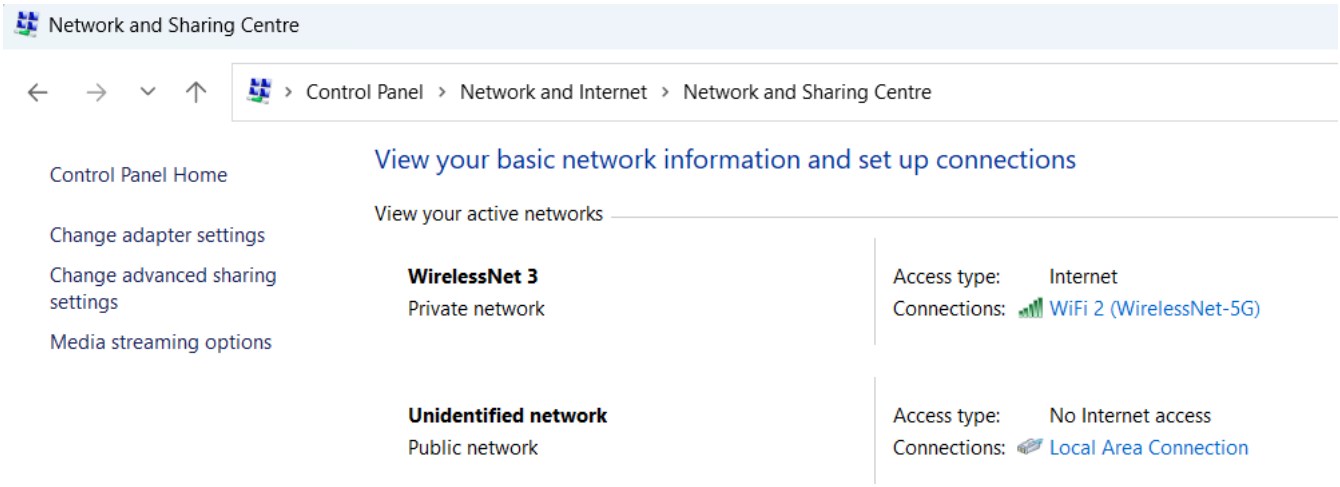
Checking Hardware Compatibility for Higher Internet Speeds

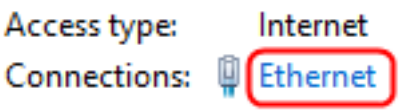
Are you on a high-speed or Gigabit plan but not getting the speeds you expected? Here’s how to check if your devices and equipment support higher speeds — whether you’re using a wired or Wi-Fi connection.

A. Wired (LAN) Connection

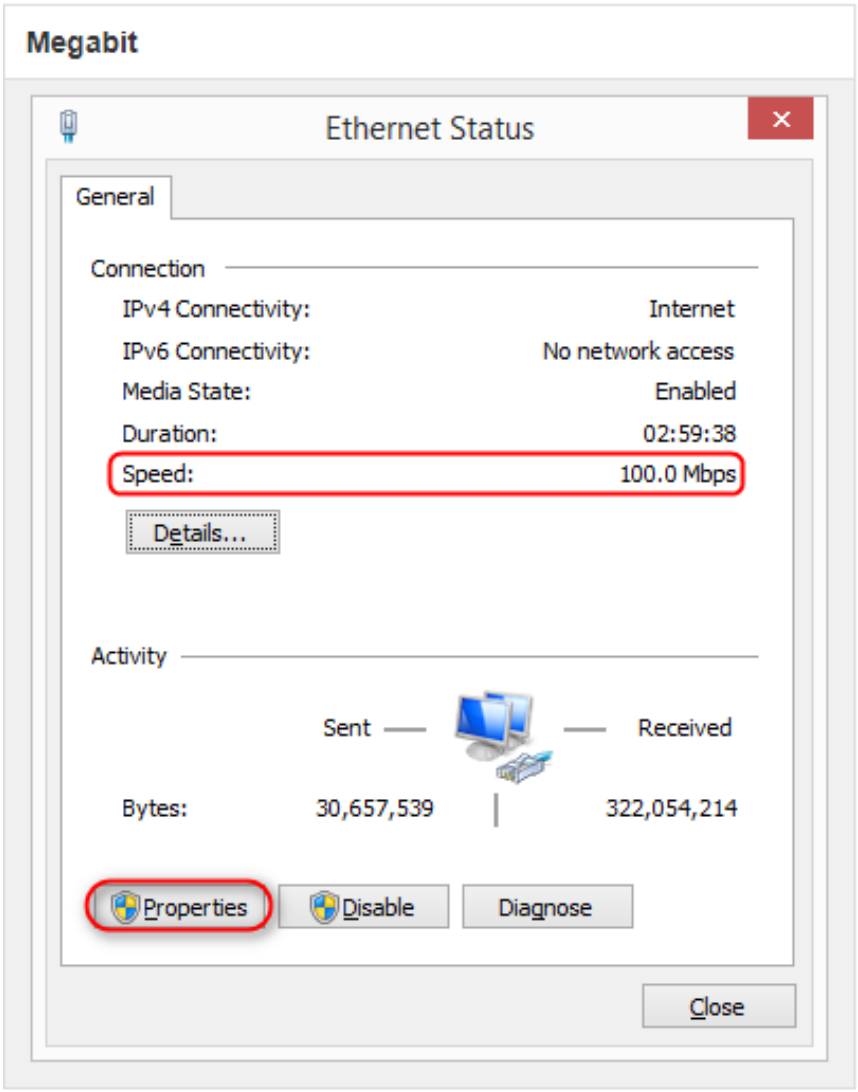
A wired connection provides the most accurate speed test results, as it connects directly to the modem or router.

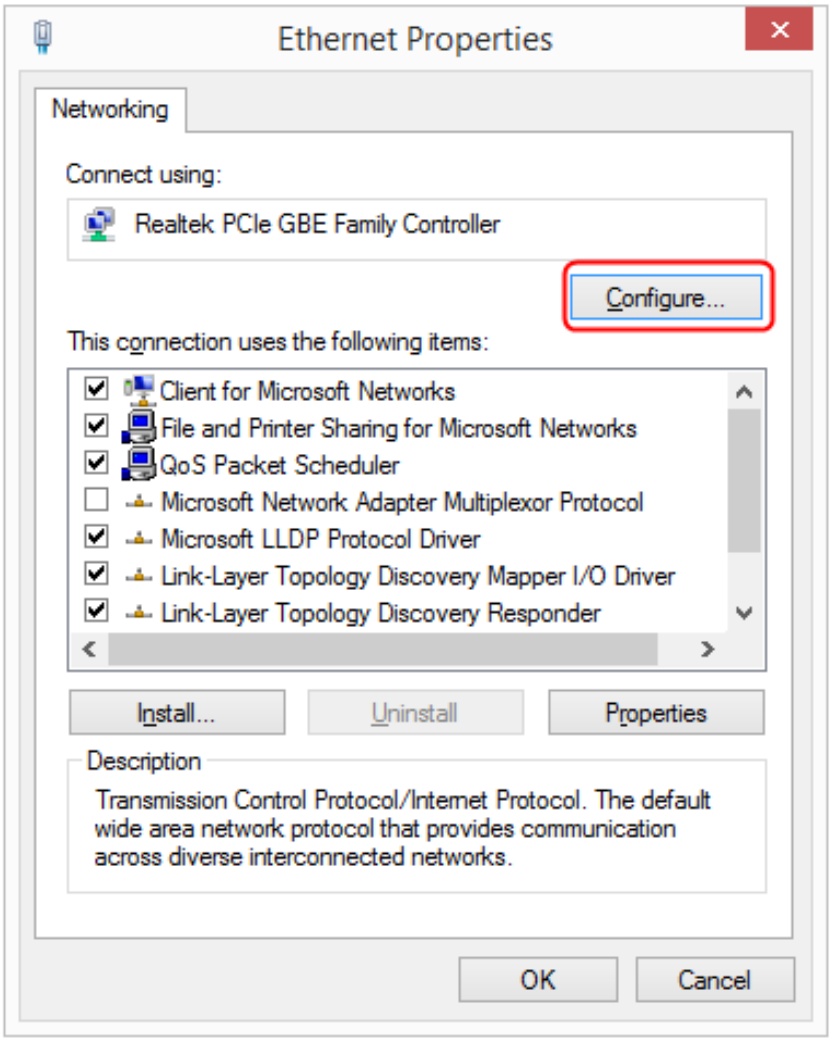
Check the Computer’s Network Speed

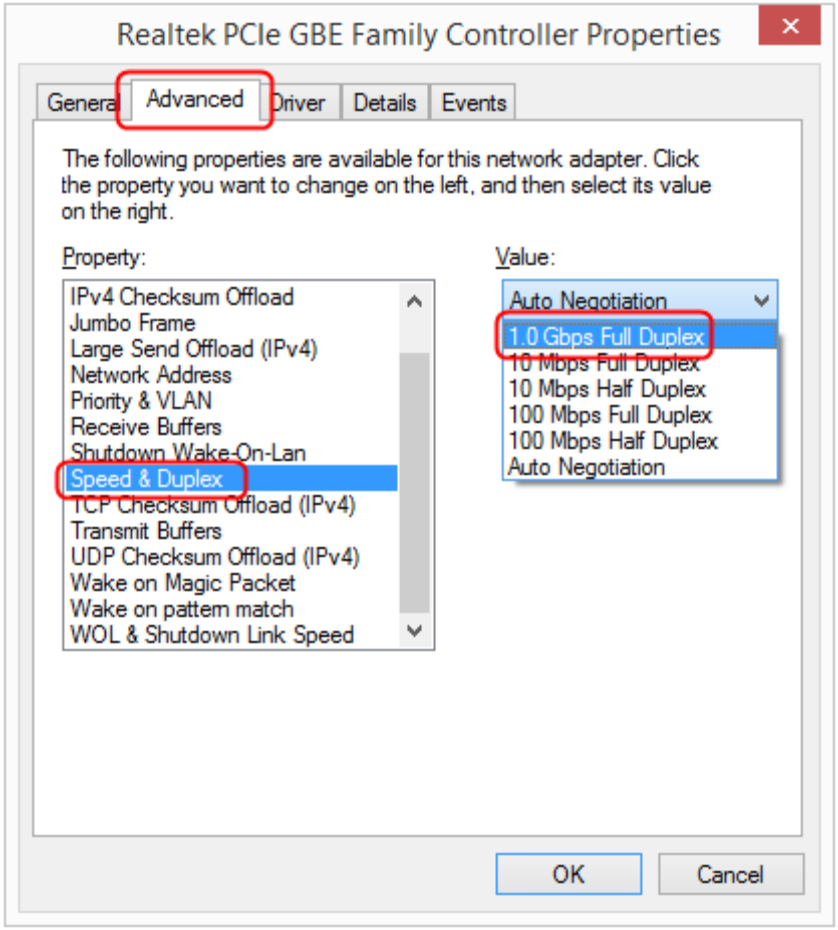

Network and Sharing Centre
Control Panel › Network and Internet › Network and Sharing Centre
Control Panel Home
Change adapter settings
Change advanced sharing settings
Media streaming options
View your basic network information and set up connections
View your active networks
WirelessNet 3
Private network
Access type: Internet
Connections: WiFi 2 (WirelessNet-5G)
Unidentified network
Public network
Access type: No Internet access
Connections: Local Area Connection

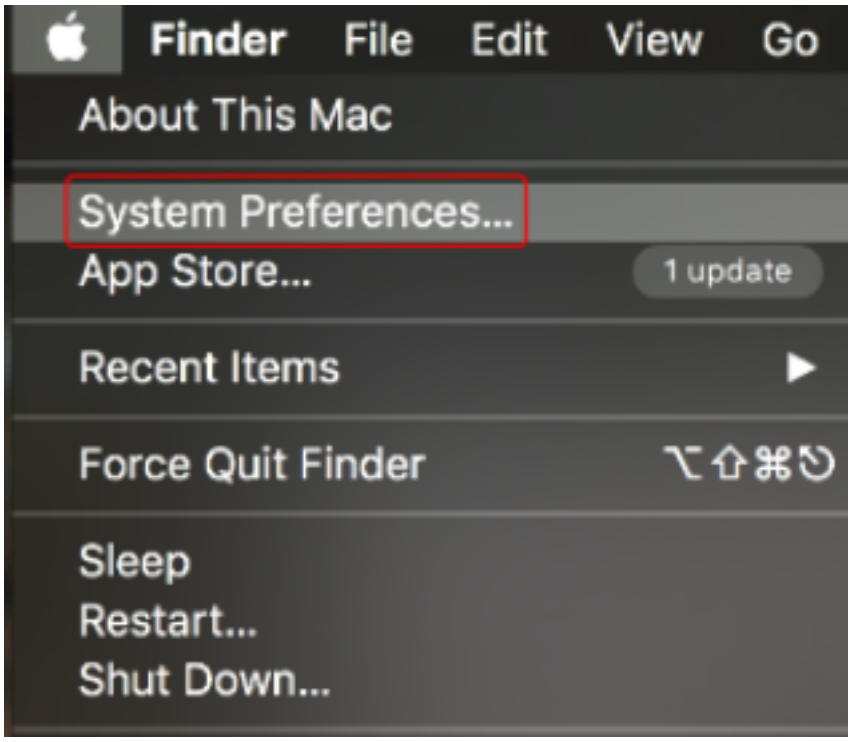

Access type: Internet
Connections: Ethernet

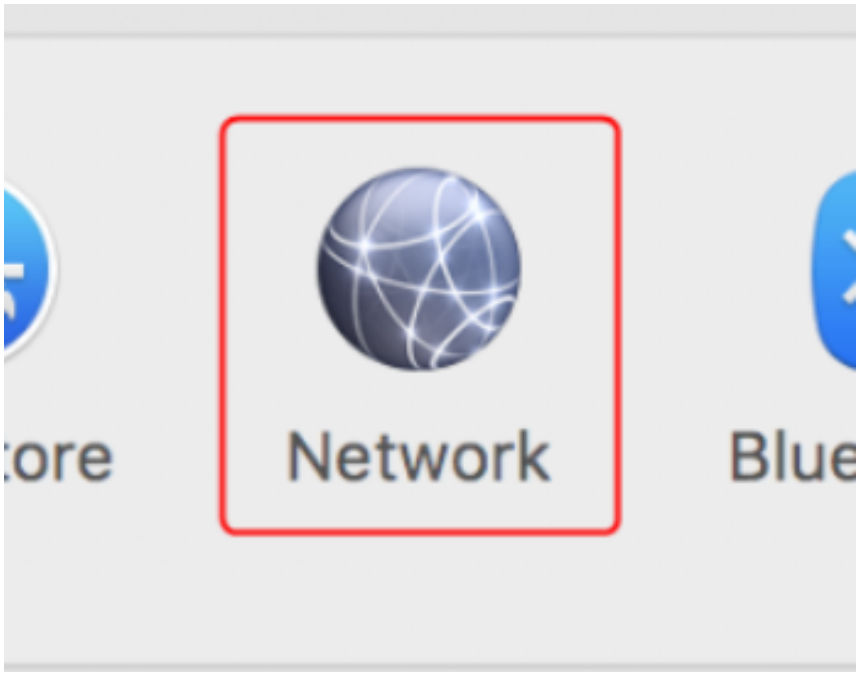
Megabit

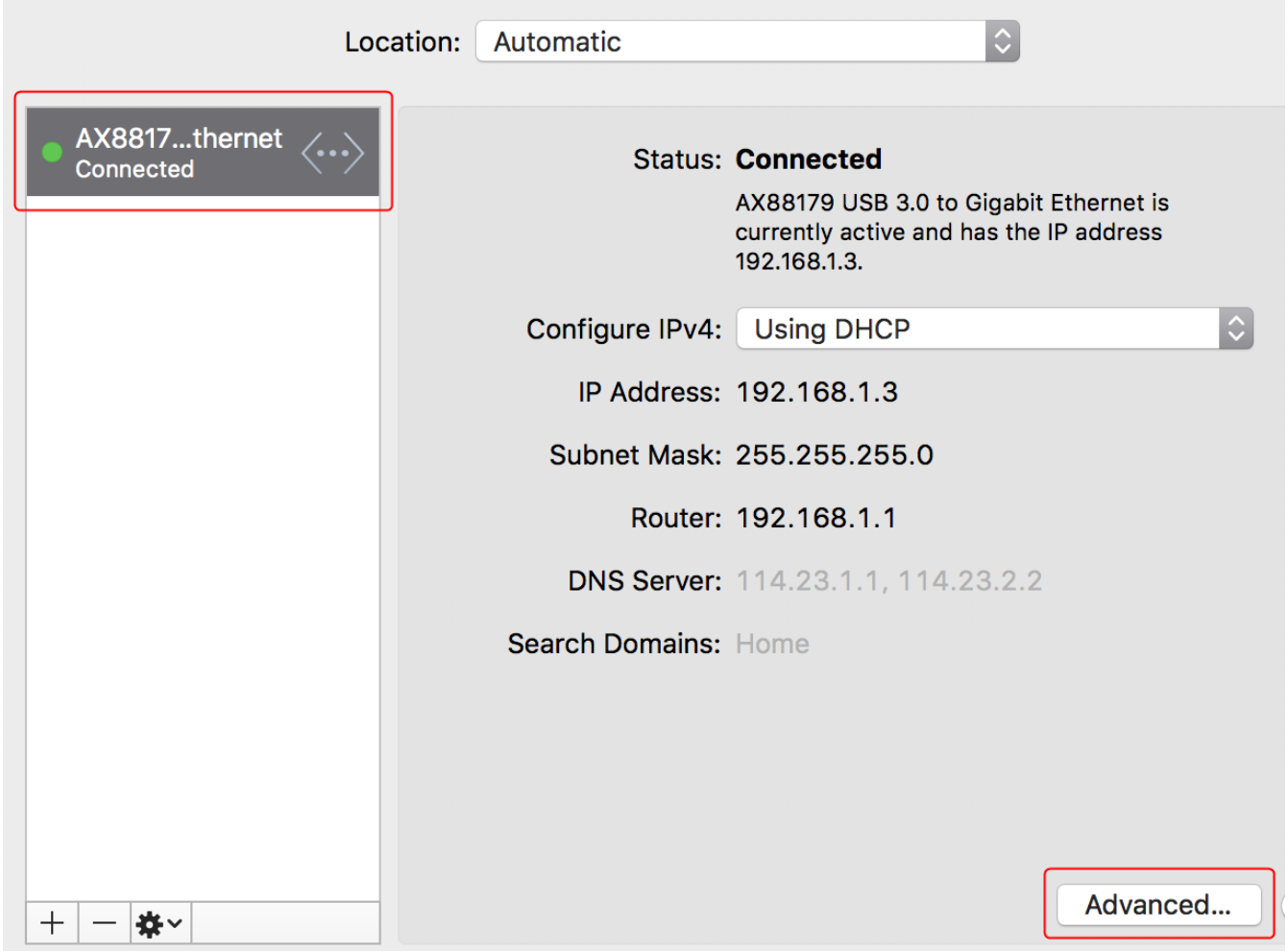

Ethernet Status
General
Connection
IPv4 Connectivity: Internet
IPv6 Connectivity: No network access
Media State: Enabled
Duration: 02:59:38
Speed: 100.0 Mbps
Details...
Activity
Sent
Received
Bytes: 30,657,539 322,054,214
Properties
Disable
Diagnose
Close


Ethernet Properties
Networking
Connect using:
Realtek PCIe GBE Family Controller
Configure...
This connection uses the following items:
Client for Microsoft Networks
File and Printer Sharing for Microsoft Networks
QoS Packet Scheduler
Microsoft Network Adapter Multiplexor Protocol
Microsoft LLDP Protocol Driver
Link-Layer Topology Discovery Mapper I/O Driver
Link-Layer Topology Discovery Responder
Install...
Uninstall
Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK
Cancel


Realtek PCIe GBE Family Controller Properties
General
Advanced
Driver
Details
Events
The following properties are available for this network adapter. Click the property you want to change on the left, and then select its value on the right.
Property:
IPv4 Checksum Offload
Jumbo Frame
Large Send Offload (IPv4)
Network Address
Priority & VLAN
Receive Buffers
Shutdown Wake-On-Lan
Speed & Duplex
TCP Checksum Offload (IPv4)
Transmit Buffers
UDP Checksum Offload (IPv4)
Wake on Magic Packet
Wake on pattern match
WOL & Shutdown Link Speed
Value:
Auto Negotiation
1.0 Gbps Full Duplex
10 Mbps Full Duplex
10 Mbps Half Duplex
100 Mbps Full Duplex
100 Mbps Half Duplex
Auto Negotiation
OK
Cancel

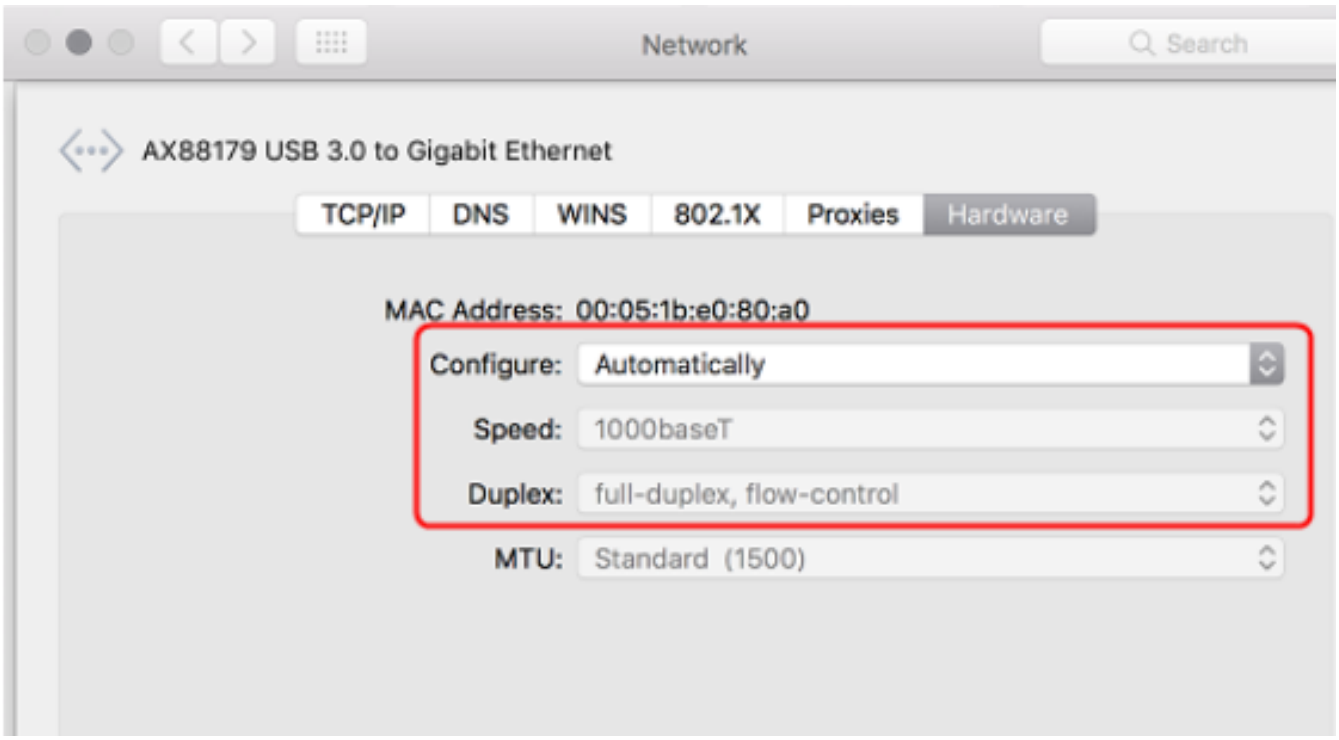

Finder
File
Edit
View
Go
About This Mac
System Preferences...
App Store...
1 update
Recent Items
Force Quit Finder
Sleep
Restart...
Shut Down...


Network



Select the Hardware tab and check the Speed field:

- If the speed is lower than 1000baseT, see if it can be manually adjusted.
- If 1000baseT is not listed as an option, the device does not support gigabit connection.



Check Your Cable Compatibility

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[redacted]	[redacted]

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Check Your Modem’s Capability

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[redacted]

- [redacted]
- [redacted]

[redacted]

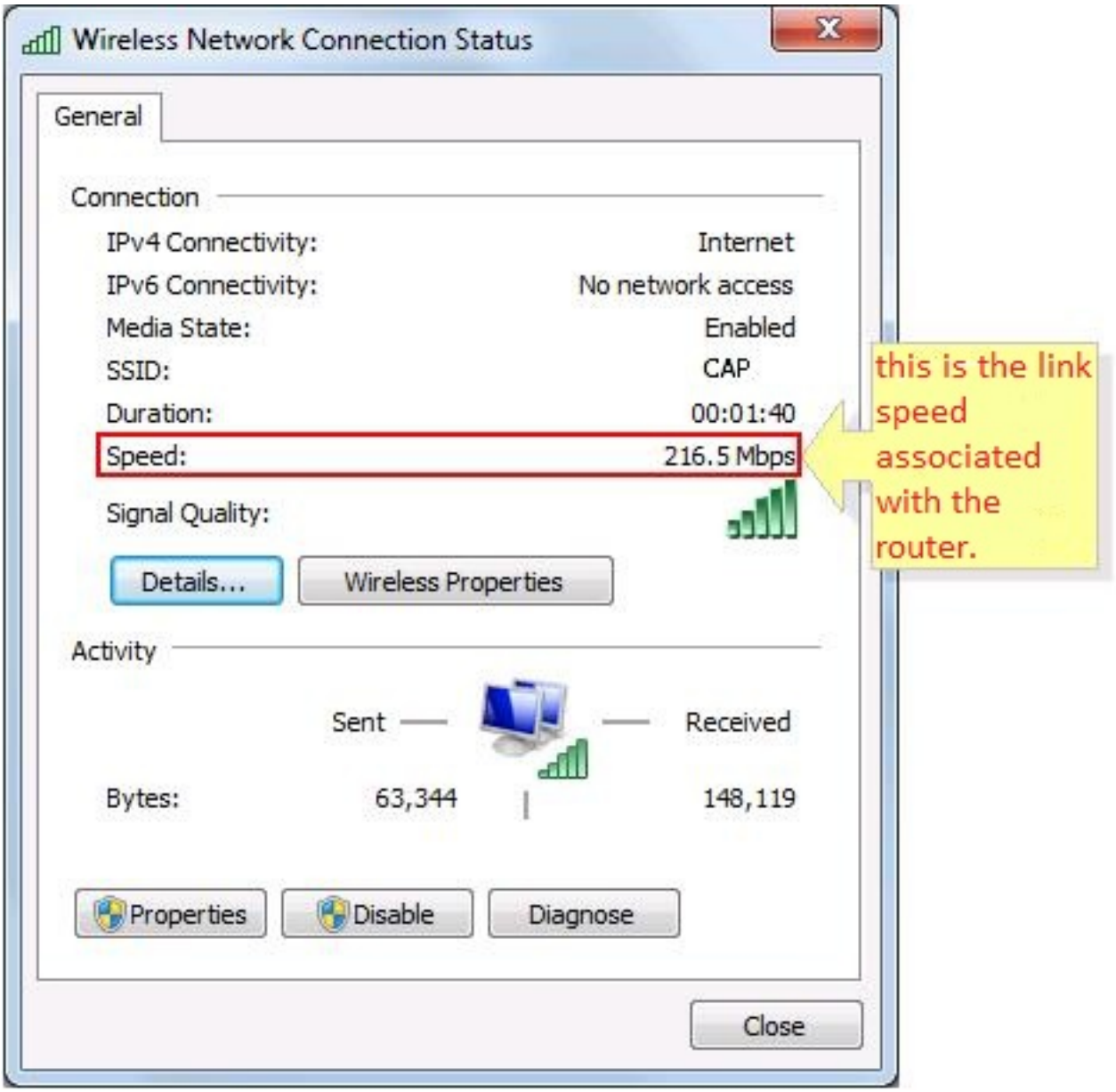
B. Wi-Fi (Wireless) Connection

Note: Wi-Fi speeds depend on your device’s wireless capability and the Wi-Fi standard your modem supports (e.g., Wi-Fi 4, 5, or 6).

Check the Attainable Speed of the Connected Device

Windows (Laptop/PC):

- Press Windows Key + R, type ncpa.cpl, and press Enter.
- Right-click Wi-Fi/Wireless Network Connection ? select Status.



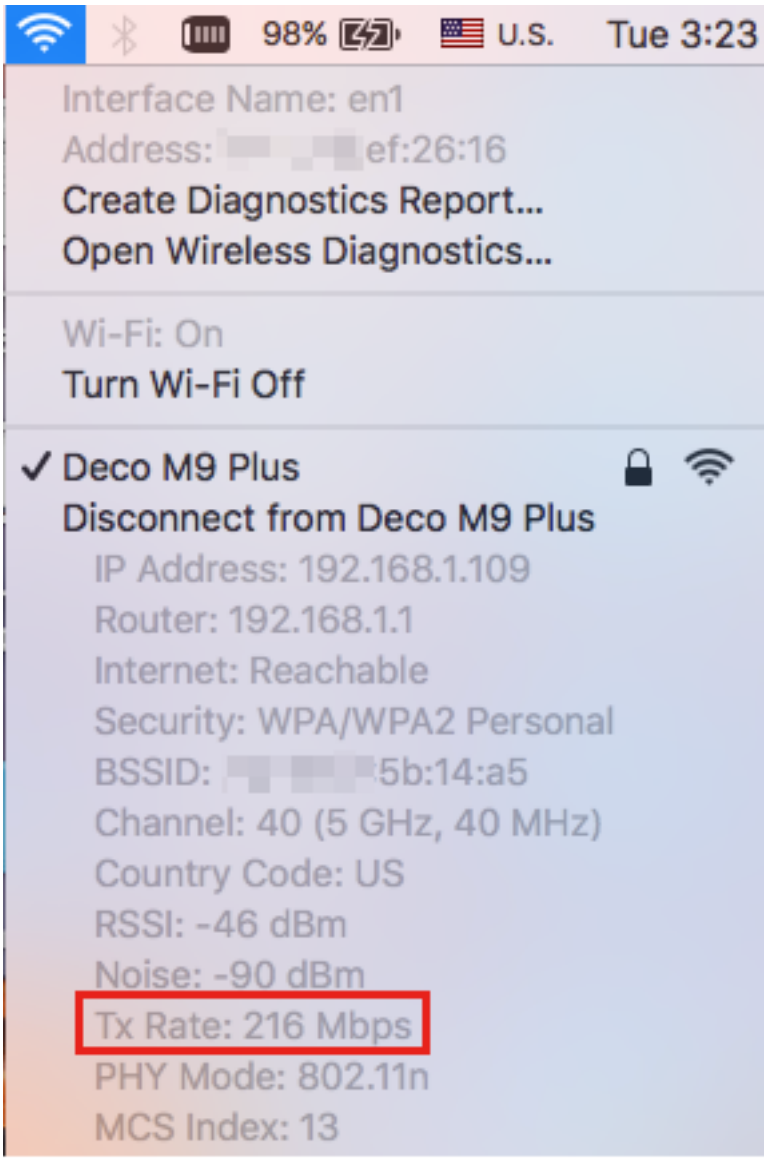
The Speed shown is your link speed (maximum connection rate between your device and modem).

Alternative path:

Go to Settings > Network and Sharing Center > Change adapter options, left-click the Wi-Fi adapter to view the link speed.

Mac OS:

Hold the Option key on the keyboard and click the Wi-Fi icon on the top menu bar.

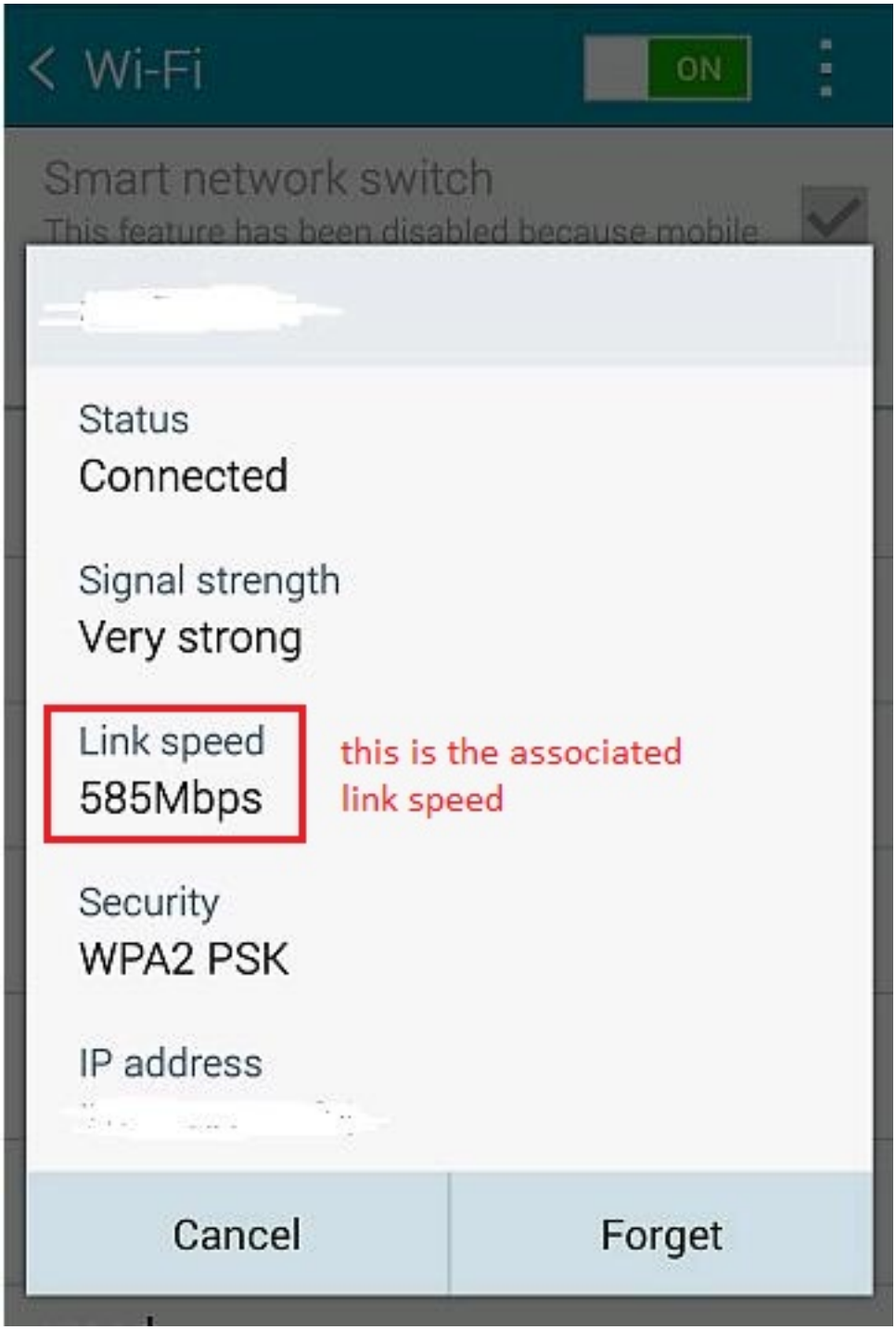


Look for Tx Rate — this indicates the Wi-Fi link speed.

Android:

Go to Settings > Wi-Fi, then tap the network you’re currently connected to.

The link speed or connection speed will be displayed.



Note:

Wi-Fi speeds are generally lower than wired speeds due to signal interference, distance, and network congestion.

For the most accurate speed test, use a wired (LAN) connection when possible.

Still Experiencing Slow Speeds?

If all your equipment supports gigabit speeds but you're still experiencing slow performance, try using a different Ethernet port or cable and restarting your modem and computer.

If the issue continues, please

Online URL:
https://articles.spintel.net.au/article/checking-hardware-compatibility-for-higher-internet-speeds.html