# The Open Pitt

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

## Red Hat's Latest: Fedora Core 2 *by Carl Benedict*

Released May 14th, the latest in the Fedora line of Linux operating systems is Fedora Core 2 (codename: Tettnang). Keeping in time with Fedora Core 1, Fedora Core 2 puts you near that technological edge yet again.

### What's New in FC2?

Like its predecessors, Fedora Core 2 boasts quite a bit of software. You can get the OS in the form of 4 install CDs or 1 DVD. There are also 4 source RPM CDs available for download, as well as a rescue CD. Discs were also released for 64-bit x86 processors. Base i386 software includes the Linux kernel 2.6.5, GNOME 2.6, KDE 3.2.2, SELinux, OpenOffice.org 1.1.1, and X.org's X11R6.7.0.

The 2.6 series kernel offers many improvements over prior kernel versions. Among these are performance enhancements and improved hardware support. From a user perspective, increased system responsiveness is one of the most noticeable features. Also included is ALSA, which will replace OSS as the default Linux sound architecture.

Security-Enhanced Linux (SELinux) is included but not enabled by default. It is an implementation of mandatory access control in the Linux kernel allowing greater control over security using a policy-based system. SELinux can be installed by passing the parameter "selinux" at the installer command line, although I chose not to for this article.

The XFree86 implementation of the X Window System has been replaced with the X.org version. Based on XFree86 4.4RC2, X.org has made quite an extensive list of enhancements. Most notable are improved video driver support and performance, and IPv6 support added to the X11 server. Perhaps the most obvious change is the naming convention—all of the previous tools and files named "XF86" have been changed to "xorg" (e.g., XF86Config is now xorg.conf).

### Installation

I decided to test FC2 on two machines. The newer PC has an Athlon XP 2600 and 512 MB of RAM, while the older one contains a Pentium III 650 and 160 MB of memory.

The install process is not unlike that of previous versions of Red Hat or Fedora. You set up your locale, timezone, network configuration, firewall, root password, and partition your hard disk. Several packaged environments such as "workstation", "desktop PC", "server", and "custom" are offered. I chose "workstation" for both, which requires CD #1 and CD #2. The last step of the install process tells you which CDs are needed to complete the installation, based on the selections you have made. This is a great feature and will inevitably save someone somewhere from a potential headache. Package installation took less than 30 minutes on both machines.

After completing installation, the system reboots and runs "firstboot", a graphical utility that lets you do things such as test sound output, add user accounts, and install additional software.

## April/May Roundup

*Apr. 17 Inflow Site Visit:* **Paul Painter** presented an introduction to high-availability computing, concentrating on networking applications. Inflow provides application hosting, colocation, and business continuity services. After lunch, we toured the data center to see the redundant systems first-hand, from multiple routers to the diesel backup generator.

*Apr. 24 Erie Installfest:* ErieLUG hosted its first installfest ever at **Mercyhurst College**. Eight WPLUGers made the trip up to assist. It looks like ErieLUG is off to a running start.

*May 1 Security Doubleheader:* Prof. **Christopher Belcher** of the **Community College of Allegheny County** guest-lectures in the Software and Information Assurance (SIA) program. He covered performing a minimal Linux installation, removing unneeded services, and limiting privileges granted to server processes.

**Bill Moran** of **Potential Technologies** took a more outside-in approach, discussing port scans and firewalls, as well as tools for diagnosing and reacting to an attack. He also illustrated real-world examples of attacks. A PDF copy of Bill's slides is available.

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Inflow - <http://inflow.com/location-details.asp?id=9>
Inflow Slides - <http://www.wplug.org/files/inflow.ppt>
ErieLUG - <http://erie.wplug.org/>
SIA Program - <http://sia.ccac.edu/>
Security Slides - <http://www.potentialtech.com/wmoran/>
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### Coming Events

**Jun. 5:** General User Meeting, Topic: Cobind Desktop. 10AM to 3PM, 1507 Newell-Simon Hall, CMU

**Jun. 12:** New User Tutorial, Topic: Linux Basics with SUSE 9.1. 10AM to 3PM, 1507 Newell-Simon Hall, CMU

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

**Jul. 17:** General User Meeting. 10AM to 3PM, 1507 Newell-Simon Hall, CMU

*The public is welcome at all events*

# From the Editors: Welcome!

The Western Pennsylvania Linux Users Group (WPLUG) is proud to present the inaugural issue of *The Open Pitt*. Chances are you've heard of Linux and used it, too, even if you aren't quite sure what it is. It has gone from being a hobbyist's toy to powering millions of websites like Google and Amazon.com to starring in an IBM Superbowl ad.

Starting up a new publication is a daunting task, especially with an all-volunteer crew having little publishing experience. But Linus Torvalds didn't let limited resources or lack of experience deter him from creating the Linux kernel, so we will follow his example and push forward. With luck, we'll have at least a tiny fraction of the success Linux has had.

One goal of *The Open Pitt* is to serve as the voice of WPLUG. So far, 2004 has been a busy year, with high turnout at meetings and other events. In addition to WPLUG activities, we will also report on the newly-formed ErieLUG as it gets up and running.

More broadly, though, *The Open Pitt* exists to serve everyone in Western Pennsylvania who is using, evaluating, or even just contemplating putting Linux and other Free and Open Source software to work for them. Even if you never plan to drop in on a user meeting or installfest, we want *The Open Pitt* to keep you up-to-date on what's happening locally as well as some of the more noteworthy Linux events from around the world.

If you're only a little curious about all this, keep reading *The Open Pitt*. To find out more, join the mailing lists at `<http://www.wplug.org/>` or come out to a meeting. Everyone is welcome.

Want to install Linux but aren't sure how to proceed or having trouble? WPLUG's monthly installfests can provide the help needed to get you up and running. Linux can even sit alongside your current Windows or MacOS installation, letting you choose which one to run on power-up.

If you know anyone who might be interested in what you're reading here, please pass along a copy of this newsletter to them. In Open Source and Free Software, sharing is not only allowed, it is encouraged!

In that same vein, we'd like you to share your experiences. If you have a story to contribute or feedback on an article, fire off an e-mail message to us at `<top@wplug.org>`.

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**FEDORA**, *from p. 1*

You are then presented with the default desktop. I experienced no problems running under the default configuration on either machine, nor did I have to tweak anything to get hardware working. However, some software does not ship with Fedora due to licensing issues. After a Google search and installing a few libraries, MP3 playback was a reality.

The next issue to deal with was accelerated graphics. The drivers from `<http://www.nvidia.com/>` are the best choice for performance for gaming or anything OpenGL-related on NVidia-based cards. To use them, I had to change a few options in the stock Fedora kernel and rebuild it from source. Since I was going to the trouble of recompiling, I grabbed and used the latest stable kernel (2.6.6) from `<http://www.kernel.org/>`. After compiling, installing, and rebooting, I had a responsive system with accelerated 3D graphics.

## In Closing

Fedora Core 2 delivers a lot of the newest technology from the Linux world, all rolled into one distribution. It has met my expectations for a Linux distribution, while staying within the bounds of current open source software. FC2 also took less time to configure to my liking than any previous Red Hat release. I feel the Fedora team has taken a step in the right direction for the Linux desktop. I look forward to seeing what the next release brings. Fedora is located at `<http://fedora.redhat.com/>`.

*Carl Benedict works for Pittsburgh Techs `<http://www.pittsburghtechs.com/>` in Cranberry Township.*

## New User Tutorial

June 12, 10am to 3pm
Beth Lynn Eicher will present a free tutorial on Linux basics, including:
- Choosing a distribution
- Filesystems and permissions
- Using the command line
- Kernels and bootloaders
- Security suggestions
- Basic desktop usage
- Using Knoppix as a rescue disc or as your main Linux desktop

You may bring a computer along, but one is not required. Those who RSVP to `<bethlynn@wplug.org>` will receive a free Knoppix CD. Make sure to RSVP if you plan to bring your computer.

If you have any specific topics of interest or questions you would like addressed at the tutorial, please e-mail them to Beth Lynn.