

Who invented the Internet?

A single person did not create the [Internet](#) that we know and use today. Below is a listing of different people who have helped contribute to and develop the Internet.

The idea

The initial idea of the Internet is credited to [Leonard Kleinrock](#) after he published his first paper entitled "Information Flow in Large Communication Nets" on May 31, [1961](#).

In [1962](#), [J.C.R. Licklider](#) became the first Director of [IPTO](#) and gave his vision of a galactic network. Also, with ideas from Licklider and Kleinrock, [Robert Taylor](#) helped create the idea of the network that later became [ARPANET](#).

Initial creation

The Internet as we know it today first started being developed in the late 1960s in California in the United States.

In the summer of [1968](#), the NWG (Network Working Group) held its first meeting, chaired by **Elmer Shapiro**, at

the SRI (Stanford Research Institute). Other attendees included **Steve Carr**, [Steve Crocker](#), **Jeff Rulifson**, and **Ron Stoughton**. In the meeting, the group discussed solving issues related to getting hosts to communicate.

In December 1968, **Elmer Shapiro** with SRI released a report "A Study of Computer Network Design Parameters." Based on this and earlier work by [Paul Baran](#), **Thomas Marill** and others, [Lawrence Roberts](#) and **Barry Wessler** created the IMP (Interface Message Processor) specifications. BBN (Bolt Beranek and Newman, Inc.) was later awarded the contract to design and build the IMP subnetwork.

General public learns about Internet

The UCLA (University of California, Los Angeles) put out a press release introducing the public to the Internet on July 3, [1969](#).

First network equipment

On August 29, 1969, the first network [switch](#) and the first piece of network equipment called "IMP" (Interface Message Processor) is sent to UCLA.

On September 2, 1969, the first data moves from the UCLA host to the switch. The picture is Leonard Kleinrock next to the IMP.

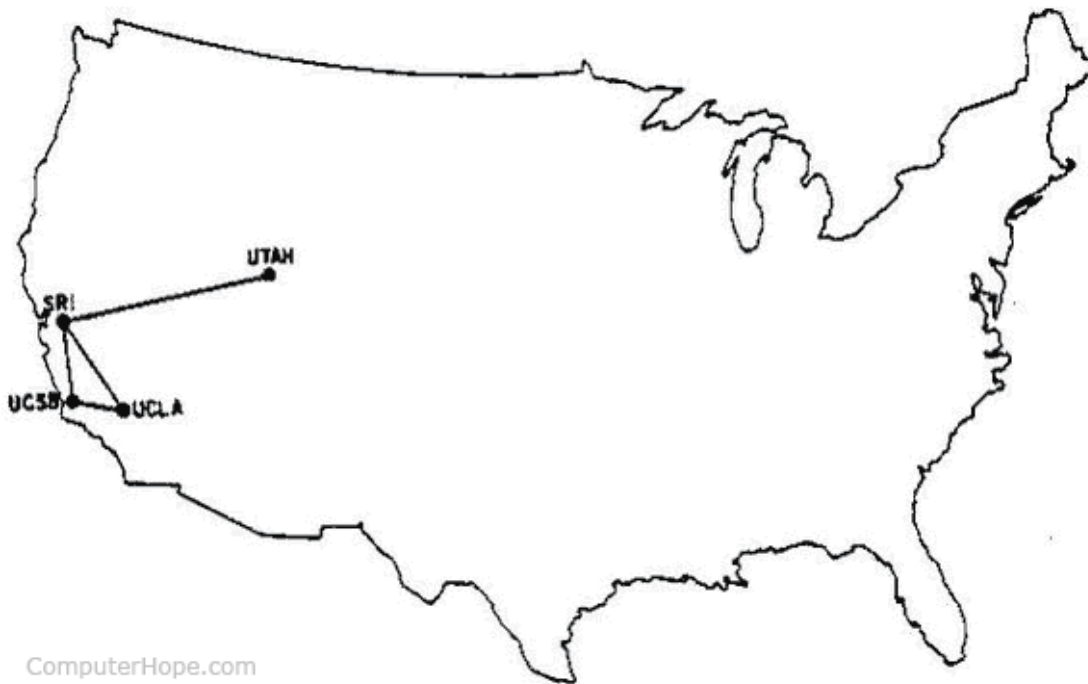


The first message and network crash

On Friday, October 29, 1969, at 10:30 p.m., the first Internet message was sent from the computer science Professor Leonard Kleinrock's laboratory at UCLA, to a computer at SRI. The connection not only enabled the first transmission to be made, but is also considered the first Internet [backbone](#).

The first message to be distributed was **LO**, an attempt at **LOGIN**, by [Charley S. Kline](#) to log into the SRI computer from UCLA. However, the message was unable to be completed because the SRI system crashed. Shortly after the crash, the issue was resolved, and he was able to log into the computer.

The entire Internet in 1969

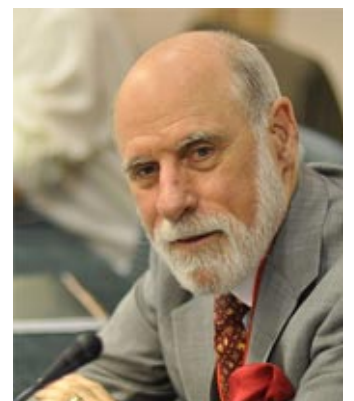


E-mail is developed

[Ray Tomlinson](#) sends the first network [e-mail](#) in 1971. It's the first messaging system to send messages across a network to other users.

TCP is developed

[Vinton Cerf](#) and [Robert Kahn](#) design [TCP](#) during [1973](#) and later publish it with the help of **Yogen Dalal** and **Carl Sunshine** in [RFC 675](#), published in December [1974](#). Most people consider these two people the inventors of the Internet.



First commercial network

A commercial version of [ARPANET](#), known as [Telenet](#), is introduced in [1974](#) and considered to be the first [ISP](#) (Internet service provider).

Ethernet is conceived

[Bob Metcalfe](#) develops the idea of [Ethernet](#) in [1973](#).

The modem is introduced

[Dennis Hayes](#) and **Dale Heatherington** released the 80-103A modem in [1977](#). The [modem](#) and their subsequent modems become a popular choice for home users to connect to the Internet and get online.

TCP/IP is created

In [1978](#), TCP splits into [TCP/IP](#), driven by [Danny Cohen](#), [David Reed](#), and [John Shoch](#) to support real-time traffic. The creation of TCP/IP help create [UDP](#) and is later standardized into ARPANET on January 1, [1983](#). Today, TCP/IP is still the primary [protocol](#) used on the Internet.

DNS is introduced

[Paul Mockapetris](#) and [Jon Postel](#) introduce [DNS](#) in [1984](#), which also introduces the [domain name](#) system. The

first Internet domain name, **symbolics.com**, is registered on March 15, [1985](#) by Symbolics, a Massachusetts computer company.

First commercial dial-up ISP

The first commercial [ISP](#) (Internet service provider) in the US, known as "The World," is introduced in [1989](#). The World was the first ISP to be used on what we now consider to be the Internet.

HTML

In [1990](#), while working at [CERN](#), **Tim Berners-Lee** develops [HTML](#), which made a huge contribution to how we navigate and view the Internet today.



The first website, **info.cern.ch**, is developed by Tim Berners-Lee at CERN and published online on August 6, 1991.

WWW

Tim Berners-Lee introduces [WWW](#) (World Wide Web) to the public on August 6, [1991](#), and becomes publicly available on August 23, 1991. The WWW is what most people today consider the "Internet" or a series of sites and pages

that are connected with links. The Internet had hundreds of people who helped develop the standards and technologies used today, but without the WWW, the Internet would not be as popular today.

First graphical Internet browser

[Mosaic](#) is the first widely-used graphical World Wide Web browser, released on April 22, [1993](#) by the [NCSA](#) with the help of [Marc Andreessen](#) and [Eric Bina](#). A big competitor to Mosaic was [Netscape](#), which was released a year later. Today's Internet browsers we use today (e.g., [Internet Explorer](#), [Chrome](#), [Firefox](#), etc.), got their inspiration from the Mosaic browser.



Java and JavaScript

Originally known as **oak**, [Java](#) is a programming language developed by [James Gosling](#) and others at [Sun Microsystems](#) in [1995](#). Today, Java is still used to create [Internet](#) applications and other [software](#) programs.

[JavaScript](#) was developed by [Brendan Eich](#) in [1995](#) and originally known as **LiveScript**. LiveScript was released with Netscape Navigator 2.0 and renamed to

JavaScript with Netscape Navigator
2.0B3. JavaScript is an [interpreted](#) client-side scripting language that allows a web designer the ability to insert code into their web page.

Related Questions

That is a great overview, but who are the key inventors of the Internet?

If you had to isolate the key inventors of the Internet, it would have to be two people: [Vinton Cerf](#) and [Robert Kahn](#).

The [WWW](#), which is different from the [Internet](#), but what most people think of as the "Internet," was invented later by [Tim Berners-Lee](#).

I thought Al Gore invented the Internet

[Al Gore](#) coined the term [information superhighway](#), but he did not invent the Internet.

Additional information

- [Overall history of the Internet.](#)
- See the [Internet](#) definition for further information and related links.
- [Computer history questions and answers.](#)
- [Internet help and support.](#)

