



Informatic applications in the internet

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The internet

What is it??

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The internet is a global system of interconnected computer network that use the standard internet protocol suit (TCP/IP) to serve billions of users word wide.

In other word it is a network of networks, that consist of millions of private, public, academic, business, and government networks, at local to global scope, that are linked by a broad array of electronic, wireless and optical networking technologies.


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Internet is a short term for the technical term internetwork, the result of interconnecting computer networks with special gateways or routers.

The internet, referring to the specific entire global system of IP networks.

The internet carries an extensive range of information resources and services, such as the inter-linked hypertext documents at the world wide web (WWW) and the infrastructure to support email.

Internet services

- **Data transfer**
 - **Communication**
 - **World wide web**
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Data Transfer

- File sharing is an example of transferring large amounts of data across the internet.
- Computers file can be emailed to others as an attachment, can be uploaded to a website or FTP server, can be put into a “shared location” or onto a file for instant use.

Communication

- Email messages is an important communication service available on the internet.
- Internet telephony (voice over IP) is another common communications service.

World wide web

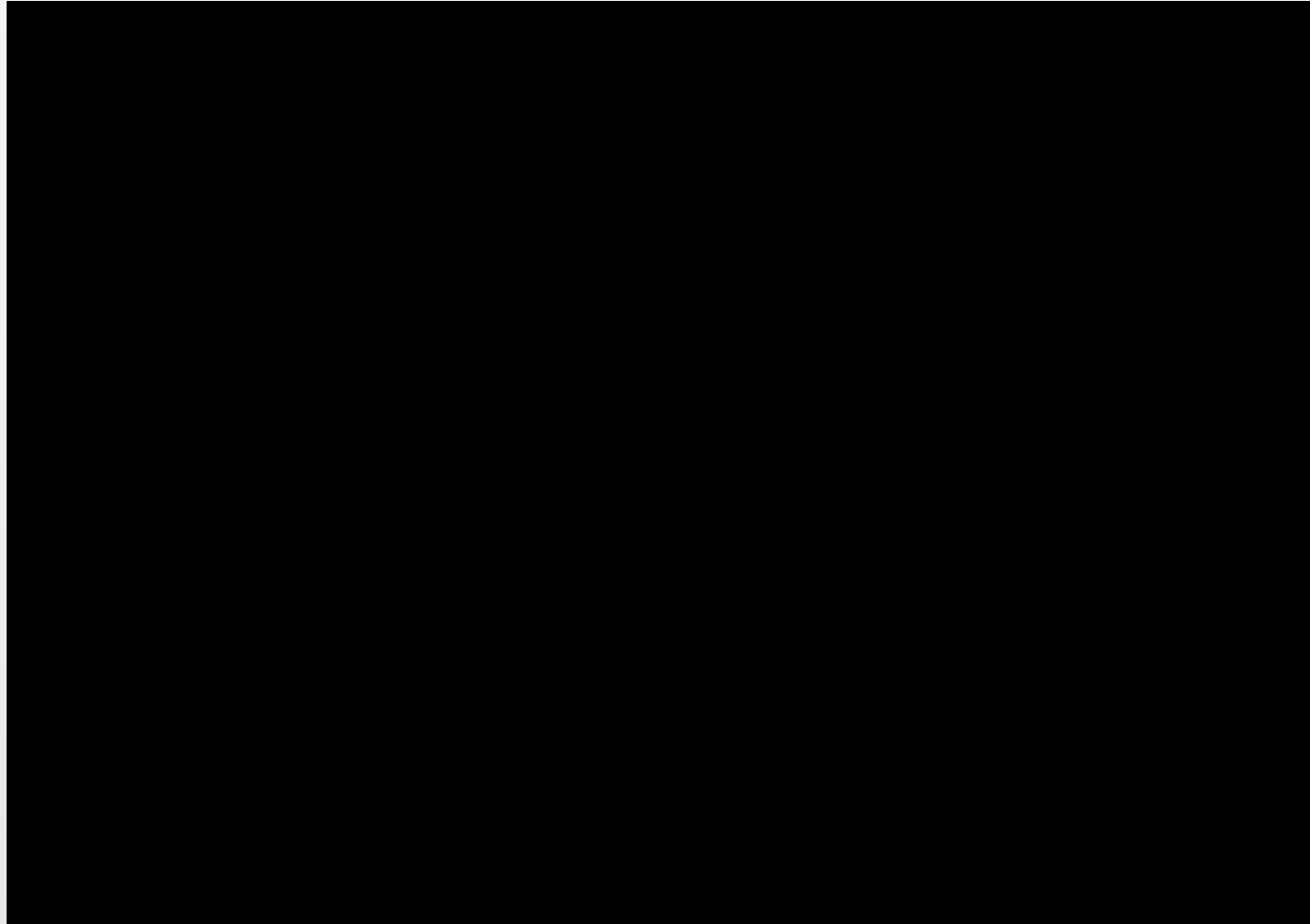
- The terms Internet and World Wide Web or the web are not synonymous.
- The World wide web is a global set of documents, images and other resources, logically interrelated by hyperlinks and referenced with Uniform Resource Identifiers (URIs).
- World wide web browser software, such as internet explorer, Mozilla firefox, opera, apple's safari and Google chrome, lets users navigate from one web page to another via hyperlinks embedded in the documents.

A central graphic featuring a globe with a grid pattern, surrounded by numerous speech bubbles of various sizes and orientations, all rendered in a light gray, semi-transparent style. The globe is positioned at the top center, and the speech bubbles are scattered around it, creating a sense of global communication and interaction.

How the internet works??

This clip is for non-commercial use only

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History of the internet

The history of the Internet began with the development of electronic computers in the 1950s.

The public was first introduced to the concepts that would lead to the Internet when a message was sent over the ARPANet (The Advanced Research Projects Agency Network) from computer science Professor Leonard Kleinrock's laboratory at University of California, Los Angeles (UCLA), after the second piece of network equipment was installed at Stanford Research Institute (SRI)

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Packet switched networks such as ARPANET, Mark I at NPL in the UK, CYCLADES, Merit Network, Tymnet, and Telenet, were developed in the late 1960s and early 1970s using a variety of protocols.

The ARPANET in particular led to the development of protocols for internetworking, where multiple separate networks could be joined together into a network of networks.

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The Advanced Research Projects Agency Network (ARPANET) was the world's first operational packet switching network, the first network to implement TCP/IP, and the progenitor of what was to become the global Internet.

The network was initially funded by the Advanced Research Projects Agency (ARPA, later DARPA) within the U.S. Department of Defense for use by its projects at universities and research laboratories in the US.

The packet switching of the ARPANET, together with TCP/IP, would form the backbone of how the Internet works

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In 1982, the Internet protocol suite (TCP/IP) was standardized, and consequently, the concept of a world-wide network of interconnected TCP/IP networks, called the Internet, was introduced.

Access to the ARPANET was expanded in 1981 when the National Science Foundation (NSF) developed the Computer Science Network (CSNET) and again in 1986 when NSFNET provided access to supercomputer sites in the United States from research and education organizations.

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- Commercial Internet service providers (ISPs) began to emerge in the late 1980s and early 1990s.
- The ARPANET was decommissioned in 1990.
- The Internet was commercialized in 1995 when NSFNET was decommissioned, removing the last restrictions on the use of the Internet to carry commercial traffic.

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