Securing Storage:

A Practical Guide to SAN and NAS Security

Himanshu Dwivedi, Addison-Wesley Professional, 2005, \$49.99, ISBN: 0321349954

Information technology systems are moving forward inexorably in every area of our daily lives. This affects our relations with administration and companies, as well as our leisure time. We no longer find it strange to handle bureaucratic matters automatically instead of manually.

Those of us who are IT professionals, however, know that, parallel to this forward movement, there is a constant, growing threat posed by failures in security, whether accidental or intentional. This results in a loss of faith in IT systems, which can somehow produce a reduction in growth. We can affirm, without a doubt, that this is the reason why e-commerce is not increasing as much as expected.

One field that is experiencing significant growth is data storage. This is partly because of a desire to store more data, so we can subsequently perform intelligent searches and inquiries. Traditional file servers have been replaced by the modern SAN (storage area network) and NAS (network-attached storage).

The problem of security affects these networks, and this is the subject of this book. Author Himanshu Dwivedi briefly introduces these networks before addressing the issue. This is, perhaps, the weakest part of the book. The topic needs a longer introduction.

In Parts 2 and 3 ("NAS Security" and "iSCSI Security"), the author deals with threats to the security of these systems in great detail. He provides plenty of examples, allowing readers to see the security failures in these systems. In Part 4, "Storage Defenses," the author offers solutions for creating safe and reliable SAN and NAS systems. In the last part of the book, "SAN/NAS Policies, Trends, and Case Studies," Dwivedi reviews the legislation relevant to these systems. This discussion is limited to North America, which is of little use to readers from other parts of the world.

This book was written for a varied audience: mainly specialists in security and administrators of SANs and NAS systems. It will, however, also appeal to those interested in implementing these networks and help them to learn about their pros and cons.

The work contains all that a demanding reader could want: a carefully prepared edition, clear examples and explanations, many graphs and diagrams, exercises, and

finally, several practical case studies. To take full advantage of the material in this excellent book, readers must be highly knowledgeable about hardware and security.

—Jose Lloret

High-Assurance Design: Architecting Secure and Reliable Enterprise Applications

Clifford Berg, Addison-Wesley Professional, 2005, \$54.99, ISBN: 0321375777

This book is just what my doctor ordered for job-related stress relief. The subject, high-assurance design, was the initial attractor, but it is (in nonhierarchical order) the book's level of abstraction, layout, style, clarity, and content that make it useful,

especially to techies and applied "formal methodists" like me, who have been dragged kicking and screaming into development—and acquisition—management.

Clifford Berg characterizes his work as a "crossover book [that] addresses several topics that are traditionally treated distinctly." The two main topics this book successfully synthesizes are security and reliability. "Achieving both at the same time is even more difficult [than attaining them separately]," states Peter Neumann, principal scientist of the SRI International Computer Science Laboratory, in the book's foreword. I can, in the case of safety and reliability, attest to the truth of Neumann's statement. Though the author's stated target domain is a "business application design and programming environment," the book's value to the "practicing software application architect" in any venue is much broader. The precepts apply to almost any large-scale, nontrivial design that has multiple aspects.

The book's format, with important principles and ideas repeated in a large font, design patterns rendered clearly throughout, and exhaustively crafted summary appendices, makes reading it as easy as could be for such a complete and rigorous ("but not formal") work. The list of references is complete and contains nothing superfluous. The beginning-of-chapter quotations are relevant and are useful in showing that computing truths transcend computing and are really derived from more universal wisdom. The case studies presented from chapter 20 onward serve to bring the information together and to show a way forward in ameliorating chapter 19's Tower of Babel with respect to methodologies. This book can serve as a textbook, a handbook, or an excellent reference book for some time to come.

—George Hacken

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