The Open Pitt

What's cooking in Linux and Open Source in Western Pennsylvania

From the Editors: The Long Haul

As *The Open Pitt* begins its third year of publication, it seems appropriate to be a bit retrospective. You may have heard the proverb: all it takes are years and years of hard work to become an overnight success. It's pretty well-suited to Open Source and Free Software as sayings go.

After all, the "upstart" Linux kernel has been in public development for 15 years. And the GNU project, whose tools are included in each distribution of Linux, was formed 24 years ago. The original release of BSD, the forerunner of today's FreeBSD, NetBSD, and OpenBSD projects, took place fully 28 years ago.

Maybe system software isn't what excites you. One year ago, PC World named the Firefox web browser its "Product of the Year" for 2005. Two years ago, as the first issue of *The Open Pitt* was published, Firefox stood at version 0.9. This may seem like an extremely short timeframe, but the true genesis of Firefox was Netscape's code release in 1998, which gave rise to the Mozilla project.

Today, estimates of market share for Mozilla and Firefox combined range from 9% to 12%, depending on which source you consult.

Are you seeing a pattern here? Those endeavors which achieve great success do so largely through the years, if not decades, of effort put forward by the people involved. As any parent knows, the work doesn't end at childbirth—that's just the beginning of a twenty-year project.

So let's take a look at some recently-born projects. A year ago, Sun Microsystems released OpenSolaris, an Open-Source version of its popular UNIX system. So far, three derivative distributions (BeleniX, SchilliX, and Nexenta OS) have been based on it. Although the project has enticed a number of developers to sign on, to date we haven't seen announcements of significant OpenSolaris deployments.

Call for Speakers: Ohio LinuxFest

The fourth annual Ohio LinuxFest will again be held in Columbus, Ohio, and presenters are needed to deliver talks about Free and Open Source Software topics.

The event will take place on September 30, 2006, and proposals should be submitted by **July 10** using the on-line form available from `<http://www.ohiolinux.org/speak.html>`.

Once again, the LinuxFest will be held at the Greater Columbus Convention Center. Over 700 people attended last year, and a larger turnout is anticipated for 2006.

Sponsorship opportunities are also available for companies and projects interested in having a booth on the exhibit floor.

Registration for attendees begins on July 1, and, as always, will be free. A conference pass may be purchased which will get you a t-shirt, lunch, and other goodies.

For further details and updates, refer to the LinuxFest web site at `<http://www.ohiolinux.org/>`.

May Roundup

May 17 General User Meeting: **Patrick Wagstrom** reviewed the complex yet increasingly relevant subject of encryption. Starting from the definition of cryptography as writing a message so that it is difficult—or impossible—for outsiders to understand its meaning, he described the two major forms of encryption. These are symmetric encryption, where the sender and recipient share the key to the message, and public-key encryption, where the sender uses one key to scramble the message and the recipient uses another to unscramble it. After reviewing the basic concepts of

each, he showed that an interesting feature of public-key encryption is that it allows you to securely communicate with people you've never met. But this introduces a new wrinkle: how do you know that a key *really* belongs to the person whose name is on it? One answer is the web of trust, where individuals vouch for the identity of one another, and by so doing they build a chain between sender and recipient. After his presentation, Patrick put this concept into action by signing keys for those who brought them to the meeting along with appropriate forms of identification.

Coming Events

Jul. 8: Installfest. 10AM to 5PM, Newell-Simon Hall 3rd floor atrium (Perlis Atrium), CMU

Jul. 15: Special Event: Site Visit at Sungard's Data Center. 2202 Liberty Ave., Strip District *(RSVP required)*

Aug. 5: General User Meeting. 10AM to 2PM, 3002 Newell-Simon Hall, CMU

Aug. 12: 5th Annual WPLUG Open Source Picnic. 1PM to 6PM, Snyder Park, Whitehall

The public is welcome at all events

Links of the Month *by Michael P. O'Connor*

After taking an issue off, this month we'll be looking at Linux and Personal Digital Assistants (PDAs).

For those of you that just want to sync your PalmOS-based PDA to your Linux system, you can use J-Pilot <http://jpilot.org/>. I know that the mail client Evolution does have Palm syncing features also, but I think that J-Pilot is a bit more stable. Evolution can be found at <http://www.gnome.org/projects/evolution/>, and there's a good chance it's already included with your Linux distribution.

For an article on Linux on PDAs check out the LinuxDevices article on it at <http://www.linuxdevices.com/articles/AT8728350077.html>. This shows off some of the hand-held devices that are designed to run Linux on them.

For those of you that are brave and want to put Linux on a non-Linux PDA (such as the Palm), check out <http://palm-linux.sourceforge.net> for how to install Linux. It will have you download a copy of Linux <http://uclinux.org/> and give you instructions on how to get it going on your Palm. The stuff on this page is a bit dated, but it should be a good place to start.

As always, if you have any links to suggest, send them in to me at <wplug@mikeoconnor.net>.

Till next month, enjoy these links!

LONG HAUL, *from p. 1*

One highly-hyped area in recent times has been virtualization, which allows running multiple independent environments on a single physical machine. A hot player in this arena is Xen, which a year ago was included with the Fedora Core and SUSE Linux distributions. On the surface, the situation today is not much different, as none of the other major distributions have decided to ship it. But it stands to reason that the Fedora experience will eventually result in Xen's inclusion in Red Hat's enterprise software, and significant work is being done to have Xen included in the main Linux kernel tree. It would not be surprising if a year from now this has already taken place.

In the arena of office software, one year ago the Organization for the Advancement of Structured Information Standards (OASIS) announced the approval of the OpenDocument format as an official standard. Traditionally, word processing, spreadsheet, and presentation software has saved data in numerous incompatible formats with varying levels of documentation and compatibility. OpenDocument is a fully-open specification that anyone is free to implement, and is designed to facilitate information exchange between applications. Just recently, the International Organization for Standardization (ISO) ratified it as an ISO standard, giving it great credibility and status across the globe. So far, government bodies in Massachusetts and Belgium are looking to it as a standard format for storing data. Although several applications which read and write it exist, whether Open-Document succeeds in gaining widespread use may ultimately depend on the ability of its proponents to convince users of the need for an open format. The availability of a plugin for Microsoft Word wouldn't hurt, either, and reportedly there are programmers in the Open Source community working on exactly that.

If you take some time to reflect on these examples, you should see that the greatest indicator of success is the determination and persistence of the people and organizations involved. Raw brilliance is fine, but Source-Forge is littered with projects based on a great idea but later abandoned for lack of interest or motivation. Take a look at the examples in this column over the coming months and years, and see for yourself if this thesis is proven out: that those projects which succeed tend to do so by having people work on the thousands of

What is Linux?
Linux is a *kernel*, the core of a computer operating system, created by Linus Torvalds. It is typically packaged as a *distribution*, which includes the extra programs necessary to make a computer functional and useful. Since 1991, it has grown from a one-man project which ran on one computer to one with thousands of contributors running on everything from personal organizers to million-dollar supercomputers.

What are Open Source and Free Software?
Open Source and Free Software provide you, the user, with the opportunity to see the source code of the programs you use. You are free to use it, share it with others, and even make changes to it if you wish. While the Free Software and Open Source communities differ in their philosophical approach, in practical terms they share nearly identical goals. Learn more at <http://www.opensource.org/> and <http://www.gnu.org/>.

This newsletter was produced using Open Source and Free Software.

small, unglamorous tasks that translate an idea into reality.

Any project, whether it's a piece of software or an organization like WPLUG, needs people like you to take on these tasks. We'll continue to hammer away here at *The Open Pitt*, and you're encouraged to contribute to that as well. If you have an article to submit, a comment, or even just a question, you can contact us at <top@wplug.org>. We look forward to hearing from you!

Since this column opened with a saying, we'll close with one, this time from Thomas Edison: "Genius is one per cent inspiration, ninety-nine per cent perspiration." Are you up to the challenge of providing some of that sweat equity?