# UPDATES ON TECHNOLOGIES, TRENDS, AND TOOLS



On June 7 Apple revealed (or re-revealed, if you follow Gizmodo) the iPhone 4. The new iPhone features a front-facing camera, true multitasking, a high res display and the ability to shoot video in 720p. And Android users everywhere said, "So what?"

All of the features mentioned above are already available on Android-based smartphones such as HTC's Evo 4G. What's more, Android 2.2 ushers in features currently unavailable in iOS, the operating system that powers Apple's mobile devices. In 2.2 it's possible to enable any phone running the OS as a hotspot, send Android intents from a desktop Web browser to a mobile device, and fully explore Flash-based sites without restriction. All of these functions are available to developers. Android is literally rooted in open source because it's based on the Linux kernel, but past that, it provides users the freedom of choice, a tenant of open source since the beginning. Android-powered phones are available on multiple carriers and at multiple price points and performance levels. The user interface is customizable and carrier specific, and Google's willingness to open API calls to not just apps, but mobile sites from within the browser, is noteworthy.

According to data introduced at the Google I/O keynote, more than 60 Android devices are on the market with an average of 100,000 activations occurring daily. This is huge. People all over the country and the world are using open source technology every time they make a phone call, every time they use an app, and the fact that many of these people do so having never even heard of the concept of open source says a lot about the reliability and functionality of the operating system.

Jim Zemlin, executive director of the Linux Foundation put it best in a piece he wrote for Bloomberg Businessweek:

"Apple has set a high bar, no doubt. But if you don't believe Linux can beat an entrenched market leader, just ask the folks who used to run Sun."

#### THIS MONTH'S NEWS

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#### MORE NEWS ONLINE

Mozilla Evangelist Mocks Apple http://www.linuxpromagazine.com/Online/News/Mozilla-Evangelist-Commentson-Apple-s-Recent-HTML5-Demos

UK Non-Profit Aims to Reduce Linux Fragmentation

http://www.linuxpromagazine.com/Online/News/UK-Non-profit-Aims-to-Reduce-Embedded-Linux-Fragmentationon-ARM-Devices

WebM Enters the Firefox Trunk

http://www.linuxpromagazine.com/Online/ News/WebM-Enters-the-Firefox-Trunk



# Defensive Patent License Shields against Infringement Suits

University of California Berkeley law professors Jason Schultz and Jennifer Urban may have found a way to shield open source developers successfully from project-killing patent infringement lawsuits. The catch is that their solution requires the FOSS community to file patents.

Schultz and Urban's solution, the Defensive Patent License, requires a group of copyright owners that dedicate their patents solely to defensive purposes. Much like the GPL, a standardized license is distributed within the group.

"There are people inventing things in FOSS projects all the time that are potentially patentable. But there are a number of reasons why people aren't patenting anything, generally, in the FOSS world. Some places are, but very few – and usually they're the giant companies, so it's the IBMs and the Novells of the world who are sort of doing the patenting, not the actual developers in the projects or an individual or smaller scale," said Schultz.

Generally, members of the FOSS community don't just oppose patenting, many would like to see software patents abolished altogether. But FOSS members like Florian Mueller, founder of NoSoftwarePatents.com, are beginning to come around to the idea.

"I see the Defensive Patent License as a vehicle that could make active patenting a choice that is ethical and in the community's best interest," Mueller said. Anyone actively patenting can sign up to volunteer their patents under the Defensive Patent License (DPL), under the condition that all patents are submitted to the defensive patent portfolio.

Once that initial commitment is made, members of the DPL have access to all the other patents volunteered by existing members. The license is free, recognized worldwide, and doesn't need to be actively renewed.

Group members can use all patents within the portfolio royalty-free as long as they don't file an offensive lawsuit or withdraw any of their own patents from the portfolio.

This ties in with the biggest point of the DPL: Members of a patent portfolio must agree that the patents are being filed expressly for defensive purposes; no money is to be made from licenses or offensive suits.

"Supporting the DPL would also be a strong political statement because someone who does so sends out a clear message that he'd rather get rid of patents in the industry altogether," Mueller said.

Defensive patenting allows a developer to hold their patented work in reserve, providing much-needed ammunition in case of an infringement suit. Essentially, defensive patents deter infringement claims for fear of countersuits. If a member of the DPL were sued by someone outside of the community, he or she could defend themselves and countersue with the full force of their patents. And, although it hasn't been officially decided yet, Schultz is against giving a member of the DPL access to not just their patents but to the sum total of all of the patents offered by the license during litigation.

Startups and open source developers often forgo patents in favor of copyrights. Schultz cites three reasons for patent aversion: cost, skepticism, and ideological disharmony. The DPL addresses these issues by emulating open source ideas, such as the GPL, as well as the FOSS community's ideology. "The all-or-nothing approach is an important and unique feature of the DPL," Mueller said.

Schultz and Urban have yet to finalize the DPL, but expect to make a full announcement soon. "What we've heard is that people continue to worry about patents in open source and free software and that this is not going away. Unless we get some incredible ruling from the supreme court or some other kind of other miracle answer, patents in software are here to stay. And, 'How do we deal with this growing reality?' is a real, serious question."

### **NEWS BITES**

#### Red Hat Chairman to Step Down in August

Chairman and former CEO of Red Hat Matthew J. Szulik has submitted his resignation to the board of directors and will leave the company effective August 12.

"I am at a stage in my life when I would like to have more time and energy available to devote to my family and some of my personal interests outside of Red Hat," Szulik said in his resignation letter that was submitted to the SEC on May 26.

#### Most of the Fastest Run Linux

The biannual list of the fastest supercomputers in the world was released at the beginning of June and, unsurprisingly, the vast majority (455/500, or 91%) run some form of the Linux operating system. The Linux Foundation's Amanda McPherson discussed the positive effect this statistic has on end users by citing that any improvements to Linux made by one of the supercomputer manufacturers was poured back into the kernel. "Just remember that today's desktop PC was considered a supercomputer not long ago."

# Smokescreen Turns Flash into JavaScript

As the war between Flash and HTML5 wages on, developers are finding all kinds of workarounds to get Flash-based advertising content onto the slew of mobile devices that can't, or in some cases won't, support Adobe's format. Chris Smoak's Smokescreen skips the Flash plugin and instead uses JavaScript and HTML5 to decode the media. This is great news for banner ads, but for those of us looking forward to watching Hulu at the gym, Smokescreen is more than lacking. To remedy this, Smokescreen is going open source later this month. For previews and news on Smokescreen, head over to http:// smokescreen.us/.



# **The European Commission Sets Digital Agenda**

The European Commission announced the Digital Agenda for Europe, a long-term plan to boost economic growth and extend benefits of the digital age to every person in Europe. The Digital Agenda contains seven goals to achieve:

- Create "The Single Market," which would unify legal online content by simplifying copyright clearance and manage cross-border licensing.
  Under The Single Market, electronic payments, invoicing, and online dispute resolution would be made easier.
- 2. Improve interoperability and Information and Communications Technology (ICT) standards by making

- software, products, and services open.
- Improved trust through enhanced security. This step requires better coordination between European response to cyber attacks and improved personal data protection.
  This step might require websites to inform their users of security breaches.
- 4. Improved Internet speed and access. The 2020 target for Internet speed is 30Mbps or faster for all European citizens, with half of European homes receiving speeds in excess of 100Mbps. Growing access and speed means the increased adoption of fiber-based networks.
- 5. Increase ICT research and innovation. The European Commission plans to accomplish this goal through investments from both private capital and European regional funding.
- 6. Educate all Europeans on how to use and access online services.
- 7. Use ICT breakthroughs to benefit society. Improvements that arise from ICT breakthroughs, such as improved energy consumption or digitized, online medical records, will be introduced into society at large.

These seven goals generate another 100 follow-up actions, 31 of which are legislative. The seven initiatives fall under the EC's Europe 2020 strategy.

### **Google Fleshes Out Details for Android 2.2**

Google officially unveiled the details for Android 2.2, code-named "Froyo" at their I/O Conference on May 20. Vic Gundotra, the Vice President of Engineering debuted the updated operating system, championing it as truly

Among the key features in the newest build of the Linux-based OS were WiFi tethering, Microsoft Exchange Server support, enhanced communication with the cloud, and an improved compiler that provides between two and five times the performance compared with hardware running Android 2.1. But, one of the biggest announcements for consumers was that Android 2.2 will feature full support of Flash 10.1 – both as a video container and in website interfaces.

"It turns out, people use Flash," Gundotra said in one of many jabs at Apple.

"Froyo" is now a requirement to run Flash on an Android device, because the APIs necessary are only available in Android 2.2. Flash 10.1 will be available as a standalone app in the Android App store.

Also demonstrated in Android 2.2 was a cloud-to-device API that not only pushed data from one device to another but was also capable of triggering Android intents. The demonstration given during the keynote showed a Google-mapped trip route in the desktop version of Chrome. The user then clicked a button in the browser, which sent the trip information to the mobile device, triggering the Google Map application to launch with the trip information preloaded. Android 2.2 also uses the cloud to auto-update apps, back up

application data, and transfer downloaded items from browser to device. Music or apps can be downloaded on a PC and will show up on the Android 2.2-enabled mobile device soon after.

Google's acquisition, Simplify Media, debuted its first Android implementation, showing how the Android 2.2 music player now has the ability to stream non-DRM music from a home computer library.

Google also demoed the V8 JavaScript Engine in Android 2.2 running on an Nexus One against another Nexus One running Android 2.1 and an iPad. Android 2.2 won the benchmark test, and Gundotra touted it as the fastest mobile browser on the planet.

Finally, Gundotra introduced Google's advertising platform for Android. AdMob, AdSense, DoubleClick, and Analytics will all work in Android 2.2. Rich advertisements available include drop-downs, location-based custom ads, and click-to-calls, which allow potential customers to dial directly to a business or promotional offer.

Although Google has been quick to dispel the notion that Android implementations are fragmented, getting Android 2.2 onto existing smartphones is largely the responsibility of the manufacturer. HTC has made the loose commitment of updating its 2010 phones sometime this year, while other vendors have remained largely silent. Meanwhile, Google's own data collection shows that 54.6 percent of Android-enabled smartphones are running a version prior to 2.0. Until an official update, intrepid EVO 4G and Nexus One users are installing 2.2 through the phones' root menu.

The SDK for Android 2.2 is available now at http://developer. android.com/.



MeeGo 1.0 Software Platform for Netbooks Released

The MeeGo project, a Linux-based joint venture between Nokia and Intel, announced the release of MeeGo 1.0 core software platform for netbooks. The project, which combines Intel's Moblin project and Nokia's Maemo initiative has released its 1.0 API. In addition to the API and Qt 4.6, the MeeGo software platform also includes a robust SDK with some powerful open source tools: Ofono telephony, Conman connection manager, and BlueZ, the official Linux Bluetooth protocol stack, handle communications.

DeviceKit and udev manage the OS's interactions with hardware devices, and the default filesystem is Btrfs. The entire MeeGo 1.0 operating system is based on the 2.6.33 build of the Linux kernel.

MeeGo 1.0 also works on Nokia's N900 smart-phone, but added handset support will come with the MeeGo Handset user experience, which should be out by the time this prints. The OS comes packaged with Chrome as the default browser, but Chromium is also available. The MeeGo Handset user experience will come packaged with Fennec, the mobile version of Firefox.

The development tree for

1.1 is already open with touch support for handsets, tablets, and car-mounted infotainment devices such as GPS confirmed. MeeGo 1.1 will be released in October, but developers will have ac-



cess in June. Future releases of MeeGo are planned on a six-month schedule. For more information, including links to both the netbook and N900 versions of the OS, head to the MeeGo community blog.



# Business Linux Conference 27th and 28th September 2010 Portorož, Slovenia

#### Subjects for Linux conference 2010 are:

- © Cloud computing from point of enterprise information systems or business services and costs reductions connected with them
- Deen Source software for ERP, CRM, BPM (use cases or implementations preferred)
- Security Data Leak Prevention (DLP) inside enterprise, identity steal, safe connections
- Open licensing of software and use cases of software with OS licenses usage in software development
- Dutsourcing of services and software in connection with main thematics cloud computing
- Integration of telephony and mobile telephony with help of OSS
- Development platforms Android, Maemo, Symbian
- Green IT, green data centers

One english track guaranteed!











# In the Channel: Linux Distros Worth Checking Out

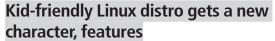
#### Say "hello" to Isadora

The Linux Mint team announced Linux Mint 9 Isadora. The open source OS, which is based on Ubuntu 10.04, marks the first new version since Version 8, "Helena," came in November 2009.

Like all good OS updates, Isadora contains a slew of new features, including a new backup tool and software manager. The Windows installer from previous releases returns, allowing a user to install Linux Mint as a program on a Windows *C*:\ drive, without the need for partitions.

A USB startup disk creator commonly packaged with Ubuntu allows Linux Mint to export onto a USB stick. Among the included software in Linux Mint 9 is Gwibber, an open source microblog client; P7zip, a zip utility; and apturl, a package installer. On a superficial level, Isadora features new backgrounds, an enhanced welcome screen, and an improved and simplified Update Manager.

Linux Mint 9 can be downloaded at http://www.linuxmint.com/download.php.



Qimo For Kids, the Linux distro aimed at educating children has received a minor upgrade in the form of Qimo 2.0. Qimo 2.0 features support for multiple accounts and replaces the eToys application on the launcher with Laby, an educational game that teaches children the basics of programming. A new character is introduced to the Qimo environment. Illa (pronounced "ee-la") is a polar bear. Qimo is based on Xubuntu Linux. If you're already using Ubuntu 10.04, Qimo can be run within your existing OS by using Apt-get or Synaptic to add the qimo-session package from the Universe repository. Qimo 2.0 can be dowloaded via BitTorrent and mirrored at USF, NiuX, and the University Roma.





# Peppermint Linux refreshes desktop experience

Peppermint OS 1.0 uses Mozilla Labs's Prism technology to fully integrate with Cloud and web-based applications such as Hulu and Gmail. The OS is built on Linux kernel 2.6.32, the Xorg 7.5 GUI, and Openbox 3.4.10 for window management.

In addition to onboard software, Peppermint includes default Cloud Applications Editor by PixIr, Facebook, Last.FM, Hulu, Pandora, The Cloud Plyer, YouTube, Google Calendar, Google Docs, Google Reader, and Gmail.

Peppermint contains a custom front end for Prism that makes these web apps seamlessly integrate with the Lightweight X11 Desktop Environment. Like Canonical's recently announced Ubuntu Light, Peppermint is designed to boot and power down quickly, all while providing a familiar environment for Linux users.

The operating system can be downloaded at <a href="http://peppermintos.com/download">http://peppermintos.com/download</a>. Full release notes and documentation can be found at <a href="http://peppermintos.com/release-notes">http://peppermintos.com/release-notes</a>.

