What is an internet gateway?

A gateway is a node (router) in a computer network, a key *stopping point* for data on its way to or from other networks. Thanks to gateways, we are able to communicate and send data back and forth. The Internet wouldn't be any use to us without gateways (as well as a lot of other hardware and software).

In a workplace, the gateway is the computer that routes traffic from a workstation to the outside network that is serving up the Web pages. For basic Internet connections at home, the gateway is the Internet Service Provider that gives you access to the entire Internet.

A node is simply a physical place where the data stops for either transporting or reading/using. (A computer or modem is a node; a computer cable isn't.) Here are a few node notes:

- On the Internet, the node that's a stopping point can be a gateway or a host node.
- A computer that controls the traffic your Internet Service Provider (ISP) receives is a node.

If you have a wireless network at home that gives your entire family access to the Internet, your gateway is the modem (or modem-router combo) your ISP provides so you can connect to their network. On the other end, the computer that controls all of the data traffic your Internet Service Provider (ISP) takes and sends out is itself a node.

When a computer-server acts as a gateway, it also operates as a firewall and a proxy server. A firewall keeps out unwanted traffic and outsiders off a private network. A proxy server is software that "sits" between programs on your computer that you use (such as a Web browser) and a computer server—the computer that serves your network. The proxy server's task is to make sure the real server can handle your online data requests.