

History of the Internet

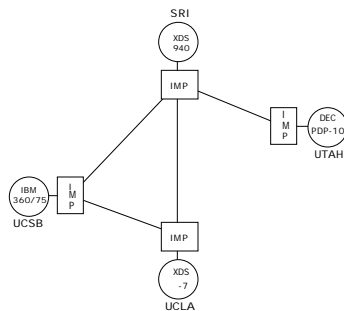
These slides outline the history of the Internet from its beginnings in 1969 to the present day. Not surprisingly, many of the best sources on Internet history can be found on the Internet itself. Some of the most interesting online sources include:

- BBN's timeline of the Internet, available at <http://www.bbn.com/timeline>.
- The Internet Society's history page at <http://www.isoc.org/internet-history>.
- The Internet Domain Survey maintained by Network Wizards Inc., which is available at <http://www.nw.com/zone/WWW/top.html>.

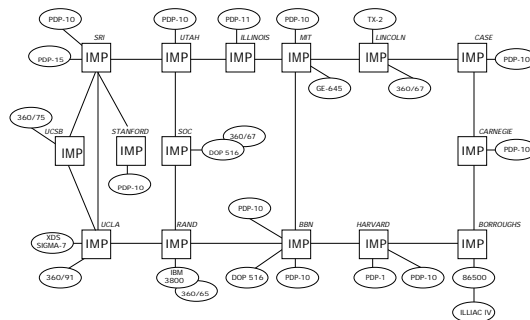
I also recommend the following book, in which I manage to rate a passing mention:

- Katie Hafner and Matthew Lyon, *Where Wizards Stay Up Late: The Origins of the Internet*, New York: Simon & Schuster, 1996.

ARPANET (1969)



ARPANET (1971)



**Internet Timeline
1960s**

- 1961 Leonard Kleinrock publishes first paper on packet-switched communication"
- 1965 ARPA sponsors study on "A cooperative network of time-sharing computers"
- 1967 Larry Roberts proposes construction of a network to ARPA
- 1968 ARPA issues request for proposals (July)
Contract awarded to BBN (Dec)
- 1969 IMP1 begins running at UCLA (Sep)
Four nodes connect to form first ARPANET (Dec)

**Internet Timeline
1970s**

- 1970 Unix operating system developed at Bell Labs
- 1971 ARPANET grows to 23 hosts
- 1972 First dial-in TIP released
- 1973 ARPANET adds first international connections (England and Norway)
- 1974 ARPANET grows to 62 hosts
Vint Cerf and Robert Kahn begin design of TCP/IP
- 1977 ARPANET grows to 111 hosts

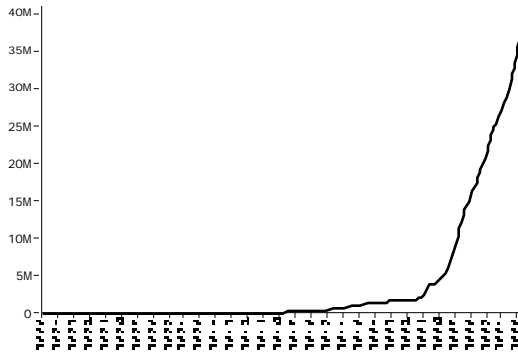
Internet Timeline 1980s

- 1980 CSNET founded by NSF
- 1981 TCP/IP formalized
- 1983 TCP/IP required for ARPANET
ARPANET/MILNET split
- 1984 First domain name server established
Number of hosts passes 1000
- 1985 T1 Internet backbone formed
- 1987 Merit wins NSFNET contract
- 1988 NSFNET T3 backbone becomes operational
- 1989 Tim Berners-Lee proposes the World Wide Web
Number of hosts passes 100,000

Internet Timeline 1990s

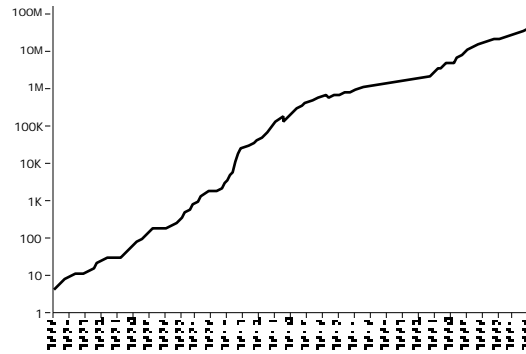
- 1991 Programmers at CERN release the first browser
- 1991 Programmers at CERN release the first web browser
Gopher and WAIS released
- 1992 T1 circuits decommissioned
World Wide Web is launched
- 1994 Number of hosts passes 3,000,000
- 1995 NSF subsidies end
Netscape issues initial public offering
Sun releases Java
- 1997 Number of web sites passes 1,000,000
- 1998 Number of Internet hosts passes 30,000,000

Growth in Internet Hosts



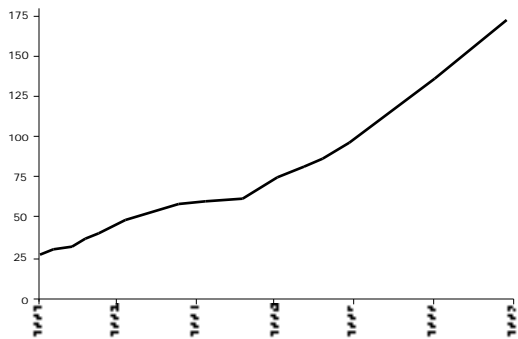
Source: Robert Zakon, Internet Society

Growth in Internet Hosts (Log Scale)



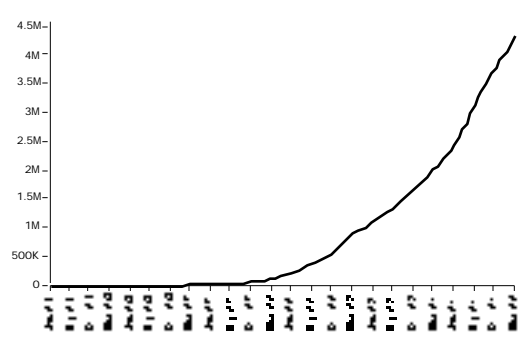
Source: Robert Zakon, Internet Society

Number of Countries Served by the Internet



Source: Robert Zakon, Internet Society

Number of Web Servers



Source: Robert Zakon, Internet Society