

# 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.

## Peazip File and Archive Manager

Peazip is a particularly useful and easy-to-use open source file and archive manager that supports virtually any file type. It's designed for the person who frequently works with large files and large file archives, and it needs a quick and efficient way to zip and unzip these archives.

PeaZip's features include saving an archive's layouts, multiple search filters for archive contents, managing multiple archives simultaneously, and the ability to export job definitions at the command line. It also has AES256 encryption, is able to generate random passwords and keyfiles, provides for secure file deletion, and offers much more.

Peazip can be used on a wide variety of Windows and Linux platforms, supporting both 32- and 64-bit Windows, from 9x through Vista. Peazip is Linux desktop agnostic, so regardless of your distro or desktop preferences, Peazip will work for you.

Find out more about Peazip and download it for free from <http://peazip.sourceforge.net/>.

## Phoenix Releases Hyperspace

Phoenix Technologies, best known at the BIOS giant, announced the release of Hyperspace, a Linux-based environment with an Opera-embedded browser designed to run on the Windows Mobile PC platform. The unique feature of Hyperspace is its ability to provide for an "instant Internet" experience while Windows is booting, running, or shutting down. Intrigued? So was I.

Because of the Hyperspace fast-booting Linux-based environment, hyperspace creates a unique merger between Linux with its fast-booting performance and Windows Mobile PC's features (which do not include fast booting by any means). Web browsing, emailing, instant messaging, multimedia playback, and secure transactions in the Opera browser are all available while waiting for Windows to boot. Once Windows is up and running, the user can move easily back and forth between the Windows and Hyperspace environments.

Although Hyperdrive doesn't make you wait for the Mobile PC, you'll have to wait for Hyperspace itself to become available.

No price information has been announced, but Phoenix says that it won't be releasing Hyperspace until January 2009.

Learn more about Hyperspace by visiting <http://www.phoenix.com/en/Home/default.htm>.

## Fast-Booting Linux Gets Faster

Whereas Phoenix Technologies boasts that their Hyperspace distro boots faster than Windows, Japanese company Lineo, which specializes in embedded systems, has announced a Linux that boots in an incredible 2.97 seconds. The technology is aptly named Warp 2 and consists of a boot loader, Linux kernel, and "hibernation driver." This specialized driver takes a snapshot of the RAM when launched and saves it to flash memory. When the device starts up, the contents of the flash are speedily returned to RAM, and the system is almost instantaneously up and running again.

Warp 2 optionally allows you to compress the snapshot to about half the original size if space is an issue. Compression results in slightly longer boot times. An available figure for a system booting from compression is 3.17 seconds – still fast enough to satisfy all but the most impatient of users. Warp 2 can only be run on Linux computers and is currently available to OEMs.

The English version of the Lineo Solutions main page can be found at <http://www.lineo.co.jp/eng/index.html>, whereas the Warp 2 web page translated from the Japanese can be accessed by pressing the *English* link in the upper right corner at <http://www.lineo.co.jp/products-services/services/warp.html>.

## Zenoss Enterprise 2.3

Zenoss announced Zenoss Enterprise version 2.3, which provides integrated IT management of physical and virtual infrastructure platforms. This provides the ability to manage VMware, allowing you to use a single interface console to monitor both your physical and virtual environments. Deeper virtualization monitoring is the key feature of this new release. Zenoss detects in real time when VMotion, a VMware technology, moves virtual machine instances from one physical platform to another. Other new features include automatic discovery and inventory of all virtual infrastructure components, and physical and virtual resource usage and performance monitoring. To learn more about the new release, visit <http://www.zenoss.com/>.

## Portland Group PGI 8.0 Compilers and Tools

The Portland Group has released a new version of the PGI compiler collection. The PGI compilers support C and Fortran for systems running Linux, Windows, and MacOS X. PGI 8.0 includes a number of HPC and multi-core programming enhancements, including new support for the OpenMP 3.0 multi-core programming standard. The latest version also builds in support for OpenMPI applications and rolls out a new set of optimization and code-analysis tools.

More information is available at <http://www.pgroup.com/about/news.htm>.

## ARM and Ubuntu Partner

British chip maker ARM, a company that specializes in mobile chip designs for networking, wireless, and storage devices, has entered into an alliance with Ubuntu to produce netbooks and other ultra-light devices. A specially customized version of the Ubuntu operating system will be developed to take advantage of the ARMv7 chip architecture which, among other advantages, will give lightweight, inexpensive laptops the battery life now enjoyed by cell phones, at least potentially.

ARM is uniquely positioned to take advantage of the small device market and quickly gain traction, possibly leaving major players such as Intel, and particularly Intel's Atom, in the dust. Although Intel is no stranger to the netbook market space, ARM's primary expertise in fueling even smaller devices will enable them to take advantage of their venture with Ubuntu and produce a plethora of hand-held devices. Linux is already making great strides in the world of embedded devices, and it seems like the future for Linux, at least at this point, is in "getting small."

Learn more at <http://www.arm.com/>.

## Linux Server Contained in RJ45 Connector

Speaking of small, Digi International, maker of network connectivity devices for the business market, has announced the release of the ME 9210: a Linux server packaged in what looks like a stretched out RJ-45 connector. This makes it one of the smallest embedded device servers running on a Linux platform.

Primary targets for this device include Power Distribution Units (PDUs), Programmable Logic Controllers (PLCs), and a variety of environmental control equipment. Because of its generalist design, the ME 9210 is also suitable for a large number and variety of other embedded devices. The ME 9210 is based on Digi's new NS9210 system-on-chip. The specs include a 32-bit ARM926EJ-S core with MMU, integrated 8MB of RAM, and 4MB of flash memory. The ME 9210 will become available in December, both as a quick start kit, which goes for \$399, and for purchase in quantities of 1,000, at \$48 dollars per individual unit. More information is available at <http://www.digi.com/>.

## Compiz Branched for 0.8

The Compiz compositing window manager has just been branched for version 0.8 according to the Compiz mailing list. Compiz has the distinction of being one of the first compositing window managers for the X Window System. It uses 3D graphics hardware to create fast compositing desktop effects.

Branching Compiz 0.8 allows new and unstable work to be managed in the main repository branch more freely, while grooming 0.8.0 for a stable release at some point. The Compiz 0.8 release will include multiple bug fixes, window decorator changes, optimizations, rendering improvements, code clean-ups, and translation updates. Compiz reports a little over 180 bugs in a new or re-opened state for 0.8, so don't look for it to be available very soon.

The current stable release available for download is 0.6.2, whereas the development release is 0.7.9, and you can download either version from <http://freedesktop.org/wiki/Software/Compiz>. Find out more about the branching of Compiz 0.8 at <http://lists.freedesktop.org/archives/compiz/2008-November/003207.html>.

## BackTrack 3 Penetration Testing

BackTrack, the brain child of the folks over at Remote-Exploit.org, is a melding of the Whax and Auditor Security Collection Linux distros. It takes advantage of the SLAX (based on Slackware) modular design and structure, allowing BackTrack to be customized by the individual. Such customizations run the range from configurable kernels to customized scripts. The product's focus is on penetration testing – just plug it in to the computer of your choice, reboot, and start using more than 300 system penetration and analysis tools.

Also, you can install BackTrack directly onto a hard disk and gain access to all of its features without having to reboot whenever you want to use it.

BackTrack 3 was released in June 2008 and currently boasts in excess of 2 million downloads.

To learn more about this incredible distribution and to download it yourself, go to <http://www.remote-exploit.org/index.html>.