

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.

OpenFlow: Building a Crash-Proof Internet

Although no one seems worried that the Internet will go away, its infrastructure is vulnerable to major catastrophic events, such as earthquakes, floods, and the occasional misplaced ship's anchor. OpenFlow could someday change all that.

OpenFlow is based on an open standard that allows the running of experimental protocols within production environments. Presently deployed at Stanford University, among other institutions, OpenFlow lets engineers and developers create their own customized routes for data traffic by writing algorithms on the desktop then securely uploading them to the router. By controlling the flow table, engineers can separate any network into partitions then isolate those partitions from each other, creating a "multiverse" of virtual networks. This multiverse can then be used to test new networking ideas, accelerating the evolution of networks up to and including the Internet.

Although OpenFlow is not currently positioned to have an overarching effect on the global Internet infrastructure, it is being used on large university and other enterprise-level networks. The software is available for download and installation on several Linux distributions, including CentOS, Debian, Fedora, and Ubuntu. As of the beginning of July, OpenFlow 0.9.0 RC1 is the most recent version available.

Review a complete description and find out how to download and install OpenFlow at <http://www.openflowswitch.org/>.

KnowARC Ports Globus Grid Middleware to Debian

KnowARC, creator of "Next Generation Grid" middleware, brings Globus.org packages to Debian, enabling the veteran Linux distro to participate in numerous future grid projects. Globus middleware is a significant player in the grid computing space, and the Globus Toolkit is a popular set of building blocks for grid solutions.

Although KnowARC's Advanced Resource Connector (ARC) middleware already runs on all major Linux distros, including Debian, Globus packages were introduced directly into Debian to accelerate ease of use and deployment of the ARC middleware.

Find out more about KnowARC at <http://www.knowarc.eu/> and learn about Globus by going to <http://www.globus.org/>. See the Debian wiki for more on grid computing in Debian: <http://wiki.debian.org/DebianScience/Grid>.

Internet Barometer

Interoute, an Internet backbone company, is offering a free utility for download that provides real-time data on Internet security threats. The Internet Barometer uses 22 sensors, deployed strategically on the Interoute backbone network, to collect information on the volume of threats happening at any given moment.

Internet Barometer is a desktop widget that displays its threat information on a world map. Individual countries are separated into tables, and the map shows threats according to geographic region.

More about Interoute and Internet Barometer can be found at http://barometer.interoute.com/barom_main.php.

Automatic Testing Tool GUIDancer 3.1

Software developer Bredix has released GUIDancer 3.1, an Eclipse-based utility used for automated functional testing of Graphical User Interfaces (GUIs). The current version supports the testing of GEF (Graphical Editing Framework) components, is extended to improve testing of dynamic tables, and is available for Linux, Mac OS X, and Windows.

GUIDancer lets testers automate their tests from a user's point of view, without the need to write or edit any of the programming code. Creating a test is as easy as performing a drag-and-drop operation from a library of actions or recording actions from a running application.

GUIDancer is available immediately. Pricing begins at EUR 4,641.00 for a single GUI toolkit, up to EUR 5,355.00 for three GUI toolkits. The 14-day trial license is free. Visit <http://www.bredix.de/en/guidancer/first.html> for more information.

SpiderOak Offers Online Backups for Linux

SpiderOak, an online data management service, offers up to 2GB of easy, secure, and consolidated online backup for Linux, Mac OS X, and Windows for free. Supported Linux distros are Debian, Fedora, and Ubuntu. Major features include accessing your data in one de-duplicated location, configurable multi-platform synchronization, and the ability to immediately share folders in web ShareRooms via RSS.

The first 2GB of data is free, and pricing is US\$ 10 per 100GB thereafter for unlimited devices. Full details are available at <https://spideroak.com/>.

AAEON Release New Module

AAEON, a single-board computer developer, announced the release of ETX-CX700M, a new computer module that uses a Via C7/EdenV4-based processor and offers a large collection of features. These features include multiple expansion and storage interfaces, Linux driver support, and particularly high resolution, dual-channel LVDS display support. The ETX-CX700M module targets specific markets that have low power consumption and multiple function requirements, such as gaming, entertainment, government, and security applications.

The module supports 32-bit PCI, 8-bit/16-bit ISA, and 10/100 Ethernet and, for storage, offers dual SATA II connectors, a single PATA channel, and CompactFlash interfaces. It also is capable of using up to 1GB of 200-pin DDRII 400/533 RAM, has four USB 2.0 ports, and two serial ports.

Pricing and availability for the module are not known at this time. For more information and a full list of the module's features, go to http://www.aaeon.com/L_US.html.

Advantech's "Rugged" PC Works in Power Substations

The Linux-compatible, fanless UNO-4672 PC by Advantech offers IEC 61850-3 and IEEE 1613 compliance for environmental and networking standards. These certifications verify the networking device's ability to be used in power substations, meeting both environmental and testing requirements. The UNO-4672 also has the ability to interoperate with a wide variety of other devices typically found in power substation environments and can act as a controller, protocol server, and LAN gateway.

The primary features found in the 19-inch rack mount UNO-4672 include Pentium M 1.4GHz or Celeron M 1GHz processors, 1GB DDR DRAM, one 2.5-inch SATA HDD bay, and two CompactFlash slots for storage, as well as 2GB Ethernet and four 10/100 Ethernet ports. Operating system options include Linux, Windows XP Embedded, Windows 2000/XP, and Windows CE 6.0.

Pricing and availability are not known at this time. For more information, contact Advantech at <http://www.advantech.com/>.

Alter Way Offers odtPHP 1.0 API for OpenOffice

French open source integrator Alter Way has just released odtPHP v1.0, an API for OpenOffice. OdtPHP optimizes use of the OpenDocument XML format, and it allows model-based automatic generation of files in the OpenDocument format. This lets people employ the models directly in PHP applications, using only PHP on the server. With minimal code, users can create documents by replacing the model's tags and inserting images to create complex OpenOffice files.

OdtPHP 1.0 is available for immediate download from <http://www.odtphp.com/>.

Enea Lightweight Database

Enea, a global software and services company, has released version 8.2 of its Polyhedra SQL RDBMS (relational database management system). The primary feature of the new Polyhedra release is the modification of the product's Open Database Connectivity (ODBC) library for Linux, which allows it to be used with the unixODBC driver manager. That means developers can write more easily Linux applications that communicate with both the Polyhedra database and third-party databases.

Other features offered by Polyhedra include in-memory data storage, hot standby with user-controlled failover, and support for SQL, JDBC, OLEDB, and DDE standards, as well as ODBC.

Polyhedra is currently available, but pricing is unknown at this time. Learn more by going to <http://www.enea.com/templates/Extension.aspx?id=12769>.

VIA Technologies Publishes Chrome 9 DRM

VIA Technologies, a supplier of power-efficient x86 processor platforms, has announced the release of DRM (Direct Rendering Manager) code supporting Chrome 9 IGP hardware. VIA's release consists of three patches of the DRM kernel module, supporting the VIA Chrome9 GFX chipset and based on 2.6.31-rc3. The DRM code still needs a Mesa driver to take full advantage of it; however, no code is currently available for a Gallium3D driver or Mesa driver.

More information about VIA is available at <http://www.via.com.tw/en/index.jsp>.