Securing Your Connection with a Firewall

If your network is connected to the Internet, a whole host of security issues bubbles to the surface. You probably connected your network to the Internet so that your network's users could get out to the Internet. Unfortunately, however, your Internet connection is a two-way street. It not only enables your network's users to step outside the bounds of your network to access the Internet, but it also enables others to step in and access your network.

And step in they will. The world is filled with hackers who are looking for networks like yours to break into. They may do it just for the fun of it, or they may do it to steal your customers' credit card numbers or to coerce your mail server into sending thousands of spam messages on behalf of the bad guys. Whatever their motive, rest assured that your network will be broken into if you leave it unprotected.

Using a firewall

A *firewall* is a security-conscious router that sits between the Internet and your network with a single-minded task: preventing *them* from getting to *us.* The firewall acts as a security guard between the Internet and your local area network (LAN). All network traffic into and out of the LAN must pass through the firewall, which prevents unauthorized access to the network.


WARNING

Some type of firewall is a must-have if your network has a connection to the Internet, whether that connection is broadband (cable modem or DSL), T1, or some other high-speed connection. Without it, sooner or later a hacker will discover your unprotected network and tell his friends about it, and within a few hours, your network will be toast.

You can set up a firewall in two basic ways:

- **Firewall appliance:** The easiest way, and usually the best choice. A firewall appliance is basically a self-contained router with built-in firewall features.

  Most firewall appliances include web-based interfaces that enable you to connect to the firewall from any computer on your network by using a browser. You can then customize the firewall settings to suit your needs.

- **Server computer:** Can be set up to function as a firewall computer.

  The server can run just about any network operating system, but most dedicated firewall systems run Linux.