

# **CREATE A “PORTABLE OFFICE” WITH OPEN SOURCE SOFTWARE**

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*What is open source?*

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The term "open source" refers to something that can be modified and shared because its design is publicly accessible.

While it originated in the context of computer software development, today the term "open source" designates a set of values—what we call the open source way. Open source projects, products, or initiatives are those that embrace and celebrate open exchange, collaborative participation, rapid prototyping, transparency, meritocracy, and community development.

*What is open source software?*

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Open source software is software whose source code is available for modification or enhancement by anyone.

"Source code" is the part of software that most computer users don't ever see; it's the code computer programmers can manipulate to change how a piece of software—a "program" or "application"—works. Programmers who have access to a computer program's source code can improve that program by adding features to it or fixing parts that don't always work correctly.

*What's the difference between open source software and other types of software?*

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Some software has source code that cannot be modified by anyone but the person, team, or organization who created it and maintains exclusive control over it.

This kind of software is frequently called "proprietary software" or "closed source" software, because its source code is the property of its original authors, who are the only ones legally allowed to copy or modify it. Microsoft Word and Adobe Photoshop are examples of proprietary software. In order to use proprietary software, computer users must agree (usually by signing a license displayed the first time they run this software) that they will not do anything with the software that the software's authors have not expressly permitted.

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# *What's the difference between open source software and other types of software?*

Open source software is different. Its authors make its source code available to others who would like to view that code, copy it, learn from it, alter it, or share it. LibreOffice and the GNU Image Manipulation Program are examples of open source software.

As they do with proprietary software, users must accept the terms of a license when they use open source software—but the legal terms of open source licenses differ dramatically from those of proprietary licenses. Open source software licenses promote collaboration and sharing because they allow other people to make modifications to source code and incorporate those changes into their own projects.





# *What's the difference between open source software and other types of software?*

Some open source licenses ensure that anyone who alters and then shares a program with others must also share that program's source code without charging a licensing fee for it. In other words, computer programmers can access, view, and modify open source software whenever they like—as long as they let others do the same when they share their work. In fact, they could be violating the terms of some open source licenses if they don't do this.

So as the Open Source Initiative explains, "open source doesn't just mean access to the source code." It means that anyone should be able to modify the source code to suit his or her needs, and that no one should prevent others from doing the same. The Initiative's definition of "open source" contains several other important provisions.

Source: <https://opensource.com/resources/what-open-source>



*Why should I use open source software?*



*Why should I use open source software?*

## **10 Reasons Open Source Is Good for Business**

**Source:**

*Katherine Noyes, PCWorld*

*Nov 5, 2010 1:00 PM*

**Link:**

*[http://www.pcworld.com/article/209891/10\\_reasons\\_open\\_source\\_is\\_good\\_for\\_business.html](http://www.pcworld.com/article/209891/10_reasons_open_source_is_good_for_business.html)*



# *Why should I use open source software?*

With the many business and government organizations that now use open source software such as Linux, it's becoming increasingly clear that price is not the only advantage such software holds. If it were, companies that adopted it during the Great Recession would surely have switched back to the expensive proprietary stuff as soon as conditions began to ease, and that's clearly not the case.

Rather, free and open source software (FOSS) holds numerous other compelling advantages for businesses, some of them even more valuable than the software's low price. Need a few examples? Let's start counting.

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# *Why should I use open source software?*

## **1. Security**

It's hard to think of a better testament to the superior security of open source software than the recent discovery by Coverity of a number of defects in the Android kernel. What's so encouraging about this discovery, as I noted the other day, is that the only reason it was possible is that the kernel code is open to public view.

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# *Why should I use open source software?*

Android may not be fully open source, but the example is still a perfect illustration of what's known as "Linus' Law," named for Linus Torvalds, the creator of Linux. According to that maxim, "Given enough eyeballs, all bugs are shallow."

What that means is that the more people who can see and test a set of code, the more likely any flaws will be caught and fixed quickly. It's essentially the polar opposite of the "security through obscurity" argument used so often to justify the use of expensive proprietary products, in other words.

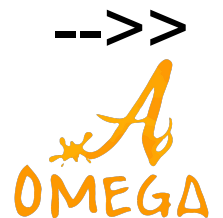
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# *Why should I use open source software?*

Does the absence of such flaw reports about the code of the iPhone or Windows mean that such products are more secure? Far from it--quite the opposite, you might even say.

All it means is that those products are closed from public view, so no one outside the companies that own them has the faintest clue how many bugs they contain. And there's no way the limited set of developers and testers within those companies can test their products as well as the worldwide community constantly scrutinizing FOSS can.



## *Why should I use open source software?*

Bugs in open source software also tend to get fixed immediately, as in the case of the Linux kernel exploit uncovered not long ago.

In the proprietary world? Not so much. Microsoft, for example, typically takes weeks if not months to patch vulnerabilities such as the recently discovered Internet Explorer zero-day flaw. Good luck to all the businesses using it in the meantime.



# *Why should I use open source software?*

## **2. Quality**

Which is more likely to be better: a software package created by a handful of developers, or a software package created by thousands of developers? Just as there are countless developers and users working to improve the security of open source software, so are there just as many innovating new features and enhancements to those products.

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## *Why should I use open source software?*

In general, open source software gets closest to what users want because those users can have a hand in making it so. It's not a matter of the vendor giving users what it thinks they want--users and developers make what they want, and they make it well.

At least one recent study has shown, in fact, that technical superiority is typically the primary reason enterprises choose open source software.

# *Why should I use open source software?*

## **3. Customizability**

Along similar lines, business users can take a piece of open source software and tweak it to suit their needs. Since the code is open, it's simply a matter of modifying it to add the functionality they want. Don't try that with proprietary software!

# *Why should I use open source software?*

## **4. Freedom**

When businesses turn to open source software, they free themselves from the severe vendor lock-in that can afflict users of proprietary packages. Customers of such vendors are at the mercy of the vendor's vision, requirements, dictates, prices, priorities and timetable, and that limits what they can do with the products they're paying for.

With FOSS, on the other hand, users are in control to make their own decisions and to do what they want with the software. They also have a worldwide community of developers and users at their disposal for help with that.



# *Why should I use open source software?*

## **5. Flexibility**

When your business uses proprietary software such as Microsoft Windows and Office, you are on a treadmill that requires you to keep upgrading both software and hardware ad infinitum. Open source software, on the other hand, is typically much less resource-intensive, meaning that you can run it well even on older hardware. It's up to you--not some vendor--to decide when it's time to upgrade.

# *Why should I use open source software?*

## **6. Interoperability**

Open source software is much better at adhering to open standards than proprietary software is. If you value interoperability with other businesses, computers and users, and don't want to be limited by proprietary data formats, open source software is definitely the way to go.

# *Why should I use open source software?*

## **7. Auditability**

With closed source software, you have nothing but the vendor's claims telling you that they're keeping the software secure and adhering to standards, for example. It's basically a leap of faith. The visibility of the code behind open source software, however, means you can see for yourself and be confident.

# *Why should I use open source software?*

## **8. Support Options**

Open source software is generally free, and so is a world of support through the vibrant communities surrounding each piece of software. Most every Linux distribution, for instance, has an online community with excellent documentation, forums, mailing lists, forges, wikis, newsgroups and even live support chat.

For businesses that want extra assurance, there are now paid support options on most open source packages at prices that still fall far below what most proprietary vendors will charge. Providers of commercial support for open source software tend to be more responsive, too, since support is where their revenue is focused.





# *Why should I use open source software?*

## **9. Cost**

Between the purchase price of the software itself, the exorbitant cost of mandatory virus protection, support charges, ongoing upgrade expenses and the costs associated with being locked in, proprietary software takes more out of your business than you probably even realize. And for what?

You can get better quality at a fraction of the price.

# *Why should I use open source software?*

## **10. Try Before You Buy**

If you're considering using open source software, it will typically cost you nothing to try it out first. This is partly due to the software's free price, and partly due to the existence of LiveCDs and Live USBs for many Linux distributions, for example. No commitment required until you're sure.

None of this is to say, of course, that your business should necessarily use open source software for everything. But with all the many benefits it holds, you'd be remiss not to consider it seriously.

# *Open Source Alternatives to Commercial* *Software* **OFFICE**

- Libre Office
- Evince
- PDF shuffler
- Project Libre
- Planner

## **GRAPHICS**

- Gimp
- Blender
- gscan2pdf
- Scribus

# *Open Source Alternatives to Commercial Software*

## **INTERNET**

- Firefox
- Chromium
- Thunderbird

## **MULTIMEDIA**

- VLC
- Audacity
- Musescore
- Open Shot

# *Open Source Alternatives to Commercial Software*

## **OPERATING SYSTEMS**

### **Commercial**

- MS Windows OS
- MacOS

### **Open Source**

- Unix
- Linux
- (Android)

# *What is GNU/Linux?*

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Linux is, in simplest terms, an operating system. It is the software on a computer that enables applications and the computer operator to access the devices on the computer to perform desired functions. The operating system (OS) relays instructions from an application to, for instance, the computer's processor. The processor performs the instructed task, then sends the results back to the application via the operating system.

Explained in these terms, Linux is very similar to other operating systems, such as Windows and OS X.

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# *What is GNU/Linux?*

But something sets Linux apart from these operating systems. The Linux operating system represented a \$25 billion ecosystem in 2008. Since its inception in 1991, Linux has grown to become a force in computing, powering everything from the New York Stock Exchange to mobile phones to supercomputers to consumer Devices.

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## *What is GNU/Linux?*

As an open operating system, Linux is developed collaboratively, meaning no one company is solely responsible for its development or ongoing support. Companies participating in the Linux economy share research and development costs with their partners and competitors. This spreading of development burden amongst individuals and companies has resulted in a large and efficient ecosystem and unheralded software Innovation.

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# *What is GNU/Linux?*

Over 1,000 developers, from at least 100 different companies, contribute to every kernel release. In the past two years alone, over 3,200 developers from 200 companies have contributed to the kernel--which is just one small piece of a Linux Distribution.

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# *What is GNU/Linux?*

## **The Birth of Linux**

On August 25, 1991, a Finn computer science student named Linus Torvalds made the following announcement to the Usenet group comp.os.minux:

"I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) (among other things))."



# *What is GNU/Linux?*

The “Minix” Torvalds referred to is a variant of the UNIX operating system, used as a guideline for his the free operating system he wanted to run on the x86-based consumer PCs of the day. “gnu” refers to the set of GNU (GNU Is Not Unix) tools first put together by Richard Stallman in 1983. UNIX, the operating system that started it all, had its origins in the old Bell Labs back in the early 60s.

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# *What is GNU/Linux?*

Torvalds built the core of the Linux operating system, known as the kernel. A kernel alone does not make an operating system, but Stallman's GNU tools were from a project to create an operating system as well--a project that was missing a kernel to make Stallman's operating system complete. Torvalds' matching of GNU tools with the Linux kernel marked the beginning of the Linux operating system as it is known today.

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# *What is GNU/Linux?*

Linux is in many ways still only at the beginning of its potential, even though it has enjoyed tremendous success since Torvalds' first request for help in 1991.

Linux has gained strong popularity amongst UNIX developers, who like it for its portability to many platforms, its similarity to UNIX, and its free software license. Around the turn of the century, several commercial developers began to distribute Linux, including VA Linux, TurboLinux, Mandrakelinux, Red Hat, and SuSE GmbH. IBM's 2000 decision to invest \$2 billion in Linux development and sales was a significant positive event to the growth of Linux.



# *What is GNU/Linux?*

Today, Linux is a multi-billion dollar industry, with companies and governments around the world taking advantage of the operating system's security and flexibility. Thousands of companies use Linux for day-to-day use, attracted by the lower licensing and support costs. Governments around the world are deploying Linux to save money and time, with some governments commissioning their own versions of Linux.

The analyst group IDC has projected Linux will be a \$49 billion business by 2011, and there are many indications in the market that this figure will be achieved.



# *What is a GNU/Linux Distribution?*



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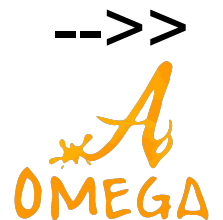
Linux isn't like Windows or Mac OS X. Microsoft combines all the bits of Windows internally to produce each new release of Windows and distributes it as a single package. If you want Windows, you'll need to choose one of the versions Microsoft is offering.

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# *What is a GNU/Linux Distribution?*

Linux works differently. The Linux operating system isn't produced by a single organization. Different organizations and people work on different parts. There's the Linux kernel (the core of the operating system), the GNU shell utilities (the terminal interface and many of the commands you use), the X server (which produces a graphical desktop), the desktop environment (which runs on the X server to provide a graphical desktop), and more. System services, graphical programs, terminal commands – many are developed independently from another. They're all open-source software distributed in source code form.



# *What is a GNU/Linux Distribution?*

If you wanted to, you could grab the source code for the Linux kernel, GNU shell utilities, Xorg X server, and every other program on a Linux system, assembling it all yourself. However, compiling the software would take a lot of time – not to mention the work involved with making all the different programs work properly together.

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Linux distributions do the hard work for you, taking all the code from the open-source projects and compiling it for you, combining it into a single operating system you can boot up and install. They also make choices for you, such as choosing the default desktop environment, browser, and other software. Most distributions add their own finishing touches, such as themes and custom software the Unity desktop environment Ubuntu provides, for Example.

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# *What is a GNU/Linux Distribution?*

When you want to install new software or update to new versions of software with important security updates, your Linux distribution provides them in precompiled, packaged form. These packages are fast and easy to install, saving you from doing the hard work yourself.

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# *What is a GNU/Linux Distribution?*

There are multiple different Linux distributions. Many have different philosophies – some, like Fedora, refuse to include closed-source software, while others, like Mint, include closed-source stuff to make it easier on users. They include different default software – like how Ubuntu includes Unity, Ubuntu derivatives include other desktop environments, Fedora includes GNOME Shell, and Mint includes Cinnamon or MATE.

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# *What is a GNU/Linux Distribution?*

Many also use different package managers, configuration utilities, and other software. Some distributions are bleeding edge and won't receive support for very long. Others, such as Ubuntu LTS or Red Hat Enterprise Linux, are designed to be stable distributions that will be supported with security updates and bug fixes for many years.



# *What is a GNU/Linux Distribution?*

Some Linux distributions are intended for desktop computers, some for servers without a graphical interface, and others for special uses, such as home theater PCs.

Some are designed to work out of the box – like Ubuntu – while others require a bit more tweaking, such as Arch Linux.

# *What is a GNU/Linux Distribution?*

## **About Distrowach.com**

Distrowach.com is a web site where you can find descriptions, comparisons and recent news about over 100 distributions.

# The “OMEGA Project Linux Distribution”



Linux

# About the “OMEGA PROJECT” Linux Distribution

The “*OMEGA Project Linux Distribution*” is a remastered Live Linux Mint distribution which contains software in order to help the students to create a “portable office”.



# About the “OMEGA PROJECT” Linux Distribution

## GREDITS

The Omega Project Linux Distribution has been  
created by the:



**Greek Linux Users Group**  
[www.greeklug.gr](http://www.greeklug.gr)



# About the “OMEGA PROJECT” Linux Distribution

## What is a “Live” Distribution?

*A live CD, live DVD, or live disc is a complete bootable computer installation including operating system which runs in a computer's memory, rather than loading from a hard disk drive; the CD itself is read-only. It allows users to run an operating system for any purpose without installing it or making any changes to the computer's configuration.*



# About the “OMEGA PROJECT” Linux Distribution

## OMEGA OS SOFTWARE

### OFFICE

- Libre Office
- PDF Suffer
- Planner
- Project Libre
- Gantt Project
- Evince



# About the “OMEGA PROJECT” Linux Distribution OMEGA OS SOFTWARE

## GRAPHICS

- Gimp
- gscan2pdf
- Scribus
- Freemind
- Labyrinth

## INTERNET

- Firefox





# About the “OMEGA PROJECT” Linux Distribution OMEGA OS SOFTWARE

## MULTIMEDIA

- VLC
- Open Shot Video Editor
- Musescore
- Audacity
- Blender

## OTHERS

- FET



# LINUX USERS GROUPS

## TURKEY

The Turkish Linux Users Group

<http://www.lkd.org.tr/en/hakkimizda/tarihce/>

## GREECE

The Greek Linux Users Group

<http://www.greeklug.gr>

## ITALY

The Verona Linux Users Group

<http://www.lugverona.it/>

## SPAIN

Hispa Linux

<http://hispalinux.es/>

## IRELAND

The Irish Linux Users Group

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



# OTHER SOLUTIONS

## THE PORTABLE APPS USB

The PortableApps.com Platform™ is a full featured portable software system that lets you build your own custom portable app suite for use on your USB drive, cloud drive, or local PC.

<http://portableapps.com>



# OPEN SOURCE & LINUX RESOURCES

## OPEN SOURCE

<https://opensource.com>

<https://opensource.org>

<http://www.documentfoundation.org>

<http://www.fsf.org>

<http://www.gnu.org>

<http://portableapps.com>

## LINUX

[www.linuxfoundation.org](http://www.linuxfoundation.org)

<https://www.linux.com/>

<http://distrowatch.com/>

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

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

<https://www.linuxmint.com/>



# Workshop: The Open Source Portable Office

**THANK YOU FOR LISTENING!**

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