

What is the internet?



The internet is a global **network** of computers that any computer can join. It is a **WAN** - which is a series of connected **LANs**.

Data packets are sent between computers using **protocols** that manage how data is sent and received. The internet also uses different models - such as the **client-server** model and the **P2P** model - to connect computers in different ways. The internet is leading to more and more people using **cloud** computing to store files and use web applications online.

Technologies and services available over the internet include:

- web pages – **HTML** documents that present images, sound and text accessed through a **web browser**
- web applications - web **software** accessed through a **browser**
- **native apps** - applications developed for specific devices (such as **smartphones**) and accessed without the need for a browser
- email
- file sharing
- voice calls
- **streaming** audio and video

Web browser

A web browser is a piece of software that enables the user to access web pages and web apps on the internet. There are a range of browsers available, and they are usually free to download and install.





Sir Tim Berners-Lee

Sir Tim Berners-Lee, (born June 8, 1955, London, England), British computer scientist, generally credited as the inventor of the World Wide Web. In 2004 he was awarded a knighthood by Queen Elizabeth II of the United Kingdom and the inaugural Millennium Technology Prize (€1 million) by the Finnish Technology Award Foundation.

Computing came naturally to Berners-Lee, as both of his parents worked on the Ferranti Mark I, the first commercial computer. After graduating in 1976 from the University of Oxford, Berners-Lee designed computer software for two years at Plessey Telecommunications Ltd., located in Poole, Dorset, England. Following this, he had several positions in the computer industry, including a stint from June to December 1980 as a software engineering consultant at CERN, the European particle physics laboratory in Geneva.

While at CERN, Berners-Lee developed a program for himself, called Enquire, that could store information in files that contained connections (“links”) both within and among separate files—a technique that became known as hypertext. After leaving CERN, Berners-Lee worked for Image Computer Systems Ltd., located in Ferndown, Dorset, where he designed a variety of computer systems. In 1984 he returned to CERN to work on the design of the laboratory’s computer network, developing procedures that allowed diverse computers to communicate with one another and researchers to control remote machines.

In 1989 Berners-Lee drew up a proposal for creating a global hypertext document system that would make use of the Internet. His goal was to provide researchers with the ability to share their results, techniques, and practices without having to exchange e-mail constantly. Instead, researchers would place such information “online,” where their peers could immediately retrieve it anytime, day or night. Berners-Lee wrote the software for the first Web server (the central repository for the files to be shared) and the first Web client, or “browser” (the program to access and display files retrieved from the server), between October 1990 and the summer of 1991. The first “killer application” of the Web at CERN was the laboratory’s telephone directory—a mundane beginning for one of the technological wonders of the computer age.

Pause

From 1991 to 1993 Berners-Lee evangelized the Web. In 1994 in the United States he established the World Wide Web (W3) Consortium at the Massachusetts Institute of Technology’s Laboratory for Computer Science. The consortium, in consultation with others, lends oversight to the Web and the development of standards. In 1999 Berners-Lee became the first holder of the 3Com Founders chair at the Laboratory for Computer Science. His numerous other honours include the National Academy of Engineering’s prestigious Charles Stark Draper Prize (2007). Berners-Lee is the author, along with Mark Fischetti, of *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web* (2000).