

**BIBLIOGRAPHY ABOUT NETWORK PROTOCOLS:  
A LIST FOR BACKGROUND READING**

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The attached bibliography of recent articles and books pertaining to TCP and IP, X.25, the Transport Protocol (TP-4), OSI and other standards, was compiled by the DDN Network Information Center (NIC) as a background reading list for vendors. The bibliography cites articles, mostly from the open literature, representing a variety of viewpoints. It has not been sanctioned by any government agency, nor does it contain references to the Requests for Comments (RFCs). The NIC does not provide copies of these articles because they are readily available in the open literature. The NIC has copies of the DDN Protocol Handbook, the RFC index, RFCs and the OSD (Office of the Secretary of Defense) directives pertaining to the DoD protocol suite.

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## **BIBLIOGRAPHY ABOUT NETWORK PROTOCOLS: A LIST FOR BACKGROUND READING**

- Arms, C.R., ed. Campus networking strategies: EDUCOM strategies series on information technology. Nashua, NH: Digital Press; 1988. 321 p.
- Bass, C. Data networks' endangered and protected species. *Data Commun.* 16(11): 293-304; 1987 October.
- Bell, C.G. Gordon Bell calls for a U.S. research network. *IEEE Spectrum.* 25(2): 54-57; 1988 February.
- Bolt Beranek and Newman, Inc. Features of internetwork protocol [Draft]. Washington, DC: National Bureau of Standards, Inst. for Computer Sciences and Technology; 1980 July; ICST/HLNP-80-8. 67 p.
- Brusil, P.J.; Stokesberry, D.P. Toward a unified theory of managing large networks. *IEEE Spectr.* 26(4): 39-42; 1989 April.
- Burruss, J.W. Features of the transport and session protocols [Draft report]. Washington, DC: National Bureau of Standards, Inst. for Computer Sciences and Technology; 1980 March; ICST/HLNP-80-1 and BBN Rpt. No. 4361. 71 p.
- Burstein, B. Future of TCP/IP. *Gov. Data Syst.* 16(6): p. 22, 24, 26; 1987 September.
- Cashin, J. Goodbye TCP/IP, hello OSI: DoD. *Software Mag.* 8(1): 68-70; 1988 January.
- Cashin, J. In network politics, OSI has upper hand. *Software Mag.* 9(5): 73-78; 1989 April.
- Cashin, J. OSI remains divided. *Software Mag.* 8(9): p. 8, 10; 1988 July.
- Cashin, J. TCP/IP is now in your stores, while OSI has future promise: By virtue of its wide acceptance and use, TCP/IP will remain a pillar of interoperability in 1990s. *Software Mag.* 9(10): 63-67; 1989 August.
- Cecere, M.E. Easing the burden of network management. *LAN Technol.* 5(6): 25-31; 1989 June.
- Cerf, V.G.; Cain, E. DoD Internet Architecture Model. *Comput. Networks.* 7(5): 307-318; 1983 October.
- Cerf, V.G.; Kahn, R.E. Protocol for packet network intercommunication. *IEEE Trans. Commun.* COM-22(5): 637-648; 1974 May.
- Cerf, V.G.; Kirstein, P.T. Issues in packet-network interconnection. In: *Tutorial: Principles of communication and networking protocols.* Lam, S.S., ed. Silver Spring, MD: IEEE Computer Society Press; 1984: 360-382.

- Cerf, V.G.; Lyons, R.E. Military requirements for packet switched networks and their implications for protocol standardization. *Comput. Networks*. 7(5): 293-306; 1983 October.
- Chesson, G. Interview with Vint Cerf. *Unix Rev.* 5(1): 60-82; 1987 January.
- Clark, D.D. Design philosophy of the DARPA Internet protocols. *Communications Architectures and Protocols*; SIGCOMM '88 Symposium; 1988 August 16-19; Stanford, CA. New York: Association for Computing Machinery; 1988 August: 106-114.
- Clark, D.D.; Jacobson, V.; Romkey, J.L.; Salwen, H. Analysis of TCP processing overhead. *IEEE Commun. Mag.* 27(6): 23-29; 1989 June.
- Comer, D.E.; Korb, J.T. CSNET protocol software: The IP-to-X.25 interface. *Communications Architectures and Protocols*; SIGCOMM '83 Symposium; 1983 March 8-9; Austin, Tx. New York: Association for Computing Machinery; 1983: 154-159.
- Comer, D.E. *Internetworking with TCP/IP: Principles, protocols, and architecture*. Englewood Cliffs, NJ: Prentice-Hall, Inc.; 1988. 382 p.
- Comput. Networks & ISDN Syst.* 13(3): 256 p; 1987.
- Comput. Stand. & Interfaces.* 7(1/2): 216 p; 1988.
- Datapro Research Corp. Transmission Control Protocol/Internet Protocol (TCP/IP): An overview. In: *Datapro reports on data communications*. Vol. 1. Delran, NJ: Datapro; 1987 November: [C05-010-971]-[C05-010-979].
- Davidson, J.M. *Introduction to TCP/IP*. New York, NY: Springer-Verlag, Inc.; 1988. 112 p.
- Davies, B.H.; Bates, A.S. Internetworking in a military environment. In: *DDN protocol handbook: Supplement*. Feinler, E.J.; Jacobsen, O.J.; Stahl, M.K.; Ward, C.A., eds. Vol. 3. Menlo Park, CA: SRI International, DDN Network Information Center; 1985 December: [3-153]-[3-163]. NIC 50006.
- DeBoever, L.R. Emerging standards in connectivity. *Software Mag.* 8(8): 69-75; 1988 June.
- Derfler, F.J., Jr.; Ferrill, P. Building workgroup solutions: TCP/IP for multiplatform networking. *PC Mag.* 8(12): 247-272; 1989 June 27.
- Elliott, T.R. Rallying round the standard(s). *J. Inf. Syst. Manage.* 5(1): 58-60; 1988 Winter.
- Estrin, J. Networking standards end confusion. *UnixWorld.* 3(1): 26-32; 1986 October.
- Foley, J.S. Status and direction of Open Systems Interconnection. *Data Commun.* 14(2): 177-193; 1985 February.
- Gantz, J. Standards: What they are. What they aren't. *Networking Manage.* 7(5): 23-35; 1989 May.

- Groenbaek, I. Conversion between the TCP and ISO transport protocols as a method of achieving interoperability between data communications systems. *IEEE J. Sel. Areas Commun. SAC-4(2)*: 288-296; 1986 March.
- Groenbaek, I. TCP and ISO transport service: A brief description and comparison. The Hague, Netherlands: SHAPE Technical Center; 1984 February; STC TM-726. 37 p.
- Guidi, P.L. Electronic mail begins a new era. *Telecommun. Prod. + Technol.* 5(12): 16-20; 1987 December.
- Harrison, B. OSI standards: To wait or not to wait? *TPT.* 6(1): 50, 52-54; 1988 January.
- Haverty, J.; Gurwitz, R. Protocols and their implementation: A matter of choice. *Data Commun.* 12(3): 153-166; 1983 March.
- Herman, J.G.; McQuillan, J.M. How to expand and modernize a global network. *Data Commun.* 14(13): 171-190; 1985 December.
- Horwitt, E. TCP/IP-to-OSI road has fork. *Computerworld.* 22(28): 43-44; 1988 July 11.
- Houser, W.R. Pass it on, GOSIP will spread quickly. *Gov. Comput. News.* 7(11): p. 27, 31; 1988 May 27.
- Knightson, K.G.; Knowles, T.; Larmouth, J. Standards for Open Systems Interconnection. New York, NY: McGraw-Hill Book Co.; 1988; 395 p.
- Leiner, B.M.; Cole, R.H.; Postel, J.B.; Mills, D.L. DARPA Internet protocol suite. *IEEE Commun. Mag.* 23(3): 29-34; 1985 March.
- Lew, H.K.; Robertson, J. TCP/IP network management with an eye toward OSI. *Data Commun.* 18(10): 123-126, 129-130; 1989 August.
- McCloghrie, K.; Rose, M.T. Network management of TCP/IP-based internets. *ConneXions.* 3(3): 3-9; 1989 March.
- McFarland, R.I., Jr. Protocols in a computer internetworking environment. In: *DDN protocol handbook: Supplement.* Feinler, E.J.; Jacobsen, O.J.; Stahl, M.K.; Ward, C.A., eds. Vol. 3. Menlo Park, CA: SRI International, DDN Network Information Center; 1985 December: [3-125]-[3-132]. NIC 50006.
- Melendez, W.A.; Petersen, E.L. Upper layers of the ISO/OSI Reference Model (Part I). *Comput. Stand. & Interfaces.* 5(1): 13-46; 1986.
- Melendez, W.A.; Petersen, E.L. Upper layers of the ISO/OSI Reference Model (Part II). *Comput. Stand. & Interfaces.* 5(2): 65-77; 1986.
- Miles, J.B. Government locks into OSI standards in March. *Gov. Comput. News.* 7(1): 15, 80-81; 1988 January 8.

- Nagle, J. Congestion control in IP/TCP internetworks. *Comput. Commun. Rev.* 14(4): 11-17; 1984 October.
- National Bureau of Standards, Inst. for Computer Sciences and Technology. Computer networks program. Gaithersburg, MD: NBS ICST; 1986 February; 36 p.
- National Bureau of Standards, Inst. for Computer Sciences and Technology. Military supplement to ISO Transport Protocol. Washington, DC: NBS ICST; 1985 December; ICST/SNA-85-17. 31 p.
- Passmore, L.D.; Horn, J. GOSIP to govern federal nets. *Network World.* 5(9): 1, 35, 37-40; 1988 February 29.
- Perry, D.G.; Blumenthal, S.H.; Hinden, R.M. ARPANET and the DARPA Internet. *Library Hi Tech.* 6(2): 51-62; 1988 April.
- Piscitello, D.M.; Weissberger, A.J.; Stein, S.A.; Chapin, A.L. Internetworking in an OSI environment. *Data Commun.* 15(5): 118-136; 1986 May.
- Postel, J.B. Internetwork applications using the DARPA protocol suite. Marina del Rey, CA: University of Southern California, Information Sciences Inst.; 1985 April; ISI/RS-85-151. 13 p.
- Postel, J.B. Internetwork protocol approaches. *IEEE Trans. Commun.* COM-28(4): 604-611; 1980 April.
- Postel, J.B.; Sunshine, C.A.; Cohen, D. ARPA Internet Protocol. In: *DDN protocol handbook: Supplement.* Feinler, E.J.; Jacobsen, O.J.; Stahl, M.K.; Ward, C.A., eds. Vol. 3. Menlo Park, CA: SRI International, DDN Network Information Center; 1985 December: [3-141]-[3-151]. NIC 50006.
- Radoff, D. Consensus out of conflict: Agreement on open standards increasingly comes only after chaos and strife. *UnixWorld.* 6(2): 36-41; 1989 February.
- Rauch-Hindin, W. Communication standards: OSI is not a paper tiger. *Syst. & Software.* 4(3): 64-86; 1985 March.
- Retz, D. TCP/IP: DoD suite marches into the business world. *Data Commun.* 16(12): 209-225; 1987 November.
- Rose, M.T. Building distributed applications in an OSI framework. *ConneXions.* 2(3): 2-7; 1988 March.
- Rose, M.T. Transition and coexistence for TCP/IP to OSI. *ConneXions.* 2(12): 2-5; 1988 December.
- Rose, M.T.; Cass, D.E. OSI transport services on top of the TCP. *Comput. Networks & ISDN Syst.* 12(3): 159-173; 1987.

- Roux, E. OSI's final frontier: The application layer. *Data Commun.* 17(1): 137-138, 141-142, 145; 1988 January.
- Rudin, H. Informal overview of formal protocol specification. *IEEE Commun. Mag.* 23(3): 46-52; 1985 March.
- Saltzer, J.H.; Clark, D.D.; Romkey, J.L.; Gramlich, W.C. Desktop computer as a network participant. *IEEE J. Sel. Areas Commun. SAC-3(3)*: 468-478; 1985 May.
- Schultz, B. Evolution of ARPANET. *Datamation.* 34(15): 71-74; 1988 August 1.
- Schultz, B. Report urges DoD to link networks. *Gov. Comput. News.* 4: 88-89; 1985 March 8.
- Selvaggi, P.S. Department of Defense data protocol standardization program. *Comput. Networks.* 7(5): 319-328; 1983 October.
- Selvaggi, P.S. Development of communications standards in the DoD. *IEEE Commun. Mag.* 23(1): 43-55; 1985 January.
- Sharkey, S.; Pruden, G.A.; Boyd, G.S.; Herzoff, I.S. TCP/IP provides passage to foreign LANs. *LAN Technol.* 5(4): 23-28; 1989 April.
- Shaw, S.J. TCP/IP still rules federal nets. *Network World.* 5(11): p. 1; 1988 March 14.
- Sheltzer, A.; Hinden, R.M.; Brescia, M. Connecting different types of networks with gateways. In: *DDN protocol handbook: Supplement.* Feinler, E.J.; Jacobsen, O.J.; Stahl, M.K.; Ward, C.A., eds. Vol. 3. Menlo Park, CA: SRI International, DDN Network Information Center; 1985 December: [3-165]-[3-172]. NIC 50006.
- Sirbu, M.A.; Zwimpfer, L.E. Standards setting for computer communication: The case of X.25. *IEEE Commun. Mag.* 23(3): 35-45; 1985 March.
- Solomon, M.; Landweber, L.H.; Neuhengen, D. CSNET name server. *Comput. Networks.* 6: 161-172; 1982.
- Spanier, S. Emergence of TCP/IP. *Localnet '86*; 1986 November; San Francisco. New York: Online Publications; 1986: 21-33.
- Stallings, W. Can we talk? *Datamation.* 31(20): 101-106; 1985 October 15.
- Stallings, W. DoD communication protocol standards. *Signal.* 40(8): 29-34; 1986 April.
- Stallings, W. Handbook of computer-communications standards: Department of Defense (DoD) protocol standards (Volume 3). New York, NY: Macmillan Publishing Co.; 1988; 255 p.
- Stallings, W. Handbook of computer-communications standards: Local network standards (Volume 2). New York, NY: Macmillan Publishing Co.; 1987; 272 p.

- Stallings, W. Handbook of computer-communications standards: The Open Systems Interconnection (OSI) model and OSI-related standards (Volume 1). New York, NY: Macmillan Publishing Co.; 1987; 336 p.
- Stallings, W. Internetworking: A guide for the perplexed. Telecommunications. 23(9): 25-26, 28, 30; 1989 September.
- Stallings, W. Is there an OSI session protocol in your future? Data Commun. 16(12): 147-148, 153-156, 159; 1987 November.
- Stallings, W. Primer: Understanding transport protocols. Data Commun. 13(11): 201-215; 1984 November.
- Strauss, P. OSI throughput performance: Breakthrough or bottleneck? Data Commun. 16(5): 53-54, 56; 1987 May.
- Sunshine, C.A. Local net product family for DoD networking. Localnet '86; 1986 November; San Francisco. New York: Online Publications; 1986: 35-40.
- Tanenbaum, A.S. Operating Systems: Design and implementation. Englewood Cliffs, NJ: Prentice-Hall, Inc.; 1986. 719 p.
- Tsuchiya, P.F. Architecture for network-layer routing in OSI. Garcia-Luna-Aceves, J.J., ed. Frontiers in Computer Communications Technology; SIGCOM '87 Workshop; 1987 August 11-13; Stowe, VT. New York: Association for Computing Machinery, SIGCOMM; 1988: 185-190.
- Tully, J. XNS and TCP/IP protocols on Ethernet. Networks 85: Proceedings of the European Computer Communications Conference 1985; London. Pinner, England: Online Publications; 1985: 103-112.
- Voelcker, J. Helping computers communicate. IEEE Spectrum. 23(3): 61-70; 1986 March.
- Wakid, S.; Brusil, P.J.; LaBarre, L. Coming to OSI: Network resource management and global reachability. Data Commun. 16(3): 137-150; 1987 December.
- Weissberger, A.J.; Israel, J.E. What the new internetworking standards provide. Data Commun. 16(2): 141-156; 1987 February.
- Whitten, D. X.400: Breaking vendor boundaries for enterprise-wide e-mail. Telecommunications. 23(7): 47, 51-56; 1989 July.
- Winkelmann, C.A. Gateway-to-gateway protocol issues in a tactical environment. Signal. 41(7): 55-60; 1987 March.
- Wood, B.M. Standards for OSI - present status, future plans. Telecommunications. 22(3): 101-105; 1988 March.