

➤ **FirstLight Client Requested Testing Procedure for Data Latency and/or Hosted VoIP Phone Call Quality Issues**

1. Within any web browser in the google search bar type: "What's my ip address?"
2. Provide copy screenshot of IP address provided

208.133.219.202
Your public IP address

3. Within any Web Browser type www.Firstlight.net/network
4. Click on Speedtest icon on page –all testing is requested to be from hard wired LAN connections.



5. Click on "Run speedtest" link

Average Download **Average Upload**

0.00

0.00

Mbit/s

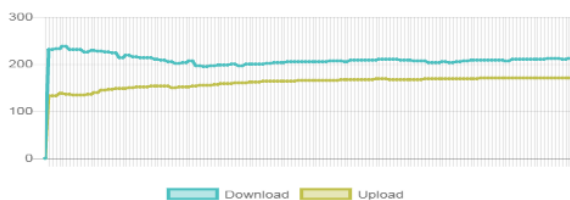
Mbit/s

Run speedtest

6. Graph will provide Average Download & Average Upload speeds –all testing is requested to be from hard wired LAN connections.

Firstlight Speedtest

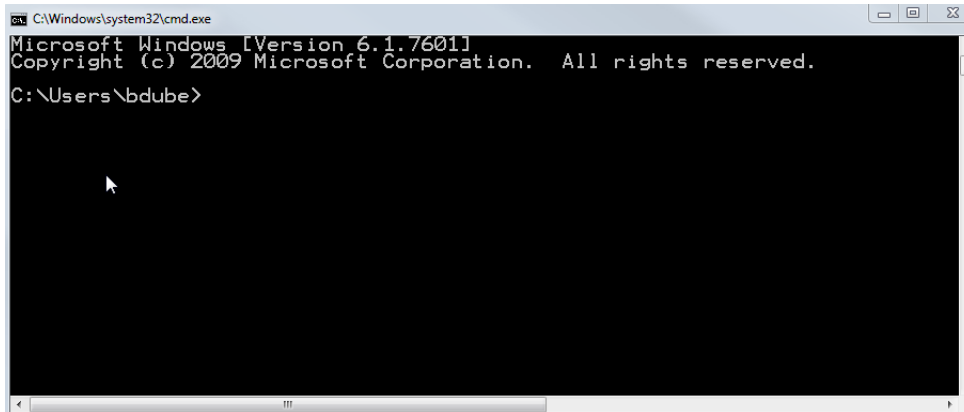
208.133.219.202



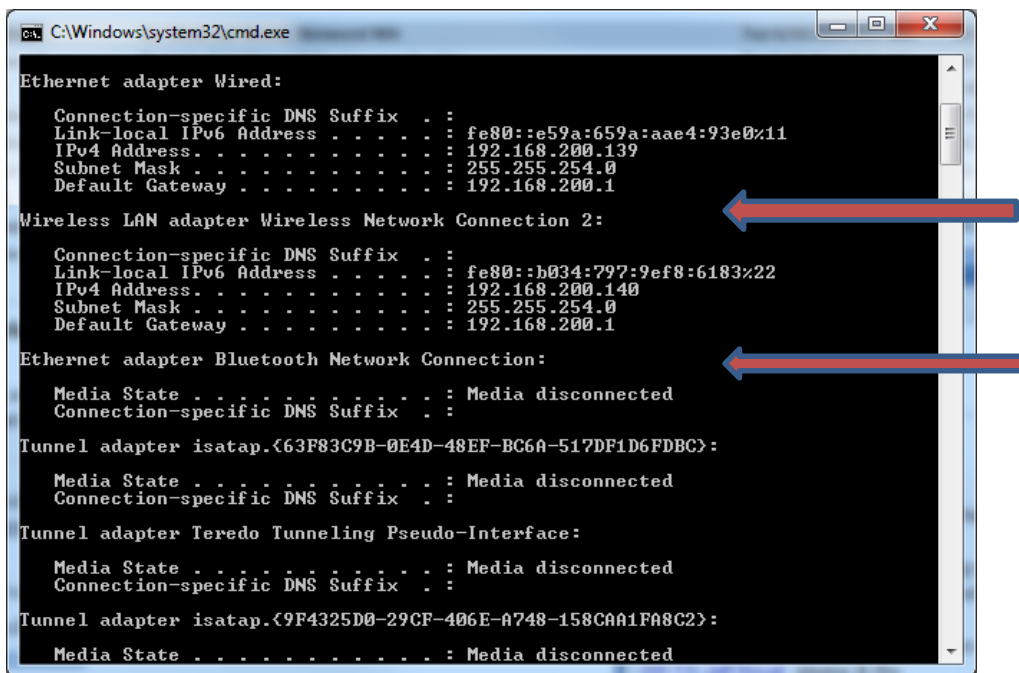
Average Download **Average Upload**
209.63 160.55
Mbit/s Mbit/s

7. Please copy & email to NOC_Teamrepair@firstlight.net for investigation. Please specify business name or provided Ticket report number within email if applicable.

- **Client requested Test procedure – Constant Ping Test instructions from Windows PC** –all testing is requested to be from hard wired Lan connections. *This test method is useful for isolating the source issue for latency or slow data. VOIP clients experiencina choann calls or loss of audio*
 1. Click on START and either type CMD in search bar or click on START and run and then type CMD and enter.
 2. You should see a window like below but specific to your PC...



3. determine what your gateway IP is by simply pulling up the DOS prompt on your PC & typing **“ipconfig”**. You will see a screenshot like this example below with your gateway IP address.



(This example shows both a **wireless adapter gateway** & **Ethernet adapter gateway**. Be sure you ping the same gateway IP or data connection that your phones are using – if unsure, check the **“network status”** on your VoIP phone menu to ensure the **“default router”** or **“gateway IP”** is the same as what your computer is using that you will run the ping test from.)

4. Enter ping, the IP address of your router, -t and press Enter. (a space between the word ping and the IP address), i.e., type **ping -t 192.168.1.1** as the default gateway.
5. Open a second DOS window and type **ping -t 72.55.232.3**

6. Open a 3rd DOS window & type ping -t 8.8.8.8

7. Type CTRL + C to stop the test(s)

- If "Packets: Sent = X, received = X, Lost = 0 (0% loss)" displays, the connection is good, and the signal successfully reached the gateway or destination ip address
- If "Packets: Sent = X, received = X, Lost = 4 (ANY AMOUNT % loss)" displays, the connection is faulty and there was a loss of packets or latency to the gateway / destination ip address
- "**Destination host unreachable**" or "**Request timed out**" error message indicates the connection is faulty and the signal did not reach the router or default gateway & would indicate an issue on the Internal LAN needing to be resolved. This should be addressed by whomever handles your internal networking such as your IT professional.

8. Please copy and paste the ping statistics in an email to NOC_Teamrepair@firstlight.net

- a) Copy by clicking on the left top corner of the DOS window and choose to edit
- b) windows snippet tool works well for this application & can be in programs & files
- c) All testing is requested to be from hard wired Lan connections- Wireless test results are not supported or investigated by Fristlight Personnel.

NOTES

Clients experiencing intermittent latency or voice quality issues can minimize all 3 DOS prompts windows and go about their day with a review the Ping test results when experiencing latency over data connections or phone calls with choppiness or loss of audio events.

If experiencing "**maximum response times over 120 MS**" this will indicate latency over your data provider needing to be addressed with your data provider & ping test results should be discussed with your Data Provider to troubleshoot properly.

If not experiencing "**maximum response times over 120 MS**" call FirstLight Repair to troubleshoot further as the issue may be within the Network or another issue within the FirstLight Network requiring further investigation.