

Open Source – What is it?



- The freedom to use the software for any purpose
- The freedom to study how the software works and to adapt it to your needs
- The freedom to redistribute copies of the software
- The freedom to share the changes you make

Open Source



- 1) Free Redistribution
- 2)Source Code
- 3)Derived Works
- 4)Integrity of The Author's Source Code
- 5)No Discrimination Against Persons or Groups
- 6)No Discrimination Against Fields of Endeavor
- 7)Distribution of License
- 8)License Must Not Be Specific to a Product
- 9)License Must Not Restrict Other Software



- The Open Source Initiative (<http://www.opensource.org>)
 - BSD (Berkeley Software Distribution)
 - GPL (GNU General Public License)
 - Creative Commons

The OS Process



- Who writes open source code?
- What do these people do?
- How do they collaborate
- How do they resolve disagreements and deal with conflict?

Two Models



- Cathedral Model
- Open Source Model



OPEN SOURCE PRINCIPLES

Intellectual property



Code should always be open -
“Free speech, not free beer”

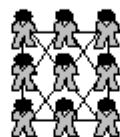


“Copyleft”



“Use copyright to
ensure copyleft”

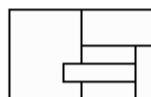
Development paradigm



Extensive involvement of
user/developer community



“Release early, release often”



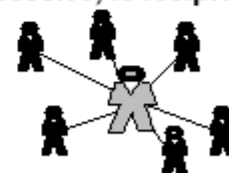
Modularize code

Resource model



Good ideas come from solving
a problem or scratching an itch

“The three obligations: to give,
to receive, to reciprocate”



Peer leadership -
vision, engagement, code

- 5 -

Impact



- Web servers
- E-mail servers
- Scripting languages
- DNS
- SSH
- Databases
- Browser
- OS - Internet
- Embedded and mobile platform



- Percentage of the Top 50 Most Reliable Hosting Company sites that run on Windows: 18
- Percentage of the Top 50 Most Reliable Hosting Company sites that run on Linux: 50
- Percentage of the Top 5 Most Reliable Hosting Company sites that run on Linux: 80



- Apache's percentage market share among web servers in 10/2008: 50
- Linux percentage share of the smartphone market in Q2 2008: 7.3
- Linux adoption percentage at the 14 largest investments firms in 2008: 72



- Desktop
- File servers (SAMBA)
- Databases
- Communication (Internet2 speed record)



- Scalability - Used in 78% of the world's 500 fastest supercomputers
- Security – Need I say more :-)
- TCO



- Freedom
- Flexibility
- License
- Ethics/Social
- Innovation
- Governments/International



- GtkPod
- Songbird
- Amorak
- GIMP
- Tomboy
- Beagle
- Democracy TV



- Ability to create specialized distributions
- Live CD
 - great for hacking
 - checking out computers
 - security

Linux Distributions



- Ubuntu
- Dynebolic
- Gparted
- Xen
- Geexbox
- DSL

References



- Open Sources 2.0 – O' Reilly Press
- <http://www.netcraft.com>
- http://www.dwheeler.com/oss_fs_why.html
- <http://www.distrowatch.com>