TECH TOOLS

Professional users are always searching for an edge. Whether you work with Linux as a webmaster, programmer, system administrator, or security consultant, you know the best solution depends on finding the right tool for the job. We thought you might be interested in the following new products and updates.

Tiny Linux Just Got Smaller

CompuLab recently released the Linux-ready Fit-PC Slim, a PC measuring only 4.3x3.9x1.2 inches (110x100x30mm). This tiny, fanless computer uses only 4 to 6 watts of power but boasts a 500MHz AMD Geode LX800, Ethernet, VGA output, WiFi, and a 2.5-inch hard drive. RAM options are 256 to 512MB, and the current version adds easy bay access for its 2.5-inch hard drive. This version also introduces a WiFi adapter, which supports access point mode, allowing the Fit-PC Slim to function as a wireless router.

Fit-PC Slim capabilities also include one Ethernet port with an RJ45 connector, three USB ports, VGA output, audio I/O, and a serial port.

The bare-bones Fit-PC Slim is available in a 256MB configuration without WiFi for US$ 220. The 512MB version with WiFi, but without a hard drive, sells for US$ 245. Full-featured versions that include 60MB hard drives, 512MB of RAM, and Linux or Windows XP Home capability go for US$ 295 and US$ 335, respectively.

To find out more, visit *http://www. fit-pc.com*.

HP Storage Virtualization Products

These days it seems like everyone wants to virtualize, but the problem lies in making the dream become the reality. That's where HP comes in. In September, HP announced the release of several new storage virtualization products that are aimed at easing the deployment challenges of virtualization projects and emphasizing application and business services, regardless of whether it's hosted, networked, or managed. To that end, HP has released solutions ranging from the desktop to the data center.

For instance, HP has bundled its 4400 Scalable NAS File Services with its HP StorageWorks 44000 Enterprise Virtual Array (EVA44000), file servers, management software, and support for both Linux and Windows, creating what they call "shared data architecture." The core of the solution is HP's file serving software, which is designed to eliminate by virtualization the physical hardware connection between servers and storage, which allows the servers access to all the stored data. Both storage and applications can be moved from one server to another, giving businesses a highly available and flexible shared data architecture.

The HP 4400 Scalable NAS File Services will be available to customers in Q4 2008. In the US, the Windows File Services version will sell for US$ 94,270. The Linux File Services version will go for US$ 97,630.

Learn more about HP's flexible shared data architecture solution at *http:// welcome.hp.com/country/us/en/ prodserv/storage.html*.

X Server 1.5.0 Now Available

On the lists at freedesktop.org, Adam Jackson has just announced the release of the greatly anticipated X Server 1.5.0, the core element making up the upcoming X.Org 7.4. Unfortunately, as of this writing, the X.Org wiki hasn't divulged a specific release date.

Jackson's announcement can be found at *http://lists.freedesktop.org/archives/ xorg/2008-September/038187.html*. More information about X.Org 7.4 is available at *http://www.x.org/wiki/Releases/7.4*.

GNOME 2.24 Now with Empathy IM

Empathy is a desirable quality in any person, but when Gnome "gets" Empathy, it's all about communication. The recent major upgrade of the Gnome desktop to version 2.24 adds the Empathy instant messaging (IM) client.

Empathy is based on the Telepathy D-Bus communications network plus Nokia's Mission Control connection management utility for Telepathy. Also, it utilizes Gossip's UI, provides access to libempathy and libempathy-gtk libraries, and supports XMPP/SIP audio and video conferencing on the Maemo-based Nokia N800/N810 Internet Tablet devices. This makes Empathy appear to be largely a conglomeration of reusable IM widgets.

Find out more about Empathy and the other improvements for users at: *http://library.gnome.org/ misc/release-notes/2.24/# rnusers*.

Asus Eee PC/Intel Atom News

Michael Larabel at Phoronix recently putm the Asus Eee PC 901 netbook through its paces by fully encrypting the Asus' solid-state disk drive and then testing drive performance.

Hard drive encryption isn't the default option for the Asus, but Ubuntu 7.10 supports install-time encryption, so it became the Linux distro of choice for this test.

Because mobile devices are exceptionally vulnerable to loss or theft, protecting your sensitive data in this manner makes a great deal of sense, but how does security affect usability?

Larabel's test didn't yield encouraging results, at least not if universally superb disk performance is of vital importance to you. Although not true of all the test results, the most discouraging report was a 45 percent reduction in response from the encrypted logical volume manager (LVM).

Larabel states that some tests resulted in a performance slowdown that the end user would be unlikely to detect, and you have the comfort of knowing that if your laptop turns up missing, any critical data on the device is not immediately compromised.

A full report about the test setup and results can be found at:

http://www.phoronix.com/scan.php? page = article&item = intel_atom_disk& num = 1.

Electric Cloud Ships ElectricCommander 3.0

ElectricCommander 3.0, Electric Cloud's most recent version of their build automation system, is now available and has the ability to check or "preflight" any newly modified source code to determine whether it will build correctly into an application. If members of your team habitually perform multiple daily builds, they might be used to regular continuous build failure. If your actual goal is continuous integration, ElectricCommander 3.0 could be the right solution.

ElectricCommander "lives" for automating the assembly of the components making up a program and building those components into a working application.

The inherent preflight build and test capacity of ElectricCommander lets developers run builds and tests on production hardware before checking in code to the SCM (software configuration management) system. This allows developers to catch errors before they affect productivity.

ElectricCommander is independent of development language and build utility and supports various scripting languages, including bash, Perl, Python, and Tcl. Also, you can use your choice of SCM system, such as AccuRev, Subversion, and Synergy. Additionally, version 3.0 now integrates with Eclipse and Visual Studio.

More information can be found at *http://electric-cloud.com/*.

NeoPwn Announces Network Audit Tool for Linux Phones

NeoPwn's handset-based network-penetration tool runs on a Linux phone and is based on a modified Linux 2.6.24 kernel. The Neo FreeRunner's software stack runs on the Openmoko Neo FreeRunner Linux handset, offering USB WLAN support, a GPS modem, a GPRS modem for cellular connectivity, and a CSR Bluetooth module.

The device can be used by IT professionals in either "phone" or "pwn" mode. Pwn mode enables Wi-Fi and Bluetooth network penetration testing through the use of tools that include Aircrack and Metasploit. FreeRunner's touch keyboard is supposed to be more versatile than the iPhone's.

FreeRunner will be available in the US starting in October 2008. The basic package goes for US$ 699, and the basic bundle, including a microSD card with the software, will cost customers US$ 299. Visit *http://www.neopwn.com/* for more details.

Electronic Book Reader Runs Linux

Chinese company Jinke Electronics recently released the latest version of their electronic book reader, the Hanlin eReader V3. According to Jinke, the Hanlin eReader V3 can last about a month between charges of its 950mAh lithium-ion battery on the basis of 300 pages views a day.

The device sports a 200MHz ARM9 processor and a six-inch 800x600 display that uses E Ink's power-sipping EPD (electronic paper display) module. Other specifications include 32MB SDRAM, 2MB NOR flash, an SD slot for up to 4GB of flash expansion, a USB 1.1 port, and accessories such as charger, USB cable, earphone, battery, and hand band.

Availability of the source code is still questionable. In December 2007, a user on the GPL violations mailing list tried unsuccessfully to obtain certain source code elements.

The Hanlin eBook is unlikely to be on Ebay any time soon, but is available for $361 from the Jinke website, albeit only by bank wire transfer (no credit cards or PayPal): *http://www.jinke.com.cn/Com- pagesql/English/index.asp*l.