

Overview

SamKnows has developed a web-based test which offers a quick and easy way for consumers to test their internet performance without having to install either software or hardware.

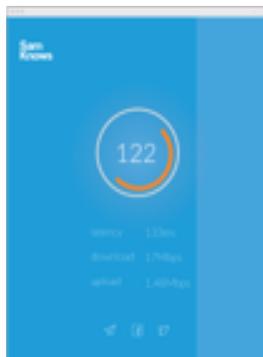


Image 1: SamKnows Web Based Speed Test

The SamKnows web-based test uses HTML5 WebSockets to conduct measurements, meaning there is no requirement for Flash or Java support. This allows the test to operate seamlessly on desktops, mobiles and tablets alike. The web-based test is able to accurately measure speeds in excess of 1Gbps.

The application is provided with a simple, clean and responsive user interface that caters to all form factors. However, client's embedding the test in their own web pages are able to customise the look and feel entirely.

Upon startup, the application performs a latency test to all configured measurement servers. These may be provided by the ISP or by SamKnows. The server with the lowest latency is used for all subsequent measurements.

Core Features

Measurement Capabilities

The following key measurements are available from the Web-based test:-

- ➔ Download throughput (up to 1Gbps)
- ➔ Upload throughput (up to 1Gbps)
- ➔ Latency
- ➔ Subscriber's ISP and geographic location
- ➔ Subscriber's browser and platform

These measurements are run against SamKnows's network of test nodes. These are dedicated servers either on-net (on the local ISP's network) or off-net (on the public Internet).

In-Home Measurement

The web-based test can also be used in conjunction with other SamKnows-enabled devices in the home (such as the Whitebox) to perform in-home measurements. This may be used by consumers to self-diagnose in-home issues, reducing the support burden on ISPs.



Image 2: SamKnows Enabled Device

Browser Capability

IE10+	✓
Chrome	✓
Firefox	✓
Safari	✓
Android 4.4+	✓
IOS 7.1+	✓

The SamKnows web-based test uses WebSockets on modern browsers to achieve high performance, without any need for Flash or Java. Older browsers (such as IE8 and IE9) are supported transparently by a fallback to AJAX requests.

Real-time Reporting

The results of the tests are securely transmitted to hosted backend infrastructure for processing and presentation through a web interface.

End-users are presented with their results immediately after the test. Clients embedding the test into their own web page can also transmit the results directly to their own backend if desired.