

Technology

WHAT CAN YOU DO WITH THE INTERNET?

Networks

When two or more computers are connected to each other, they become a **network**. People who use networked computers can share information with each other, exchange messages, and even run the same programs at the same time on many different computers.

The Internet

The **Internet** is like a network, only much bigger. In fact, the Internet is made up of many different networks combined.

In 1980, a large group of scientists found themselves working on the same projects, but from different parts of the world. They needed a faster way to share information than sending messages through the mail. The scientists set up a special network that connected not only computers in one building, but computers around the world.

This world-wide network was called the Internet. Today anyone can explore the Internet. It connects more than 60,000 networks, each with its own collection of articles, pictures, and sounds.

Uses of the Internet

You can do many things on the Internet. Two of the most popular things are **electronic mail** or **e-mail** and browsing pages on the **World Wide Web**.

E-mail is one of the most common use of the Internet. With e-mail you can write an electronic letter on your computer and send it to another person almost instantly, even if that person is halfway around the world. You can also attach pictures or sounds to an e-mail message.

E-mail addresses look like this: **mrsteve@jlab.org**. In this example, "mrsteve" is the name of the person who gets the letter. The name is followed by an "at" sign (@), which tells the network that a server name is coming next. In this case "jlab.org" is the e-mail server address for Jefferson Lab.

The World Wide Web, also known as the Web or WWW, is made up of millions of documents called Web pages. These pages can include text, still and moving pictures, and sound. When you are done looking at one Web page, you can click on a short-cut called a **hyperlink** to connect to other Web pages.

Most organizations on the Web have sets of pages that are linked together called Web sites.

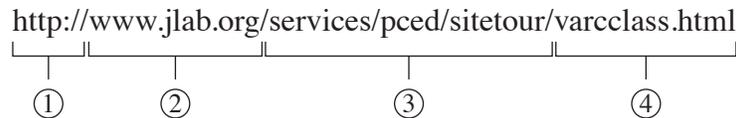
WHAT ARE SOME OTHER USES FOR THE INTERNET?

How Does it Work?

Each of the thousands of individual networks that make up the Internet has set aside one or more computers to act as a server. These computer servers play host to Internet sites, and serve their information to computer users the way a waiter serves food in a restaurant. And, like a restaurant, each of these servers has its own **address**.

Internet Addresses

Internet addresses are called **URLs (Uniform Resource Locators)**. Some look long and complicated, while others are quite short, but they all follow the same simple rules. A typical URL looks something like this:



- ① The first group of letters on every address tells the network which **protocol** to use. A protocol is like a language - you have to know which one to speak. One common protocol is `http`, which stands for **HyperText Transport Protocol**.
- ② Next comes the **domain name**. The domain name is the name of the computer that you are trying to contact. You can sometimes tell what kind of a site you will be visiting by looking at the end of the domain name. A domain name ending in `.org` usually means that the site is run by a non-profit **organization**. Sites ending with `.gov` are run by the **government** while sites ending with `.edu` are usually **educational** sites like colleges or universities.
- ③ The next part of the URL is the **file path**. This tells the computer where the file you want is located.
- ④ The last part of the URL is the **file name**, which is the name of the file you want. Files ending with `.html` are text files written in **HyperText Markup Language** and are used in web browsers. Files ending with `.gif` or `.jpg` are graphic files while files ending with `.wav` or `.mp3` are sound files.

Internet Safety

**Be careful what information you give out in e-mails and on the World Wide Web!
Never give your address, telephone number, or even your name over the Internet
to anyone you don't know!**