WAVLINK

see the world

USB-C 10 Gigabit Ethernet Adapter

Model: WL-NWU343G

@WavlinkOfficial
@WavlinkTechSupport

Table of contents:

About This Guide

This guide serves as a companion to the Quick Installation Guide for your wired USB product. The Quick Installation Guide provides essential steps for immediate setup, while this document offers detailed explanations of product features and advanced configuration options.

Please note that product functionality may vary slightly depending on your specific model, software version, geographic region, language, and connected devices. Screenshots, parameters, and descriptions in this guide are for illustrative purposes only.

Conventions

In this guide the following conventions are used :

Convention	Description
<u>Underlined</u>	Underlined words or phrases are hyperlinks. You can click to redirect to a website or a specific section.
Teal	The content and text that needs to be emphasized on the web page is the theme color `#1D428A` , including menus, items, buttons, etc.
Note:	Critical reminders to prevent operational errors or functionality issues.
Tips:	Best practices or optimization suggestions for enhanced performance.

More Info

The latest driver, firmware and utilities are available from the Download Center at **WAVLINK SUPPORT** .

Included in your product packaging or available digitally via the link above.

If you encounter any issues, please don't hesitate to email **contact@wavlink.com** /**techsupport@wavlink.com** / **postsales@wavlink.com** to provide feedbacks or contact online customer service, thank you !

Performance Disclaimer

The maximum transfer speeds stated for this product are based on theoretical limits of USB specifications (e.g., USB 2.0/3.0/3.1 Gen 1/Gen 2). Actual performance may vary due to:

Device limitations: Host system performance, driver compatibility, and connected device capabilities.

Environmental factors: USB cable quality, length, electromagnetic interference, and port power delivery.

Network/software conditions: Operating system overhead, background processes, and concurrent data transfers.

Wired connections are generally more stable than wireless alternatives, but performance is not guaranteed and depends on the factors listed above.

Information in this document is subject to change without notice.The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage,including but not limited to special, incidental, consequential, or other damage.

Safety Instructions

Always read the safety instructions carefully.

Keep this Quick Start Guide for future reference.

Keep this equipment away from humidity.

If any of the following situation arises, get the equipment checked by a service technician:

⬜The equipment has been exposed to moisture.

⬜The equipment has been dropped and damaged.

⬜The equipment has an obvious sign of breakage.

⬜The equipment has not been working well or you cannot get it work according to Quick start Guide.

Copyright Statement

WEEE Directive & Product Disposal

At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

Overview

LED1

USB-C Port

RJ45 10G
Ethernet Port
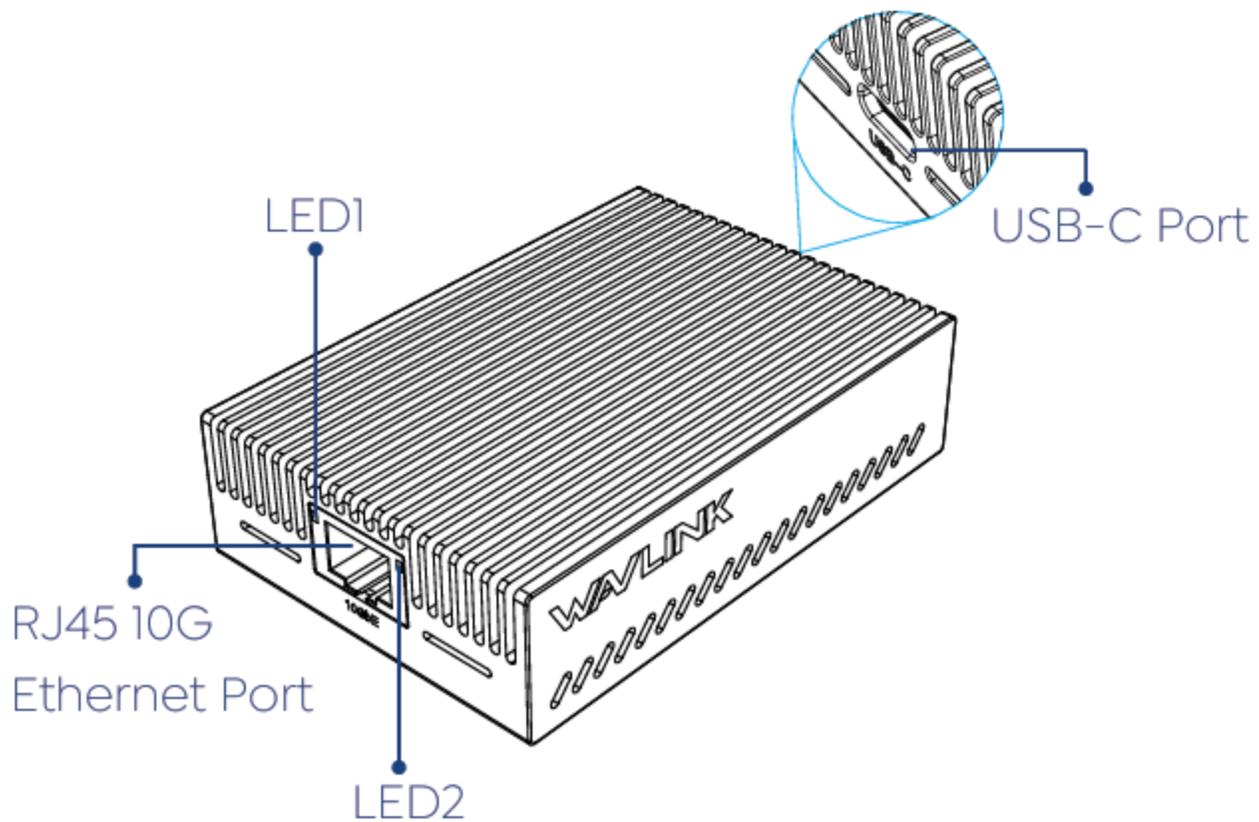
LED2

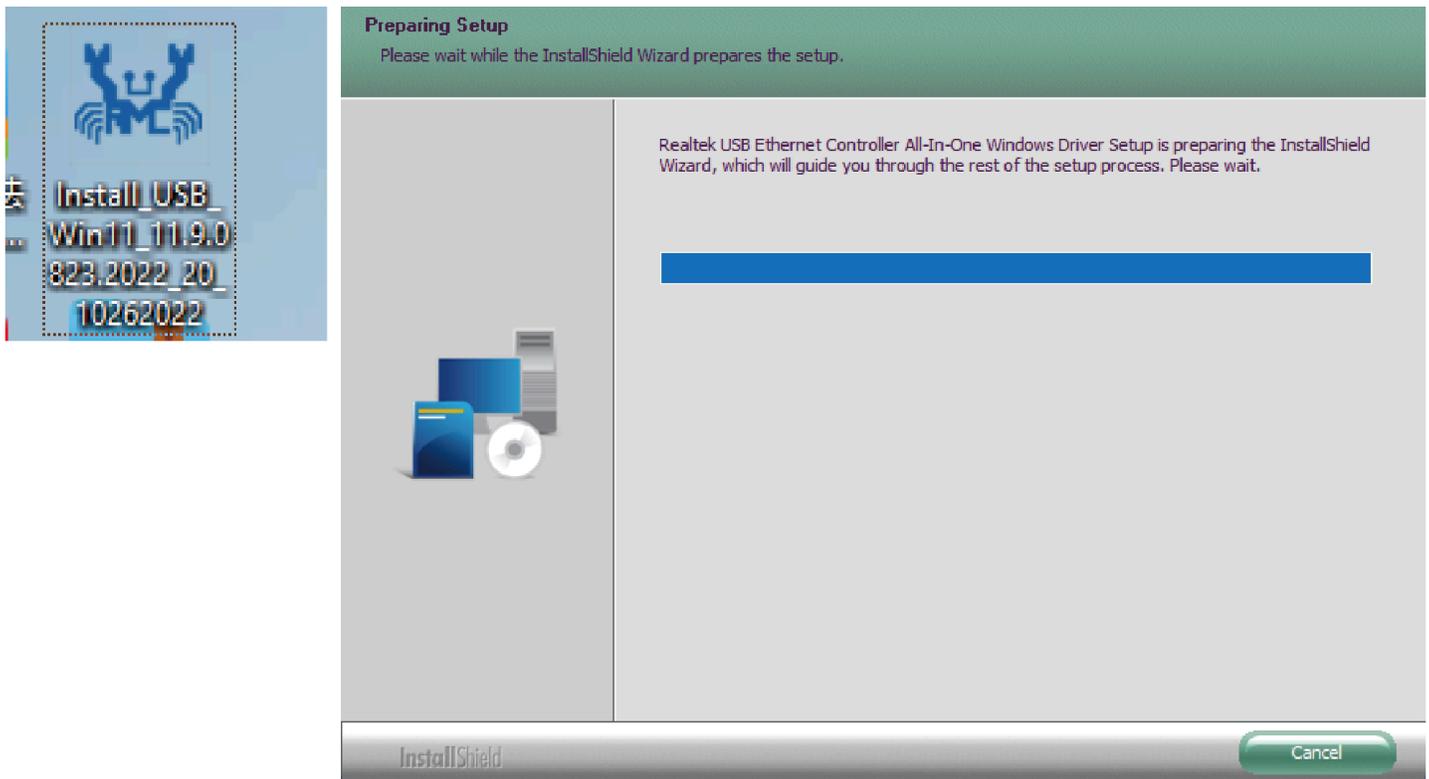| LED	Color&State	Description
Link (LED1)	Green, Solid	The connection is active at a 10Gbps speed.
	Orange, Solid	The connection is active at speeds of 5G/2.5G/ 1G/100M/10M.
ACT(LED2)	Green, Solid	No data.
	Green, Flashing	Data is being transferred.

Chapter 2 Driver Installation

This chapter introduces the steps of driver installation.
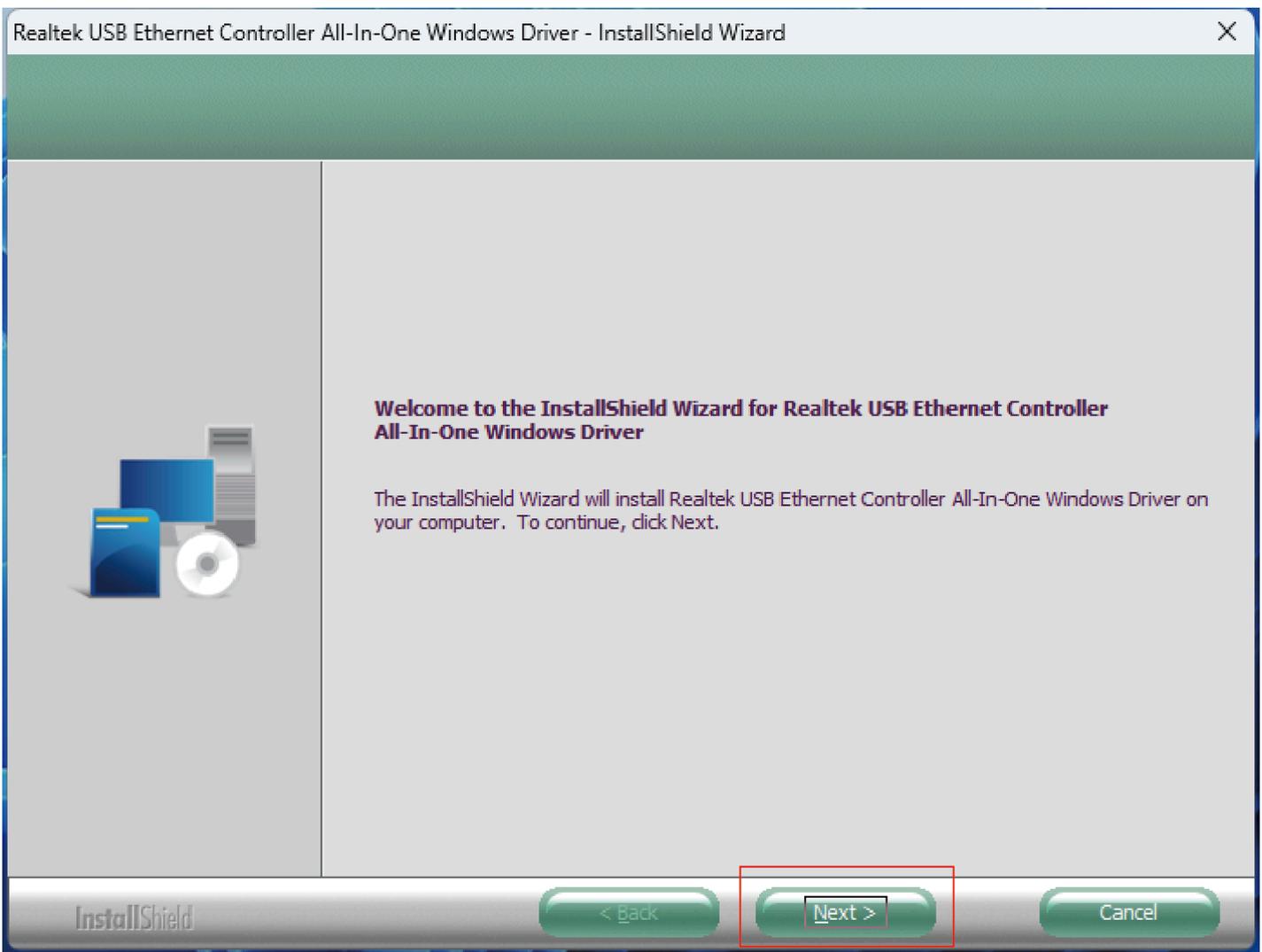
- For Windows

- Jumbo Frames Configuration

For Windows, it is Plug and Play. Driver auto-installation is allowed. If the Network port of this Dock can't be recognized, please visit **www.wavlink.com/en_us/WL-NWU343G** or **www.wavlink.com > SUPPORT > Driver > PC Peripherals > WL-NWU343G** to download the driver file and manually install it.

For Windows

1. Locate the downloaded folder and unzip the file to the desktop, please select **Yes** if your computer asks your permission, then double-click the **Driver icon** on the desktop.

2. Click **Next** to continue the installation process.

Realtek USB Ethernet Controller All-In-One Windows Driver - InstallShield Wizard

Welcome to the InstallShield Wizard for Realtek USB Ethernet Controller All-In-One Windows Driver

The InstallShield Wizard will install Realtek USB Ethernet Controller All-In-One Windows Driver on your computer. To continue, click Next.

InstallShield

< Back   Next >   Cancel

3. Select **Install** to begin the installation. If you want to review or change any of your installation settings, click **Back** or **Cancel** to exit the wizard.

Realtek USB Ethernet Controller All-In-One Windows Driver - InstallShield Wizard ☒

Ready to Install the Program
The wizard is ready to begin installation.

Click Install to begin the installation.

If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
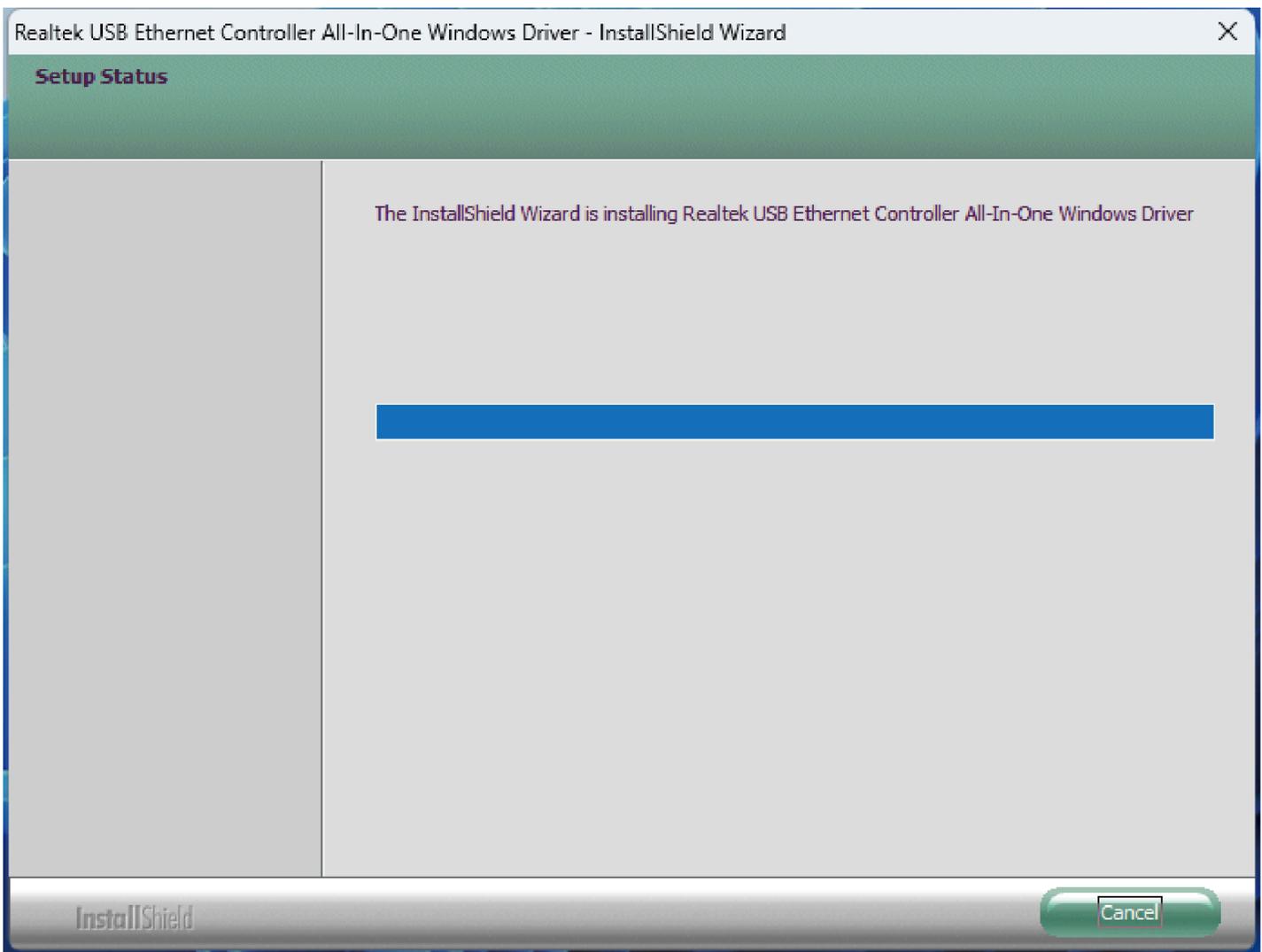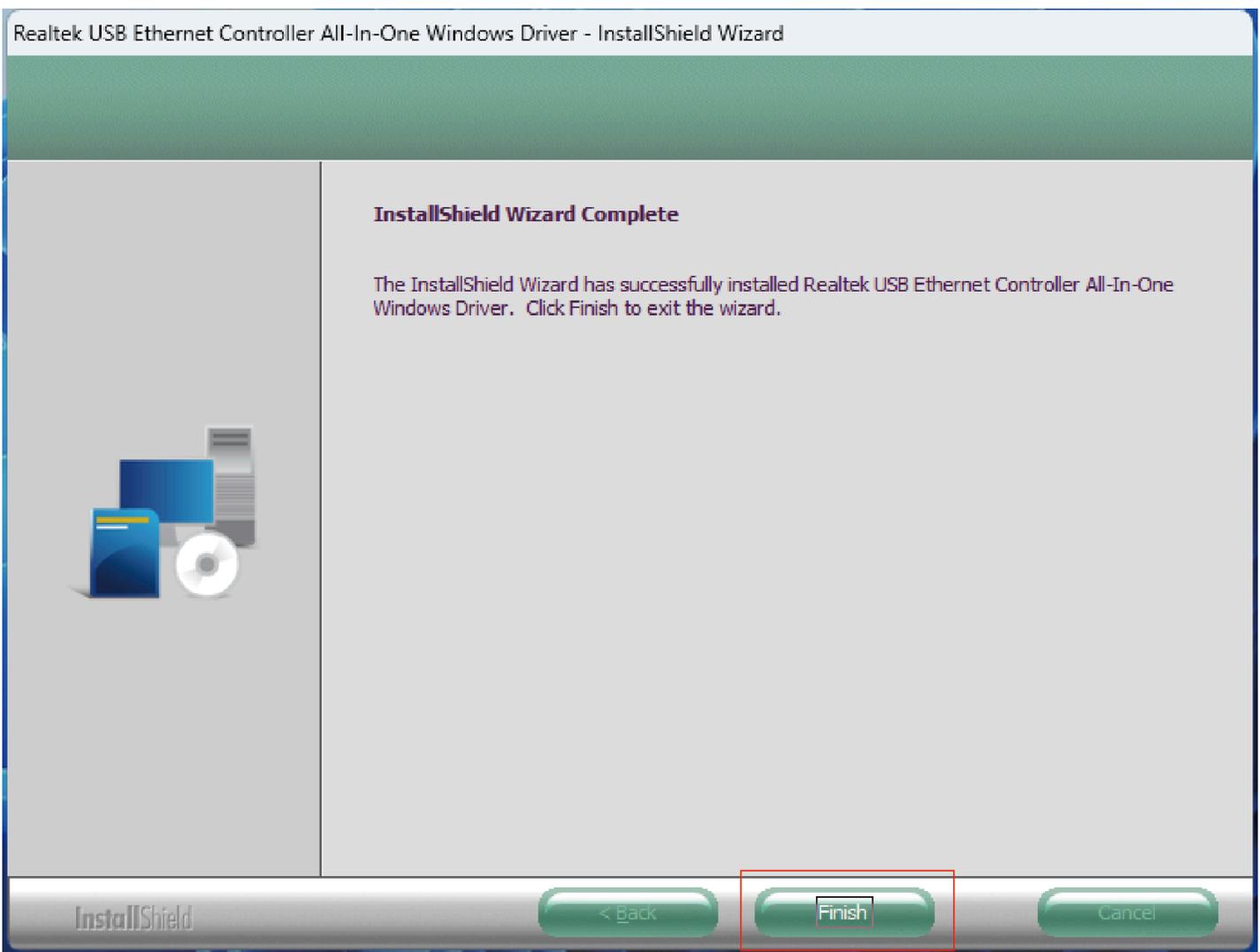
InstallShield
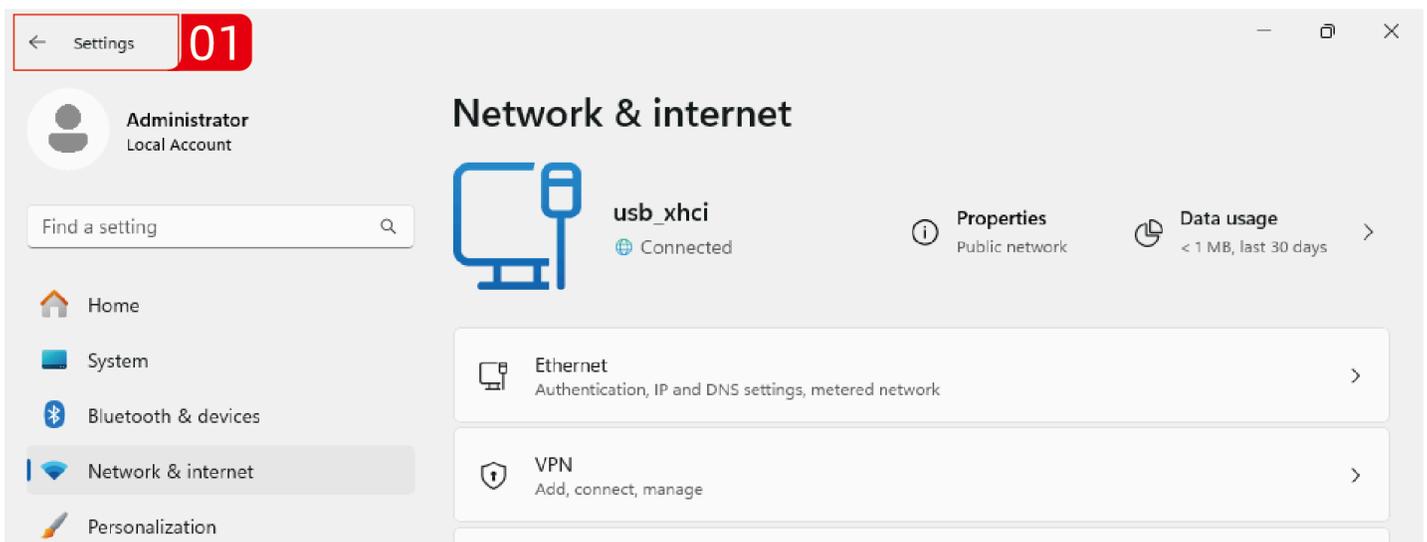
< Back   Install   Cancel

4. After the Driver is successfully installed, select **Finish** to exit the wizard.
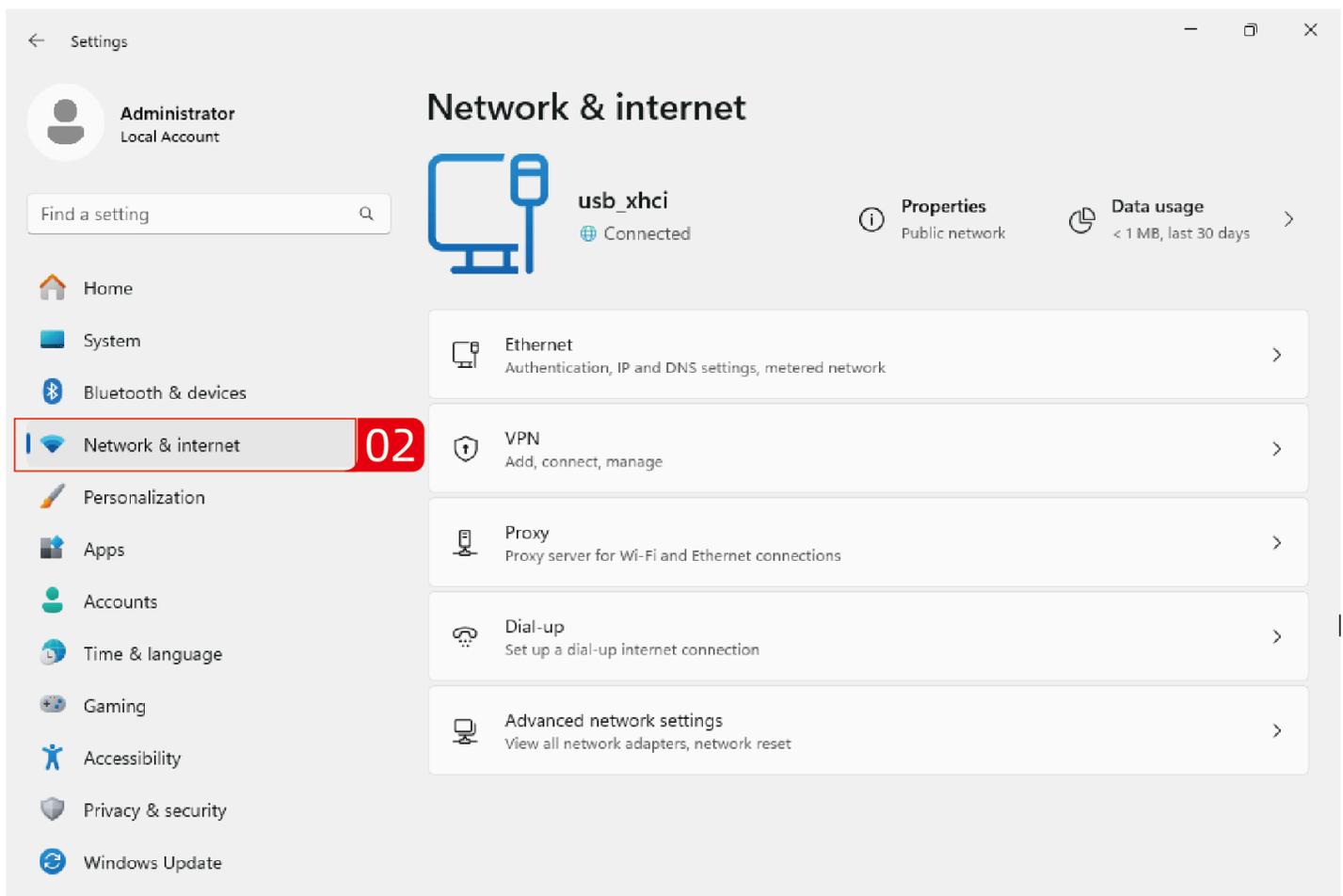
Jumbo Frames Configuration

To achieve the performance of the 2.5G/5G/10G network card, you need to enable and configure the Jumbo Frames for the 2.5G/5G/10G network card.
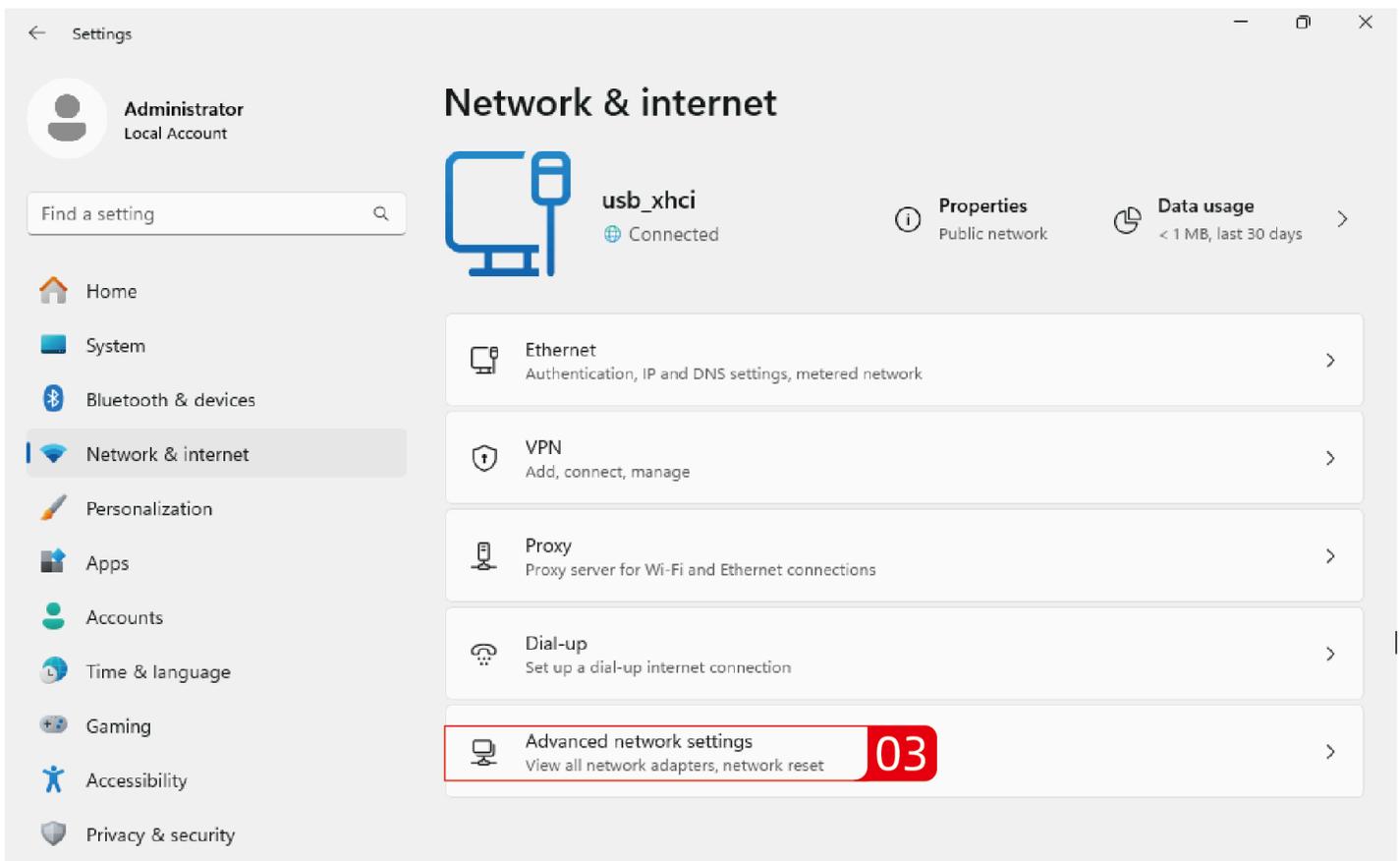
1. In Windows, open **Settings**.
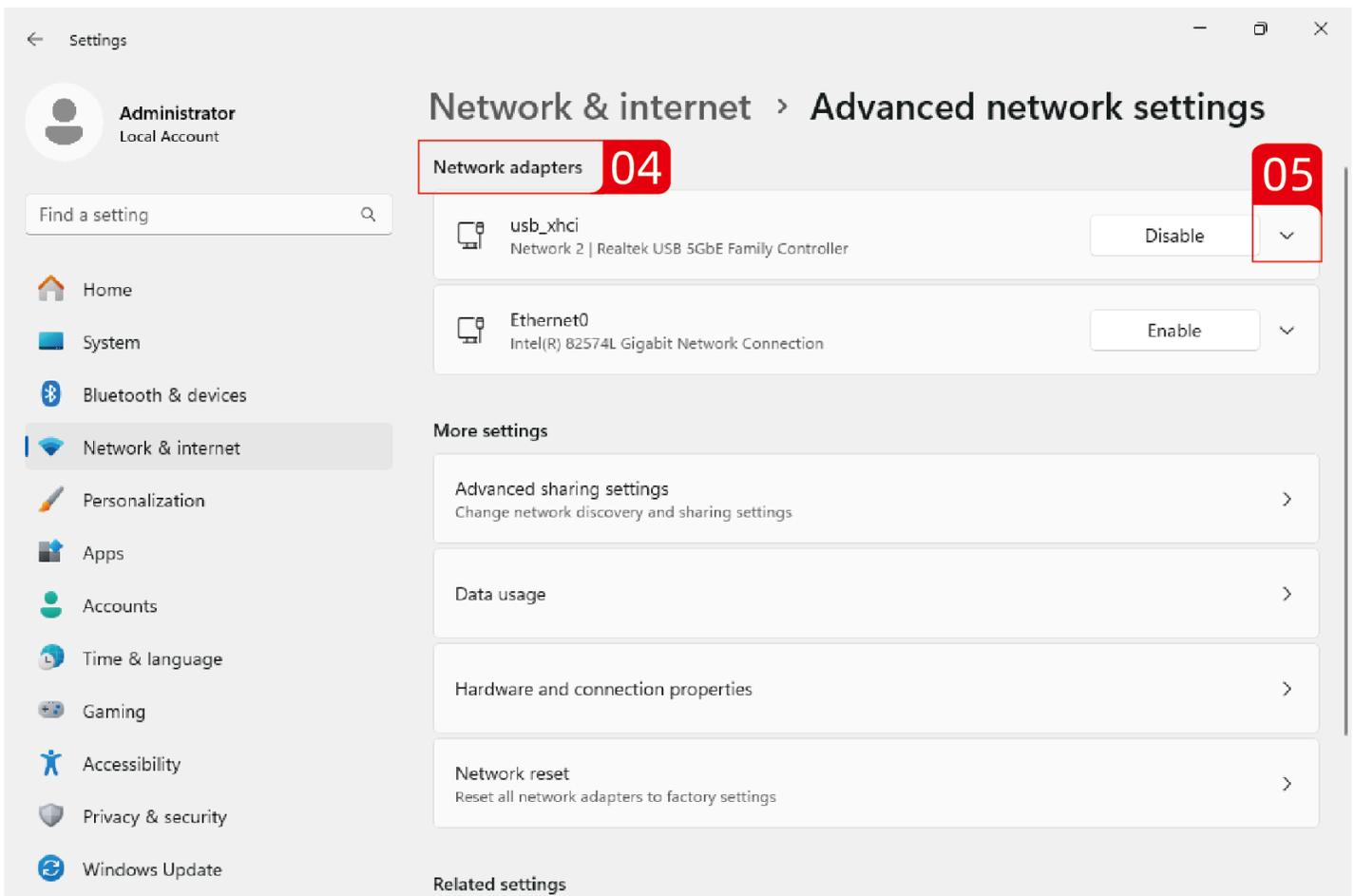
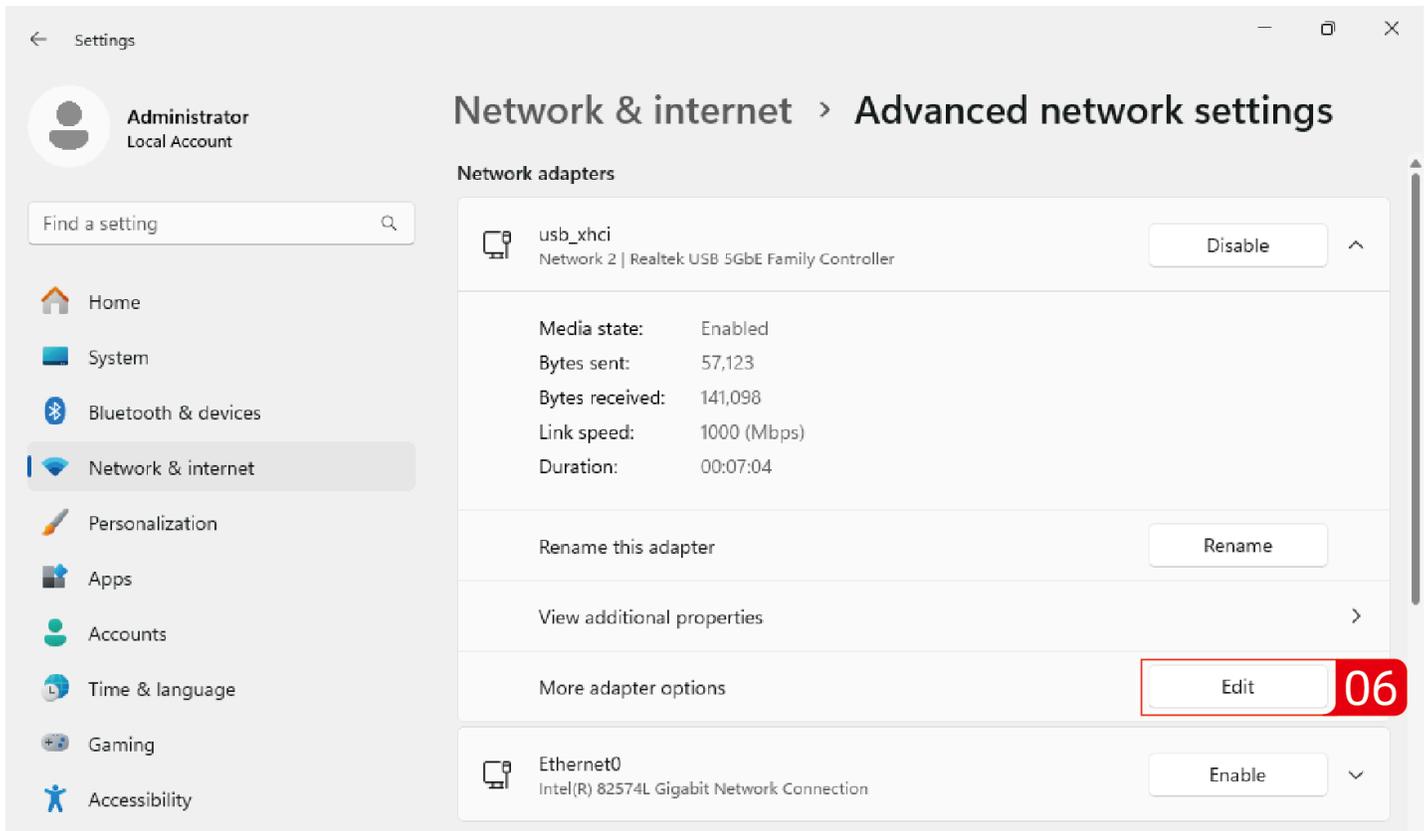2. Click on **Network & internet**.

3. Click on **Advanced network settings**.

4. Locate the **Network adapters** and find the 10G network card, then click the drop-down arrow icon on the right.

5. Locate **More adapter options**, and click on **Edit** to configure the properties of the network adapter.

6. Click on **Configure...**, then choose **Advanced**.

usb_xhci Properties

×

Networking

Connect using:

Realtek USB 5GbE Family Controller

Configure... **07**

This connection uses the following items:

- ☑ Client for Microsoft Networks
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ Internet Protocol Version 4 (TCP/IPv4)
- ☐ Microsoft Network Adapter Multiplexor Protocol
- ☑ Microsoft LLDP Protocol Driver
- ☑ Internet Protocol Version 6 (TCP/IPv6)

Install...   Uninstall   Properties

Description

Allows your computer to access resources on a Microsoft network.

OK   Cancel

Realtek USB 5GbE Family Controller Properties   ✕

| General | Advanced **08** | Details | Events | Power Management |

Realtek USB 5GbE Family Controller

Device type: Network adapters

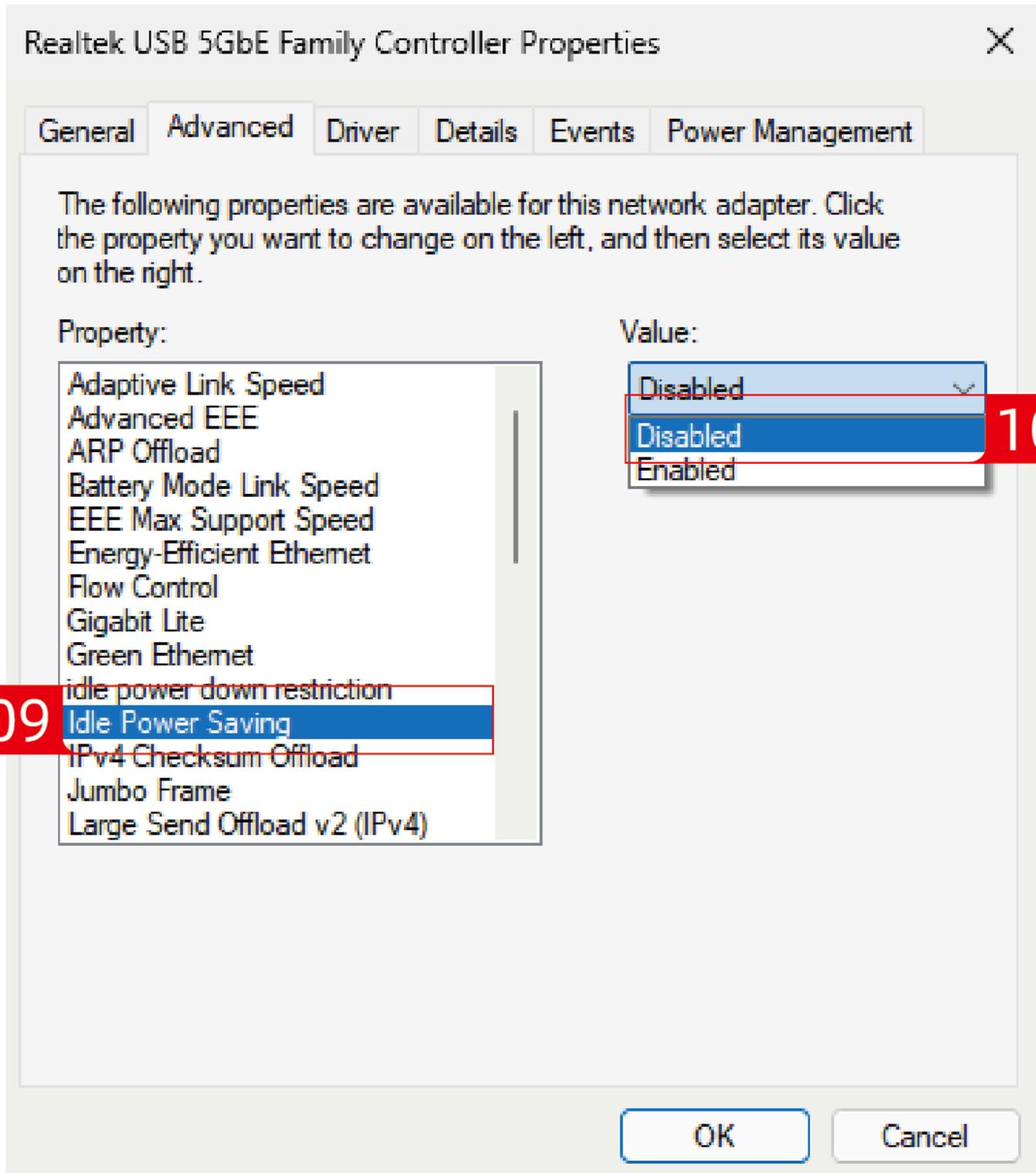Manufacturer: Realtek

Location: Port_#0002.Hub_#0003

Device status

This device is working properly.

[OK]   [Cancel]

7. Disable the **Idle Power Saving** mode in **Property**.

Realtek USB 5GbE Family Controller Properties ✕

| General | **Advanced** | Driver | Details | Events | Power Management |

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:

- Adaptive Link Speed
- Advanced EEE
- ARP Offload
- Battery Mode Link Speed
- EEE Max Support Speed
- Energy-Efficient Ethernet
- Flow Control
- Gigabit Lite
- Green Ethernet
- idle power down restriction
- **Idle Power Saving** **09**
- IPv4 Checksum Offload
- Jumbo Frame
- Large Send Offload v2 (IPv4)

Value:

Disabled ⌄

- Disabled **10**
- Enabled

OK Cancel

8. Set the value of Jumbo Frame to **16128 Bytes**.

Realtek USB 5GbE Family Controller Properties   ✕

General **Advanced** **Driver** **Details** **Events** **Power Management**

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:

Value:

```
Adaptive Link Speed
Advanced EEE
ARP Offload
Battery Mode Link Speed
EEE Max Support Speed
Energy-Efficient Ethernet
Flow Control
Gigabit Lite
Green Ethernet
idle power down restriction
Idle Power Saving
IPv4 Checksum Offload
```
11 `Jumbo Frame`
```
Large Send Offload v2 (IPv4)
```

```
16128 Bytes              ⌄
```
| 16128 Bytes | **12** |
| 4088 Bytes |
| 9014 Bytes |
| Disabled |

OK   Cancel

How to Use

LAN
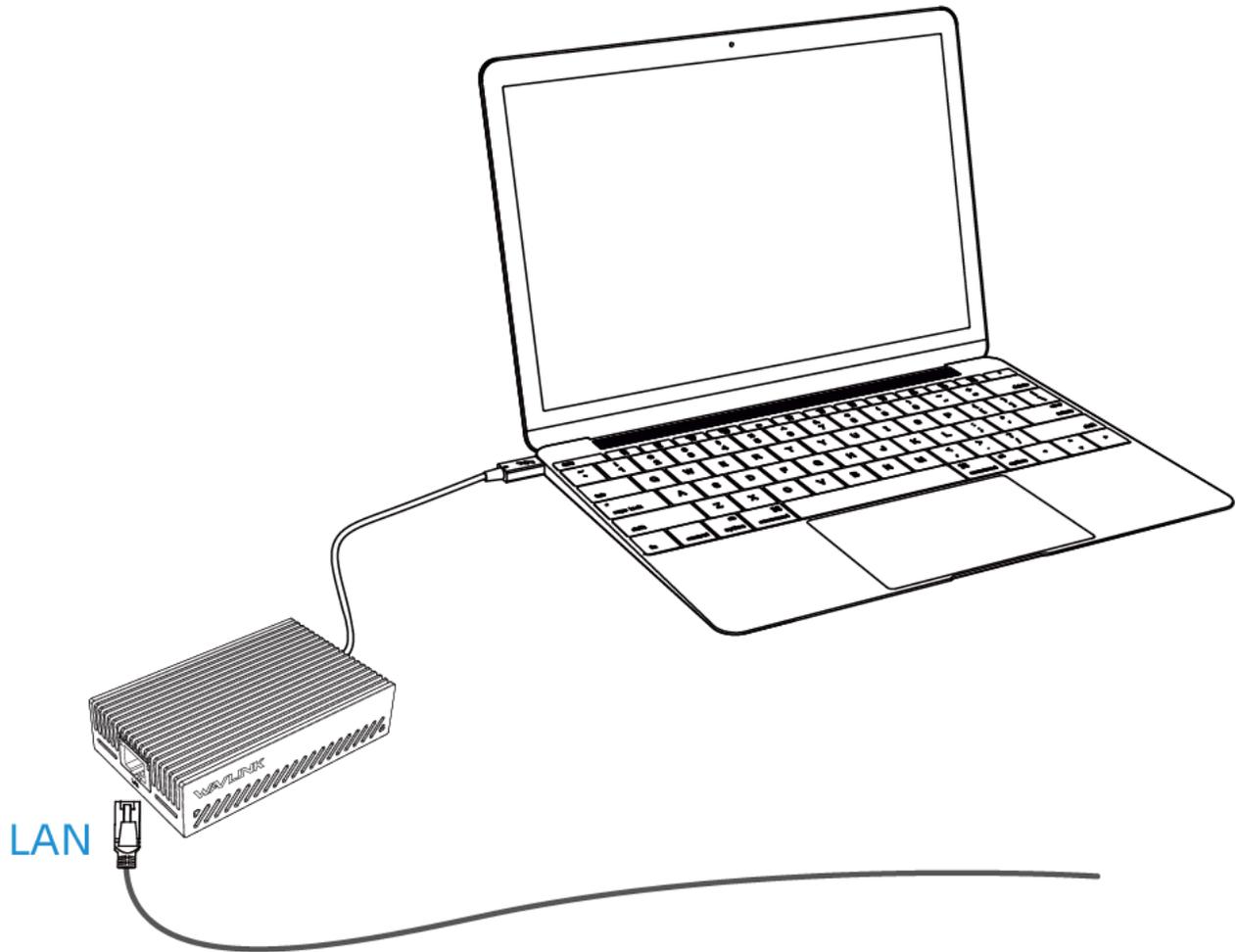
Connecting to Network

Now you can connect your network device (eg.: switch, router, DSL/cable modem) to the adapter's LAN port via an Ethernet cable.
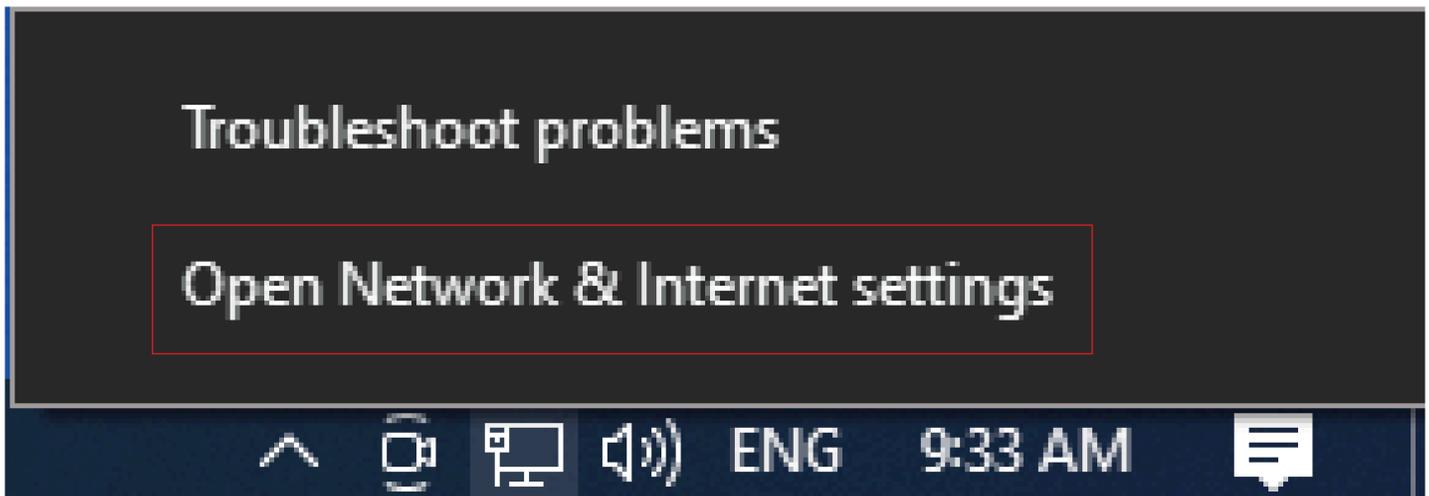
> (i) **NOTES ON ETHERNET CABLES.**
>
> - Sometimes a so-call crossover Ethernet cable is required for connection to certain network equipments. As the adapter's LAN port supports Auto-MDIX feature, it eliminates the need to use crossover cables.
> - When the Ethernet adapter is used in the Gigabit network, it is recommended that you use category 6 Ethernet cable for higher transmission speed.

The adapter's AutoSense feature can automatically detect the network's maximum line speed. To have a 1000/2500/5000/10000Mbps connection, your network device (eg.: switch, router, DSL/cable modem) must also support 1000/2500/5000/10000Mbps.

On Window 10, you can view the connection speed by the steps below:
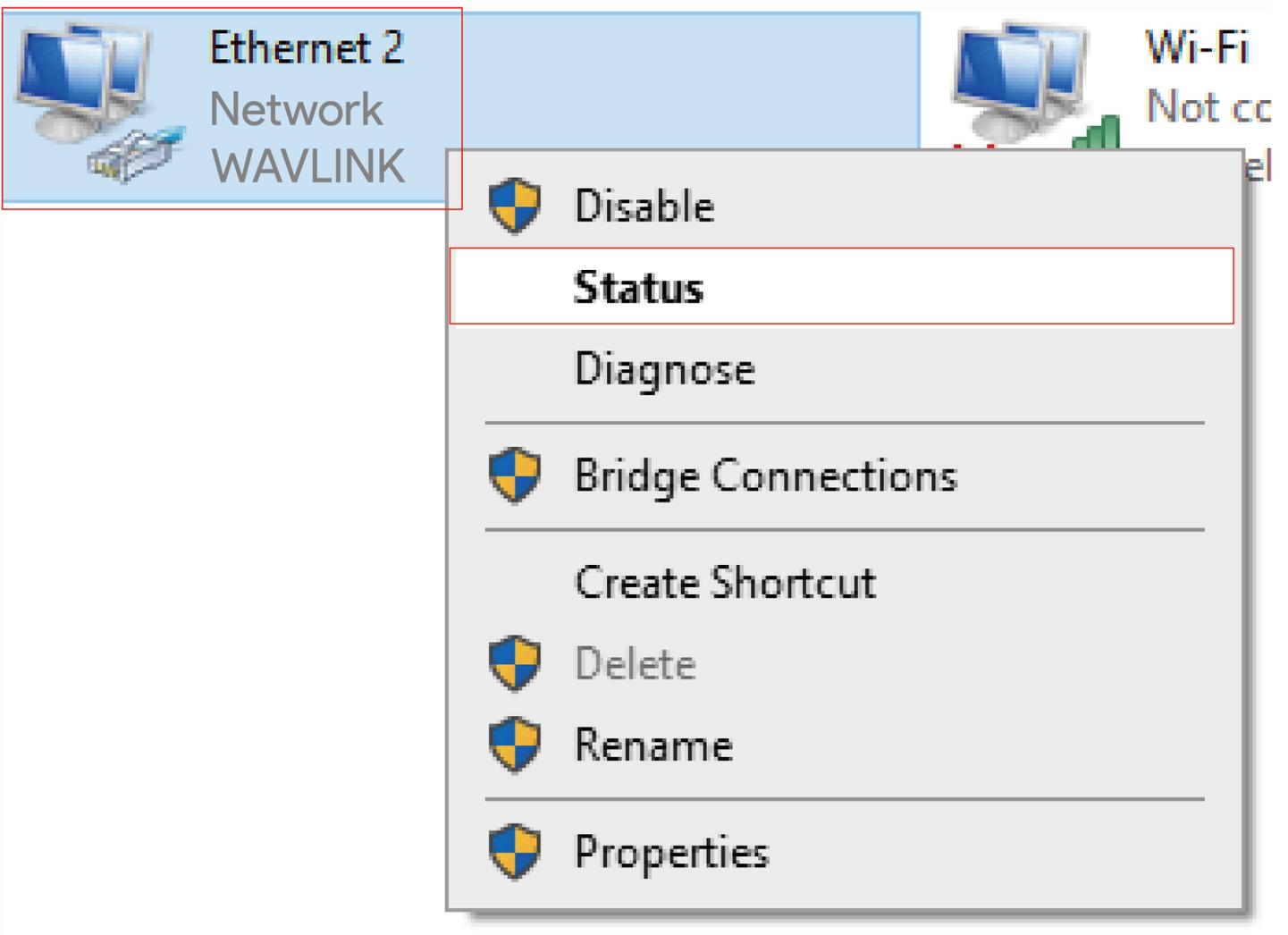
1. Right-click the network icon in the system tray and select **Open Network & Internet settings**.

2. Click **Change adapter options**.

3. Right-click the **Ethernet icon** indicating your netowrk adapter and click **Status**.

4. Current connection speed will be displayed among the connection information.

Net wrok Status

☓

General

Connection

IPv4 Connectivity:	Internet
IPv6 Connectivity:	No network access
Media State:	Enabled
Duration:	00:46:02
Speed:	1.0 Gbps

Details...

Activity

Sent —— 🖥️ —— Received

	Sent		Received
Bytes:	9,920,257		107,257,183

🛡️Properties 🛡️Disable Diagnose

Close

This chapter introduces the steps of configuring network settings.

Configuring Network Settings

You should configure your Ethernet adapter as required according to your network environment. If you are unsure about the settings, consult with your network administrator for assistance. The following describes how to launch the network settings window for your Ethernet adapter.

To configure network settings for your Ethernet adapter on Windows:
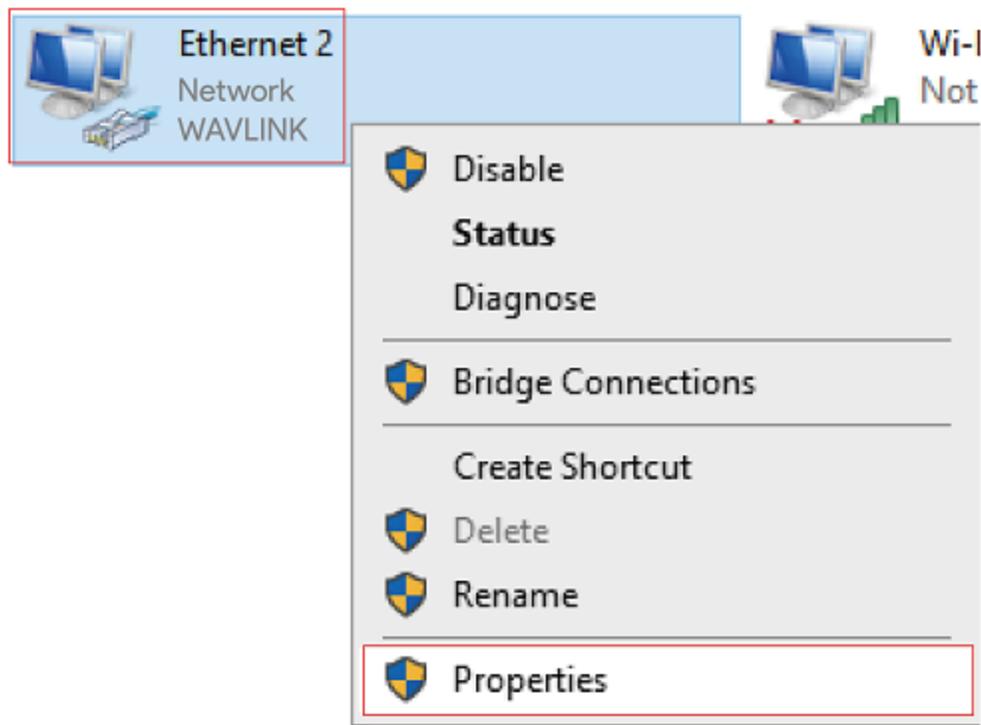
1. Right-click the network icon in the system tray and select **Open Network & Internet settings**.
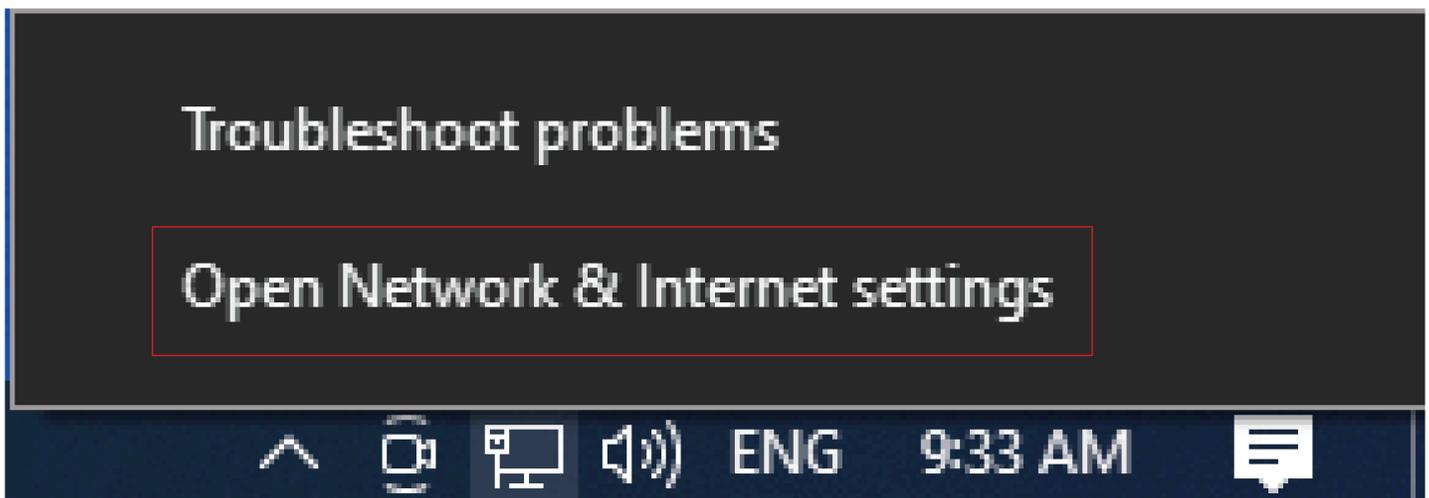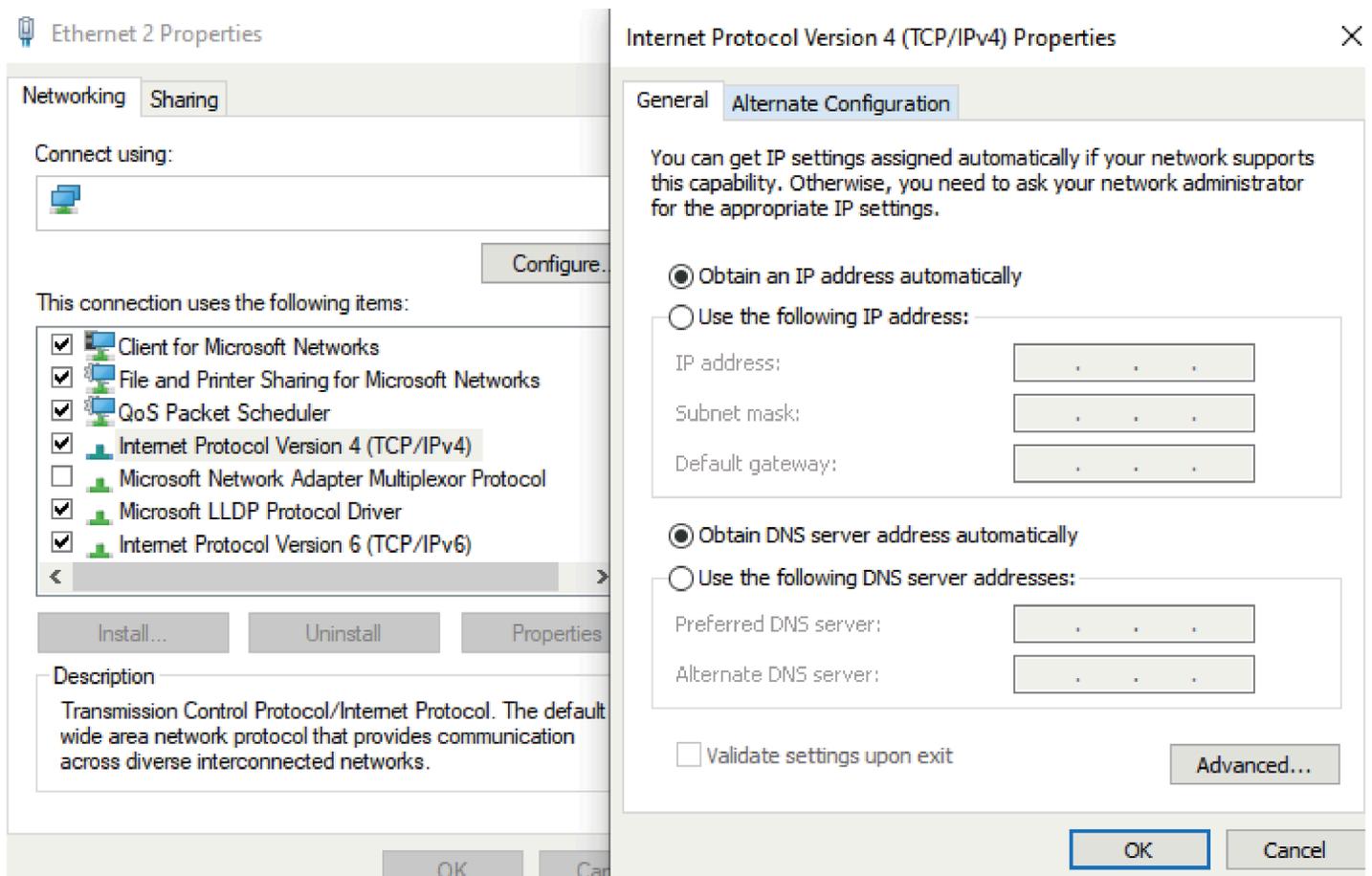

2. Click **Change adapter options**.
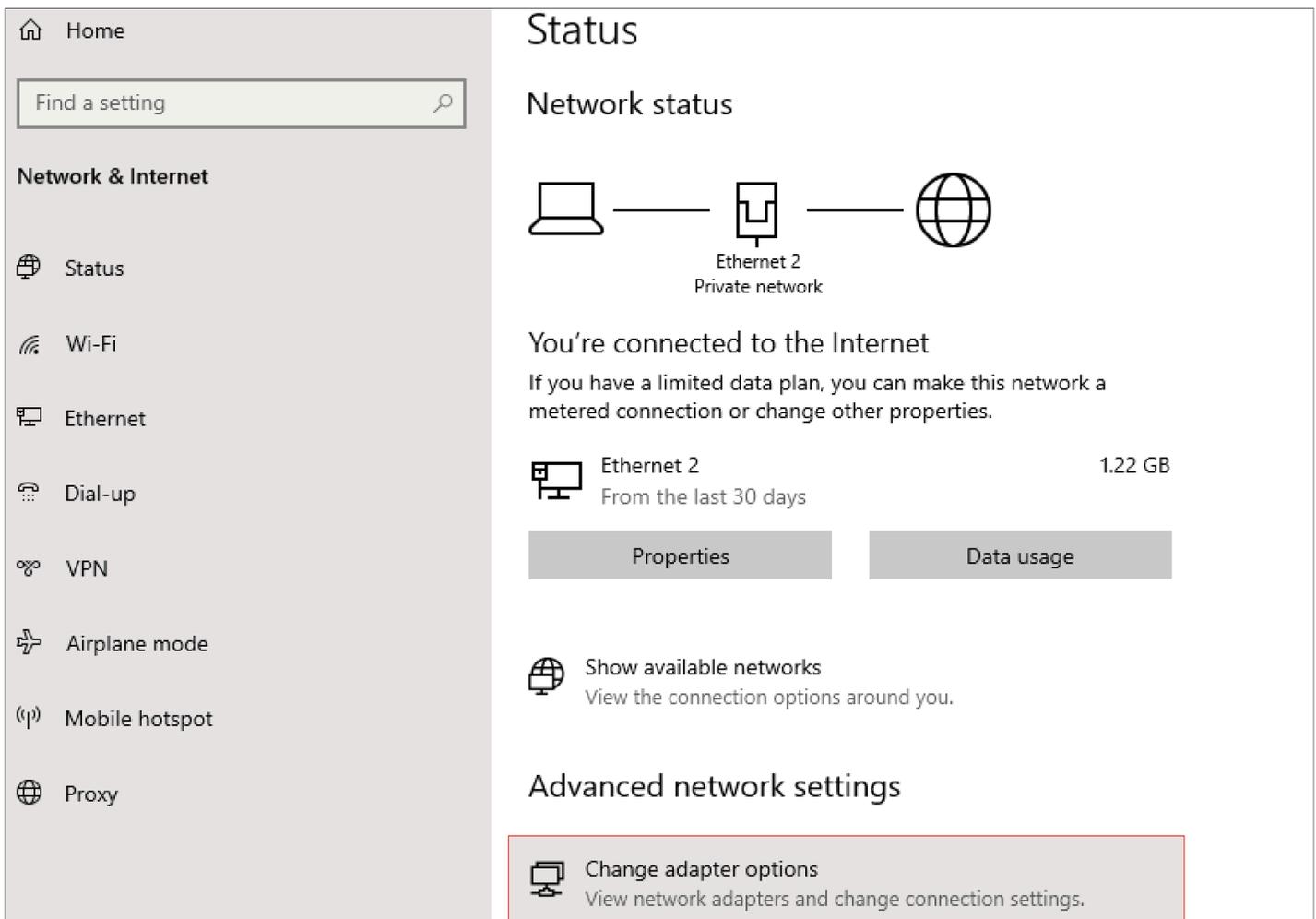
3. Right-click the **Ethernet icon** indicating your netowrk adapter and click
Properties.

4. Then the **Ethernet Properties** window appears for user to make required settings.

ⓘ **NOTE**

Open a browser and test the connection.

Chapter 6 FAQ & After-sale Service

This chapter includes FAQ and After-sale Service.

- [FAQ](#)

- [After-sale Service](#)

FAQ

Q1. Why could I not achieve 10Gbps on Mac?

- A1. To achieve 10Gbps, the Type-C port of the host must support USB 3.2 Gen2×2 at 20Gbps. Otherwise, the performance will be limited currently. Mac doesn't support USB 3.2 Gen2×2 at 20Gbps.

Q2. Why can Windows only achieve a speed of 1G and not 2.5G/5G/10G?

- A2. Please install the driver manually. After manually installing the driver, you can go to **Device Manager-Network adapters** to select USB 2.5G/5G/10G network card, then right-click to select **Properties-Advanced-Connection Speed and Duplex Mode (Speed & Duplex)- Value** and choose 2.5G/5G/10G Full Duplex. After that, please ensure that other hardware supports the 2.5G/5G/10G bandwidth. To support 10G, the Type-C port of the host should support USB 3.2 Gen 2×2 at 20Gbps. To support 5G, the Type-C port of the host should support 10Gbps.

Q3. Can this Network Adapter work on mobile phones?

- A3. As of 2021, no mobile phone supporting 2.5G/5G/10G has been found. Currently, all mobile phones are not compatible. When our company updates relevant mobile phone models for compatibility with 2.5G/5G/10G, we will provide further information.

Q4. What should I do after installing the 2.5G/5G/10G driver manually?

- A4. Go to **Device Manager- Network adapters** to select USB 2.5G/5G/10G network card, then right-click to select **Properties-Advanced-Connection Speed**

and Duplex Mode (Speed & Duplex)-Value, and choose 2.5G/5G/10G Full Duplex. After that, please ensure that other hardware supports the 2.5G/5G/10G bandwidth.

Q5. Does the Network Adapter support PXE?

- A5. The 10G Network Card supports the UEFI PXE function, which is related to the computer's BIOS driver. If it cannot be implemented, try updating the computers BIOS-related driver or contact the host manufacturer.

After-sale Service

Need help?

We're here for you!

Online support: wavlink.com
Available Mon-Fri 8:30 am-5:30pm (UTC+8)

support@wavlink.com
Available Mon-Fri 8:30 am-5:30pm (UTC+8)

+1 8889730883
Mon-Fri 9:00 am - 6:00 pm (UTC-5)

www.wavlink.com

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