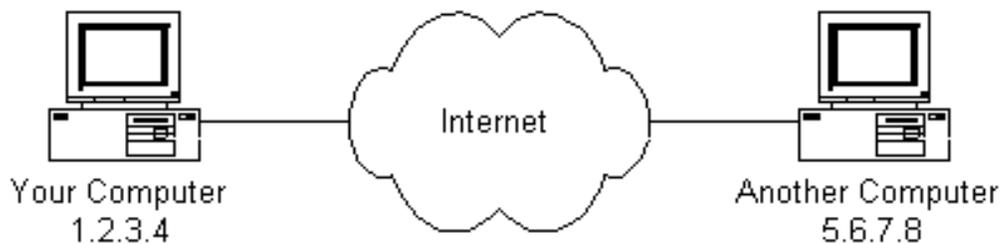


Today, we don't just use the Internet, we rely on it. When the connection is slow, or worse, nonexistent, your whole day could be ruined. But have you ever stopped to think about how that connection works?

## **Internet**

The Internet is a giant network of computers communicating with each other. Your computer connects to the Internet through a system of computers at your Internet Service Provider (ISP). The ISP connects to other networks of computers to provide you with access to the Internet.



## **How the Internet Process Works**

You have a computer, and you have signed up with an ISP to gain access to the Internet. The connection can be through:

Dial-up - your computer dials a phone number to access the Internet.

Cable - your Internet connection is provided by your cable company and is connected at all times.

ADSL - your computer uses the phone line and is connected to the Internet at all times.

When you choose a website to visit, the request goes to your ISP's computer network. It sends out your request to the next computer in the system of the Internet structure. Your request could travel all the way around the world to find the website you are looking for.

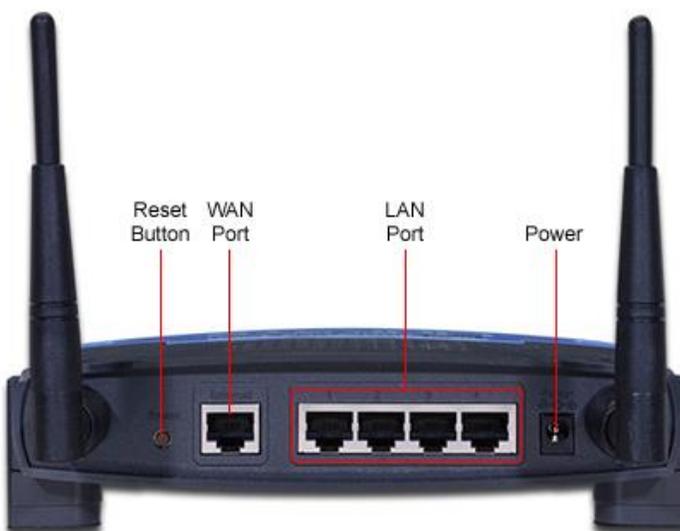
Once the website has been found, the location information is sent back through the Internet structure to your ISP then to your computer's browser, such as Firefox, Chrome, Safari, Internet Explorer.

## Modem

On a basic level, your modem gives you access to the Web. It converts the signal from your source (cable/phone line) to a language that computers can understand. From a Wi-Fi router to mobile devices, the components that make up your home network all speak different digital languages, but your modem is the translator. It takes the signals that come from your ISP and translates them into an Internet connection for your router to broadcast. The router's job is to push this signal out to the connected devices, either through wired cables or wireless Wi-Fi, so all your devices can hop on board and access the Internet.

## What is a Router and How does it Work?

A router is the piece of network hardware that allows communication between your local home network, i.e., your personal computers and other connected devices, and the Internet. Routers connect a modem to other devices to allow communication between those devices and the Internet. Typically, a router connects physically, via a network cable, to the modem.



## Wi-Fi

Wi-Fi (pronounced “Why-Fy”) is the ability to connect to the internet wirelessly, either in your own home or on the move. Wi-Fi connectivity is the technology that allows a PC, laptop, mobile phone or tablet device to connect at high speed to the Internet without the need for a physical wired connection.

This image will appear on your device  
(mobile phone, tablet, PC etc.) when you are  
connected to the **internet VIA Wi-Fi**

