# **Could Linux Be the Right Operating System for You?**

Every operating system has advantages and disadvantages. Microsoft's

Windows and Apple's MacOS are the best known, but there are hundreds

### OF LINUX VARIANTS. HAVE YOU CONSIDERED LINUX?

Munich, Germany's third largest city, abandoned Microsoft in 2013 and began switching to Linux. Now the city is switching back to Windows and citing problems with "buggy and outdated software." That may not be the real reason.

Most people seem not to like change and the switch to Linux certainly gave the office workers and the bureaucrats a heavy dose of change. There have been complaints about printing, viewing, and editing documents.

Given all that, you might want nothing to do with Linux.

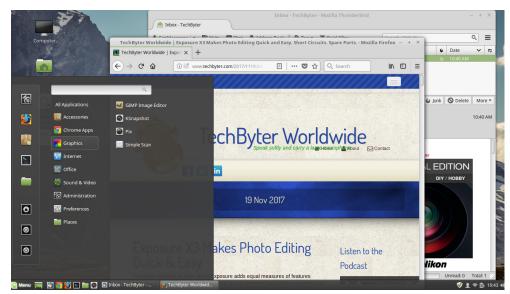
Granted, Linux can be more challenging to set up than Windows or MacOS, but it's easy to use and reliable when the setup is complete. For example, when I installed Linux Mint on an older notebook computer that no longer had a functional Wi-Fi card, I installed a USB Wi-Fi adapter. It took nearly a week's worth of backand-forth with the seller to make it work.

There's a reason for problems such as this: Most computers are assembled with hardware that's designed for Windows. Historically, this has been a particular problem with communications devices, but Linux comes with the necessary tools to fix these incompatibilities.

Equivalent applications generally run faster on Linux than on Windows or MacOS. As a result, Linux can often run on lower-cost hardware.

Linux isn't a good fit for everyone, but it is suitable for a lot of people. Maybe for you!

If you or your organization relies on Microsoft Outlook on an Exchange server, Linux is not for you. Likewise, if you depend on Adobe's Creative Cloud applications, you'll want to avoid Linux



Linux Mint looks a lot like Windows and may be an easier transition.

because Adobe doesn't support Linux. But if your needs are served by a word processor, spreadsheet, database manager, email application, and web browser, Linux could be the perfect choice.

Linux has been around for a long time. In fact, it runs the internet. Software developers like it. Its cousin, Unix, is the basis for MacOS and Unix has been around even longer.

If you've thought about Linux, why not try it? Set up one or two Linux computers and see if they suit your needs. Recent versions of Linux (called "distros") are easier for non-techies to set up. Many distros include features that people like about Windows and MacOS. It's more than adequate for anyone who needs to write letters (or books), calculate things, write programs, connect to other computers, and perform nearly any basic computer task.

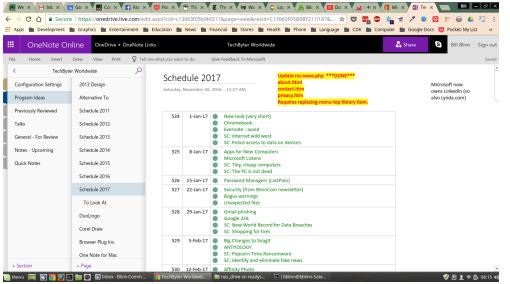
Be aware that most proprietary (i.e., commercial) software doesn't have a Linux version but some applications will run acceptably under Wine ("Wine Is Not an Emulator"). New Linux users should be prepared to read a lot and occasionally be frustrated during the changeover.

If you've investigated Linux, you've probably heard of Ubuntu. It's a well known and respected distro, but there are hundreds of others. Some of the other distros might be a better fit for you.

Ubuntu and many of the distros that are based on Ubuntu are significantly different from Windows. Differences tend to frustrate new users, so beware.

## Linux Differences

Unlike on Windows or MacOS computers, most of the applications you'll use on a Linux



Some Microsoft applications such as One Note are available to Linux users via a browser interface.

MACHINE WILL COME WITH NO COST. MANY LINUX DISTROS HAVE A SOFTWARE STORE APPLICATION THAT LOOKS A LOT LIKE MAC, MICROSOFT, AND GOOGLE SOFTWARE STORES — WITH THE EXCEPTION OF PRICES.

Linux doesn't use drive letters, so MacOS users will be more familiar with the way that Linux displays files and folders. Files are still files. Folders are still folders. Until recently, Windows often had problems connecting to network attached storage (NAS) drives. Windows 10 has eliminated the problem and Linux can almost always connect easily to NAS drives.

A brief explanation by Ofir Chakon about his decision to switch from Windows to Ubuntu Linux is unusual because it avoids the rabid partisanship that so often infests discussions of operating systems. Chakon is a software developer, but many of his observations apply to non-developers, too.

One of Chakon's observations parallels mine and he explains why we have taken different paths. My concern, and his, is the lack of Adobe applications on Linux. "Unfortunately, Adobe hasn't released any of its products to Linux users. So it's impossible to run them directly. The Ubuntu alternative is GIMP. This is a free software and has the basic features for a developer-designer."

I am not a software developer and I depend on Adobe applications, so GIMP isn't a viable option for me. Although there are ways to run Windows applications on a Linux system, I prefer not to use them.

Those kinds of considerations are essential to making the right decision about which operating

system to use. Chakon needed speed and support for development tools; that made Linux a good choice. "Linux is not for everyone," he writes. "Check to see if it fits your needs before you decide to switch. If you consider yourself either a technological entrepreneur, developer, data scientist, or programmer, you should definitely check out [one of the Linux distros]."

### Which Distro?

My Linux computers have always run Ubuntu. It's well known and well supported, but an acquaintance told me about the Mint distro and I decided to take a look at it.

Mint is based on Ubuntu, but it includes some features that make it a better fit for many users. Mint has three versions: A variant of the Gnome version 3 desktop called Cinnamon, another variant of Gnome version 2 desktop called Mate, and a third version called Xfce.

If all this seems a bit murky, here's a quick explanation: Linux is only a "kernel" and it needs an operating environment and a user interface (the "Desktop") to be functional. Five primary distros exist: Red Hat, Debian, Novel Suse, Gentoo, and Slackware; all other variants are based on them. Mint, for example, is based on Ubuntu and Ubuntu is based on Debian.

If you're a Windows or MacOS user who's considering Linux, Linux Mint's interface will be a lot more familiar than Ubuntu's. And Windows users who are using some of the cross-platform applications such as Firefox, Chrome, LibreOffice, OpenOffice, VLC, Thunderbird, and such, are already half way there.

## **Expect Success**

Some distros are better than others, but most will recognize your wired or wireless LAN, keyboard, mouse, and video subsystem.

They will identify all (or at least most) of your hardware and peripherals and then set them up. You may need additional proprietary drivers for some hardware, but the installer will usually ask if you want them to be included.

Linux is not Windows or the MacOS and installing programs is different because Linux uses a package management system. Packages can be programs, libraries, or other components. Unlike Windows, Linux and the MacOS don't use dynamic link libraries (DLL). A Linux system's package manager will ensure that all necessary dependencies are considered and the necessary packages are installed.

If you have an older computer — a desktop system or a notebook that you've retired — why not install a Linux distro on it and see what happens? The process is easy enough: Just download the ISO file, burn a disk, and then use that disk to boot the computer.

Linux can be installed to dual-boot with Windows, but it's easier to make it the only operating system on the computer. Assuming you're using a retired computer for tests, installing Linux as a stand-alone makes sense. The computer's hard drive will be formatted and any previous operating system or data on it will be lost.

Installation is straightforward and easy with most distros. That's certainly the case with Ubuntu and with any of the Mint distros. Just follow the prompts and answer the questions. If you're not sure how to answer a question, take the default answer. During installation, you'll be asked to connect to a network, to create an account, to indicate your time zone, to select a language, and such. The installer may ask if you want it to use proprietary software from device manufacturers. You do.

Unless the computer is ancient and seriously underpowered, your new Linux system will be up and running in less than 30 minutes.

Linux isn't guaranteed to make your numbers more accurate, your prose easier to read, or yout teeth whiter, but it's a viable alternative that deserves a look when you're thinking about new hardware. And a test using old hardware is a good way to experiment.  $\Omega$