

Ultimate Guide: How to fix Wifi / Packet Loss / Slow Internet

In this article, I'll show you the ultimate guide in fixing common wifi problems such as packet loss, intermittent Wifi connection and overall slow internet speed. There could be a number of possible common fixes or solution for this broad area of concern hopefully one will help fix your wifi network to get back up and running as optimal as possible.

1. Slow Wifi / Slow Internet

Devices connected on your wifi router share the same so called bandwidth/speed on your network. Each users that browse a website, stream a video on YouTube or watch Netflix consume download and upload speed.

To check your current download and upload speed to diagnose this issue, you can conduct a speed test using these popular sites:

- [Run Speed Test](#) by 00kla
- [Run Speed Test](#) by Fast.com (Powered by Netflix)

In the article of Nicole George "[Frequently asked questions on internet speeds – What speed do you need?](#)", the recommended speed by the Federal Communications Commissions (FCC) recommends speeds of 12-25 Mbps for families that have multiple internet users or for frequent online streaming.

With that being said, after running the speedtests by either from 00kla or Fast.com tests, you can check whether you are getting sufficient internet speeds. If you're not getting the recommended wifi speed try the following:

The Quick Fix for Slow Wi-Fi Internet Speeds:

- Try disconnecting all devices first connected on your Wi-Fi network.
- Restart your modem for (15-30 seconds) to refresh the IP configuration.
- Close any downloads, updates, or disable smartphone updates.
- Check if there are any unauthorized devices connected on your router (typically routers have a webpage interface where you can check the connected list of devices)



The screenshot shows the 'Internet Traffic' page of a router's web interface. At the top, it displays 'WAN IP: 192.168.1.230'. Below this, there are tabs for 'All' and 'Interface'. A table titled 'All list' is shown, with columns for 'Internet', 'Icon', 'Clients Name', 'Client IP address', 'Clients MAC Address', 'Interface', 'Tx Rate (Mbps)', 'Rx Rate (Mbps)', and 'Access time'. The table contains six rows of data, including an ASUS device and several BIOSSTAR Microtech Int'l Corp devices. An 'Export' button is located below the table. At the bottom of the interface, there are sections for 'VPN' and 'Firewall', and a temperature gauge showing 176°F and 115°F.

Internet	Icon	Clients Name	Client IP address	Clients MAC Address	Interface	Tx Rate (Mbps)	Rx Rate (Mbps)	Access time
Internet	ASUS	ASUS	192.168.0.14 Static	AC:22:08:DC:87:76	Internet	-	-	
Internet	Icon	B4:2E:99:C7:10:87	192.168.0.23 Static	B4:2E:99:C7:10:87	Internet	-	-	
Internet	Icon	BIOSTAR Microtech Int'l Corp	192.168.0.25 Static	B8:97:5A:F0:8F:20	Internet	-	-	
Internet	Icon	BIOSTAR Microtech Int'l Corp	192.168.0.26 Static	B8:97:5A:F0:95:3E	Internet	-	-	
Internet	Icon	BIOSTAR Microtech Int'l Corp	192.168.0.28 Static	B8:97:5A:F0:9A:08	Internet	-	-	
Internet	Icon	HUAWEI_P30-ca8fae5dfb7744	192.168.0.47 DHCP	54:92:09:F1:D1:82	Internet	-	-	

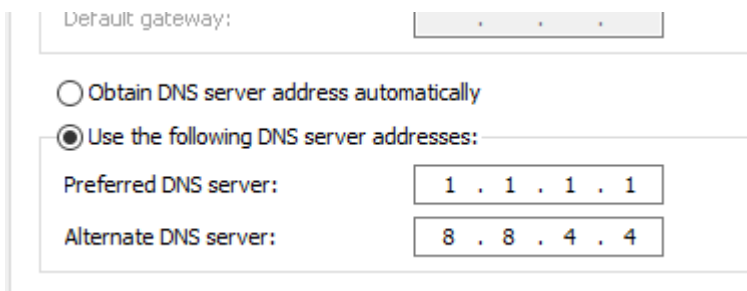
All Connected Clients on a ASUS RTN18-U Router

If all above fails, you can try contacting your Internet Service Provider (ISP) and ask them if they are conducting any maintenance, or having network issues that may be the cause of your slow Wi-Fi speed issue.

2. DNS Server is Not Responding

Two common things may cause this issue that pops up on your Windows computer "DNS Server is not responding" either your ISP network default DNS server went offline or you have a misconfigured custom DNS server set on your network.

To fix this: You can go to your taskbar, right-click your Network Icon > Open Network & Internet Settings, click on *Change Adapter Options* and locate your network adapter / wifi adapter then right click on it and click on Properties. Look for the *Internet Protocol Version 4 (IPv4)* and click on properties. If you have the “Obtain DNS server address automatically” checked, try choosing the “Use the following DNS Server addresses” and enter the following:



The image shows a screenshot of the Windows Network Adapter Properties dialog box. At the top, there is a field for 'Default gateway' with a placeholder ' . . .'. Below this, there are two radio button options: 'Obtain DNS server address automatically' (which is unselected) and 'Use the following DNS server addresses:' (which is selected). Under the selected option, there are two input fields: 'Preferred DNS server:' with the value '1 . 1 . 1 . 1' and 'Alternate DNS server:' with the value '8 . 8 . 4 . 4'.

Preferred DNS: Cloudflare Alternate DNS: Google DNS

And hit the ok button and restart your computer. However if you have an existing records under that particular option and you get the *DNS Server is Not Responding* error, try the other way around and select the “Obtain DNS Server address automatically” and restart your computer.

3. Wifi Keeps Disconnecting

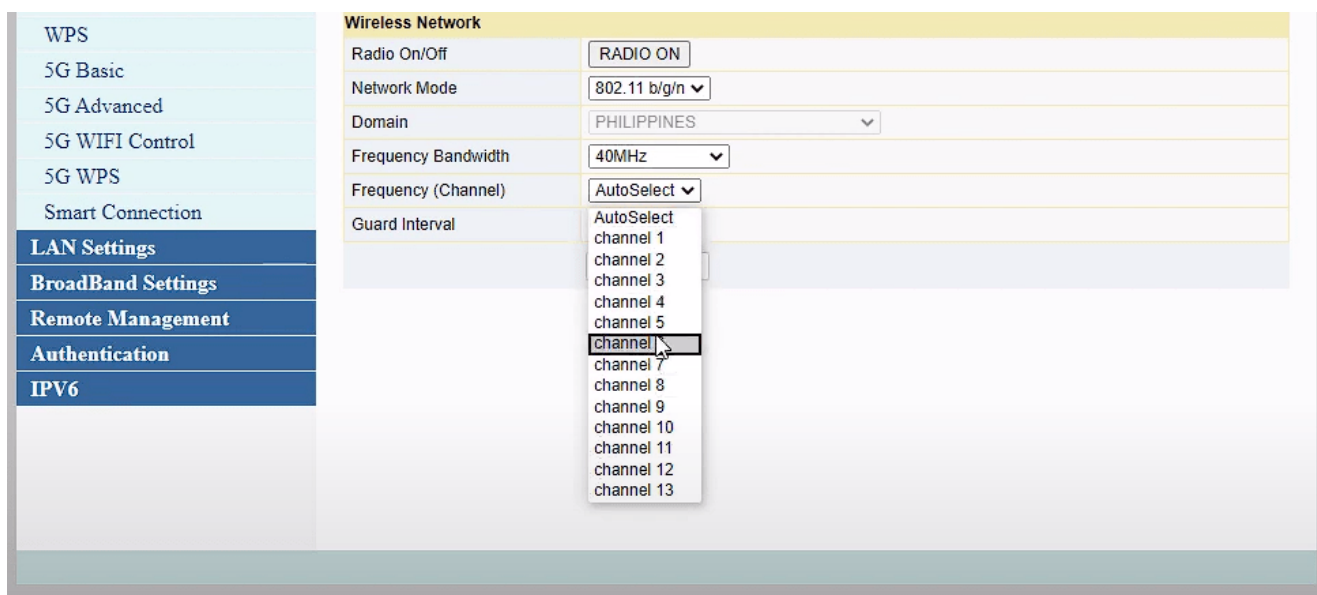
One common cause of this particular wifi issue is an overlapping wifi channel on your area. Having overlapping Wi-Fi channels can result to intermittent wifi connection hence there are three common ways to fix this issue.

To fix this: First, you can try simple restarting your router. Turn off your router for at least 1 minute before turning it back up. Restarting your router will result to a configuration “refresh” wherein your router may try to find a different wifi channel to broadcast your wifi ssid to prevent interference between networks.

If that didn't work, you can try manually moving your wifi

router if that permits you to move your router and see if that fixes the issue.

Otherwise, you can configure manually your wifi network (2.4Ghz or 5Ghz) wifi to use a specific channel only either 1,6 or 11 channel to prevent any overlapping frequency with other networks. Also, if you are in a congested area try keeping the frequency bandwidth to only 20 MHz.



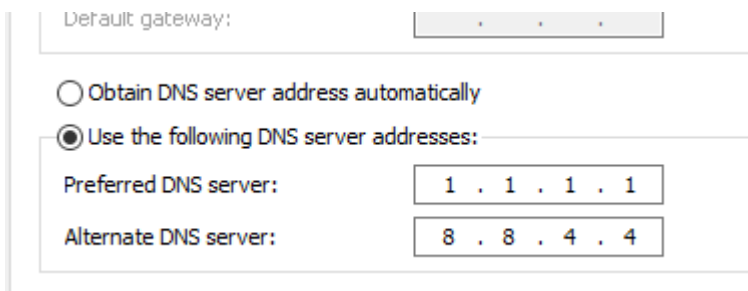
Wifi Frequency Channel Configuration – AN5506-04-FA ONU Fibr Router

4. Some Websites Don't Load

Websites can sometimes fail to load due to various limitations set by your ISP, system configuration or country-wide restrictions.

Quick Fix: To quickly troubleshoot and fix this wifi problem, try changing first the DNS settings on your computer as shown in the 2nd step on this article. Go to your taskbar, right-click your Network Icon > Open Network & Internet Settings, click on *Change Adapter Options* and locate your network adapter / wifi adapter then right click on it and click on Properties. Look for the *Internet Protocol Version 4 (IPv4)* and click on properties. If you have the "Obtain DNS server

address automatically” checked, try choosing the “Use the following DNS Server addresses” and enter the following:



The image shows a network configuration window. At the top, there is a field for 'Default gateway' with a placeholder '...' and a button. Below this, there are two radio button options: 'Obtain DNS server address automatically' (which is unselected) and 'Use the following DNS server addresses:' (which is selected). Under the selected option, there are two input fields: 'Preferred DNS server:' with the value '1 . 1 . 1 . 1' and 'Alternate DNS server:' with the value '8 . 8 . 4 . 4'.

Preferred DNS: Cloudflare Alternate DNS: Google DNS

Once done, close everything up and open up a command prompt by going to your start menu and search for Command Prompt and right click on it and run it as administrator.

Type in the command:

```
ipconfig /flushdns
```

Restart your computer, and see if that fixes your problem. If that wouldn't still fix websites not loading up on your network, another thing that you can try is to use free VPN services. VPN or Virtual Private Networks masks your IP address to prevent internet censorship (eg. Website blocking, and ISP site monitoring, etc) and see if that fixes your problem.

If none fixed your problem, you can check if the website itself is offline for everyone using the [this](#) tool.