

# AliceStreet Conference Center

A **real** conference room on your desktop

## Client Bandwidth Specifications

Version 1.6.535.0

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**AliceStreet**  
Conference Center



USA

Canada

UK

South America

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Specifications subject to change without notice

1 of 10

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## 1. Bandwidth Overview

The AliceStreet Conference Center is designed to run over a variety of network infrastructures using a proprietary bandwidth management system (BMS). The BMS controls the output from the client to the server and the output from the server returning to the client.

All specifications are based upon a “normal” meeting with average movement and voice as one might be expected to do in a real live meeting. Ultimately, bandwidth in any audio/video collaboration session will be dictated by the amount of voice data, and the amount of video movement by the participants.

In all measurements, we have seen significantly lower results. This is particularly true in the measurements of client to server where measurements of average use have dropped to below 75Kbs. However, voice data and video movement is not easy to predict, therefore, we have erred on the side of caution allowing network administrators to plan a high quality of service.

## 2. Applicable infrastructures

AliceStreet has a general specification of 150Kbs upload from the client to the server, and 250Kbs from the server to the client. This means a client with 400Kbs available bandwidth can in fact have a “face to face” meeting, share PowerPoint’s, and use a whiteboard with 15 other people.

The network infrastructures over which AliceStreet operates include the following:

- LAN’s
- WAN’s
- WiFi
- WiMax
- 3G (HSDPA)
- BPL
- LOS Radio link
- DSL/ADSL

AliceStreet will operate over any infrastructure with available bandwidth of 400Kbs. In today’s environment, this means a participant on a DSL home office connection, in a major hotel, at an airport, basically anywhere there may be a reasonable connection can meet “face to face”.

### 3. General Specifications – Client to server

Figures 3.1, 3.2 and 3.3 show the overall average use for deployment of the AliceStreet Conference Center for a specific client. All specifications have been taken from actual AliceStreet meetings ranging from 20 minutes to 2 hours with up to 16 participants.

**Figure 3.1:**

**Total Average bandwidth usage per specification of 400Kbs (assumes 16 participants)**

Number of Participants	Kbs/second Maximum	Mbits/second needed	Consumption Per hour (MB)	Consumption Per hour (GB)
1	400	0.391	175.8	0.17

**Figure 3.2:**

**Client to Server: Average bandwidth usage per specification of 150Kbs**

Number of Participants	Kbs/second Maximum	Mbits/second needed	Consumption Per hour (MB)	Consumption Per hour (GB)
16	150	0.146	65.9	0.06

**Figure 3.3:**

**Server to Client: Average bandwidth usage per specification of 250Kbs**

Number of Participants	Kbs/second Maximum	Mbits/second needed	Consumption Per hour	Consumption Per hour

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		(MB)	(GB)	
16	250	0.244	109.9	0.11

## 4. Variations to measurements

All of the bandwidth measurements include audio, video and PowerPoint sharing. There are other events or additional AliceStreet offerings that will increase the bandwidth usage significantly.

Notable exceptions to previous measurements include:

- a) First download of AliceStreet client: When a client has never been installed, a client file of less than 10Meg will be downloaded. This will cause the bandwidth usage to spike during the upload from the server, and the download to the client.
- b) Initial "handshake". A spike will always occur when first logging into AliceStreet. The amount of available bandwidth will dictate how long the connection takes to start.
- c) Adding VPN: AliceStreet will work over a variety of VPN's, Cisco, Checkpoint, etc. VPN's by nature will significantly increase the bandwidth requirement. Check with your VPN vendor for specific requirements.
- d) Extreme non-typical meeting type video movement: Although rarely seen, extreme video movement may increase the bandwidth required to send a quality picture with audio.
- e) All voices speaking at the same time: Again, very rare as meetings will seldom have more than 1 person speaking simultaneously.
- f) Application sharing: This is a serious bandwidth consumer. Please note with extreme caution that users with less than 512 Kbs total bandwidth will seldom be able to take advantage of application sharing. We recommend testing prior to running simultaneously with AliceStreet.
- g) Protocol shaping: Most countries in the world are generally offering unshaped bandwidth within their primary market. However, please check with your local service provider as some shape the international bandwidth. Shaped bandwidth will cause some additional latency with most audio/video collaboration systems.

Running other tools such as a shared whiteboard and Instant Messaging (available with AliceStreet) will not materially impact bandwidth requirements.

As a general best practise, all other applications connected to a network, or Internet, should be closed during the operation of AliceStreet.

## 5. Bandwidth measurement tools

Bandwidth provisioning is key to the successful use of the AliceStreet Conference Center and related products. AliceStreet has found a number of tools to measure bandwidth. Generally these tools are web based (external), or installed directly on the device whose throughput is being measured (internal).

### 5.1 External measurements

External or web based measurements are those that use a process to measure data going to and from the device whose throughput is being measured to an external server located somewhere around the globe.

The following article published in September 2006 from Broadcast Newsroom explains a great deal about bandwidth and has some good reference sites. It is key that what ever web based tool is selected to remember that the tools must provide **separate upload and download** measurements to compare against AliceStreet's 150 Kbs and 250 Kbs respective specifications. It is wise to ask your ISP for a speed test, but many do not disclose Upload speeds separately. Please also note that depending on the backend processes, and the location of the external server versus the location of the user, the results will vary. For reasons of ease of use and graphical representation, AliceStreet is using Internet Frog.

<http://www.broadcastnewsroom.com/articles/viewarticle.jsp?id=64180>

Technology: 09/11/06

### **Measuring Your Internet Connection Speed You can't be too thin, too rich, or too fast**

*BY TIFFANY LEFARGE*

As a latter-day Teyve might comment, it's no sin to have a slow Internet connection -- but it's no great honor, either. In the ever-increasing need to have the fastest broadband connection possible, you need some way to measure the speed you're actually getting. Fortunately, there are several sites that offer a free speed-check.

The primary reason to use one of these sites is to calibrate your experience against your ISP promised. If the ISP guarantees you'll get 512Kbps upload speed, then these sites can help you find out if you're being shortchanged. If the [access](#) from a hotel conference center seems distressingly slow, these sites give you useful data to wave at the hotel staff. And, if you're making changes to a computer's TCP/IP configuration, these sites can help you establish a performance baseline.

For the most part, the sites against which I tested gave roughly equal numbers. I tested on my business-class [cable modem](#) connection. A scientific measurement might have used a minimum load without anything else running but I left my "ordinary" applications running in the background (such as e-mail and instant messaging).

Thus the results should be fairly consistent across each of the sites, but some variation is expected given background processes.

All these sites are free to use, with the arguable exception of our first listing, [Bandwidthplace](#), which lets you do three personal tests per month. Its results were the least consistent of the various sites, however. The first time, I got these numbers:

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4.2 megabits per second  
Communications 4.2 megabits per second  
Storage 515.6 kilobytes per second  
1MB file download 2 seconds  
Subjective rating Awesome  
and ten minutes later (with the same general load on the system), Bandwidthplace told me this:  
Communications 1.4 megabits per second  
Storage 172.6 kilobytes per second  
1MB file download 5.9 seconds  
Subjective rating Good  
I expect some variation, but that's a surprising amount.

The great granddaddy of Internet connection speed sites is [DSL Reports](#), which lets users compare notes on broadband service providers as well as check their own connections.

Your download speed : 3425 kbps or 428.1 KB/sec.  
That is 12.7% worse than an average user on cox.net  
Your upload speed : 549 kbps or 68.6 KB/sec.  
That is 20.4% worse than an average user on cox.net

The [Speakeasy](#) test delivers a nice, basic set of results, without a lot of analysis. It does distinguish between upload and download speeds, however, which is helpful because my ISP does, too.

Last Result:  
Download Speed: 3677 kbps (459.6 KB/sec transfer rate)  
Upload Speed: 550 kbps (68.8 KB/sec transfer rate)

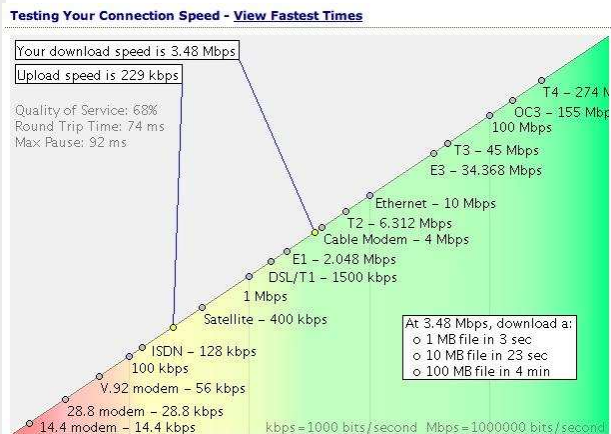
[InternetFrog](#) has a useful graph that gives more than numbers; it demonstrates where your actual speed is relative to expected broadband speed for cable, DSL, Ethernet, T3, and so on. It also includes a rating for Quality of Service (QOS), which represents the level of consistent download capacity provided by your Internet Service Provider (ISP). Says the site, "The higher QOS percentage, the higher the overall quality of the connection - which results in better connections for high traffic applications, such as streaming content (audio, video, VoIP calls, etc.)"

Download: 3,482,376 bps  
Upload: 229,304 bps  
QOS: 68%  
RTT: 74 ms  
MaxPause: 92 ms

[Toast.Net](#) has several tests available, which may be particularly helpful if the connection you're trying to troubleshoot is of one particular type (an XML server will care mostly about text loads, for instance). Unfortunately it gives rather spare results unless you sign up for their premium service.

Loaded 754,928 bytes in 1.262 seconds from 1&1 server.  
Your Results: 4786 Kb

[McAfee](#) has a free Internet speedometer service, but it, too, is rather spare in its results, and doesn't give you any context for the numbers.



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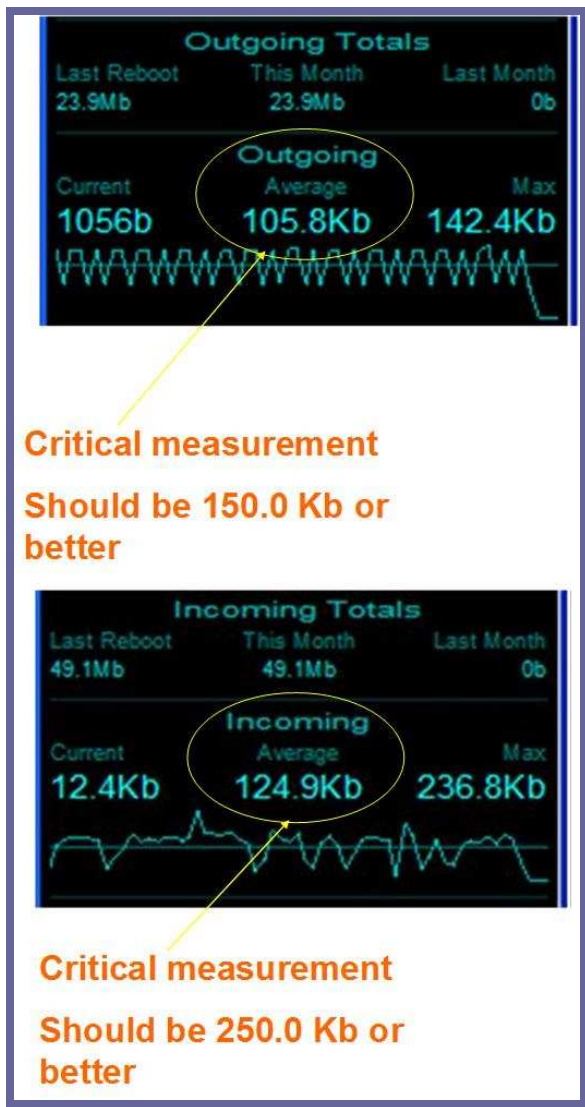
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## 5.2 Internal measurement

Internal measurement tools are ones installed on the device to be measured. These tools tend to be more reliable as they measure the packets/data going out and coming in directly from the users machine or server, and do NOT rely on some distant server.

There are a variety of tools. AliceStreet uses NetStat Live from AnalogX, for a couple of reasons. First the tool is very easy to use. Second, NetStat Live provides 3 specific measurements for both upload and download: Current, Average, and Maximum. The key measurement is **Average**, in measuring both Upload and Download speeds. This tool can be downloaded off our website at: [http://www.alicestreet.com/ASCC\\_Software/Support\\_Downloads/AnalogX.zip](http://www.alicestreet.com/ASCC_Software/Support_Downloads/AnalogX.zip) or from: <http://www.analogx.com/contents/download/network/nsl.htm>

The following example is from a recent user who was battling with poor performance. The results of NetStat Live indicated a bandwidth restriction and on further investigation it was determined the ISP was providing a service sub standard to the current offerings.



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For further information, contact your AliceStreet partner, or write Support for your region:

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