Speedtest FAQ

Eric Van Tol - 2016-08-26 - Comments (0) - Connectivity

Why do I get different results from different Internet Speed Test Sites?

The primary difference in results is due to the location of the speed test server you are testing against. Every test is subject to many factors including, but not limited to, location of the test server, speed of your Internet connection, software and optimization of your computer, utilization of the remote speed test server and its Internet connection, traffic congestion on the internet, time of day attempted and other factors too numerous name here. For example, if you are in Washington, D.C. and the test server is in Los Angeles, your results *will* be very different from a test you run to a server in the Washington, D.C. area). If you are an Atlantech Online Internet access customer, by using Atlantech's speed test server, you eliminate traffic congestion on the internet as a factor since your Internet service and the server we use are on the same provider network.

Do you prioritize traffic to and from your speed test server to skew results?
No, we do not do this. Atlantech Online would not benefit from this practice. Unlike some of our competitors, our goal is to provide optimal service and it would be impossible to meet that goal if we were dishonest with our customers.

Why are download and upload speeds different?

Our speed test server is optimized for sending data (speed tests up to 1Gbps have a high level of accuracy). The server's capacity for uploading data allows for upload tests of up to 950Mbps at a high level of accuracy.

Why do I get different results at different times?

Under ideal network conditions, Atlantech's Speed Test Server will provide virtually identical results every time that it is run. However, in most environments, users share the network, Internet connection, and the destination server, which can cause variation in the results.

If you see wildly different results each time Atlantech's Speed Test Server is run, this suggests that you are sharing your network and/or server with other Internet users or there could be a problem. To obtain a the most accurate results, we suggest that you remove all devices from the internet connection other than the device you are using for the speed test. If you are unable to do so, we suggest you perform the test during a time when internet utilization is at its lowest (before or after normal work hours, or sometimes during lunchtime when employees are out to lunch).

Will Atlantech's Speed Test Server work through my corporate firewall?

It should. However, some aggressive firewall techniques may interfere with Atlantech's Speed Test Server upload test.

What speed test results can be expected?

You should expect to see speed test results within 90% to 95% of your contracted bandwidth, assuming no other traffic on your circuit. **Please note**: Other users could also be utilizing the Atlantech Online Speed Test server and those users could skew results. In addition, we have experienced occasional problems where the speed test does work as expected through a firewall, especially at higher throughput levels.

What is jitter?

Jitter is the variation in time between packets sent and packets arriving caused by network difficulties such as route changes, congestion, packet loss, traffic regulators etc., and plays a major role in the quality of a VoIP call. VoIP works by sending voice data as a stream of packets from source to destination. These packets can take a varying amount of time to reach the destination and invariably do not arrive in the order in which they were sent.

For a VoIP telephone call to work well, the packets sent from the source must arrive within a certain time window (or "buffer") in order for the receiving end to reassemble the packets in the correct order and reproduce the spoken words. When there is excessive jitter, the time delay is too long (high latency) and packets arrive outside the time window and get lost from the call (discarded). As a result, the recomposed sound no longer reflects exactly what was sent, and depending of the extent of the delay may not be understandable by the recipient.

What is packet loss?

Packet loss plays a key role in the quality of VoIP connections, as high packet loss causes some of the voice data not to arrive to the recipient. Packet loss occurs when voice packets are discarded by the jitter buffer (see previous FAQ), or dropped by network

routers/switches due to high congestion. Atlantech's Speed Test Server measures the percentage of packet loss and reports the number of packets lost during the test.

Why did the Packet Loss and Firewall Tests get skipped?

This occurs because the Packet Loss and Firewall tests both use Java. If your Java version is out of date, or more likely, disabled, then this test will be skipped. It is not an indication of a problem, but if you wish for either test to run, ensure that your Java version is up to date and that your browser allows Java to run. Atlantech Online will not field questions about Java, so please contact your LAN administrator if you require assistance with installing/running Java in your browser.

What is the Firewall Test?

The Firewall Test is merely a test that is run to test for open TCP and/or UDP ports on the server and your local machine. This will tell you whether certain communication to and from the Speed Test server is blocked by your firewall.