

Connecting to the Internet Safely

It seems that there is always a item in the newspaper about a new virus or computer worm bringing the Internet to a halt. There is no shortage of hackers who delight in causing havoc on the Net. And while many of the viruses are not destructive to your machine, some are, and we cannot afford to cruise the Internet without taking a few precautions.

Microsoft takes the problem so seriously, that it has widely publicized a three step plan to improve the security of the average user.

- Step 1 Use an Internet Firewall.
- Step 2 Keep your computer up to date.
- Step 3 Install and maintain an anti-virus program.

We will guide you through these steps over the next few pages.

1. Use an Internet Firewall

With Windows XP Microsoft has included a basic Internet Firewall for your use. A firewall is basically a program that monitors your communication over the Internet. In its simplest form, it keeps track of any communication to the Internet that originated with you, and allows the response to come through to your computer. If you start Internet Explorer, and request a web page, the reply will come through. If you start your e-mail program, it will check your mailbox, and bring you your new mail.

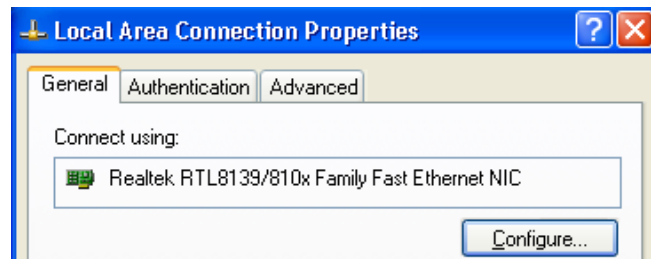
However, if anyone on the Internet tries to make a connection with your computer, that you have not requested, the connection will be rejected. Famous worms such as Blaster and Sasser infect a machine, and then go searching the Internet for other machines to infect. A Firewall will not allow any of these viruses to enter your computer.

Let's see how to install the Internet Connection Firewall on your computer. Click Start, and then click Control Panel. From the Category List, click on Network and Internet Connections. On the next screen, instead of selecting a task, click on the Network Connections icon. A screen appears that shows the network connections that are available on your machine. On this machine, we are connected to the Internet through a DSL phone line, and so our network connection is a Local Area Connection.

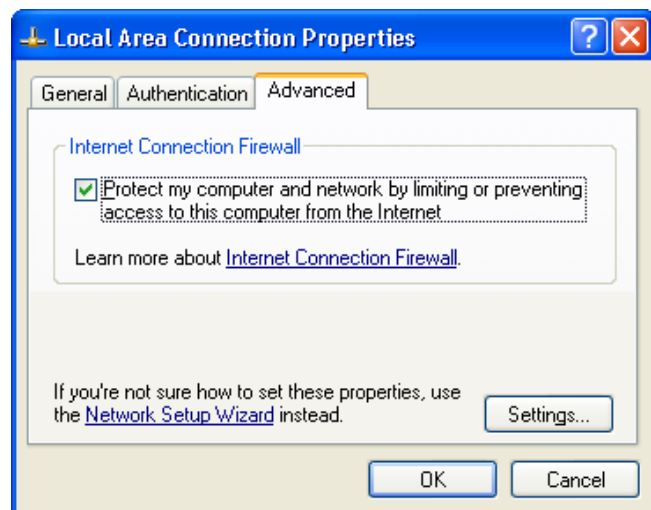


To change the Network Properties, place your mouse arrow over the Local Area Connection icon, and right click. On the pop out menu that appears, click on Properties, and the Local Area Connection Properties Dialog box appears.

Notice the three tabs along the top of the Property page. The one we want to select now is the "Advanced" tab. This will take us to the Internet Connection Firewall Setup page.



Click the check box to enable your Internet Connection Firewall (ICF). For most people, simply press OK and you are finished. Your Internet Explorer will still work, and if you use a e-mail program such as Outlook Express you will not notice a change.



One thing to be aware of is that if something does not work after you have enabled the Internet Connection Firewall, the ICF may have caused the problem. The Settings... button brings you to some advanced settings that may need to be configured. If turning ICF off fixed the problem, you may need to consult someone who can help you with the advanced settings to permit a certain type of network communications.

There are other firewalls available. One that is highly recommended is ZoneAlarm which comes in a basic free version for home use, and a Pro version with far more features. If you wish to explore ZoneAlarm further, you can visit their Website at www.zonelabs.com.

2. Keep your computer updated.

One of the very first things you need to do when you connect to the Internet for the first time, is make sure your Windows XP software is up to date. There may have been many improvements and patches that Microsoft has released that are not on your computer.

Windows update provided three categories of updates. We are most concerned with security in this section, and so we will concentrate on the “Critical Updates and Service Packs.” The importance of Critical Updates is illustrated by the fact that most of the recent viruses could have been stopped before they started, if all computers on the Internet were up to date. The Sasser virus was unleashed on the Internet over a week after a Microsoft patch to prevent the problem had been made available.

Windows XP updates are usually useful, as they fix minor problems that have cropped up in XP, or add additional functionality to your computer. Driver updates are also available, but my rule of thumb for driver updates is, “If it isn’t broken, don’t fix it.” In other words, if my computer is working properly, I usually don’t update the Windows drivers from the Website.

Let’s go through the Windows Update process. Click the Start button, hover the mouse pointer over “All Programs” until the program list pops out, and then click on “Windows Update.”

The Windows Update site opens in Internet Explorer. The first task the program does is to check to make sure the latest version of Windows Update Software is installed. If not, a screen will open requesting permission from you to install the latest version of Windows Update Software will appear.

When Update has checked for the latest software, and is satisfied, we come to the first Windows Update Welcome Screen where we click “Scan for updates.” Windows update examines our computer to identify the patches that our computer is lacking.

Welcome to Windows Update

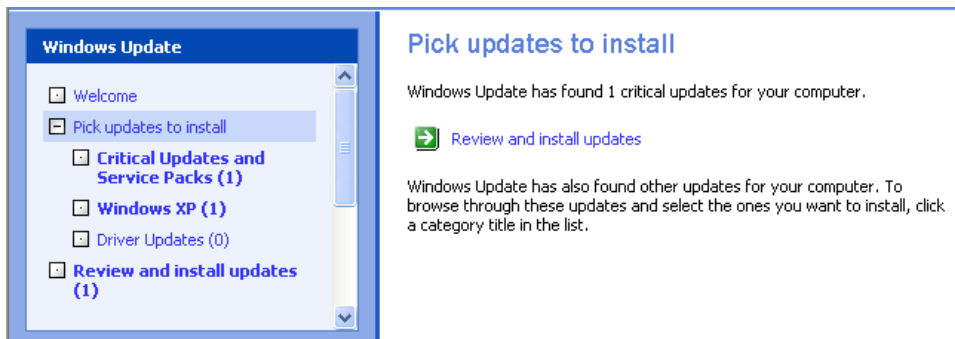
Get the latest updates available for your computer's operating system, software, and hardware.

Windows Update scans your computer and provides you with a selection of updates tailored just for you.

 Scan for updates

Note Windows Update does not collect any form of personally identifiable information from your computer.
[Read our privacy statement](#)

The screen shot that shows the results of the scan is shown below. Windows update has found one critical update to install. On the left pane we see that there is also one Windows update that can be installed, and no driver updates are available. It is the Critical updates we are most concerned about, so we will click review and install updates.

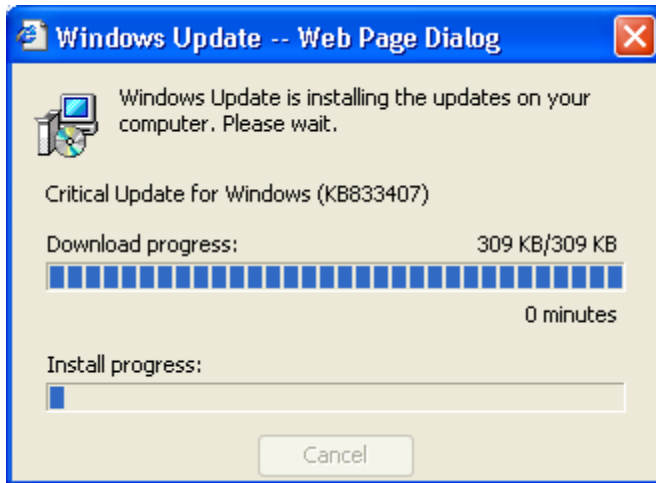


After we click review and install updates, we are given an opportunity to review the update before we install it.

If we decide not to install any update, we are given the opportunity to remove it from the list. Never do this with Critical Updates without good reason.

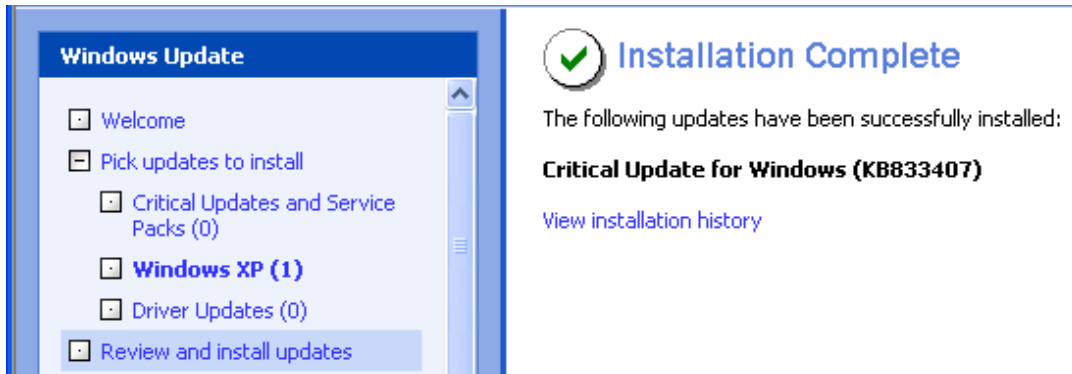
When we are ready to proceed, click the install now button.

Windows Update goes to the Microsoft website to download and install the update on your machine. You can watch the progress in the Web Page Dialog box pictured below



This is a small download, so it did not take long. The first time you do this may take a very long time depending on the amount and size of updates that need to be downloaded. This is especially true for modem dial-up users.

After the update has been completed, Windows Updates notifies you of the successful completion of the Update.



For many of the Updates to be in effect, the computer must be re-started. If Windows asks you to restart your computer do so now.

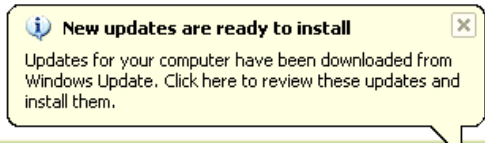
Before we leave Windows Update, I want to show you how to automate the Windows update process. Click on the Start button, and then click on the Control Panel. From the Category List, click on “Performance and Maintenance.” Now, click on the task “See basic information about your computer” The System Properties dialog box opens up. We want to click on the tab named “Automatic Updates.”

If you check the “Keep my computer up to date....” check box Windows will go and check for Critical Updates whenever you are connected to the Internet. For most users, the default “Download the updates automatically and notify me when they are ready to be installed” works well.

When finished click “OK.”

If you have this set up, Windows remembers to keep your computer updated, and yet still gives you the opportunity to review and accept the new updates.





Now whenever updates are available Windows notifies you with a bubble message on the lower right corner of the screen.

Your computer is now up to date with all the security patches installed, and you are safely behind your firewall. But there is one important thing yet to take care of. We need to install an anti-virus software package.

3. Use Up-to-Date Antivirus Software

Many new computers come pre-installed with an antivirus program. However, usually these versions only update the virus definitions files for a few months, and then you need to subscribe to get further updates. Often this step is ignored. The only thing worse than not having anti-virus software is having out of date anti-virus software, which can give a false sense of security to the user.

There are many good anti-virus programs available today. Norton and McAfee both make excellent programs. Both offer automatic updates while your computer is on line. I use Trend Micro PC-cillin on my machine, and have been very happy with the results. If money is tight, there is a free alternative that is reasonably effective. We will go through the installation now. (You must be connected to the Internet to do this.)



First step, open Internet Explorer, and enter www.grisoft.com in the address box. This will bring you to the home page of AVG Anti-virus software. On the left at the bottom is a link to AVG Free Edition. Click this link now.

This will bring you to the AVG Free Edition page. Here they will explain the details of what is included in the free edition, and what features are not available.

They make you aware that the Free Edition is only for use for single home users.

At the bottom of the page is a button to click to begin the process of downloading the home edition. As you go through the screens, read and follow the directions given. When you have your AVG anti-virus installed, do

a full scan of your system, to make sure you have a clean start.

If you implement three steps, your computer should be secure from any dangers that the internet exposes you to.