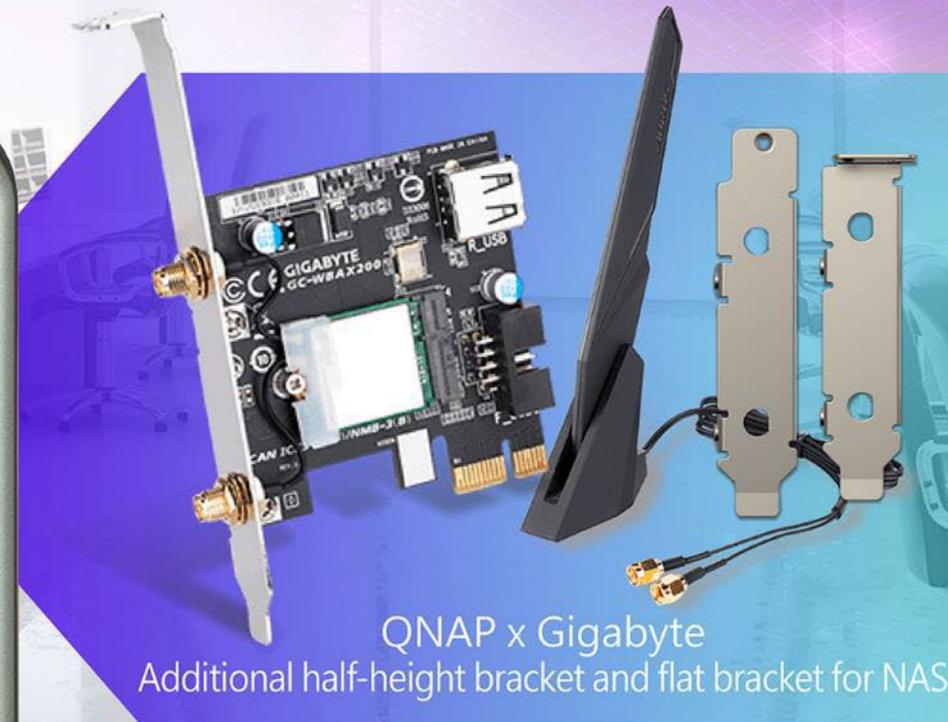


QNAP

QXP-W6-AX200 PCIe WiFi 6 Card

WI-FI
GIG+6
BY INTEL®

Add Gigabit WiFi connectivity to a NAS/PC in wireless environments



QNAP x Gigabyte
Additional half-height bracket and flat bracket for NAS

A new milestone with Gigabit+ level of WiFi 6 connectivity

- The increasing trend of wireless-only environment
- Gigabit+ level WiFi 6 wireless connectivity
- QXP-W6-AX200 PCIe WiFi 6 card enables NAS and PC with high-speed WiFi 6 client connectivity
- How to install and setup QXP-W6-AX200 on PC and NAS



More WiFi only environments because of the simplicity of wireless connections

- Laptops and mobile devices already have integrated wireless capability
- Because all mobile devices now are equipped with Wi-Fi, hotel rooms and lobbies, show rooms, and conference centers no longer provide wired connection or provide it with a fee. More and more locations now provide WiFi-only connection.



More and more laptops have removed RJ45 LAN port

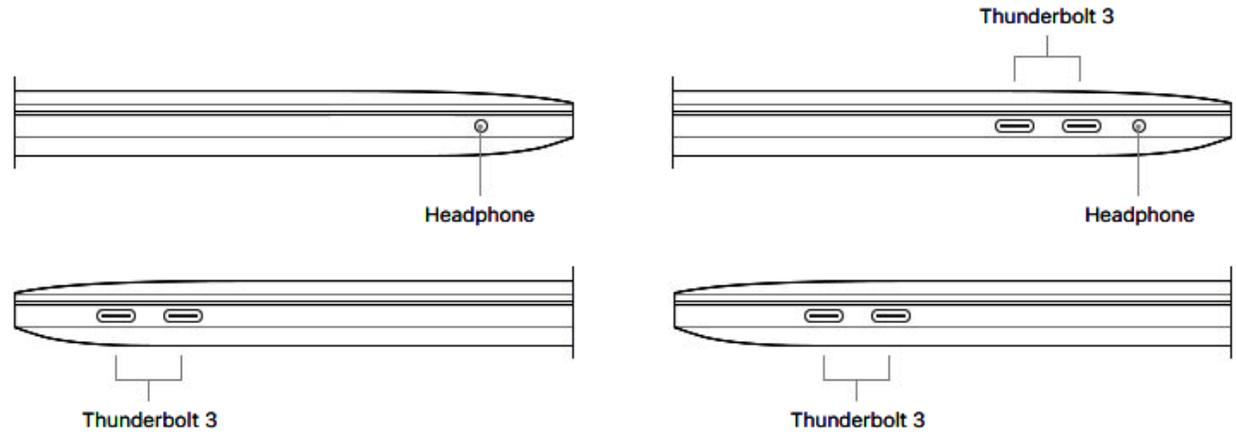
Apple Macs



Windows computers



Chromebook



Next-gen WiFi 6 network with Gigabit+ speed

WiFi 6

2x2 802.11ax

WiFi 5

2x2 802.11ac wave2

WiFi 5

2x2 802.11ac

WiFi 4

1x1 802.11bgn



2400 Mbps
16X Faster



1734 Mbps



867 Mbps



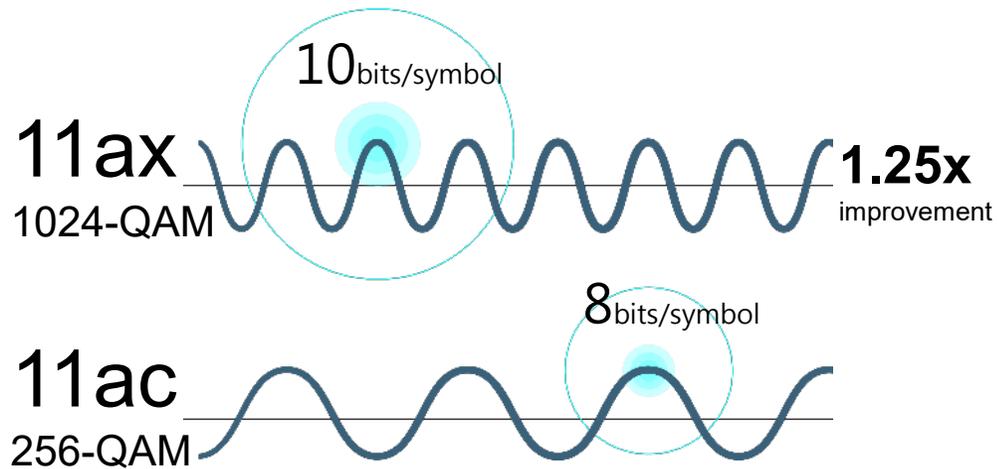
150 Mbps



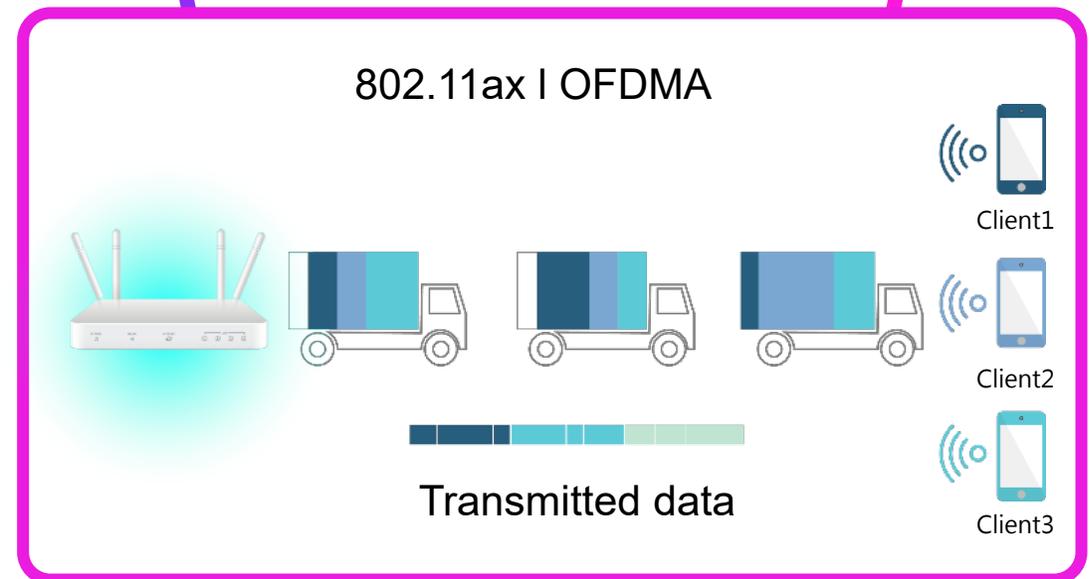
QXP-W6-AX200

WiFi 6 is faster and lower in latency than WiFi 5

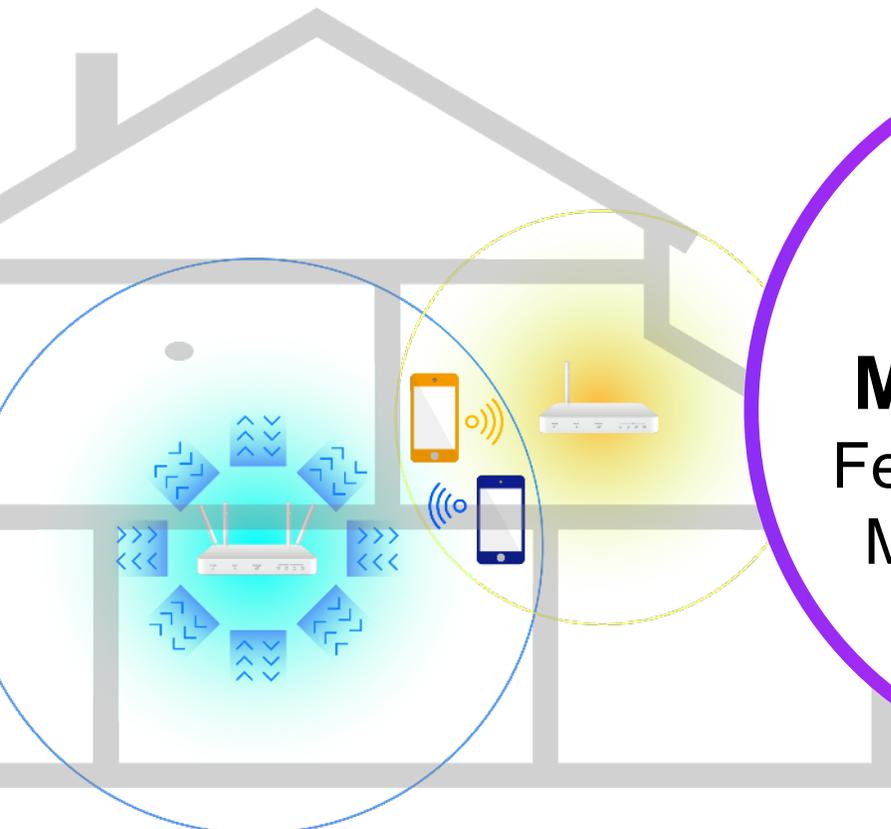
1.25 X
Faster Speed



4 X
Lower Latency



WiFi 6 with larger coverage, less interference, and higher capacity for more devices



125 %

More coverage
Fewer dead corners
More connections

- 8 x 8 MU-MIMO supports concurrent upload and download for more connected devices.
- BSS (Basic Service Set) color can mark surrounding non-related wireless devices and ignore them and also avoid weak wireless signals to reduce the wireless interference for better wireless connection quality.
- OFDMA (Orthogonal Frequency-Division Multiple Access) can divide each channel into small ones with narrower bands for higher wireless coverage thus reducing the number of wireless-dead zones.

More devices are now shipped with WiFi 6

Laptops

- Asus Chromebook Flip c436
- Dell XPS 13 (2020)
- HP Spectre x360
- Lenovo Yoga c940
- LG Gram 17
- Microsoft Surface pro 7



PCs / Motherboards

- Asus Mini PC PN62
- Asus desktop PC S700TA
- Acer Predator Helios 300
- AMD B550 boards
- Intel Z490 boards



Phones / iPad Pro

- Huawei P40 Pro
- iPhone 11 series, SE
- LG V60 ThinQ
- Motorola Edge Plus
- OnePlus 8 and 8 Pro
- Samsung Galaxy S10, S20 series
- Samsung Galaxy Note 10 series
- Samsung Galaxy Fold
- Xiaomi Mi 10 series



QXP-W6-AX200 enables your current PC and NAS with WiFi 6 wireless connectivity

Current Windows 10 /Linux PCs



QNAP TS-253D NAS



PC / NAS installs the
QXP-W6-AX200 PCIe WiFi 6 card



WiFi6 router / access point

QXP-W6-AX200 WiFi 6 card package contents

**WiFi 6 PCIe
Card and antenna**



**2 extra half-height
brackets for PC and NAS**



Installation guide



**Internal USB cable for
BT 5.0 on PC**



**Windows 10
driver CD**



QXP-W6-AX200 WiFi 6 card overview

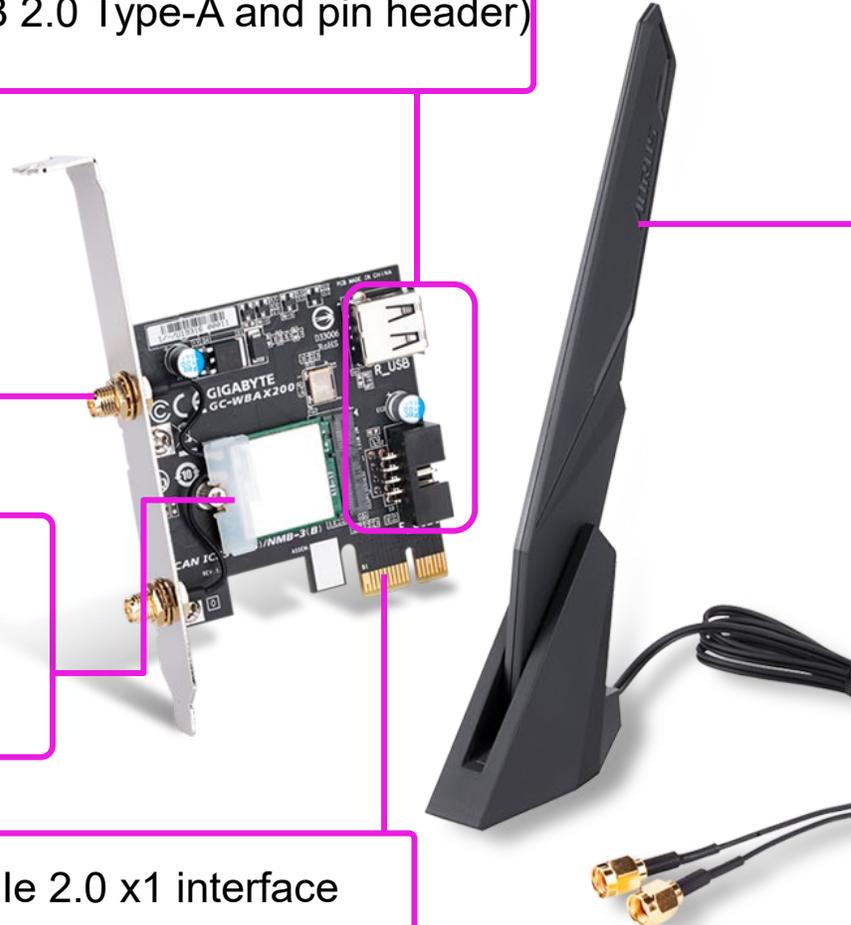
- BT 5.0 USB connector for PC connection (Choose from USB 2.0 Type-A and pin header)

- Pre-installed full-height bracket
- Gold-plated connectors for higher quality and durability

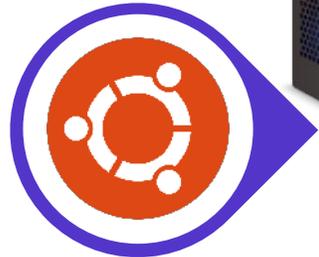
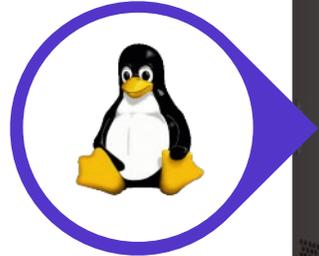
- Intel WiFi 6 AX200 wireless module
 - Theoretical speed up to 2400Mbps
 - 802.11 ax/ac/a/b/g/n
 - Bluetooth 5.0 for PC

- PCIe 2.0 x1 interface

- AORUS high-performance dual-band antenna with 802.11ax 2.4GHz & 5GHz
 - 2T x 2R antenna with smart antenna enhancement for the optimal wireless performance
 - Antenna with multiple angle tilt and magnetic base for the best placement and signal reception



Supports NAS QTS / QuTS hero, Windows 10, and Linux operating systems



QXP-W6-AX200

Install the driver from
Intel AX200 website

Supports Windows 10 64 bit /
Linux kernel 5.1+

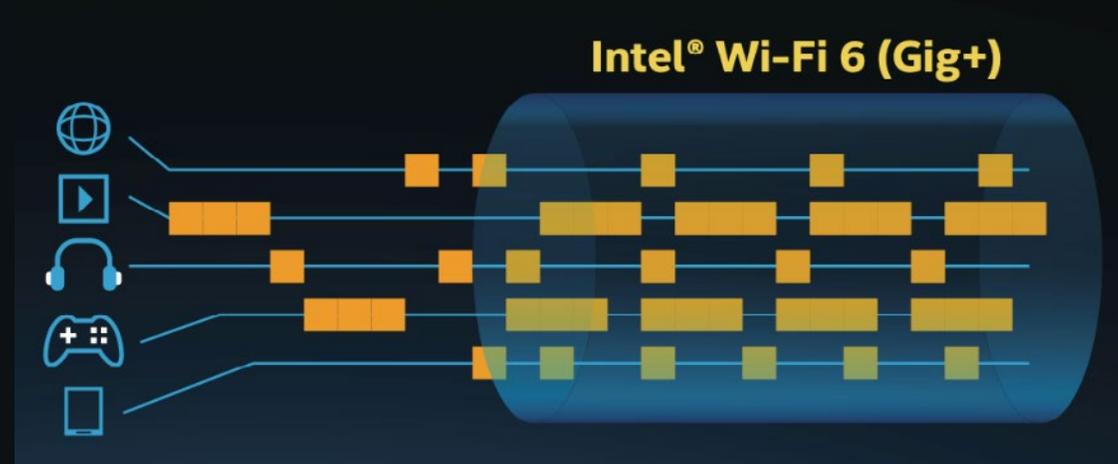
QTS 4.4.3 + & QuTS hero
NAS with a PCIe slot* and
64-bit x86 and ARM CPU



*Refer to the QNAP website for the compatible NAS models. Some NAS models require a BIOS update.

2x2 WiFi 6 and 160MHz for 3X data rates and 4X capacity

- QXP-W6-AX200 WiFi 6 (802.11ax) card provides nearly **3X** higher peak data rates and **4X** capacity improvements with spatial reuse than a WiFi 5 (802.11ac) card in dense environments*.
- 2x2 **160MHz** channels, Upload/Download **OFDMA**, **1024QAM**, and **MU-MIMO** deliver theoretical data rates in 2.4GHz up to **574Mbps**, and in 5GHz up to **2402Mbps**.



Source: <https://www.intel.com/content/www/us/en/products/docs/wireless-products/gaming-with-wi-fi-6-infographic.html>

*A WiFi 6 router is required to achieve the WiFi 6 performance and benefits. Actual wireless throughput and/or range will vary depending on your environments.

Two methods for setting up WiFi NAS

You can make your NAS wireless by installing PCIe AX200 or USB WiFi Dongles.

QNAP QXP-W6-AX200 PCIe supports
WiFi 6 (802.11ax)



USB Dongle only supports up to
WiFi 5 (802.11ac)



USB WiFi Dongle Caompatibility List

Go to QNAP website for USB WiFi Dongle Compatibility List
<https://www.qnap.com/go/compatibility>

Compatibility List

QNAP regularly tests hard drives and other devices for compatibility with our products. Please check below for details on compatible and recommended devices.



Search by Product

Search by Devices

Supported IP Cameras

1 - Category

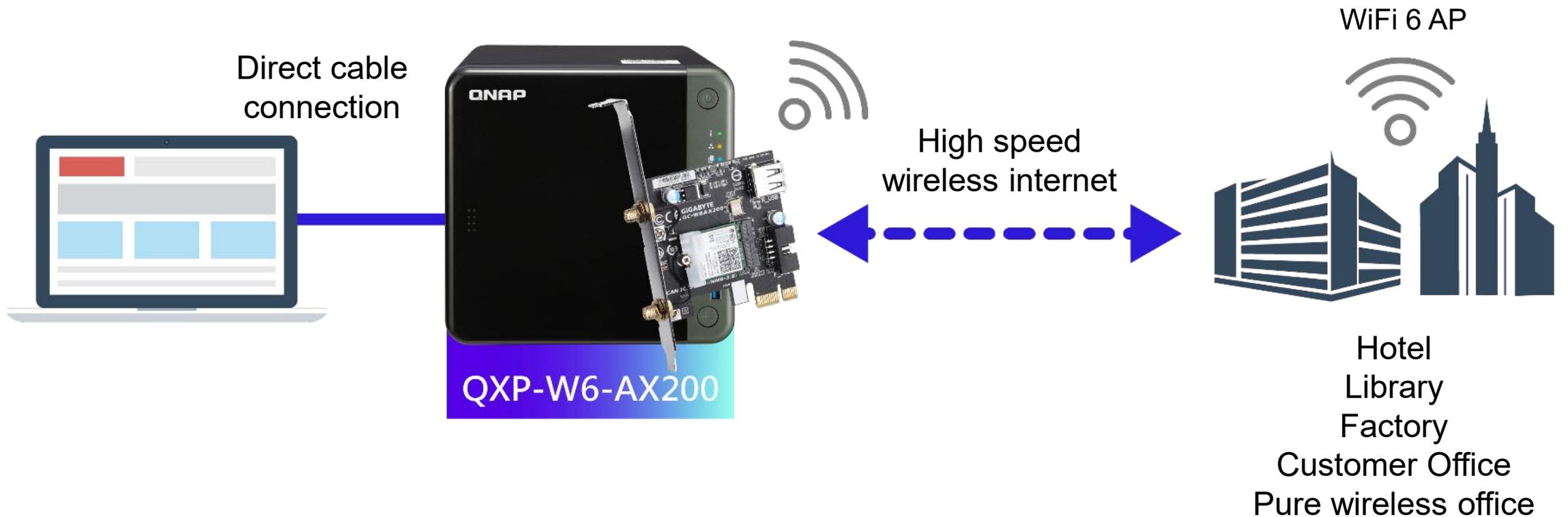
Which type of device?

USB Wi-Fi

Choose Brand

- AboCom
- ASUS
- BELKIN
- Buffalo
- D-Link
- EDIMAX
- Linksys
- Mercury
- Netcore
- Netis
- TOTOLINK
- TP-LINK
- Xiaomi (小米)
- ✓ Zyxel

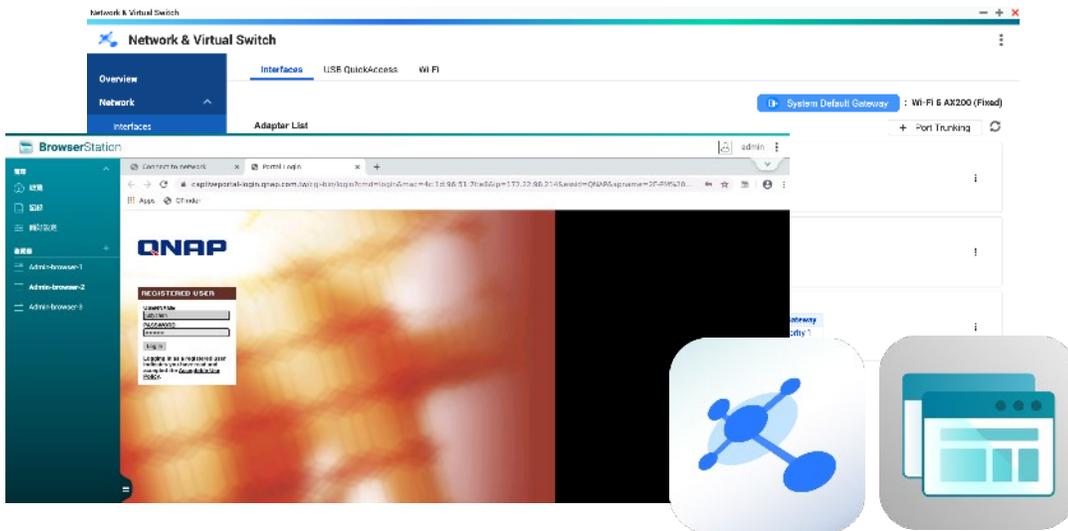
Transform your NAS to become WiFi 6 NAS



How to quickly setup QXP-W6-AX200

The QXP-W6-AX200 card can be activated on NAS using following two ways

Enable WiFi at [Network and Virtual Switch]
Log into Captive Portal via Browser Station



***Browser Station only supports on x86-based NAS with a minimum 4GB memory or above.
***Browser Station needs to be installed manually.

Enable WiFi via Qfinder Pro
Log into Captive Portal via host browser



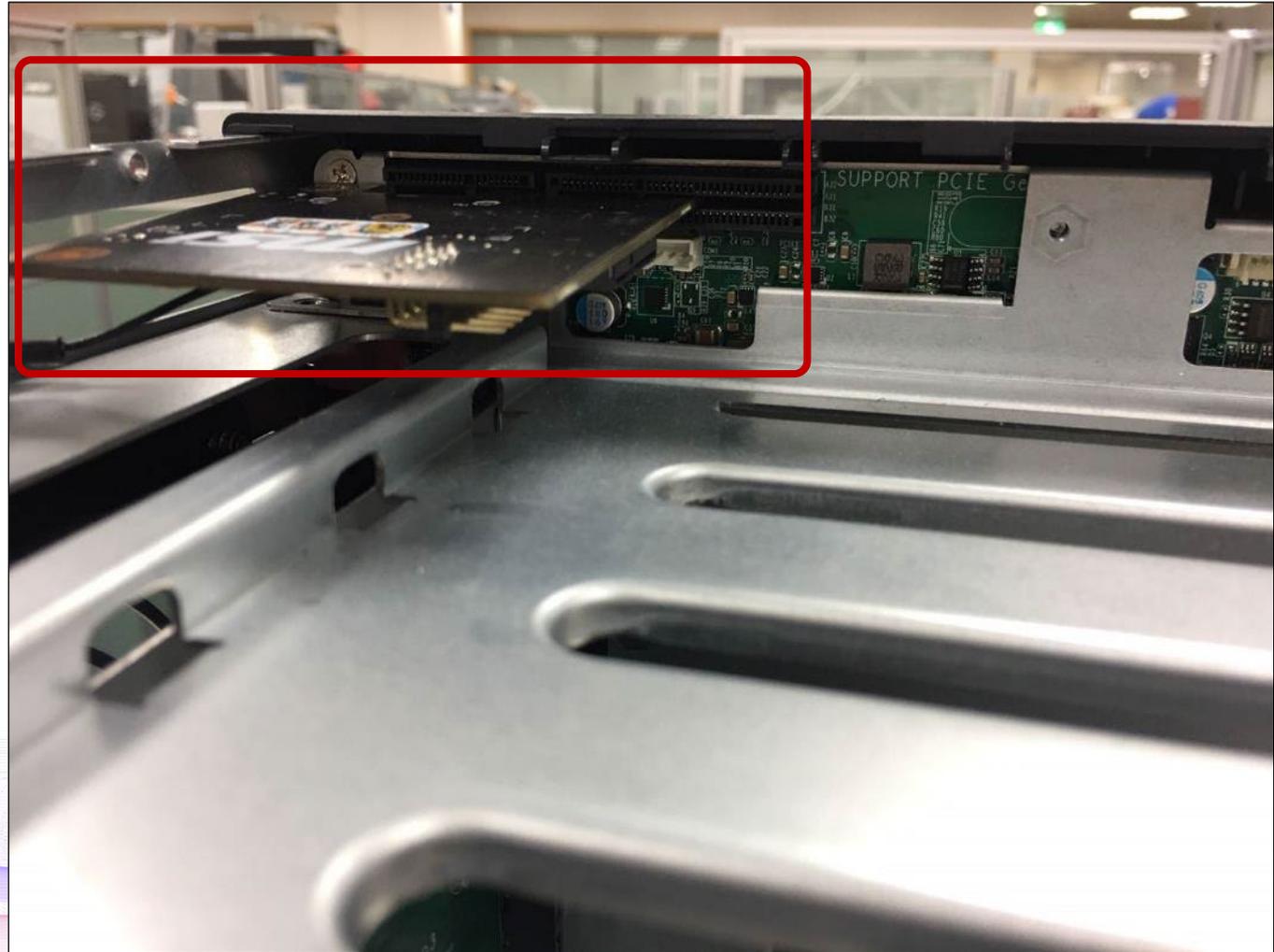
Qfinder Pro Version
Windows v6.9.2
Mac v7.3.2
Linux v7.3.2

***If the connected WiFi AP has a mechanism that blocks request under NAT, the browser cannot be opened automatically. You need to enable Browser Station on the NAS to log into Captive Portal, or select another WiFi network that does not need to log into Captive Portal.

Network and Virtual Switch x Browser Station

Step 1

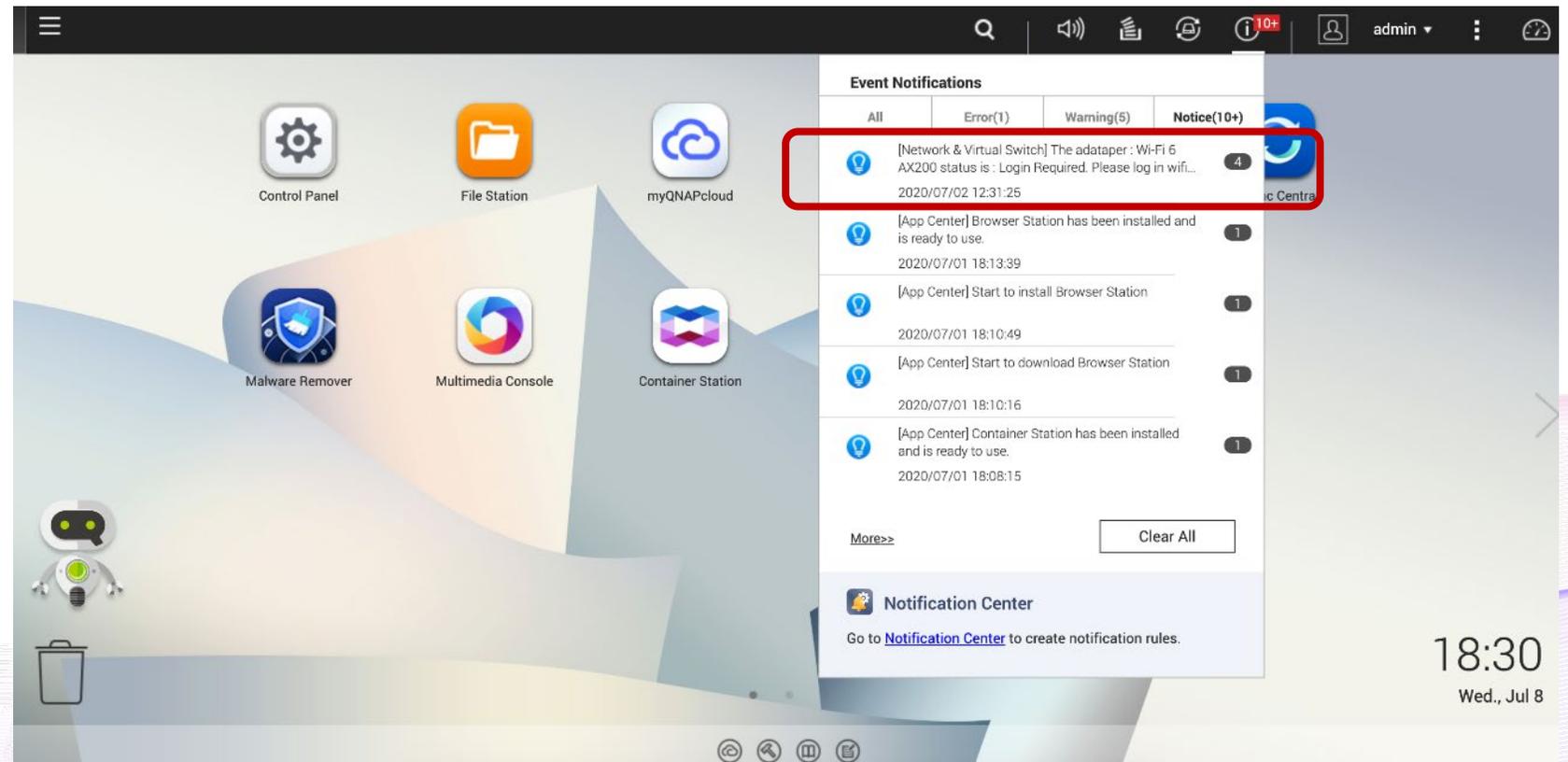
- Install QXP-W6-AX200 on NAS PCIe slot.



Network and Virtual Switch x Browser Station

Step 2

- Turn on NAS. Connect PC and NAS directly using ethernet cable and log into QTS.
- You can see system notification shows that PCIe WiFi 6 AX200 has been detected.
- QTS FW needs to be 4.4.3 or above.



Network and Virtual Switch x Browser Station

Step 3

- Go to Network and Virtual Switch page
- Go to WiFi6 AX200 Setting.

The screenshot displays the 'Network & Virtual Switch' management page. The left sidebar contains navigation options: Overview, Network (expanded), Interfaces, Virtual Switch, DHCP Server, Route, Access Services (expanded), and DDNS. The 'Network' section is active, showing 'System Default Gateway : Adapter 2 (Auto)' and a '+ Port Trunking' button. The 'Adapter List' table shows three network adapters:

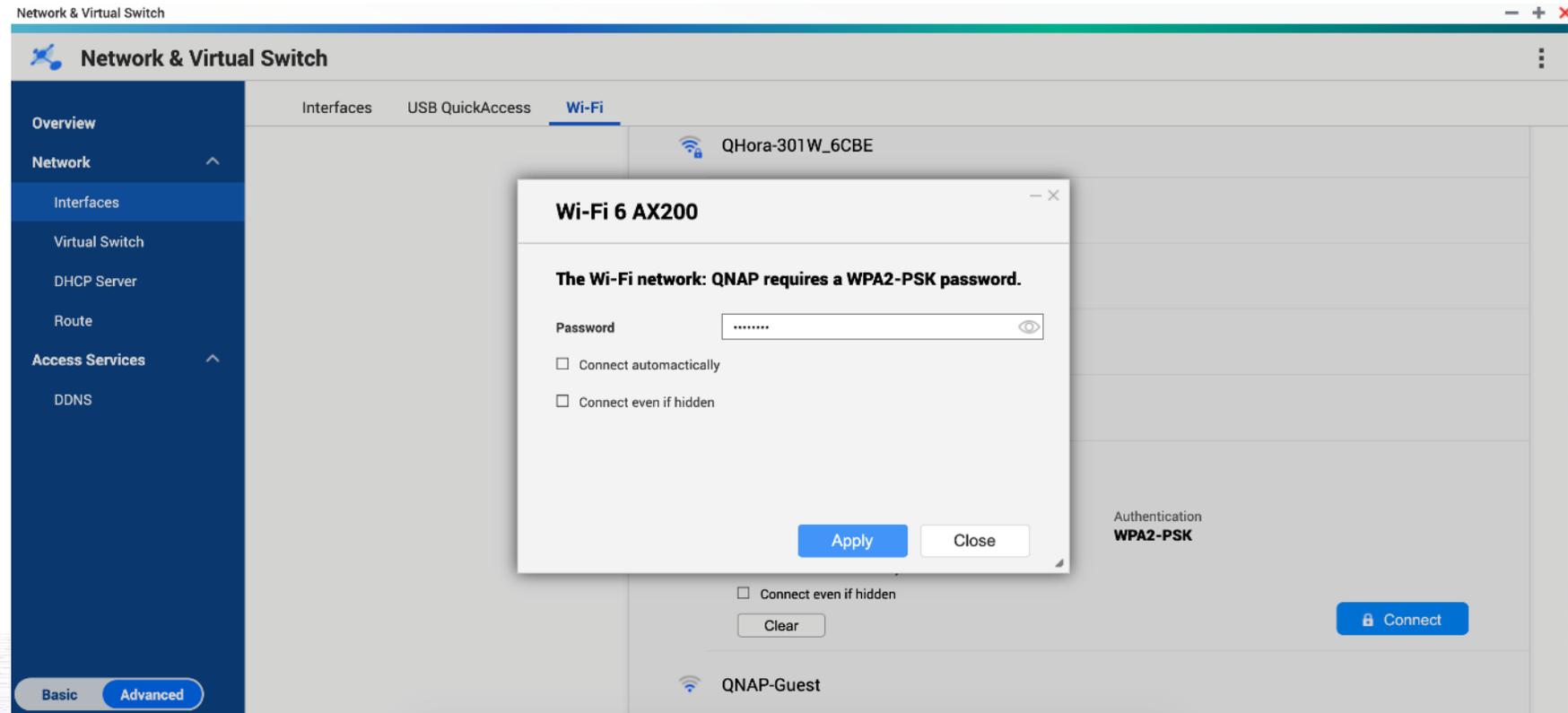
Adapter	Status	IP Address	Network Speed	VLAN	Vendor name	NIC model	Service	Actions
Adapter 1 (1GbE)	Connected	Virtual Switch 3 (198.18.5.1)	1 Gbps	--	QNAP	Intel I211 Gigabit Network Connection	WOL	⋮
Adapter 2 (1GbE)	Connected	192.168.100.102	1 Gbps	--	QNAP	Intel I211 Gigabit Network Connection	WOL	Gateway Auto ⋮
Wi-Fi 6 AX200	Disconnected	--	-- Mbps	--	Intel Corporation	Intel Wi-Fi 6 AX200		⋮

The 'Wi-Fi 6 AX200' adapter row is highlighted with a red border. A 'Configure Information' dropdown menu is visible next to its actions icon. At the bottom of the interface, there are 'Basic' and 'Advanced' tabs, with 'Advanced' selected.

Network and Virtual Switch x Browser Station

Step 4

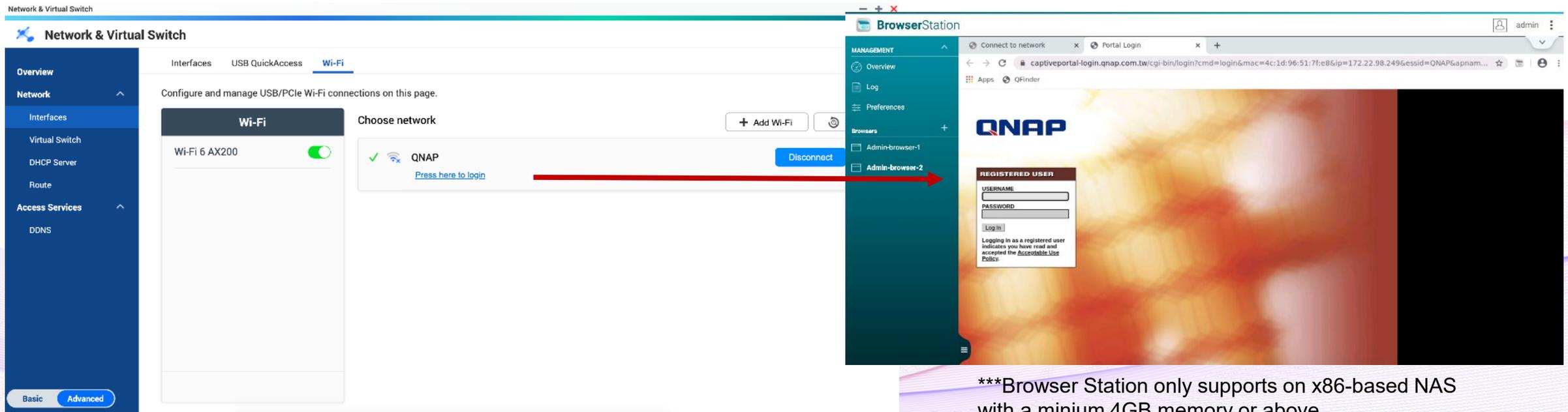
- Enable WiFi and select a SSID to connect.
- Enter WiFi password



Network and Virtual Switch x Browser Station

Step 5

- If log into Captive Portal is required, click the link under SSID, and a new browser tab will open automatically via Brower Station.
- WiFi connection will complete after logging in.



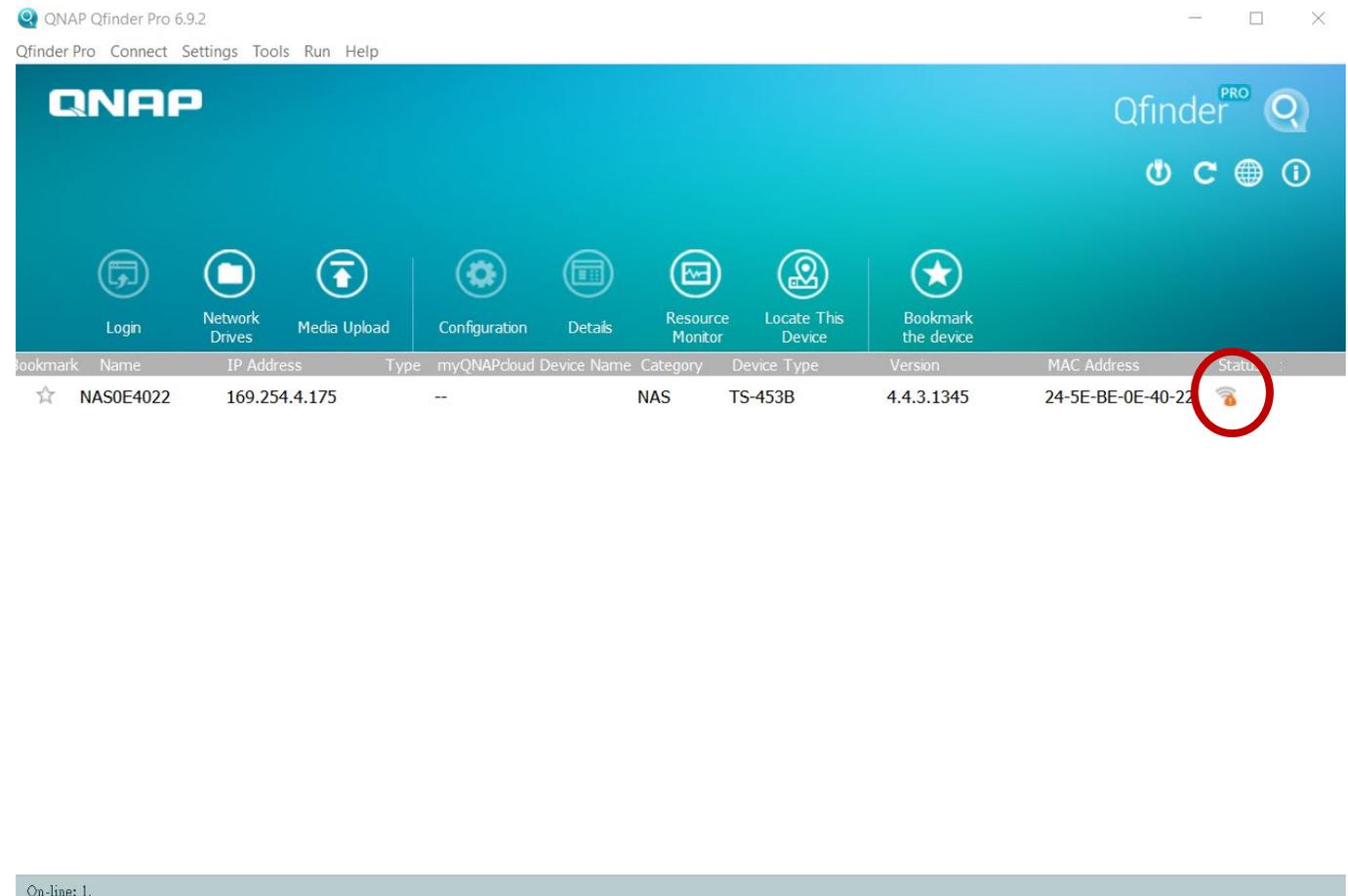
The screenshot displays the 'Network & Virtual Switch' management interface. The 'Wi-Fi' tab is selected, showing the 'Wi-Fi 6 AX200' interface with a green toggle. The 'Choose network' section lists the 'QNAP' network with a checkmark and a 'Press here to login' link. A red arrow points from this link to a browser window titled 'BrowserStation'. The browser window shows a QNAP captive portal login page with fields for 'REGISTERED USER', 'USERNAME', and 'PASSWORD', and a 'Log In' button.

***Browser Station only supports on x86-based NAS with a minium 4GB memory or above.

Setting up QXP-W6-AX200 via Qfinder Pro

Step 1

- Install AX200 on NAS PCIe slot. Turn on NAS. Connect PC to NAS directly using ethernet cable.
- Find NAS via Qfinder Pro
- NAS Status will show a Wireless Icon indicating that AX200 is detected.



QNAP Qfinder Pro 6.9.2

Qfinder Pro Connect Settings Tools Run Help

QNAP Qfinder PRO

Login Network Drives Media Upload Configuration Details Resource Monitor Locate This Device Bookmark the device

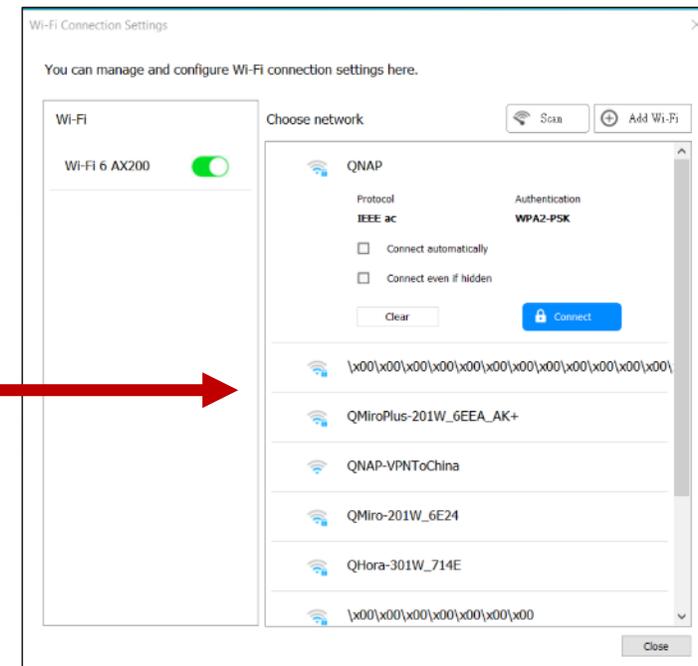
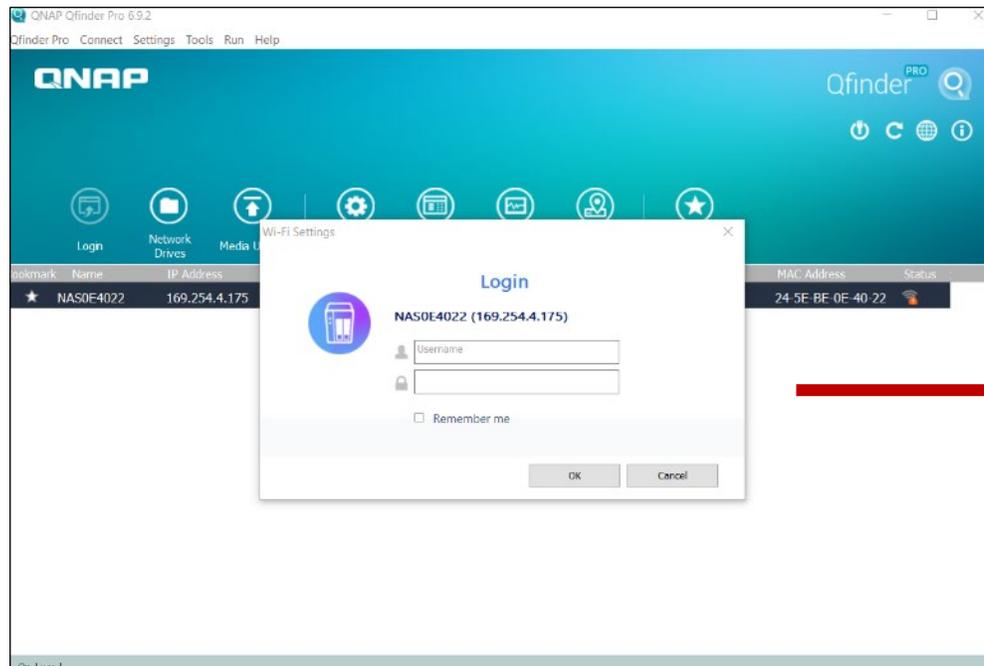
Bookmark	Name	IP Address	Type	myQNAPcloud Device Name	Category	Device Type	Version	MAC Address	Status
☆	NAS0E4022	169.254.4.175	--		NAS	TS-453B	4.4.3.1345	24-5E-BE-0E-40-22	📶

On-line: 1.

Setting up QXP-W6-AX200 via Qfinder Pro

Step 2

- Click Wireless icon
- Log into NAS and enable WiFi settings



Setting up QXP-W6-AX200 via Qfinder Pro

Step 3

- Select SSID and connect

Qfinder Pro 6.9.2
Qfinder Pro Connect Settings Tools Run Help

QNAP

Login Network Drives Media Upload Configuration

Wi-Fi Connection Settings

You can manage and configure Wi-Fi connection settings here.

Wi-Fi Choose network

Wi-Fi 6 AX200 QNAP

Wi-Fi 6 AX200

The Wi-Fi network: QNAP requires a WPA2-PSK password.

Password :

Connect automatically

Connect even if hidden

i The WPA key must be 8 to 63 ASCII characters (case-sensitive) or 64 hexadecimal characters.

QMiRO-201W_6E24

QHora-301W_714E

\x00\x00\x00\x00\x00\x00\x00

Bookmark	Name	IP Address	Model	OS	Version	MAC Address	Status	
☆	NAS1CAA11					24-00-BE-1C-AA-11	📶	
☆	NAS4EA2D9					24-5E-BE-4E-A2-D9	📶	
☆	NAS4E2444					24-5E-BE-4E-24-44	📶	
☆	NAS43C806					24-5E-BE-43-C8-36	📶	
☆	NAS0B4462					24-5E-BE-FF-DD-AF	📶	
☆	NASFED24					24-5E-BE-FE-FD-24	📶	
☆	NAS0AF0DA					24-5E-BE-10-F8-C6	📶	
☆	NAS2BE912					24-5E-BE-2B-E9-12	📶	
★	NAS0E4022					24-5E-BE-0E-40-22	📶	
☆	NAS3551F7					24-5E-BE-35-51-F7	📶	
☆	NAS427907					24-5E-BE-42-79-07	📶	
☆	NAS378948					24-5E-BE-37-89-48	📶	
☆	NAS424618					24-5E-BE-42-46-18	📶	
☆	NAS10E599					24-5E-BE-10-E5-99	📶	
☆	NAS89BF1C					24-5E-BE-89-BF-1C	📶	
☆	NASE8DFBD					00-08-9B-E8-DF-BD	📶	
☆	NAS0EDA0CAndy					24-5E-BE-0E-DA-0C	📶	
☆	WilberQTSHero1	172.17.22.27	WilberQTSHero1	NAS	TS-h453BT3	h4.5.0.1216	24-5E-BE-19-AA-80	📶
☆	NAS199D64	172.17.22.31	--	NAS	TS-231P2	4.3.5.0642	24-5E-BE-19-9D-64	📶
☆	NAS1A54C9	172.17.22.34	--	NAS	TS-453RT3	4.4.2.1342	24-5E-BE-1A-54-C9	📶

On-line: 56.

Setting up QXP-W6-AX200 via Qfinder Pro

Step 4

- Click login after wireless connection completes. Captive portal page will be opened via host browser automatically.

***If the connected WiFi AP has a mechanism that blocks request under NAT, the browser cannot be opened automatically. You need to enable Browser Station on the NAS to log in to Captive Portal, or select another WiFi network that does not need to log in to Captive Portal.

The screenshot displays the QNAP Qfinder Pro 6.9.2 interface. On the left, a 'REGISTERED USER' login form is visible with fields for 'USERNAME' (judy chen) and 'PASSWORD' (masked with dots), and a 'Log In' button. Below the form, a note states: 'Logging in as a registered user indicates you have read and accepted the Acceptable Use Policy.' The main interface shows the QNAP logo and navigation icons for 'Login', 'Network Drives', 'Media Upload', and 'Configuration'. A table lists bookmarks with columns for 'Name' and 'IP Address':

Bookmark	Name	IP Address
★	NAS0E4022	198.18.5.1
☆	Boxafe-Test	172.22.98.186
☆	TBS-453DX-Koi	172.22.99.18 (Wi-F
☆	QTS-dd	172.22.98.138 (Wi

On the right, a 'Wi-Fi 連線設定' (Wi-Fi Connection Settings) dialog is open. It shows 'Wi-Fi 6 AX200' is enabled. A list of available networks includes 'QNAP-Guest' (selected), 'QNAP-HS 111N', 'QHora-301W_6D36', and 'AirStation_5G'. A warning message is displayed: 'To connect the QNAP NAS to the internet, log in to the Captive Portal. QNAP recommends disabling your PC from other networks for a successful connection. Do you want to log in to the Captive Portal now?' with 'Yes' and 'No' buttons. A note below the warning reads: 'Note: After successfully logging in to the Captive Portal, the NAS sets this connection as the default gateway. To change the default gateway, follow these steps: Log in to the NAS. Go to Network_Virtual Switch. Click on Interface. Click on System Default Gateway.'

AX200 card becomes QTS default gateway automatically

Network & Virtual Switch

Notification History to review the - + ×

Network & Virtual Switch

Interfaces USB QuickAccess Wi-Fi

System Default Gateway : Wi-Fi 6 AX200 (Fixed)

+ Port Trunking

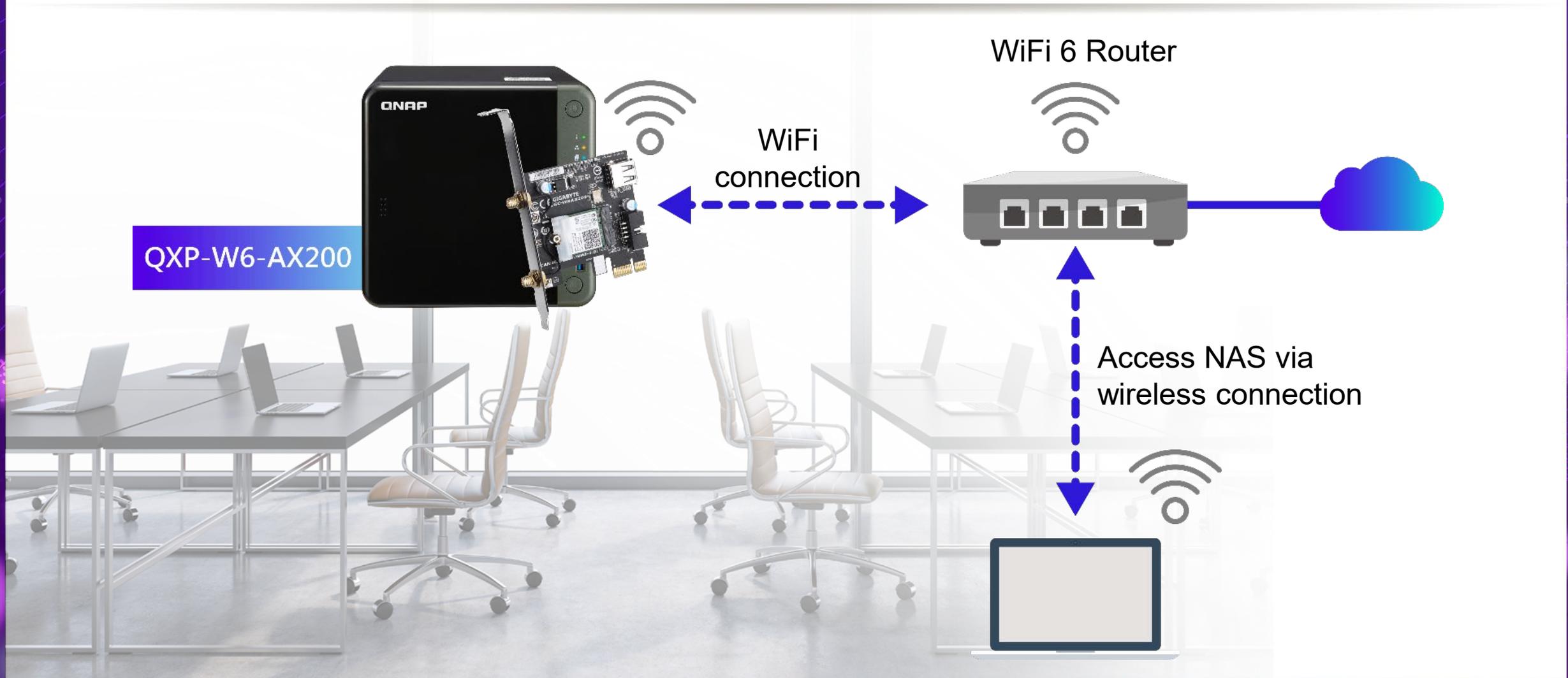
Adapter List

	Adapter: Adapter 1 (1GbE) Status: Connected IP Address: Virtual Switch 3 (198.18.5.1) Network Speed: 1 Gbps VLAN: --	Vendor name: QNAP NIC model: Intel I211 Gigabit Network Connection Service: WOL	
	Adapter: Adapter 2 (1GbE) Status: Connected IP Address: 172.17.22.86 Network Speed: 1 Gbps VLAN: --	Vendor name: QNAP NIC model: Intel I211 Gigabit Network Connection Service: WOL	
	Adapter: Wi-Fi 6 AX200 Status: Connected IP Address: 172.22.98.249 Network Speed: 195 Mbps	Vendor name: Intel Corporation NIC model: Intel Wi-Fi 6 AX200	Gateway Priority 1

Basic **Advanced**

User Scenario 1

Access NAS via wireless connection



User Scenario 2

Access Internet via mobile hotspot

QXP-W6-AX200



WiFi 6



Phone Hotspot
4G/5G Internet



User Scenario 3

NAS can connect to Internet wirelessly via another NAS

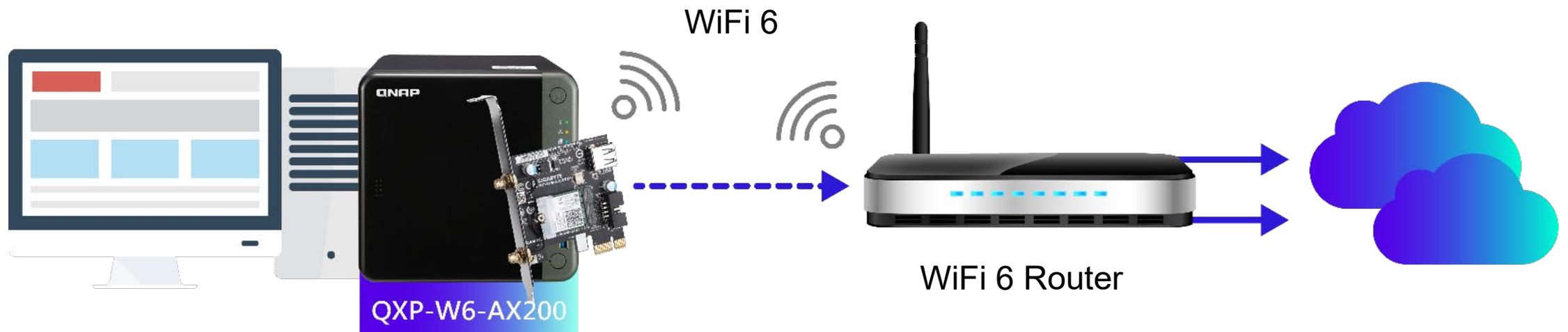
Connect your NAS wirelessly to another NAS that is installed with QuWAN and QWA-AC2600 with WirelessAP Station. QuWAN provides network optimization, firewall and deep packet inspection on both wireless and wired networks to achieve high-speed and redundant transmission and security protection mechanisms



User Scenario 4

Transform your NAS to Wireless WiFi 6 Desktop

WiFi 6 NAS can turn into a high speed wireless desktop by connecting HDMI monitor and keyboard to NAS.



QXP-W6-AX200 PCIe WiFi 6 card

Enables NAS and PC with WiFi 6
Gigabit+ connectivity and more
responsive performance on dense
wireless network



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