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Bibliography

A number of *RFC*s—*Requests for Comments*—are listed in the bibliography. They may be obtained by electronic mail or by anonymous FTP. For instructions, send mail to *rfc-info*@ISI.EDU with a message body of

help: ways_to_get_rfcs

For other documents, we have listed anonymous FTP repositories when we are aware of them. See Appendix A for instructions.

- [Amoroso, 1994] E. Amoroso. *Fundamentals of Computer Security Technology*. Prentice-Hall, Englewood Cliffs, NJ, 1994. Cited on: 21, 81.
- [Anderson, 1993] Ross Anderson. Why cryptosystems fail. In *Proceedings of the First ACM Conference on Computer and Communications Security*, pages 215–227, Fairfax, VA, November 1993. Cited on: *121*.

Describes how real-world failures of cryptographic protocols don't always match the classical academic models.

- [Anklesaria *et al.*, 1993] Farhad Anklesaria, Mark McCahill, Paul Lindner, David Johnson, Daniel Torrey, and Bob Alberti. The Internet gopher protocol (A distributed document search and retrieval protocol). RFC 1436, March 1993. Cited on: *44*.
- [ANSI, 1988] Information retrieval service definition and protocol specifications for library applications. Z39.50-1988, ANSI, 1988. Cited on: *107*.

This protocol is the basis for WAIS.

- [Arkin et al., 1992] Stanley S. Arkin, Barry A. Bohrer, John P. Donohue, Robert Kasanof, Donald L. Cuneo, Jeffrey M. Kaplan, Andrew J. Levander, and Sanford Sherizen. *Prevention and Prosecution of Computer and High Technology Crime*. Matthew Bender & Co., New York, 1992. Cited on: 202, 202.
- [Asimov, 1951] Isaac Asimov. *Foundation*. Doubleday & Company, New York, 1951. Cited on: 143.

[Avolio and Ranum, 1994] Frederick Avolio and Marcus Ranum. A network perimeter with secure external access. In *Proceedings of the Internet Society Symposium on Network and Distributed System Security*, San Diego, CA, February 3, 1994. Cited on: *31*, *115*, *122*, *241*.

All the President's E-mail! A description of the firewall created for the Executive Office of the President, including mail support for *president@WHITEHOUSE.GOV*. Available from FTP.TIS.COM as /pub/firewalls/isoc94.ps.Z.

- [Avolio and Vixie, 1994] Frederick M. Avolio and Paul Vixie. *Sendmail: Theory and Practice*. Digital Press, Burlington, MA, 1994. (To appear). Cited on: *30*.
- [Balenson, 1993] David Balenson. Privacy enhancement for Internet electronic mail: Part III: Algorithms, modes, and identifiers. RFC 1423, February 1993. Cited on: 232.
- [BB, 1991] The Bluebook: A Uniform System of Citation. Harvard Law Review Association, 15th edition, 1991. Cited on: 198.
- [Bellovin, 1989] Steven M. Bellovin. Security problems in the TCP/IP protocol suite. *Computer Communications Review*, 19(2):32–48, April 1989. Cited on: 24, 24, 65, 67, 71, 141.

Available by ftp from FTP.RESEARCH.ATT.COM in /dist/internet_security/ipext.ps.Z.

[Bellovin, 1990] Steven M. Bellovin. Pseudo-network drivers and virtual networks. In *USENIX Conference Proceedings*, pages 229–244, Washington, D.C., January 22-26, 1990. Cited on: 79.

Available by anonymous ftp from FTP.RESEARCH.ATT.COM in /dist/smb/pnet.ext.ps.Z.

[Bellovin, 1993] Steven M. Bellovin. Packets found on an internet. *Computer Communications Review*, 23(3):26–31, July 1993. Cited on: *137*, *137*, *152*, *193*.

Available by anonymous ftp from FTP.RESEARCH.ATT.COM in /dist/smb/packets.ps.

- [Bellovin, 1994] Steven M. Bellovin. Firewall-friendly FTP. RFC 1579, February 1994. Cited on: 60.
- [Bellovin and Merritt, 1991] Steven M. Bellovin and Michael Merritt. Limitations of the Kerberos authentication system. In *USENIX Conference Proceedings*, pages 253–267, Dallas, TX, Winter 1991. Cited on: 223, 225, 236.

Available by ftp from FTP.RESEARCH.ATT.COM in /dist/internet_security/kerblimit.usenix.ps.

[Bellovin and Merritt, 1992] Steven M. Bellovin and Michael Merritt. Encrypted key exchange: Password-based protocols secure against dictionary attacks. In *Proc. IEEE Computer Society Symposium on Research in Security and Privacy*, pages 72–84, Oakland, CA, May 1992. Cited on: 219, 226.

Available by anonymous *ftp* from FTP.RESEARCH.ATT.COM in /dist/smb/neke.ps.

[Bellovin and Merritt, 1993] Steven M. Bellovin and Michael Merritt. Augmented encrypted key exchange. In *Proceedings of the First ACM Conference on Computer and Communications Security*, pages 244–250, Fairfax, VA, November 1993. Cited on: 219.

Available by anonymous ftp from FTP.RESEARCH.ATT.COM in /dist/smb/aeke.ps.

- [Bellovin and Merritt, 1994] Steven M. Bellovin and Michael Merritt. An attack on the *Interlock Protocol* when used for authentication. *IEEE Transactions on Information Theory*, 40(1):273–275, January 1994. Cited on: 219.
- [Bender, 1992] David Bender. *Computer Law*, Volume 3. Matthew Bender & Co., New York, 1992. Cited on: 202.
- [Berners-Lee, 1993] Tim Berners-Lee. Uniform resource locators. Internet Draft, October 14, 1993. Work in progress. Cited on: 44.

Available for *ftp* from the various internet-drafts directories around the Internet.

- [Biham and Shamir, 1991] Eli Biham and Adi Shamir. Differential cryptanalysis of DES-like cryptosystems. *Journal of Cryptology*, 4(1):3–72, 1991. Cited on: 216.
- [Biham and Shamir, 1993] Eli Biham and Adi Shamir. *Differential Cryptanalysis of the Data Encryption Standard*. Springer-Verlag, Berlin, 1993. Cited on: 216.
- [Bishop, 1990] Matt Bishop. A security analysis of the NTP protocol. In *Sixth Annual Computer Security Conference Proceedings*, pages 20–29, Tuscon, AZ, December 1990. Cited on: *33*.

Available for ftp from LOUIE.UDEL.EDU as /pub/ntp/doc/bishop.ps.Z.

- [Bishop, 1992] Matt Bishop. Anatomy of a proactive password changer. In *Proceedings of the Third Usenix* UNIX *Security Symposium*, pages 171–184, Baltimore, MD, September 1992. Cited on: 12.
- [Blaze, 1993] Matt Blaze. A cryptographic file system for UNIX. In *Proceedings of the First ACM Conference on Computer and Communications Security*, pages 9–16, Fairfax, VA, November 1993. Cited on: *107*.

Available from FTP.RESEARCH.ATT.COM as /dist/mab/cfs.ps.

[Blaze, 1994] Matt Blaze. Key management in an encrypting file system. In *Proc. Summer Usenix Conference*, pages 27–35, Boston, MA, June 1994. Cited on: *14*.

- Adding a smart card-based key escrow system to CFS [Blaze, 1993]. Available from RESEARCH.ATT.COM as /dist/mab/cfskey.ps.
- [Borenstein and Freed, 1993] Nathaniel Borenstein and Ned Freed. MIME (Multipurpose Internet Mail Extensions) Part One: Mechanisms for specifying and describing the format of internet message bodies. RFC 1521, September 1993. Cited on: *31*.
- [Borman, 1993a] David Borman, editor. Telnet authentication: Kerberos version 4. RFC 1411, January 1993. Cited on: 231.
- [Borman, 1993b] David Borman, editor. Telnet authentication option. RFC 1416, February 1993. Cited on: *31*, *231*.
- [Braden, 1989a] Robert Braden, editor. Requirements for Internet hosts—application and support. RFC 1123, October 1989. Cited on: 29, 30.
- [Braden, 1989b] Robert Braden, editor. Requirements for Internet hosts—communication layers requirements for internet hosts communication layers. RFC 1122, October 1989. Cited on: 26.
- [Brickell *et al.*, 1993] Ernest F. Brickell, Dorothy E. Denning, Stephen T. Kent, David P. Maher, and Walter Tuchman. SKIPJACK review: The SKIPJACK algorithm, July 28, 1993. Interim Report. Cited on: *214*.

The final report will discuss the security of the entire key escrow system, and not just the underlying cryptographic algorithm. It isn't clear when that report will be finished.

[Bryant, 1988] B. Bryant. Designing an authentication system: A dialogue in four scenes, February 8, 1988. Draft. Cited on: *8*, *39*, *223*.

A light-hearted derivation of the requirements Kerberos was designed to meet.

- [Callaghan and Lyon, 1989] Brent Callaghan and Tom Lyon. The automounter. In *USENIX Conference Proceedings*, pages 43–51, San Diego, CA, Winter 1989. Cited on: *107*.
- [Campbell and Wiener, 1993] K. W. Campbell and M. J. Wiener. Proof that DES is not a group. In *Advances in Cryptology: Proceedings of CRYPTO '92*, pages 518–526, Santa Barbara, CA, 1993. Springer-Verlag. Cited on: *217*.
- [Carson, 1993] Mark E. Carson. *Sendmail* without the superuser. In *Proceedings of the Fourth Usenix* UNIX *Security Symposium*, pages 139–144, Santa Clara, CA, October 1993. Cited on: 31.

A good example of retrofitting an existing program to use the principle of "least privilege."

[Case *et al.*, 1990] Jeffrey Case, Mark Fedor, Martin Schoffstall, and James Davin. Simple network management protocol (SNMP). RFC 1157, May 1990. Cited on: *138*, *231*.

- [Chapman, 1992] D. Brent Chapman. Network (in)security through IP packet filtering. In *Proceedings of the Third Usenix* UNIX *Security Symposium*, pages 63–76, Baltimore, MD, September 1992. Cited on: 55, 65, 66.
 - Shows how hard it is to set up secure rules for a packet filter. Available for *ftp* from FTP.GREATCIRCLE.COM as /pub/firewalls/pkt_filtering.ps.Z.
- [Cheswick, 1992] William R. Cheswick. An evening with Berferd, in which a cracker is lured, endured, and studied. In *Proc. Winter USENIX Conference*, San Francisco, CA, January 1992. Cited on: *167*.
 - Available by ftp from FTP.RESEARCH.ATT.COM in /dist/internet_security/berferd.ps.
- [Comer, 1991] Douglas E. Comer. *Internetworking with TCP/IP: Principles, Protocols, and Architecture*, Volume I. Prentice-Hall, Englewood Cliffs, NJ, second edition, 1991. Cited on: 19.
 - A well-known description of the TCP/IP protocol suite.
- [Comer and Stevens, 1994] Douglas E. Comer and David L. Stevens. *Internetworking with TCP/IP: Design, Implementation, and Internals*, Volume II. Prentice-Hall, Englewood Cliffs, NJ, second edition, 1994. Cited on: *19*.
 - How to implement TCP/IP.
- [Cook and Crocker, 1993a] Jeff Cook and Stephen D. Crocker. Truffles—A secure service for widespread file sharing. TIS Report 484, Trusted Information Systems, Glenwood, MD, February 1993. Cited on: 81.
- [Cook and Crocker, 1993b] Jeff Cook and Stephen D. Crocker. Truffles—Secure file sharing with minimal system administrator intervention. TIS Report 485, Trusted Information Systems, Glenwood, MD, April 1993. Cited on: 81.
- [Cook et al., 1993] Jeff Cook, Stephen D. Crocker, Thomas Page, Jr., Gerald Popek, and Peter Reiher. Truffles—A secure service for widespread file sharing. In Workshop on Network and Distributed System Security, San Diego, CA, February 1993. Cited on: 81.
- [Costales, 1993] Bryan Costales, with Eric Allman and Neil Rickert. *sendmail*. O'Reilly and Associates, Sebastopol, CA, 1993. Cited on: *30*, *30*.
- [Crocker, 1982] David Crocker. Standard for the format of ARPA Internet text messages. RFC 822, 13 August 1982. Cited on: *30*.

[Curry, 1992] David A. Curry. UNIX System Security: A Guide for Users and System Administrators. Addison-Wesley, Reading, MA, 1992. Cited on: xiii.

[Davies and Price, 1989] Donald W. Davies and Wyn L. Price. *Security for Computer Networks*. John Wiley & Sons, second edition, 1989. Cited on: *122*, *211*.

A guide to deploying cryptographic technology.

- [Deering, 1989] Steve Deering. Host extensions for IP multicasting. RFC 1112, August 1989. Cited on: 46.
- [Denning, 1982] Dorothy E. Denning. *Cryptography and Data Security*. Addison-Wesley, Reading, MA, 1982. Cited on: 211.
- [Denning, 1993] Dorothy E. Denning. To tap or not to tap. *Communications of the ACM*, 36(3):26–33, March 1993. Cited on: 220.

A defense of the U.S. government's key escrow initiative.

[Denning and Sacco, 1981] Dorothy E. Denning and Giovanni M. Sacco. Timestamps in key distribution protocols. *Communications of the ACM*, 24(8):533–536, August 1981. Cited on: 123, 223.

Some weaknesses in [Needham and Schroeder, 1978].

[Diffie, 1988] Whitfield Diffie. The first ten years of public key cryptography. *Proceedings of the IEEE*, 76(5):560–577, May 1988. Cited on: 121.

An exceedingly useful retrospective.

[Diffie and Hellman, 1976] Whitfield Diffie and Martin E. Hellman. New directions in cryptography. *IEEE Transactions on Information Theory*, IT-11:644–654, November 1976. Cited on: 34, 218, 219, 225.

The original paper on public-key cryptography. A classic.

[Diffie and Hellman, 1977] Whitfield Diffie and Martin E. Hellman. Exhaustive cryptanalysis of the NBS data encryption standard. *Computer*, 10(6):74–84, June 1977. Cited on: 216.

The original warning about DES's key length being too short.

[DoD, 1985a] DoD trusted computer system evaluation criteria. DoD 5200.28-STD, DoD Computer Security Center, 1985. Cited on: *8*, *162*.

The famous "Orange Book." Available for ftp from FTP.CERT.ORG as /pub/info/orange-book.Z.

[DoD, 1985b] Technical rationale behind CSC-STD-003-83: Computer security requirements. DoD CSC-STD-004-85, DoD Computer Security Center, 1985. Cited on: 8.

A lesser known companion to the Orange Book [DoD, 1985a]. It describes how to select a security assurance level based on the data on the system and the risks to which it is exposed.

[Eichin and Rochlis, 1989] M. W. Eichin and J. A. Rochlis. With microscope and tweezers: An analysis of the Internet virus of november 1988. In *Proc. IEEE Symposium on Research in Security and Privacy*, pages 326–345, Oakland, CA, May 1989. Cited on: *30*, *161*, *198*.

Available by ftp from ATHENA-DIST.MIT.EDU in /pub/virus/mit.PS.

- [Emtage and Deutsch, 1992] Alan Emtage and Peter Deutsch. *archie* An electronic directory service for the internet. In *Proc. Winter Usenix Conference*, pages 93–110, San Francisco, January 1992. Cited on: *184*.
- [Farmer and Spafford, 1990] Dan Farmer and Eugene H. Spafford. The COPS security checker system. In *USENIX Conference Proceedings*, pages 165–170, Anaheim, CA, Summer 1990. Cited on: *154*, *244*.
 - A package to audit systems for vulnerabilities. This paper is available for anonymous ftp from FTP.CS.PURDUE.EDU as /pub/spaf/security/COPS.PS.Z.
- [Farmer and Venema, 1993] Dan Farmer and Wietse Venema. Improving the security of your site by breaking into it. Available from FTP.WIN.TUE.NL, file /pub/security/admin-quide-to-cracking.101.z, 1993. Cited on: 33, 149.
- [Farrow, 1991] Rik Farrow. UNIX System Security: How to Protect Your Data and Prevent Intruders. Addison-Wesley, Reading, MA, 1991. Cited on: xiii.
- [Feldmeier and Karn, 1990] David C. Feldmeier and Philip R. Karn. UNIX password security—ten years later. In *Advances in Cryptology: Proceedings of CRYPTO* '89, pages 44–63. Springer-Verlag, 1990. Cited on: *12*.
- [Flink and Weiss, 1988] Charles W. Flink II and Jonathan D. Weiss. System V/MLS labeling and mandatory policy alternatives. *AT&T Technical Journal*, 67(3):53–64, May/June 1988. Cited on: 22.
- [Flink and Weiss, 1989] Charles W. Flink II and Jonathan D. Weiss. System V/MLS labeling and mandatory policy alternatives. In USENIX Conference Proceedings, pages 413–427, San Diego, CA, Winter 1989. Cited on: 22.
- [Galvin *et al.*, 1992] James Galvin, Keith McCloghrie, and James Davin. SNMP security protocols. RFC 1352, July 1992. Cited on: *231*.
- [Ganesan, 1994] Ravi Ganesan. BAfirewall: A modern design. In Proceedings of the Internet Society Symposium on Network and Distributed System Security, San Diego, CA, February 3, 1994. Cited on: 78.

A firewall that uses Kerberos to authenticate requests.

[Garfinkel and Spafford, 1991] Simson Garfinkel and Gene Spafford. *Practical Unix Security*. O'Reilly, Sebastopol, CA, 1991. Cited on: *xiii*.

- [Garon and Outerbridge, 1991] Gilles Garon and Richard Outerbridge. DES Watch: An examination of the sufficiency of the data encryption standard for financial institution information security in the 1990's. *Cryptologia*, XV(3):177–193, July 1991. Cited on: *217*.
 - Gives the economics—and the economic impact—of cracking DES.
- [Gavron, 1993] Ehud Gavron. A security problem and proposed correction with widely deployed DNS software. RFC 1535, October 1993. Cited on: 28.
- [Gemignani, 1989] Michael C. Gemignani. *A Legal Guide to EDP Management*. Quorum Books, New York, 1989. Cited on: *198*, *208*.
- [Gifford, 1982] David K. Gifford. Cryptographic sealing for information secrecy and authentication. *Communications of the ACM*, 25(4):274–286, 1982. Cited on: *14*.
- [Gong et al., 1993] Li Gong, Mark A. Lomas, Roger M. Needham, and Jerome H. Saltzer. Protecting poorly chosen secrets from guessing attacks. *IEEE Journal on Selected Areas in Communications*, 11(5):648–656, June 1993. Cited on: 159, 164.
- [Grampp and Morris, 1984] Fred T. Grampp and Robert H. Morris. UNIX operating system security. *AT&T Bell Laboratories Technical Journal*, 63(8, Part 2):1649–1672, October 1984. Cited on: *xi*, *12*, *130*, *159*, *183*.
- [Haber and Stornetta, 1991a] S. Haber and W. S. Stornetta. How to time-stamp a digital document. In *Advances in Cryptology: Proceedings of CRYPTO '90*, pages 437–455. Springer-Verlag, 1991. Cited on: 201, 222.
- [Haber and Stornetta, 1991b] S. Haber and W. S. Stornetta. How to time-stamp a digital document. *Journal of Cryptology*, 3(2):99–112, 1991. Cited on: 201, 222.
- [Hafner and Markoff, 1991] Katie Hafner and John Markoff. *Cyberpunk: Outlaws and Hackers on the Computer Frontier*. Simon & Schuster, New York, 1991. Cited on: *11*, *114*, *235*.
 - Background and personal information on three famous hacking episodes.
- [Haller, 1994] Neil M. Haller. The S/Key one-time password system. In *Proceedings of the Internet Society Symposium on Network and Distributed System Security*, San Diego, CA, February 3, 1994. Cited on: *122*.
 - An implementation of the scheme described in [Lamport, 1981].
- [Hansen and Atkins, 1992] Stephen E. Hansen and E. Todd Atkins. Centralized system monitoring with *swatch*. In UNIX *Security III Symposium*, pages 105–117, Baltimore, MD, September 14–17, 1992. USENIX. Cited on: *139*.

[Harrenstien, 1977] Ken Harrenstien. NAME/FINGER protocol. RFC 742, December 30, 1977. Cited on: 33.

- [Harrenstien and White, 1982] Ken Harrenstien and Vic White. NICNAME/WHOIS. RFC 812, March 1, 1982. Cited on: *33*.
- [Hedrick, 1988] Chuck Hedrick. Routing information protocol. RFC 1058, June 1988. Cited on: 27.
- [Hernandez, 1988] Ruel Torres Hernandez. ECPA and online computer privacy. *Federal Communications Law Journal*, 41(1):17–41, November 1988. Cited on: 205.
- [Hobbs, 1853] Alfred Charles Hobbs. *Rudimentary Treatise on the Construction of Locks*. Edited by Charles Tomlinson. J. Weale, London, 1853. Cited on: *143*.
- [Holbrook and Reynolds, 1991] J. Paul Holbrook and Joyce Reynolds, editors. Site security handbook. RFC 1244, July 1991. Cited on: 4.
- [Honeyman *et al.*, 1992] P. Honeyman, L. B. Huston, and M. T. Stolarchuk. Hijacking afs. In *USENIX Conference Proceedings*, pages 175–182, San Francisco, CA, Winter 1992. Cited on: 39.
 - A description of some security holes—now fixed—in AFS.
- [Housley, 1993] Russell Housley. Security label framework for the Internet. RFC 1457, May 1993. Cited on: 21.
- [Howard, 1988] John H. Howard. On overview of the Andrew File System. In *USENIX Conference Proceedings*, pages 23–26, Dallas, TX, Winter 1988. Cited on: *38*.
- [Ioannidis and Blaze, 1993] John Ioannidis and Matt Blaze. The architecture and implementation of network-layer security under unix. In *Proceedings of the Fourth Usenix* UNIX *Security Symposium*, pages 29–39, October 1993. Cited on: 229.
 - Available from FTP.RESEARCH.ATT.COM as /dist/mab/swipeusenix.ps.
- [ISO, 1987a] ISO. Information Processing Systems Open Systems Interconnection Specification of Abstract Syntax Notation One (ASN.1), 1987. International Standard 8824. Cited on: 35.
- [ISO, 1987b] ISO. Information Processing Systems Open Systems Interconnection Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1), 1987. International Standard 8825. Cited on: 35.
- [ISO, 1991] ISO. Information Technology Telecommunications and Information Exchange Between Systems — Transport Layer Security Protocol, October 1991. Draft International Standard DIS 10736. Cited on: 227.

[ISO, 1992] ISO. Information Technology — Telecommunications and Information Exchange Between Systems — Network Layer Security Protocol, November 1992. Draft International Standard DIS 11577. Cited on: 227.

- [Kahn, 1967] David Kahn. The Code-Breakers. Macmillan, New York, 1967. Cited on: 211.
 - The definitive work on the history of cryptography, and an introduction to classical cryptography. A must-read. But it does not discuss modern cryptographic techniques.
- [Kahn, 1989] John R. Kahn. Defamation liability of computerized bulletin board operators and problems of proof. Available from LCS.MIT.EDU, file /telecom-archives/sysop.libel.liability, February 1989. CHTLJ Comment, Computer Law Seminar, Upper Division Writing. Cited on: 208.
- [Kaliski, 1992] Burt Kaliski. The MD2 message-digest algorithm. RFC 1319, April 1992. Cited on: 222, 247.
- [Kaliski, 1993] Burt Kaliski. Privacy enhancement for Internet electronic mail: Part IV: Key certification and related services. RFC 1424, February 1993. Cited on: 232.
- [Kantor and Lapsley, 1986] Brian Kantor and Phil Lapsley. Network news transfer protocol. RFC 977, February 1986. Cited on: 45.
- [Kaufman, 1993] Charles Kaufman. DASS distributed authentication security service. RFC 1507, September 1993. Cited on: *234*.
- [Kazar, 1988] Michael Leon Kazar. Synchronization and caching issues in the andrew file system. In *USENIX Conference Proceedings*, pages 27–36, Dallas, TX, Winter 1988. Cited on: *38*.
- [Keeton *et al.*, 1984] W. Page Keeton, Dan B. Dobbs, Robert E. Keeton, and David G. Owen. *Prosser and Keeton on Torts*. West Publishing Company, St. Paul, MN, fifth edition, 1984. Cited on: 206, 208.
- [Kent, 1991] Stephen Kent. Security options for the Internet protocol. RFC 1108, November 1991. Cited on: 21.
- [Kent, 1993] Stephen Kent. Privacy enhancement for Internet electronic mail: Part II: Certificate-based key management. RFC 1422, February 1993. Cited on: 232.
- [Kim and Spafford, 1993] Gene Kim and Eugene H. Spafford. The design and implementation of Tripwire: A file system integrity checker. Technical Report CSD-TR-93-071, Purdue University, 1993. Cited on: *111*, 244.

A package to audit systems for vulnerabilities and evidence of hacking attacks. This paper is available for anonymous *ftp* from FTP.CS.PURDUE.EDU as /pub/spaf/security/Tripwire.PS.Z.

[Kim and Spafford, 1994a] Gene Kim and Eugene H. Spafford. Experiences with Tripwire: The evaluation and writing of a security tool, 1994. (In preparation). Cited on: 111, 244.

- [Kim and Spafford, 1994b] Gene Kim and Eugene H. Spafford. Experiences with Tripwire: Using integrity checkers for intrusion detection, 1994. (In preparation). Cited on: 111, 244.
- [Klein, 1990] Daniel V. Klein. "Foiling the cracker": A survey of, and improvements to, password security. In *Proceedings of the USENIX* UNIX *Security Workshop*, pages 5–14, Portland, OR, August 1990. Cited on: *11*, *12*, *14*, *159*.

Describes the author's experiments cracking password files from many different machines.

[Koblas and Koblas, 1992] David Koblas and Michelle R. Koblas. Socks. In UNIX *Security III Symposium*, pages 77–83, Baltimore, MD, September 14-17, 1992. USENIX. Cited on: 77, 126, 240.

A description of the most common circuit-level gateway package.

- [Kohl and Neuman, 1993] John Kohl and Cliff Neuman. The Kerberos network authentication service (V5). RFC 1510, September 1993. Cited on: *8*, *39*, *223*.
- [Korn and Krell, 1989] David G. Korn and Eduardo Krell. The 3-d file system. In *USENIX Conference Proceedings*, pages 147–156, Baltimore, MD, Summer 1989. Cited on: 77.
- [Lai, 1992] X. Lai. On the Design and Security of Block Ciphers, Volume 1 of ETH Series in Information Processing. Hartung-Gorre Verlag, Konstanz, Germany, 1992. Cited on: 214.
- [LaMacchia and Odlyzko, 1991] Brian A. LaMacchia and Andrew M. Odlyzko. Computation of discrete logarithms in prime fields. *Designs, Codes, and Cryptography*, 1:46–62, 1991. Cited on: 34, 164.

Describes how the authors cryptanalyzed Secure RPC.

[Lamport, 1981] Leslie Lamport. Password authentication with insecure communication. *Communications of the ACM*, 24(11):770–772, November 1981. Cited on: *121*, 241, 264.

The basis for the Bellcore S/Key system.

[LeFebvre, 1992] William LeFebvre. Restricting network access to system daemons under SunOS. In UNIX *Security III Symposium*, pages 93–103, Baltimore, MD, September 14-17, 1992. USENIX. Cited on: 77, 240.

Using shared libraries to provide access control for standing servers.

[Leong and Tham, 1991] Philip Leong and Chris Tham. UNIX password encryption considered insecure. In *Proc. Winter USENIX Conference*, Dallas, TX, 1991. Cited on: *12*, *159*.

How to build a hardware password-cracker.

[Libes, 1991] Don Libes. *expect*: Scripts for controlling interactive processes. *Computing Systems*, 4(2):99–126, Spring 1991. Cited on: *149*.

- [Linn, 1993a] John Linn. Generic security service application program interface. RFC 1508, September 1993. Cited on: 233.
- [Linn, 1993b] John Linn. Privacy enhancement for Internet electronic mail: Part I: Message encryption and authentication procedures. RFC 1421, February 1993. Cited on: 232.
- [Lloyd and Simpson, 1992] Brian Lloyd and William Simpson. PPP authentication protocols. RFC 1334. October 1992. Cited on: 235.
- [Lomas *et al.*, 1989] T. Mark A. Lomas, Li Gong, Jerome H. Saltzer, and Roger M. Needham. Reducing risks from poorly chosen keys. In *Proceedings of the Twelfth ACM Symposium on Operating Systems Principles*, pages 14–18. SIGOPS, December 1989. Cited on: 226.
- [Lottor, 1987] Mark Lottor. Domain administrators operations guide. RFC 1033, November 1987. Cited on: 27.
- [Lottor, 1988] Mark Lottor. TCP port service multiplexer (TCPMUX). RFC 1078, November 1988. Cited on: 64, 193.
- [MacAvoy, 1983] R. A. MacAvoy. *Tea with the Black Dragon*. Bantam Books, New York, 1983. Cited on: *160*.
 - A science fiction story of a rather different flavor.
- [Machiavelli, 1950] Niccolò Machiavelli. *The Prince and The Discourses*. Random House, New York, modern library edition, 1950. Cited on: *239*.
 - A classic work on political philosophy—and it isn't all "Machiavellian."
- [Malkin, 1993] Gary Malkin. RIP version 2—carrying additional information. RFC 1388, January 1993. Cited on: 27.
- [Markoff, 1989] John Markoff. Computer invasion: 'back door' ajar. In *New York Times*, Volume CXXXVIII, page B10, November 7, 1989. Cited on: *30*.
- [Markoff, 1991] John Markoff. Move on unscrambling of messages is assailed. In *New York Times*, Volume CXL, page A16, April 17, 1991. Cited on: 220.
- [Markoff, 1993a] John Markoff. Communications plan to balance government access with privacy. In *New York Times*, Volume CXLII, page A1, April 16, 1993. Cited on: *214*.
- [Markoff, 1993b] John Markoff. Keeping things safe and orderly in the neighborhood of cyberspace. In *New York Times*, Volume CXLIII, page E7, October 24, 1993. Cited on: *15*.
- [Maryland Hacker, 1993] A Maryland Hacker. Telco UNIX trap. 2600, pages 30–31, Autumn 1993. (letter to the editor). Cited on: 128.

- A correct—but incomplete—discussion on the limitations of chroot environments.
- [Merkle, 1990a] Ralph C. Merkle. A fast software one-way hash function. *Journal of Cryptology*, 3(1):43–58, 1990. Cited on: *111*, *111*, 222.
- [Merkle, 1990b] Ralph C. Merkle. One way hash functions and DES. In *Advances in Cryptology: Proceedings of CRYPTO '89*, pages 428–446. Springer-Verlag, 1990. Cited on: 222.
- [Merkle and Hellman, 1981] Ralph C. Merkle and Martin Hellman. On the security of multiple encryption. *Communications of the ACM*, 24(7):465–467, July 1981. Cited on: 217.
- [Miller *et al.*, 1987] S. P. Miller, B. C. Neuman, J. I. Schiller, and J. H. Saltzer. Kerberos authentication and authorization system. In *Project Athena Technical Plan*. MIT, December 1987. Section E.2.1. Cited on: *8*, *39*, *223*.
- [Mills, 1992] David Mills. Network time protocol (version 3) specification, implementation and analysis. RFC 1305, March 1992. Cited on: 32.
- [Mitchell and Walker, 1988] Chris Mitchell and Michael Walker. Solutions to the multidestination secure electronic mail problem. *Computers & Security*, 7(5):483–488, 1988. Cited on: 222.
- [Mockapetris, 1987a] Paul Mockapetris. Domain names—concepts and facilities. RFC 1034, November 1987. Cited on: 27.
- [Mockapetris, 1987b] Paul Mockapetris. Domain names—implementation and specification. RFC 1035, November 1987. Cited on: 27.
- [Mogul, 1989] Jeffrey C. Mogul. Simple and flexible datagram access controls for UNIX-based gateways. In *USENIX Conference Proceedings*, pages 203–221, Baltimore, MD, Summer 1989. Cited on: *57*, *74*, *242*.
 - A description of one of the first packet filters. The original paper is available as Research Report 89/4; send mail to *wrl-techreports@WRL.PA.DEC.COM* with "Subject: help" for ordering information. Also see [Mogul, 1991].
- [Mogul, 1991] Jeffrey C. Mogul. Using *screend* to implement IP/TCP security policies. Network Note NN-16, Digital Equipment Corp. Network Systems Laboratory, July 1991. To find out how to order a copy, send email to nsl-techreports@nsl.pa.dec.com with "Subject: help". Cited on: 74, 269.
 - A longer version of [Mogul, 1989], with some worked examples.
- [Moore, 1988] J. H. Moore. Protocol failures in cryptosystems. *Proceedings of the IEEE*, 76(5):594–602, May 1988. Cited on: 211.
- [Morris and Thompson, 1979] Robert H. Morris and Ken Thompson. UNIX password security. *Communications of the ACM*, 22(11):594, November 1979. Cited on: *11*, *12*, *159*, *225*.

Gives the rationale for the design of the current UNIX password hashing algorithm.

[Morris, 1985] Robert T. Morris. A weakness in the 4.2BSD UNIX TCP/IP software. Computing Science Technical Report 117, AT&T Bell Laboratories, Murray Hill, NJ, February 1985. Cited on: 24, 141.

The original paper describing sequence number attacks. Available for *ftp* from NETLIB.ATT.COM as /netlib/research/cstr/117.Z.

- [Moy, 1991] John Moy. OSPF version 2. RFC 1247, July 1991. Cited on: 27.
- [Muffett, 1992] Alec D. E. Muffett. A sensible password checker for UNIX, 1992. Cited on: 12, 149.

Available with the Crack package.

- [Nat, 1979] National Criminal Justice Information and Statistics Service, Law Enforcement Assistance Administration, U.S. Department of Justice. *Computer Crime: Criminal Justice Resource Manual*, 1979. Cited on: 201.
- [NBS, 1977] NBS. Data encryption standard, January 1977. Federal Information Processing Standards Publication 46. Cited on: *34*, *212*.

The original DES standard. It's a bit hard to get, and most recent books on cryptography explain DES much more clearly. See, for example, [Schneier, 1994].

[NBS, 1980] NBS. DES modes of operation, December 1980. Federal Information Processing Standards Publication 81. Cited on: 212.

The four officially approved ways in which DES can be used. Clearer explanations are available in most recent books on cryptography.

- [Nechvatal, 1992] James Nechvatal. Public key cryptography. In Gustavus J. Simmons, editor, *Contemporary Cryptology: The Science of Information Integrity*, pages 177–288. IEEE Press, Piscataway, NJ, 1992. Cited on: 222.
- [Needham and Schroeder, 1978] R. M. Needham and M. Schroeder. Using encryption for authentication in large networks of computers. *Communications of the ACM*, 21(12):993–999, December 1978. Cited on: 123, 223, 262.

The first description of a cryptographic authentication protocol. Also see [Denning and Sacco, 1981] and [Needham and Schroeder, 1987].

- [Needham and Schroeder, 1987] R. M. Needham and M. Schroeder. Authentication revisited. *Operating Systems Review*, 21(1):7, January 1987. Cited on: *123*, 223, 270.
- [NIST, 1993] NIST. Secure hash standard (SHS), May 1993. Federal Information Processing Standards Publication 180. Cited on: 222.

The algorithm is also described in [Schneier, 1994]. The original version has been recalled by NSA; a new version incorporates a one-line fix.

[NIST, 1994a] NIST. Digital signature standard (DSS), May 1994. Federal Information Processing Standards Publication 186. Cited on: 220.

The algorithm is also described in [Schneier, 1994].

[NIST, 1994b] NIST. Escrowed encryption standard, February 1994. Federal Information Processing Standards Publication 185. Cited on: *214*.

The actual encryption algorithm is classified, and is not described in this publication.

- [Niven, 1968] Larry Niven. Flatlander. In *Neutron Star*, pages 129–171. Ballantine Books, New York, NY, 1968. Cited on: 6.
- [Nycum, 1983] Susan H. Nycum. Legal exposures for computer abuse. In Daniel T. Brooks and Susan H. Nycum, editors, *Computer Crime: Prevention Detection Prosecution* •, pages 19–31. Law & Business, New York, NY, 1983. Cited on: 207.
- [Pendry, 1989] Jan-Simon Pendry. Amd An automounter, 1989. Department of Computing, Imperial College, London. Cited on: 107, 192.

Packaged with the amd automounter.

[Pike *et al.*, 1990] Rob Pike, David L. Presotto, Ken Thompson, and Howard Trickey. Plan 9 from Bell Labs. In *Proceedings of the Summer 1990 UKUUG Conference*, pages 1–9, London, July 1990. UKUUG. Cited on: 98.

Documentation on Plan 9 can be found on FTP.RESEARCH.ATT.COM in /dist/plan9doc and /dist/plan9man.

- [Piscitello and Chapin, 1994] David M. Piscitello and A. Lyman Chapin. *Open Systems Networking: TCP/IP and OSI*. Addison-Wesley, Reading, MA, 1994. Cited on: 26.
- [Plummer, 1982] David Plummer. Ethernet address resolution protocol: Or converting network protocol addresses to 48-bit ethernet address for transmission on ethernet hardware. RFC 826, November 1982. Cited on: 22.
- [Postel, 1980] Jon Postel. User datagram protocol. RFC 768, 28 August 1980. Cited on: 25.
- [Postel, 1981a] Jon Postel. Internet control message protocol. RFC 792, September 1981. Cited on: 25.
- [Postel, 1981b] Jon Postel. Internet protocol. RFC 791, September 1981. Cited on: 19.
- [Postel, 1981c] Jon Postel. Transmission control protocol. RFC 793, September 1981. Cited on: 22.

- [Postel, 1982] Jon Postel. Simple mail transfer protocol. RFC 821, August 1982. Cited on: 29.
- [Postel and Reynolds, 1985] Jon Postel and Joyce Reynolds. File transfer protocol. RFC 959, October 1985. Cited on: *39*.
- [Presotto, 1985] David L. Presotto. *Upas*—a simpler approach to network mail. In *USENIX Conference Proceedings*, pages 533–538, Portland, OR, Summer 1985. Cited on: *30*.
- [Presotto and Ritchie, 1985] David L. Presotto and Dennis M. Ritchie. Interprocess communication in the eighth edition unix system. In *USENIX Conference Proceedings*, pages 309–316, Portland, OR, Summer 1985. Cited on: *125*.
- [Rago, 1990] Stephen Rago. A look at the Ninth Edition Network File System. In A. G. Hume and M. D. McIlroy, editors, UNIX *Research System: Papers*, Volume II, pages 513–522. AT&T Bell Laboratories, Murray Hill, NJ, tenth edition, 1990. Cited on: *81*, *108*.
- [Ranum, 1992] Marcus J. Ranum. A network firewall. In *Proc. World Conference on System Administration and Security*, Washington, D.C., July 1992. Cited on: 75.
 - A description of Digital's firewall.
- [Reiher et al., 1993] Peter Reiher, Jeff Cook, Thomas Page, Jr., Gerald Popek, and Stephen D. Crocker. Truffles—Secure file sharing with minimal system administrator intervention. In World Conference On System Administration, Networking, and Security, Arlington, VA, 1993. Cited on: 81.
- [Rekhter *et al.*, 1994] Yakov Rekhter, Robert G. Moskowitz, Daniel Karrenberg, and Geert Jan de Groot. Address allocation for private internets. RFC 1597, March 1994. Cited on: 73.
- [Riordan, 1992] Mark Riordan. RIPEM user's guide, December 1992. Cited on: 233.
 - Available with the RIPEM package, but not export-restricted.
- [Rivest, 1992] Ronald Rivest. The MD5 message-digest algorithm. RFC 1321, April 1992. Cited on: 222, 247.
- [Rivest and Shamir, 1984] Ronald L. Rivest and Adi Shamir. How to expose an eavesdropper. *Communications of the ACM*, 27(4):393–395, 1984. Cited on: 219.
- [Rivest *et al.*, 1978] Ronald L. Rivest, Adi Shamir, and Leonard Adleman. A method of obtaining digital signatures and public-key cryptosystems. *Communications of the ACM*, 21(2):120–126, February 1978. Cited on: 218.
 - The original RSA paper.
- [Rochlis and Eichin, 1989] J. A. Rochlis and M. W. Eichin. With microscope and tweezers: The worm from MIT's perspective. *Communications of the ACM*, 32(6):689–703, June 1989. Cited on: *30*, *161*, *198*.

There are several other stories on the Worm in this issue of CACM.

- [Rose, 1991] Lance Rose. Cyberspace and the legal matrix: Laws or confusion. Available from FTP.EFF.ORG, file /pub/EFF/legal-issues/cyberspace-legal-matrix, February 1991. Cited on: 205.
- [Rosenberry *et al.*, 1992] Ward Rosenberry, David Kenney, and Gerry Fisher. *Understanding DCE*. O'Reilly and Associates, Sebastopol, CA, 1992. Cited on: *35*.
- [Safford *et al.*, 1993a] David R. Safford, David K. Hess, and Douglas Lee Schales. Secure RPC authentication (SRA) for TELNET and FTP. In *Proceedings of the Fourth Usenix UNIX Security Symposium*, pages 63–67, Santa Clara, CA, October 1993. Cited on: *31*, *35*.
- [Safford *et al.*, 1993b] David R. Safford, Douglas Lee Schales, and David K. Hess. The TAMU security package: An ongoing response to Internet intruders in an academic environment. In *Proceedings of the Fourth Usenix* UNIX *Security Symposium*, pages 91–118, Santa Clara, CA, October 1993. Cited on: *32*, *74*, *137*, *168*, *190*, *244*.
 - A detailed look at a hacker's activities in a university environment—and what they did to stop them. The paper is available for *ftp* as part of the TAMU security package.
- [Samuelson, 1989] Pamela Samuelson. Can hackers be sued for damages caused by computer viruses? *Communications of the ACM*, 32(6), June 1989. Cited on: 197.
- [Scheifler and Gettys, 1992] Robert W. Scheifler and James Gettys. *X Window System*. Digital Press, Burlington, MA, third edition, 1992. Cited on: 47.
- [Schneier, 1994] Bruce Schneier. Applied Cryptography: Protocols, Algorithms, and Source Code in C. John Wiley & Sons, New York, 1994. Cited on: 211, 270, 270, 271.
 - A comprehensive collection of cryptographic algorithms, protocols, etc. Source code is included for many of the most important algorithms.
- [Shamir, 1979] Adi Shamir. How to share a secret. *Communications of the ACM*, 22(11):612–613, 1979. Cited on: 14.
- [Shannon, 1948] Claude E. Shannon. A mathematical theory of communication. *Bell System Technical Journal*, 27(3,4):379–423,623–656, July, October 1948. Cited on: *12*.
- [Shannon, 1949] Claude E. Shannon. Communication theory of secrecy systems. *Bell Systems Technical Journal*, 28:656–715, October 1949. Cited on: *12*.
- [Shannon, 1951] Claude E. Shannon. Prediction and entropy in printed English. *Bell System Technical Journal*, 30(1):50–64, 1951. Cited on: *12*.

One of the classic papers in information theory.

[Sieber, 1986] Ulrich Sieber. *The International Handbook on Computer Crime: Computer-related Economic Crime and the Infringements of Privacy*. John Wiley & Sons, New York, 1986. Cited on: 197, 202.

- [Simpson, 1992] William Simpson. The point-to-point protocol (PPP) for the transmission of multi-protocol datagrams over point-to-point links. RFC 1331, May 1992. Cited on: 80.
- [Smith, 1953] E. E. "Doc" Smith. *Second Stage Lensman*. Pyramid Communications, New York, 1953. Cited on: 82.
- [SP3, 1988] SDNS secure data networking system security protocol 3 (SP3). Technical Report Revision 1.3, SDNS Protocol and Signalling Working Group, SP3 Sub-Group, July 12 1988. Cited on: 227.
- [SP4, 1988] SDNS secure data networking system security protocol 4 (SP4). Technical Report Revision 1.2, SDNS Protocol and Signalling Working Group, SP4 Sub-Group, July 12 1988. Cited on: 227.
- [Spafford, 1989a] Eugene H. Spafford. An analysis of the Internet worm. In C. Ghezzi and J. A. McDermid, editors, *Proc. European Software Engineering Conference*, number 387 in Lecture Notes in Computer Science, pages 446–468, Warwick, England, September 1989. Springer-Verlag. Cited on: *30*, *161*, *198*.
 - The timeline and effects of the Worm.. This paper is available for anonymous ftp from FTP.CS.PURDUE.EDU as /pub/spaf/security/IWorm2.PS.Z.
- [Spafford, 1989b] Eugene H. Spafford. The Internet worm program: An analysis. *Computer Communication Review*, 19(1):17–57, January 1989. Cited on: *30*, *161*, *198*.
 - A detailed description of how the Worm worked. This paper is available for anonymous ftp from FTP.CS.PURDUE.EDU as /pub/spaf/security/IWorm.PS.Z.
- [Spafford, 1992a] Eugene H. Spafford. Observations on reusable password choices. In *Proceedings of the Third Usenix UNIX Security Symposium*, pages 299–312, Baltimore, MD, September 1992. Cited on: 159.
 - Analysis of user password selections based on actual recorded choices. The discussion of how the recorded passwords were protected from hackers is especially interesting. This paper is available for anonymous *ftp* from FTP.CS.PURDUE.EDU as /pub/spaf/security/observe.PS.Z.
- [Spafford, 1992b] Eugene H. Spafford. OPUS: Preventing weak password choices. *Computers & Security*, 11(3):273–278, 1992. Cited on: 12.
 - Discusses how to use Bloom filters to check passwords against dictionaries without consuming large amounts of space. This paper is available for anonymous *ftp* from FTP.CS.PURDUE.EDU as /pub/spaf/security/opus.PS.Z.

[St. Johns, 1985] Michael St. Johns. Authentication server. RFC 931, January 1985. Cited on: 141.

- [St. Johns, 1993] Michael St. Johns. Identification protocol. RFC 1413, February 1993. Cited on: 138, 141.
- [Stahl, 1987] Mary Stahl. Domain administrators guide. RFC 1032, November 1987. Cited on: 27.
- [Steiner *et al.*, 1988] Jennifer Steiner, B. Clifford Neuman, and Jeffrey I. Schiller. Kerberos: An authentication service for open network systems. In *Proc. Winter USENIX Conference*, pages 191–202, Dallas, TX, 1988. Cited on: *8*, *39*, *223*.

The original Kerberos paper. Available as part of the Kerberos distribution.

- [Sterling, 1992] Bruce Sterling. *The Hacker Crackdown: Law and Disorder on the Electronic Frontier*. Bantam Books, New York, 1992. Cited on: *xiii*.
 - A description of how law enforcement agents went overboard, though often in response to real threats.
- [Stevens, 1990] W. Richard Stevens. UNIX *Network Programming*. Prentice-Hall, Englewood Cliffs, NJ, 1990. Cited on: 25.
- [Stevens, 1994] W. Richard Stevens. TCP/IP Illustrated, Volume 1. Addison-Wesley, Reading, MA, 1994. Cited on: 19.

Uses tcpdump to show how the protocols work.

- [Stoll, 1988] Cliff Stoll. Stalking the wily hacker. *Communications of the ACM*, 31(5):484, May 1988. Cited on: 128, 142, 173, 208.
- [Stoll, 1989] Cliff Stoll. *The Cuckoo's Egg: Tracking a Spy Through the Maze of Computer Espionage*. Doubleday, New York, 1989. Cited on: 128, 142, 173, 208.

A good read, and the basis for an episode of Nova.

- [Sun Microsystems, 1987] Sun Microsystems. XDR: External data representation standard. RFC 1014, June 1987. Cited on: *35*.
- [Sun Microsystems, 1988] Sun Microsystems. RPC: Remote procedure call protocol specification: Version 2. RFC 1057, June 1988. Cited on: *34*, *64*.
- [Sun Microsystems, 1989] Sun Microsystems. NFS: Network file system protocol specification. RFC 1094, March 1989. Cited on: *37*.
- [Sun Microsystems, 1990] Sun Microsystems. *Network Interfaces Programmer's Guide*. Mountain View, CA, March 1990. SunOS 4.1. Cited on: *34*, *37*, *64*.

[Tolkien, 1965] J. R. R. Tolkien. *Lord of the Rings*. Ballantine Books, New York, 1965. Cited on: 11, 119, 237.

- [Treese and Wolman, 1993] Win Treese and Alec Wolman. X through the firewall, and other application relays. In USENIX Conference Proceedings, pages 87–99, Cincinnati, OH, June 1993. Cited on: 106, 241.
- [Tsudik, 1992] Gene Tsudik. Message authentication with one-way hash functions. In *Proceedings of IEEE Infocom '92*, Florence, Italy, May 1992. Cited on: 221.
- [Venema, 1992] Wietse Venema. TCP WRAPPER: Network monitoring, access control and booby traps. In *Proceedings of the Third Usenix* UNIX *Security Symposium*, pages 85–92, Baltimore, MD, September 1992. Cited on: 92.
 - A very important paper. Available for *ftp* from FTP.WIN.TUE.NL as /pub/security/tcp_wrapper.ps.Z.
- [Violino, 1993] Bob Violino. Cover story: Hackers. *Information Week*, (430):48–56, June 21, 1993. Cited on: 154.
 - A discussion of the wisdom and prevalence of hiring hackers as security experts.
- [Voydock and Kent, 1983] V. L. Voydock and S. T. Kent. Security mechanisms in high-level network protocols. *ACM Computing Surveys*, 15(2):135–171, June 1983. Cited on: 215.
- [Waitzman, 1990] David Waitzman. Standard for the transmission of IP datagrams on avian carriers. RFC 1149, April 1, 1990. Cited on: 80.
- [Wiener, 1994] Michael J. Wiener. Efficient DES key search. Technical Report TR-244, School of Computer Science, Carleton University, Ottawa, Canada, May 1994. Presented at the Rump Session of Crypto '93. Cited on: 217.
- [Winternitz, 1984] Robert S. Winternitz. Producing a one-way hash function from DES. In *Advances in Cryptology: Proceedings of CRYPTO '83*, pages 203–207. Plenum Press, 1984. Cited on: 222.
- [Wood *et al.*, 1993] David C. M. Wood, Sean S. Coleman, and Michael F. Schwartz. Fremont: A system for discovering network characteristics and problems. In *USENIX Technical Conference Proceedings*, pages 335–347, San Diego, CA, Winter 1993. Cited on: *147*.
- [Woodward and Bernstein, 1974] Carl Woodward and Robert Bernstein. *All the President's Men.* Simon and Schuster, New York, 1974. Cited on: *165*.
- [Wray, 1993] John Wray. Generic security service API: C-bindings. RFC 1509, September 1993. Cited on: 233.
- [Zimmerman, 1992] Philip Zimmerman. PGP user's guide, September 1992. Cited on: *233*. Available with the PGP package.