
- Web Content Management: Wordpress, Drupal, Joomla
- Antivirus & Spam protection: ClamAV, SpamAssassin
- Desktop apps: OpenOffice, Mozilla, Pidgin, Evince
- Security: GPG

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Developing Open Source

- Developing open source software can mean:
  - Basing it on open source technologies and open standards
  - Building on existing open source projects(s)
  - Open-sourcing your project
  - Working collaboratively with other groups

  All elements need not be present, but the greatest benefit is
  derived when they are

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Why Open Source ?

- Why would someone give away valuable software ?
- Why would someone work without pay ?
- Why would you pick this software ?

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Motivation for Developers

- Why give it away ?
  - Benefit from previous work of others
  - Better software, when others can fix it
  - Many hands make light work
- Why work for free ?
  - The good feeling from any volunteer-ism
  - Respect, fame, pride in one's creation
  - Actually, not everyone works for free

The Practical Appeal

Open source has practical benefits for all:

- "Better":More stable, secure, interoperable
- You can make a difference
- Little or no licensing cost, upgrade cost
- Good community support, direct line to developers
- Lower system requirements
- Freedom to change your mind

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The Philosophical Appeal

Open source also has particular appeal for the nonprofit and public sectors

- Mission driven, not profit driven
- It's about Family Values
- Of,By and For the People
- Public monies = public resource
- Support local economy

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The Downsides

There are problems with going OpenSource

- Rough user interfaces, documentation
- Compatibility: it's hard being different
- Transition requires work/time/energy/money
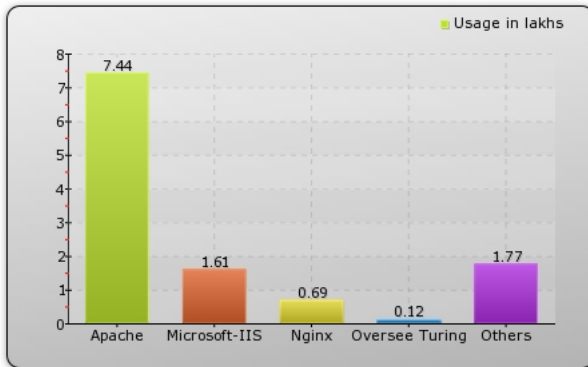- Support: Where does the buck stop?

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Progress of OpenSource

- Dominant in its traditional realm of internet services
- Growing as a LAN server
- Moving towards the desktop
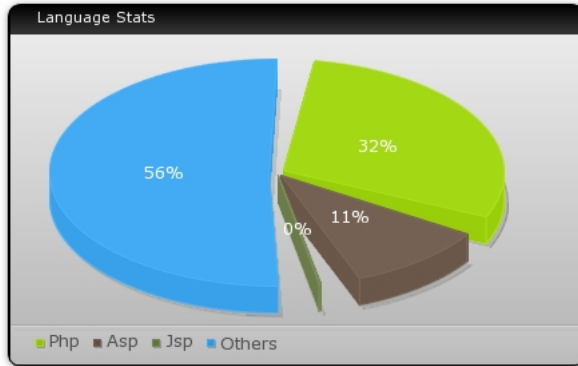 - Ubuntu/LinuxMint
  - Wine/CrossOver Office

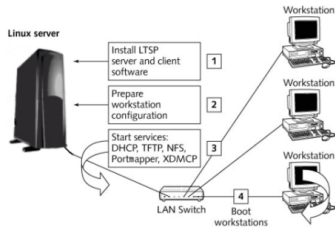**SUIIT**

Webserver Usage - I

Web Server Usage Statistics

Webserver Usage - II

A Few Open Source Projects

- **Linux Terminal Server Project**
  Continue using or recycle obsolete hardware

- **OpenGroupware**
  Eventual MS Exchange-killer?

- **Jhai Foundation**
  Wireless footcranck-powered solid-state Linux computers,
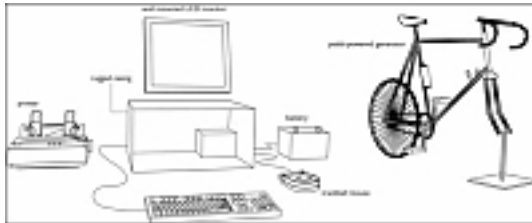 bringing telephony and Internet to rural Laos

Linux Terminal Server Projects

OpenGroupware

Jhai Foundation

Current Sector Trends

- Government mandates
- Nonprofit sector initiatives

END

THANK YOU

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