

;login:

THE MAGAZINE OF USENIX & SAGE

October 2001 • Volume 26 • Number 6

inside:

THE BOOKWORM
by Peter H. Salus

USENIX & SAGE

The Advanced Computing Systems Association &
The System Administrators Guild

the bookworm

by Peter H. Salus

Peter H. Salus is a member of the ACM, the Early English Text Society, and the Trollope Society, and is a life member of the American Oriental Society. He is Chief Knowledge Officer at Matrix.Net. He owns neither a dog nor a cat.



peter@matrix.net

The USENIX Conference in Boston finally convinced me that folks read this column. Oh, I'm not trying to be coy: whenever there's a glaring error, I hear it. But as I walked the exhibit floor in Boston, people I hardly knew (or didn't know) would ask me about this book and that. It's really flattering. So is the response I've had to my call for more reviewers. I now have a group of volunteers who will be doing reviews. Just how many and how frequently will be a function of the topics they have an interest in and what gets sent in by the myriad publishers.

I am especially pleased that I've found volunteers in Canada, Germany, and Italy, spreading our scope geographically.

And now for the autumn's books.

Berkeley DB

Databases are important. Embedded systems are important. The Berkeley database is the most widely used embedded database system in the world. The more we use embedded databases (as every time you employ Netscape or order a book from Amazon.com or use a handheld device), the more important understanding them becomes.

Berkeley DB is divided into two parts: the first, pp. 1–242, is a reference manual of great value; the second, pp. 243–632, is the API manual. The latter details the APIs for C, C++, Java, and Tcl. The book

concludes with a section on supporting utilities and an excellent index. (NB: If you just want to use a database, this book is not for you. If you are a programmer with at least some knowledge of databases, this book is for you.)

Berkeley DB is a good book on a first-rate, open source database. The only criticisms I have are of the volume's production: first of all, the page numbers in the table of contents bear only a tangential relationship to the actual chapters (luckily, the index was done by reliable software); secondly, two figures have their labels reversed.

The folks at Sleepycat Software have done a great job: Margo, Keith, Mike, Mike, and whoever else was involved in this, my compliments.

Being Disruptive

Over the past 5000 years, most media have functioned on a one-to-many basis. The massive temple inscriptions, the imposing stelae of the Babylonian, Egyptian, and Persian empires bear testimony to the beginnings of this: "I, Darius, great king, king of kings..." begins column 1 in Behistun (parodied by Shelley in "Ozymandias" [1818]). The sacred books of all religions are proclamations from the few to the many. So, in more recent centuries, the book, magazine or newspaper publisher, the radio and the TV broadcaster all operate on a one-to-many basis.

From its very beginnings, the Internet has broken this model: every machine on the Net peers with every other. Even when there were but a dozen or a few hundred hosts, there was no notion of publisher/source and passive receiver. As we're now at over 150 million machines on the Net, "closing down" the publisher or broadcaster (a popular pastime of oppressive regimes) has become truly impossible.

BOOKS REVIEWED IN THIS COLUMN

BERKELEY DB

Sleepycat Software, Indianapolis, IN: New Riders, 2001. Pp. 664. ISBN 0-7357-1064-3.

PEER-TO-PEER: HARNESSING THE POWER OF DISRUPTIVE TECHNOLOGIES

ANDY ORAM, ED.

Sebastopol, CA: O'Reilly, 2001. Pp. 432. ISBN 0-596-00110-X.

BEYOND CHAOS

LARRY L. CONSTANTINE, ED.

Boston, MA: Addison-Wesley, 2001. Pp. 416. ISBN 0-201-71960-6.

CERT GUIDE TO SYSTEM AND NETWORK SECURITY PRACTICES

JULIA H. ALLEN

Boston, MA: Addison-Wesley, 2001. Pp. 447. ISBN 0-201-73273-X.

A SYSTEM ADMINISTRATOR'S GUIDE TO AUDITING

GEOFF HALPRIN

Short Topics In System Administration, 6. Berkeley, CA: USENIX Association for SAGE, 2000. Pp. 52. ISBN 1-880446-21-9.

By and large viruses or worms or DDoS attacks are just annoyances, pranks. But for over 150 countries, the Internet has become a road to news that does not pass through government control, a method for nearly anyone to both send and receive at will.

Andy Oram has put together an anthology of pieces on technological, legal, financial, and social repercussions of peer-to-peer Internet communication. This goes far beyond SETI on the one hand and Gnutella on the other. The mere existence of anonymous remailers (even after Julf Helsingius shut his down) frightens the thought police.

Publius tells us about trust. Red Rover tells us about really low-tech distribution. The book contains 19 essays and an afterword.

Like any anthology, the quality is uneven. But it's worth reading (and thinking) about.

Software Development

For four years, Larry Constantine ran/edited/wrote a "forum" in *Software Development* magazine. Forty-five of the columns (by a large variety of folks) have been collected in *Beyond Chaos*. Most of the essays are interesting and, thanks (I suspect) to editing by Larry and the magazine's staff, quite readable. I found several very illuminating; a few (in retrospect) seem just worthless; but the just over 400 pages are great for reading on a flight, at the beach, or wherever. The essays are brief and thus the volume can be read in snippets.

I found it heartening to realize that Aristotle is still relevant today. Larry states (Chapter 31): "The artist learns how to paint by painting." Aristotle wrote: "He who learns to play the harp learns to play it by playing it" (*Metaphysics* 1049b31f). There's something similar in the *Nicomachean Ethics* 1103a32–34.

John Boddie's Chapter 10 is a keeper.

CERT's Practices

With input from a large number of folks at the SEI and at CERT, Julia Allen has produced a simple, practical guide to protecting your system(s) from unauthorized intrusions. My guess is that many readers of this column will find the book too simple, but it seems to me that with the Internet and systems growing at a furious rate, the number of experienced sysadmins is waxing far too slowly. There are thus a number of folks who need a milder, more basic approach. There are also a number of people who work in environments where the highest levels of management don't understand the details. Here is a book that carries CERT's authority to hammer them with.

A Major Omission

I owe Geoff Halprin an apology. It's a year since his SAGE booklet appeared, and I've neglected it. I could offer excuses, but instead, I'll just give him a few flattering lines.

There are all sorts of jokes about how dull auditors are. Computer auditing has never, I admit, appeared a fascinating topic to me. But Halprin's 50 pages convinced me that the "rigorous examination of a system" together with the "identification of shortfalls in compliance or practices" and the "organized repair" of the system are indeed very important. Good job, Geoff. And, again, my apologies for taking so long to print these few words.