

Identifying WildBlue Performance Problems

NOTE: You should decide whether you are comfortable changing your personal computer's configuration. Assess your comfort level and, when necessary, take it to your local computer technician to make the changes.

1. Is your computer equipped to handle WildBlue?

If you are running Windows 98, Windows NT or Windows Millennium, you probably have an older personal computer that might not meet WildBlue system requirements for processor power, memory and security. The following requirements are the MINIMUM for running Wild Blue:

- Operating system:
 - Windows/PC: Windows 2000, XP or Vista
 - Mac: OS 10.4 or higher
- Processor:
 - 300 Mhz (faster is better)
- Hard drive:
 - 100 MB space necessary for system operation
- Memory:
 - 128 MB of RAM (**512 MB for Vista**)

NOTE: To find your system information in :

Windows/PC: Open your Start menu, right click on My Computer, and go down to Properties. Your system information will be displayed under the General tab. (In the Vista start menu, right click Computer)

Mac: Click the Apple icon in the top left finder window, click About This Mac, and for more advanced details click More In fo... in the About This Mac window that appears.

NOTE: PC's total memory and available memory can be affected by the operating system, the number of processes running and the number of windows opened. To view the status of both types of memory, hold down the Control, Shift and Escape keys at the same time. You'll see the "Task Manager." Click on the Performance tab.

2. Have you run speed and page load tests, with and without Optimizer?

Check which WildBlue package you have and then run speed tests so you can compare the speeds to ensure you are experiencing the maximum "up to" WildBlue speeds.

- Value Pak:
 - Download speed can reach up to 512 kilobits per second (Kbps)
 - Upload speed can reach up to 128Kbps
- Select Pak:
 - Download speed can reach up to 1.0 megabits per second (Mbps)
 - Upload speed can reach 200Kbps
- ProPak:
 - Download speed can reach up to 1.5Mbps
 - Upload speed can reach up to 256Kbps

Running accurate speed tests has become tricky due to different speed test sites using different methods for testing. The speed test results on some sites appear skewed. When Optimizer is running, the reported speeds from these sites are lower than they should be, but the pages load much faster. But be advised: Do not conduct speed tests over a wireless router, because this may affect your test results. Connect only one PC directly to the WildBlue modem.

Test with Optimizer

Make sure Optimizer is loaded on your computer. You can check by choosing “Programs” from your Start menu and seeing if WildBlue is listed. If it’s not listed, it’s not loaded.

If it is loaded, verify the settings are correct. You can check by going to Internet Explorer, click Tools/Internet Options/Connections/LAN Settings. Check to see whether “Automatically detect settings” and “Use automatic configuration script” are checked and the address listed is <http://wpad.wildblue.com/wpad.dat>. If each of these items is correct, Optimizer is properly loaded.

If Optimizer is not loaded:

1. Open Internet Explorer and go to <http://powwwer.net>
2. If you use a Macintosh computer, click on “WildBlue Optimizer for Mac” to download Optimizer.
3. If you use Windows, click on “WildBlue Optimizer for Windows” to download Optimizer.



(Often, you use your computer in different locations, like at home and work, where other proxy settings can replace the WildBlue settings. When using your computer at home, you should check to see if the Optimizer is loaded and reload it if it's not.)

Speed Tests

It is best to test speeds on multiple sites, including testmy.net, TOAST.net, Speakeasy.net and Speedtest.net. Please note that the upload speed test on Speakeasy.net and Speedtest.net WILL come back with a false reading. Reported speeds tend to be about a quarter to a third of the actual speed.

Also, if a file size option is available when using these sites, choose a file size no smaller than 750 kilobytes (K). This ensures that the calculation is figuring in the inherent delay of a satellite link. A smaller file may give an incorrect reading.

When using TOAST.net, make sure that each time the test is run; the test uses the same hosting site, such as "GoDaddy." This will ensure a more consistent test.

Remember, these speed tests measure file transfer speeds and may not reflect a situation in which Web pages are loading slowly. Therefore, **also test page load speeds**, using www.click2web.com/sitetime.php. Record the page load times for these sites— www.about.com, www.fedex.com, www.ups.com, www.youtube.com, and www.ebay.com—and select some of the sites you regularly visit.

You will generally find download speed tests running about 200kbps below listed package speeds with Optimizer loaded, but page load speeds will be acceptable. Be aware, the upload speed results may vary significantly based on the test site you use. Speakeasy.net and Speedtest.net may use a file or process that skews or gives an incorrect upload speed— generally, it shows only a third of the speed you are actually getting.

Test Without Optimizer

TEMPORARILY remove Optimizer by going to Internet Explorer and click Tools/Internet Options/Connections/LAN Settings and deselecting "Automatically detect settings" and "Use automatic configuration script."

Then, close all browsers and open a new browser. Confirm that Optimizer is still off by verifying that the boxes on the LAN setting are still deselected.

Now, repeat the speed and page load tests you did when Optimizer was loaded.

The speed test results on testmy.net and TOAST.net, in particular, are close to the WildBlue package speeds, but the page load tests using the same Web pages as before will result in slower page load speeds.

Re-test with Optimizer

Reload Optimizer and conduct the same tests. You will see slower speed test results but improved Web page load times. Because the majority of WildBlue customers correlate speeds with page load times, leave Optimizer loaded and check it from time to time.

3. Do you have firewalls?

Firewalls are designed to provide protection from hackers, but if there is more than one firewall active, the result can be slow Internet speeds and Web pages not displaying or timing out.

If you have a router, once you have determined that the Optimizer is loaded, verify whether the router has its own firewall. (Verify your router firewall is enabled, often one can login by opening your Internet browser and typing 192.168.1.1 in the address bar).

1. If you use a router with its own firewall, great!
 - Router firewalls typically provide more protection than software firewalls.
 - Start menu, Control Panel, Security Settings for Windows Firewall.
 - Disable your software firewalls, including Windows, Symantec, Norton, MacAfee, etc. The router firewall is sufficient, and more firewalls can be detrimental.
2. If you do not have a router:
 - Leave a software firewall in place—but again, make sure there is only one firewall active. Many software firewalls have multiple settings. The higher the setting, the more protection, but the slower the speed as a result.
 - Start menu, Control Panel, Security Settings to verify Firewall is on.

4. Are you running anti-phishing software?

If web pages are loading slowly, check to see if an anti-phishing filter in IE7 (or another security software package) is turned on. You can find the anti-phishing filter for IE7 by looking in Tools/Internet Options/Advanced Setting/Phishing Filter. If the phishing filter is turned off, performance may improve.

If an anti-virus security suite—such as Norton or MacAfee—is loaded onto your computer, check if it also offers an anti-phishing filter, firewall protection, spyware or any other tools.

If it becomes necessary to choose among the Windows IE7 /IE8, Norton or MacAfee anti-phishing filter, the best option would be the Windows IE7 /IE8 filter. It can be set to check sites only when requested. Anti-phishing filters in bundled software packages usually check each and every site, and this slows browsing considerably.

5. Does your computer have a virus?

Viruses can cause slow Internet speeds and lead to Web pages not displaying or timing out.

To identify whether a computer virus is the problem, run an anti-virus scan to ensure no virus is present. Open your anti-virus security suite software and click scan.

Also, check if more than one anti-virus software package is loaded onto your computer:

- If more than one software package is installed, ensure that only one is active.
- If possible, uninstall the others. Having more than one anti-virus software package could create problems. For instance, when the software packages are being updated, the registry settings could change.

Have you at any point switched anti-virus software packages? (Such as switched from Norton to MacAfee?) If so, check which ones and the method you used for uninstalling them. If you just used the Windows Add/Remove software tool, the old anti-virus software may not be completely removed and there could be a conflict occurring. When possible select All Programs from your start menu, find the software in the list, select Uninstall in the sub-menu.

6. Having trouble with routers?

Sometimes router configurations and out of date firmware negatively impact performance. Follow these steps to check Linksys routers:

1. Check to see which version of firmware you are using by logging into the router. (Often one can log in by typing 192.168.1.1 at the URL prompt.) The default username and password are "Admin." Whoever installed the router may have changed this password, and you will need to know the new username and password. The firmware version can be found in the upper right hand corner of the router's main page. Make a note of the router model, version and firmware version number.
2. Go to www.linksys.com, type in the model and router version number and click on "Downloads." (NOTE: If you are using Windows XP service pack 2 and Internet Explorer, you may see a "Pop-up blocked" message in your browser information bar. Click the bar and select Temporarily Allow Pop-ups, then click Download). Click Save in the File Download dialog box that appears. In the Save As dialog box, choose a location for the file (like the Desktop) and click Save. You may have to expand or unzip the download. Double-click on the zip file you just downloaded and click Extract to send its contents to a single folder (or to the Desktop). The WinZip trial version (www.winzip.com) may be used for this function.
3. Once this has been done, go to the router menu, click "Administration" and then select "Firmware Update." Browse to where you downloaded the firmware update file and click "Update." After this, the router should be updated and reset.

Critical warnings for helping with routers:

1. The main page of most NetGear and D Link routers will ask if you would like to check for newer versions of firmware. If you select "Yes" to this query, the router will check for newer versions and further prompts will follow..

2. DO NOT perform this check while using a wireless connection, in case you get disconnected during the process!
3. If you have set up a router with more elaborate configurations or you do not feel comfortable performing these procedures, it is best to seek support from your router's vendor directly.

7. Are you running a remote access tool?

Frequently, remote access tools, such as PC Anywhere, BNC or Net Meeting, negatively impact performance.

8. Do you have VPN software loaded?

Although WildBlue has recently announced a new Virtual Private Network (VPN) solution for business customers through Enterprise, VPN software —such as Check Point, Cisco VPN and NetGear VPN— does not work well on residential accounts. Hardware is being developed to overcome this issue.

9. Are using FTP client software?

Some customers have had problems with File Transfer Protocol (FTP) performance. If you are using FTP client software, try to configure it into the “passive mode.” Open your FTP client software choose Edit and then Settings, it should allow you to configure “passive mode”.