

## The monthly BSD column

## FREE WORLD

Welcome to our monthly Free World column where we explore what's happening in the world of Free software beyond the GNU/Linux horizons. This month Janet Roebuck opens the door on Java and the office

**Java nearer**

HotSpot from Sun Microsystems has now been compiled on FreeBSD by Bill Huey. At the moment both demo applets and JFC (Java Foundation Classes) run but HotSpot for FreeBSD is not yet complete. For more information see the [freebsd-java mailing list](#).

**Office work**

Martin Blapp has announced that, with help from Tim Tretyak, Alexander Kabaev and Carlos FA Paniago, OpenOffice.org 1.0 now works on the STABLE version of FreeBSD.

**Red Hat say no to BSD licence**

Red Hat has recently caused a storm over licensing issues. Having previously stated that it did not support software patents, Red Hat has decided to start building up a



software patent portfolio. The first two patents for Red Hat are by Ingo Molnar and are for Embedded Protocol Objects and a method and apparatus for atomic file lookup. Red Hat claims that these patents have been adopted as defensive measures to allow cross licensing rather than court action.

Red Hat has publicly stated that it will not enforce the patents where they are used for Open Source software. In this the Open Source software is licensed to allow modification and redistribution as long as the modified versions are themselves Open Source. The BSD licence is not covered under this agreement however, as BSD licensed software may be used and built into proprietary software. Approved Licenses are the GNU General Public License v2.0; IBM Public License v1.0; Common Public License v0.5; and the Q Public License v1.0. More information can be found at [http://www.redhat.com/legal/patent\\_policy.html](http://www.redhat.com/legal/patent_policy.html)

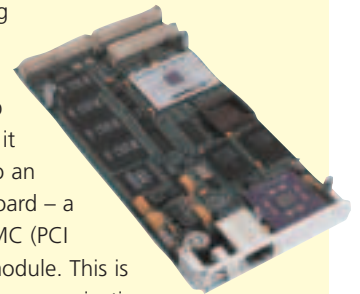
**Remember the football?**

Last month's FIFA World Cup was a highly popular

event with millions of interested viewers watching the events and many more eager to find out the latest news. The World Cup Web site was in understandably high demand and this heavy traffic was handled with ease by none other than FreeBSD.

**Yet another hardware port**

The ever-expanding influence of NetBSD has again made another leap forward. This time it has been ported to an Artesyn PM/PPC board – a PowerPC-based PMC (PCI mezzanine) card module. This is designed to allow communication equipment manufacturers to add computing functionality to a baseboard, such as a T1/E1 or ATM interface board, and provide the localized horsepower necessary for applications such as protocol processing, data filtering or I/O management. For more information on the subject visit <http://www.artesyncp.com/html/pmppc.html>

**Smaller and safer**

A new project is underway to make a secure hardened Posix1e draft OS – a project which has taken on the affectionate moniker of MicroBSD. The idea behind MicroBSD is to create a hardened secure Posix1e OS with a small – hence Micro – footprint. The compact system is designed to work on x86 (now) and Alpha/Sun/PPC (soon) hardware, using as little hard disk space as possible yet providing fully functional systems.

Based on a complete server model, builds are currently available for firewalls, IDS and VPN with SMTP, WWW, DNS and FTP combinations to be developed over time. The systems features address all aspects of security: these builds are designed to take the work out of building secured network

environments with specific features unique to each one. In a nutshell, MicroBSD is a secured manageable system build designed to undertake specific tasks. More information can be gleaned from <http://www.microbsd.net/>

## OpenSSH goes up a level

OpenSSH 3.2.3 has been released. This is a 100 per cent SSH implementation of the versions 1.3, 1.5 and 2.0 protocols and features both server and client support for sftp. This latest build is available for download from <http://www.openssh.com/>.



The OpenSSH suite includes the ssh program which replaces rlogin and telnet, scp which replaces rcp, and sftp which replaces ftp. Also included is sshd, which is the server side of the package, and the other basic utilities like ssh-add, ssh-agent, ssh-keygen and sftp-server.



## Don't mess with Stephanie

OpenBSD 3.1 has a new version of the security hardening package Stephanie. The new package is in a modular form so you can choose which components to install. Modules included are: TPE (Trusted Path Execution), MD5 "binary integrity verification", an in-kernel ACL mechanism, real time logging of `execve()` calls and `ld.so` protection (`env` stripping). Stephanie is available from <http://linnu.org/~brian/Stephanie>.

## Seeing the light

Solaris 9, from Sun Microsystems, has increased its security features by using code from OpenSSH. According to Darren Moffat, the engineer responsible for Solaris: "All we added was the following:

- 1. BSM audit code (which has now been donated back to OpenSSH).
- 2. L10N/I18N of messages that get sent to the user.
- 3. Two standalone proxy commands one for SOCKS5 and one for HTTP.
- 4. The code was also linted.

We did change the vendor part of the version string but this is perfectly in spec. The reason for this being we don't want to identify it as OpenSSH because it isn't 100 per cent OpenSSH code and also because the version of OpenSSH we started with didn't

implement re-keying. There will be an effort to get back in sync with OpenSSH in a future revision of Solaris – we will assess at that time if it is appropriate to keep Sun\_SSH as the vendor component or revert to OpenSSH. By having a different vendor string it helps in identifying any bugs because it is obvious who to contact."

## Sandboxed

The OpenBSD developers have now developed Systrace. This makes system call polices enforceable and so untrusted binaries can be safely sandboxed and run without risk of harm to the rest of the system. As more binary-only software is released onto the market this will become increasingly useful and may help calm down some of the current security paranoia that occurs with binary-only software.

## Package information

At the beginning of June the number of packages in the NetBSD Package Collection stood at an impressive 2,926, while at the same time the FreeBSD ports broke the 7,000 ports barrier. The NetBSD Package Collection can be found at [http://www.netbsd.org/Documentation/software/packages.html#searching\\_pkgsrc](http://www.netbsd.org/Documentation/software/packages.html#searching_pkgsrc).

The most recent new packages are p5-WWW-Amazon-Wishlist (get details from your Amazon wishlist), rox-system (a system monitor), xfm (the X File Manager), yup (print multiple pages on one sheet), su2 (enhanced su command), xcin (xim server in Chinese), libtabe (Chinese language processing), nbitools (imake tools), rox-wallpaper (backdrop setting), rox-memo (reminder pad), rox-edit (text editor), rox-lib (library functions for ROX), sylpheed-claws (email and news client).

The most recent updates are mozilla, awka, lukemftp, ttf2pt1, ettercap, audit-packages, doc++, sylpheed, xservers, tits, stow, p5-XML-Namespacesupport, p5-HTML-FillInForm, p5-Test-Harness, p5-Net, pkglint, ethereal, rox-wrappers, rox-session, rox, rox-base, apache, portsentry.

The gnus and mutt-devel packages have been retired.

a different vendor string helps in identifying bugs

## Signing off

That's about as much of the Free World as we have time to visit this month. Until the next issue, if you have suggestions or feedback then don't be coy – get in touch with us here at Linux Magazine.

