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# USENIX & SAGE

The Advanced Computing Systems Association &  
The System Administrators Guild

# the bookworm

by Peter H. Salus

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Wow! What a year!

It's really tough for me to contemplate the end of the year and holidays. I'm writing this the first week in October, less than a month after September 11. But we can hope that 2002 will be a happier year than 2001. As usual, my 10 best for the year are at the end of this column.

## Penguin Care

I really like Gagne's book. But I need to confess that I was one of those Addison-Wesley had read the manuscript, and I'm thanked in the acknowledgments. I liked the first chapters when I saw them; I like the finished book.

Anyone who's read Gagne's columns in *Linux Journal* knows that he's knowledgeable, witty, and jocular. The volume reflects all these aspects of his personality. The book is well organized, yet I'm not certain that it's really suitable for a raw beginner. I think that if you are more than a real newbie, this is the very best book on Linux system administration I have seen. And it is up-to-date but eschews vendor specificity.

Really nice job, Marcel.

## Phone Wires

IMP #5 was intended for the Harvard Science Center in January 1970. But the phone company had a "problem" running a dedicated connection from Harvard to BBN (both in Cambridge,

Massachusetts). It was the first Net-telco problem. It was not the last.

Yet there are few books on Net telephony (not VoIP). Gast's "survival guide" is an excellent one. A T1 is more than just a wire that plugs into an alien box which then connects to a router. In view of the fact that most *login:* readers encounter T1, T3, etc. far more than they deal with dialup, I think that Gast has supplied something worthwhile and needed.

T1 has a caribou on the cover.

## NETWORKS

Sloan's *Tools* is another neat book from O'Reilly. I especially liked his tool approach (after all, that's what I consider one of the most important and distinctive features of UNIX). His list of tools and sources – from Analyzer and Argus through MRTG and nemesis to xplot and xv – is simply superb.

A basilisk adorns Sloan's book.

## Web Sociology

Huberman's *Laws* is an interesting 100-page exposition of the surprising regularities that show up in Web usage. Among the millions of Web sites and the many millions of pages, there are pathways and agglomerations and other patterns. What Huberman has produced is a fascinating analytic essay on social dynamics and group strategy. While not "technical," it's well worth reading.

## And Business

The second edition of Chase and Shulock carries a "seal" on the cover, proclaiming "Essential Tips for Surviving the Dot-Com Fallout!" I'm not so sure. But I may just be the Grinch at their Christmas.

I found reading Chase and Shulock quite interesting, even though they seem to confuse the Web and the Internet it "rides" on: but it's unclear to me that they either achieve their purpose or

## BOOKS REVIEWED IN THIS COLUMN

### LINUX SYSTEM ADMINISTRATION

Marcel Gagne

Boston: Addison-Wesley, 2001. Pp. 532  
ISBN 0-201-71934-7

### T1: A SURVIVAL GUIDE

Matthew S. Gast

Sebastopol, CA: O'Reilly & Associates, 2001  
Pp. 288. ISBN 0-596-00127-4

### NETWORK TROUBLESHOOTING TOOLS

Joseph D. Sloan

Sebastopol, CA: O'Reilly & Associates, 2001  
Pp. 346. ISBN 0-596-00186-X

### THE LAWS OF THE WEB

Bernardo A. Huberman

Cambridge, MA: MIT Press, 2001. Pp. 105  
ISBN 0-262-08303-5

### ESSENTIAL BUSINESS TACTICS FOR THE NET

Larry Chase & Eileen Shulock

2nd ed. New York: John Wiley, 2001. Pp. 315  
ISBN 0-471-40397-0

enable the increased productivity or more effective marketing they claim they do.

## Top 10 for 2001 (in no particular order):

Russell C. Pavlicek, *Embracing Insanity* (SAMS)

Lincoln Stein, *Network Programming with Perl* (Addison-Wesley)

Jim Mauro & Richard McDougall, *Solaris Internals* (Prentice Hall)

Martin Dodge & Rob Kitchin, *Mapping Cyberspace* (Routledge)

Aviel D. Rubin, *White Hat Security Arsenal* (Addison-Wesley)

Paul Albitz & Cricket Liu, *DNS and BIND* 4th ed. (O'Reilly)

Charles E. Perkins, ed., *Ad Hoc Networking* (Addison-Wesley)

Marcel Gagne, *Linux System Administration* (Addison-Wesley)

Joseph D. Sloan, *Network Troubleshooting Tools* (O'Reilly)

Thomas H. Cormen et al., *Introduction to Algorithms* 2nd ed. (MIT Press)

## Book Reviews

### WIRELESS WEB (A MANAGER'S GUIDE)

Frank P. Coyle

Boston: Addison-Wesley, 2001. Pp. 248  
ISBN 0-201-72217-8

Reviewed by Ulrich Weis  
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A first glance at the book satisfies my prejudices: small book (just about 250 but thick pages), nice cover, a font appearing to be a bit bigger than normal (managers tend to be older than the average Joe Hacker), broad right margin (filled with only some remarks), a lot of nice images and charts, and even some very detailed advice about who should

read or skim which chapters. Definitely for managers - let's see if that counts for the content too.

*Wireless Web* is divided into nine chapters, a 35-page glossary, and an intense index. Each chapter starts with a short overview, continues by treating the topic from the general to the specific, gives a short summary, and finishes with printed and/or Web resources.

Chapter 1 ("The Wireless Web") introduces the reader to the overall wireless area, pointing out hype cycles, application opportunities, and technology enablers. More technical stuff (devices like PDA, cell phone, pager) is handled in Chapter 2. Chapters 3 and 4 introduce Bluetooth, a technology for connecting both IT-equipment over short distances "at chance" and wireless LAN (WLAN), which are mostly used as replacements for wired networks.

"Networks and the Quest for Bandwidth" is the title of Chapter 5, dealing with second- and third-generation wireless networks (2G/3G cell phones). Coyle not only reports the standards used in the world, but talks about politics and migration (2G -> 3G).

Chapters 6 through 8 are on protocols and languages, dealing with WAP, XML, and Java. XML (and all its subsidiaries) is especially in the fireline of big companies, as it's going to be the "standard" for "wireless content." And content is what makes those products worth livinghaving.

The last chapter is probably the most important subject covered: security. Coyle discusses requirements, threats, signatures, encryption, VPN, and all that. While the chapter is good at what it's presenting, this reviewer is feels it really misses some points. One is the biggest security problem of all: the user. It definitely doesn't help you to secure access if your boss loses his (her) PDA

with passwords written on some tape on the back. And, up to now, no manufacturer has apparently thought about allowing a user to "self-destroy" data on PDAs, if there were several unauthorized access attempts.

Another point of concern, especially to Europeans, is backdoor-access or even hacking by "governmental institutions." "Echelon" is one of the keywords that come to mind, at least to security-concerned Europeans. Coyle doesn't address this point at all.

As a non-US-citizen, this reviewer must point out that most of the information is generally useful in all countries but that some stuff should definitely never be used, at least in Europe (900 MHz cordless phones, for example, disturb air traffic frequencies). There are other mistakes, but only minor ones: for example, a reference for a Bluetooth book in Chapter 4, which should be in Chapter 3.

Overall, *Wireless Web* does a good job; it is well written and easy to read. Just use it for the purpose it's been created for: if your CEO bores you again with questions about WAP, SMS, Bluetooth and all those buzzwords, hand over this book. This will probably give you some peace. At least until your boss wants to use all that nice stuff.

To sysadmins, the book offers a short but mostly complete overview of wireless technology. You'll probably find some helpful data in the large number of URL references or the tables presenting a lot of technical details (standards, comparisons).

The book is not just marketing talk but gives some real technical overview.