

Since we talked about Fedora Core 5 at the last meeting, I thought I'd share some additional experiences I have personally had with this new distro.

As with Jim, I was fortunate enough to locate a mirror that was not overloaded on the release date, and downloaded the CD install version of FC5 (5 images, plus the rescue CD image). I had been anxiously awaiting this release, since it promised to have several new features that I was very interested in, such as PHP 5 and MySQL 5. To my pleasant surprise, this release has even more open source goodness of interest to me than I expected, chief among these being tighter integration of Postfix/Dovecot/Amavisd/Spamassassin/Clamav for mail servers (I run several of these). Also, MySQL Administrator, formerly only available from MySQL, is included with this release, as well as a host of other improvements.

As of this writing, FC5 has been installed to three machines, two servers and one workstation. This article is being written on the workstation machine. Brief hardware specs:

1. Workstation

- Home built MicroATX
- AMD AthlonXP 3000
- 1 GB Ram
- Nvidia GEForce integrated graphics
- 40 GB IDE hard drive (parallel, not SATA)

2. Server

- Compaq DL360
- 2x P3-800
- 1 GB RAM
- ATI integrated graphics
- integrated Compaq SCSI RAID
- 2x 18GB Ultra3 SCSI (RAID 1 mirrored)

3. Server

- White box local vendor
- 2x Xeon 3.2 GHz
- 4 GB RAM
- ATI integrated graphics
- integrated Intel SCSI RAID
- 4x 36GB Ultra320 SCSI (RAID 5)

The install process was very smooth on each of the three machines, with one exception: Anaconda incorrectly detected the Compaq RAID controller as a generic Symbios chip, so the installation failed and had to be restarted with the noprobe option. This caused Anaconda to not detect any controllers, including both RAID and network controllers.

Fortunately, the list of drivers that could be manually selected included the necessary drivers for all of the Compaq hardware, so the stumbling block turned out to be nothing more than a speed bump. The remainder of the installation on all three machines proceeded with no further problems. On the workstation, FC5 detected and installed the USB-attached HP3200 multi-function fax/laser printer/scanner with no prompting from me, and even loaded the Sane scanner drivers correctly!

Using FC5 has been a pleasant experience. On the workstation, standard productivity and entertainment applications have been installed, including OpenOffice.org 2, Firefox 1.5, Thunderbird 1.5, BMP for mp3 playback, and xine for DVD playback. Note that due to copyright concerns, the latter two applications are crippled in the default FC5 installation, so new versions were downloaded from freshrpms.net and installed using yum. More on yum in a minute.

The very first thing I noticed when starting OpenOffice is that it loads *much* faster now. Initial startup into a blank document following a reboot was about five seconds on the workstation. Subsequent blank documents were less than 3 seconds. Loading MS Office documents took a little longer, apparently due to the conversion that is performed when opening, but was still quite respectable at about 5-6 seconds. This is a major improvement, one that I hope will propagate to the Windows version of OpenOffice. One note about Java: OpenOffice in FC5 makes use of a new, free java runtime released by FSF. I felt a need to have the Sun Java runtime installed as well (mainly for Firefox plugin support), so I downloaded and installed Java 1.5.06. Both runtimes appear to be functional, and seem to be peacefully coexisting.

Another improvement in FC5 is memory handling. On the Compaq server, with all the services that I typically have running (mail, DNS, http, NTP, MySQL, Postgres, etc.) fully configured, the installed 1 GB of RAM is more than adequate. For comparison, FC3 would start swapping to disk within hours after a restart using the same amount of memory.

Interestingly, running the top command on the workstation reveals that RAM use scales quite nicely, suggesting that the kernel is managing memory use very efficiently at high loads. The workstation was tested with up to seven office-type applications running simultaneously, with no visible degradation in performance and no swap file usage (although I believe that something strenuous like video encoding would change that in a hurry). In fact, indicated memory usage barely changed upon loading the final application in the test (GIMP image software).

One small bone of contention: Nvidia drivers have not yet been updated to work with FC5, meaning poor 3D and OpenGL performance. This is not the fault of the Fedora team, however, because the Nvidia 3D drivers are proprietary, and therefore not included with FC5.

Package handling is a mixed bag. In the past, I'd always been happy with the Apt-get/Synaptic combination, but starting with FC4, the Fedora package management tool of choice became yum, and apt-get started to decline in usability. In FC5, the trend towards yum continues, and is more tightly integrated with the introduction of yum-based Pup and Pirut for package management. While these appear to be competent tools, in their default configuration, they can be *very* slow. A better solution is yumex, which is in Fedora Extras, and can be configured for better (meaning faster!) updates. One yum bug/feature that I dislike is that by default, every time yum is started, it goes out to the Internet and updates its package cache, which can take some time. Give me the ability to choose when the cache is updated. It may be possible to change this behavior, but I haven't investigated all the yum options yet. Yum/yumex still has a ways to go before it reaches the ease of use of Apt-get/Synaptic, but there is noticeable progress.

Speaking of updates, FC5 seems to have more than usual, even for a new version. My recent experience is that updates average about a dozen per day. Perhaps this is because I tend to have many packages installed, but it still feels like it's been more frequent than in the past. I'm sure things will settle down, and for the record, I'm not aware of any critical software problems in Fedora at this time, so FC5 updates don't seem to be as urgent as, say for example, Windows updates.

Overall, FC5 feels faster than its predecessors. Applications seem snappier, opening and closing windows is zippier, and the impression I have is that FC5 has comparable quickness to Windows XP on a similar platform. Naturally, it continues to be rock-solid stable. Also, for the first time, I feel comfortable using KDE as my default desktop environment, and plan to take it out for an extended spin to explore some of its capabilities. If at some point in the future, the Fedora team incorporates the awesome Xgl desktop into FC5, this distro could well become a Windows-killer in the mainstream desktop computer environment.

On a scale of 1 to 10, I'd have to give FC5 a solid 9.0 (it would be higher, but I had to go out and find DVD and mp3 support elsewhere).

This is a great distro.