

## Firewalls

A firewall can help protect your computer and network from unauthorized communications coming into your computer and going out. A common misconception is that a firewall can secure you from most all network threats – in reality all they do is block or allow certain programs from communicating with the outside world.

While far from a complete security solution, a *properly configured firewall* is essential to the security of your network and computers. Here's a few ways you can be sure your firewall is configured properly and doing its job.

### Software Based Firewalls

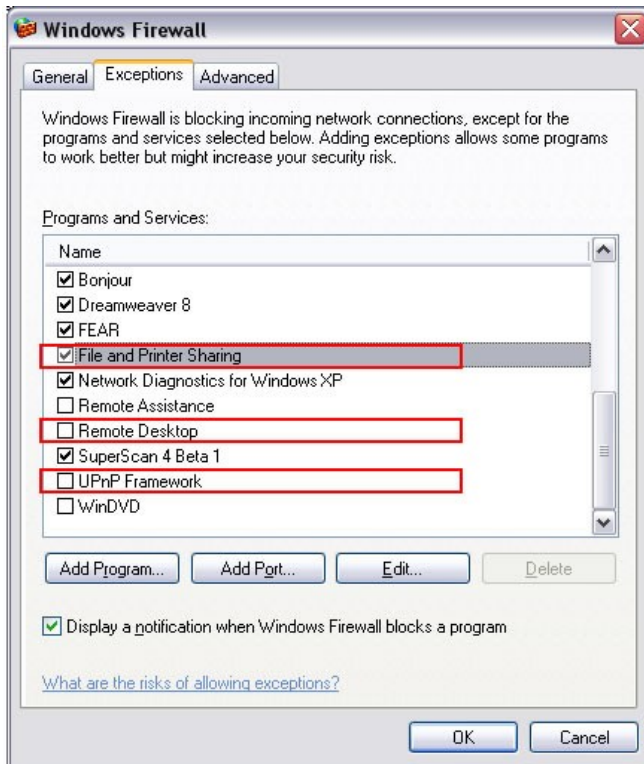
A *software-based* firewall is an application that runs on your computer and monitors the communications going in and out of your PC. If you're running Microsoft Windows, you can access your firewall settings by entering the control panel and selecting the Security Center. From here you can inspect and manage the settings.



You'll want to make sure the firewall setting is "on". It most likely will be, or Windows will begin to alert you on a regular basis. To look more deeply into the configuration, select the Windows Firewall option toward the bottom of the screen.

Once you've selected the Windows Firewall option, you'll be presented with the first configuration screen. We'll focus on the *exceptions* and *advanced* tabs to really be sure our firewall is working as it should.



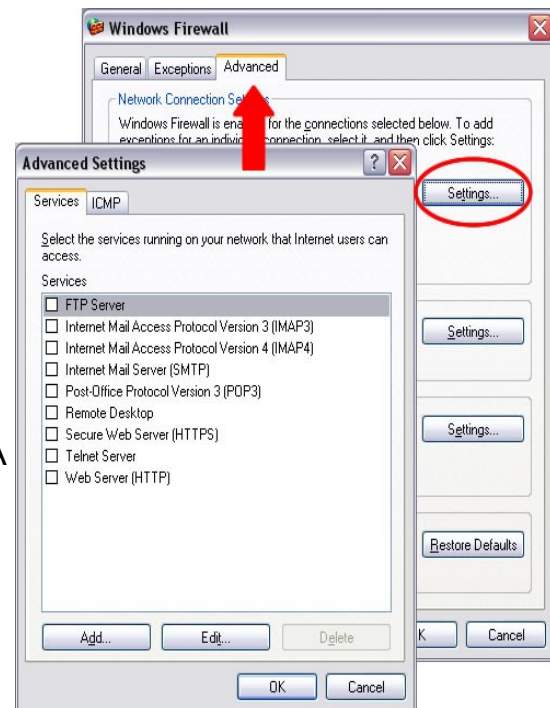


Three applications that are installed by default in Windows that you want to pay attention to are **File and Printer Sharing**, **Remote Desktop**, and the **UPnP Framework**. Unless you have a specific need for the remote desktop or UPnP framework to be enabled, clear the check boxes. If you don't share files or printers with other computers on your network, clear the check-box for file and printer sharing, too. This will present less opportunity for people outside your network to connect to your computer.

Review the list of programs and services. **Are there any there that you don't recognize?** Before clearing their checks, look them up at [www.processlibrary.com](http://www.processlibrary.com) - this is an excellent source of information on programs and processes (applications) that are running on your computer.

Under the **advanced** tab, click the settings button. Again, unless you have a specific need for any of the services listed in this window, all check boxes *should be cleared*.

This is a list of programs that allow your PC to act as a server – to serve files, e-mail, or web pages. A typical desktop PC doesn't normally perform these tasks, so make sure your firewall doesn't let that kind of communication to take place!



The Windows-based firewall is a popular target for malicious programs – they'll try to disable it or modify its rules to allow communications through that you don't want. For that reason, it's good practice to install an additional second firewall. Many free software-based firewalls are available for download:

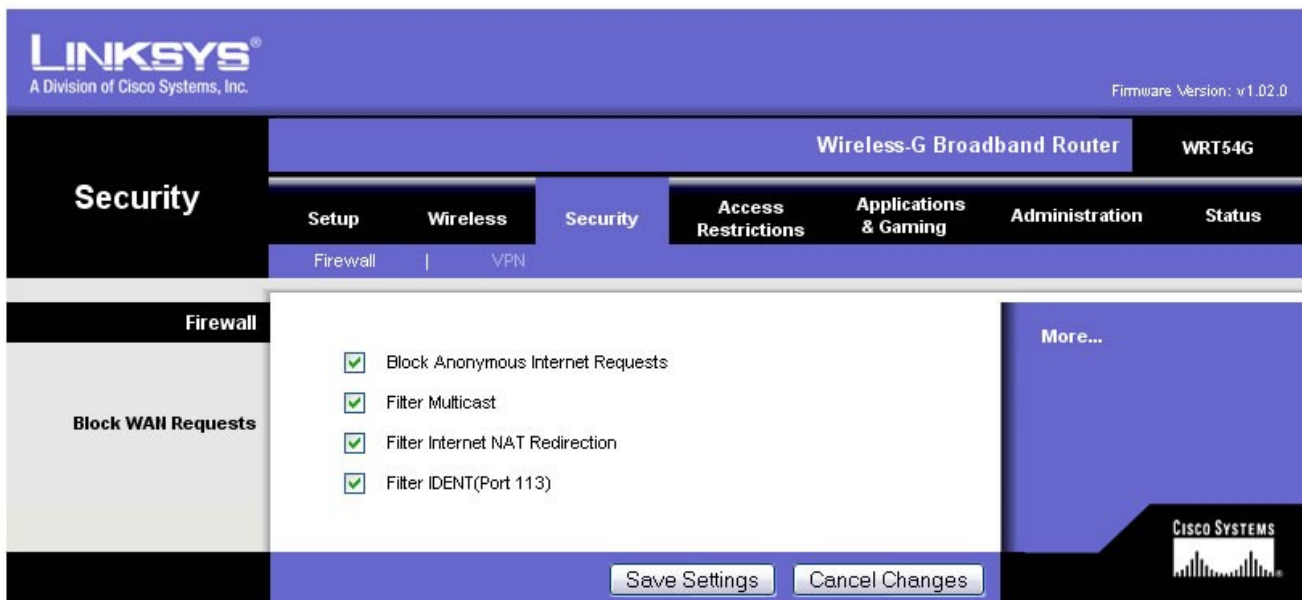
Comodo Firewall Pro – [www.personalfirewall.comodo.com](http://www.personalfirewall.comodo.com)

SmoothWall Express – [www.smoothwall.org](http://www.smoothwall.org) (for Linux-based PCs)

ZoneAlarm Free – [www.zonealarm.com](http://www.zonealarm.com)

### Hardware Based Firewalls

A hardware based firewall is a firewall that's built-in to your home or office router, such as a Linksys, D-Link or Netgear device that's connected to your cable, DSL or fiber Internet modem – or maybe even built into the modem itself.



While the look and settings of these firewalls vary by manufacturer, make sure they're blocking **WAN requests** - these are attempts at communication that come from the Internet to your network. Don't worry, any communications that start inside your network won't be blocked, but unless you're running a public server there's no reason people should be successfully communicating into your personal network.

**For more information on how firewalls can help secure your network and computing resources, and for more information on Linux and Mac-based security, contact VeriSpect Security Services and Consulting – we're experts on securing your data and can create a custom security plan to fit your needs and your budget. More information at [www.Verispect.net](http://www.Verispect.net) or through email at [info @ verispect.net](mailto:info@verispect.net).**