Internet Society

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FREQUENTLY ASKED QUESTIONS

WHAT IS THE INTERNET?

The Internet is a global network of networks enabling computers of all kinds to directly and transparently communicate and share services throughout much of the world. Because the Internet is an enormously valuable, enabling capability for so many people and organizations, it also constitutes a shared global resource of information, knowledge, and means of collaboration, and cooperation among countless diverse communities.

▶ HOW DOES THE INTERNET WORK? WHO OWNS IT?

Starting at the top, each country typically has one or more backbone public internets which are connected to each other through a variety of global arrangements. At the regional and local levels, there are tens of thousands of organizations of every conceivable kind that have built their own enterprise internets and connected them to national backbones. Most of the networks are operated by organizations that either provide Internet access to internal staff or specialize in providing widespread public access to end-users.

There are basically two kinds of access provided :

- ***host access*** where end-users connect their computers to become part of the Internet, or
- ***terminal access*** where end users connect to a host computer which is directly connected to the Internet. The computer terminal itself is not directly connected.

The latter is the kind of service provided by nearly every public Email service provider to millions of people. Increasingly, new access providers are starting to offer Internet host access and an array of other services for computers that range from PCs to a mainframes.

There are now more than 30,000 networks interconnected by the global ***Internet*** - which is literally collectively owned by thousands of private commercial and public organizations. The global international organization for Internet coordination and cooperation is the Internet Society.

▶ HOW BIG IS THE INTERNET?

At April 1994, the Internet consisted of more than 30,000 networks in 71 countries. Gateways that allow at least Email connectivity extend this reach to 146 countries. At the end of 1993, 2.217 million computers were measured as actually reachable - with an estimated total of 20 million users. Network growth continues at around 10 percent per month.

▶ WHAT INTERNET SERVICES EXIST?WHAT CAN I DO?

Internet access is provided over almost any medium from simple telephone dialup to satellites or extremely high speed optical fiber connections.

Internet services number in the hundreds, and depend upon a combination of the access computer software and the available bandwidth. The most common services are ***file transfer***, Email and fax ***messaging***, and ***remote computer access***. Other popular services include: ***information browsing*** using Gopher and World Wide Web; ***automatic information delivery*** via Distribution Lists and Netnews; ***information searching*** with WAIS, Archie, Veronica or even automatic agents such as Knowbot® programs; ***real-time written interactions*** using Talk or Internet Relay Chat and packet audio and video conferencing using, for example, CUSeeMe; ***directory lookup services*** to discover the network addresses of people and computers; or even ***multicasting*** of audio and video programs such as Internet Talk Radio and replay service.

Perhaps the ultimate value of the Internet, however, is enabling communication among millions of people and organizations who can be reached through the network, or who provide abundant and diverse information and software on Internet computer servers. For many professional, business, educational, and governmental activities today, the Internet is a indispensable tool.

▶ HOW DID THE INTERNET HAPPEN?

The Internet technology and networks were originally developed by the research arm of the USA Department of Defense to provide robust interconnection of its information resources and researchers. During the 1980s, the technology and networks were adopted by other government agencies and countries, as well as the private business sector. Today, internet technology and the Internet have found massive acceptance and use by tens of thousands of organizations around the world.

▶ WHAT ARE THE ECONOMICS OF THE INTERNET?

The Internet makes use of extremely cost effective arrangements where Internet capacity is usually purchased at dedicated unmetered flat rates based on bandwidth, or at metered dialup rates. The network transport technology is also highly cost effective because it uses "connectionless" techniques to share capacity.

▶ WHERE IS THE INTERNET GOING?

The Internet today is growing exponentially worldwide. Simple easy-to-use software and inexpensive access to the general public over nearly every telecommunications medium are becoming widely available. Almost every conceivable non-profit and for-profit use is underway or being envisioned. The Internet's future rests with the global Internet community and the Internet Society - established in 1992 as the international organization for coordination and cooperation of the Internet and its technologies and applications.

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