News Briefs

TECHNOLOGY

Nanotechnology Breakthrough Could Offer Significant Storage Increase

Lining up molecules in perfect arrays over large areas could yield data storage on a coin-sized surface equal to that of 250 DVDs. Scientists from the University of California, Berkeley, and the University of Massachusetts Amherst made the discovery and published their findings in the 20 February 2009 issue of *Science*.

The scientists, Thomas Russell and Ting Xu, heated sapphire crystals to between 1,300 and 1,500 degrees Celsius, creating sawtooth ridges that they used to guide the joining together of block copolymers. The size of an array is only limited by the sapphire's size, the scientists found. Prior research found that patterns break up over large areas, limiting storage density. Russell and Xu's technique achieved a storage density of 10 Tbytes per square inch, more than 15 times the storage capability of prior solutions. Using the new technique, the scientist said they could store the data of 250 DVDs on a surface roughly equivalent to the diameter of a US quarter (25.26 millimeters).

Additionally, the technique could create microchips that measure 3 nanometers across, compared to current microprocessor techniques that produce chips that run roughly 45 nm across. ❖

Visual Basic and C# Programming Languages to Converge

At the VSLive Conference in San Francisco, Beth Massi, senior program manager at Microsoft, announced that features of the Visual Basic and C# languages will converge when both platforms are upgraded at the end of this year. The teams developing the languages were merged and now are known as the Visual Studio managed languages team. Also under the Visual Studio umbrella are the F# language and Microsoft's Dynamic Language Runtime (DLR). Massi said the two languages will co-evolve together and let programmers tap into each language's features as they develop Web and business applications. ❖

Fujitsu's Esprimo 7935 Pulls the Plug on Pulling the Plug

At the Cebit trade show in Hanover, Germany, Fujitsu unveiled plans to release a desktop computer that consumes no energy when the power is off. While plugged in, most electrical devices eat up a small amount of energy even when turned off. The Esprimo 7935 enterprise desktop reduces its power consumption to zero watts without requiring users to unplug it from electrical outlets.

IT departments that deploy software updates overnight needn't worry about changing the update schedule. The Esprimo 7935 can schedule update times during which it will consume the necessary power to process the updates, then shut down to its zero-consumption state until booted up by the user.

Additionally, the desktop boasts a power supply that is 89 percent efficient and motherboards that don't contain halogen or lead. The desktop will conform to the US Environmental Protection Agency's Energy Star 5.0 Standard (www.energystar.gov/index.cfm?c=revisions.computer_spec), which goes into effect on 1 July 2009. Fujitsu hasn't set a release date yet. ❖

Published by the IEEE Computer Society

Herdict Crowdsources the Web for Inaccessible Sites

Jonathan Zittrain, a Harvard University law professor, has released Herdict (www.herdict.org/web/), a Web site that collects user input as to which Internet sites are down. Users can see whether a Web site is down, in what part of the world, and submit data on a site's status from their locations. Herdict offers browser plugins for Firefox and Internet Explorer that lets users anonymously send in data. For those inclined toward mashups, the site also uses Google Maps to show users which sites are down all over the world.

The tool was developed out of a joint project of Harvard University's Berkman Center for the Internet and Society (http://cyber.law.harvard.edu/) and the OpenNet Initiative (ONI; http://opennet.net/). The name is a portmanteau of "herd" and "verdict". ❖

Open Source Vendors Team Up to Offer SharePoint Alternative

Ingres and Alfresco, both open source vendors, have partnered to develop a software appliance in an effort to provide an alternative to Microsoft's SharePoint. The software appliance will use Ingres's database with Alfresco's content management system, and adds a Linux operating systems that can be installed on commodity hardware. Ingres will handle the customer support. ❖

Ubuntu Release to Support Cloud Computing

The next release of Ubuntu will offer support for cloud computing, Mark Shuttleworth announced via email (https://lists.ubuntucom/archives/ubuntu-devel-announce/2009-February/000536.html). Ubuntu 9.10, scheduled for an October release, will include support for EC2, Amazon's cloud computing service so that applications will be able to collaborate easier.

"Karmic Koala," the nickname for the upcoming release, will feature management tools to better control energy consumption in data centers and incorporate an open source tool called Eucalyptus to let enterprises create their own cloud environments.

In addition, Canonical, the company that maintains Ubuntu's distribution, plans to update the netbook edition of the operating system. Shuttleworth's email also hints to a new look and feel for the OS and offers a sneak peek at the Ubuntu Developer Summit to be held in Barcelona between 25–29 May. ❖

BUSINESS

Microsoft Sues TomTom Over Patent Violations

In February, Microsoft filed a lawsuit against TomTom, claiming the navigation system maker violated eight of its patents. Of concern to open source proponents is Microsoft's claim that TomTom's Linux implementation, which runs on its devices, violates three of its patents.

The lawsuit comes after negotiations between the companies broke down over licensing fees. Horacio Gutierrez, Microsoft's corporate vice president of intellectual property, says the company "had no choice" but to begin litigation after it tried for more than a year to reach a licensing agreement with TomTom. This is the first lawsuit Microsoft has filed involving Linux, and Gutierrez wouldn't speculate as to whether this lawsuit would open the floodgates for more: "We can't speculate about that. We have a strong track record of licensing, which evidences our commitment to that approach and that will continue to be the focus of efforts going forward."

The Linux Foundation (www.linux-foundation.org), a nonprofit consortium that aims to foster Linux's growth, is monitoring the situation. Jim Zemlin, the Foundation's executive director, urged everyone to "calm down" on his blog (www.linux-foundation.org/weblogs/jzemlin/2009/02/26/note-on-microsoft-tomtom-suit-calm-down-hope-for-the-best-plan-for-the-worst/).

"If this case is in any way directed at Linux (in fact, Horacio Gutierrez, Microsoft's corporate vice president and deputy general counsel of Intellectual Property and Licensing, has specifically stated that it isn't), the Linux ecosystem has enormously sophisticated resources available to assist in the defense of any claim that is made against Linux," Zemlin wrote on his blog. ❖

HP and Sun Partner to Distribute Solaris

Hewlett-Packard and Sun Microsystems agreed to partner up to distribute Sun's Solaris 10 operating systems in February. As part of the agreement, HP's ProLiant server and blade platforms will feature Sun's Solaris 10 operating system. The companies will also start work on integrating the OS with HP's Insight software. However, the deal doesn't extend to HP's Integrity server line, which will continue to feature HP's HP-UX operating system. ❖

Low-Cost Windows Server OS in the Works

Microsoft is putting the finishing touches on a low-cost server operating system to run on lower-end PCs. The new addition to Microsoft's server family is called Foundation Server (http://blogs.technet.com/windowsserverarchive/2009/02/24/new-server-joining-the-windows-server-family.aspx) and will be marketed to customers at the lowest end of the server market in which even the company's Small Business Server product doesn't match their needs or budgets. ❖

Verizon Gets Approval to Set up Communication Gateways in India

Verizon announced in February that it had received security approval from the Indian government to connect traffic into and out of the country on its own global network. Verizon previously had to use a local communications provider to route traffic. The approval will let the company operate its own gateways and monitor performance. ❖

Cybercriminals Use Google Trends to Spread Fake Security Software

Malware makers are using Google Trends to select popular search phrases and news content to create Web sites that peddle phony security warnings and malware. As a McAfee researcher details in a blog posting (www.avertlabs. com/research/blog/index.php/ 2009/02/25/google-trends-abused-to-serve-malware/), the practice isn't new, but the latest round of poisoned links appears to be more aggressive, with the links appearing higher up in search results.

Distributing "scareware," as it's called, works like this: malware authors create sites that host content pulled from legitimate sites, such as popular news stories, and use Google Trends to select keywords and phrases to game Google into ranking their sites higher in searches. Unsuspecting users who click on these links are taken to sites that flood them with bogus security warnings. The sites try to lure users into downloading free antivirus software that's actually a Trojan, which continues to inundate users with the warnings. To rid themselves of the warnings, users must pay for the bogus software.

In October 2008, a security researcher from SecureWorks estimated that distributing scareware could net malware maker as much as US$5 million a year. ❖

Privacy Holes in the Cloud

The World Privacy Forum released a report (www.world privacyforum.org/pdf/WPF_ Cloud_Privacy_Report.pdf) detailing the privacy and security risks involved in deploying applications in the cloud. The report presented several potential issues, including

- *Noncompliance with privacy laws.* Companies that use the cloud to host data might run afoul of data regulations without knowing it. For example, US health-care or financial companies might be offloading data to the cloud without understand that HIPPA and the Gramm-Leach-Bliley Act restrict disclosing this type of data to third parties without prior contractual agreements in place.
- *Nonspecific contract language.* Companies should check the small print for terms that let cloud vendors access or use data for marketing purposes such as targeted ads.
- *Location, location, location.* Countries have different privacy regulations; some more lax, some more stringent. Companies must be aware of where the cloud vendor maintains its operations.

Given the economic downturn, the report warns companies that a cloud vendor that declares bankruptcy might bring a change in ownership, triggering new terms on data handling, storage, and location. ❖

Survey Reveals More than Half of Employees Steal Data on Their Way Out

The Ponemon Institute released a survey that found 59 percent of employees who leave companies take more than office supplies with them. The survey of 945 participants in the past year found that employees who quit, were laid off, or got fired took company data, such as employee records, business documents, or contact lists.

How employees feel toward their companies is a significant factor into whether they steal data. The survey revealed that 61 percent of employees with a negative feeling toward their company stole some type of data, whereas only 26 with a positive attitude toward their company did.

The most popular type of data to pilfer was email-related information and hardcopy files because they were the easiest to steal via forwarding or copying files to CDs, DVDs, or memory sticks. At the other end of the spectrum, accessing database files and taking source code were the least favorite methods of copping data because access is easily traceable.

The survey also showed that companies don't always take employee theft seriously. More than 12 percent of the respondents said they had access to their company's computer systems after they left for up to a week after their departures. ❖