The Open Pitt

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

So Many Distributions, So Little Time *by Beth Lynn Eicher*

A distribution (or distro) is an Open Source operating system, Linux or BSD, pre-packaged by a company or a project, or even by an individual. Each one is different, with its own strengths and weaknesses.

Listing every Open Source distribution could consume the whole newsletter. There is an entire web site at `<http://distrowatch.com/>` dedicated to cataloging and tracking them. At press time, the DistroWatch database contained 315 actively-maintained distributions of Linux and 10 BSD distributions. A further 126 distributions are on the "waiting list," which means they have made a release, but haven't yet built up enough of a track record to be included in the main list.

Which one you choose depends on your specific needs. Here are just a few examples:

- Novell's **SUSE** Linux offers a commercially-supported boxed solution with gigabytes of desktop applications and games.
- Your 12-year-old 486 PC can still do useful work with **aLinux**.
- If you have something even older or more obscure like an Atari Falcon, you may find that **NetBSD** will still run on it.
- For a Linux you can literally carry in your pocket, **Damn Small Linux** will boot from a USB memory stick.
- **FreeBSD** is widely deployed as a high-reliability web server.
- Wring every last drop of performance from your 64-bit CPU with **Gentoo** Linux.
- **Xandros** Linux can give you maximum Microsoft compatibility without running Windows.
- If management demands a system with a rock-solid product roadmap and a support program aimed at corporate users, **Red Hat Enterprise Linux** may fill the bill.
- **Fedora Core** offers the latest and greatest Open Source software and widespread community support.
- There are many options like **Ubuntu** or **SimplyMEPIS** geared toward users just getting started.
- Need something tailored exactly to your situation? **Linux From Scratch** can help if you're the build-it-yourself type.

Clearly, Open Source enthusiasts enjoy a variety of choice. But how does one select a distribution? Even if you limit yourself to the "big-name" distros like Fedora, Slackware, SUSE, Mandrake, Knoppix, Debian, Gentoo, Ubuntu, Xandros, OpenBSD… you can still face what seems like a long, long list of options.

You'll find many similarities among these choices since they are all rooted in the Unix tradition. But as you compare one distro to another, you may notice that the administration tools and the system file structure are somewhat different. Each distributor makes philosophical decisions that distinguish their distro from the others. Many distros are just a different spin on another's approach, for example Ubuntu, MEPIS, Xandros, Linspire, and Progeny are all derived from Debian.

Finding the best distribution for you can take some trial and error. There is no perfect distro for every purpose. Some people have a favorite distro, however this is often just a matter of taste. You can compare it to ice cream. Over the course of your life, you may go to the ice cream parlor hundreds of times. Each visit you may experiment with different flavors, but over time you're likely to develop at least one favorite.

During the July 9th General Users Meeting, we will try to help you in the search for your perfect distro by having several presentations on various flavors, featuring Fedora, Mandrake, Knoppix, Gentoo, and FreeBSD. I hope you will join us.

Beth Lynn Eicher is WPLUG's Chair.

Coming Events

Jul. 9: General User Meeting, Topic: Comparing Linux/BSD Distributions. 10AM to 2PM, 1507 Newell-Simon Hall, CMU

Jul. 16: Installfest. 10AM to 5PM, 1507 Newell-Simon Hall, CMU

Aug. 7: 4th Annual WPLUG Open Source Picnic. 1PM to 7PM, Snyder Park, Whitehall

The public is welcome at all events

May Roundup

May 28 General User Meeting: **Mark Dalrymple** of **Borkware** gave a presentation on the Subversion source code version control system. He covered some of the basic concepts of source code control, and the different ways people have approached the problem. After comparing Subversion to its predecessor CVS, Mark went into the command syntax. He gave examples of checking out files, committing changes, generating diffs, resolving conflicts, and branching off from a main code trunk. A PDF copy of Mark's slides is available for download.

`<http://www.wplug.org/meetings/one-meeting?wp_meeting_id=3180>`

From the Editors: One Year On

In some circles, the number thirteen is considered unlucky. But this thirteenth issue of *The Open Pitt* marks the beginning of its second year of publication, which at least in our minds is cause for celebration.

Putting together a monthly newsletter has been at once easier and more difficult than we anticipated a year ago. Like any volunteer effort, it can be hard to find the spare time to get contributors, edit articles for form and space, do the layout, and produce the final PDF and text versions. But being a volunteer effort also gives it its magic—everyone's doing their part for the love of it, not just to get a paycheck. And fortunately, there's been plenty happening in the Open Source world to talk about.

We can always use more articles, so contact us if you have an idea. No previous writing experience is needed; we'll help you get your thoughts down on paper.

What a Difference a Year Makes

It is interesting to look back a year to see how things have changed. Fedora Core 2 had just been released, and was still establishing its footing as a community-built distribution. "Ubuntu" was an obscure African word unknown to the computer world. The very first versions of Linux for the new AMD and Intel 64-bit x86 processors were released. Bitkeeper was still being used for Linux kernel development. And the city of Munich broke new ground by announcing its large-scale desktop deployment of Linux.

Of course, not everything has changed. Kernel hacker Alan Cox issued a call back then to oppose software patents under consideration in the European Union. While some procedural votes and amendments have been made to the proposal, Open Source advocates are still trying to have it voted down or at least made less egregious. A final decision looks to be some time away. And of course SCO's lawsuits against IBM, Auto-Zone, and DaimlerChrysler continue to grind on.

WPLUG Carries On

The past year has seen a busy schedule of events for WPLUG. In addition to monthly General User Meetings, nearly every month has included a tutorial, installfest, or other special event.

Topics have covered the whole spectrum: basic system administration, security, kernel configuration, building and using RPMs, voice over IP, Samba file sharing, and much more. Hopefully there's something of interest to everyone; if not, be sure to let us know what you'd like to see.

On the Road Again

In addition to events here at home, WPLUG has made a large showing at a number of activities elsewhere, with contingents going to ErieLUG's first ever installfest, the Ohio LinuxFest in Columbus, and the Central Pennsylvania LUG Security Conference near Harrisburg.

It's a great way to see what is new and exciting in the wider world of Open Source. We'll try to keep you informed of these as they come up, so keep your eye on the "Coming Events" section of *The Open Pitt*.

Into the Future

The coming year looks to be filled with just as much activity as the last. Linux and Open Source are advancing at a rapid pace, and WPLUG doesn't intend to be left behind. So keep reading, and come on out to any WPLUG event which catches your interest. Our picnic coming up in August will once again be filled with food, fun, and balloon animals.

As always, *The Open Pitt* exists to serve you, the reader. If you have something to contribute, want to comment on any of our articles, or simply have a question, you can e-mail the editors at <top@wplug.org>. We look forward to hearing from you!

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.

Quick Tip

The *kill* command isn't just for killing a process. It works by sending a *signal*. Normally, it sends the TERM signal, which is a nice way of asking the process to terminate. Other common ones are:

KILL The infamous `kill -9`, it is a not-so-nice way of killing a process and should be a last resort.

STOP Like pressing Ctrl-Z in command-line programs, this suspends a process but does not kill it.

CONT Resumes a process suspended with STOP.

HUP Originally used to signal a remote connection loss (hangup), today many dæmons respond to it by re-reading their configuration files and applying any changes.

See `man kill` for how to use signals or `man 7 signal` for a list of signals and their meanings. A program's man page should explain how it responds to various signals.