

What is Linux?

Linux is an operating system. An operating system is the basic set of programs and utilities that make your computer run. Some other common operating systems are Unix (and its variants BSD, AIX, Solaris, HPUX, and others); DOS; Microsoft Windows; Amiga; and Mac OS. If you're interested in learning about some not-so-common operating systems, take a look [here](#) and [here](#).

Linux is Free Software. Now, just because it's Free, doesn't necessarily mean it's free. Think "free" as in "free speech," not "free beer," as we in the Free Software/Open Source community like to say. In a nutshell, software that is free as in speech, like Linux, is distributed along with its [source code](#) so that anyone who receives it is free to make changes and redistribute it. So, not only is it ok to make copies of Linux and give them to your friends, it's also fine to tweak a few lines of the source code while you're at it -- as long as you also freely provide your modified source code to everyone else. To learn more about free software and the major software license it is distributed under, called the General Public License (GPL), go [here](#). In addition to the GPL, there are many other software licenses that allow you to modify the source code. The Open Source Initiative approves these licenses and keeps a [current list of them](#).

Linux is not owned by anyone. One misconception many first-time Linux.com readers have is that this site, Linux.com, is similar to Microsoft.com, which is owned and controlled by the company that produces the Windows operating system.

Not so!

No one company or individual "owns" Linux, which was developed, and is still being improved, by thousands of corporate-supported and volunteer programmers all over the world. Not even Linus Torvalds, who started the Linux ball rolling in 1991, "owns" Linux.

(However, the trademark "Linux" is owned by Linus Torvalds, so if you call something "Linux" it had better be Linux, not something else.)

How to get Linux: When you "get Linux" you are usually getting a "Linux distribution" that contains not only the basic Linux operating system, but also programs that enhance it in many ways. Anyone who wants to put together his or her own Linux distribution is free to do so, and we know of more than 200 different Linux distributions that fill special "niche" purposes. But we advise new users to stick with one of the five or six most popular general-purpose Linux distributions until they know a little about what Linux can and can't do.

You can get Linux from a number of online software repositories, including the official Web sites for each distribution. For example, at www.linux-mandrake.com you'll find the Mandrake distribution; at www.redhat.com you'll find Red Hat Linux.

It helps to have a fast connection and a CD burner so you can quickly download an .ISO image of the distribution and burn it onto a CD. You then can load the bootable installation programs that lead you, step by step, through the process of getting Linux on your computer.

If you don't have a CD burner, you'll be better off if you buy a CD pre-loaded with the distribution (or distributions) of your choice. The more popular distributions are available in chain computer stores like [Best Buy](#) or [CompUSA](#). They sell the full boxed sets that come complete with a fancy user manual and official technical support. The average price is \$25 to \$80 USD. The convenience of a distribution on CDs, including manuals, generally makes your first installation so much easier that it is well worth the money, and even if you pay full retail price for a Linux distribution you will still get an incredible value.

One Linux.com editor tried to figure out how much he would have had to spend to get Windows software equivalent to the software that came with his USD \$70 Mandrake 8.0 "PowerPack Edition," and stopped counting when he reached USD \$1,500. He was only adding up the desktop software he used every day, and didn't count the server packages that were included and he didn't need. If they had been included in his tally, he probably would have concluded that his USD \$70 investment in Linux was the equivalent of \$5,000 or more in Windows software.

And when comparing Linux to Windows, don't forget that Linux is a better match for "commercial grade" Windows NT or 2000 than it is for "consumer grade" Windows 95, 98, ME or XP when it comes to stability and networking ability -- except that Linux is generally more stable than Windows, and will run on less expensive or older hardware than current Windows versions.

If you're on a tight budget, you can pick up a CD from any number of online shops that burn Linux CDs and sell them for just a few bucks each. Here are four of many, in no particular order:

[CheapBytes.com](#)

[LinuxCentral](#)

[EverythingLinux.com.a u](#)

[Linux-download-cds.com](#)

Get help before, during, and after you install Linux. Take advantage of some free, expert technical support: the Linux Users Group, or LUG. The heartbeat of Linux support, and of Linux itself, is the LUG. There are LUGs in almost every country in the world, where you can get Linux advice and help from people who live near you, speak your language, and are willing to donate their time so that new users (like you!) can learn about Linux without going through any more head-scratching than necessary.

Two excellent LUG lists can be found [here](#) and [here](#). Neither of these lists is quite complete; there is no "LUG central" any more than there is a single company that

controls Linux. Each LUG operates independently and has its own style and meeting schedule. Note that if there is no LUG close enough for you to conveniently attend meetings, most LUGs maintain email lists you can join and use to get answers to any Linux questions you have.

One very good reason to make contact with a LUG before you install Linux, or even decide which distribution to use, is that your nearest LUG's members may have accumulated experience with one particular distribution and may be most helpful with that one. If this is the case, you would be wise to choose the distribution most popular with local LUG members, because you will get better and more accurate answers to any questions you may have.

So please, try to find a LUG and ask your questions there, because that is what a LUG is for. You may also find that a LUG in your area holds "installfests," which are special events where LUG members will sit down with you, in person, and help you install Linux on your computer if you "LUG" it with you to the LUG meeting location. (Maybe this is why they're called LUGs, eh?) This is the absolutely best and easiest way to get Linux going. If there is a LUG near you, and they do not have an installfest scheduled, ask anyway. Many LUGs will help you with an install at any meeting, anytime.

And now, let's talk about Linux distributions.

Many flavors of Linux: Windows and Mac only have one or two current versions each. Linux is about freedom and choice, so you have plenty of freedom to choose -- and until you have some experience with Linux, it is almost impossible to decide which of the many Linux distributions best fits your needs. All we can do here is give you a basic list and some information based on Linux.com staff members' own experience with different Linux distributions.

[Red Hat](#) is the best-known Linux distribution, at least in the United States. It is the one most likely to be supported by large server hardware vendors like IBM, Hewlett-Packard, and Dell, so it is probably the best choice if you are going to first make use of Linux as a server of some sort in a corporate setting. You can download Red Hat Linux free from the Internet, but if you buy a "boxed set" from Red Hat or an authorized retailer, you will get the right to ask Red Hat employees for help directly as part of the deal. The amount of support and the length of the support period depends on which version of Red Hat you buy. As you'd expect, the more you spend, the longer the free support period you get. But even if you download Red Hat free, you will find many free "help" resources on Red Hat's Web site if you dig around a little. Several Linux.com workers use and love Red Hat, while others have had frustrating experiences with it.

[SuSE](#) is more oriented toward the needs and desires of home and small office Linux users than Red Hat, especially people who are experimenting with Linux for the first time. Several of our staff members use and love SuSE. It also offers support for large-scale servers and has special editions for Mac hardware and other hardware including (in case you happen to have one lying around) the top-of-the-line IBM 390 series.

SuSE's Web site offers many support options ranging from free up into the sky, depending on whether you are an individual or running an industrial-scale server farm or even a Linux cluster running as a single "Beowulf" supercomputer. Because of the way SuSE distributes its product, you cannot download an ISO image of SuSE from the Internet. But the individual files that make up the distribution are available online.

[Linux-Mandrake](#) has a reputation for being the easiest distribution for new Linux users to install and learn. It has its quirks, but most of them are lovable, not harmful. We are sometimes accused of being biased in favor of Mandrake, because it is the distribution used by more Linux.com and NewsForge people than any other. Mandrake is downloadable for free, but the boxed sets come with support and a set of manuals that are more than worth the price.

[Caldera OpenLinux](#) is produced by a company with many years of Unix experience. It can be either downloaded free or purchased on CDs, with professional support provided to paying customers and "user helping user" free support available to all others. Caldera has other enterprise-level Linux and Unix products available, including a messaging server they say is nearly a direct replacement for Microsoft Exchange, which may be of special interest to corporate users thinking about switching to Linux (although there are other "Exchange replacement" products in the market, too).

[Turbolinux](#) is an enterprise-oriented distribution, generally not as suited for home or small-office installation by new users as most others. Linux.com staff has no direct experience with Turbolinux, but we have heard many good things about it from readers, especially about its application deployment utilities that make it easy for a systems administrator in a large computer facility to add programs to many computers at once. Again, there are other utilities from other software developers that do the same thing, but Turbolinux is rapidly accumulating a fine reputation.

[Debian GNU/Linux](#) is not a commercial distribution. It is maintained by a worldwide, all-volunteer organization, and it's 100% free. Several Linux.com people and a number of workers on other OSDN Web sites love Debian and would not use anything else. There is no "company-sponsored" support for Debian because there is no company, but Debian users say the Debian online documentation, combined with help they get from other users, is all they need.

[Slackware Linux](#) is "the original" Linux distribution. It does not pretend to be easy to install and use, and it isn't. But if you are determined to learn the inner workings of a Linux computer system, possibly with an eye to becoming a professional Linux or Unix systems administrator, Slackware may be your best bet. Slackware is probably the "geekiest" of current Linux distributions. It will take you longer to learn how to control Slackware than any other distribution, but in return you will have a computer system that is totally yours, customized exactly the way you like it right down to the placement of every script and program component. Some people say "Slackware is a hobby, not an operating system," which isn't a slam. It simply means that people who love to play with their computers all day tend to like Slackware.

[Lycoris](#) is the most fully-developed of a whole new group of ultra-user-friendly Linux distributions starting to appear on the market. It installs almost effortlessly on most common PC hardware, and has enough software included that you can instantly start writing and editing documents, jump on the Internet either through a phone modem, cable modem or DSL, and start browsing the Web and exchanging email right away. You can either download Lycoris or buy a boxed set including manuals through the company's Web site.

Lots of other distributions: [Dmoz.org has a huge list](#) of available Linux distributions for all tastes and purposes that includes links to yet other lists. No one list of Linux distributions can possibly be complete, because almost anyone can decide to make his or her own Linux distribution, and many people do this. It can all be a bit bewildering until you get used to having this huge cafeteria of software available to you, which again is why we recommend getting advice from a LUG full of experienced users, then beginning your Linux experience with one of the popular distributions that offers professional and/or volunteer support to help you get going.

A Linux distribution contains more than just the operating system. You need more than an operating system to do anything useful with your computer. You need applications. Software that works with or on top of the operating system is what makes Linux useful. Fortunately, distributions package dozens, even hundreds of Linux tools and programs together -- office suites, text editors, games, spreadsheets, PIMs, email programs, graphics applications, scientific programs, documentation, digital camera applications, Web editors and browsers, and others -- so that you can install all of them at once and be assured that they will all work together efficiently without worry or any great effort by you. These are *not* the same programs you may have used with Windows or Mac, but since almost all of them are free, they are well worth your time to learn. You may be surprised to find that many free Linux programs included in the distribution you choose are better and more stable (less likely to crash) than expensive software you have used with other operating systems. After you have used Linux for a while, you will get used to this -- and once you do, it is very hard to go back to the world of high-priced Windows or Mac software!

Learn more at Linux.com: For specific information on how to do things with Linux, please check [the Linux.com documentation section](#), the area of our site devoted to "how to do it" articles.

As we mentioned at the beginning of this page, the one thing we can't offer is one-on-one support. We'd like to, but with only three full-time Linux.com staff people, and hundreds of thousands of readers all over the world, we simply don't have time. Please make contact with that local LUG. It truly is your best source for individual Linux help.