Soroban Support Guide



Running a Broadband Speed Test

Summary

This document describes how to run an Broadband speed test to check whether your broadband connection is performing as it should. No download is required – just access to a web site.

The website chosen here, Ookla, produces reliable results and can easily be run by anybody at at the first level are easily understandable.

If you are having network problems then the summary produced will assist you, or your anyone else assisting you, to provide the evidence required begin to evaluate the issues as a first step to provide a remedy.

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Revisions

Version	Date	Changed by	Summary of change
Draft	25/01/2023	John Steele	Initial draft

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1 OVERVIEW

It is a common requirement to have issues with broadband speed. This document describes how to run a speed test to identify whether the broadband speed you are getting matches the speed you are promised by your Internet Service Provider (ISP)

This document does not directly address issues with your wireless connection. Ideally this test should be run with a wired connection to your broadband router.

No additional software is required – just a web browser. The test is free!

1.1 How to run the test

Using your favourite Web browser enter the URL https://www.speedtest.net/

A screen similar to that down in Figure 1 below should appear.

	Apps	Analysis	Network	Developers	Enterprise	About
	@ SETTINGS					
G	ο					
PlusNet (2)	Enley Change	nm -on-Thames e Server				

Figure 1: Initial screen

Just click Go!

It will first measure the delay from your computer to the server it has chosen. This is the "Ping" test. A small data packet is sent to a server which then echoes it back and the time taken is recorded.

This is followed by a download of a large data packet from the server and the time taken is reported as Megabytes per second which is the download speed.

It then uploads data from your computer to the server to calculate the upload speed

The next diagrams show the progress

- Figure 2 While running during the download phase
- Figure 3 Results



Figure 2: While running

SHARE 🕜 🅑	(f) 💮 Result ID	14258212674 🕑 RESULTS 🔞 SETTINGS
 DOWNLOAD Mbps 36.09 Ping ms 11 Connections Multi 		ops Ops Ops OP UPLOAD Mbps 9.16 ③ 47 ③ 20 How likely is it that you would recommend plusnet to a friend or colleague?
GO	Zzoomm Henley-on-Thames Change Server PlusNet 146.90.199.8	012345678910Not at all likelyExtremely LikelyBy submitting this feedback, you acknowledge and agree that Ookla may share this information as set forth in its Privacy Policy.

Figure 3: Results

1.2 Viewing the results of the test

Clicking on the *Results* will lead to the following beg displayed

- ➢ Figure 4 Summary − graph and below this on the same page (scroll down) is
- Figure 5 Summary detailed results



Figure 4: Summary – graph

Below this on the same page (scroll down) is the results of this test and any recent tests.

INDIVIDUAL RESULTS						Export Results	
DATE /TIME •) PING ms	DOWNLOAD Mbps	O UPLOAD Mbps	DISTANCE mi	LOCATION /SERVER	PROVIDER	
(11	36.09	9.16	< 50	Henley-on-Thames Zzoomm + 3 more	PlusNet	Ø 9 f 💬
() 01/25/2023 1:18 PM	10	31.99	9.23	< 50	Henley-on-Thames Zzoomm + 3 more	PlusNet	Ø 9 f 💬
(\$) 01/25/2023 1:16 PM	11	36.42	9.23	< 50	Henley-on-Thames Zzoomm + 3 more	PlusNet	Ø 9 f 💬
(11	33.82	9.23	< 50	Henley-on-Thames Zzoomm	PlusNet	Ø Ø f 💬

Figure 5: Summary – detailed results

If you click on *Export Results* in Figure 5 it will download a Comma Separated Varriable (CSV) text file that can be opened in Microsoft Excel or LibreOffice Calc (fir example) to display the results in a spreadsheet format.

This will contain a row for each of the records results stored and an example has been pasted into this document (with some columns omitted and formatting applied to make it clearer) in Figure 6 Summary table below

IP_ADDRESS	TEST_DATE	TIME_ZONE	DOWNLOAD_MEGABITS	UPLOAD_MEGABITS	LATENCY_MS	SERVER_NAME
146.90.199.8	01/25/2023 13:21	GMT	36.09	9.16	10	Henley-on-Thames
146.90.199.8	01/25/2023 13:18	GMT	31.99	9.23	9	Henley-on-Thames
146.90.199.8	01/25/2023 13:16	GMT	36.42	9.23	10	Henley-on-Thames
146.90.199.8	01/25/2023 13:15	GMT	33.82	9.23	10	Henley-on-Thames
146.90.199.8	01/25/2023 12:44	GMT	35.63	9.24	10	Henley-on-Thames
146.90.199.8	01/25/2023 12:42	GMT	36.64	9.24	10	Henley-on-Thames
146.90.199.8	01/10/2023 16:25	GMT	26.85	9.25	8	Slough
146.90.199.8	01/10/2023 16:24	GMT	26.65	9.07	9	Slough

Figure 6: Summary table

The figures shown in Figure 6 are typical examples of a "Fibre to the Cabinet" (FTC) connection with a rated speed of up to 38 Mbps. The Download and Upload speeds are Megabits per second.

In most cases

- > The download speed will be considerable faster than the upload speed
- If you have a faster connection then it would be expected that the Download and Upload data rates would improve
- The Latency figure measures the time taken for the data to travel from the computer to the server and should reduce slightly for a faster connection.

Note that these readings, for the purpose of this document, were taken over a wireless connection to a local router.

A wired Ethernet connection will be typically slightly faster than a wireless connection to the router.

Ideally there must be no other active devices accessing the local network while the test is being run.