Is This Finally Going to be the Year of Linux? Spoiler: No.

Have you thought about using Linux? Since the early 1990s, I've had Linux on at least one computer at all times. Maybe you've tried it or would like to.

I've had an internal conversation at least once a year since about 1992, a year after Linus Torvalds released his operating system based on Unix. So far none of those 27 years has turned out to be the *Year of Linux*.

In 1991, Torvalds announced that he was working on "a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones." It turned out to be a bit more than that. Torvalds liked Unix but didn't want to pay for it. "If 386BSD had been available when I started on Linux, Linux would probably never had happened" is what he told an interviewer in 1993.

So here we are, more than a quarter of a century later. Everyone who uses the internet uses Linux because "Linux runs the internet." That may be a bit of an overstatement: Combined, Linux and Unix power about two-thirds of the servers that run the internet and Linux is on a little more than half of these servers. Microsoft IIS also runs about a third of internet servers.

Sometimes Microsoft is essential. If an Exchange server or Sharepoint is required for a website, Microsoft IIS is a foregone conclusion, but Linux and Unix are the better choice for most people and that's probably why two thirds of the internet is on an X-server (X is shorthand for Linux/Unix).

That leads to what seems to be an obvious question: If Linux is so good that it's the dominant operating system for the internet, why is it virtually absent from desktop computers? Actually, Android is the prevalent operating system, being on more than 40% of devices compared to 35% for Windows. Smartphones are important, of course, but let's restrict this to desktop and notebook computers (including tablets). In that case, Net Marketshare says that Windows has about 87% of the market and the MacOS checks in at a little under 11%. Linux has less than 2%, ChromeOS is under half a percent, and BSD Unix is so low that it's beaten even by "unknown" at less than a quarter of a percent.
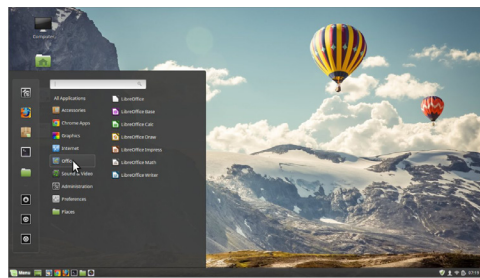
Why? Linux is a perfectly capable operating system. It can be configured to look a lot like Windows or a lot like the MacOS. Open source applications that perform all essential tasks exist. So what's the problem?

Starting with Servers

Let's go back to servers on the internet for a moment.

Linux servers rarely need to be rebooted, most configuration changes can be accomplished without a restart, and Linux is generally considered to be more secure. Windows servers need to be rebooted for many updates and they can become unstable when multiple database, web, and file services are in play. Anyone who needs 99.9999% uptime should choose Linux. However, learning how to manage a Linux server is more difficult. Simplicity is a key IIS benefit.

Ease of use and familiarity are two key considerations that work against Linux for desktop and notebook computer users, too. Applications such as Libre Office have most of Microsoft Office's features but the user interface is more like a much earlier version of Office.

My primary reasons for sticking with Windows include software. I'm familiar with Outlook, Word, Excel, and all of Adobe's Creative Cloud applications. There are no Linux versions of these applications, but they could be run with some success under WINE ("Wine Is Not an Emulator"). WINE introduces additional complexity that's likely to cause unwelcome problems at the worst possible time. As with word processor and spreadsheet applications, there are applications that perform the same tasks as well known commercial programs, such as GIMP in place of Photoshop.
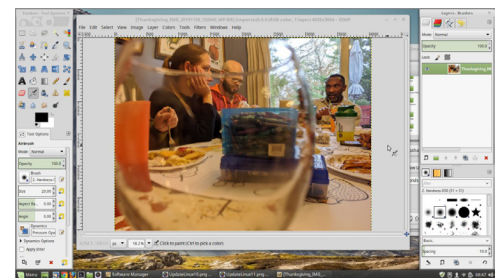
Although applications for email, web browsing, and office tasks are abundant, specialized commercial applications are not. There's no shortage of applications, though. Currently nearly 91,000 "packages" are available for Linux Mint.

Perhaps the major argument against Linux is the huge number of versions ("distros"). Linux is just the operating system's kernel. The user interface lies on top of the kernel and there are more than 200 distros. Seriously, though, that's a specious argument against. There are maybe a dozen top contenders and anyone who's serious about considering Linux should be able to find someone who's familiar with what's available. If not, keep these two terms in mind: Ubuntu and Mint.

Some people claim that Linux has more bugs that Windows. I don't buy that. Linux is an open-source operating system, which means that some of the developers are donating their time. There are paid developers and several organizations are involved in advancing Linux.

Users of Windows machines may be puzzled by the lack of drive letters on Linux systems. Those who are familiar with MacOS computers will recognize the Unix-like directory system. Linux has no problem connecting to Windows-based network drives using Samba, the Server Message Block (SMB) protocol.

Another absurd argument against Linux says that support is lacking. Have you tried to get support from Microsoft or Apple lately? This is something I've whined about from time to time. Yes, if you want serious, paid support for Linux, you'll need to get it from an organization such as Red Hat.

I've had mixed and mostly negative results in dealing with Microsoft support, though. The technicians, often based in India, offer reassuring comments, promise to resolve the problem, and may do so if the problem isn't complicated, but I've experienced poor support from "technicians" who know far less than I do. Most Linux support is provided in various online chat groups by people who use Linux and who have solved their own problems.

Maybe the second most important argument against Linux is the lack of drivers for many devices. I installed Linux on an older Windows computer that had a defective Wi-Fi system. The USB device I purchased from a Linux-aware company didn't work at first and the vendor spent far too much time working

with me to resolve the problem. Certainly there was no profit on that sale, but the problem was resolved and the old Windows computer has a good Wi-Fi connection under Linux.

Linux Can Be a Bad Choice

IF YOU PLAY A LOT OF GAMES, YOU'LL FIND THAT LINUX ISN'T EXACTLY WELCOMING. THERE'S NOT MUCH TO SAY HERE. IF YOU WANT TO PLAY GAMES, BUY A WINDOWS OR MACOS COMPUTER.

Perhaps the most illogical argument I've seen against Linux, and I've seen it many times, is "installing Linux is hard." It's not. Sure, if you try to second-guess the installer and make random changes, you'll have a mess. In the past quarter century, I've installed Linux many times on many computers. Follow the bouncing ball and you'll be fine.
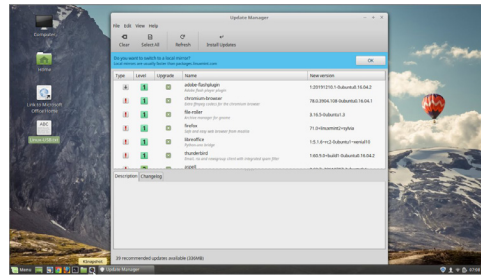
Arguments for Linux

LINUX IS BETTER THAN WINDOWS AND MACOS WHEN IT COMES TO UPDATES. OR MAYBE WORSE. IT DEPENDS ON YOUR POINT OF VIEW.

Microsoft pushes out big updates twice a year, minor updates on the second Tuesday of each month, and occasional out-of-cycle emergency updates.

Linux systems can receive updates for the operating system and all installed applications anytime. Whenever an update is available, it will be presented. As a result, you'll see more updates but the frequent updates address security and operational problems faster than Microsoft or Apple can.

Open-source is good. Windows hides what it does and the MacOS is even worse. Because Linux is an open-source operating system, anyone can look at the source code. Maybe you don't want to look at the code. Neither do I. But there are people who like to pick code apart and find flaws. When they find flaws, they report them and the problems are resolved.

Security is another argument for Linux. Microsoft has become much better with security, but Linux is based on Unix so that means file and directory permissions are robust. Package management, repositories, and a lack of shared resources makes Linux safer by default.

Linux allocates resources better than Windows does. Because this is so, installing Linux on an older computer can make the computer appear to be faster.

How about an illogical reason to use Linux? Here's one that many Linux proponents use: If you're a software developer, you'll probably love Linux. That line of reasoning fails to take into account that most of us are not programmers or developers. So you may not care that Linux has native support for Secure Shell (SSH) and may not even know what SSH is. It is an advantage, but for most people that argument in favor of Linux looks like a large load of gobbledygook.

Those who favor Linux take the "too many distros" argument against Linux and turn it on its head. Windows is Windows. You might have Windows Home (which eliminates some important features) or Windows Pro, but that's about it unless you're running Windows Server.

Linux, as I noted earlier, has more than 200 "distros". If you want to install Linux, Ubuntu or one of the three Mint distros (all of which are based on Ubuntu) will probably be good choices, but more adventurous users will find Linux distributions for hackers, for programmers, and for extremely old computers. These kinds of choices are not available to Windows or MacOS users.

Sigh.

So here I am coming down on both sides of the issue and you can imagine how painful it is to land squarely on the fence with one foot on either side. Yes, this should be the Year of Linux. Yes, 1992 should have been the Year of Linux. And every other year between then and now.

So far, no year has been the Year of Linux and there's little reason to expect that 2020 will be any different.

But it would be a nice 50th birthday present for Linus Torvalds. Ω