Vol. 15 No. 5

January 2003
$2.50

MUUGlines
The Manitoba UNIX User Group Newsletter

January 14, 2003: Mac OS X Update

This month, Douglas Hamilton, Apple Product Professional at the University of Manitoba, returns to give us an update on Mac OS X, a year after his last presentation. Many changes have occurred to Mac OS X over the past year (the current version is now 10.2.2). These changes include a revised kernel, greater security, improved development tools and greatly improved printing & networking technologies (including a new open standard).

The presentation will cover the significant changes pertaining to the Unix underpinnings of Mac OS X, and how they have improved this operating system. This presentation will also cover the user interface changes which have been made to enable consumer (as opposed to power-user) access to the new Unix services included in Mac OS X.

Meetings are held at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy). When you arrive, you will have to sign in at the reception desk, and then wait for someone to take you (in groups) to the meeting room. Please try to arrive by about 7:15 PM, so the meeting can start promptly at 7:30 PM. Don't be late, or you may not get in.

Limited parking is available for free on the street, or in a lot across Ellice from IBM, for $1.00 for the evening. Indoor parking is also available nearby, at Portage Place, for $2.00 for the evening.

Book Review: Absolute BSD

by Sean Walberg

Absolute BSD
Michael Lucas
No Starch Press, 2002
565pp

The BSD family of Unix operating systems has a distinguished heritage, and is responsible for many of the Unix features that we take for granted. Somehow, the open-sourced BSDs such as FreeBSD, OpenBSD, and NetBSD have not shared in the popularity enjoyed by Linux. However, those that pass over the likes of FreeBSD are missing out on something good, and would do well to have Absolute BSD show them the way.

Absolute BSD bills itself as "The Ultimate Guide to FreeBSD", and I have no reason to doubt that. It's chock full of information on the care and feeding of a FreeBSD server, along with some good stories and background on the OS that contributes to the reader's overall understanding of the material.

What's good?

As someone who has a lot of experience with the SysV family of Unix, but no BSD experience, I found this book to be truly excellent. The book is full of commands and examples which helped me quickly figure out how to do the stuff I wanted to.

What I'm looking for in a technical book is a mix of commands and concepts, i.e. "Here is how to do XXX", and "Here is why you are doing it". Absolute BSD had a great mix of this, describing everything from how the development process works, to some of the intricacies behind FreeBSD's use of CVS.

For instance, Chapter 12, "Finding Hosts With DNS", is a fascinating read, covering not only how DNS works and how to configure your DNS server, but the dirty details of recursion and debugging. Likewise, the chapter on email, while relatively short, was very complete.

Of note is the author's choice of Postfix over sendmail. In fact, one of the first things that this chapter covers is replacing the default sendmail with Postfix.

A central theme in this book is doing everything in a secure manner, which is a refreshing change from many introductory books out there. Furthermore, the breadth of information covered in this book makes it a great reference, as everything from installation, to configuration, and on to hardware tuning is covered.

Finally, I appreciated the writing style of the author. The text itself is easy to read, concise without being terse, and very welcoming to the reader.

What's bad?

I've only a couple of minor quibbles about this book. The first is the organization. Even though the introduction states that the book can be read cover-to-cover, I found many forward references throughout the later chapters, with backward references only to the early chapters. This would seem to indicate that it could have been laid out better.

Second, I found a few places where I had to scratch my head and ask "Are you sure of that?" The ones that come readily to mind had to do when the author compared BSD to other operating systems, or made some reference to hardware. More thorough technical editing might have smoothed over these rough edges.

So?

Absolute BSD is a great book about the FreeBSD operating system. People with some Unix experience, perhaps Linux or Solaris, will find it an excellent transitional step into learning more about the BSD world. Those new to Unix might be advised to pick up a basic Unix book and go through it after completing the initial installation. The breadth of information covered makes this the perfect companion for the budding BSD administrator.

Mandrake's Commercial Firewall Product

MandrakeSoft, a leading Linux solutions provider, announced December 12th the availability of "Multi Network Firewall" (MNF) – a multi-VPN (virtual private network), multi-DMZ (demilitarized zone) firewall and networking solution that provides smart Internet Traffic Management combined with an industrial-strength hardening system for the highest level of network security. MNF provides remote administration and finely-tuned monitoring through a secure web interface, plus MandrakeSoft's world-famous ease-of-use. MNF is the newest release in the MandrakeSecurity range of products, which also includes the Single Network Firewall, an application widely adopted by customers throughout the globe.

The Multi Network Firewall adds numerous features to Single Network Firewall such as the ability to manage multiple Virtual Private Networks (VPNs) and multiple DeMilitarized Zones (DMZs). MNF is based on a secure Linux 2.4 kernel to provide numerous new technologies as well as an improved user interface. "The Single Network Firewall was a great product in its class, but it didn't include the wealth of advanced features that are introduced with MNF," said Frédéric Lepied, Chief Technical Officer of MandrakeSoft. "Aside from DMZ and VPN features, MNF offers, for instance, a stateful packet filtering technology based on IPtables and the Shorewall project to allow smarter and more precise analysis of data packets."

The interface offered by MNF enables system administrators to configure complex firewall and network options/services with just a few clicks of the mouse to result in dramatic time and productivity gains. Even the most experienced administrators will appreciate the ability to achieve, in a matter of minutes, previously complicated tasks such as customizing the graphical display of information for network and system activities. With MNF, a basic firewall configuration can be accomplished with just two mouse clicks (closing and opening of ports).

MNF is an ideal solution for small and medium-sized businesses as well as large enterprises seeking to deploy a full-featured network security solution that also delivers a low cost of ownership. Provided under a "per-server" licensing model, MNF's comprehensive networking solution offers superior economics by eliminating typical "add-on" costs such as 3DES VPN licenses and VPN clients, as well as by bundling a collection of software that most other companies sell separately.

A medium-sized business can use MNF to build the entire company's network, including several demilitarized zones (DMZs) with Intrusion Detection capabilities. DMZs are special areas of a network placed between an untrusted environment (such as the Internet) and a protected network. With MNF, a business is capable of creating as many virtual private networks as needed, for example, to provide secure and encrypted communication for privileged and critical data. Large enterprises, especially those comprised of multi-platform environments, can use MNF to build sub-networks for providing secure access to entire company divisions. MNF also enables large enterprises to create virtual networks so that mobile staff members can communicate securely with the main office.

MNF's leading-edge Traffic Management feature handles a wide range of Internet connections, including modem, DSL, ISDN, Cable and T1. With MNF, businesses can optimize Internet bandwidth and control the time allowed for web-surfing. The integration of an easily configurable proxy (transparent, manual and manual with user authentication) accelerates access to content and data transfer. A specialized feature allows the ability to control Internet access only during specified hours of the day. MNF also enables businesses to enact content filtering capabilities to make sure that inappropriate or unwanted content can not be accessed from within the company's network.

MNF's main features include:

Easy-to-use yet powerful configuration tools

- Configuration and management is performed through a secure Web Interface
- Monitoring tools display detailed information about network & system activity
- Logs report intrusion detection, DHCP and Proxy usage
- Dial-on-demand provides a hassle-free way to share a dial-up connection

Strong Firewall

- "IPtables" firewalling subsystem (stateful secure kernel 2.4).
- "Snort" and "Prelude" Intrusion Detection Systems
- DMZ wizard for configuring DMZs
- VPN, based on FreeS/wan project, for secure data transfer
- "Shorewall" hardening firewall system
- "MSEC" security system

Complete network solution

- Integrated and easily configured Proxy
- URL/content filtering
- Web surfing time restriction
- DNS cache
- DHCP server

A complete list of MNF features is available at: http://www.mandrakesoft.com/products/mnf/features. MNF is now available at MandrakeStore. (http://www.mandrakestore.com)

But You Already Do Backups, Right?

Arkeia Corp., an international supplier of heterogeneous network backup solutions, announced on December 17th the release of Arkeia Light, a fully enabled free version of the company's award-winning Arkeia v5 enterprise software for open source environments.

Arkeia Light is designed to provide Linux-based PCs and small networks with enterprise-calibre backup capability at no cost for personal or commercial use. Arkeia is the most widely used professional backup solution in the Linux environment with more than 90,000 networks worldwide protected by either the Light or the full version.

This new version of Arkeia Light features the Arkeia v5 user interface, including a calendar interface for periodic backup and exception management. Arkeia Light adds support for OpenBSD and NetBSD clients and many new Linux distributions, including the recently announced UnitedLinux.

Arkeia believes that diversity and choice promote a healthy, robust and dynamic software industry. "Our offer of a free version for Linux backup servers acknowledges the voluntary work by thousands of Linux users who have donated time and expertise toward making Linux a viable alternative OS," said Phil Roussel, Arkeia CEO.

"Open source solutions have significantly contributed to the software industry by creating free, high-quality software such as Linux."

Arkeia Light is a complete version of the Arkeia solution (no time limit) for one Linux backup server attached to a SCSI single-tape tape drive and two desktop-class client machines, i.e., Linux, FreeBSD, BSD/OS, OpenBSD, NetBSD and/or an MS-Windows workstation (MacOS X support is scheduled for early next year).

Arkeia Light is available for download at http://www.arkeia.com/arkeialight.html.

Formerly Knox Software, Arkeia is noted for its early and comprehensive support for the Linux open source operating system. Arkeia is a leading provider of enterprise network backup solutions. Founded in 1996, the company's mission is to provide fast, reliable, easy-to-use and affordable network backup solutions for heterogeneous networks.

The distributed client/server architecture, administrative capabilities, and multiplexing technologies enable Arkeia to provide enterprise-class technology at an affordable price. Arkeia supports hundreds of tape libraries, tape drives and more than 30 operating systems/hardware combinations.

The Arkeia product range, Arkeia Light, Arkeia

MicroLan, MiniLan, EnterpriseLan and Arkeia Virtual Server, has attracted more than 90,000 users worldwide who rely on Arkeia for their data protection needs. Arkeia is privately owned and has offices in Carlsbad and Paris. For further information about Arkeia, visit the company's Web site at http://www.arkeia.com.

Good Financial News

Red Hat, Inc. reported financial results on December 17th for its third quarter fiscal 2003 ended November 30, 2002. In the third quarter of fiscal 2003, Red Hat achieved revenue of $24.3 million, a sequential increase of 14% compared to $21.2 million in the second quarter of fiscal 2003, and a year-over-year increase of 21%.

For the third quarter of fiscal 2003 the company reported a net income of $305,000, or break-even per share. This compares to a net loss of $2.0 million, or $0.01 per share, in the prior quarter, and a net loss of $15.1 million, or $0.09 per share in the same quarter a year ago.

Other highlights for the quarter include:

- Enterprise revenues, which account for 93% of Red Hat's total revenues, grew 15% to $22.5 million.
- Enterprise subscription revenues jumped 29% and generated gross margins of 82%.
- Blended gross margins remained strong improving to 66%, while Enterprise gross margins grew to a record 68%.
- Cash flow from operations jumped 74% to $1.0 million.
- Sales of Advanced Server increased to 12,000 subscriptions, a 50% increase compared to the prior quarter.
- Days Sales Outstanding decreased to a record 46 days.

The bottom line? A small profit, *without* excluding various losses this time!

Samaritans Go With Linux

The UK-based emotional support charity, Samaritans, has chosen Trustix and IBM to incorporate Linux based security solutions into the charity's expanding IT infrastructure. The charity is already using SuSe Professional Linux distribution.

Security and Linux specialists Nouveau Solutions recommended the Trustix and IBM solution, as they were aware of the charity's need to provide more computing power but keep IT costs as low as possible. Nouveau were also aware of a heightened interest in securing a new source of confidential data in the form of the new Samaritans' e-mail support service.

People in emotional distress can now contact trained Samaritans volunteers by e-mail. Currently 80 of the charity's 203 branches throughout the UK and Republic of Ireland offer the service, with more set to come online in the coming months. Samaritans volunteers give people the time and space to find a way forward from their emotional distress in total confidence and without judgment, whatever the situation. Mike Hermon, IS Manager at Samaritans explained: "An e-mail is sent in confidence to a single address, jo@samaritans.org, and administered centrally. Network security provided by the IBM / Trustix solution is essential to maintain total safety and confidentiality for our e-mail callers."

Hermon continued: "One of the great challenges for computing in any charity is to provide more for less. Linux-based solutions such as those from Trustix and IBM offer all the benefits of low cost and efficient use of resources associated with Linux backed up by names you can trust".

Note that they are using Linux despite reports that charities are often granted free use of software from Microsoft.

Sending Us E-Mail?

Due to the amount of e-mail MUUG receives, we've set up an auto-reply to give you immediate feedback, and redirect some of the e-mail to the appropriate places. Why not look at http://www.muug.mb.ca/about.html#contacts first?

Share Your Thoughts

E-mail us with your comments on the newsletter, whether it's criticisms or commendations, and continue to send in articles or ideas for same. If you have a How-To or other idea, and aren't ready to give a presentation at MUUG, an article is a great alternative! If you can write better than the editor, that's terrific; if you can't, submit it anyway and we'll get it into shape for publication. We know that many of you have some great ideas and lots of knowledge. Why not share? Mailto: editor@muug.mb.ca.