

By Jack Wallen

The battle between Linux and Windows will most likely rage on for years to come. I can foresee that even when all things migrate to the cloud, users in both camps will still be screaming the virtues of their favorite operating system. And, of course, I will be one of those campers (and I can bet you know just which camp I'll be in). But being in that camp does not preclude me from seeing the benefits and strengths of the Windows operating system.

In my next two 10 Things articles, I am going to take pieces of each operating system and place them in the other. In this first article, I am going to share 10 features from the Linux operating system that should be in the Windows operating system. In the next article, I will go the other way.

Now you should know, *features* will encompass literal features as well as systems and even philosophies. I don't want to leave anything out of the picture. In the end, my hope is that theoretically, at least, we'll have a much more ideal operating system. Of course, you can (and will) be the judge of that. Let's get going and start adding Linux features to Windows.

## 1 Compiz

No matter how clean Aero gets, I am not a fan of the flat, single-workspace desktop of Windows 7. Yes, it has come a long way, but it's not nearly the modern desktop that Compiz offers. Of course, many would argue that Compiz is nothing more than eye candy. I, on the other hand, would argue that many of the features Compiz offers are just as much about usability as they are eye candy. Having a 3D desktop that offers you quick access (via key combinations) to multiple workspaces is handy. Window switchers can't be beaten for ease of use. And the eye candy is just a bonus. Having Compiz on top of Windows would certainly take the experience to a level few Windows users have experienced.

## 2 Multi-user

Yes I know you can have multiple accounts on a Windows 7 box, but that doesn't make it truly multi-user. Can you log on more than one user at a time in Windows 7? Not by default. To have concurrent user sessions for Windows 7, you have to download a third-party tool. In Linux, you can do this by default. This is a feature that should be enabled by default in Windows 7, too.

## 3 Log files

Windows operating systems have plenty of tools that enable the administrator to read log files. But for system, administration, and security issues, the administrator must fire up the tools to see those log files. But Linux places all system log files in `/var/log` and allows the user (with the right permissions) to read these log files from a simple text editor. And the Linux log files are flexible in many ways. For instance, if I want to follow a system log, I can open that log in a terminal window with the `tail -f` command and watch as events occur.

## 4 Centralized application installation

The new paradigm for Linux is a centralized location for installation. The Ubuntu Software Center is turning out to be the culmination of much of this work. From one source, you can search from hundreds of thousands of applications and install any one you need. And with upcoming releases of the Ubuntu Software Center (version 3 to be exact), commercial software will be available.

## 5 Cron

I am a big fan of Cron. Cron jobs enable you to easily automate tasks. Yes, you can add third-party software on a Windows operating system to help automate tasks, but none will have the flexibility of the cron job. Cron allows you to schedule as many tasks as you like, at any time you like, from a simple command-line tool (or a GUI tool, if you so desire). And cron is available system wide -- for both administrative tasks and standard user tasks. Having an automated system built in would certainly be handy.

## 6 Regular release cycle

This is one of those areas where Microsoft could learn a serious lesson from the Linux camp. Most Linux distributions release their updated distributions on a regular basis. And even better, they stick to these schedules to the best of their ability. Take Ubuntu, for example. For each release there is a .04 and a .10 version. The .04 version is released on the fourth month of the year. The .10 version is released on the 10th month of the year. This happens like clockwork. So Ubuntu 10.04 will release April 2010 and Ubuntu 10.10 will release October 2010. Granted sometimes those releases don't start populating the mirrors until the last second of that month, but they are as regular as they can be.

## 7 Root user

Let's face it -- by default, the average user can do too much in Windows. So much so, it becomes simple for someone to write a nasty little virus that can be spread simply by opening up an attachment in an email. With the way Linux is set up, this doesn't occur. For damage to be done to a system, generally speaking the root password must be known.

For example, if a user clicked on an attachment from an email, and that attachment demanded the root (or sudoers) password, that would be a quick indication that the attachment was malicious. Windows should separate the administrative user and the standard user by default. The first thing Windows users should have to do, upon starting up their new computer for the first time, is create an administrative password and a user password.

## 8 Pricing

Okay, I'm not going to say Windows should be free. What I am going to say is that it should have one version and one price (with a nod to bulk pricing). Why do I say this? Simple. Which version should you buy? Do you need Premium or Ultimate? Which sounds better? Is "premium" better than "ultimate"? Here's an idea -- just have one version for the desktop and one for the server. It works for Linux. Less confusion and frustration for the consumer, less advertising waste for Microsoft. And all those features that cause the most expensive version of Windows 7 to be thus -- the average user wouldn't know how to use them anyway.

## 9 Installed applications

I know that Microsoft doesn't include any useful applications (minus a browser) by default for a reason -- to make money. But when I install Linux for the average user, I'm done. I don't have to install an office suite, an email client, or audio/visual tools. Outside of installing financial applications and the odd power-user tool (which is all handled in a single, centralized location -- see #4), there's nothing more to do once the OS installation is done. Microsoft could at least include Word.

## 10 Hardware detection

Before anyone gets bent out of shape, this is not what you're thinking. Let me set this up for you. What happens when you install a Windows operating system and something doesn't work? Say, for example, video. You thought for sure the OS would support your video card, but when the installation is complete you're stuck with good old 800x600 resolution. So you go to the device manager to see if you can find out what the card is, and you get nothing. How are you supposed to find out what drivers to download when Windows gives you no information? Oh sure, you can open up the case and check out the chipset. Or you might get lucky and find that device driver CD lying around. But what if you can't? Or what if that video is on board?

If you were using Linux you could at least issue the `dmesg` command and get some information right away. And if `dmesg` didn't help out, you could always fire up the Hardware Drivers tool, which will might discover a proprietary driver you could use. In Windows, if you don't know the card, you're going to have fun finding the drivers. Although Windows hardware support is better, Linux hardware detection is better.

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### Version history

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