



# How to Resolve Network/Internet Related Issues

Version 1.0

We at Gurukul Global School are always striving to improve our Online Learning Infrastructure & Curriculum, to bring world class education to our students. It has been brought to our notice that some parents are experiencing network related issues during the online teaching learning process.

## Common problems/issues faced

- Slow internet speed
- Unable to connect to the internet service
- Unable to connect to Online Classroom Session
- Video/Audio lag issues
- Video/Audio clarity issues
- Web/Desktop Client not responding
- Frequent/Infrequent disconnects
- Other network related issues
- Uploading, document sharing issues

Below are a few quick steps to resolve some of these commonly experienced issues.

## Quick steps to resolve network issues

### 1. Internet-Service related network issues

- 1.1. Please check for **any bad connection**, refer **Section A1** of this document on how to detect if you have a bad or unstable connection.

- 1.2. Once you have established that your connection is stable, you need to **check for connection speed and reliability**, refer **Section A2** for more details.
- 1.3. We recommend using a **wired/ethernet connection** for a stable internet service, refer **Section A3** of this document to ensure that your connection is stable.
- 1.4. In case you do not have an option to use a wired connection and have to rely on **Wi-Fi/4g/3g**, then refer to **Section A3** to ensure that your wireless connection is stable.
- 1.5. We advise you to use a **latest high-quality modem/router** from a good brand that **supports 5Ghz band**, more details can be found in **Section A4** of this document.
- 1.6. If you are using modem that supports 5Ghz but are not sure if you are using 2.4Ghz or 5Ghz band, then you can kindly refer to **Section A5** of this document to ensure that you are **using the recommended 5Ghz band**. Alternately you can get in touch with your internet service provider to help you properly configure your router.
- 1.7. We recommend that you **restart/reset your modem/router** before connecting to Online Classroom Session, this will ensure that most of your network problems are resolved. Please refer to document **Section A6** on how to correctly reset/restart your modem.
- 1.8. If you are still not happy with your internet speed and stability, we recommend that you **change to a more reliable internet service provider**, refer document **Section A7**. If possible, try to get a **Fiber-optic/Fiber** connection from a recognized service provider.

## 2. Computer/Device related network Issues

- 2.1. If in case your internet service is up to the mark, then you need to check if your **device is meeting the minimum requirements** and not creating a bottleneck. We recommend that you go through **Section B1** if you are using **computer/laptop** as your primary device and **Section B2** if you are using mobile/tablet as your primary device.
- 2.2. We recommend that you always try to use **wired/ethernet connection** for best results. In the case you are using Wi-Fi and your internet connection is not showing then please **check if your Wi-Fi is turned on**, you may **check Section B3** for more details.
- 2.3. If your Wi-Fi is turned on and your **device is still not connecting to the internet**, then you can try restarting your device which will most of the time solve the problem, you may refer to **Section B4** to know how to restart your device.

*If you are still experiencing network issues, then please contact our IT Cell at:*  
**[tech\\_help@gurukulglobalschool.co.in](mailto:tech_help@gurukulglobalschool.co.in)**

## A. How to fix connection related problems?

If you are having trouble connecting your device to the internet, try the steps given below.

### A1. Check for bad connection

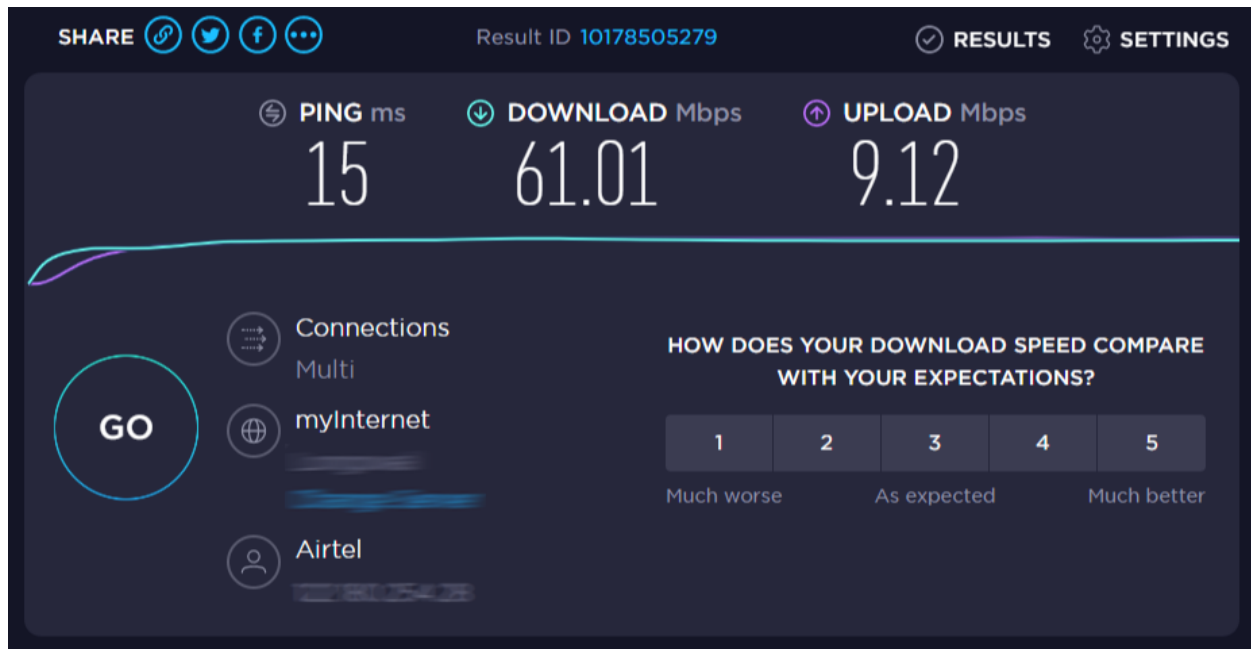
Signs of bad internet connection:

- Downloads do not start, time out, or remain at 0%.
- When things get stuck on "Loading..."
- You cannot load web pages in a browser
- Frequent disconnects
- When basic task like your emails are getting stuck
- Frequent DNS errors, signals of lost internet connection

### A2. How to test your Connection Speed/Reliability?

The first step you can take is to check and improve your Connection Speed, you can use tools like [www.speedtest.net](http://www.speedtest.net) check your Upload & Download Speed.

#### Sample Test



Remember that your **Upload Speed** is just as important as **Download Speed**. Get in touch with your service provider if your **Upload Speed is less than ideal**. We advise a wired broadband connection with **minimum of 4 Mbps of Download Speed** and **2 Mbps of Upload Speed** and **recommend 10 Mbps Download Speed** and **8 Mbps of Upload Speed** for best results.

Also, remember that not only the Upload and Download speed but the **stability of connection** is **equally important**. So, get in touch with your service provider to make sure that your connection is stable, that your internet cable has no joint and has minimum packet loss.

We recommend getting your **internet pack changed** if in case the Download and Upload Speed is not meeting the **minimum criteria**.

### A3. How to ensure internet stability?

We recommend that you attach your computer/device to **ethernet (wired internet connection)**. Also, make sure the ethernet wire is not broken and is working fine.

In case you are using **Wi-Fi/4G/3G** we **recommend** that you move to a place that has the strongest signal strength, preferably **not less than 4 bars**.

### A4. Updating your modem/router

If you are still having trouble connecting to online sessions, we recommend calling your Service Provider **to check your modem/router and its settings**.

If in case you are using an **old modem/router** then we recommend **upgrading to modem/router that supports 5Ghz band**.

### A5. How to change 2.4Ghz band to 5Ghz?

If your modem already supports 5Ghz band, then you can follow **the steps given below** to ensure that you are using the right frequency band.

### The frequency band is changed directly on the router:

1. Enter the IP address **192.168.0.1** or **192.168.1.1** in your Internet browser
2. Use your username & password, most of the times both your username & password will be set to admin
3. If in case you are unable to log in you may try these default logins  
<https://www.cleancss.com/router-default/192.168.0.1>
4. Select Wireless from the menu
5. In the 802.11 band selection field, you can select **2.4 GHz** or **5 GHz**.
6. **Click on Apply** to save the **Settings**.

## A6. How to correctly reset & restart modem/router?

It may sound simple and unnecessary, but power cycling and restarting your modem/router solves your internet problem 90% of the time. To correctly reset/restart your router you can follow the following steps

1. **Unplug the router from the electrical outlet** and make sure the lights on the router go out.
2. Wait **30 seconds**.
3. **Plug the router back** in and wait 30 seconds for all the lights to come back .

If you still have connectivity issues after you complete these steps, contact your internet service provider.

## A7. When should you change your Internet Service Provider?

If you are not satisfied with the **speed or the service** provided by your internet service provider, then we highly recommend that you change over to a new service provider. We recommend going for a reputed service provider, that is preferably offering **Fiber-optic/Fiber** service.

## B. How to Fix device related problems?

If you are still facing trouble connecting your device to the internet, try checking your device.

### B1. Check your computer (Win/Mac/Linux)

To join your Online Classroom Session, we advise using a computer that has **minimum 2.0 GHZ** processor and **4.0 GB RAM**.

For a better experience with your Online Classroom Session we **recommend** using a computer that has **a dual-core processor and 8.0 GB RAM (or higher)**.

We recommend using latest versions of **Windows 8.1 or Windows 10**, if in case your using Mac we recommend using **Mac OS X 10.11 El Capitan or later**, if in case you are using Linux based machine then we recommend **Ubuntu 16.04 LTS**. Also, always ensure that you are **using the latest audio & video drivers**.

### B2. Check your device (Android/iOS)



To join Online Classroom Session **via tablet or mobile device**, we advise using either an **Android Compatible** mobile/tablets or an **iOS enabled device**.

For Android Compatible mobile/tablet **we recommend** that you use the **latest non-beta version of Android**. If you are unable to use the newest version, then we would advise not to go below the **previous three officially released versions** of Android.


If in case you are using an **iOS enabled device like iPhone, iPad, and iPod touch**, then we recommend using the **latest version of iOS**, or else we suggest **you limit to the two most recent major versions of iOS**. When a new major version of iOS is released, the new version of iOS and the previous version are officially supported.

We also recommend using **iPhone 7 or later, iPad 2018 (6th generation) or later**, and the **iPod touch 2019 (7th generation)** for the best experience.

## B3. How to check that Wi-Fi is turned on the device and you are connected

1. Open your **Settings app**  > "**Wireless and Networks**" or "**Connections**" > tap **Wi-Fi**. Depending on your device, these options may be different.
2. Turn **Wi-Fi** on.
3. Find the **Wi-Fi connection indicator** at the top of your screen .
4. If this is not displayed, **or none of the bars are filled in**, you may be out of **range of a Wi-Fi** network.
5. **Move closer to the router**, check to see if you have a **stronger Wi-Fi connection**, and try again.

## B4. Device refuses to connect to internet

1. **Restart your device**, be it mobile device or a computer. It might sound simple, but sometimes that is all it takes to fix a bad connection.
2. If restarting does not work, switch between Wi-Fi and mobile data:
  - Open your **Settings app**  > "**Wireless & networks**" or "**Connections**". Depending on your device, these options may be different.
  - Turn **Wi-Fi off and mobile data on**, and check to see if there is a difference.
  - If not, turn **mobile data off and Wi-Fi on** and see if that works.

*If you are still experiencing network issues, then please contact our IT Cell at:*  
**[tech\\_help@gurukulglobalschool.co.in](mailto:tech_help@gurukulglobalschool.co.in)**