

A brief history of the internet origins

[Technology](#), [Internet](#)



By default, any definitive history of the Internet must be short, since the Internet (in one form or another) has only been in existence for less than 30 years. The first iteration of the Internet was launched in 1971 with a public showing in early 1972. This first network, known as ARPANET (Advanced Research Projects Agency NETwork) was very primitive by today's standards, but a milestone in computer communications. ARPANET was based upon the design concepts of Larry Roberts (MIT) and was fleshed out at the first ACM symposium, held in Gaithersburg, TN in 1966, although RFPs weren't sent out until mid 1968.

The Department of Defense in 1969 commissioned ARPANET, and the first node was created at the University of California in Los Angeles, running on a Honeywell DDP-516 mini-computer. The second node was established at Stanford University and launched on October first of the same year. On November 1, 1969, the third node was located at the University of California, Santa Barbara and the fourth was opened at the University of Utah in December. By 1971 15 nodes were linked including BBN, CMU, CWRU, Harvard, Lincoln Lab, MIT, NASA/Ames, RAND, SDC, SRI and UIU(C).

In that same year, Larry Roberts created the first email management program. As a side note, Ray Tomlinson is the person who established the "@" sign as a domain/host designator from his Model 33 Teletype. The first international connection to ARPANET is established when the University College of London is connected in 1973, and RFC-454 " File Transfer Protocol" was published. 1973 was also the year that Dr. Robert Metcalfe's doctoral thesis outlined the specifications for Ethernet. The theory was

tested on Xerox PARCs computers. 1974 saw the launch of TELNET public packet data service.

UUCP (Unix-to-Unix Copy Protocol) was developed at AT&T Bell Labs in 1976, and distributed with UNIX the following year. 1978 saw the split of TCP into TCP and IP. In 1979 the first MUD (Multi-User Domain) was created by Dr. Richard Bartle and Roy Trubshaw from the University of Essex, and was the foundation for multi-player games (among other things). This event marked the gradual decline of productivity over the Internet. In 1981 a cooperative network between CUNY (City University of New York) and Yale was established.

This network was called BITNET (Because It's There NETwork) and was designed to provide electronic mail transfer and list serve services between the two institutions. RFC-801 " NCP/TCP Transition Plan" was published that same year. It was because of the growing interconnectivity of new networks that the phrase " Internet" was coined in 1982, and the Department of Defense also declared TCP/IP to be its defacto standard. The first name server was developed in 1983 at the University of Wisconsin, allowing users to access systems without having to know the exact path to the server.

1983 also saw the transition from NCP to TCP/IP, and it was at this same time that ARPANET was split into ARPANET and MILNET. 68 of the current 113 existing nodes were assigned to MILNET. It was also in 1983 that a San Francisco programmer, Tom Jennings wrote the first FidoNet Bulletin Board System, which was capable of allowing both email and message passing over the Internet between networked BBSs by 1988. In 1984, the number of hosts

on the Internet broke 1000, and DNS (Domain Name Services) was introduced.

Moderated newsgroups also made their first appearance this year, although it would be almost a year and a half before NNTP (Network New Transfer Protocol) would be introduced. In 1985, the WELL (Whole Earth 'Lectronic Link) was launched out of Sausalito California, allowing San Francisco Bay Area users free access to the Internet. The Internet had grown so fast, and to such large proportions by this time that some control was needed to oversee its expansion, so in 1986, the Internet Engineering Task Force (IETF) and Internet Research Task Force (IRTF) came into existence under the IAB.

1988 Saw the advent of IRC (Internet Relay Chat), developed by Jarkko Oikarinen, and it can be safely assumed that the first " Hot Chat" took place very shortly afterwards. By 1989 the number of Internet hosts had capped 100, 000, and the first commercial Internet mail service was created by MCI. In 1990, ARPANET was finally closed down and ceased to exist. Two other notable events this year include the release of ARCHIE by Peter Deutsch, Alan Emtage, and Bill Heelan at McGill, and the first remotely controlled machine to be linked to the Internet; a toaster (controlled by SNMP).

1991 was the year what WAIS (Wide Area Information Servers), was released by Brewster Kahle, of Thinking Machines Corporation; Paul Lindner and Mark P. McCahill released Gopher from the University of Minnesota, and most notably, World-Wide Web was released by Tim Berners-Lee of CERN. By 1992 the number of hosts on the Internet had exceeded 1, 000, 000 and the first MBONE audio multicast was made. In 1993 InternNIC was created by, the

National Science Foundation (NSF). InterNIC provided a centralized organization for domain name registration, and continues to regulate that function today.

As the great, unwashed hordes began to flood into the Internet, it was only natural that vendors would soon follow. So in 1995, the first Internet based "shopping mall" was opened on the World Wide Web. It was also in this year that the World Wide Web edged out FTP as the most popular service on the Internet. In 1995, CompuServe, America Online and Prodigy opened up Internet access portals, and hundreds of thousands of commercial users flooded into what had previously been the private domain of veteran computer users.

The average IQ dropped dramatically at this point. Since 1995, some of the new and/or emerging technologies have included Server Push, Multicasting, Streaming Media, E-Commerce, ASP and XML. Although the Internet started out of military necessity, it is doubtful that its creators could envision its impact, not only on the American culture or the world in general, but on the future of the human race. The Internet will continue to grow and evolve in the years to come, becoming an indispensable channel of communication and a catalyst for human evolution.