

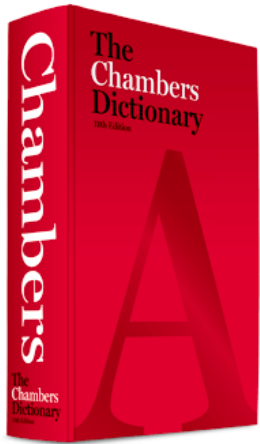


FREE SOFTWARE

An Introduction



What is *software*?



software: **n** computer programs that control the operation of computer hardware; computer program (or analogous) accessories (other than the actual parts of a computer, etc); video cassettes and discs; material recorded in microform.



Software : Function: *noun* Date: 1958
Something used or associated with and usually contrasted with hardware: as *a*: the entire set of programs, procedures, and related documentation associated with a system, especially a computer system; *specifically*: a computer program *b*: materials for use with audio-visual equipment



What is meant by *free*?



Free *not* as in free lunch
(not cost)



Free as in **free speech
(freedom)**



What freedoms?



Freedom 0

(use)

**The freedom to run the
program, for any purpose.**



Freedom 1

(study)

The freedom to study how the program works, and adapt it to your needs .
(Access to the source code is a precondition for this.)



Freedom 2

(copy and share)

**The freedom to redistribute copies
so you can help your neighbor.**



Freedom 3

(modify and distribute)

The freedom to improve the program, and release your improvements (and modified versions in general) to the public, so that the whole community benefits .

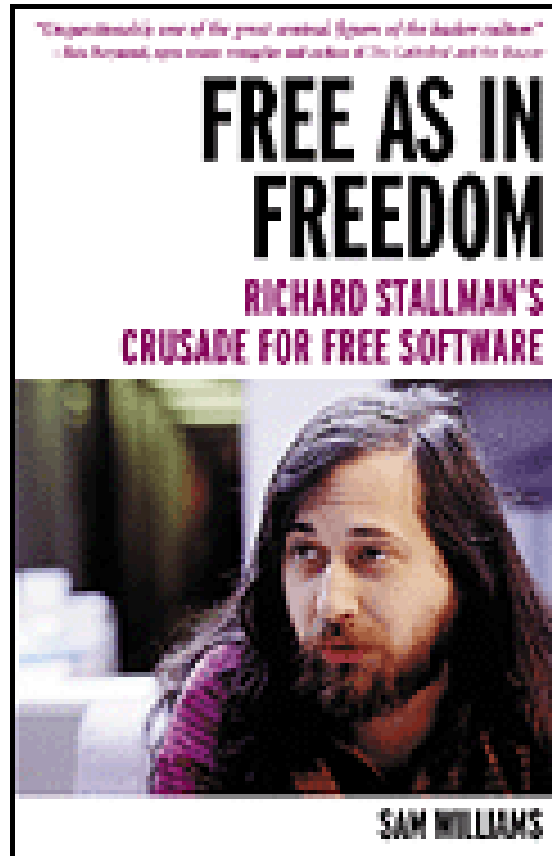
(Access to the source code is a precondition for this.)



**A program is *free software*
if users have all of these
freedoms.**



The *free software movement* was
started by Richard Stallman
(born 16 March 1953) in 1983.



Cover page of a book on Stallman



**The Free Software Foundation
was founded in 1985.**



<http://www.fsf.org/>



Free Software Foundation of India

FSF-India was inaugurated on 20 Jan 2001

**Richard Stallman Inaugurated Free
Software Foundation-India, First Affiliate in
Asia of the Free Software Foundation on 20
January 2001**

**Chief Minister V.S.
Achuthanandan with Richard M
Stallman at the inauguration of a
seminar 'Free software for
Kerala's development' in
Thiruvananthapuram on Monday,
21 August 2006.**

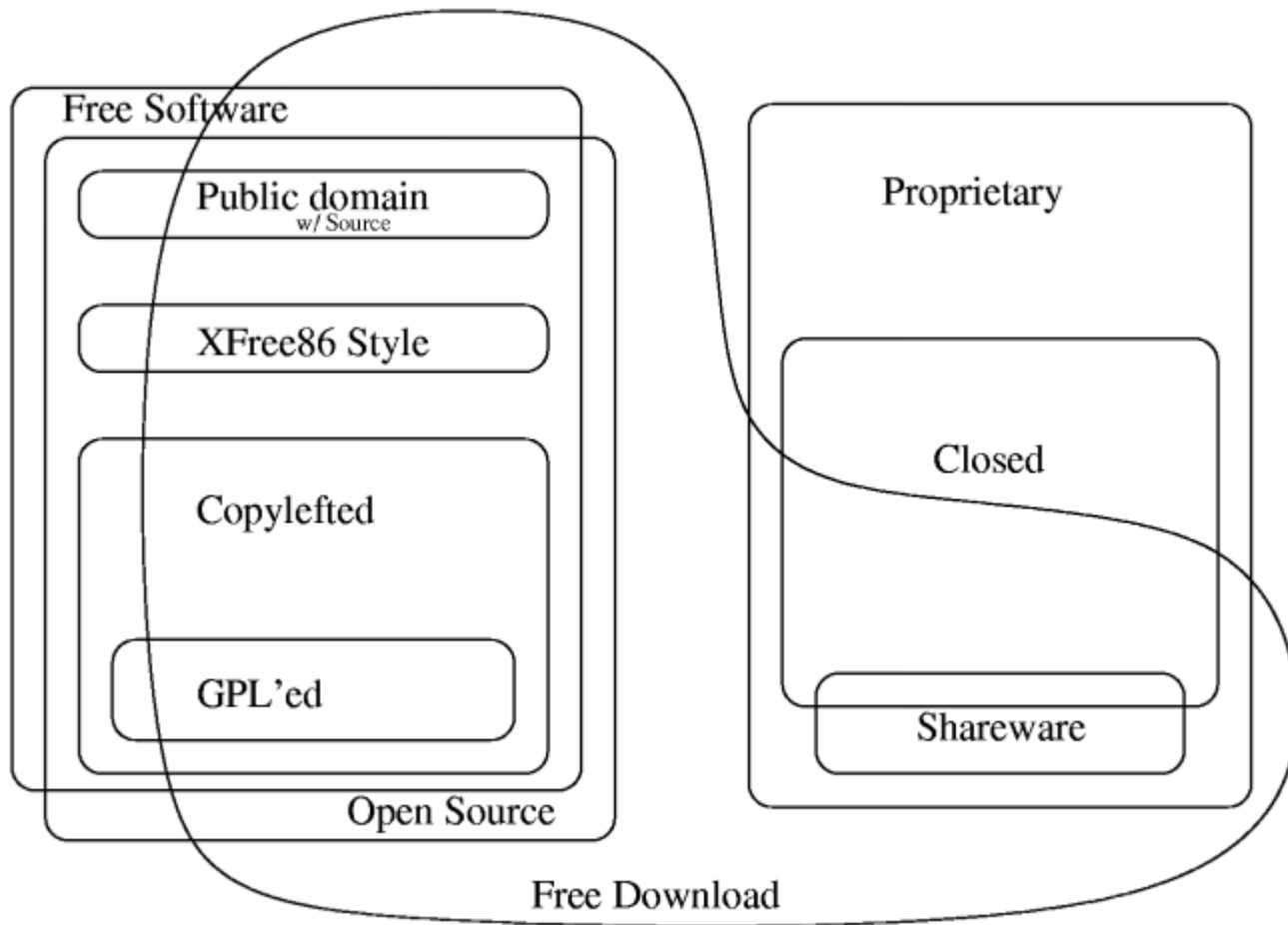




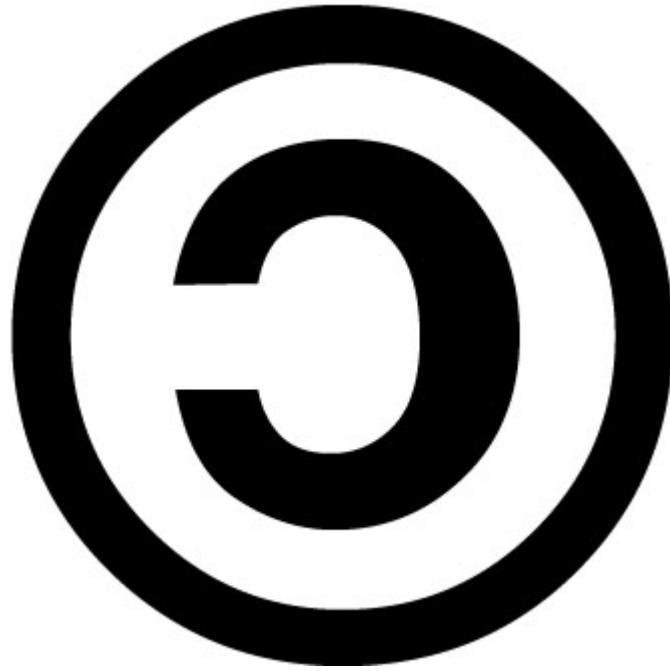
Freeware \neq Free software



The antonym of free software is
"proprietary software"
or
"non-free software"



Categories of Free and Non-Free Software



The concept of `copyleft` is used to protect the freedoms associated with free software legally for everyone.

Free Software Licenses

Free Software Licenses

A **free software license** is a software license which grants recipients rights to modify and redistribute the software which would otherwise be prohibited by copyright law. A free software license grants, to the recipients, *freedoms* in the form of permissions to modify or distribute copyrighted work.



Free as in Freedom

GNU General Public License v.3

Eben Moglen



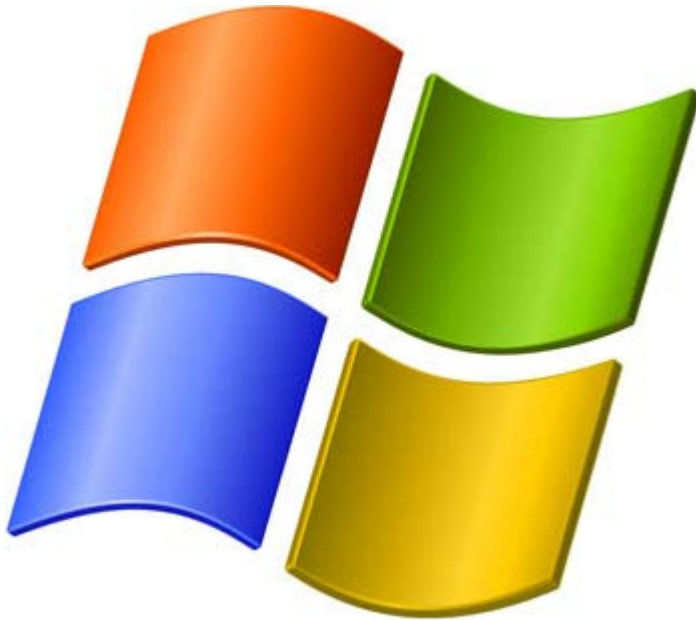
Founder and director of the Software Freedom Law Center defending Free Software legal Interests.

GNU GPLv3 writer.

“Anything that is worth copying is worth sharing.”

Some proprietary software packages

Proprietary software: *Microsoft Windows*



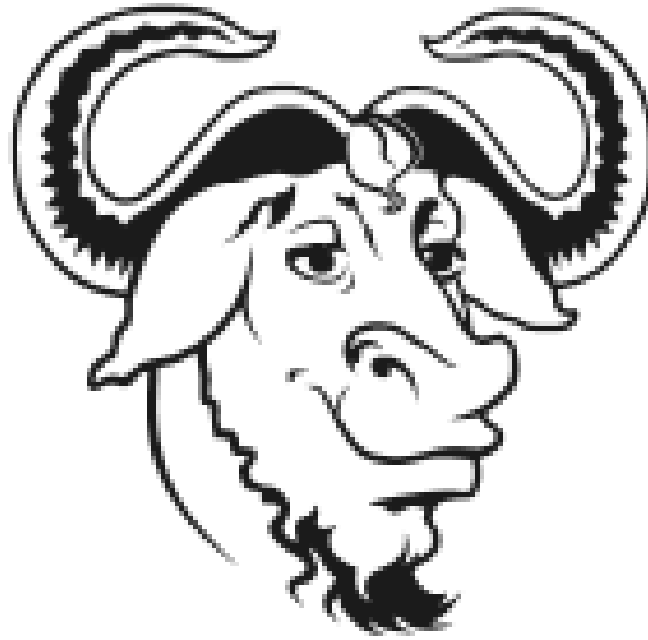
Proprietary software: *Adobe Flashplayer*



Proprietary software: *Google Earth*



Some free software packages



GNU Operating System



<http://www.gnu.org/>



What is GNU?

GNU : “**G**NU is **N**ot **U**nix”

GNU was proposed as a complete operating system compatible with Unix.

The project to develop the GNU system is called the GNU Project.

The GNU Project was launched in 1983 by Richard Stallman.

By 1990, all major components like compilers, editors, text formatters, mail software, etc., except the kernel, were finished.

In 1992, Linus Torvalds made available a Unix-like kernel called Linux as free software.

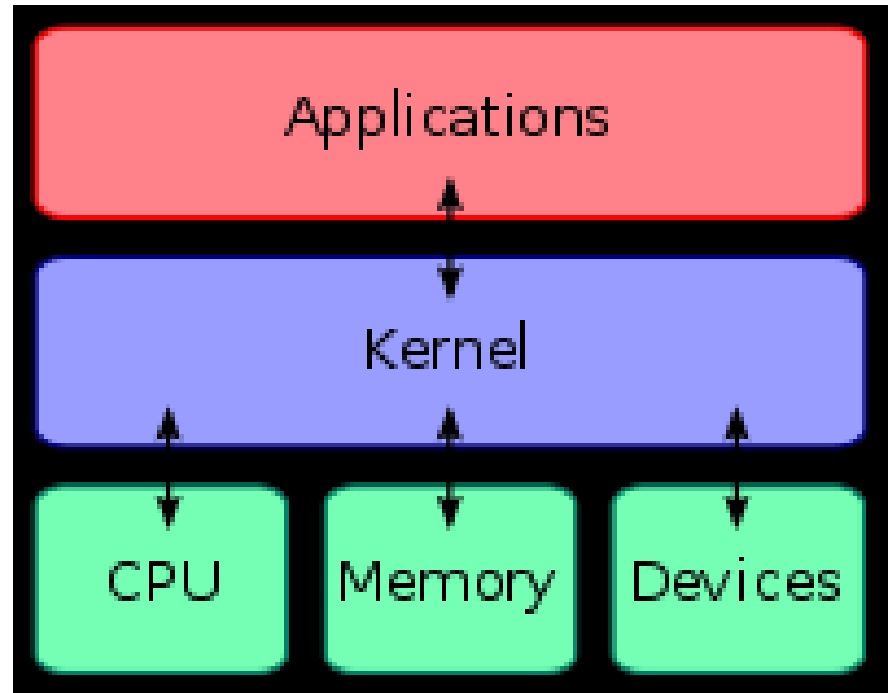
Combining Linux with the almost-complete GNU system resulted in a complete operating system: the GNU/Linux system.



Gnu is also the name of an animal found in Africa with an ox-like head, horse-like mane and buffalo-like horns.



Gnus



Linux kernel

<http://www.linux.org/>





The Linux kernel was initially conceived and created by Finnish computer science student **Linus Torvalds in (born December 28, 1969) in **1991**.**

GNU LINUX

THE SOFT REVOLUTION



RICHARD STALLMAN IN ASSOCIATION WITH THE FREE SOFTWARE FOUNDATION
AND LINUS TORVALDS IN ASSOCIATION WITH THE LINUX KERNEL ARCHIVE PRESENT

« GNU/LINUX, THE SOFT REVOLUTION » FEATURING

LINUX, A CLONE OF THE OPERATING SYSTEM UNIX, GCC, THE GNU COMPILER, X.ORG, THE EXTENSIBLE, CUSTOMIZABLE, SELF-DOCUMENTING REAL-TIME DISPLAY EDITOR, GNOME, THE INCLUSIVE AND ATTRACTIVE DESKTOP, KDE, THE POWERFUL, FREE SOFTWARE GRAPHICAL DESKTOP ENVIRONMENT, OPEN OFFICE, THE FREE PRODUCTIVITY SUITE COMPATIBLE WITH ALL MAJOR OFFICE SUITES, THE GIMP, THE GNU IMAGE MANIPULATION PROGRAM, EVOLUTION, THE INTEGRATED MAIL, ADDRESS BOOK AND CALENDARING FUNCTIONALITY, THUNDERBIRD, A FASTER, SAFER AND MORE PRODUCTIVE EMAIL EXPERIENCE, KONQUEROR, THE FILE MANAGER FOR THE X DESKTOP ENVIRONMENT, BLENDER, THE OPEN-SOURCE SOFTWARE FOR 3D MODELLING, POV-RAY, THE PERSISTENCE OF VISION RAYTRACER, FIREFOX, TO BROWSE FASTER, MORE SAFELY AND MORE EFFICIENTLY THAN WITH ANY OTHER BROWSER, TEXTEX, A COMPLETE TEX DISTRIBUTION FOR UNIX COMPATIBLE SYSTEMS, XINE, THE FREE MULTIMEDIA PLAYER, DISTRIBUTED BY UBUNTU, LINUX FOR HUMANS BEINGS, MANDRIVA, THE FRIENDLY LINUX OPERATING SYSTEM, FEDORA, THE OPEN SOURCE PROJECT, OPEN SUSE, A WORLDWIDE COMMUNITY PROGRAM, DEBIAN, MORE THAN A FLAVOR OF LINUX, SLACKWARE, THE OLDEST SERVING DISTRIBUTION, KNOPPIX, THE BOOTABLE LIVE CD/DVD SYSTEM, MEPIS, OPTIMIZED FOR DESKTOP USE, XANDROS, SIMPLY AND EASILY, FREEBSD, ADVANCED OPERATING SYSTEM.

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WWW.GNU.ORG





GNU/Linux distributions

GNU/Linux distributions



<http://www.debian.org/>

GNU/Linux distributions



<http://www.redhat.com/>

GNU/Linux distributions



<http://fedoraproject.org/>

GNU/Linux distributions



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 Search

Ubuntu 9.10 is here

Free operating system for your desktop or laptop

- **Faster, smoother, more beautiful...**
New features, fixes and applications designed around you
- **Developing at speed...**
Fun tools make it easy to write and deploy apps for Ubuntu
- **...and introducing your personal cloud**
Store and share files and contacts in a couple of clicks with Ubuntu One

Download Ubuntu

Take the tour



<http://www.ubuntu.com/>

GNU/Linux distributions



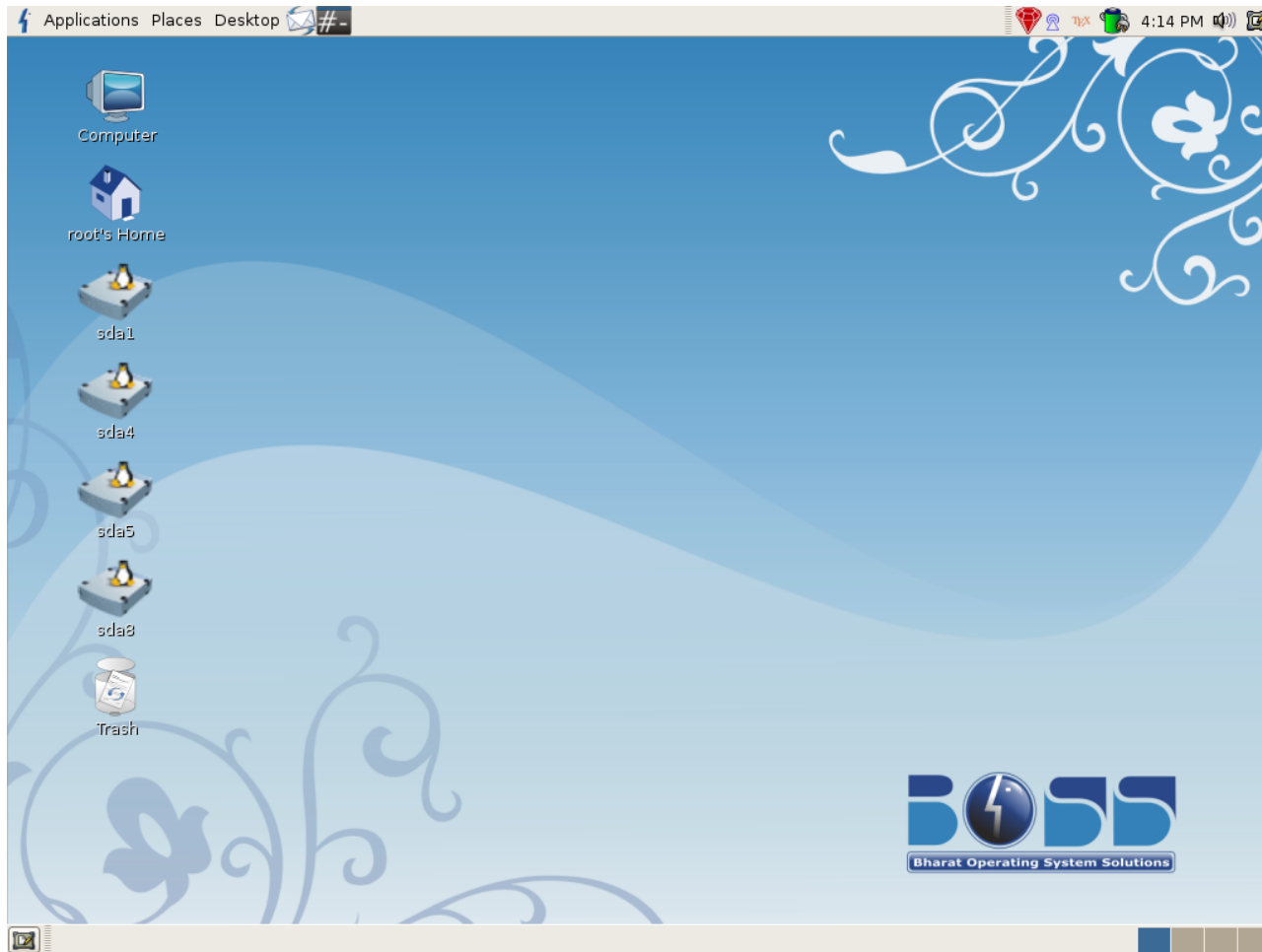
<http://www.opensuse.org/en/>

GNU/Linux distributions



<http://bosslinux.in/>

GNU/Linux distributions



**Free software doesn't
imply Linux!**

Some more free software products

More free software



GNU Compiler Collection

<http://gcc.gnu.org/>



More free software



Relational Database Management System



<http://www.mysql.com/>

More free software



Apache HTTP Server



<http://httpd.apache.org/>

More free software



GIMP (GNU Image Manipulation Program)



<http://www.gimp.org/>

More free software

TEX



A typesetting system



<http://www.tug.org/>

More free software



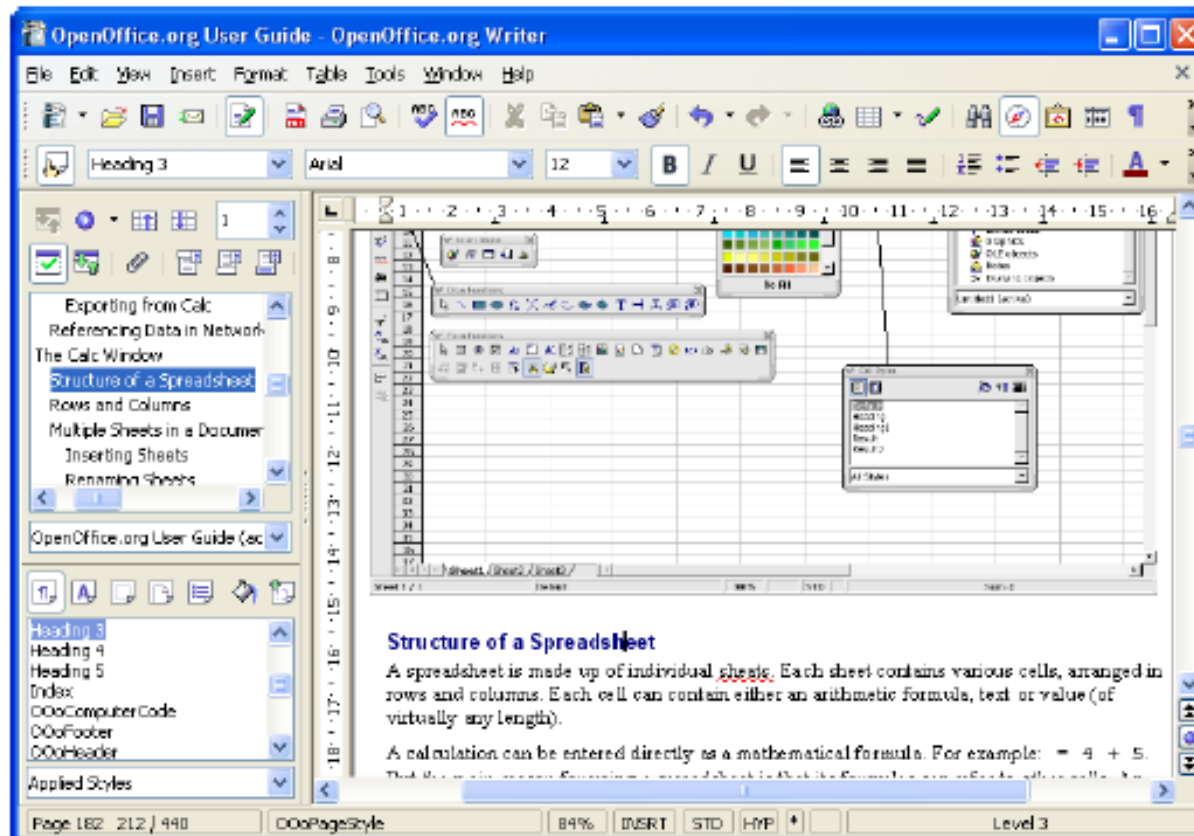
<http://www.mozilla.org/>

More free software



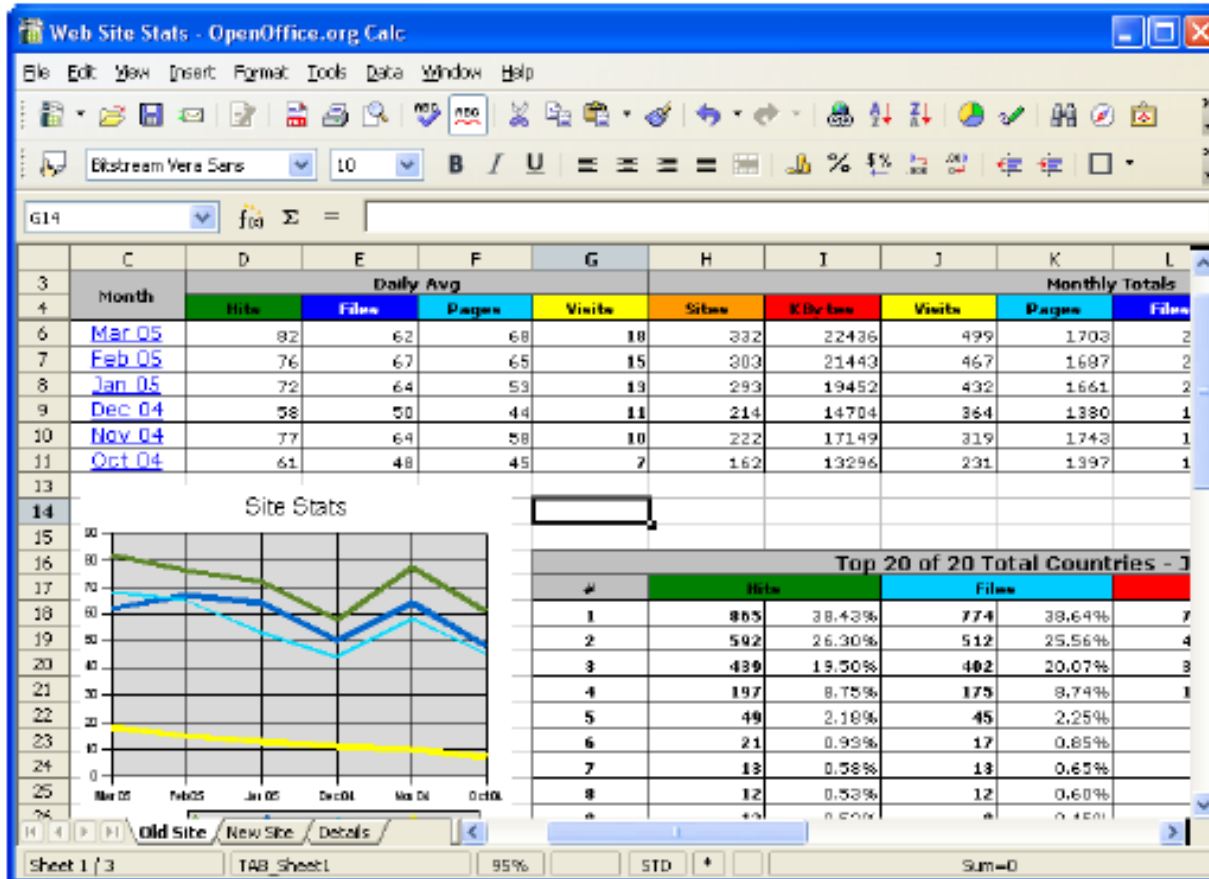
<http://www.openoffice.org/>

More free software



Writer, AbiWord, KWord, ...

More free software



Calc, Gnumeric, KSpread, ...

Free Software are available on nearly all possible operating systems (free or not)



Advantages of free software

Advantages of free software

Better quality:

because the code can be revised by many different programmers



Advantages of free software

More security:

having many developers look into the code as potential users is more likely to uncover possible security holes right away.

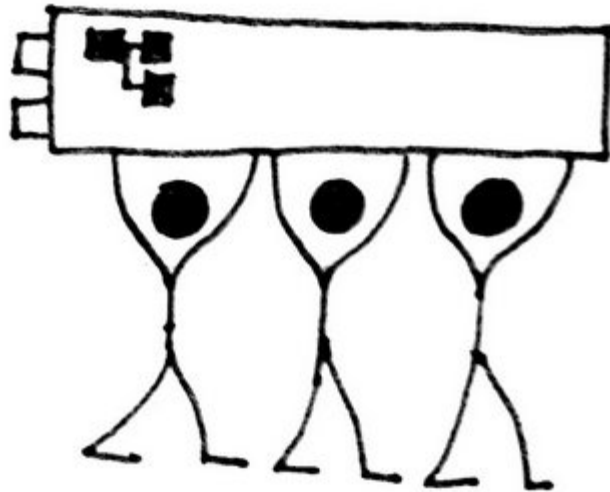
It is more resistant to hangs and crashes

It doesn't get infected by virus easily.



Advantages of free software

Collective ownership and effort



Advantages of free software

Price:

In the Free Software world, users pay for services. 99% free software has zero cost





Advantages of free software

Once free software is written, it never disappears.

Lotus discontinued, now what?
Netscape freed, continued as *Mozilla*.



Advantages of free software

The biggest advantage free software has is that it doesn't tie you down to anyone.

Benefits for a company

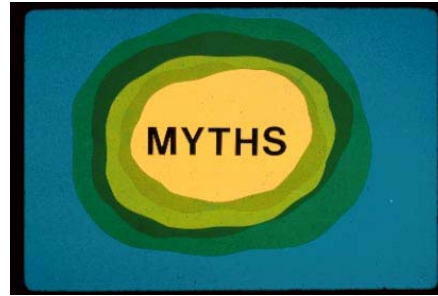
1. Future compatibility guaranteed with other applications and systems.
2. Not tied to any enterprise and/or country.
3. Hire your own developers
4. Lot of support over the internet
5. Save millions on licenses

Benefits for the humanity:




Benefits for the humanity:

1. Avoid monopolies.
2. Impossible to insert “backdoors” for data gathering.
3. Share knowledge.
4. No “big brothers”.
5. Users can get an active part in the development: One doesn’t need programming knowledge, can send ideas to developers.



Some Myths about Free Software

- 
1. FS is inferior to proprietary software.
 2. FS is piracy (or at least encourages it).
 3. FS has no support.
 4. FS is only for developers.
 5. If software costs nothing, it's no good.
 6. FS is only good for small projects.
 7. FS is unable to develop games.
 8. FS is all about price.
 9. Using FS means working from the command line.
 10. FS is unable to innovate.
 11. Big companies don't use FS.
 12. If I give away my software to the FS community, thousands of developers will suddenly start working for me for nothing.
 13. There is no money to be made on FS.



**Defend freedom.
Promote free software.**



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