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THE BOOKWORM by Peter H. Salus

USENIX & SAGE

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 Editorial Director at Matrix.net. He owns neither a dog nor a cat.



<peter@matrix.net>

Everyone knows that I get and read a lot of books. Frequently, I look at books I dislike. By and large, I try to avoid really negative reviews. This column is devoted to a negative review because I fear that this book will be well-regarded because it originates from a major publisher.

Who's on the phone?

I'm at a complete loss as to why McKnight, Lehr, & Clark's *Internet Tele-phony* was published. It is rife with outdated "facts," misleading in import, poorly proofread, and (in general) an embarrassment to its publisher.

The volume comprises 13 chapters, many of which are by the editors' students. "An Introduction to Internet Telephony" (1-13), is nothing of the kind. It flatly notes that "If a reader is hoping to unravel the mysteries of, for example H.323, H.324 ..., we suggest that person look elsewhere"[p. 5]. (This appears to be the sole mention of the ITU's standards.) The editors further note that "We define Internet Telephony as the services, applications, and equipment for mediated human communication emerging from the convergence of the Internet and telecommunications. That is the subject of this book" [p. 7].

I found little of that subject elucidated.

I was looking forward to Dave Clark's "A Taxonomy of Internet Telephone Applications" [pp. 17-42]. Here, I was rewarded. Clark is the author (or co-author) of about 15 RFCs, most interestingly of RFC 1633 (June 1994) on "Integrated Services." In "Taxonomy," he uses some of this information, as well as material in RFC 2205 (September 1997) and 2211 (September 1997). It's unclear to me why RFC 2750 (January 2000), which updates 2205, isn't cited, unless this volume has been in production for over a year. One of Clark's great assets is his view that the "various industry players" will find it increasingly incapable of agreement, necessitating resolution "in a multinational context" [p. 41].

McKnight's and McGarty's essay on "Virtually Global Telcos" [pp. 43-91] informed me that "the World Trade Organization (WTO) has superseded the ITU as the organization setting the terms for international telecommunications services" [p. 68]. While it is true that the CCITT was subsumed into the ITU, this led to the formation of ITU-T, the "Telecommunication Standardization Sector." Those of us who follow H.320, H.323, etc., would be surprised by this cis-Atlantic chauvinism. I found it yet more fascinating as McKnight and McGarty repeatedly cite SS7 (Signaling System 7), which is a 1980 CCITT standard which was detailed in an AT&T paper at the Spring 1987 International Switching Symposium. The business concepts within the essay may be valuable, the misleading statements vitiate them.

Lehr's piece on "Vertical Integration" [pp. 93-124] would have made a good 10-pager. But it is rife with platitudes like: "There are strong incentives to integrate vertically (and horizontally) for each of the participants in the service provider value chain" [p. 112]; and: "Technological advances have been reducing network costs in absolute terms..." [p. 123].

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INTERNET TELEPHONY L.W. McKnight, W. Lehr, and D.D. Clark, Cambridge, MA: MIT Press, 2001. Pp. 395. ISBN 0-262-13385-7.

July 2001; login: 65

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Clark, Again

Dave Clark's "Local-Loop Technology and Internet Structure" [pp. 125-140] is a diamond among the coal. Though it's a version of a paper that appeared two years ago, Clark has revised and emended it. Clark really understands the problems facing the LEC as well as the capabilities of the LECs' wire lines. He concludes that "there may be increased competition in the provision of [consumer] services . . . This derives from the open character of the Internet design that militates against vertical integration of the Internet service provider and the higherlevel service provider" [p. 139]. Dr. Clark, meet Dr. Lehr.

That's the first five or 13. I'm not going to savage each of the others (sorry). The one by Mutooni and Tennenhouse [pp. 143-163], for example, is an excellent presentation on "Internet Telephony and the Datacentric Network." But McKnight and Shuster, "After the Web" [pp. 165-190], is full of weird statistics and graphs.

Let me start with a look at the growth of the Internet. On p. 175 there is a graph of Internet hosts attributed to Network Wizards showing 0 in January 1969 and 30 million hosts in January 1997. The 30 million was reported by NW in January 1998. The graph on the next page (no attribution) levels out predicting under 100 million hosts from January 2002 through January 2011. Using the information from Network Wizards and NSI, we passed 100 million hosts last November.

The bibliographical references are either misspelt ("Lotter" for Mark Lottor) or absent. Talking about numbers of Internet hosts or Internet host growth without a reference to John Quarterman is absurd. Referring to a 1997 (dead) URL (Hilgemeier) for "Internet Growth" is not useful.

Etc.

I'm very unhappy about this book. My suggestion is that if you're interested in Internet Telephony, get Hersent, et al. *IP Telephony* [Addison-Wesley, 2000]. The few good articles in this volume aren't worth \$40.

Vol. 26, No. 4 ;login: