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.

The Mono 2.6 C# Compiler is Feature Complete

In general, Mono is an open source, cross-platform Microsoft .NET development framework. More specifically, it's an implementation of C# and the CLR that is binary compatible with .NET. The Mono C# compiler is able to compile itself and numerous other C# programs. Typically, it's used to compile Mono, which is made up of some 4 million lines of C# code, along with a few other projects. The compiler is fairly fast. On a ThinkPad t40, it compiled 18,000 lines of C# code per second.

The big deal with this announcement, is that, with Mono version 2.6, the current version, a new compiler *dmcs* is available as a preview of C# 4.0 – that's as a preview only, though. For production, it still defaults to the C# 3.x language specification. Only beginning with Mono 2.8 will the default specification be C# 4.0. The compiler supports a cornucopia of C# 3.0 features, including anonymous methods, iterators, partial classes, and so on.

The list is truly impressive, and you can read it in its entirety at *http://www.mono-project.com/CSharp_Compiler*. More on Mono 2.6 is located at *http://www.mono-project.com/Main_Page*.

Novell's Intelligent Workload Management

According to Novell, a workload is a portable, self-contained unit of work built through the integration of the operating system, middleware, and an application. Novell's Intelligent workload management works to blur the distinction between on-site and cloud-based computing environments. This model allows resources to be managed and optimized by policy-driven tools in a secure and compliant manner across multiple dissimilar environments, whether they are physical, virtual, or in the cloud. The strategy aims to balance the rapid rate of change and innovation in IT with the need to extend the technology life cycle.

The current model allocates workloads to computers ad hoc without policy statements or compliance enforcement, making management and security activities a struggle at best. Novell proposes to clean up the mess, allowing console-based management and running workloads on the basis of policies designed to provide compliance and security reports and to conform to all formal requirements. Intelligent workload management comprises a series of products to be released by Novell throughout the 2010 fiscal year. Find out more by going to *http://www.novell.com/*.

Video Transcorder HandBrake 0.9.4 Released

HandBrake is an open source, GPL-licensed, multi-platform, multi-threaded video transcoder that supports Linux, Mac OS X, and Windows platforms. In general, transcoding is the direct digital-to-digital conversion of one encoding type to another. It wouldn't do to have some vital data become inaccessible because it's recorded in an obsolete or incompatible format. HandBrake allows the conversion of such legacy formats into modern data formats.

The new HandBrake release offers improvements in the compilation system, allowing easier 64-bit and parallel builds, as well as providing for easier extendability for future versions of this application. Details on other improvements include better audio-video synchronization, more precise control of all parameters for power users, and library updates for FFmpeg, libtheora (1.1), libmp4v2, libfaac/faad, libvorbis, and libmkv.

Supported operating systems include Linux Ubuntu 9.10 and Fedora 12, Mac OS X 10.5 and up, and Windows XP and up.

HandBrake is freely available for download at *http://handbrake.fr/downloads.php*.

Rollout for Duck Code Sight Enterprise Code Search

Black Duck Software has just announced the release of Duck Code Sight, part of its code search initiative for empowering developers and enterprises by providing comprehensive code search capability utilizing Koders.com, their free open source code search website.

Koders.com serves up more than 2.5 billion lines of open source code to tens of thousands of developers, and their code search initiative will begin by expanding the availability of source code at the site. The other two phases of the initiative are the aforementioned release of Duck Code Sight, in both enterprise and free editions, and an open integration framework initiative for community expansion of integrations with source code management systems. Black Duck plans to add Black Duck Code Sight enterprise code search to its Black Duck Suite in the first quarter of 2010.

Learn more about Black Duck at *http://www.blackducksoftware.com/*, and visit *http://www.koders.com/* for more information.

New UNIX, Windows Management Tool from Cyber-Ark

Cyber-Ark just released its unified tool for managing privileged accounts across both UNIX and Windows environments. This is an upgraded version of their Privileged Identity Management Suite that now enables management of superuser/admin accounts, which have permissions to everything on the system, with the goal of more easily managing multi-operating system environments that traditionally need separate tools for each OS platform. Cyber-Ark's new offering lets IT professionals manage, control, and audit privileged accounts across the enterprise.

This product is especially attractive to organizations striving to meet state and federal compliance and governance requirements, as well as those with growing concerns about the security risks posed by insiders with access to privileged accounts.

Cyber-Ark's Privileged Identity Management Suite is currently available. To read about feature and pricing details. go to *http://www.cyber-ark.com/*.

Team Builds Desktops in the Cloud

Significant Internet "buzz" has been circulating for about a year concerning VERDE (Virtual Enterprise Remote Desktop Environment). Virtual Bridges has partnered with Canonical and IBM to construct a suite of enterprise-class applications and services that is touted as a "Microsoft-free Desktop in the Cloud".

Generally, it's well known that Microsoft is and has been the undisputed king of the business and home desktop space ever since the term "desktop computing" was coined. If Virtual Bridges and company have their way, though, all that is about to change. VERDE is a Linux-based Virtual Desktop Infrastructure that does an end run around the exorbitant desktop licensing structure offered by Microsoft. Not only does this solution cost a fraction of what maintaining a traditional desktop infrastructure costs, but users can access their desktop at any time from anywhere, because it lives "in the cloud" and not at the office.

The infrastructure concept behind VERDE is pretty straightforward. A few "gold masters" of the desired OS client (Linux, Mac OS X, or Windows) are created and disseminated to users as they log in to the system. Persistent user data are stored at other locations in the system and accessed by users through their clients on the fly. From an administration level, monitoring and maintaining a few gold masters, vs. thousands or tens of thousands of individual desktops, cuts costs by an almost unbelievable amount. Although no enterprise-level organization is going to dump 10,000 desktops abruptly and switch to VERDE, as PC computers age, migrating in stages to cloud-based desktops seems a logical evolutionary step. Linux-based VDI company Virtual Bridges, in concert with Canonical and IBM, might well make it happen.

To find out more, visit *http://vbridges.com/wp/*.

Linux-based Addonics Mini NAS Available

Small and amazingly affordable network storage is now available in the form of Addonics Mini NAS device. Measuring just 6.1x3.7x1.2 inches (155x95x30mm) and weighing only 6oz. (170 grams), this device targets the SOHO market space and supports both SMB and open source Samba network protocols. The Mini NAS comes standard with a 10/100 Ethernet port and a 2.5-inch storage bay for a SATA HDD (Hard Disk Drive) or SSD (Solid State Drive). The embedded Linux operating system, supporting the 2.6.x kernel, is included, but Windows OS and Mac OS are also available.

Device availability is unclear, and as of this writing, the shopping page for the Addonics Mini NAS is empty (*http://www.shopaddonics.com/items.asp?Cc=NAS&Bc=*); however, pricing is listed at US$ 70.00.

Find out more details on this product at *http://www.addonics.com/products/nas/NAS25HDU2.asp*.

Nitrox Security Adapters Come with Linux SDK

The NitroxXL NFBE family of security adapters comes loaded for bear. Certified to FIPS 140-2 Level 2 and Level 3 standards, these products are designed to be used in database, remote access, and web servers, as well as in the public key infrastructure, load balancers, and various other networking and server appliances. Contained in tamper-resistant enclosures, Nitrox XL adapters attach directly to a server, PC, or other unit used as a Hardware Security module (HSM), either as an external device or a plug-in card.

The Nitrox adapters come with a Software Development Kit (SDK) that includes the source code written in C for Linux and FreeBSD drivers. The SDK also offers APIs for OpenSSL, OpenSSH, and PKCS#11, in addition to other code and utilities.

This family of adapters was expected to be available for production use by the end of the fourth quarter of 2009 (i.e., "now" by the time you read this column). See *http://www.caviumnetworks.com/index.html* for the inside scoop.