

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.

802.11n WiFi Routers Use Linux

Netgear has been getting some buzz recently in the open source news space for offering its Wireless-N (802.11n) router supported by a Linux operating system and the My Open Router open source community.

Netgear first announced an open source supported router in June 2008, with the release of its WGR614L 802.11g device. WNR3500L and BCM4718, two Netgear 802.11n routers follow in these footsteps. The BCM4718 features an 802.11n baseband router chip, USB host ports to support media storage routers, and simultaneous dual-band routers to allow the 5GHz part of the wireless band to be exclusively available for video streaming and VoIP phone calls. The 2.4GHz band remains in reserve for more traditional data application traffic.

The My Open Router community and Developer Partner Program offers significant support in terms of Linux-based router distribution firmware, as well as source code, blogs, articles, user guides, and technical support.

The Netgear RangeMax Wireless-N Gigabit Router with USB (WNR3500L) is available for US\$ 140 through selected resellers. More device, pricing, and availability information can be had at <http://www.netgear.com/>. For more on My Open Router, visit <http://www.myopenrouter.com/>.

Mamut Offers Cloud-Based ERP Services

Scandinavian software company Mamut is in the process of launching a single software ERP (Enterprise Resource Planning) solution in the SMB (Small to Medium-sized Business) space. Traditionally a provider of CRM, Internet, accounting, and business management solutions, Mamut offers “one-stop shopping” for companies looking for a single product to handle payroll, messaging, calendaring, e-commerce, stock control, and related services.

Mamut believes their product is ideal for SMBs in the current economy who are increasingly under pressure to maximize productivity under a tightening budget. The pricing structure is on three levels, depending on business scope and need. More details on availability and purchasing services can be found at <http://www.mamut.com/selectlanguage.asp?ref=/Default.asp&q=>.

Game Editor Goes Open Source

Game Editor, a multi-platform game creation environment, has now become open source. Game Editor lets you design and create exciting, interactive games for Windows, Windows Mobile, Pocket PC, Smartphone, and Linux platforms. Game Editor is completely under GPLv3, so a developer who is also operating under that license never needs to pay Game Editor for access to the source code.

Information about Game Editor can be found at <http://game-editor.com/>.

ITTIA DB SQL Provides Combined Memory and Disk

ITTIA, provider of embedded RDBMS for embedded platforms, announced the availability of a DB SQL hybrid product that combines fast, predictable in-memory database performance with robust disk database storage caching. This serves the needs of embedded devices that continuously process information from a wide variety of data sources, such as sensors, network traffic, and user input.

The DB SQL hybrid database can contain related data that's divided into memory and disk tables. Memory tables are optimized to minimize CPU cycles, whereas disk tables optimize throughput when data is saved to block devices such as flash or hard disk. Use of a relational model foundation lets the SQL queries easily navigate these relationships.

This product is ideally positioned to serve devices that log events happening at a very high frequency, store the events temporarily in memory, and store related data, such as event types, critical types, and thresholds, in disk tables continuously saved to flash.

ITTIA offers the DB SQL hybrid database as a 30-day trial at their evaluation center. Learn more about availability and pricing by going to <http://www.ittia.com/>.

Green “ecoSoftware” Monitors Energy Use

CA has announced plans to do its part to help companies reduce their carbon footprint by releasing a suite of “ecoSoftware” apps designed to monitor an organization’s electricity consumption. Certainly if you’re Amazon.com or have some other reason to run a massive, power-gulping server farm, you are going to be somewhat interested in this.

The first step in reducing your power consumption and becoming more “green” is to become aware of what sort of footprint you are generating. That’s the job of CA’s ecoSoftware solution. Although the application suite can’t directly reduce your electricity use, it can monitor your progress as you make efforts in that direction. The ecoMeter and ecoGovernance components of this solution work together to provide a real-time, detailed profile of datacenter energy use, including PDUs, UPS devices, backup generators, cooling units, and other energy using hardware.

Learn more about CA’s ecoSoftware product at <http://www.ca.com/us/energy-software.aspx>.

Wireless Portable Power?

Although at least some portion of the overall networking infrastructure can be managed wirelessly, power management, and particularly recharging portable devices, still requires a “nest of snakes” cable system ... or does it? Recently, Dell released the Latitude Z business laptop with a new wireless charging technology. To recharge, the laptop is placed on a special stand that generates an electromagnetic field, which provides the power for the laptop’s battery.

This technology, called inductive charging, might eventually become available not only for other Dell products but also for your iPod, PDA, and other mobile devices. Fulton Innovation is the company behind this technology and has created eCoupled to develop the inductive charging solution. Ironically, the Palm Pre smartphone, which is the first cell phone to offer inductive charging as an option in January 2009, does not use the Fulton solution. Inductive charging is still in its infancy, but it’s something well worth watching. To learn more, go to <http://www.ecoupled.com/>.

Linux In On Record-Breaking Computation

A team of mathematicians from the University of Warwick has performed a record-breaking computation, using a system from Manchester-based Linux computer specialist, Digital Networks UK Ltd. (DNUK). A multi-national team worked to resolve the first trillion (1000 billion) cases of the ancient “congruent number problem,” an obscure and amazingly difficult calculation that has puzzled scientists for centuries.

Typically, such enormous calculations are performed almost exclusively on large computer clusters. For the current project, DNUK built “Selmer,” a Teraserve R2850x, Quad socket AMD Opteron system running 128GB of RAM. Selmer was supplied with a factory-installed Ubuntu 9.04 server operating system “off the shelf,” so to speak. All the mathematics team then had to do was add the specific computational packages necessary for the project and begin the calculation.

For more project details, see the press release at <http://www.dnuke.com/news/article.php?id=10>.

SheevaPlug Development Kit Available in UK

New IT has formed a partnership with Globalscale Technologies to offer the SheevaPlug Development Kit in the UK. SheevaPlug is a development platform created to run network-based software services and designed to be used as a plug computer.

Hardware specifications include a Kirkwood Series CPU with embedded Marvell Sheeva 1.2GHz processor, 512MB Flash, and 512MB DRAM memory. Offering desktop-like performance, SheevaPlug connects to the network over Gigabit Ethernet and is able to replace a PC-based home server system for various applications. Power usage, footprint, and cost of ownership are all small, making the SheevaPlug an ideal solution for both hobbyists and professional developers. New IT can provide the SheevaPlug to UK customers both more economically and more quickly than when purchasing from the US. Interested UK customers can find out more at <http://www.newit.co.uk/> and <http://www.globalscaletechnologies.com/>.

Humanoid Robot runs Linux on Intel Atom

Although it’s not C-3PO by any means, a two-legged humanoid robot called Robovie-PC, which operates with an onboard, Intel Atom-based PC, has been released by Vstone. Other features include the ability to walk on joints that offer six degrees of freedom, an accelerometer, gyro sensors, and a 1.3-megapixel webcam. It also has a body padded with polyurethane foam for protection and stands approximately 15.3 inches tall. The Robovie-PC’s 20 servomotors are controlled by a VS-RC003-HV “sub-CPU” and possesses an ARM7-based processor clocked at 60MHz and a main Intel Atom Z530 CPU. The robot can be controlled through a wired Ethernet connection but also comes optionally with USB-interfaced WLAN or 3G WLAN cards. The lifetime of the internal 2000mAh battery was not rated by Vstone. Although Linux is supported as the device’s operating system, Windows XP and Windows Vista options are also available. Vstone’s Robovie-PC is currently being offered for 400,000 Japanese Yen or about US\$ 4450. More information on the Robovie-PC (in Japanese) can be found at <http://www.vstone.co.jp/e/robot.html>.

Zend Unleashes PHP for the Cloud

Zend Technologies recently released an open source API designed for the development of PHP applications that can operate in multiple clouds. With the Simple API for Cloud Application Services (SACAS), Zend offers a single programming interface for document database, file storage, simple queue, and more. The service is designed for major players, such as Amazon, Rackspace, and even Microsoft (which is one of the original contributors to Zend). The project will be marketed as Zend Cloud and aims to provide only the tools required for the tasks shared by each service, rather than targeting individual vendors. This allows applications to remain flexible and portable between services. So far, Microsoft has committed to building adapters for its Windows Azure storage services. Rackspace and other vendors have made similar commitments. More information on Zend Technologies is available at <http://www.zend.com/en/>.