LINUX AND ITS DISTRIBUTIONS

Linux is Free/Libre Open Source Software. You can download a free copy of Linux and install it on your own computer. No password is required for access, and no registration is required after downloading. There are no "nag" screens begging you to pay for it. It is not crippled in any way, nor is it limited to any particular kind of use. You can use it at home, at school, in your business. You can install it as many times on as many computers as you like, and you can *legally* make copies of it and give them to friends and colleagues (or even sell copies if you wish).

Linux powers the servers that deliver Google search results to you (and most other web sites, actually). It is also the core of the Android system that powers the latest smart phones and tablets. Linux is capable of powering giant servers, standard desktop computers, handheld devices, and tiny embedded systems.

Linux Distributions

Technically, Linux is an operating system *kernel*, the core part of an operating system. (See *What is an operating system?* if you are not clear on this point.) The Linux kernel is commonly bundled with many other components to form a complete *Linux Distribution*. When most people refer to Linux they are talking about this complete set of programs needed to run a computer, not just the kernel, and so shall we.

Because Linux is an *open source* operating system, anyone can extend and distribute the system. Several companies and organizations put together the Linux kernel along with a host of programs and their own special setup utility and distribute the whole package. These are called "distributions". <u>Linux Installation, Step by Step</u> has links to the official installation documentation for each distribution, as well as links to Control-Escape's reviews of the software and the installation procedure for each.

Obtaining Your Copy of Linux

Because it is Open Source, Linux can be distributed by anyone using any method. This means that there are myriad ways to obtain Linux, including Internet download, retail stores, and <u>Amazon.com</u>. Linux is distributed both by commercial companies and by community-owned organizations. Choice of distribution is mostly a religious decision, and most of the articles found on Control-Escape will be valid no matter which distribution you choose. That said, since our purpose is to help guide you through your Linux adventure with as little pain as possible, we do have some recommendations for those of you who have not yet made a choice.

Which Linux?

For new users, I highly recommend the <u>Ubuntu</u> distribution. It is based on Debian, has an easy installer with excellent hardware support, and the user interface is configured for simplicity and ease of use. Pick up a copy of <u>The Official Ubuntu Book</u>, which not only is an excellent introduction to life with Linux, but also contains Ubuntu Linux on DVD. You can run Ubuntu direct from the disc, without installing it, as a test drive, or install it right to your hard drive.

The Linux sources listed below are the big kids on the block, the most popular and most widely supported Linux distributions. Visit their web sites to get a feel for the kind of spin they put on their product.

- <u>Ubuntu</u> Recommended for new users.
- Fedora an excellent desktop, also good for new users..
- **Debian GNU/Linux** Very strict about the "freeness" of the distro.
- **<u>Slackware Linux</u>** Old school.
- **<u>SUSE Linux</u>** Corporate/Enterprise
- Red Hat Enterprise Linux Corporate/Enterprise

Note that SUSE and Red Hat as companies have chosen to focus on the "Enterprise market". As a result, their software and support services are targeted toward large businesses, to the detriment of the home user and hobbyist (in my humble opinion).

Fedora is a community-friendly work-alike if you're looking for something closely compatible with the enterprise versions.

Internet Download

For the budget conscious and bandwidth endowed, many Linux distributions are available via FTP. Keep in mind that Linux distributions typically fill at least one CD-ROM, sometimes two or more. This means you can expect *at least* a 500MB download, and more likely on the order of 1 gigabyte. (On a 28.8kbps modem this takes approximately 5000 years.) A Linux expert could pick and choose the packages he wanted and trim it down quite a bit, but for beginners, you'll want the whole shebang.

Before you decide to download, check the other options listed below. You will probably find them to be less hassle. But if you insist, you can indeed download the whole thing from the Internet. You can visit any of the vendor web sites above for information about downloading their products.

If you have a CD recorder, your best bet is to download ISO image files that you can burn directly onto a disc. Look for this option on the download sites you visit. The best place to locate the latest ISO images for every Linux distribution is <u>LinuxISO.org</u>. They have a sophisticated setup that will find you the fastest mirror automatically. Just point, click, and wait (and wait, and wait).

On CD-ROM (or Other Media)

You can also purchase CD-ROM copies of Linux, ready to install. All of the Linux vendors linked above will be happy to ship you copies of their distribution for (what they feel are) the appropriate fees. Mandriva will even ship you a <u>USB hard drive with</u> <u>Linux pre-installed</u>. Just plug it in and reboot! This has to be the simplest Linux installation of all.

"Free" Distributions on CD

Knowing that not everyone has broadband, many companies will print up CD-ROMs with copies of Linux, charging only for the disc and shipping. This is the same stuff you can download free from the Internet, all you pay is a few dollars (or euros or whatever) to have it delivered to your door. It also makes installation far more convenient to have a CD-ROM.

You can try ordering at LinuxCentral.

Official Boxed Linux Distributions

You can also purchase Official Linux CD-ROM Distributions from the companies that put them together. They come in shrink-wrapped boxes and contain everything you would expect from "commercial" software: multiple CDROMs, a printed installation manual or user's guide, a boot floppy, and most importantly, technical support. Each vendor has its own support policies (some provide support only via email, for example), so investigate before you buy.

Most of the major distributions are coming available in retail channels now, so you may find them on the shelf in your local computer store. If not, you can purchase official box sets from <u>LinuxCentral</u> or <u>Amazon.com</u>. You can also order directly from the vendor in most cases (see the Web sites under Internet Download above).

In a Book

Many books about Linux come with a complete Linux distribution bundled on CD-ROM. Although you don't *have* to buy a book to learn about Linux, it is often more convenient to have paper rather than just online resources. If you are planning to buy a Linux book anyway, you might as well get one with Linux inside and save some time.

We recommend <u>The Official Ubuntu Book</u> for beginners. If you're not sold on that, you might want to browse through our <u>Linux book store</u> to find some other books with CDROM's. New books and new Linux distributions are arriving more quickly than we can update our list, so you may also want to check the <u>Linux Section on</u> <u>Amazon.com</u>. Try sorting the books by publication date to find the most recent copies of Linux.