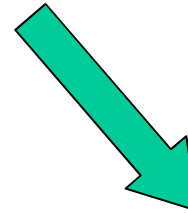
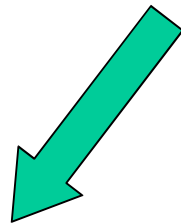


Linux business stories: How to conduct successful migrations

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NEOFACTO

Free, open source products & skills



Internet
Start-up



Services on
open source
Software



lesfrontaliers.lu



Agenda

- What is free software, open source software ?
- Open source in your company
- How to proceed ?

History

- In the beginning... software was shared
- GNU Project (GNU's Not Unix)
 - Started by Richard Stallman
- “Free” Software
 - Freedom to run the program, for any purpose
 - Freedom to modify the program to suit your needs
 - Freedom to redistribute copies
 - Freedom to distribute modified versions
- « Free software » is a matter of liberty, not price. To understand the concept, you should think of « free » as in « free speech » not as in « free beer ».

History (cont.)

- 1970's toys, games and demos, 1980's development and internet tools, 1990's OS
- Emacs (1984-1985)
- GPL (1985)
- Linux (1991)
- Linux/GNU combination (1992)
- 1993 : FreeBSD
- 1994 : Linux 1.0
- 1995 : FreeBSD 2.0 – The Apache Group
- GNOME (1997)

Why is the License Important?

- Seen in the same “About” box
 - Based on NCSA Mosaic. NCSA Mosaic(TM); was developed at the National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign.
 - Warning: This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.

Licenses

- Open Source Initiative approves licenses
 - GNU General Public License (GPL)
 - The Linux kernel, emacs, etc.
 - Libraries can't be used in Proprietary software
 - GNU Library or “Lesser” Public License (LGPL)
 - GNU C Library
 - Libraries can be used in Proprietary software
 - BSD License
 - FreeBSD, OpenBSD, NetBSD
 - Artistic License
 - Perl
 - <http://www.opensource.org/licenses/>
 - <http://www.gnu.org/licenses/licenses.html>

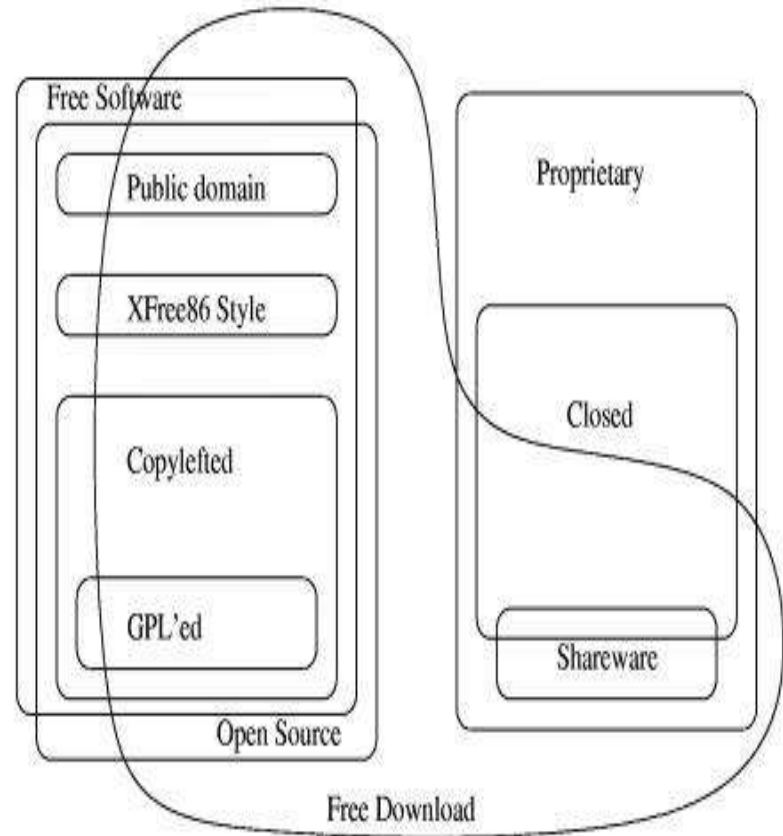


Copyleft

- The simplest way to make a program free is to put it in the public domain, uncopyrighted. This allows people to share the program and their improvements, if they are so minded. But it also allows uncooperative people to convert the program into proprietary software. They can make changes, many or few, and distribute the result as a proprietary product. People who receive the program in that modified form do not have the freedom that the original author gave them; the middleman has stripped it away.
- Instead of putting software in the public domain, we may ``copyleft" it. Copyleft says that anyone who redistributes the software, with or without changes, must pass along the freedom to further copy and change it. Copyleft guarantees that every user has freedom.

What is Free Software?

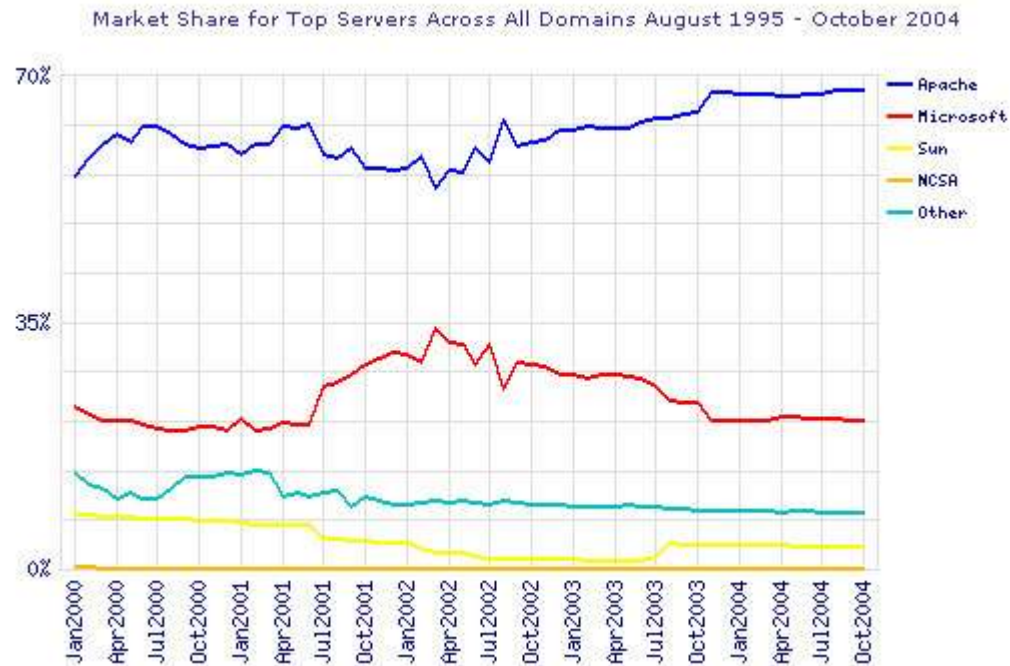
- Free download or distribution does not equal Free Software
- Free Software comes in many forms



FS/OSS market share

Web server survey

http://news.netcraft.com/archives/web_server_survey.html



OSS/FS people



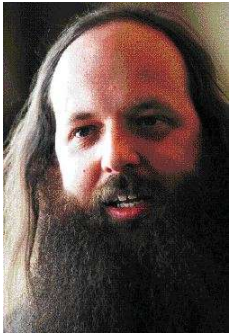
it's Linux as in "linn-ux" not "line-ux"!

« The linux philosophy is to laugh in the face of danger. Oops. Wrong one. « Do it yourself . » That's it. »

"The goal is not world domination, but that would be nice."

-- *Linus Torvalds*

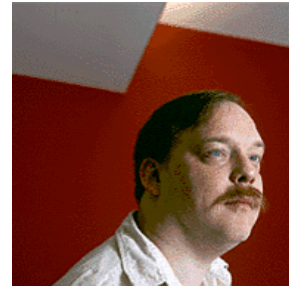
Open source people



Alan Cox



Richard Stallman



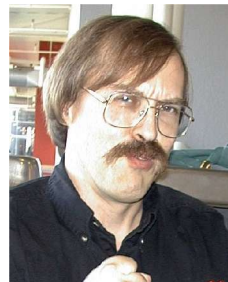
Eric Raymond



Bruce Perens



Brian Behlendorf



Larry Wall



Rasmus Lerdorf



Guido van Rossum

Open source flagship

- Linux / *BSD
- Apache
- Sendmail
- PHP
- Perl
- Samba

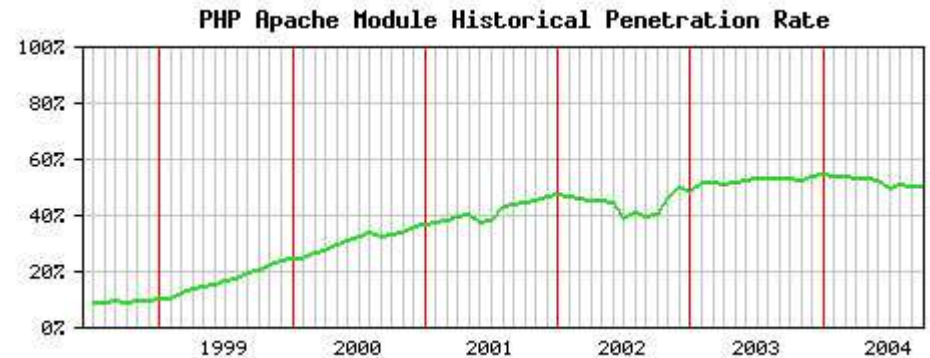
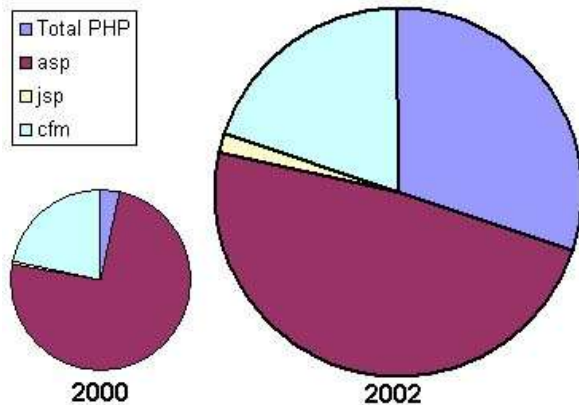


Open source & marketing

- Open source is « Internet dis-intermediation » applied to the software industry
- Viral marketing
- Few or no licence revenue implies less top-down marketing
- Bottom-up sales cycle
- Microsoft best salesman for FLOSS

Viral marketing ?

- PHP market leader with no ads ?
 - <http://php.weblogs.com/popularity>
 - <http://public.yahoo.com/~radwin/talks/yahoo-phpcon2002.htm>



OSS/FS references

- www.yahoo.com
- www.google.com
- www.amazon.com
- www.etrade.com
- www.pt.lu
- www.rtl.lu
- www.boursorama.com

OSS/FS Community

- Motivation & rewards
- Sourceforge.net
 - 88.000 projects , 900.000 members
- freshmeat.net
 - 34.700 projects, 295.000 members
- <http://savannah.gnu.org/>
 - 2117 projects

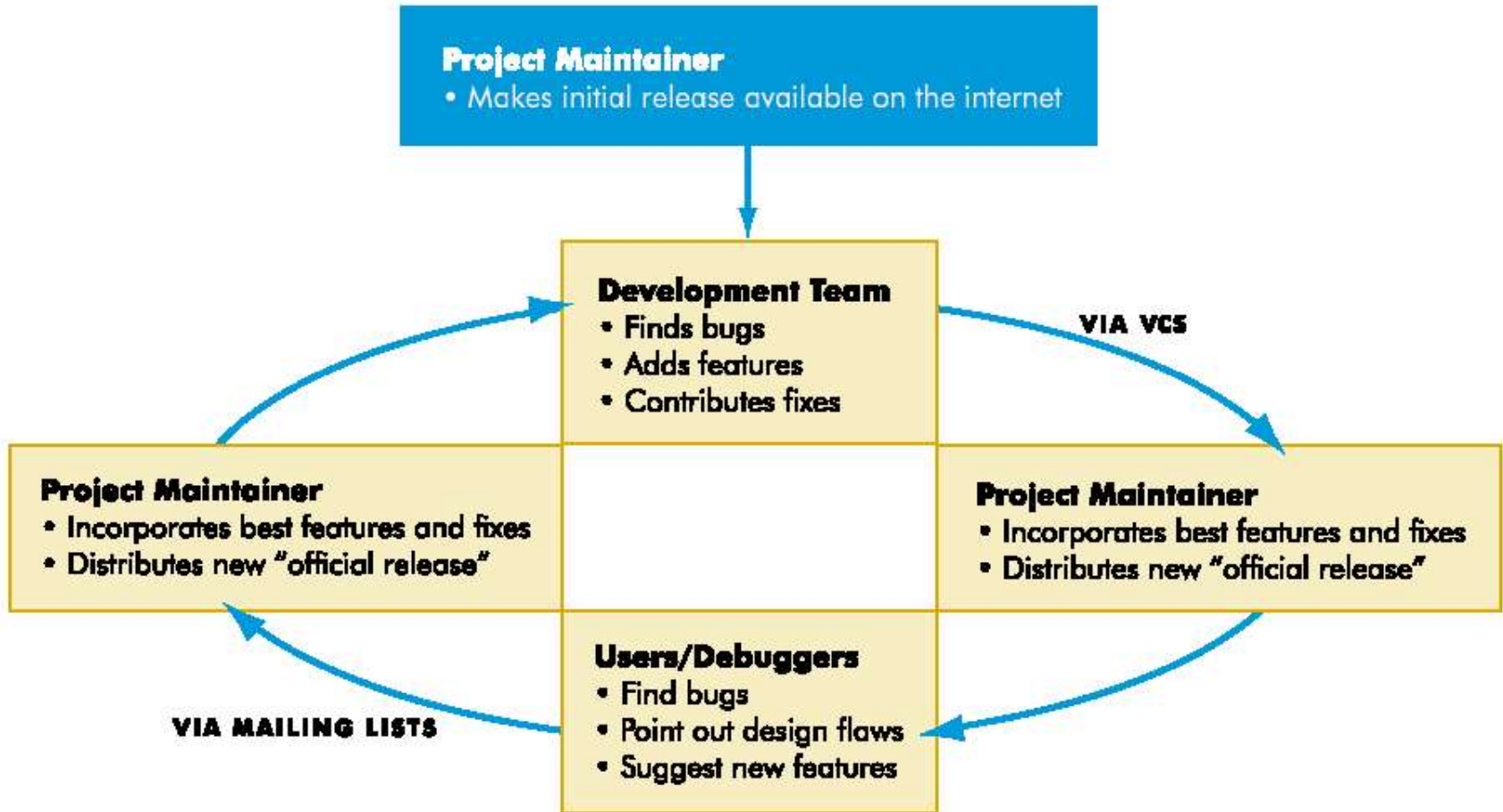


Contributing

- Depending on the project, contributions needed include:
 - Be a user
 - Using the product, reporting bugs, requesting features
 - Be a developer
 - Provide bug fixes, documentation changes
 - Be a committer
 - A developer with write access to code and voting privileges

OSS/FS development process

THE OPEN SOURCE DEVELOPMENT PROCESS

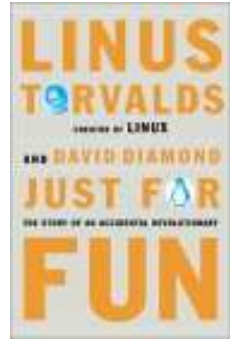
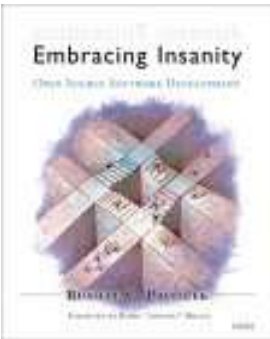


Linux Distribution



- <http://www.distrowatch.com/>
- <http://www.linuxfromscratch.org>

Readings



Agenda

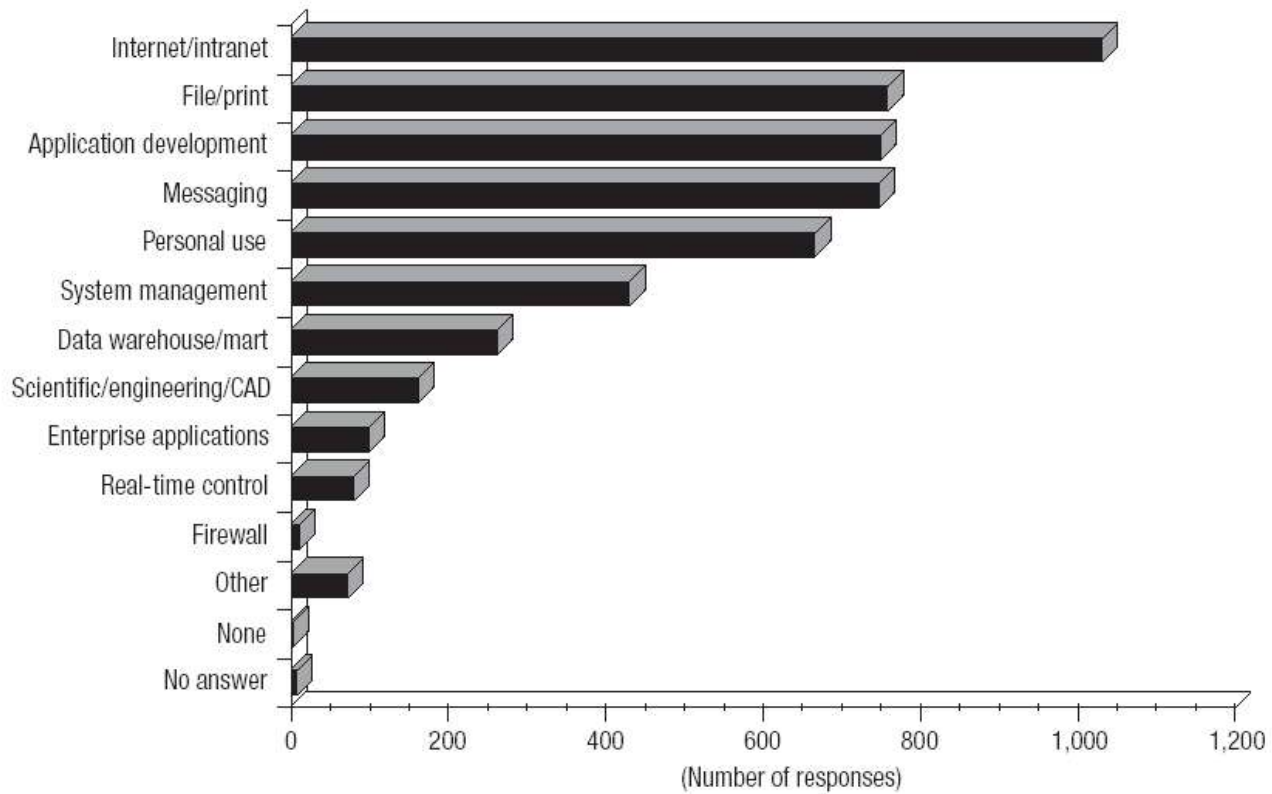
- What is open source ?
- **Open source in your company**
- How to proceed ?

When open source make sense to your business

- As software commodities
- As building blocks to integrate software
- As a development process
- **Why Open Source Software / Free Software (OSS/FS)?**
Look at the Numbers!
 - http://www.dwheeler.com/oss_fs_why.html
- **The Practical Manager's Guide to Linux**
Can you profitably use Linux in your organisation?
 - <http://www.antioffline.com/mgl.htm>

Linux usage

Figure 3
Linux Server Use by Application Type



Source: IDC, 2001

Opensource TCO

- Direct cost, recurring cost
- Security costs
- Downtime cost
- Usability/Ergonomy/Productivity
- Support costs
- Training costs
- Skilled resources costs
- Shifting costs

Price

- OpenOffice.org
 - Donate
- StarOffice
 - 79.99\$ from 1 to 50 users
25\$ from 150 to 10.000 users
 - 59.99 on amazon.com
- Microsoft Office 2003
 - ~~\$499.99~~ -> \$409 on amazon.com

Price

- Debian / Gentoo
 - Donate
- Redhat WS
 - 179\$: 1 year upgrade, 30 days support
- Microsoft XP Pro
 - ~~299\$~~ -> 249.99\$ on amazon.com

Agenda

- What is open source ?
- Open source in your company
- How to proceed ?



European Institutions

- The IDA Open Source Migration Guidelines
 - <http://europa.eu.int/ISPO/ida/jsps/index.jsp?fuseAction=showDocument&parent=news&>
- Migration overview
 - Big bang, Phased transition in groups, User by user
- Human Issues
 - Fear of the Unknown, CV dilution effect, Knowledge is power
- Making life easy
 - New applications in familiar environment
 - Do the easy things first
 - Think ahead (File formats, Stick to standards)

Do the easy things first

- Use LAMP (Linux Apache MySQL PHP) for web application
- Use Eclipse / CVS / Bugzilla as software development tools
- Use Samba / CUPS for file and print sharing
- Use FLOSS for IMAP and SMTP
- Use OpenLDAP as a corporate directory
- Use FLOSS tools on MS-Windows
- Use StarOffice / OpenOffice.org
- Use OpenXchange
- Migrate to Linux on the Desktop



Questions & Answers

Backup slides

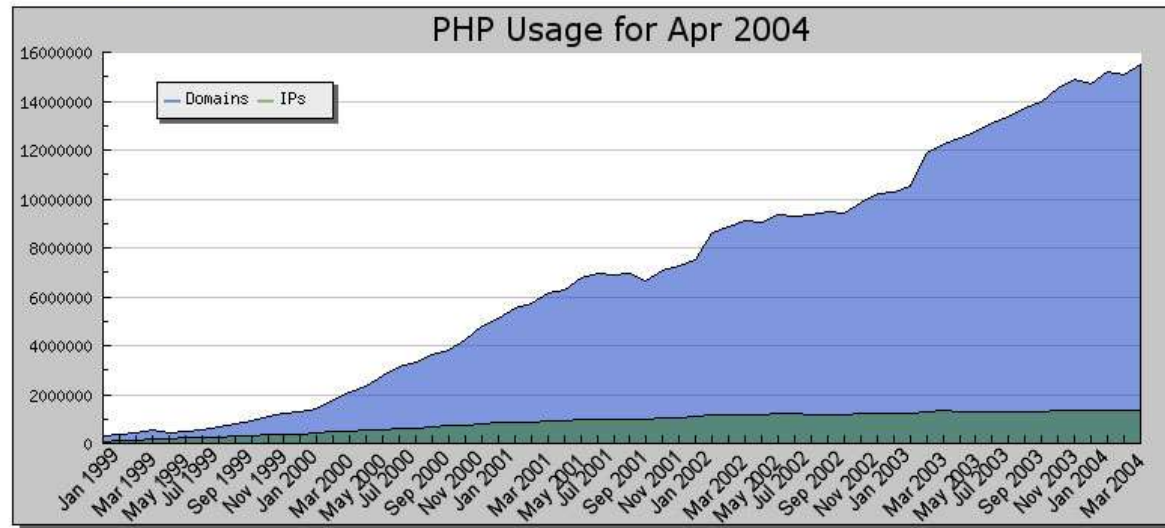
PHP as a web plateforme

- Popularity in deployment

Usage Stats for March 2004

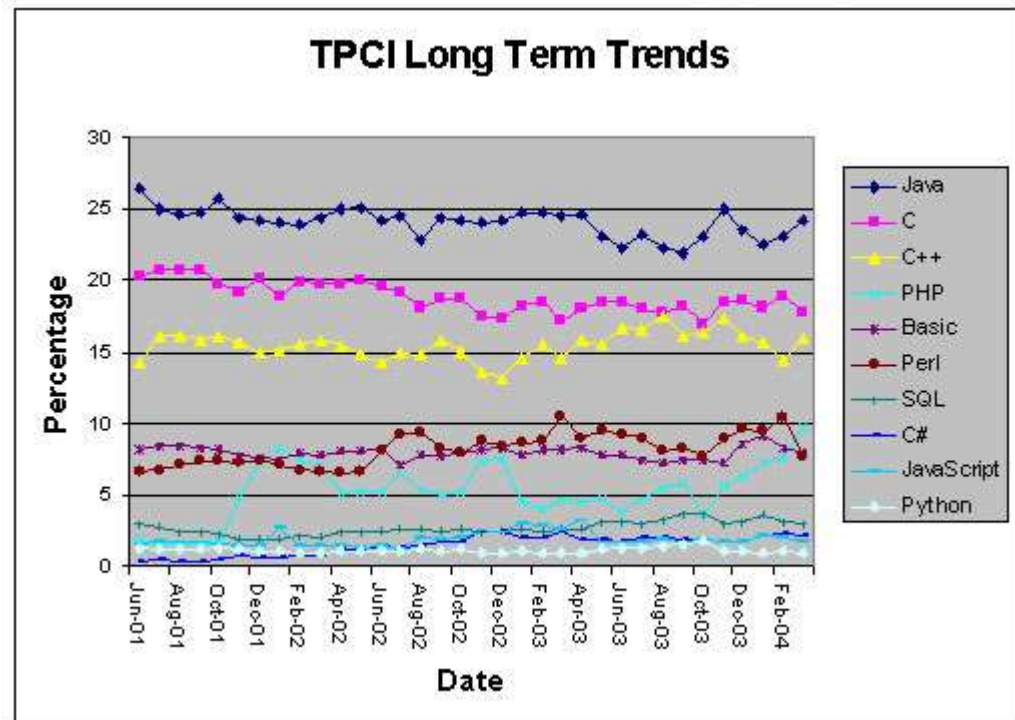
PHP: 15,528,732 Domains, 1,343,899 IP Addresses

Source: [Netcraft](#)



PHP as a language

- <http://www.tiobe.com/tpci.htm>
- April Headline: Explosive growth of PHP in last few months



PHP in corporate

- http://solutions.journaldunet.com/0404/040406_choix_sitesweb.sh
- Home use vs Professional PHP
 - Use of advanced framework



Terminology

- Free Software vs. Open Source
 - Free Software is championed by GNU
 - Open Source is championed by Open Source Initiative and others
- Why is this distinction important to GNU?
 - Open Source means “you look at the code”
 - Many companies are releasing source, but not making the code “Free”

What is Open Source?

- According to the Open Source Initiative's Open Source Definition (v 1.8) :
 - Free Redistribution
 - Anyone can sell or give away the software
 - Source Code
 - You have to be able to get to it, and read it
 - Derived Works
 - You must be able to change the code, then redistribute it under the same license
 - Integrity of the Author's Source Code
 - The author has the right to distinguish their official version from the derived works

What is Open Source? (cont.)

- No Discrimination Against Persons or Groups
 - No export restrictions or limit on distribution
- No Discrimination Against Fields of Endeavor
 - Can't limit the software from companies/individuals
- Distribution of License
 - No NDAs
- License Must Not Be Specific to a Product
 - Can't treat the software differently based on how it was distributed
- License Must Not Contaminate Other Software
 - Can't require other software to be Open Source

Examples that are Open Source but not Free

- Microsoft's "Shared Source"
 - MS claims Open Source undermines a company's Intellectual Property rights.
 - MS points to GPL's "viral" attributes
 - A follow up to MS's famous "Halloween Documents"
- Sun's "Community Source"
 - Solaris 8 Foundation Source
 - Java SDK Source
- Qt's original license (before going GPL)

Open source as a business

- **Open Source-economics:**
Examining some pseudo-economic arguments about Open Source
 - <http://www.mech.kuleuven.ac.be/~bruyning/linux/economy-os>
- **Setting Up Shop:**
The Business of Open-Source Software
 - <http://www.hecker.org/writings/setting-up-shop.html>