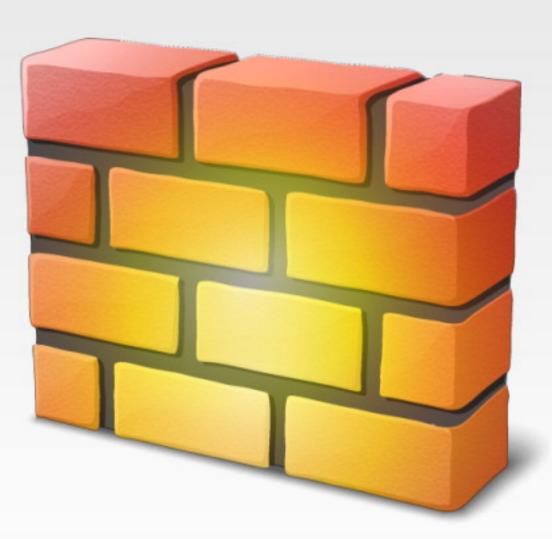
Welcome to this training lesson on **Firewalls.** In this lesson, we'll look at what firewalls are, what they do, and why you should use one.

**Estimated Completion Time:** 5 minutes.

**What is a Firewall?** A firewall is protective software for your computer. There are physical hardware firewalls used, but in general, in homes and small offices, firewalls are generally software.

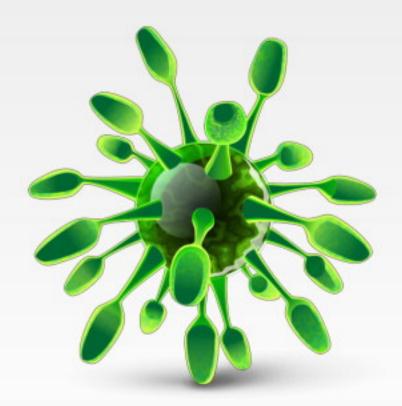
Firewalls operate by blocking incoming or outcoming data based on certain specified rules.



**Firewall vs Virus Software.** A firewall is not virus software. It works in conjunction with virus software. To ensure a secure computer, both are required.

Almost all third party virus software, like Norton's, McAfee, Avast, etc, will also include a firewall to help protect your system.

If you use Windows, or a Macintosh, a software firewall is provided with your operating system, and is generally activated by default.



**How Firewalls Work.** Firewalls monitor all data and communication that leaves, or enters your computer. And unless the firewall decides to allow that data to enter or leave, that data is blocked.

For example, see the message below (you can touch or click it to zoom in). Here, the Windows firewall has detected a new program that is attempting to contact the Internet. To make it easier for you, it asks if you want to allow this program to do just that. If you have not heard of the program, it may mean that some unauthorised software on your PC is trying some malicious activity (and you would select **Cancel**).



**Incoming Connections.** Perhaps even more importantly, firewalls monitor attempts to communicate with your computer from outside computers. This is one way hackers can take control of your computer.

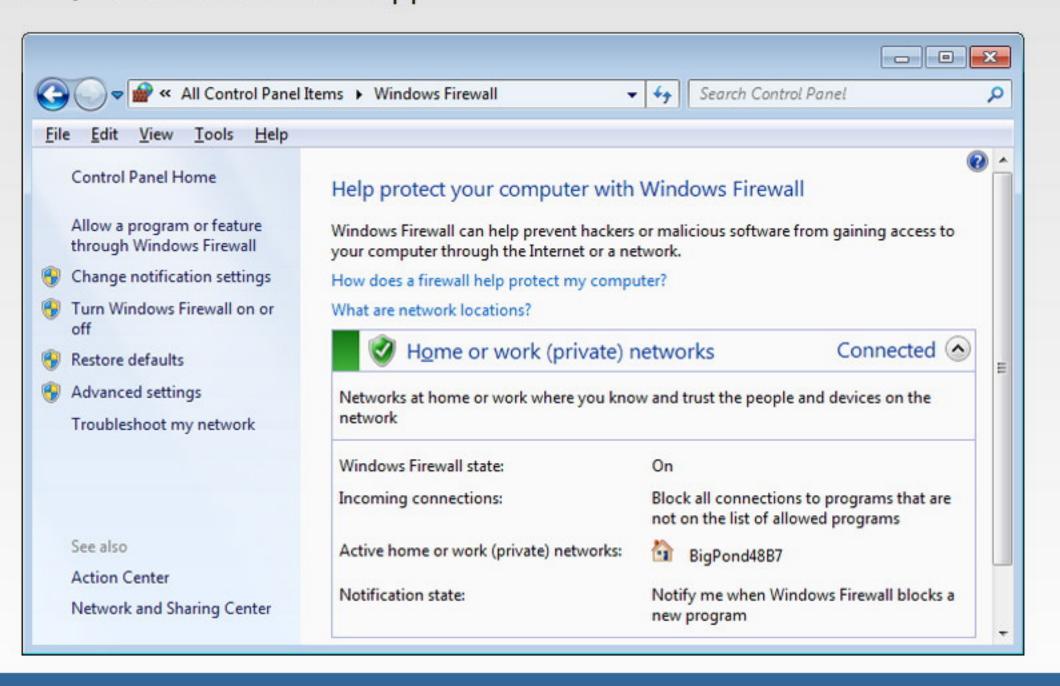


**Enabling Your Firewall.** All you need to do is ensure that your firewall is enabled. As we mentioned, this will normally be done by default.

How this done will depend on whether you run Windows, or a Macintosh, what version of Windows, and whether you have third party virus software installed. Check your documentation.



The Windows Firewall. To configure/enable/disable your firewall in Windows, use the Control Panel / Windows Firewall app.



**The Macintosh Firewall.** To configure/enable/disable your firewall on a Macintosh, open **System Preferences** from the **Apple** menu, and click on the **Security & Privacy** icon. Finally, select the **Firewall** tab.



**Detailed Firewall Control.** Depending on your firewall type, you may be able to configure more advanced settings and rules.

For example, it may be that at your workplace, or your school, that some sites - like **YouTube**, for example, are blocked, so that you cannot access them. This is achieved using a firewall that obeys a rule something like - block all incoming connections from **youtube.com**.



You've now completed this training lesson on **Firewalls.** In this lesson, we looked at what firewalls are, what they do, and why you should use one.