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.

Open Circuits Linuxstamp Boards for Tiny Computers

According to Open Circuits, the Linuxstamp is designed to be a general purpose processor module that works as a stand-alone board and allows the construction of small, independent computer units. The design is very simple and modest, sporting an Atmel AT91RM9200 processor, 32MB of SDRAM, and single 10/100 Ethernet and USB ports. An individual SB card slot and serial debug port access are also standard.

As previously mentioned, the Linuxstamp's design is simple enough to allow for a two-layer PCB design, minimizing costs and providing for simplified "home grown" construction of any appropriate device design. The Linuxstamp operates with a two-level bootstrap loader. First, a tiny loader provided by Atmel initializes the processor and its interfaces, and then loads U-boot, which completes the rest of the boot process.

The Linuxstamp runs two different Linux distributions. The first is a minimal file system that boots and runs entirely from within the Linuxstamp's 8MB flash and 32MB RAM memory. The second is a more complete, Debian-based filesystem that requires an SD card to supplement the on-board flash.

The Linuxstamp sells for US$ 120 and is available from: *http://www.opencircuits.com/Linuxstamp*.

Vyatta Linux Router Competes with Cisco

Open source developer Vyatta has announced the release of its own branded hardware "appliance" version of its dual-licensed Linux and open source software-based router and firewall stack. The Vyatta 2501 is designed to service data centers that need a throughput of up to 10Gbps. It comes standard with a 1.8GHz Celeron processor, 512MB of RAM, and an 80GB SATA hard drive.

Vyatta is aiming to leverage its commodity x86-based hardware and open source software to compete on cost performance with companies such as Cisco, Juniper Networks, and Nortel. Vyatta, a three-year-old start up company, offers both free Community and Commercial subscription versions of their product.

Learn more about open source networking by going to: *http://www.vyatta.com/*.

New Linux Data Recovery Tool Available

Stellar Phoenix Linux Recovery, a Stellar Information Systems company, has developed a data recovery tool for the Ext2, Ext3, and Reiser filesystems. Although a number of Linux solutions exist to assist in data recovery on a Windows platform, Phoenix specifically targets the recovery process on Linux-based operating systems. The utility uses scanning algorithms to examine the entire hard drive in the event of a "File not found" or "Unable to read file" error, quickly recovering and saving critical data.

To learn more, download a free demo, or purchase the commercial product, visit *http://www.data-recovery-linux.com/*.

LXDE Project Offers Lightweight Gnome Alternative

Although Gnome happens to be one of my favorite desktops, I'll admit that its demands are growing along with improvements in PC and laptop hardware resources. If you want a Gnome-like desktop more appropriate for older hardware or netbooks, the LXDE Project has developed LXDE: the lightweight X11 desktop environment.

Built into the most recent gOS 3 Gadget distro, LXDE is presented as a light, fast-booting, streamlined desktop for even the most resource-challenged hardware platform. Based on Gtk+ 2, LXDE has been described as having "a lot of promise," and as a "scaled-down version of Gnome." Besides its lightweight profile, LXDE is also highly modular, making each of the desktop's components independent, with very few dependencies on one another.

More information and a free download of LXDE can be found at: *http://lxde.org/*

PostPath: Open Source Mail Interoperability with Exchange

The PostPath email and collaboration server is the enterprise system administrator's answer to cost-conscious interoperability with Microsoft Exchange. Although PostPath is not an entirely open source platform, its use of open source components allows for a seamless "drop-in" capability with Exchange without the requirement of modifying the Outlook mail client application. Not only can the latest version of PostPath be managed via Microsoft's Active Directory infrastructure, but it also allows the use of mobile devices through its support of Blackberry Enterprise Server and ActiveSync.

Active Directory "sees" the PostPath mail server as just another Exchange server in the domain because PostPath was developed to use the same protocols as Exchange. Currently, PostPath supports Exchange environments up to 2007. Outlook 2007, however, is unable to connect to PostPath except with the use of Remote Procedure Calls (RPCs) over http connections on Windows Vista clients.

A PostPath server license runs US$ 4,000, which includes 60 free users and a redundant server. Each additional user costs US$ 45 per seat.

Complete details can be found at *http://www.postpath.com/*.

FireFly Mobile Dev Board Offers Atom Z530

InHand Electronics just announced the release of FireFly; its Intel Atom-based board that targets developers of UMPCs (ultra-mobile PCs) and MIDs (mobile Internet devices). Off the shelf, FireFly comes with a Z530 processor, gigabit Ethernet, and a standard PATA drive. Rounding out the bill are three USB ports, a daughter card connector with microSD and ExpressCard expansion capabilities, and 1GB of DDR2 RAM.

FireFly, made for the development of battery-operated devices, accepts power from either lithium-ion or lithium-polymer batteries, working with either single or dual quad-cell batteries up to 14.4 volts, and supports battery hot swapping. The board's overall power consumption is supposed to be between 5 and 7 watts and uses "BatterySmart" technology to further extend battery life, according to InHand claims.

FireFly was supposed to be shown at the Intel Developer Forum (IDF) in San Francisco last August, and supports both Embedded Linux and Windows XP. Go to *http://www.inhandelectronics.com/* to find out the rest.

WiFi Monitor Utility for Linux Desktops Arrives

Xirrus has now made available an open source version of its widget-like Xirrus WiFi Monitor for Linux. The Xirrus monitor has long been available as a free utility for Windows Vista, Windows XP, and Mac OS, enabling users of those platforms to monitor, secure, and troubleshoot WiFi networks.

Xirrus refers to the monitor's widget-like applet as a "desklet," which was developed under the gDesklets framework with the Python programming language. The desklet provides quick access to information and functions such as a radar-like view of available WiFi networks and current WiFi connection signal strength.

The Xirrus WiFi Monitor for Linux is available now at no cost. Learn more by visiting *http://www.xirrus.com/*.

RocketRAID Controller Aimed at Linux-Based Workstations

HighPoint Technologies has produced the RocketRAID 3510 (RR3510) controller specifically for Linux-based workstations and servers, and HighPoint's GPL-licensed driver was just recently embedded within the 2.6.25 Linux kernel.

The RR3510 features an 800MHz Intel IOP341 RAID I/O Processor, supporting RAID levels 0, 1, 3, 5, 6, 10, and JBOD, and has 256MB of onboard DDR2 ECC RAM.

The RR3510 also has a single mini-SAS connector that supports four SATA 3Gbps channels.

WebGUI management software for the RR3510 is easily installed, especially on RPM-based distributions such as Fedora and CentOS. Hardware installation is also reportedly very easy and "Linux-friendly."

HighPoint offers a competitive price point for the RR3510 at US$ 310.

For additional details on the Rocket-RAID 3510, go to *http://www.highpoint-tech.com/*.

Nvidia 177.67 Display Driver Updated

The just-released Nvidia 177.67 display driver has just been updated after having been made available only last July. This apparently isn't a major update in that it doesn't introduce OpenGL 3.0 support or any other significant features, but it does resolve several bugs, improves the Render extension, and adds official support to the GeForce GTX 260/280 graphics cards, among other changes.

Although this is the summer's biggest Linux driver update for Nvidia, it unfortunately doesn't provide support for OpenGL 3.0 on Linux, FreeBSD, or Solaris. Of course, Nvidia did provide such support for Windows.

Still, performance stability is noticeably greater, and Render extension for Linux platforms has been improved.

Additional information is available on the discussion forums at: *http://www.nvnews.net/vbulletin/forumdisplay.php?s = &forumid = 14*.

The Nvidia Linux, FreeBSD, and Solaris driver updates can be downloaded from *http://www.nvidia.com/object/unix.html*.