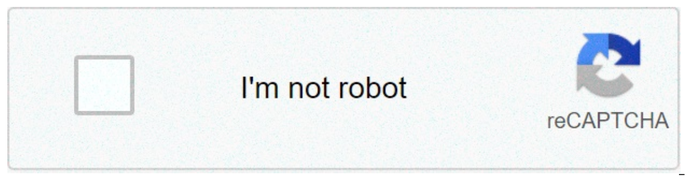

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Installing linux pdf

Screenshot: Jack WallenSo you've made the switch to Linux. Or you're thinking of making the switch. But you have questions that might be stopping you from fully diving in. One of the biggest concerns most new users have is, "What software is available and how do I install it?"It's a reasonable question. Why? For the longest time, Linux suffered from a stigma that applications were scarce, and that the few available options were a challenge to install. I remember, back in the early days, having to compile software from source packages—which would lead to a seemingly endless circle of missing dependencies. It was frustrating, but doable. That frustration, however, turned a lot of people away from Linux.Fortunately, those days are long since past, and installing any of the available software titles (of which there are many) on Linux is no longer such a headache.What operating system do you use? For some, that question may as well be posed in Latin or…Read moreBefore we get into the how-tos of actually installing software on Linux, there is one very important concept to understand:Package managersThis is one of those topics that tends to confound most new Linux users. A package manager is a sub-system on Linux that, as the title says, manages the packages (software) on your computer. It's a crucial component of Linux, in that it keeps track of everything installed; downloads packages; ensures all packages are installed in a common location; helps to upgrade packages; resolves dependencies; and keeps users from having to install from source code.The biggest point of confusion is that there are numerous package managers available, but only one can be used on a distribution. In fact, distributions are differentiated, primarily, on which package manager they choose. For example: Debian and Ubuntu (and its derivatives) use apt; Red Hat Enterprise Linux, CentOS, and Fedora use yum; SUSE and openSUSE use zypper; and Arch Linux uses pacman. There are more package managers out there, but this is a good place to start.Each package manager works with a different file type. For example, apt works with .deb files and yum and zypper work with .rpm files. The apt package manager cannot install .rpm files and neither yum or zypper can install .deb files. To make matters even more confusing, Ubuntu (and its derivatives) uses the dpkg command for installing local .deb files, and Red Hat (and its derivatives) use the rpm command to install local .rpm files.Android's designed largely for mobile users, but since it has Linux at its core, it can work with a Read moreConfused yet? Don't worry, it's actually much easier than that.Most package managers have GUI front ends. These front ends are similar to the Apple App Store. It should be no surprise that there are numerous such GUI front ends available. The good news here is that most of them are similarly titled (such as GNOME Software, Ubuntu Software, Elementary AppCenter). These app stores allow you to easily search for a software title and install it with the click of a button (more on this in a bit).There is one other issue with package managers: repositories. Repositories are a key aspect of package managers, but for new users the concept can add yet another level of confusion we don't want. For a quick overview, however, consider this: Out of the box you only have a certain selection of software titles available. That selection is dictated by the repositories that are configured. There are numerous third-party repositories you can add to the system. Once added, you can then install any software titles associated with those third-party repositories. Software repositories can be added either from a GUI tool or the command line. In any case, repositories are an issue for a different day, and not necessary to understand for the type of software downloads discussed in this article.Installing a downloaded fileI know, I know… I said one of the benefits of modern Linux operating systems is that you don't need to install from a downloaded file. That being said, I want to start here. Why? There may be times when you find a piece of software not available in your distribution's "app store." When that occurs, you'll need to know how to install that application manually. I will say that, for everyday, average use, it's a rare occasion that you'll need to do this. And even if you never do install using this method, at least you'll have a very basic understanding of how it works.Here, we'll demonstrate using the latest release of Ubuntu Linux (as of this writing, 17.10). Most package managers install in similar fashion (with slight variations on the commands used). Let's say you want to install the Google Chrome browser on Ubuntu. You won't find this particular browser in the Ubuntu Software tool. To install it from the command line, you must download the correct file. As stated earlier, the correct file for Ubuntu will be a .deb file. So point your browser to the Chrome download page and click the Download Chrome button. The good news here is that your browser will be detected and the Chrome download page will know which file you need. Click the ACCEPT AND INSTALL button and a new window will appear, giving you two options (see below).Your choice of install paths.You can either save the file to your hard drive (and then install via the command line), or open the file with the Software Installer. It is important to understand that not every distribution includes the latter. If you do not get the Open with option, then you'll have to install from the command line. Let's first use the Open with option. Make sure Software Install (default) is selected and click OK. The file will download and then Ubuntu Software will open, giving you the option to install (see below).Installing a downloaded file with Ubuntu Software.Click Install and you will be prompted for your user password. The installation will complete and Chrome is ready to use. You can close the Ubuntu Software tool and open Chrome from the Dash.But what if you don't get the option to install with the GUI tool? Then you have to select the Save File and run the installation from the command line. Don't worry, it's not that hard. Here are the steps to install the latest release of Chrome, on Ubuntu Linux, from the command line:Click on the square of dots at the bottom of the desktopWhen the Dash opens, type terminalChange into the Downloads directory with the command cd ~/DownloadsInstall Chrome with the command sudo dpkg -i google-chrome*.debWhen prompted (see below), type your user password and hit Enter on your keyboardAllow the installation to completeInstalling Chrome from the command line.Installing from the GUIThis is where things get very easy. To install from your distribution's GUI, you only need open up the tool, search for the software you want, and click Install. Say, for instance, you want to install the GIMP Image editor. To do that, open Ubuntu Software and type gimp in the search bar. When the results appear, click on the GIMP entry, click the Install button (see below), and (when prompted) type your user password. Wait for the installation to complete and your new software is ready to be opened and used.Bottom line: it's all easier than it seemsInstalling software on Linux isn't nearly as hard as you might have thought. Yes, there may be the rare occasion when you need to install something from the command line, but even that isn't much of a challenge. Besides, chances are, you'll never have to install software outside of the GUI front end.Do remember, if you use a distribution other than Ubuntu (or its derivatives), you'll want to do a quick bit of googling to make sure you understand the differences between the apt package manager and the one used on your desktop. slowmotiongli/Shutterstock.com Want to install Linux? It's an easier process than you might think! You can even try Linux on your PC before you install it. If you don't like it, just reboot and you'll be back to Windows. Here's how to get started with Linux. Choose a Linux Distro and Download It First, you'll need to choose a Linux distribution you want to use. Linux distributions package up the Linux kernel and other software into a complete operating system you can use. Different Linux distributions have different system tools, desktop environments, included applications, and visual themes. Ubuntu and Linux Mint are still some of the most popular Linux distributions. We really like Manjaro, too. There are many, many other options—there's no wrong answer, although some Linux distributions are intended for more technical, experienced users. Once you've picked your Linux distribution of choice, visit its website and download its installer. You'll get an ISO file, which is a disc image file containing the Linux distribution's installation files. Sometimes, you'll be asked to choose between 32-bit and 64-bit distributions. Most modern computers have 64-bit-capable CPUs. If your computer was made in the last decade, you should choose the 64-bit system. Linux distributions are dropping support for 32-bit systems. RELATED: The Best Linux Distributions for Beginners Create Bootable Installation Media To boot, try, and install the Linux system you downloaded, you'll need to create bootable installation media from your ISO file. There are several ways you can do this. If you have a writeable DVD you want to use, you can burn the ISO file to disc using the "Burn disc image" function in Windows. However, you'll probably want to use a USB drive instead—USB drives are faster than DVDs and will work on any computer with a DVD drive. Here's what you'll need to create a bootable Linux USB drive on Windows: The ISO file for your Linux distribution of choice. The free Rufus software. Ubuntu's official instructions recommend Rufus, too. A USB drive of at least 4 GB in size. Some Linux distributions may need larger drives if they have larger installers, but 4 GB should be fine for most Linux distributions, including Ubuntu. (Warning: The contents of the USB drive you use will be erased.) Launch Rufus and insert your USB flash drive into your computer to get started. First, in the "Device" box, select your USB drive. Second, click the "Select" button and browse to the ISO file you downloaded. Third, click the "Start" button to create the USB drive. You may see a few warnings. Accept the default options: Click "Yes" if you're prompted to download additional files, and click "OK" if you're prompted to write in ISO mode. Finally, you will be warned the Rufus will erase all files on your USB drive—ensure you've backed up any important files and click "OK" to continue. Rufus will create your USB installer drive, and you'll see the progress bar at the bottom of the window fill up. When it's a full green bar reading "Ready," you can click "Close" to finish the process. RELATED: How to Create a Bootable Linux USB Flash Drive, the Easy Way Boot Your Linux Installation Media If you're booting the Linux system on the same computer you created installation media on, you don't even need to unplug your USB drive. You'll just have to reboot your PC and boot it from the Linux installation media. To do so, select the "Restart" option in Windows. Your PC may automatically boot from the inserted USB drive and into Linux. If your computer just boots back into Windows, you may have to press a certain key to access a boot device menu and select it during the installation process. Common keys you may have to press during the boot process include F12, Escape, F2, and F10. You may see this key displayed on screen during the boot process. You may also have to access your BIOS or UEFI firmware settings screen and change the boot order. The exact process will depend on your model of PC. Check your PC's instructions for more information. (If you built your own PC, check the motherboard's instruction manual.) RELATED: How to Boot Your Computer From a Disc or USB Drive What About Secure Boot? Modern PCs with UEFI firmware—generally, PCs that came with either Windows 10 or Windows 8—have a feature called Secure Boot. They're designed not to boot unapproved operating systems, which should help protect you from rootkits and other malware. Some Linux distributions, like Ubuntu, are designed to work with Secure Boot and use a special Microsoft-signed bootloader, letting them run on your system. Other Linux distributions may require you disable Secure Boot before they can boot. However, in many situations, your Linux distribution should just boot normally. If Linux boots, don't worry about Secure Boot. If you see a Secure Boot error message and Linux doesn't boot, check your Linux distribution's documentation for more information—and consider disabling Secure Boot on your PC. RELATED: How to Boot and Install Linux on a UEFI PC With Secure Boot Try Linux With Linux booted, you'll get a "live" Linux desktop you can use just as if Linux was installed on your PC. It isn't actually installed yet and hasn't modified your PC in any way. It's running entirely off the USB drive you created (or the disc you burned.) For example, on Ubuntu, click "Try Ubuntu" instead of "Install Ubuntu" to try it out. You can explore the Linux system and use it. Bear in mind that it will likely perform more quickly once it's installed to your PC's internal storage. If you just want to play with Linux for a bit and don't want to install it yet, that's fine—just reboot your PC and remove the USB drive to boot back into Windows. If you'd like to try out multiple Linux distributions, you can repeat this process and try a bunch of them before choosing to install one. (Not all Linux distributions offer a live environment you can play with before you install them, but the vast majority do.) Warning: Back Up Before Continuing Before you actually go through with installing Linux, we recommend backing up your important files. You should always have recent backups, especially when you're messing with your system like this. It should be possible to install Linux in a dual-boot scenario and have the Linux installer seamlessly resize your Windows partition without affecting your files. However, mistakes can happen when resizing partitions. And it would be possible to accidentally click the wrong option and wipe your Windows partition. So, before continuing, we encourage you to back up all your important data—just in case. RELATED: What's the Best Way to Back Up My Computer? Install Linux If you're happy with your Linux distribution and it works well on your PC, you can choose to install it. The Linux distribution will be installed on an internal system drive, just like Windows. There are two ways to do this: You could install Linux in a "dual-boot" configuration, where it sits alongside your Windows operating system on your hard drive and lets you choose which operating system you want to run each time. Or, you can install Linux over Windows, removing the Windows operating system and replacing it with Linux. If you have two hard drives, you can even install Linux on one of the hard drives and use them in a dual-boot scenario. We recommend installing Linux in a dual-boot configuration to give yourself the option of which to use. If you know you really don't want to use Windows and you want to reclaim some hard disk space, however, go ahead and remove Windows. Just bear in mind that you'll lose all your installed applications and any files you haven't backed up. To perform the installation process, run the installer from the live Linux system. It should be easy to find—it's generally an icon placed on the default live desktop. The installation wizard will guide you through the process. Go through the installer and choose the options you want to use. Read the options carefully to ensure you're installing Linux in the way you want to. In particular, you should careful not to erase your Windows system (unless you want to) or install Linux onto the wrong drive. When the installation process is done, you'll be asked to reboot your PC. Reboot and remove the USB drive or DVD you installed Linux from. Your computer will boot Linux instead of Windows—or, if you chose to install Linux in a dual-boot scenario, you'll see a menu that will let you choose between Linux and Windows every time you boot. If you want to reinstall Windows later, you can always download Windows installation media from Microsoft and use it to reinstall Windows.