

# The Power of Ubuntu 12.10

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What makes Ubuntu different from any other operating system, and why are these differences significant? On the surface, there really aren't that many differences; you open your computer or turn it on, a desktop appears, and you get to work. Computers are commonplace enough at this point that most people have an understanding of the basic principles involved in getting it to do mostly what you want.

But of course there are hugely important differences, from the very philosophy driving the creation of the software to the little features that do little but make us happier about staring at a computer screen all day.

Strictly speaking, Microsoft is the major player in the computer world (if we believe statistics). It might not be the company that people love the most and they may not produce an operating system that anyone claims to enjoy using, but they have a big footprint in the computer world nevertheless. Along with having garnered the bulk of the marketshare, they've also garnered a lot of the mindshare in terms of what a computer should do, how it should act, what it should look like. Even when these things are not the best possible way of getting something done, it is frequently Microsoft operating system that sets the standard.

While that seems like it would be a nice place to be, it's actually a problem for Microsoft. They can't venture too far from their own established methods less because of customer expectation and because they've simply invested too much in developing the way Windows works.

Ubuntu is happy to find a middle ground between what people expect when they sit in front of a computer and what should ac-

tually happen when sitting in front of a computer. Take the simple concept of user data; arguably the most important part of a computer system. Without user data, the computer is useless to humans, and ultimately that's why computers exist.

## Customization

You spend a lot of time on your computer, so why shouldn't it work exactly the way you want it to? In fact, why should you have to adapt to a computer at all? You might not have programmed it, but every part of a computer that you interact with should be able to be modified so that you are comfortable and efficient when using it.

Ubuntu lets you change everything from the very desktop you use to the layout of the screen, to the shortcuts that start and stop processes, to which of the many available applications you use for any given task.

Some new Ubuntu users are nervous to change their environment too much, for fear that they'll learn their own way of accom-



**Figure 1.** The look of the new desktop. Windows is not the only way!

plishing a task and forget how to do it on a “normal” Ubuntu system. In reality, of course, there’s nothing keeping you from changing your environment to better suit your work style, and Ubuntu systems by default are intuitive enough that on the rare occasion you’re in front of someone else’s Ubuntu system, you’ll be able to muddle your way through.

And one of the great features of Ubuntu is that after you update to a new version or get a new computer and migrate your data, all of your customizations will go with you.

## Computer Science

On a Microsoft system, user data exists in a number of different places and there’s only a tenuous distinction between the system data and its user’s data. That works well enough, as long as the user isn’t trying to, for instance, migrate data from one system to another. In fact, if you look on Microsoft website for tips on how to migrate your data from Windows to a new version of Windows (let alone another OS), you’ll find statements like “I don’t think it is possible to explain the entire set of desktop migration tasks when moving from one operating system version to another within one page” (see <http://windowsteamlog.com/windows/b/springboard/archive/2009/11/03/springboard-series-blog-migrating-from-windows-xp-to-windows-7-part-1.aspx>).

Ubuntu Linux migration, on the other hand, can be described in *one* command.

### Such examples abound

The conclusion isn’t that Ubuntu is so much better than Microsoft Windows; obviously both are usable, legitimate ways to control a computer. But Ubuntu Linux has a few things in its favor that Microsoft can never hope to have in theirs; Ubuntu has 40 years of Unix history, with the brightest minds in computer science having contributed the foundation of its basic logic, and yet it still gets to maintain its flexibility. In fact, Ubuntu exercises those two principles in the way it creates and manages users; it lets users maintain their own data as distinct sets, and yet also allows other users on the system to view the files in one another’s folders. And if you don’t like that, you can easily set permissions of your own files and folders. The core foundation of how users are structured remains the same but still provides the flexibility of override defaults.

In other words, the core foundations of the technologies involved in making your computer work have not actually changed for decades. Since Ubuntu based itself on those core principles, it has the upper hand here; they don’t spend their time patching legacy flaws in their system, while Microsoft fights against the grain of good old-fashioned computer science.

## Who’s Really In Control?

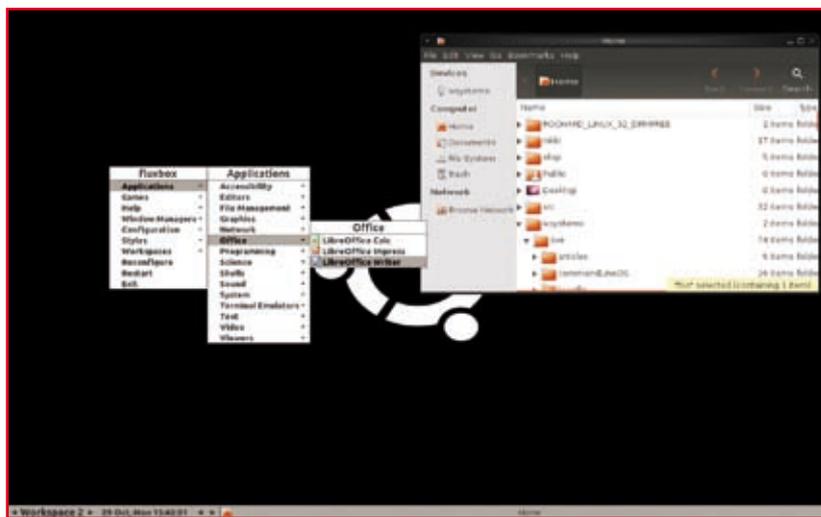
The history of computers has been an interesting thing, and it’s still young. Computers began exclusively as business machines, in fact mostly as glorified calculators and rolodexes. It’s been only relatively recent that computers have become personal devices that people actually care about and depend upon for not just work but also for their lifestyle. And if something is playing an important role in your life, then you rather expect to truly own that thing, to have full control over it, or at least have the option to exercise full control.

Some computerists get confused about the idea of controlling their computers, because they incorrectly believe that even if they had control over their technology, they wouldn’t know what to do with it. To many people, “control” means to program, because computer systems by Microsoft and Apple only provide a few modest buttons and switches and tell the users that anything beyond that would require extensive programming.

What people don’t understand is that having control of your own computer doesn’t only mean having the ability to just program it; it includes the ability to make decisions about the computer, such as how your data is stored, how easily you can get the data off in order to back it up or keep it safe, when you want to spend money on an upgrade, whether you want to change the software, and so much more.

Aside from a general lack of understanding, one of the most common complaints about computers is how they are always changing, and most people just accept it as unavoidable. Once again, this isn’t the actual truth of the matter; it’s the impression that Microsoft and Apple give their users.

On Ubuntu, desktops and paradigms don’t have to change because there’s no need for them to change. While Microsoft and Apple stand to profit by changing software, because when the software becomes too big and bloated, or flat out discontinued, for computers to run, people are forced to upgrade.



**Figure 2.** The Fluxbox desktop, a paradigm shift at last!

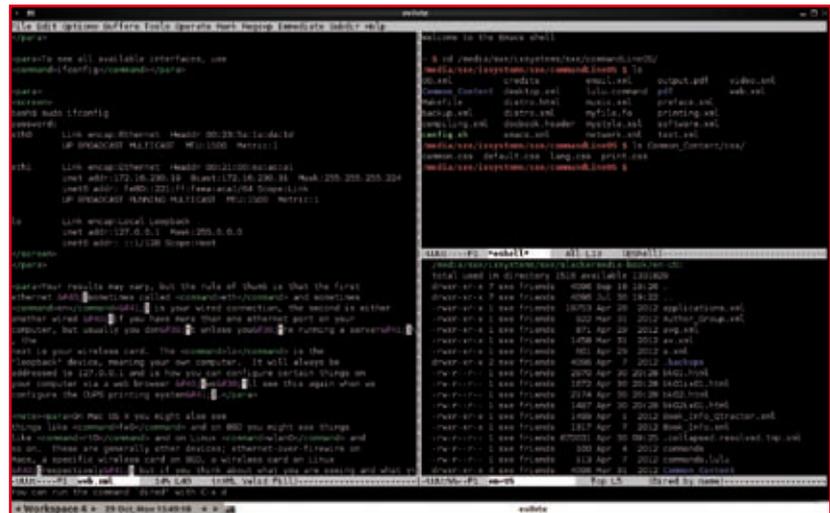
## Ubuntu vs. The World

Some people cite “too many choices” as a problem with the Linux and Free Unix set of options. That’s an idea inherited, as usual, by the idea that things must be done a certain way, “or else”. In reality, there are countless ways to do every task, computer or otherwise, and there’s nothing wrong with that. The important thing is for you to find what’s best for the way you work.

There are a lot of Linux distributions out there, and a segment of Linux users get very excited about new releases and all the different choices they have, but most of them eventually settle in and actually use full-time only one distribution. Ubuntu isn’t necessarily the best distribution out there for everyone, but it’s a good all-round distribution that a lot of people enjoy using.

People enjoy Ubuntu because it’s user friendly, meaning that they try to make the path to accomplishing every predictable task self-evident. Ideally, even someone who has never used Ubuntu should be able to sit down in front of it and, after enough mousing-over and clicking of buttons, they should be able to get a sense for how the environment works. In practice, this is usually the case. So if you’re the type of user who wants to use a computer in the same way that you might switch from a Mac to Windows and back, and never really “notice” the difference, then Ubuntu might be the distribution for you. It strives to be so obvious that it manages to just stay out of your way.

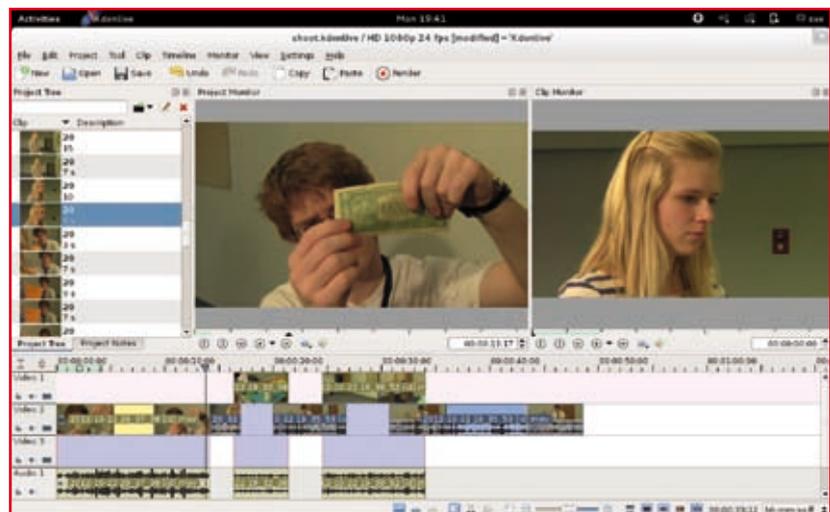
Another appealing aspect of Ubuntu is its tireless work for compatibility. In fact, Ubuntu tends to have better results than Windows or Mac for compatibility, at least in the sense of over-all design. If you install Windows on a computer, you must have either a disc full of drivers or be willing to go online and hunt for drivers. Installing Mac OS X of course is quite different; you can install it onto any computer, as long as that computer is one of 10 current models and a few models previous. There is quite a big difference between being compatible with ev-



**Figure 3.** One thing about a terminal is it doesn’t often feel the need to change

ery possible computer versus only the computers that one company makes (illegal copies of Mac OSX86 notwithstanding, since the drivers making that possible are not Apple drivers). With Ubuntu, a whole community of driver programmers contribute code for every possible device they happen to have, and you reap the benefits. Better still, it happens via the Internet, so that when you plug in a printer or a camera that you don’t have drivers for, Ubuntu just kind of makes sure you get what you need. It’s exactly what the computing experience is supposed to be like, so much so that we’re seeing commercial operating systems “borrow” that idea in their own driver install processes.

Some distributions, and indeed most of the BSD offerings, are geared toward the very technically-inclined. These people want to be able to program in an environment that makes it easy for them to catch errors, debug, and do a little pioneering. For instance, having to take a few extra steps to configure a projector that I’ve hooked up to my computer might not be a big deal to someone who never uses a projector, while for a teacher or a person who gives presentations all day, this would be a deal breaker. Ubuntu is the distribution that makes those tasks that are daily issues for “normal” people, and makes very sure that they are simple and require little or no thought to accomplish.



**Figure 4.** Get creative on Ubuntu!

## Consumers and Producers

There are computers, and then there are computers, and an Ubuntu computer is something else altogether. An Ubuntu computer combines power with flexibility and yet somehow maintains that glossy user-friendly finish. An Ubuntu computer is proud of its UNIX heritage, leverages it for its strength without hiding it from the user, but smooths out the sharp points and paves over the dangerous pot holes. Ubuntu is, in so many different ways, the pinnacle of user-friendly and user-empowering technology.

Part of getting to really fall in love with Linux is getting used to the ways it differs from other operating systems on not just technical level but a philosophical one as well. Ubuntu doesn't want to control

your data, it doesn't want to control how you choose to use your computer, it doesn't even want to control which application you use. That might sound like a good thing but to someone who is used to being told exactly what one application they have to choose from, it can be a little overwhelming.

The thing to keep in mind is that when you sit in front of an Ubuntu machine, your job isn't to go find the application that Ubuntu gave you to do one task or another, it's to find the best application for you. For some people, this is the application that shipped on the Ubuntu disc, but for others it'll be an application hidden away in the Ubuntu Software Center. And that's OK; you're allowed to do that on Linux. In fact, you're expected to. No one wants

you to force yourself into an application that isn't the right fit.

In the world of commercial operating systems, this is really unprecedented. If you want an office application, you have one to choose from. If you want a graphics editor, you have one or two to choose from, and so on. About the only place we're used to a healthy choice is in web browsers. But in the world of Free Software you have endless possibilities; every application is like a web browser with lots and lots of different versions, some lightweight, some big and full of features, others attacking the problem from a completely new angle. Your job, then, is to investigate them. Try them all out. Find your favorites and make those the tools you bring along with you when you sit down in front of a computer.

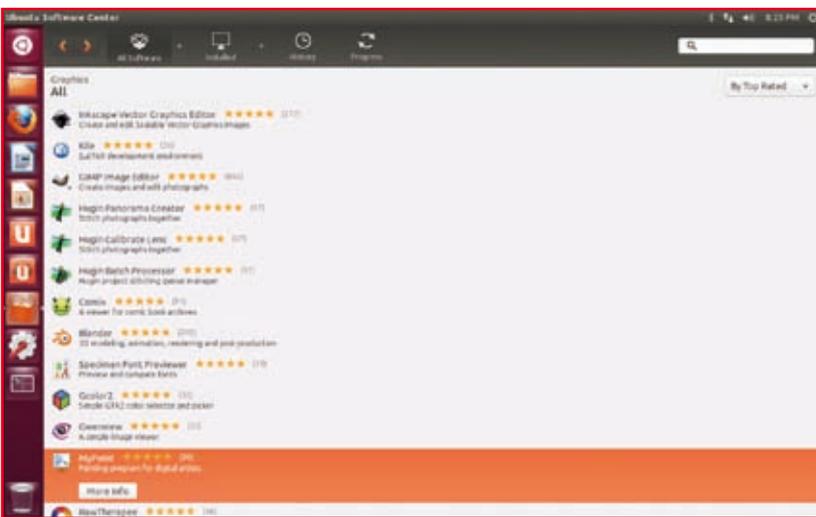
Ubuntu is a little like designing your own operating system, without actually having to learn how to program. You see, Ubuntu isn't interested in you as just a consumer, Ubuntu wants to help you create new stuff. What you create is entirely up to you; it can be anything from music, to graphics, to video, to spreadsheets, just so long as you're being an active element in the computing process.

Too many think that computers are really just television sets in disguise. They sit down at it and press some buttons and then zone out, letting the computer do all of the thinking for them. And why coming up with bold new ideas when your computer has a button to make shine and colorful graphs and charts that spew out the same old information in the same usual format?

Ubuntu is not a television set, it's an operating system that wants your input, not in just how it's built, but also what it's going to do for you. How will you use Ubuntu when you sit down in front of it and turn it on? What are you going to create for yourself, your friends and family, and for everyone else in the world? Is it going to be a cookie-cutter clone with the exact same filters and formulas and fonts and tricks that everyone is producing with a few clicks of the mouse? Or is it going to be something new and exciting and different? ■



**Figure 5.** Finally, an OS that puts YOU in control



**Figure 6.** Free software isn't just free, they're powerful, too!