



# Seven Kernels on Five Systems

David looks at compatibility problems with distros, kernels and software. **BY DAVID A. BANDEL**

I know I'm not exactly your average Linux user. I guess I have to ask, who is? But, I hope most users don't have some of the problems I see regularly. At home, I usually have five systems connected, and my business has a fair number of servers and access points on the Internet. What I've been finding, and with greater frequency, is that between software not being available on some distros and software that only builds on some kernels, I have four different distros running seven different kernels just on the five systems I have at home. As of this writing (latest kernel version 2.4.17-pre6), the latest (CVS) Internet PhoneJACK software wouldn't build on any of the four most recent kernels I installed; other software required kernels 2.4.4-2.4.8 to build. Non-overlap of kernel versions needed to build and run some software is why I have seven kernels on five systems. FreeS/WAN compiles on some, but not all kernels. Then some distros have their own problems. Mandrake 8.1, which has a lot of bells and whistles, didn't include wireless utilities or support for CardBus or my ORINOCO card—easily remedied, but not necessarily so for newbies. Caldera has a nasty habit of providing upgrades, such as those to the kernel, but not upgrading the kernel version itself. They patch it up with security patches, then leave the source as 2.4.2. Needless to say, some software refuses to build when 2.4.4 or better is required. Most readers already will be aware of the numerous problems with Red Hat. Solution? I'm afraid I don't have one. But I do know that what I consider only niggling annoyances can become showstoppers for newbies. And, no amount of support will push Linux into the Microsoft strongholds if these problems aren't resolved.

## Vipul's Razor [razor.sourceforge.net](http://razor.sourceforge.net)

Last month I railed against spammers. This month I have a cure. If you're running an MTA (I run several), you can stop spam via a simple global `/etc/procmailrc` recipe (or you can do the same just for your mail with your own personal `~/procmailrc`). Mine shunts all spam received to a spam box. I've checked the messages sent to this spam folder for over a month, and not one legitimate mail has been misdirected. Now I'm averaging one spam every three days, which I report to the razor servers, and with spams reportedly up 650% over last Christmas season, I'm happy. Requires: Perl, Perl modules Net::Ping, Net::DNS, Time::HiRes, Digest::SHA1, Mail::Internet and a strong desire to be spam-free.

**XNetworkStrength** [gabriel.bigdam.net/home/xnetstrength](http://gabriel.bigdam.net/home/xnetstrength)  
Running a wireless card? Want to know how good or bad your

signal strength is without running `iwspy` every few seconds? Well, XNetworkStrength will do it for you if you're on an X screen. You can keep an eye on your connection while you're working. Requires: libX11, glibc.

## CGIPaf [stafwag.f2g.net/cgipaf](http://stafwag.f2g.net/cgipaf)

Need a simple, safe way for users to change their password? These CGI tools are compiled C programs that provide security, but you'll want them accessible only via https (not much sense changing a password over an insecure link). They also allow for users to forward mail and return a mail message (*à la* vacation). Unfortunately, this program won't take mailing lists into account (as vacation will). Requires: libdb1, libpam (optional), libdl, glibc, web server with PHP.

## NorthStar [www.brownkid.net/NorthStar](http://www.brownkid.net/NorthStar)

NorthStar will help you keep track of your IP allocations, equipment and locations of same. In fact, one of the nicest things about this is the way you can view your networks, devices and locations. If you have more than a few IPs or systems or locations, you'll want to look this program over. Requires: web server, Perl, PostgreSQL.

## Simplified CD Backup

[scdbackup.webframe.org/main\\_eng.html](http://scdbackup.webframe.org/main_eng.html)

This backup to CD utility is actually a number of small programs to permit specific actions. There's `scdbackup_home` that permits users to back up just their home directory. There's `scdbackup_sys` that permits a backup of the system. There's also just an `scdbackup` that can be fed arguments about which directories to back up and which to exclude from backup. Some backups (home directories, for example) are backed up as filesystems. Others, such as the system backup, are done as `afio` archives. Simplified CD Backup handles multivolume backups as well as single CD backups. Requires: `cdrecord`, `mkisofs`, `bash`, `afio`.

## mail-bounce [www.spots.ab.ca/~gary/mail-bounce](http://www.spots.ab.ca/~gary/mail-bounce)

This small Perl program will allow you to take mail and bounce it back where it came from. It also permits you to include a custom message. While a message can be bounced at any time, it doesn't make much sense to bounce it back hours later, thus `procmail` is suggested as an easy way to bounce the mail, although any program, even a command line, can be used. Requires: Perl, `procmail` (suggested).

## tknotepad [ftp.mindspring.com/users/joeja](http://ftp.mindspring.com/users/joeja)

I had a difficult time selecting between two excellent packages I continue to use. And while I think E\*Reminders merits mention, I chose `tknotepad`. I'm not sure why this hasn't been more widely adopted, but it provides Windows refugees a familiar haven. This tool looks, acts and works just like the Windows `notepad`. In fact, it's what I use to write this column, and it could be used to write web pages, edit configuration files and much more. Easier for most than my favorite editor, `vi`. Requires: `Tcl/Tk`. Until next month. ☐

David A. Bandel ([david@pananix.com](mailto:david@pananix.com)) is a Linux/UNIX consultant currently living in the Republic of Panama. He is coauthor of *Que Special Edition: Using Caldera OpenLinux*.