

# Ubuntu is ready to take on Windows

Canonical puts forward the best Linux OS for mainstream PCs

By Jason Brooks, #WEEK LABS

**C**ANONICAL HAS marshaled the best of what the open-source world has to offer in Ubuntu 8.04, a Linux-based operating system that's capable of mounting a serious challenge to Microsoft Windows on mainstream desktops and notebooks.

During my tests of Ubuntu 8.04, both in its final form and in a series of test releases leading up to the official launch April 24, I've been impressed enough with the distribution to award it the eWEEK Labs Analyst's Choice designation.

As with any would-be Windows rival, Ubuntu 8.04 faces an uphill battle for hardware and software certifications, although the move by Dell in 2007 to preload Ubuntu on some of its notebook and desktop PCs points to progress on the hardware front.

As for software, the continued improvement of open-source alternative applications such as the OpenOffice.org productivity suite, Firefox Web browser and Evolution groupware client help provide users with the tools they require to get their work done from a Linux-based desktop.

For Windows applications for which there is no suitable Linux-friendly alternative, Ubuntu 8.04's KVM and Xen-based virtualization tools offer a free, built-in means of running Windows software from within an Ubuntu system.

What's more, the debut

liners Red Hat and Novell are divided between short-lived, community-supported, fee-free offerings (Fedora and OpenSUSE, respectively) and longer-term, vendor-backed, service-fee-toting options (Red Hat Enterprise and SUSE Linux Enterprise), no such commercial-versus-

One distinction that Canonical maintains for Ubuntu releases is its use of long and short support terms. Canonical ships a new release of Ubuntu every six months, with a standard security and bug fix support term of 18 months. Every two years, Canonical distributes an LTS (Long-Term Support) Ubuntu release, with a support term of three years for desktop configurations and five years for servers.

Ubuntu Linux 8.04 is available in versions for 32-bit x86 and 64-bit x86-64 systems. I tested the x86 version on a Lenovo ThinkPad T60 notebook with 3GB of RAM and an ATI Mobility X1300 graphics adapter, and on an Athlon 64-based desktop system with 2GB of RAM and an Nvidia GeForce 6600 LE graphics adapter.

When I reviewed the previous Ubuntu Linux release, Version 7.10, I ran into trouble with my ThinkPad's X1300 adapter and had to head to the command line to get up and running. This time around, Ubuntu correctly identified my graphics adapter, and the system's new Screen Resolution tool made it easy to adjust my display resolution from the 1,024-by-768



Likewise Open streamlines joining Ubuntu to an AD domain.

of Likewise Software's open-source LikewiseOpen utility makes it easy to integrate Ubuntu Linux clients into an Active Directory authentication scheme, and the new installation options for Ubuntu have lowered the bar for trying the system on machines running Windows.

Where the desktop operating systems from Linux head-

community bifurcation exists for Ubuntu.

Instead, Ubuntu's primary corporate sponsor, Canonical, labels all of its releases as fit for broad consumption, with optional paid support available to supplement the forums, wikis, chat rooms and other Web-based community support outlets that have grown up around the distribution.

pixels supported on the ThinkPad's built-in LCD to the 1,280-by-1,024-pixel resolution of the display attached to my notebook's docking station.

However, my graphics experience was not trouble-free. When I closed the notebook's lid, the system's default power management settings switched my LCD panel off. When I opened the lid again, my LCD screen awoke to a garbled pattern of colors rather than switching back on. I had to switch between virtual terminals by hitting control-alt-F6 and then control-alt-F7 to straighten out my display.

For me, this was a minor annoyance, but for someone unfamiliar with the occasional vagaries of Linux graphics, it could prove much more troublesome. Fortunately, I was able to exorcise this issue by installing ATI's proprietary driver, a process that Ubuntu's Restricted Drivers tool makes close to painless.

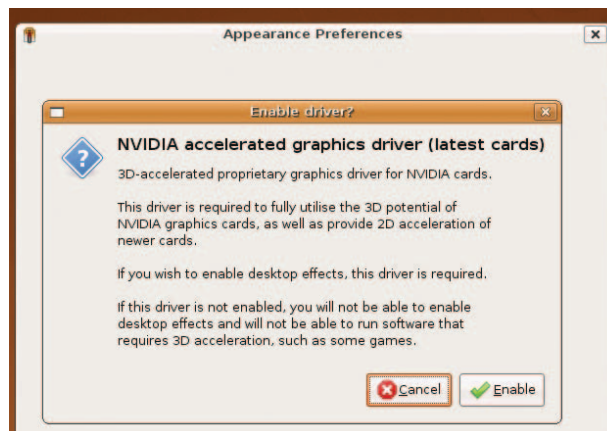
I was able to suspend the ThinkPad both to disk (hibernation) and to RAM (sleep) without any trouble. In previous Ubuntu releases, hibernation has worked well, but I've had problems getting sleep mode to work. When I tested Ubuntu 8.04 with the ThinkPad's docking station, I experienced no difficulties docking or undocking the system.

I was particularly pleased with the progress Ubuntu has made with its printer setup tools.

When I opened the system's printer configuration utility and opted to create a new printer connection, a list of the five Hewlett-Packard LaserJet printers (three 4000s, a 4050 and a 5000) and the Xerox Phaser 6250N on our floor appeared right away. I selected the printer closest to me, accepted the driver suggestions the tool

dual-boot configuration.

LiveCD setups are handy, but they often perform too poorly to give a clear idea of how a system would run on your hardware. On the other hand, I've seen enough fouled dual-boot installations to regard repartitioning with suspicion, so the new installation option is a good choice for Windows



**Ubuntu 8.04 handles proprietary graphics drivers well.**

offered, named the printer and was set to go.

I used my second test machine, an Athlon 64-based desktop running Windows Vista, to try out Ubuntu 8.04's newest installation option, in which Ubuntu installs itself in a couple of large files on a pre-existing Windows installation.

The last few Ubuntu releases have shipped in a LiveCD format that enables users to boot into a temporary Ubuntu desktop suitable for trying out the system before either devoting an entire system to Ubuntu or resizing existing Windows partitions to make way for Ubuntu in a

users looking for a low-risk way to try out a Linux desktop.

I popped the Ubuntu CD into my running Vista box, opened the installer application, and directed the installer where to store Ubuntu and how much space to assign it. Shortly thereafter, the application prompted me to reboot, after which it completed the installation process. According to documentation on the Ubuntu Web site, there's a performance hit associated with this sort of install, but I didn't detect an appreciable slowdown.

The Ubuntu desktop I'd installed within Windows

seemed no different from the one I'd installed on its own hardware, and I was pleased to find that the files from my Windows instance were accessible from Ubuntu.

I turned next to join my Linux-within-Windows installation to a Windows Server 2003-hosted domain, using the Likewise Open utility that's now available through the Ubuntu software repositories. As I learned during my tests of Likewise Open and Likewise Enterprise earlier this year, joining an Ubuntu machine to my domain was no different from joining a Windows system.

I could log in to my Ubuntu box using credentials from AD, but the functionality in Likewise Open does not extend much beyond that basic authentication. For example, I couldn't configure the Ubuntu box to grant rights to members of my administrators group in AD to administer my Ubuntu instance, as is possible with Mac OS X's AD integration.

What's more, I had to re-enter my AD credentials to access Windows shares, and there wasn't an easy way to automatically mount networked home directories for my AD users. To enable this sort of functionality, companies can buy Likewise Enterprise licenses and exercise fuller control over their Ubuntu desktops via Group Policy. [e](#)