Ubuntu MATE

A Guide for Computer Users Upgrading from Windows or OSX



Larry Bushey

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About This Guide

This guide is written for users switching from other operating systems to Ubuntu MATE. That does not mean that it is ONLY for users switching from other operating systems. It is also meant as a reference for everyone using Ubuntu MATE. However, if you are upgrading from Windows, OSX, or something else, you'll find that the suggestions we make for personalizing Ubuntu MATE will help you feel right at home with your new software for your computer.

This guide is divided into these main sections:

What is Ubuntu MATE Anyway?

A detailed discussion of Ubuntu MATE and its major applications.

About Ubuntu MATE

Why Ubuntu MATE? Objectives, hardware requirements, downloading, installing and getting support.

FAQ

There are some questions the Ubuntu MATE team is asked frequently so they compiled a list of answers to the most common ones.

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Attribution and Credits

- Some content adapted from Ubuntu MATE Help, published by <u>Ubuntu MATE</u>.
- Some content adapted from the MATE Desktop User Guide, published by the <u>MATE</u> <u>Documentation Project</u>.
- Some content adapted from the Going Linux Podcast and website, <u>http://goinglinux.com</u>
- Some figures courtesy of the Ubuntu MATE Community post, <u>Ubuntu beginners guide</u>, <u>complete how to install and run first update</u>.
- Ubuntu is a trademark of Canonical Ltd.

Introduction: So You've Discovered Linux!



"Tux" the Linux mascot.

Once you become aware that there is dependable, secure, capable, and modern software to run your computer that rivals all others in popularity and actual use, you will want to try the <u>Linux operating system</u>. Perhaps you've been using a member of the Unix/Linux family - Linux, Android, ChromeOS, BSD or even OSX - for quite a while. If so, you are likely looking for new ways to optimize your technology for the way you work. This guide is for computer users who just want to use Linux to get things done.

We know that you would probably like to have a computer with software that is like your previous computer's software, only better. By "better" we know you mean a modern but familiar user experience design, easy to understand and use, designed with security built-in, and protection from viruses and spyware included. All of that should be included and upgradeable at no additional charge. You want it all to "just work" with minimal or no maintenance – automatic security updates and software upgrades for both the operating system and all of your installed applications. You don't mind paying for software, but you prefer the "try before you buy" philosophy. We think you'll find that Ubuntu MATE gives you all of that and more!

It's true that Ubuntu MATE is great for converts from Windows or OSX, because you can easily customize it to look and behave similar to the way either of those operating systems work. Not only that, but Ubuntu MATE is an excellent choice for any kind of computer user, from casual home user to professional developer, because of its functionally thought-out design. It's also capable enough for experienced users because, like almost all Linux distributions (i.e. flavors of Linux), Ubuntu MATE has the power and capabilities of every Linux baked-in.

With that in mind, this guide is written from the perspective that Ubuntu MATE is a typical modern Linux for the average user. Let's assume that our fictional "average user" is someone who needs to browse the Internet, check email, use a text editor or word processor, and maybe read and store document files. We won't forget about viewing and editing photos, watching videos, listening to music, and subscribing to podcasts.

Whether you are new to Linux, upgrading from Windows or OSX to Linux, or just thinking about moving to Linux, this guide will provide you with practical, day-to-day advice on how you can use the Ubuntu MATE distribution of Linux and its applications. This guide will help demystify Ubuntu MATE for new-comers and provide a reference for all users of Linux.

What is Ubuntu MATE Anyway?

Ubuntu MATE is an operating system. An operating system is the core software that runs your computer, similar to Microsoft's Windows, Apple's OS X and Google's Chrome OS.

If you are new to Ubuntu MATE, or only casually acquainted with Linux-based distributions, it can take a little effort to understand how a Linux operating system compares with other computer systems that you may already be familiar with. We think investing a little time is worth it. Here's why:

Works for You, Not the Other Way Around

If you are like the "average computer user," over the years, you have become a skilled Windows user but you've become more and more aggravated at having to repurchase the same software over and over, and pay for upgraded versions of other software, each time your operating system is being upgraded. Online (cloud-based) software applications have become more attractive, but they seem like they'd be at least as expensive after a year or more of paying monthly subscription fees. When it was first introduced, somehow you just knew the "free" upgrade to Windows wouldn't be free in the long run. Now you know that you were right.

Whether you have already switched to Apple products or have just considered doing it, you are aware of two frustrations many Apple users are voicing. The first frustration is that the Apple applications, hardware and accessories are very expensive. Perhaps you can afford any one, two or three of Apple's products at any given time. But you can see that switching to the Cupertino-based company's products doesn't get you off of the treadmill of forking over ever more cash for software and hardware upgrades. If anything, it accelerates the treadmill. The second frustration is that Apple's recent direction with its products seems to be eliminating as many of its external accessory connections (ports) as possible. At the same time Apple is sealing the computer's case, eliminating the ability to replace or upgrade simple things like RAM, hard drives and broken parts. It feels like a switch to Apple would be like jumping from the frying pan into the fire.

OK, so you don't mind upgrading your computing hardware to get better performance when it's needed. But do you really like that you can't upgrade the perfectly-functioning HP Pavilion or ThinkPad you bought from a big box store a few years ago, even though it has almost the same specs as the computers now on sale at that same store? It's a perfectly good computer but because of some specification technicality, it "isn't capable" of running the latest version of the Redmond-based company's software. Adding insult to injury, your computer keeps trying to force you to upgrade! You've reached a point where you don't want to research any more computer tricks to keep your computer from doing the things *it* wants to do – but *you* don't want done. You'd rather learn how to optimize Linux than hunt down *one more* Windows hack or work-around. You want to use your computer to get things done and believe your computer should be doing the work for you, and not the other way around! So do we, and Ubuntu MATE is designed to make that happen!

Modern and Full-Featured

Ubuntu MATE is a modern computer operating system, with an attractive and easy to understand user interface. Its update manager keeps both the operating system itself and all of its installed applications updated to the current, secure release. The operating system is more secure, and better-supported than operating systems that come pre-installed on most home computer hardware today.

Pre-Configured Yet Flexible

Using Ubuntu MATE provides you with the freedom to run a complete, full-featured operating system, pre-configured with most, if not all, of the applications you will need for your daily computing. Or you can change anything about the way it looks, the way it works, or the applications it runs to suit your taste.

Built-In Security

Ubuntu MATE is designed with security in mind. Unlike operating systems that update only once a month, Ubuntu MATE receives updates continuously. The updates include security patches for Ubuntu MATE. Security updates for its installed applications are provided on the same schedule. This ensures that you have the latest protection for all of your computer's software – as soon as it's available!



Ubuntu: The Basis of Ubuntu MATE

Ubuntu MATE is created from <u>Ubuntu</u>, one of the, if not the, most widely deployed Linux-based desktop operating systems in the world. Linux is at the heart of Ubuntu and makes it possible to create secure, powerful and versatile operating systems, such as Ubuntu, Android, and ChromeOS.

Ubuntu is developed by Canonical, Ltd. and is available in a number of different community-supported flavors, each coming with its own desktop environment. Started as a community-developed project, Ubuntu MATE takes Ubuntu's base operating system and adds the <u>MATE Desktop</u>. Today, Ubuntu MATE is an official flavor of Ubuntu Linux.

The name "Ubuntu" is pronounced oŏ'boŏntoō. According to <u>The Ubuntu Story</u>:

66 Ubuntu is an ancient African word meaning 'humanity to others'. It also means 'I am what I am because of who we all are'. The Ubuntu operating system brings the spirit of Ubuntu to the world of computers.

Ubuntu Flavors

While they are not *commercially* supported by Canonical, these Ubuntu "flavors" receive full support from their communities.

- Edubuntu
- Kubuntu
- Lubuntu
- Mythbuntu
- Ubuntu GNOME
- UbuntuKylin
- Ubuntu MATE
- UbuntuStudio
- Xubuntu

The MATE Desktop



66 ... an implementation of the desktop metaphor made of a bundle of programs running on top of a computer operating system, which share a common graphical user interface (GUI)... Desktop GUIs help the user to easily access and edit files.

- Wikipedia (May 7, 2017)

The MATE Desktop is an example of such a desktop environment. It includes a file manager which can connect you to your local and networked files, a text editor, archive manager, image viewer, document viewer, system monitor and terminal. All of these are highly customizable and managed via a control center. You can find complete documentation for the MATE Desktop Environment and its applications in the MATE Desktop User Guide, available within the *Help* application on Ubuntu MATE's System menu.

The MATE Desktop provides an intuitive and attractive desktop environment using traditional metaphors like "window" and "desktop". That means, if you've ever used <u>Microsoft Windows</u> or <u>Apple</u> <u>Mac OS</u>, the MATE desktop will feel very familiar.

The MATE Desktop has a rich history and is the continuation of the GNOME2 desktop, which was the default desktop environment on many Linux and Unix operating systems for over a decade. This means that MATE Desktop is tried, tested, and very reliable.

The name "MATE" is pronounced *Ma-Tay*. It comes from the <u>yerba maté</u> plant, native to South America.

The MATE Desktop itself provides Ubuntu MATE with many of the essential features that you'd expect in a computer desktop environment, including some basic applications and utilities:

File Browser (Caja)

The *Caja* application, found in the Ubuntu MATE menus at Applications ► System Tools ► Caja, lets you organize files and folders, both on your computer and online. For help topics on this application, see the *Caja* manual contained within the MATE *Desktop User Guide*.

Text Editor (Pluma)

The *Pluma* text editor, found in the Ubuntu MATE menus at Applications > Accessories > Pluma Text Editor, enables you to create and edit text files. The aim of Pluma is to be a simple and easy to use text editor. You can enable more powerful features with different plug-ins, allowing a variety of tasks related to text-editing. For help topics on this application, see the *Pluma* manual contained within the MATE *Desktop User Guide*.

Archive Manager (Engrampa)

You can use the *Engrampa* Archive Manager application, found in the Ubuntu MATE menus at Applications > Accessories > Engrampa Archive Manager, to create, view, modify, or unpack an archive. An archive is a file that acts as a container for other files. Sometimes referred to generically as "zipped files" or "compressed files," an archive can contain many files, folders, and subfolders, usually in compressed form. For help topics on this application, see the *Engrampa* manual contained within the MATE *Desktop User Guide*.

Image Viewer (Eye of MATE)

The Eye of MATE Image Viewer application, found in the Ubuntu MATE menus at Applications Graphics Eye of MATE Image Viewer, enables you to view single image files, as well as large image collections. For help topics on this application, see the Eye of MATE manual contained within the MATE Desktop User Guide.

Document Viewer (Atril)

The Atril Document Viewer, found in the Ubuntu MATE menus at Applications > Office > Atril Document Viewer, enables you to view documents of various formats like Portable Document Format (PDF) files and PostScript files. For help topics on this application, see the Atril manual contained within the MATE Desktop User Guide.

MATE System Monitor

The MATE System Monitor, found in the Ubuntu MATE menus at Applications > System Tools > MATE System Monitor, enables you to display basic system information and monitor system processes, usage of system resources, and file system usage. You can also use MATE System Monitor to modify the behavior of your system. For help topics on this application, see the MATE System Monitor manual contained within the MATE Desktop User Guide.

MATE Terminal

MATE Terminal is a terminal emulation application, found in the Ubuntu MATE menus at Applications > System Tools > MATE Terminal, that you can use to access a UNIX shell in the MATE environment. It provides access to the powerful Linux command line and interprets and executes the commands that you type at a command line prompt. For help topics on this application, see the MATE *Terminal* manual contained within the MATE *Desktop User Guide*.

Control Center

The *Control Center* provides you with a single window that houses all of the MATE preference tools. These tools let you tweak the way things look and behave, manage software updates, and make adjustments to the printing system, among other things. For help topics on this application, see the *Control Center* manual contained within the MATE *Desktop User Guide*.

Ubuntu MATE's Powerful Applications

While the MATE Desktop provides the essential components to control and use a computer, Ubuntu MATE adds a collection of additional applications to turn your computer into a truly powerful workstation. Naturally you'll also find a firewall, backup application, document/photo scanner, and printer management all included in Ubuntu MATE.

Ubuntu MATE Welcome

Ubuntu MATE Welcome is unique to Ubuntu MATE. It is a utility that helps you to get comfortable with your new operating system. It guides you through configuring your system and installing additional applications you may want or need. More on this in the next section.

Productivity



1

Firefox delivers safe, easy web browsing.

Thunderbird is a full-featured email client with integrated spam filtering.

LibreOffice is a full-featured office productivity suite that is Microsoft(R) Office compatible.

Document Management

Printing on Ubuntu MATE is simple and easy. In most cases you simply connect your printer via
USB cable and Ubuntu MATE immediately configures it for use. Printing to a network printer is almost
as easy.

The Simple Scan application, found in the Graphics menu, provides a simple and easy way to scan your documents. Once you scanner is connected via USB or over the network, configuration is usually automatic. Load your document, press Scan, then save the image.

Whether you are scanning a page, writing a book, or saving a web page, PDF creation on Ubuntu MATE is built-in. Most applications allow you to save or export a document as a PDF from the application menus. If the application you use doesn't offer that directly, you can always print the document as a PDF file.

Entertainment



Rhythmbox is a very easy to use music player and organizer.

Shotwell is a digital photo organizer.

With VLC, you can play, capture, and broadcast your multimedia streams.

Games

Ubuntu MATE is fully compatible with *Steam* for Linux. There are also many high quality and enjoyable Open Source games titles available for Ubuntu MATE via the Ubuntu Software Center.

Security

Ubuntu MATE is designed with security in mind. Ubuntu MATE receives updates continuously, which ensures that you have the latest protection for all of your computer's software – as soon as it's available!

Accessibility

Making an accessible operating system was a key priority when the Ubuntu MATE founders initially set out the goals of the project. Accessibility is built-in.

User Interface

From within the *Control Center* Ubuntu MATE provides a unique tool to transform the look and feel – the user interface – of your computer. The *User Interface* settings can be used to quickly change how things look and feel. You can change them to be similar to Microsoft Windows or Apple's OSX if you want.

Software Centers

There is an abundance of additional software available for Ubuntu MATE. Some people may find that choice overwhelming, so Ubuntu MATE's Software Boutique has been created as a carefully curated selection of the best-in-class applications. They have been chosen because they integrate well, complement Ubuntu MATE and enable you to self style your computing experience.

And this is just the start! If you can't find what you're looking for in the Software Boutique, you can easily install one of the available software centers to explore the complete Ubuntu software catalog. The <u>Ubuntu Software Center</u> includes thousands of applications suitable for just about any professional or recreational pursuit.

Ubuntu MATE Welcome

One application developed by the Ubuntu MATE team and unique to the Ubuntu MATE Linux distribution is *Ubuntu MATE Welcome*. *Welcome* is a utility that helps you to get comfortable with your new operating system. It guides you through post-install configuration such as installing drivers and adding language support. *Welcome* provides a one-click installation from a highly curated list of best-in-class software designed to help you "get stuff done".



Welcome introduces new users to the operating system

- Highlights key features of Ubuntu MATE and GNU/Linux.
- Provides quick guidelines on getting started.
- Provides quick installation guidance.
- Informs users of their system's specifications.

Welcome grows the Ubuntu MATE Community

- Links to the community forums and social networks.
- Informs of Ubuntu MATE branded products for sale.
- Provides details on donating to the project.

Welcome includes the Software Boutique

One of the applications available from both the MATE Control Panel and the Ubuntu MATE *Welcome* application is the Software Boutique. This curated selection of the most popular applications let's you:

- Select from a pick of Ubuntu MATE's recommended software, tested for the distribution.
- Use simple tools to manage software packages installed on your system.
- Install a package manager, such as Ubuntu Software Center.

The installation options include the Steam gaming platform, the Google Chrome browser, Dropbox for file sharing, Spotify for music, Syncthing for file synchronization, Telegram messaging app, uGet download manager, Minecraft, Gimp advanced image editor, InSync Google Drive application, SpiderOakONE offsite backup, Skype, Google Music Manager, VeraCrypt file and folder encryption, Ubuntu SDK, Codecs, libdvdcss2, VirtualBox 5.0 virtual machine, Synaptic package manager, Ubuntu Software Centre and many others.

Productivity Applications

If you are like most computer users, you browse the web, check email, create and read documents, and manage your photos. Maybe you print and scan documents, create PDF files, listen to music, and watch videos as well. Ubuntu MATE comes pre-installed with a best-in-class application for each of these things – and more! And if you prefer Chrome to Firefox, or if you use Gmail on the web instead of an installed email client, you can easily make changes, but when you first start using Ubuntu MATE, it comes with all of the basic software you will need to be productive using your computer.

Firefox, a popular application on almost any computing platform, delivers safe, easy web browsing. A familiar user interface, enhanced security features including protection from online identity theft, and integrated search let you get the most out of the web. <u>Read more about Firefox</u>.

Thunderbird is a full-featured email, RSS and newsgroup client that makes emailing safer, faster and easier than ever before. It supports different mail accounts (POP, IMAP, Gmail), has a simple mail account setup wizard, one-click address book, tabbed interface, an integrated learning spam filter, advanced search and indexing capabilities, and offers easy organization of mails with tagging and virtual folders. It also features unrivaled extensibility. <u>Read more.</u>

LibreOffice is a full-featured office productivity suite that provides a near drop-in replacement for Microsoft(R) Office; its clean interface and powerful tools let you unleash your creativity and grow your productivity. LibreOffice embeds several applications that make it the most powerful Free and Open Source Office suite on the market. <u>More about LibreOffice</u>.

- Writer, the word processor.
- *Calc*, the spreadsheet application.
- *Impress*, the presentation engine.
- Draw, the drawing and flowcharting application.
- Base, the database and database front end.
- Math, for editing mathematics.

Ubuntu MATE has the essential mobile device support you'd expect. You can plug in a phone, media player or digital camera and the device is automatically detected and mounted, you can then access the files on it or sync content.

Document Management

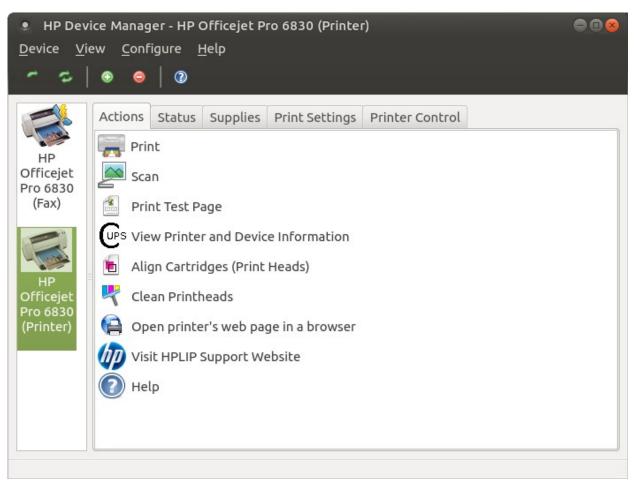
Ubuntu MATE makes printing, scanning and saving documents almost easier than creating them. All the software you are likely to need is pre-installed for the most popular printers and scanners, so setting up your hardware is easy, too.

Printing

Printing on Ubuntu MATE is simple and easy. The most popular printer drivers are already provided in Ubuntu MATE's Linux kernel. In most cases you simply connect your printer via USB cable and Ubuntu MATE immediately configures it for use. Printing to a network printer is almost as easy. Read more about printing.

(4)

For added control, you can install the *HP Linux Imaging and Printing* (HPLIP) utility from the *Ubuntu MATE Welcome* application or from the Software Boutique. It gives you access to additional drivers and provides more options for managing your printers. <u>Read more about HPLIP</u>.



Scanning

The Simple Scan application, found in the Ubuntu MATE menus at Applications
Graphics
Simple Scan, provides a simple and easy way to scan your documents. Once you scanner is connected
via USB or over the network, configuration is usually automatic. Load your document, press Simple
Scan's Scan button, then save the image.

PDF Creation

Whether you are scanning a page, writing a book, or saving a web page, you sometimes need to make a PDF file from a document. You don't need a special application with Ubuntu MATE. PDF creation is built-in. Most applications provide a menu selection to Save As PDF or Export to PDF. If the application you use does not offer one of those options, you can always print the document as a PDF file. Ubuntu MATE has printing a document or file in PDF format built-in. See the illustration.

Print				• •
General Page Setup Tex	t Editor			
Printer	Location Status			
😃 Print to File				
OfficejetPro6830fax				
OfficejetPro6835	Network			
File:ocument-manag	gement.page.pdf	Output format: 🔇	PDF 🔿 Postscript	⊖ svg
Range		Copies		
All Pages		Copies:	1 🗕 🖶	
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Entertainment Applications

Ubuntu MATE comes pre-installed with three significant applications for managing your entertainment and media files and subscriptions. If you need more, the <u>Software Centers</u> offer many, many more to choose from.

Rhythmbox

Rhythmbox is a very easy to use music playing and management program which supports a wide range of audio formats (including mp3 and ogg). Originally inspired by Apple's iTunes, the current version also supports Internet Radio, iPod integration and generic portable audio player support, audio CD burning, audio CD playback, music sharing, and podcasts.

Shotwell

Shotwell is a digital photo organizer. It allows you to import photos from disk or camera, organize them in various ways, view them in full-window or full-screen mode, and export them to share with others. It is able to manage a lot of different image formats, also including raw CR2 files.

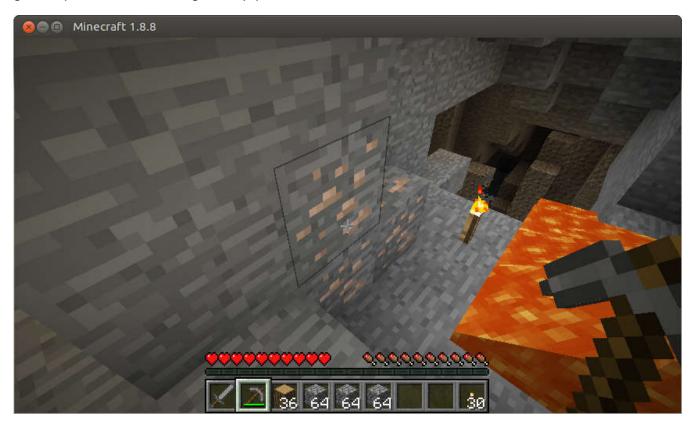
VLC

VLC is the VideoLAN project's media player. It plays MPEG, MPEG-2, MPEG-4, DivX, MOV, WMV, QuickTime, WebM, FLAC, MP3, Ogg/Vorbis files, DVDs, VCDs, podcasts, and multimedia streams from various network sources. VLC can also be used as a streaming server that duplicates the stream it reads and multi-casts them through the network to other clients, or serves them through HTTP. VLC has support for on-the-fly transcoding of audio and video formats, either for broadcasting purposes or for movie format transformations. For information about VLC see VideoLan's VLC Introduction.

Games

If you like computer games, you'll love how easy it is to find free games and to play the best games on the <u>Steam</u> platform! In the last few years Linux has become a first class gaming platform thanks to <u>Valve</u> bringing the *Steam* platform to Linux. *Steam* has more than 1000 high quality indie and AAA titles available for Linux. Ubuntu MATE is fully compatible with *Steam* for Linux.

While *Steam* is a major step forward for gaming on Linux, there are also many high quality and enjoyable Open Source games titles available for Ubuntu MATE via the Ubuntu Software Center. It doesn't matter if you like flight simulators, motor racing, first person shooters, jump and run or card games, you'll find something to keep you entertained.



Security

In today's world of computer viruses, trojans malware, ransomware and the like, you are right to be concerned about these serious malicious intrusions. You'll be relieved to know that Ubuntu MATE is designed with security in mind. Ubuntu MATE is more secure, and better-supported than operating systems that come pre-installed on most home computer hardware today. Here's why:

Updates

Unlike operating systems that update only once a month, Ubuntu MATE receives updates continuously. The updates include security patches for Ubuntu MATE and all of its components. Security updates for all of its installed applications are also provided on the same schedule. This ensures that you have the latest protection for all of your computer's software – as soon as it's available!

Insulation from Infection

Ubuntu MATE can get viruses and other infections... but it doesn't. Rapid and timely updates ensure that there are very few, if any threats to Linux systems like Ubuntu MATE that persist in the wild. In reality, there have been very few "public" infections in the last 10 years that can affect Ubuntu MATE. They are no longer a threat to anyone installing or using a modern Linux distribution today. By providing continuous updates, Ubuntu MATE can often patch your computer against potential vulnerabilities before they become a viable threat.

Ubuntu MATE is designed to make it difficult for viruses, root kits and other malware to be installed and run without conscious intervention by you, the user. Even if you do accidentally invite in an infection, chances are it's designed to attack Windows and won't do much, if any damage to Ubuntu MATE.

Built-In Security

Another significant security feature of Ubuntu MATE is that its users are not administrators by default. Administrators ("root" users) on any computer system have permission to do anything they want, including the ability to damage the system.

For example, other operating systems look at the name of a file to determine which program should open it, then immediately attempt to open it. That design makes it easy for an intruder to attack a computer. Ubuntu MATE opens a file based on what the file is, not based on its name. So even if a malicious program disguises its identity by using the name "Financial Statement.txt" Ubuntu MATE will recognize the file as a program. The system provides a warning that the file is not a text file provided by your bank, but that it's really a program that will be run if you give it permission to continue. To be extra secure, Ubuntu MATE requires you to provide your administrator password before that permission is granted. Every single time.

Trusted Software

There is an abundance of software applications available for Ubuntu MATE. When you use Ubuntu MATE, those applications as well as security updates, driver updates, application updates, software upgrades and operating system upgrades are all available from trusted sources. So you won't need to search the Internet for software. No more risking malware, junkware, or ransomware as a result of downloading from the wrong site. There are thousands of software titles in hundreds of categories available from Ubuntu's software catalogue – the ultimate in a trusted source!

The Software Boutique is a carefully curated selection of the best-in-class applications chosen because they integrate well, complement Ubuntu MATE and enable you to self style your computing experience. Other software centers are also available to explore the *complete* Ubuntu software catalog. The <u>Ubuntu Software Center</u> includes thousands of applications suitable for just about any professional or recreational pursuit.

Backups

Ubuntu MATE comes pre-installed with a Backup utility called *Déjà Dup*. Reinstalling an operating system again after something goes horribly wrong is annoying at best, but losing your valuables photographs, emails and personal documents... these are priceless and cannot be replaced. Backing up the information on your hard drive on a regular basis is critical for anyone who uses a computer routinely. You have spent hours-on-end producing the information that is on your hard drive, and much of that data is extremely important and irreplaceable stuff! You should be routinely backing up at least your new data files on a weekly basis. "Data" files include databases, documents, spreadsheets, etc. Anything YOU created on your hard drive is a data file.

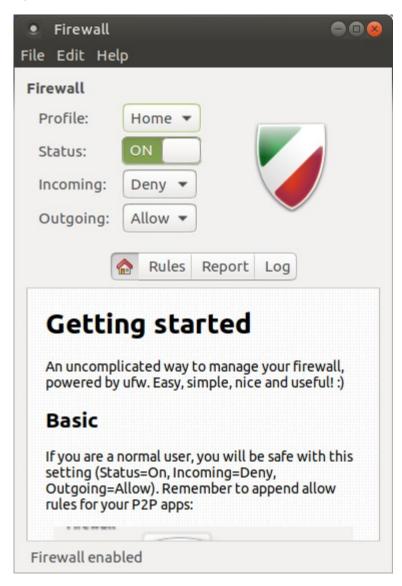
If you are prepared to restore from a backup, then you are far more secure. It is important to make backups before certain risky operations like upgrading to a new version, moving a large number of files around, deleting files and folders, etc. Making backups a routine can allow you to delete the files and folders encrypted by ransomware and replace them with safe copies from your backup. *Déjà Dup* even lets you automate your backups for added convenience and safety.

In the event your computer has a digital disaster, or you are concerned that it has an infection, your backups will ensure that you can restore Ubuntu MATE to a known previously good state.

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Fold Fold Stor	ders to save ders to ignore rage location eduling		Last backup was today. You can restore the entire backup with the Restore either revert individual files or restore missing of Restore
		\mathfrak{S}	Next backup is 2 days from now. A backup automatically starts every week. Back Up Now

Firewall

✓ Ubuntu MATE's *Firewall Configuration* utility (*Gufw*), found in the Control Center at System ► Control Center ► Firewall Configuration, provides uncomplicated way to manage your firewall settings. The firewall is not enabled by default in Ubuntu MATE because, by default Ubuntu MATE does not open ports to the outside world. If you do choose to enable the firewall, and if you are a normal user, you will be safe with this setting (Status=On, Incoming=Deny, Outgoing=Allow). No need to set the firewall to autostart. After you change the settings they will remain in place until you change them again.



Accessibility

Making an accessible operating system was a key priority when the Ubuntu MATE founders initially set out the goals of the project. Ubuntu MATE continues to follow the lead set by open source accessibility projects so that Ubuntu MATE is a viable desktop solution where computer access is shared within a household or business where individual needs differ.

Preference settings for basic accessibility setting are found in the Control Center at System ► Control Center ► Assistive Technology. From here you can enable assistive applications, change which visual and mobility applications are used by default, and whether they are started when your computer starts up. You can also modify your keyboard (sticky keys, slow keys, bounce keys) and mouse (locate pointer, acceleration, sensitivity, drag & drop, double-click timeout) accessibility settings from here. You can even enable an on-screen keyboard if you need it.

Assistive	Technologies Preferences 🛛 🔵 😣	
Assistive Te	chnologies	
	Preferred Applications	
Enable assistive technologies		
Preferences		
	장 Keyboard Accessibility	
	ᡐ Mouse Accessibility	
Help	Close and Log Out	

User Interface

As you learn about Ubuntu MATE, you might find it more comfortable to put things where you are used to finding them. Ubuntu MATE provides the unique MATE Tweak tool to do just that, transform the look and feel of your computer. The MATE Tweak application, found in the Control Center, can be used to quickly change how things look and feel to broadly reflect other popular operating systems.

Ubuntu-MATE Layout

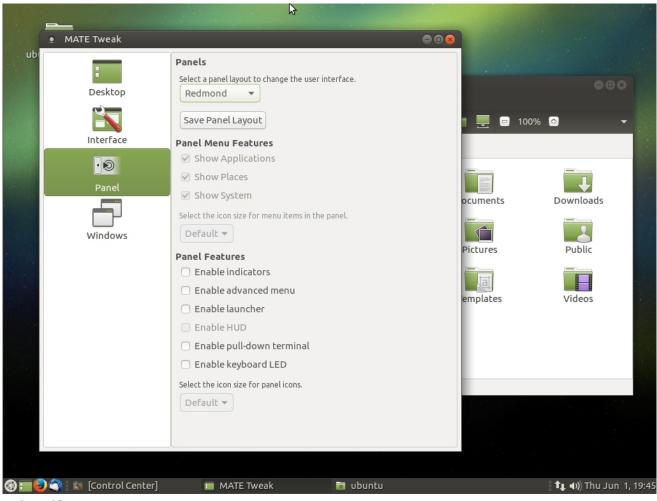
When you first install Ubuntu-MATE, it's own layout, appropriately named Ubuntu-MATE, has a classic look of Linux with a menu in the top left, clock in the top right, and a panel with the list of open applications at the bottom. You can select a different panel layout in the MATE Tweak "Panel" options.



Ubuntu-MATE layout

Redmond Layout

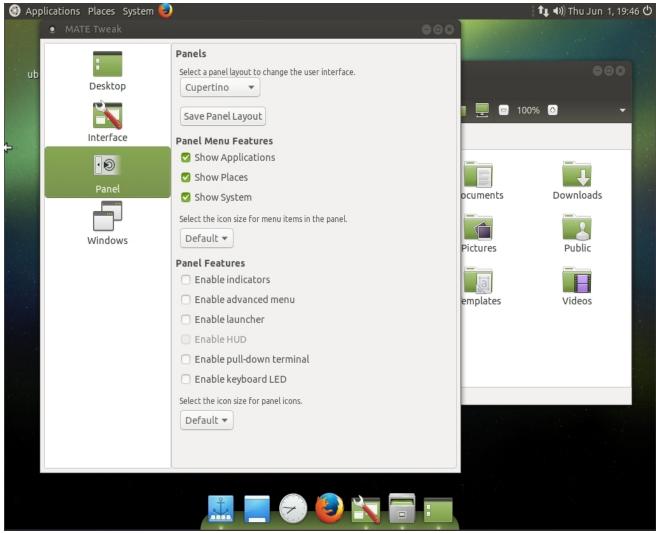
The **Redmond** layout is similar to Microsoft Windows, with a single task bar, menu, clock, and list of open applications at the bottom of the screen.



Redmond layout

Cupertino Layout

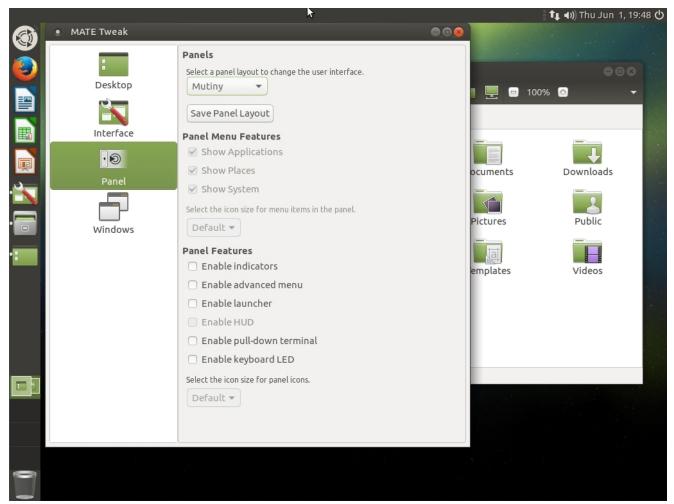
The **Cupertino** layout is similar to Apple's OSX with a panel at the top of the screen and a dock to display the open applications and to launch applications at the bottom.



Cupertino layout

Mutiny Layout

If you have tried other Ubuntu flavors and you like the look of the Unity desktop, you'll find the **Mutiny** layout familiar.



Mutiny layout

Of course since this is Linux, you can move the panels to the sides of your screen if you like, and you can control what icons appear in the panels. You can choose which icons display on your desktop, or none at all. You can control whether the windows show some animation or snap into position when they open. You can even change whether the window controls for close, minimize and maximize appear on the left, like OSX, or on the right, like Windows.

Keyboard Shortcuts

Ubuntu MATE has many keyboard shortcuts that, by pressing a combination of keys, help you do things that normally require a mouse, trackpad, or other input device. We compare these keyboard shortcuts with those you might have used in your previous operating system. Note: Changing your theme or window manager in the MATE Tweak tool might change some of these shortcuts.

Each operating system has a special meta key. They are, for most purposes, equivalent with one another:

- Apple OSX Command key(used on Apple keyboards)
- The Microsoft Windows logo key
 (used on Microsoft-branded and many generic keyboards)
- The Ubuntu logo key or Tux penguin logo key, also known as the "Super" key (used on keyboards of computers pre-installed with Linux)

Common Application Shortcuts

These shortcuts apply in most applications

Shortcut	Ubuntu MATE	OSX	Windows 10
Meta key	0	ж	Œ
Copy the selected text/object	Ctrl + C	援 + C	Ctrl + C
Cut the selected text/object	Ctrl + X	策 + X	Ctrl + X
Paste/insert the selected text/object	Ctrl + V	器 + V	Ctrl + V
Paste the selected text with formatting options	Ctrl + Shift + V	Ctrl + X + V	Ctrl + Shift + V
Select all text	Ctrl + A	策 + A	Ctrl + A
Find and replace words	Ctrl + F	器 + F	Ctrl + F
Make the selected text bold	Ctrl + B	策 + B	Ctrl + B
Make the selected text italic	Ctrl + I	₩ + I	Ctrl + I
Underline the selected text	Ctrl + U	援 + U	Ctrl + U
Open a new document or window	Ctrl + N	援 + N	Ctrl + N
Save the current document	Ctrl + S	쁐 + S	Ctrl + S
Open another document	Ctrl + O	₩ + O	Ctrl + O
Print the current document	Ctrl + P	器 + P	Ctrl + P
Undo the last change you made	Ctrl + Z	策 + Z	Ctrl + Z
Redo a change that you just undid	Ctrl + Shift + Z	器 + Shift + Z	Ctrl + Y
Toggle the current application between full-screen and windowed	F11	쁐 + Ctrl + F	F11

Window Shortcuts

Shortcut	Ubuntu MATE	OSX	Windows 10
Switch between currently-open windows	Alt + Tab	쁐 + Tab	Alt + Tab
Switch between currently open windows in all Workspaces	Ctrl + Alt + Tab		Ctrl + Alt + Tab
Switch to previous workspace	Ctrl + Alt + ←	Ctrl + ←	Ctrl + Alt + ←
Switch to the next workspace	Ctrl + Alt + \rightarrow	Ctrl + \rightarrow	Ctrl + Alt + \rightarrow
Move the current window to the previous workspace	Ctrl + Alt + Shift + ←		$$ + Ctrl + \rightarrow
Move the current window to the next workspace	Ctrl + Alt + Shift + \rightarrow		$$ + Ctrl + \rightarrow
Quit application	Alt + F4	쁐 + Q	Ctrl + F4
Close window	Alt + F4	₩ + W	Ctrl + F4
Return window to 'normal' or previous size	Alt + F5		
Move the current window	Alt + F7		
Resize current window	Alt + F8		
Minimize current window	Alt + F9	Ж+ М	
Maximize current window	Alt + F10		
Toggle the pulldown terminal	Alt + F12		
Display the window menu with options such as 'Always on Top' and 'Minimize' and 'Maximize' and above commands	Alt + Space		
Place window in top left corner of screen	Ctrl + Alt + NumPad 7		⊞ + ← , ⊞ + ↑
Place window in top half of screen	Ctrl + Alt + NumPad 8		⊞ + ↑
Place window in top right corner of screen	Ctrl + Alt + NumPad 9		$ \boxplus + \rightarrow, \boxplus + \uparrow $
Center/Maximize the window in the middle of the screen	Ctrl + Alt + NumPad 5		⊞ + ↓
Place window in the bottom left corner of the screen	Ctrl + Alt + NumPad 1		⊞ + ← , ⊞ + ↓
Place window in the bottom half of the screen	Ctrl + Alt + NumPad 2		⊞ + ↓
	Ctrl + Alt + NumPad 3		

Desktop Shortcuts

These are shortcuts you can use to operate parts of the desktop

Shortcut	Ubuntu MATE	OSX	Windows 10
Open the Applications menu	Alt + F1		Ctrl + Esc Or ⊞
Run an application by typing its name in the box with appears	Alt + F2		⊞ + R
Take a screen shot of the whole screen	PrtSc	策 + Shift + 3	🗄 + PrtSc
Take a screen shot of the current window	Alt + PrtSc		Alt + PrtSc
Open the dialog box to shutdown, restart or suspend	Ctrl + Alt + Del	Hold Power button for 1.5 sec	
Lock your screen	Ctrl + Alt + L	Ctrl + Shift + Power Or Ctrl + Shift + Eject	⊞ + L
Open a terminal	Ctrl + Alt + T		
Screen reader enable/disable	Alt + 🕲 + S	器 + F5	

Compiz Effects Shortcuts

All of these shortcuts apply when the Compiz Window Manager is selected in the MATE Tweak tool.

Shortcut	Ubuntu MATE	OSX	Windows 10
Toggles 'Show Desktop'	Ctrl + Alt + D	F11	⊞ + D
Zoom out, show workspace switcher	③ + A		
Enable the 'scale' effect, it shows all windows from the current workspace	③ + W		
Enable the 'scale effect, it shows all windows from all workspaces	• + Alt + W		
Invert colors of the focused window	③ + N		
Invert colors for the whole screen	③ + M		

About Ubuntu MATE

Ubuntu MATE is a stable, easy-to-use operating system with a configurable desktop environment. It is ideal for those who want the most out of their computers and prefer a traditional desktop metaphor. With modest hardware requirements it is suitable for modern workstations, single board computers and older hardware alike. Ubuntu MATE makes modern computers fast and old computers usable.

Why Ubuntu MATE?

Ubuntu MATE is a desktop distribution (variation) of Linux – a dependable, secure, capable, and modern computer system that rivals all others in popularity and usage. Unlike other operating systems, Linux is used:

- on most of the world's fastest and most powerful supercomputers
- on many of, if not most of, the computers that make up the backbone of Internet
- and on corporate servers that require stability and reliability

The Ubuntu MATE operating system is more secure, and better supported than the operating system pre-installed on most home computer hardware today.

Using Ubuntu MATE provides you with the freedom to run a complete, full-featured operating system, pre-configured with most, if not all, of the applications you will need for your daily computing. You can change anything about the way it looks, the way it works, or the applications it runs to suit your taste.

Objectives

The Ubuntu MATE project has a number of guiding objectives and goals.

- Accessible to all, regardless of language and physical ability.
- Increase both Ubuntu and MATE Desktop user adoption.
- Ubuntu alternative for computers that aren't powerful enough to run a composited desktop.
- First choice Ubuntu platform for remote workstation solutions such as LTSP and X2Go.
- Recreate the halcyon days of Ubuntu for users who prefer a traditional desktop metaphor.
- Use themes and artwork similar to Ubuntu so that Ubuntu MATE is immediately familiar.
- When possible contribute to Debian so both the Debian and Ubuntu communities benefit.
- Software selection will favor functionality and stability over lightness and whimsy.

Hardware Requirements

We with the new of the second second

· · · MINIMUM · · ·	··· RECOMMENDED ···
Pentium M 1.0 gigahertz	Core 2 Duo 1.6 gigahertz
1 gigabyte (GB) of RAM	2 gigabytes (GB) RAM
9 gigabytes (GB) of available space on the	16 gigabytes (GB) of available space on the
hard disk	hard disk
Bootable DVD-ROM drive	Bootable USB flash drive
Keyboard and mouse (or other pointing	Keyboard and mouse (or other pointing
device)	device)
Video adapter and monitor with 1024 x 768	3D capable video adapter and wide screen
or higher resolution	monitor with 1366 x 768 or higher resolution
Sound card	Sound card
Speakers or headphones	Speakers or headphones

Downloading Ubuntu MATE

The Ubuntu MATE website's <u>download page</u> gives you several options for downloading an ".iso image file" that you can use to create a CD, DVD or USB drive that allows you to try Ubuntu MATE without changing your computer at all, with an option to install it permanently later. You will need at least 512MB of RAM to install from this image.

Which Version Should I Choose?

Your first decision is between the version labeled Long Term Support (LTS) release, and a normal release. Here is some information about each that will help you choose the right release for you.

- Ubuntu MATE releases a new version every six months. Every two years, the release is a Long Term Support Release.
- 2. Normal support releases are supported for nine months while LTS releases are supported for five years.
- 3. "Support" includes:
 - Updates for potential security issues and bugs (not new versions of software)
 - Availability of Commercial support contracts from Canonical
 - Support by Landscape, Canonical's server management tool set designed for enterprises
- 4. Ubuntu MATE's LTS release (five years of support) is the best choice for most users. It is well-supported and will run all the software you depend on. It's regularly updated with new hardware support and performance improvements, so you don't need to be concerned that everything will work properly.
- 5. If you are a developer who needs the latest versions of certain packages, the "normal" sixmonth release cycle (nine months of support) might be for you. If you want to be on the bleeding edge, have the latest versions of all your software, and use the latest features before they make it to the LTS version of Ubuntu MATE, choose the "normal" cycle of sixmonth releases. Note that the "bleeding edge" refers to the fact that some of these latest versions may not perform as reliably as the versions supported within the LTS releases.

You can make your second decision with some information about your computer. You will need to know a little about your computer's hardware specifications.

- Choose 64-bit if your computer has more than 3GB of RAM, with a 64-bit capable Intel or AMD processor. This is also a good choice for UEFI PCs booting in CSM mode and for modern Intel-based Apple Macs.
- Choose 32-bit if your computer has less than 2GB of RAM, and an Intel or AMD processor. This choice is good for aging PCs with low-RAM resources, and older Intel-based Apple Macintosh systems.
- Choose PowerPC if you have an older generation PowerPC-based hardware, like Apple Macintosh G3, G4 and G5; Apple iBooks and PowerBooks; and IBM OpenPower 7xx Machines.
- 4. The *Raspberry Pi* version is for aarch32 (ARMv7) computers, like: Raspberry Pi 2 and Raspberry Pi 3.

Download

Once you have determined which version to download, scroll down the web page to the section labeled Via Direct Download.

 Click on the link for the file name that ends in ".iso". For our example, we've chosen version 16.04 for 64- bit processors. (Remember, even though the file name says "amd64," this is the one you want whether your 64-bit processor is from Intel or AMD.)

ubuntu-mate-16.04.1-desktop-amd64.iso

2. Select a location for your downloaded file, if prompted, and click Save to begin your download.

Now that you have the file, you don't simply copy it to your installation media – DVD, thumb drive, etc. The next topic will discuss how to prepare your installation media, and how to try Ubuntu MATE without changing your computer at all, or to install Ubuntu MATE permanently onto your computer.

Installing Ubuntu MATE

Creating Installation Media

The .iso file you downloaded using the instructions in the previous topic doesn't do you much good on its own. You need to put that file in a form that will allow you to install it on your computer. This section describes how to create the installation media (CD, DVD or USB device) that will allow you to do just that. As a note, installable media is often referred to as "live" media because using this method you run Ubuntu MATE directly from the media, live. This allows you to try Ubuntu MATE on your computer without installing, and without changing *anything at all* on your computer. When you shut down and remove the "live" media, your computer is back to normal.

The quickest and easiest method of installation is using a USB drive, also referred to as a "thumb drive" "pen drive" or "USB stick." You can also use a CD or DVD to install Ubuntu MATE, but this method is recommended only for older computers or where the computer can not be configured to boot from a USB device. For information on how to make a CD or DVD for installation using Windows, OSX and Ubuntu, see the "<u>Burning ISO HowTo</u>" article on Ubuntu help.

Most likely, if you are considering a switch to Ubuntu MATE, you are using Windows. This is a link to the official Canonical (parent company behind Ubuntu) method for <u>Creating a bootable USB stick on</u> <u>Windows</u> using a tool called Rufus.

A popular cross-platform (Windows, OSX and Linux) app for creating a "live" USB drive is <u>UNetbootin</u>. This excellent tutorial in the Ubuntu MATE community provides step-by-step instructions for using UNetbootin to create a "live" USB drive: "<u>How to use Unetbootin</u>."

Preparing For Installation

Ubuntu MATE is relatively simple to set up, whether you're looking to replace your existing operating system or install Ubuntu MATE alongside an existing one - such as Microsoft Windows or another Linux distribution.

Step one: Backup!

Back up any important data to another storage device before you start to install in case something goes horribly wrong! Save all of your important files and folders to an external USB drive or a 2nd hard drive. DO NOT save anything to the same drive you intend to use for Ubuntu MATE. Once you start, there is no going back! Here is an article with some considerations around backups: <u>Backup Strategies For Your Computer</u>

Step two: Plan for recovery

If you have a recovery partition and your current system allows you to create recovery disks for your computer, stop reading and go do that now. If you decide that Ubuntu MATE is not for you, this will allow you to reinstall your original operating system. Then you can use the data backup you made in step one to restore all your data.

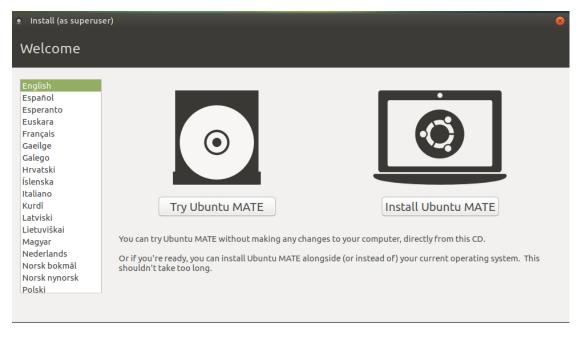
Step three: Decide what to do with the recovery partition.

If your computer has a recovery partition and you format over the recovery partition, you will not be able to recover your previous operating system. Only format or remove the recovery partition if you are certain that you don't want it anymore.

Installing

Now that you've created the installation media, you've done your backup, and you've planned for recovery (you DID do all that right?) you are ready to install, or just try, Ubuntu MATE. For most relatively modern computers, the installation process will take well under an hour to complete. Stay connected to the Internet to install all available updates while you install. Plug your device into a power source if it is running on battery power.

- 1. Completely shut down your computer.
- 2. Insert the USB stick.
- 3. Start the computer and watch the screen to determine which function key to press to change the boot device. The message flashes by quickly, right at the bottom edge of the screen, but the most frequently used keys are F1, F2, F4, F12 and the Del key. It depends on your computer's manufacturer. If your computer boots up normally and you don't see Ubuntu MATE startup, shut down and try again.
- 4. When you get to the screen that lets you change the boot device, select the menu entry that represents the Ubuntu MATE live USB stick. Press the key that let's you boot using the USB stick. That's usually Enter or F10. If you need help, try this article from How-To Geek: "How to Boot Your Computer From a Disc or USB Drive"
- 5. Once the computer has started loading Ubuntu MATE, you will be given some options. Select the option: Try Ubuntu MATE.

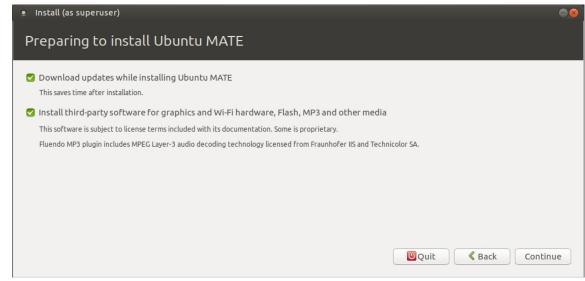


- 6. Once Ubuntu MATE has booted successfully, you will be able to use the computer as though Ubuntu MATE were installed. It's not. It is running from the USB stick. The live session you are currently in right now provides an opportunity to test Ubuntu MATE without modifying your computer, allowing you to test that all of your peripherals are working as intended before committing to installing it on your machine.
- 7. You don't need to connect to the Internet to complete the installation of Ubuntu MATE, but if you want to use the web browser, or if you want to install additional updates during the installation, you should connect your network cable, or connect to Wi-Fi. Click the Network Manager icon in the upper right corner of the screen (near the clock) and select your SSID for your wireless network. If prompted, enter the pass code, click the Connect button and you will be connected.
- 8. To begin the installation, double-click the *Install Ubuntu MATE* icon on the desktop.



9. Select your language. Press the Continue button.

10. If you have an Internet connection, choose the option to download updates while installing. For first time Ubuntu MATE users, you should also choose the option to install third-party software to ensure a smooth transition to your new operating system. If you don't have a connection, you will be able to get the updates later. Press the Continue button.



- 11. If you are sure that you want to completely erase every trace of your previous operating system, choose the option: Erase disk and install Ubuntu MATE. If you are not sure, then choose the option: Install Ubuntu MATE alongside your original operating system. This will allow you to choose which operating system to use when you start your computer. If you chose to install along side, the press the Continue button.
- 12. Press the Install Now button.
- 13. Read the message on the screen to confirm your choices, then press the Continue button to start the installation.
- 14. Select your location. Press the Continue button.
- 15. Choose your preferred keyboard layout. Press the Continue button.
- 16. Enter your full name, a name for your computer, a user name and a password. You will use the username and password when you log into your computer. You will also use this password after installation for actions that require security, such as installing additional software. Press the Continue button.
- 17. Now wait just a few minutes while the installation completes, and updates are downloaded and installed.

- 18. Press the Continue Testing button if you wish to continue to use the live environment, or press the Restart Now button to reboot and log into your new installation of Ubuntu MATE!
- 19. When prompted, remove the installation medium, then press Enter. Your computer will restart (if that's what you selected) and you will be prompted for your password to complete the log in process.

Obtaining Support for Ubuntu MATE

If you can't find the answer to your questions in this guide, many of the answers are available in the vast resource that is the Ubuntu MATE website. Often, the fastest and easiest way to get answers to your questions about how to use Ubuntu MATE is to ask the <u>Ubuntu MATE community</u>. The next two topics in this guide describe the Ubuntu MATE website and community, and provide a bit more detail about the kind of support each can provide.

The Ubuntu MATE Website

The Ubuntu MATE website, located at <u>https://ubuntu-mate.org</u> provides a wealth of information. It provides lots of details about the operating system and even a few screenshots to give you a feel for how it looks.



About

Click the <u>About</u> link for a page that breaks down what exactly Ubuntu MATE is in easy to understand language.

Blog

The <u>Blog</u> link reveals the place where the Ubuntu MATE project leaders thank the community for its support of Ubuntu MATE, make announcements, and provide updates on planned releases.

Community

Click the <u>Community</u> link for ways you can connect with the Ubuntu MATE community. For additional information <u>about the Ubuntu MATE Community</u> see the next topic in this guide.

Download

This is where you can click the <u>Download</u> link to get the latest release of Ubuntu MATE to install on your computer, or give to your friends to try on their computers.

Team

The <u>Team</u> link lists the troupe of all star international cabaret artists responsible for making Ubuntu MATE a thing.

Donate

The **Donate** page details a crowd funding campaign with three main objectives:

Fund the Ubuntu MATE project's hosting and bandwidth costs. These include domain name registrations, server hosting and bandwidth costs to provide a website and Discourse powered community space that is not reliant on social networks.

Fund the full time development of Ubuntu MATE and MATE Desktop and also be able to offer financial rewards to contributors of either project. Help subsidize the travel expenses of team members to represent MATE Desktop and Ubuntu MATE at FLOSS conferences.

Support other Open Source projects that Ubuntu MATE depends upon.

Shop

The <u>Shop</u> link reveals the "Ubuntu MATE Boutique" where you can purchase Entroware computers, pre-installed with Ubuntu MATE, shirts, jackets, mugs, stickers and more!

The Ubuntu MATE Community

Posing your question to the Ubuntu MATE Community is the fastest and easiest way to get answers about how to use Ubuntu MATE.

The <u>Community page on the Ubuntu MATE website</u> provides options in three categories for getting involved.

Discussion

Join the conversation and get involved. Stop by to share your experiences, ask questions and discuss topics with other users and developers in our growing community.

Ubuntu MATE also has its own IRC channel, <u>#ubuntu-mate</u>, on the <u>Freenode</u> network. The #ubuntu-mate channel is also home to matey, probably the smartest IRC bot in the world, EVER!

Social Networks

Ubuntu MATE is active on <u>Google+</u>, <u>Twitter</u> and <u>Facebook</u>.

Development

This is where you can get involved with Ubuntu MATE development.

This is also where you can get involved with MATE Desktop development.

Found a Bug? This is where you'll find a link to submit your detailed and reproducible bug reports to Launchpad so that the relevant developers can fix them in future updates.

Appendix A: Open Source



What Linux, Ubuntu and MATE Desktop all have in common is they are Open Source. Open source software is software that can be freely used, changed, and share, in modified or unmodified form, by anyone. In a nutshell Ubuntu MATE is free, in the truest sense of the word.

Although you will find some versions (distributions) of Linux for purchase, the vast majority are provided free of charge, like Ubuntu MATE. Open Source software is licensed in a way that allows anyone to give it away for free, no strings attached. For example, the license gives any member of the user community the freedom to use Linux for any purpose, to distribute, modify, redistribute, or even sell the operating system. If you do modify and then redistribute Linux with your modifications, you are required by the license to submit your modifications for possible inclusion into future versions. There is no guarantee that this will ever happen, but if you have made it better, then your changes just might be included in the next release of Ubuntu MATE.

This is how Ubuntu MATE can continually improve and grow without having to charge money. Many of the users of Linux are corporations that use the operating system to run their businesses, or include it within their products. Many of these corporations provide fixes and new features for Linux as they use the software for their businesses. <u>These improvements are given back</u> to the Linux distribution and the software improves as a result.

Unlike Windows, and OSX, Linux is not created and supported by just one company. It is supported by Intel, Redhat, Linaro, Samsung, IBM, SUSE, Texas Instruments, Google, Canonical, Oracle, AMD, and Microsoft. Over 4,000 developers contributed to Linux over the last 15 years.

Whether you are a home user of Ubuntu MATE, an Ubuntu MATE software or application developer, or an employee of an organization that uses the operating system, you are a member of the Linux and Open Source communities and benefit from the efforts of the developers who contribute to Ubuntu MATE and its related projects, Linux, MATE, and Ubuntu. Members of the community can and do run Linux on almost any hardware, from the prettiest Macbook to the cheapest netbook, from the newest Chromebook to some very old machines designed for Windows, and from the most powerful Internet servers to the smallest smart thermostat.

Appendix B: Frequently Asked Questions

What is Ubuntu MATE exactly?

See "What is Ubuntu MATE?"earlier in this guide.

Is Ubuntu MATE an official Canonical project?

No, it is an Ubuntu community project.

OK, so who is behind Ubuntu MATE?

Take a look at the <u>team page</u> on the website to see the all-star cast who have made Ubuntu MATE possible.

Is Ubuntu MATE an official Ubuntu "flavor"?

Ubuntu MATE 15.04 and onward are official Ubuntu flavors.

Ubuntu MATE 14.04 and Ubuntu MATE 14.10 are unofficial builds.

Will you be making a 14.04 LTS version of Ubuntu MATE?

The team has, although it is not an official build. You can get it here:

Ubuntu MATE 14.04.2 LTS

The project has also posted a <u>HOW-TO for installing your own Ubuntu MATE 14.04 from scratch.</u>

Why is xyz application installed by default when I prefer abc application?

In general, the default application selection follows what shipped in Ubuntu 14.04. The only reason we deviate from the default Ubuntu applications is if they are not compatible with Ubuntu MATE or pull in lots of unnecessary dependencies.

The reason for using the default applications as shipped by Ubuntu is the Ubuntu staff support the default applications. The Ubuntu MATE team is rather small so sharing the support responsibility makes sense, both for us and our users.

Why is xyz application installed default when abc application is better?

See the answer to the question above.

Will Ubuntu MATE run on my computer?

If you have a computer from Entroware, System 76, ZaReason or Think Penguin then Ubuntu MATE will absolutely run on your computer. Computers from major vendors such as Acer, ASUS, Dell, HP and Lenovo will most likely run Ubuntu MATE just fine too.

Ubuntu MATE is designed to run on almost any computer hardware. Of course Ubuntu MATE runs particularly well on the newest, fastest hardware, but it also runs well on almost any vintage of machine. In fact, an older computer designed during the Windows XP era, can easily be outfitted with the new, modern and fully-supported Ubuntu MATE and it will likely run better than it did with the previously installed operating system.

Can I use *iTunes* on Ubuntu MATE?

No. This is one of those programs that is specifically designed by Apple NOT to run on Linux. Although Mac OS X has its roots in the same UNIX philosophy as Linux, OS X is not the same as Linux, and applications written for Apple's operating system do not automatically run on Linux. There are, however plenty of alternative media players that will play music, create play lists, sync with mobile devices, and retrieve, manage and play podcasts. *Rhythmbox* is provided with Ubuntu MATE and can play any of the music or podcasts in your *iTunes* library.

Is Ubuntu MATE secure and safe to use?

Ubuntu MATE is designed with security in mind. Unlike operating systems that update only once a month, Ubuntu MATE receives updates continuously. The updates include security patches for Ubuntu MATE and all of its components. Security updates for all of its installed applications are also provided on the same schedule. This ensures that you have the latest protection for all of your computer's software, as soon as it's available!

Is Ubuntu MATE more secure than other operating systems?

We think that security on Linux systems like Ubuntu MATE is superior. Ubuntu MATE users are not administrators by default. Administrators ("root" users) on any computer system have permission to do anything they want, including the ability to damage the system.

For example, other operating systems look at the name of a file to determine which program should open it, then immediately attempt to open it! That design makes it easy for an intruder to attack a computer. Ubuntu MATE opens a file based on what the file is, not based on its name. So even if a malicious program disguises its identity by using the name "Last Will and Testament.txt" Ubuntu MATE will recognize the file as a program. The system provides a warning that the file is not a text file, but that it is a program that will be run if you give it permission to continue. To be extra secure, Ubuntu MATE requires you to provide your administrator password before that permission is granted.

Can Ubuntu MATE get computer viruses and malware?

Ubuntu MATE can get viruses and other infections... but it doesn't. Rapid and timely updates ensure that there are very few, if any threats to Linux systems like Ubuntu MATE that persist in the wild. In reality, there have been very few "public" infections in the last 10 years that can affect Ubuntu MATE. They are no longer a threat to anyone installing or using a modern Linux distribution today. Ubuntu MATE is designed to make it difficult for viruses, root kits and other malware to be installed and run without conscious intervention by you, the user. Even if you do accidentally invite in an infection, chances are it's designed to attack Windows and won't do much, if any damage to Ubuntu MATE.

How can Ubuntu MATE be free?

What Linux, Ubuntu and MATE Desktop all have in common is they are Open Source. Open Source software is software that can be freely used, changed, and shared (in modified or unmodified form) by anyone. In a nutshell Ubuntu MATE is free, in the truest sense of the word.

Although you will find some versions (distributions) of Linux for purchase, the vast majority are provided free of charge, like Ubuntu MATE. Open Source software is licensed in a way that allows anyone to give it away for free, no strings attached. For example, the licence gives any member of the user community the freedom to use Linux for any purpose, to distribute, modify, redistribute, or even sell the operating system. If you do modify and then redistribute Linux with your modifications, you are required by the license to submit your modifications for possible inclusion into future versions. There is no guarantee that this will ever happen, but if you have made it better, then your changes just might be included in the next release of Ubuntu MATE.

Many of the users of Linux are corporations that use the operating system to run their businesses, or include it within their products. Many of these corporations provide fixes and new features for Linux as they use the software for their businesses. These improvements are given back to the Linux community and Ubuntu MATE improves as a result.

This is how we can continually improve and grow without having to charge our users money.

I've got a question. Where do I ask?

Ask the Ubuntu MATE community.

What has Ubuntu MATE got planned for the future?

Hopefully the project <u>roadmap</u> outlines some of what they have planned. If you have any ideas yourself, they'd love to hear from you.

Appendix C: Additional Resources

If you need a little advice on how to get started with Linux – or how get better with it, the Going Linux website and podcast are designed to help you discover what you need to know to do just that. Whether you enjoy reading about tips and tricks or listening to a couple of users like yourself, you'll find these resources a refreshing alternative to similar commercial offerings that are more formal and less friendly. As a new Linux user, you'll have a friendly way to learn what you need to improve your competence with the software. As a more experienced user, you'll improve your confidence with Linux and its applications. As an old hand at Linux, you'll discover new ideas, solve problems and have a reference for helping yourself and others with day-to-day use of the operating system.

Going Linux

If you learn best by reading, or you are simply interested in using our services as a reference, visit our website at <u>http://goinglinux.com</u>, read our articles and/or download the <u>Ubuntu MATE User Guide</u>.

If you learn best by hearing others discuss interesting topics in an everyday conversational way, subscribe on iTunes, Stitcher or other application that lets you receive podcasts. <u>http://subscribe.goinglinux.com</u>.

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About the Author

Larry Bushey's broad background in technology management, project management, professional training, public speaking, management, and sales gives him a unique understanding of using today's technology to get things done.

In his professional role, he is a community manager for a cloud computing company with 15+ years experience designing and implementing large scale business and IT programs for both cloud and onpremise environments.

As creator, producer, and host of top-rated podcasts since 2005, he helps computer users with practical, day-to-day advice on how to get the most from their corporate and personal technologies and software applications. He contributes to the Linux and open source communities, authoring documentation, and writing manuals and guides -- like this one.

As a technology advocate, he uses his communication and facilitation skills to help his podcast and broadcast radio listeners, website readers, and training participants. He assists them in building their confidence and competence with alternative technologies such as open source software, and with mainstream commercial applications as well.

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