QMiroPlus-201W

Tri-Band Wi-Fi Mesh AC2200 2.5GbE NAS and SD-WAN Router

The Tri-Band Mesh Wi-Fi Router with QNAP home cloud 2.0 solution

2 x 2.5" SATA SSD/HDD bay

J4125

× Qualcomm × QNAP

IPQ4019 QTS 4.5.2 + QuRouter

QMiroPlus-201W

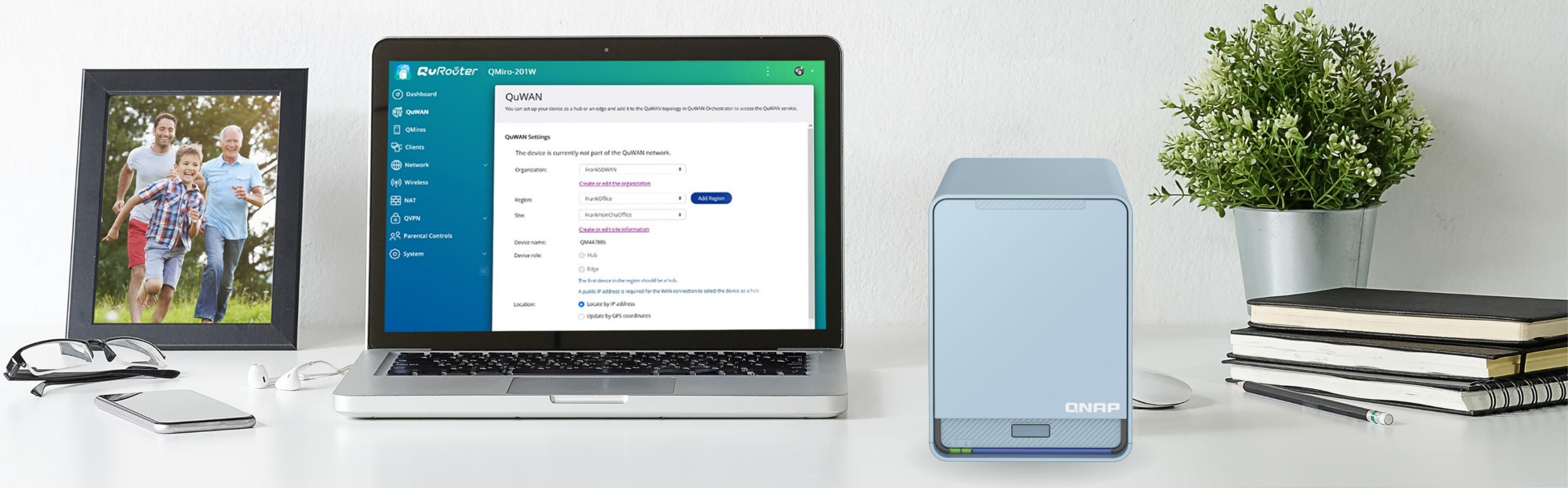
QMiro-201W

What are we going to handle to build a Wi-Fi and cloud service environment at home?

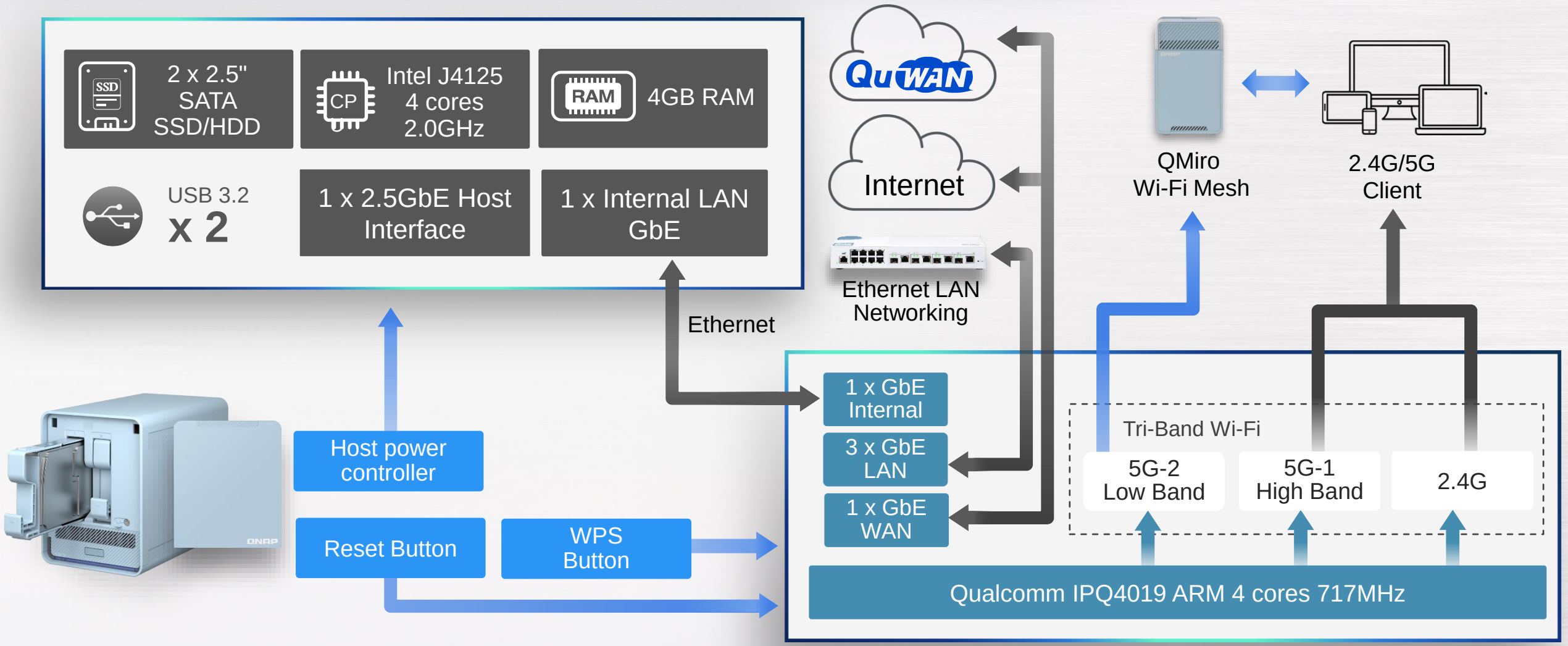
- Where and how can we access the cloud service?
- Can we put all services in a single device?
- Too much devices at home, can we simplify them?
- Why bother when you just want connect back to office to get a file?
- Why don't you have a Wi-Fi signal at my room?
- Why the device is so hard to use?

QMiroPlus-201W
Tri-band Wi-Fi Mesh AC2200 2.5GbE NAS and SD-WAN router

1. Based on QTS smart home management storage system
2. Co-work with QMiro-201W to build Wi-Fi Mesh extending your Wi-Fi coverage
3. QuWAN can easily connected company network with home network through SD-WAN, let's you easily work at home.
4. QuRouter APP makes device managed easily



QMiroPlus-201W is a dual systems which integrated x86 and ARM CPU together



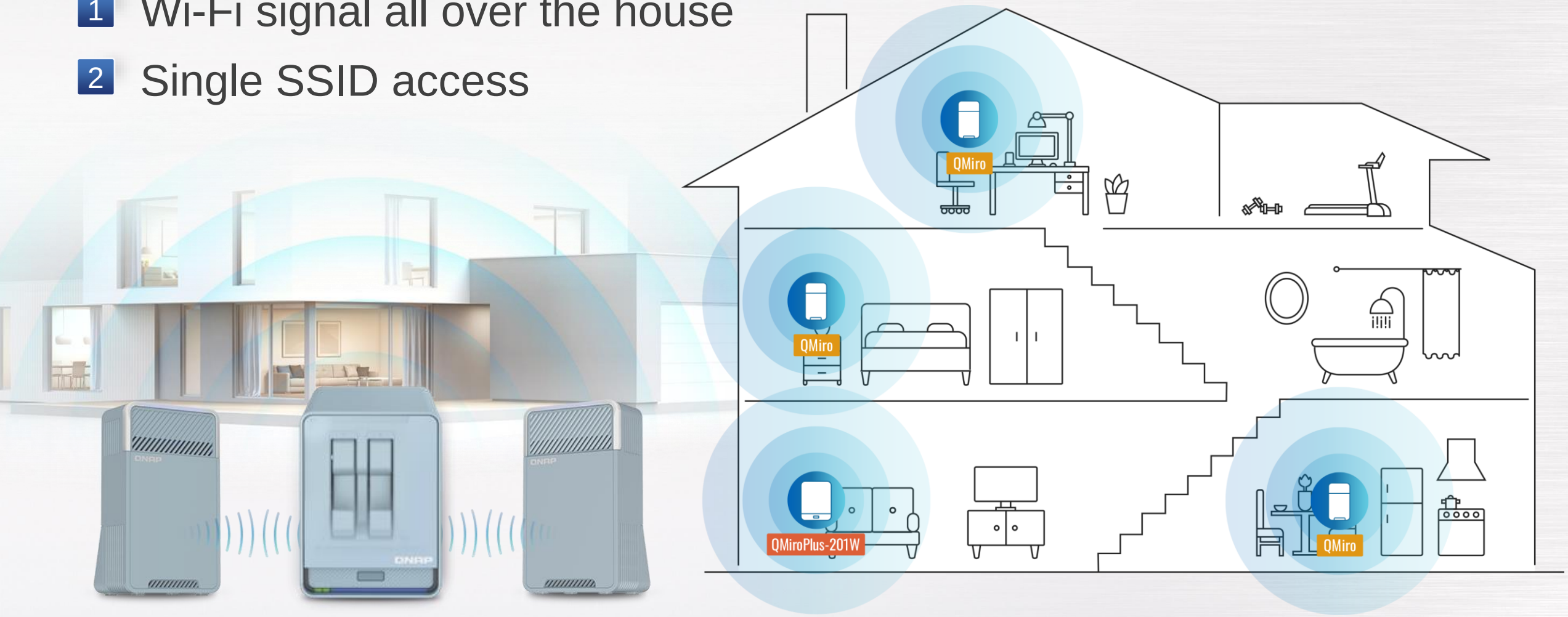
QMiroPlus-201W

QMiro-201W

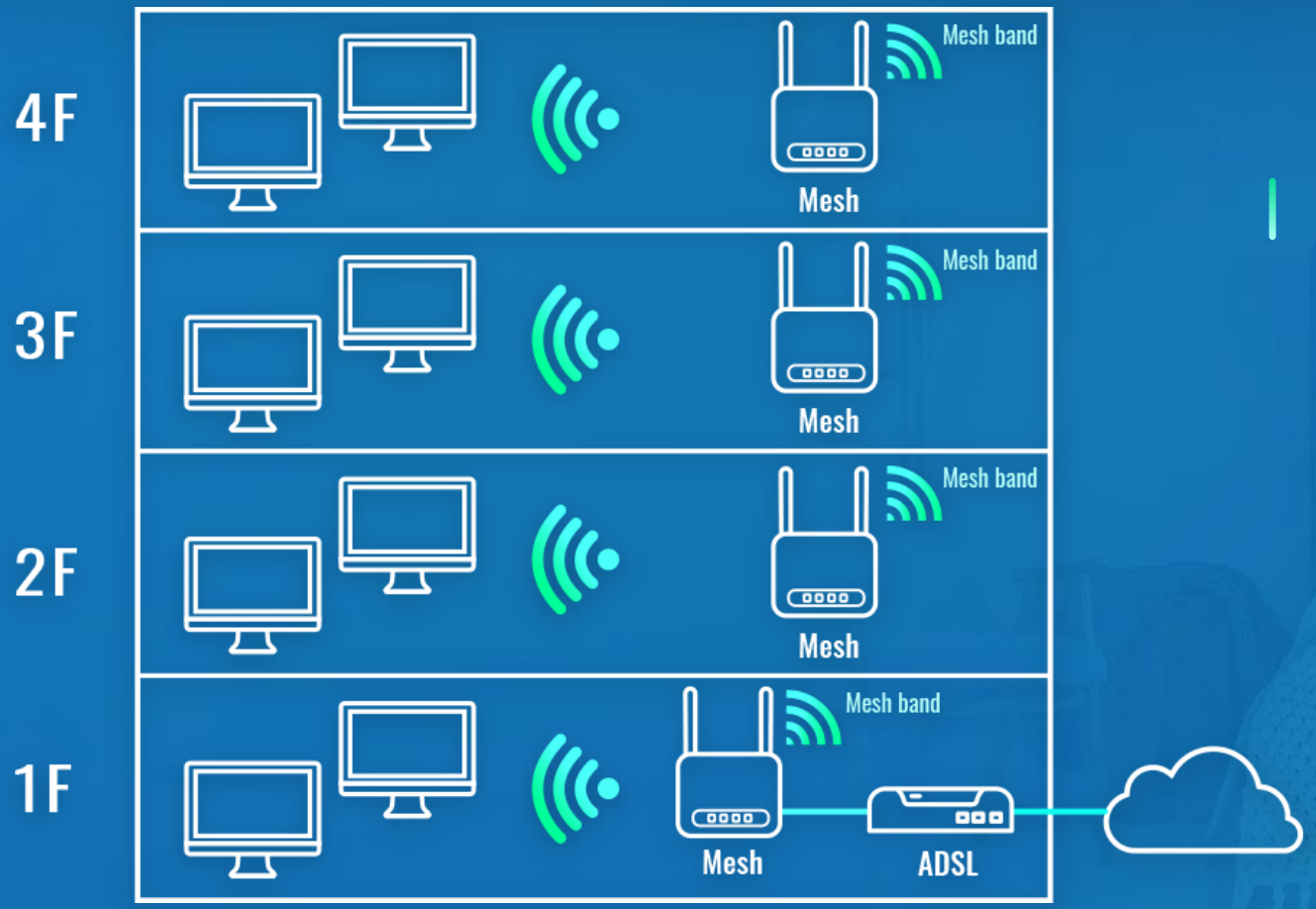
What are the expectations for a smart home wireless storage network?

Sufficient Wi-Fi coverage

1. Wi-Fi signal all over the house
2. Single SSID access



Mesh is the way to go



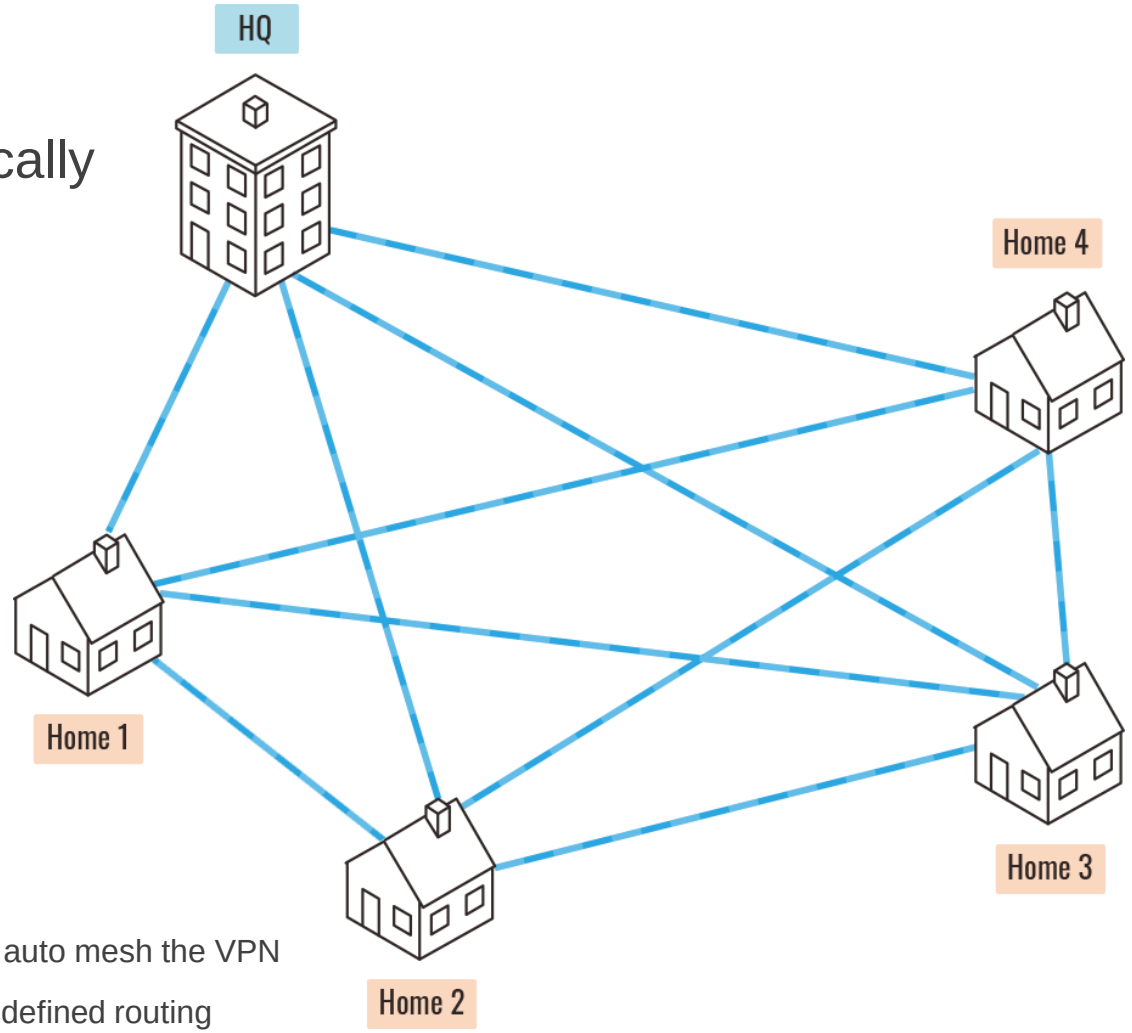
- Independent inter-AP communication channel

Work from home capabilities

1. Connect to office network from home
2. Good transfer efficiency

Easy setup and managed VPN - QuWAN(SD-WAN)

1. Centralized managed and setup
2. Connected all the sides automatically
3. Always keeps in the best route

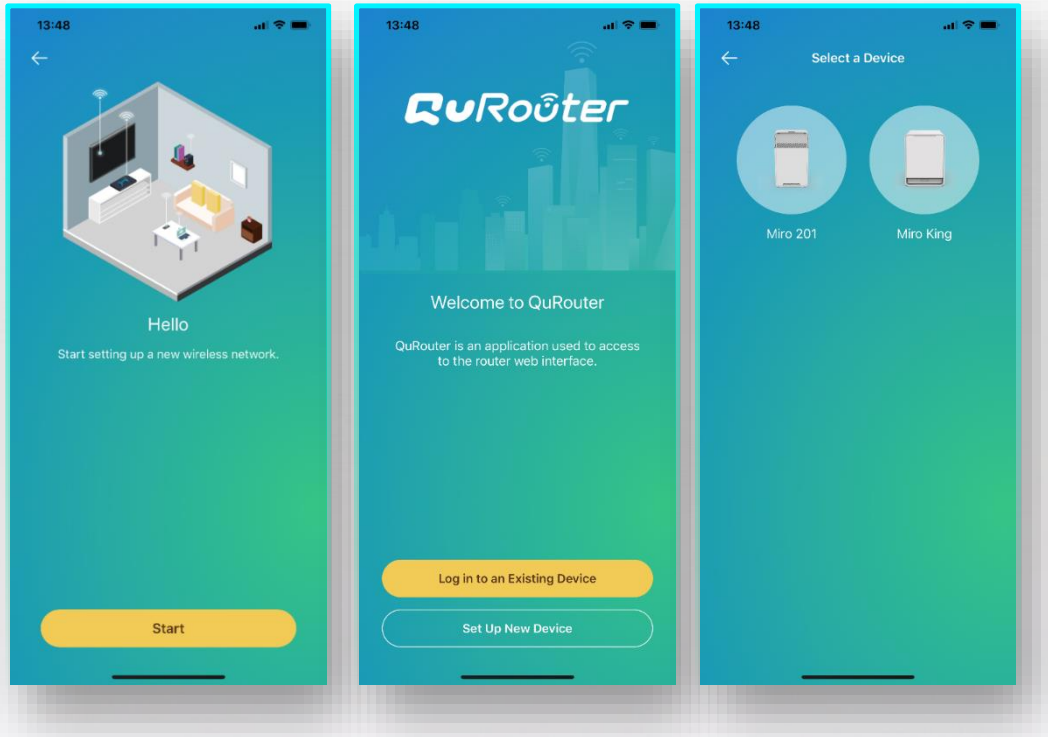


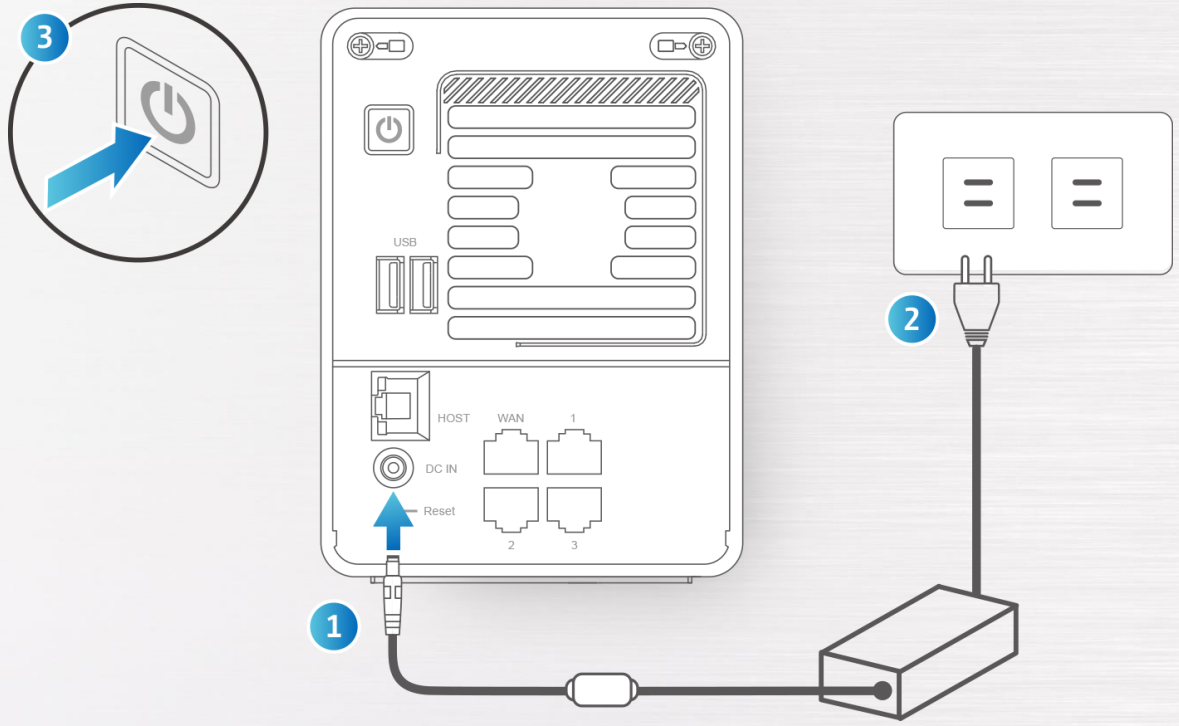
* SD-WAN auto mesh the VPN
* Software defined routing

QuRouter APP makes setup/managed easily

1. Android/iOS APP QuRouter setup networking through bluetooth/wirelss, and managed QuRouter

2. Graphical interface and only need login by using QNAP ID to QuRouter APP for configuration

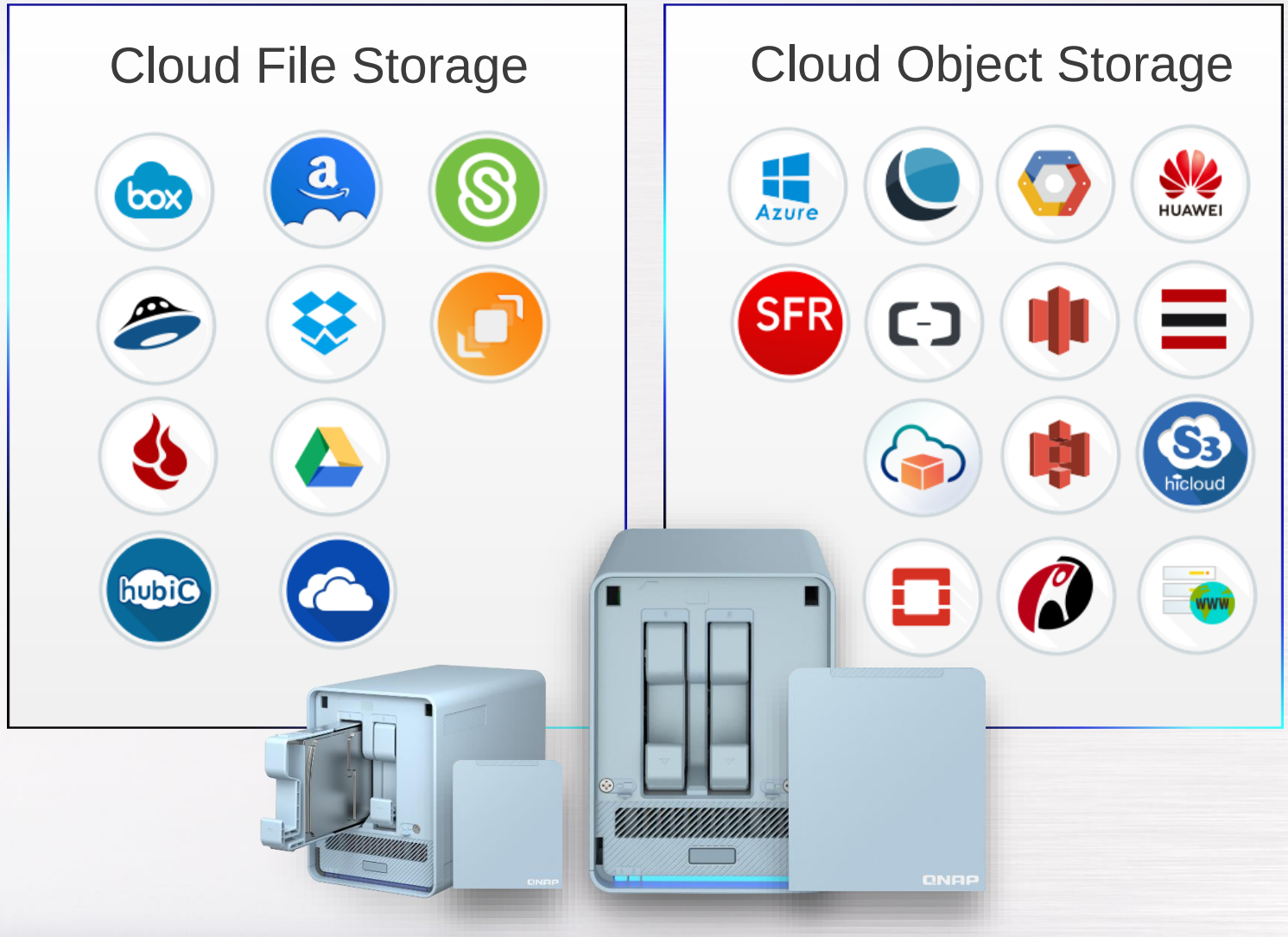




Multiple clouds managed

Support **22** public cloud service and keep increasing

- Support difference cloud services backup
- Support different version's backup



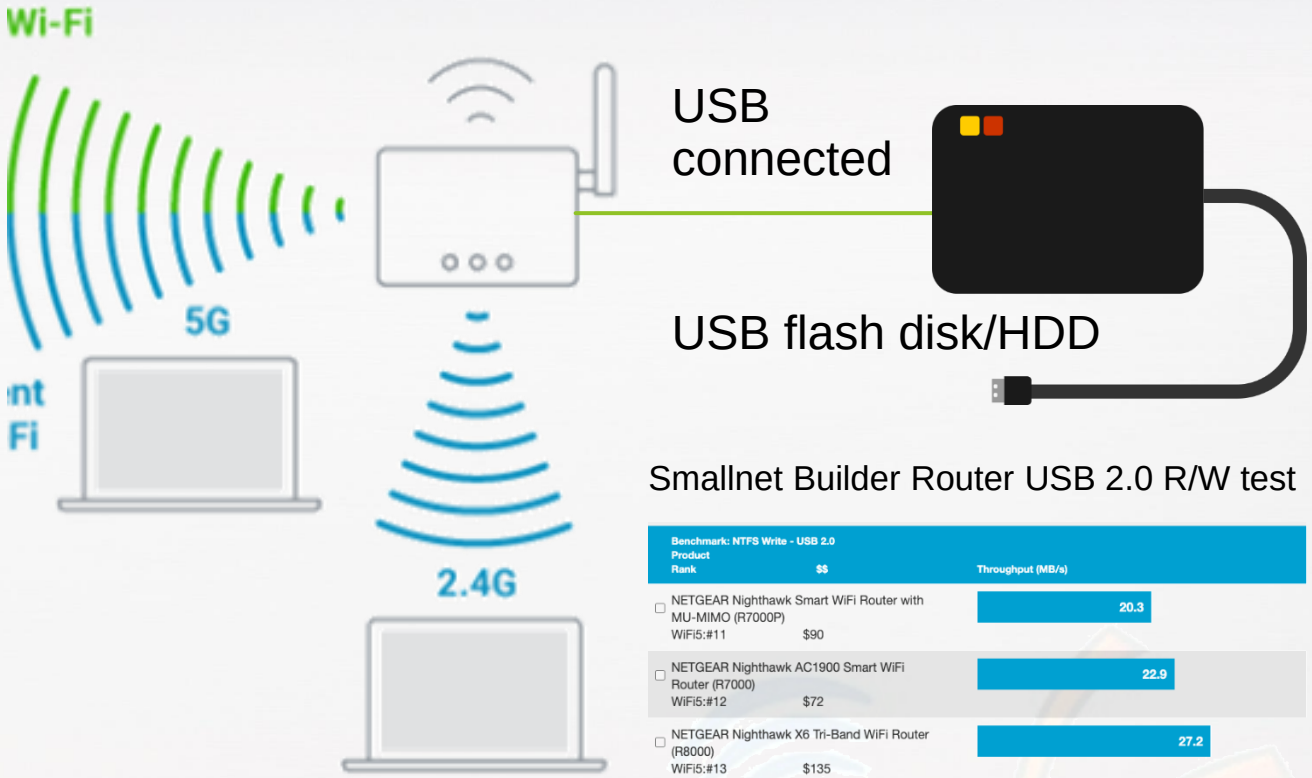
QMiroPlus-201W

born for home

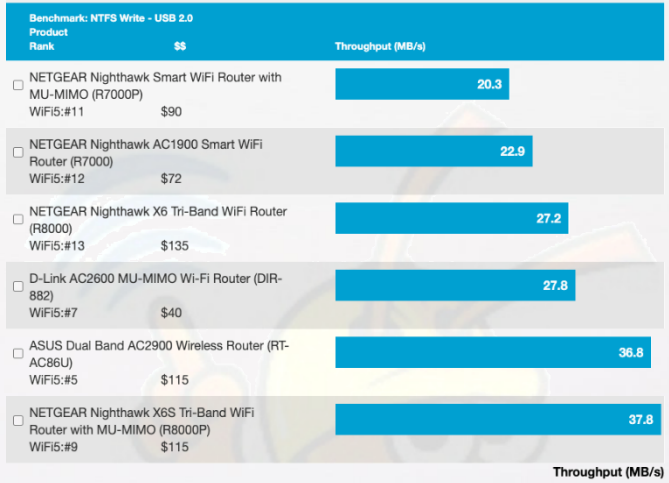
QMiroPlus-201W

QMiro-201W

It is less founctions and slow R/W speed for sharing the USB flash disk through Wi-Fi router



Smallnet Builder Router USB 2.0 R/W test



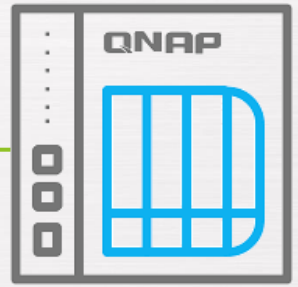
Disadvantages of share files on the USB flash disk/HDD through Wi-Fi router

- Most of devices had only FTP or SMB for file sharing.
- Hard for managing with multiple files stored in different storages.
- Throughput is worse with USB
  - Without USB port for entry level devices
  - Only provide USB 2.0 port (20~37.8MB/s) for middle level and throughput is bad.
  - Up to USB 3.0 for high end devices，but usually it only based on ARM with dual/four cores of CPU, with clock rate 700MHz ~ 1.4GHz or lower，can handle routing and data transfering at the same time well.

Ref: https://www.smallnetbuilder.com/tools/charts/router/bar/169-ntfs-write-usb-2-0/35

It needs more space to put a Wi-Fi router + NAS and organized cables at home, also much expensive.

Cable connect



NAS

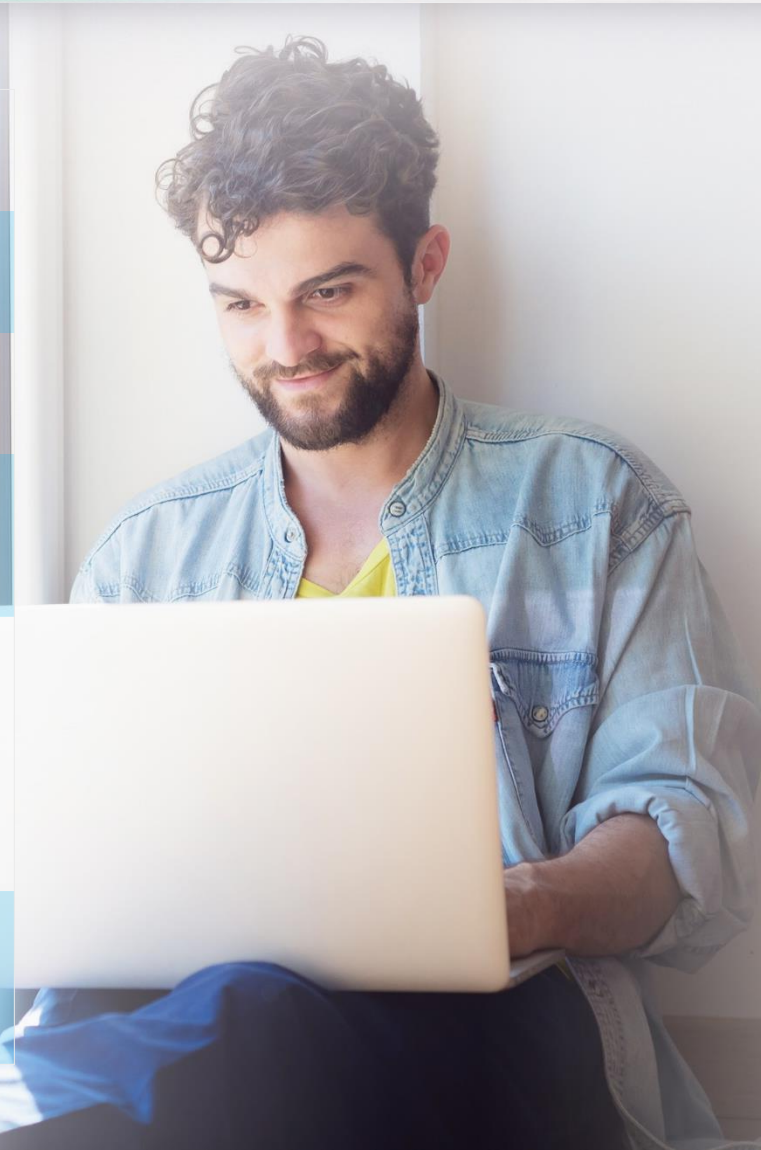
Considering the placed requirements of buying router and NAS seperated

- Larger space on the table：It takes double space for router + NAS then single one.
- Need more power sockets and adapters.
- Extended cables for physical conneted to router and NAS.
- Do you really need high level but expensive Wi-Fi router at this moment?
- Further NAS but only used 1/10 functions.

QMiroPlus-201W HW spec

Tri-Band Wi-Fi Mesh AC2200 2.5GbE NAS and SD-WAN Router

CPU	Router (QuRouter): Qualcomm IPQ4019 ARM 4cores 717MHz NAS (QTS): Intel Celeron J4125 4C 2.0GHz, up to 2.7GHz
Memory	Router: 512MB DDR3 onboard NAS: 4GB DDR4 onboard
Flash memory	Router: 4MB SPI NOR Flash, 4GB eMMC NAS: 4GB
USB port	Router: -- NAS: 2 x USB 3.2 Gen1 5Gb/s Type-A
Ethernet port	Router: 3 x LAN GbE RJ45 ports 1 x WAN GbE RJ45 port NAS: 1 x 2.5GbE RJ45 port
SSD/HDD slot	Router: -- NAS: 2 x 2.5" SATA 3Gbps SSD/ HDD(compatible with 6Gb/s SSD/HDD)



QMiroPlus-201W HW spec (con't)

Tri-Band Wi-Fi Mesh AC2200 2.5GbE NAS and SD-WAN Router

Button	Router: WPS, Reset(share with NAS) NAS: Power button, Reset(share with router)
LED	Router: QuRouter status LED NAS: hard disk1 & hard disk2 status LED
Wireless antenna	2 x internal dual band(2.4GHz/5GHz) antenna 2 x internal single band(5GHz) antenna
Wireless Standard	802.11a/b/g/n/ac
Wireless Speed Rating	Wi-Fi 5 AC2200 2.4GHz (400Mbps)+ 5GHz (867Mbps x 2)
Wireless bandwidth	20/40/80MHz
Bluetooth	Version 5

QMiroPlus-201W HW panal - front

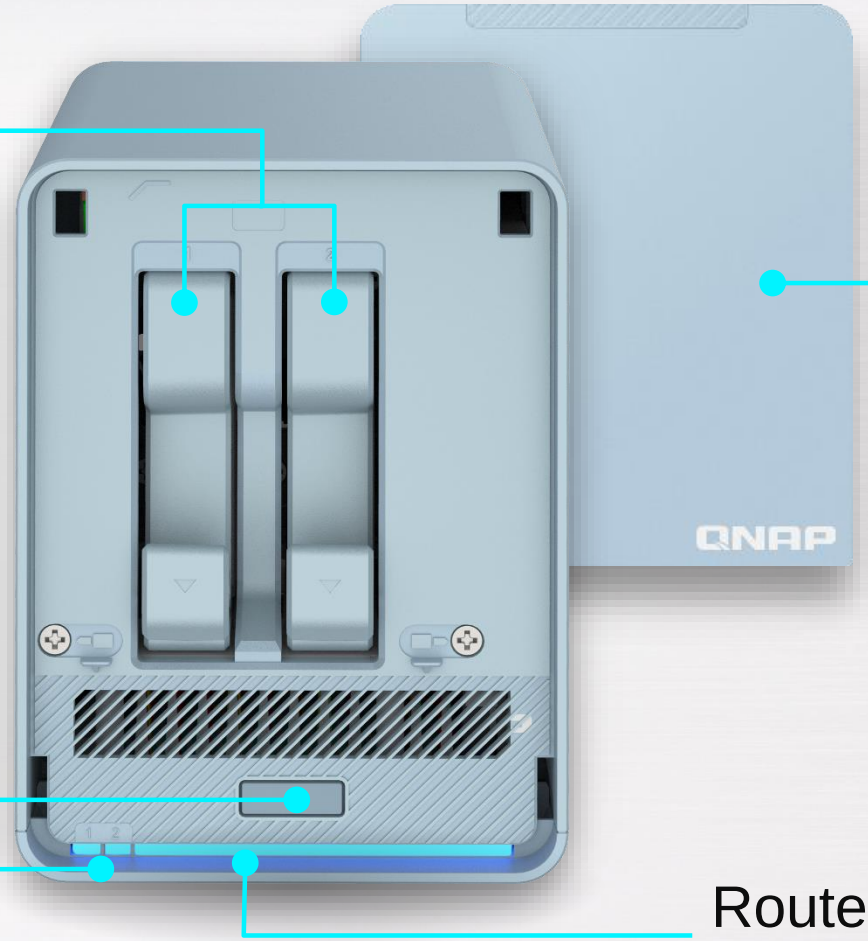
NAS only:

2 x 2.5" SATA SSD/HDD hot swap slots

Front cover

Router only:

WPS (Wi-Fi Protected Setup) Button · for edge wireless device connect to QMiroPlus-201W



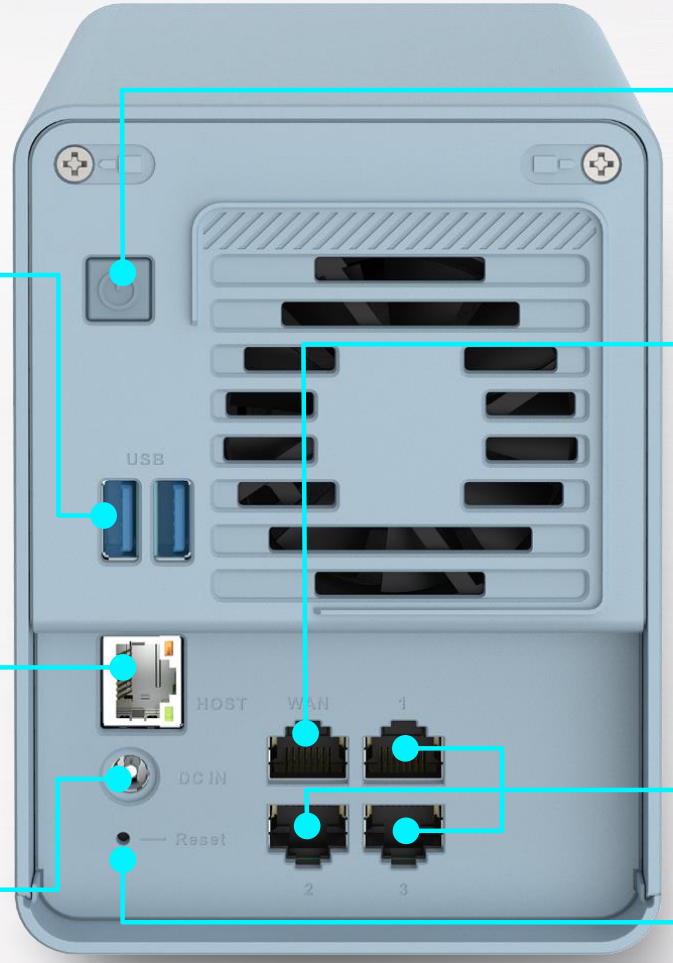
NAS only:

Hard disk1 & hard disk2 status LEDs

Router only:

QuRouter status LED

QMiroPlus-201W HW panel - back



NAS power button

Notice: Router will boot up directly after plug in power adapter

NAS only:

2 x USB 3.2 Gen1
(USB 3.0)Type-A

Router only:

1 x WAN/Internet 1GbE RJ45 port

NAS only:

2.5GbE/1GbE RJ45
(internal storage access only)

Router only:

3 x LAN 1GbE RJ45 ports

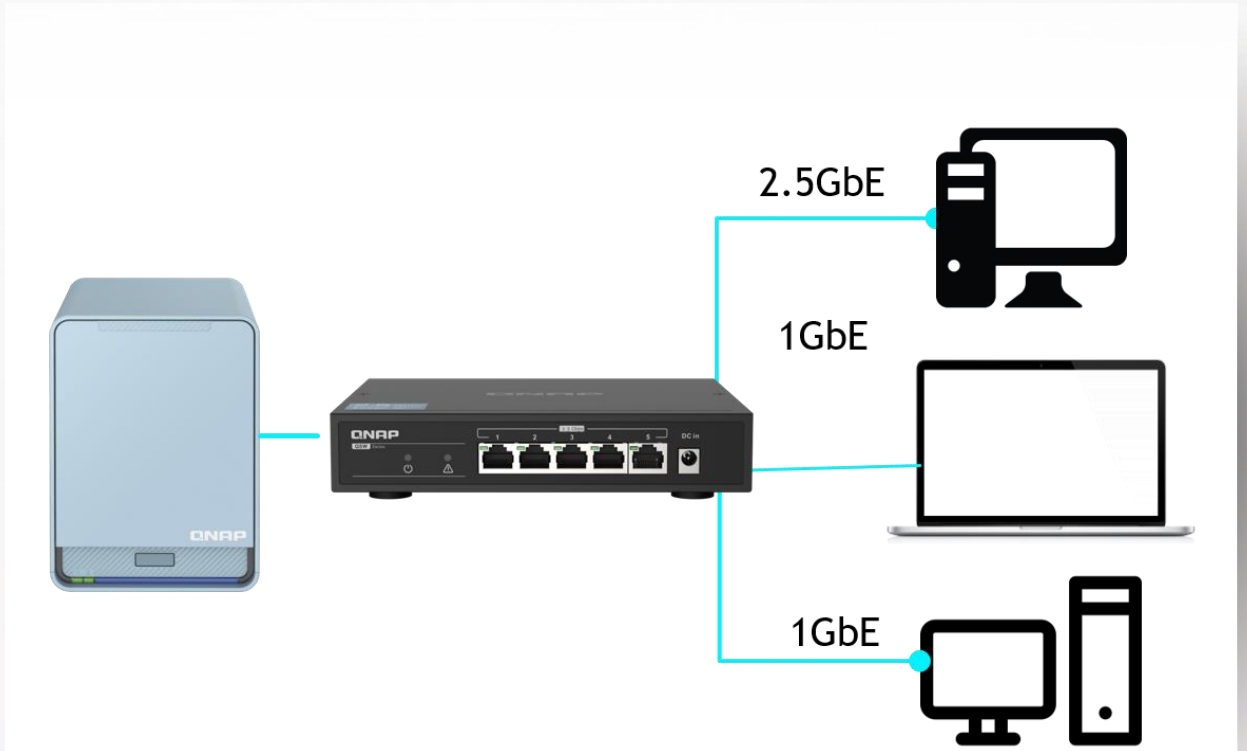
DC 12V power input

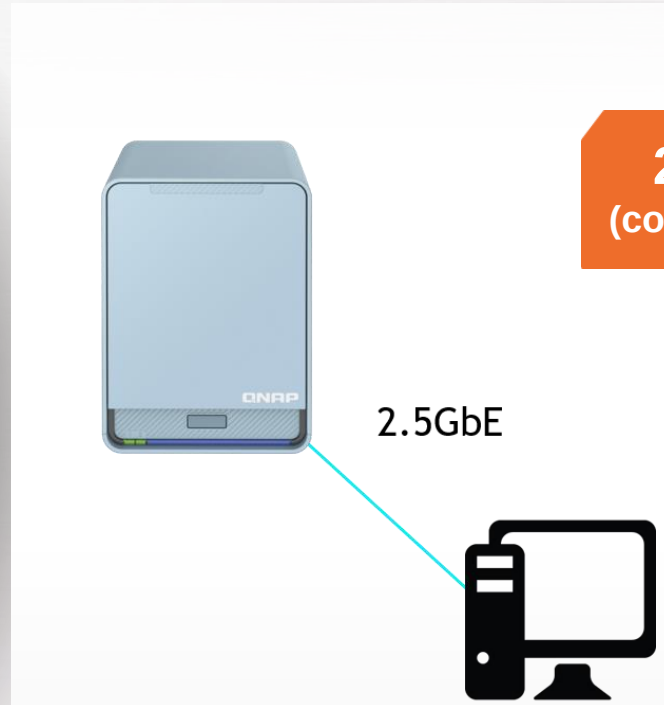
Reset

Notice: It can only reset NAS password when NAS booted up

Through QNAP 2.5GbE network equipments building up high speed intranet

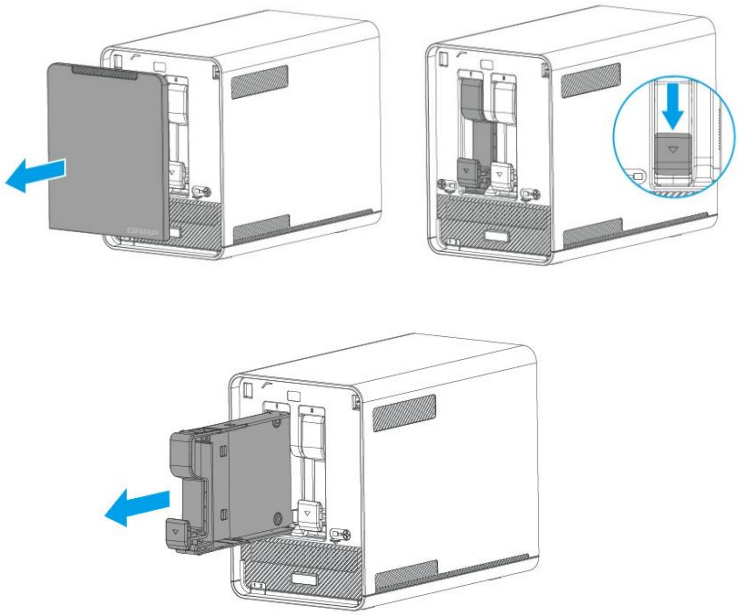
- Co-work with QNAP QSW-1105-5T 2.5GbE switch to have high speed intranet access
- Connected to a PC directly to enjoy high speed NAS access





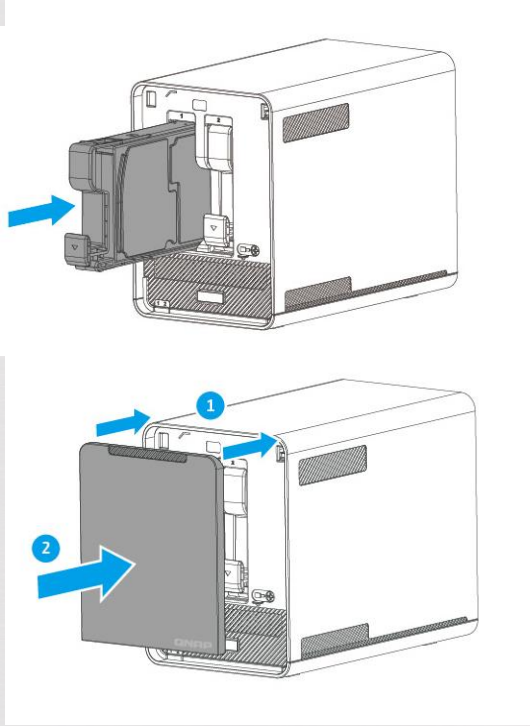
Can install up to two 4TB 2.5" SATA SSD with 8TB (RAID 0) or 4TB (RAID 1) larger storage space, high speed and quietly!

STEP | 01



STEP | 02

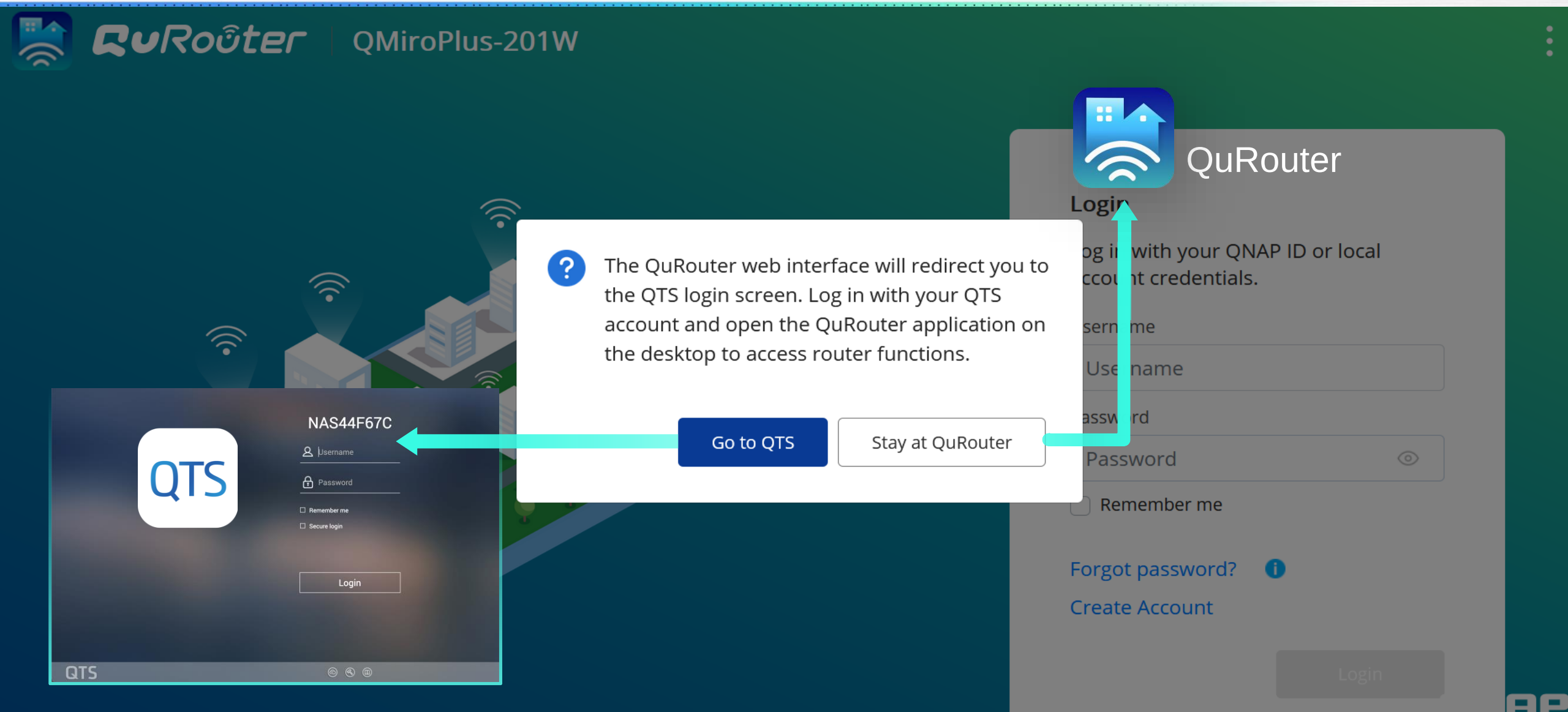
STEP 03



QMiroPlus-201W LED helps you realized the status immediatly

Description	Color	Light Status
QuRouter booting up	Green	Blinking 2s
NAS power off/booting up	Green	Blinking 2s
QuRouter is ready but NAS is still booting up	Green	Static
QuRouter is ready and NAS boots up successfully	Blue	Blinking 2s
QuRouter finished pairing and NAS boots up successfully	Blue	Static
No Internet/Wi-Fi signal out of range	Red	Static
Weak Wi-Fi Mesh signal (-70 DB)	Orange	Blinking 0.5s
Adding Wi-Fi Mesh satellite	Blue	Blinking 0.5s

User friendly design let user can one click accessing QTS/QuRouter



Extend your Wi-Fi Mesh QMiro-201W(Tri-Band Wi-Fi Mesh AC2200 SD-WAN Router)

Router Status LED

WPS (Wi-Fi Protected Setup) Button，for edge wireless device connect to QMiroPlus-201W

1x USB 3.2 Gen1 (USB 3.0)Type-A

LAN port x 1(fix)

WAN port x 1(fix)

QMiro-201W hardware spec

Tri-Band Wi-Fi Mesh AC2200 SD-WAN Router

CPU	Qualcomm IPQ4019 ARM 4cores 717MHz
Memory	512MB DDR3
Flash	4MB SPI NOR Flash, 4GB eMMC
Antenna	2 x Internal Dual Band(2.4/5G) antennas 2 x Internal Single Band(5G) antennas
USB	1 x USB 3.2 Gen1 5Gb/s Type-A
Wireless Standard	802.11a/b/g/n/ac
Wireless Speed Rating	AC2200 2.4G (400Mbps)+5G (867Mbps x 2)
Wireless Bandwidth	20/40/80MHz
Bluetooth	Version 5

QMiro-201W

Tri-Band Wi-Fi Mesh AC2200 SD-WAN Router

1. More affordable than QHora-301W
2. Co-work with QMiroPlus-201W to build Wi-Fi Mesh extending your Wi-Fi coverage
3. QuWAN can easily connected company network with home network through SD-WAN, let's you easily work at home.
4. The QuRouter app makes device management easy
5. Fanless design quiet without any noise

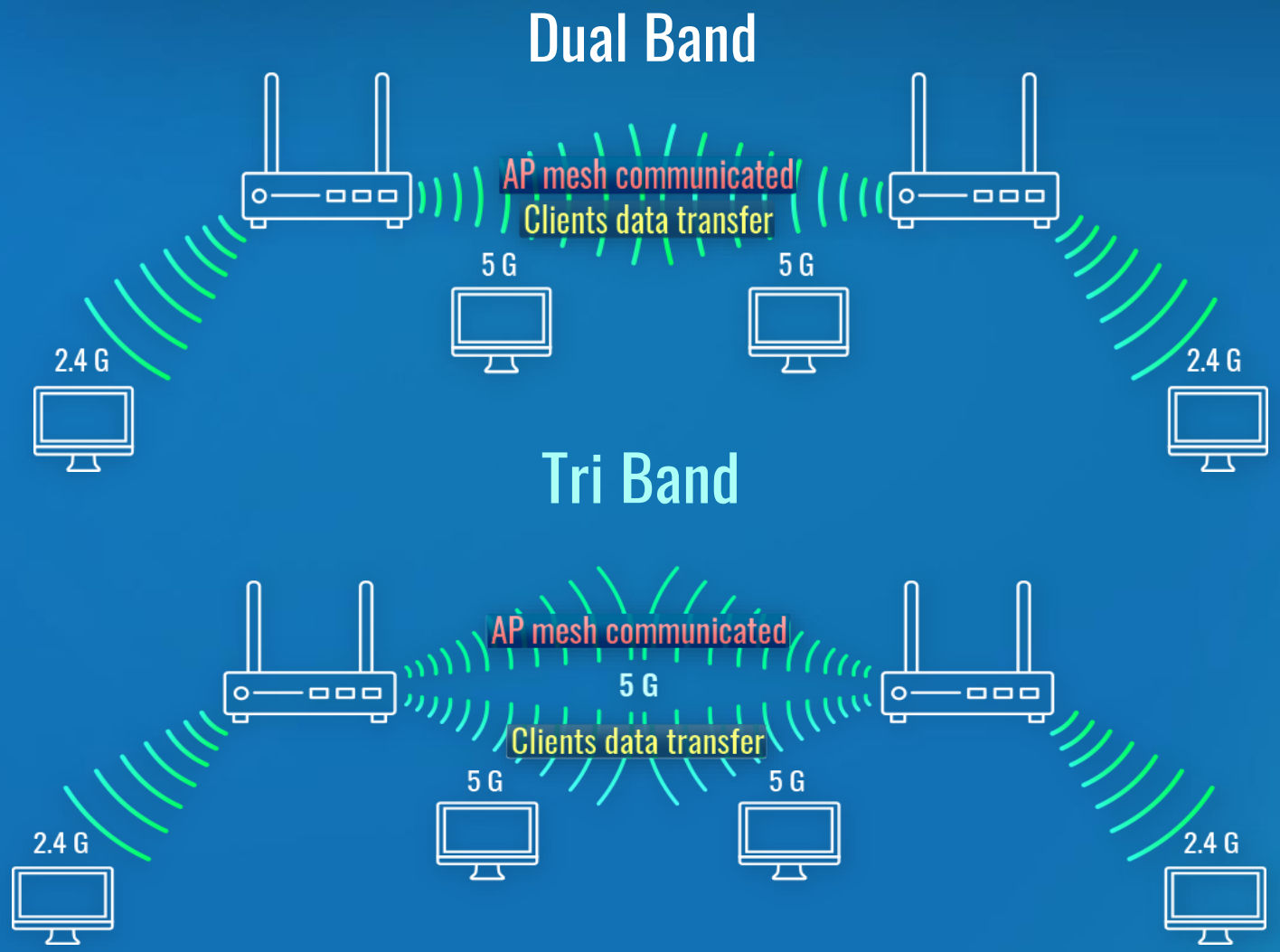
QMiro-201W

QMiroPlus-201W

No Wi-Fi coverage dead

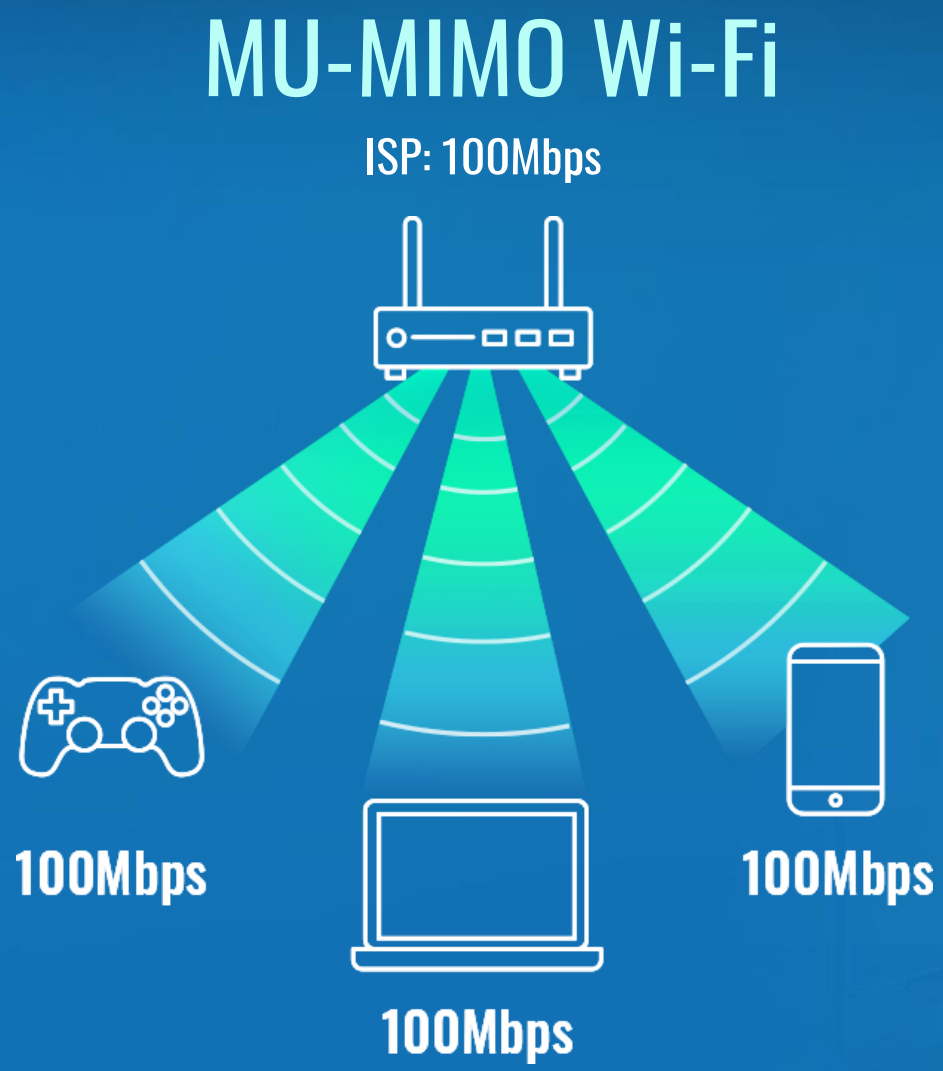
zones for your home

How can AP communicate without affecting client-side transfers?



- A third band lets AP communication with each other
- No interference with client-side transfers

Handle multiple devices



- Bring your own devices
- MU-MIMO can serve multiple devices at same time

Easily work

from home

QMiroPlus-201W

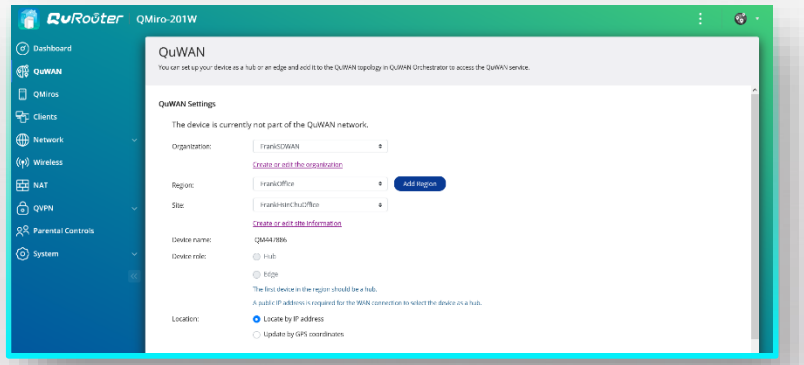
QMiro-201W

Enable QuWAN to manage QMiroPlus-201W/QMiro-201W through the cloud platform

QuWAN Orchestrator

Go to quwan.qnap.com and log in with QID to view the QMiro-201W device, network and VPN connection status, organization-wise topology, connection method. You can also perform remote debugging through the cloud platform

Login by QNAP ID can managed QuWAN cloud portal



Login by QNAP ID can managed QuWAN on the QMiroPlus-201W/QMiro-201W

QMiroPlus-201W

QMiro-201W

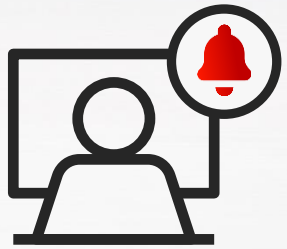
QMiro-201W

A central managed platform solves the management issues of multiple devices

1 | Intuitive graphical user interface

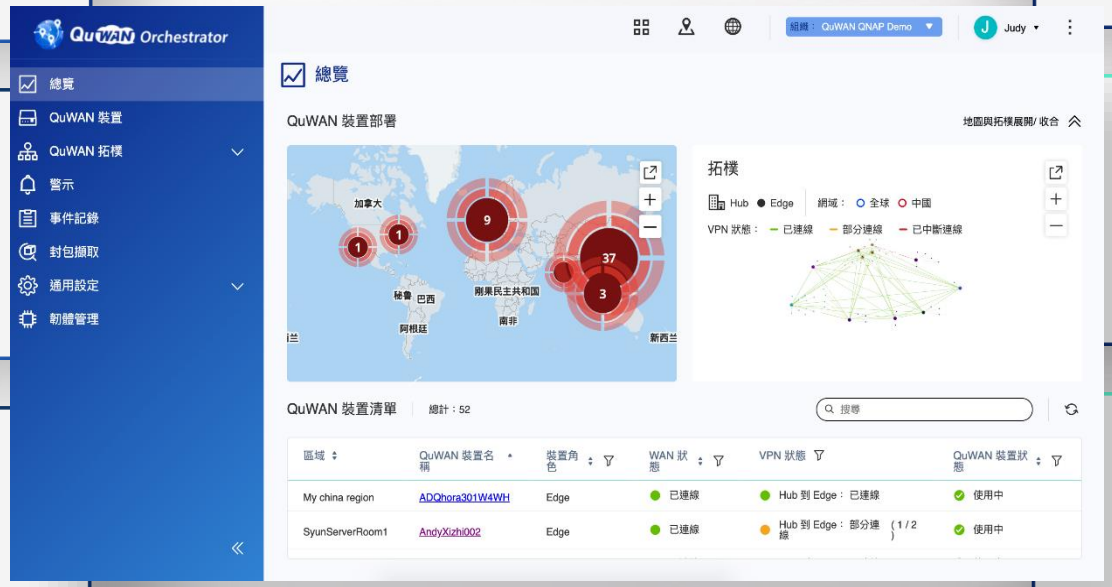
2 | Geological location of each device

3 | Overview connection status of all devices



Instant Notification

IT Admin



4 | Simultaneously execute various parameter settings

5 | Set once and apply to all. Save time to set devices individually.

6 | Remote troubleshooting (e.g., packet capture)

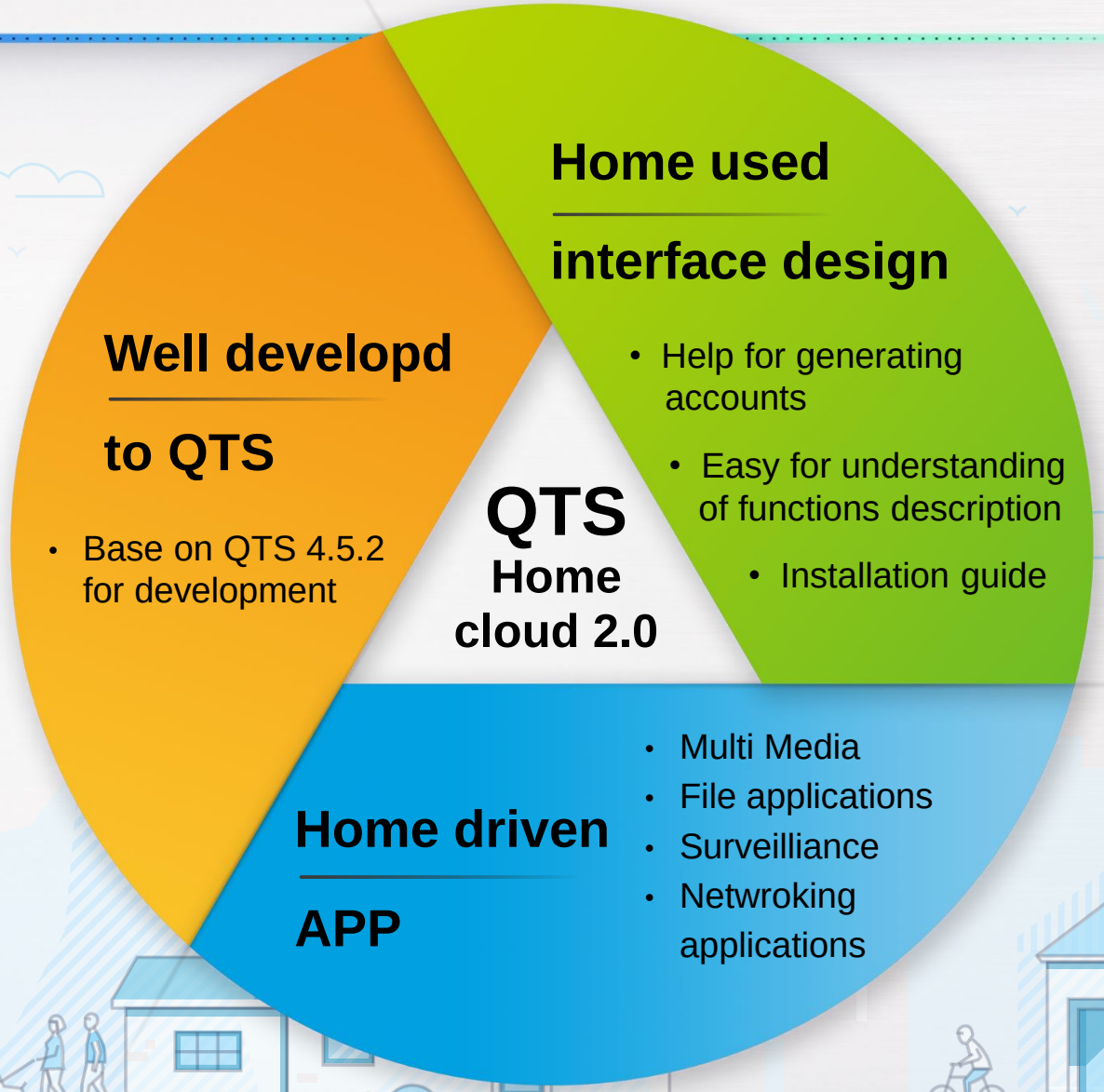
Rich services of

home cloud 2.0

QMiroPlus-201W

QMiro-201W

Core value of Home cloud 2.0



QMiroPlus-201W Home cloud 2.0

Multi media

- Video Station
- QuMagie
- Music Station

File applications

- File Station
- Hybrid Backup Sync
- Qsync 5.0

Surveilliance

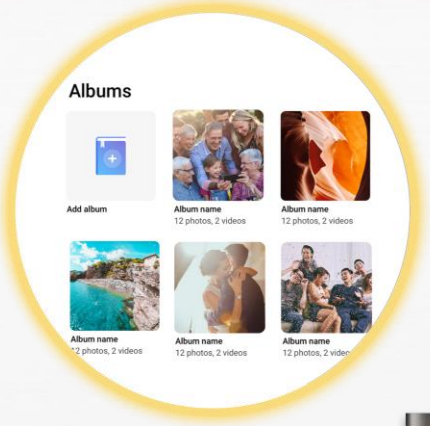
- QVR Elite

Networking application

- QuRouter

Managing pictures by using albums or folders in QuMagie

Browsing by albums



Browsing by folders

AI smart engine

The AI engine of QuMagie Core can help verified the similar people, stuff or even pictures

Backup files from different devices

Personal exclusivity albums

Easily share your pictures

Support iOS® Live Photo dynamic play

Auto backup/sync files through Qsync 5.0

- **One way synchronized**

  One way from device to NAS: data synchronize
  One way from NAS to device: data deployed

- **Dual way synchronized**

  Standard dual way synchronization, make sure the files in both sides are synchronized.

- **Filtering**

  To chose the file type which don't like to synchronize

- **Smart Delete**

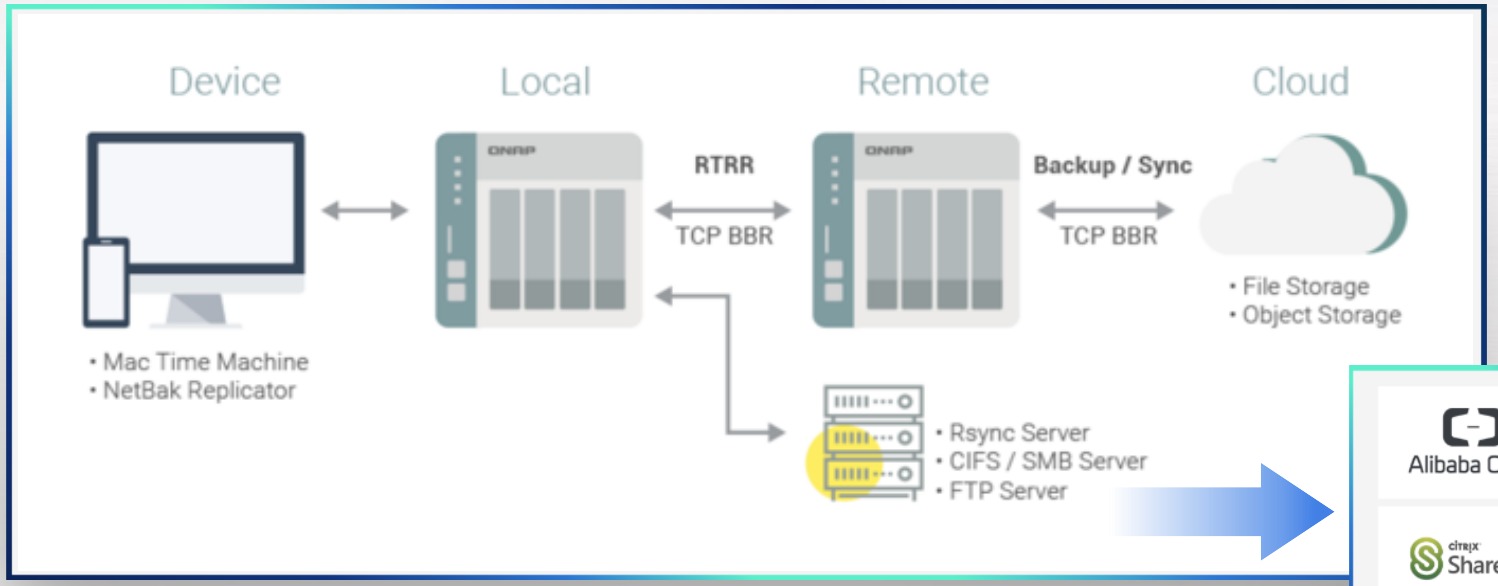
  Setup synchronized without removing files on the NAS, also make a copy for backup on the NAS avoiding delet them accidentally.

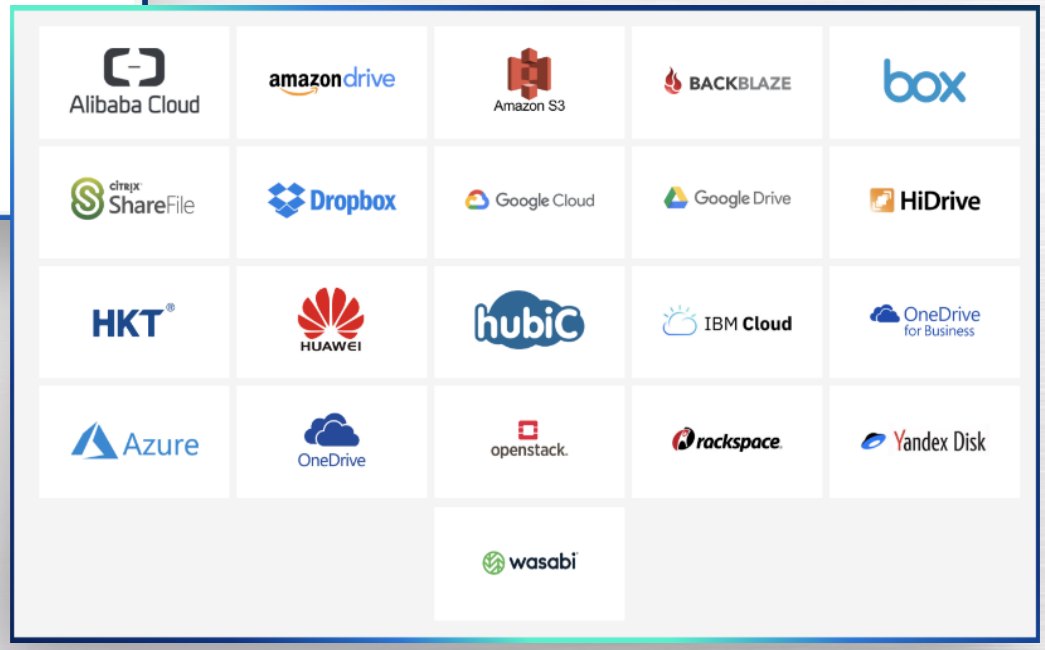
- **Space-Saving Mode[1]**

  Space-Saving Mode allows you to view files without downloading them to your device. You can download files only when you need to open and edit them.

1 Only support on Qsync Client 5.0.0 or latest ◦ Windows supported in Windows 10 (1909) or latest.

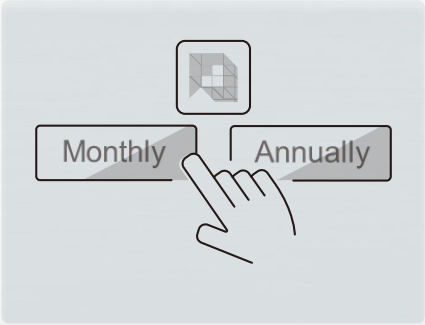
HBS 3 your backup/sync center





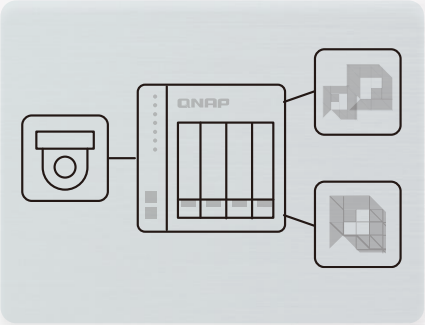
Integrad data backup/recovery/synchronized into single QTS application, let you easiy backup/synchronized files to another QNAP NAS, remote server, extend flash disk or cloud space.

Brand new survilliance service - QVR Elite



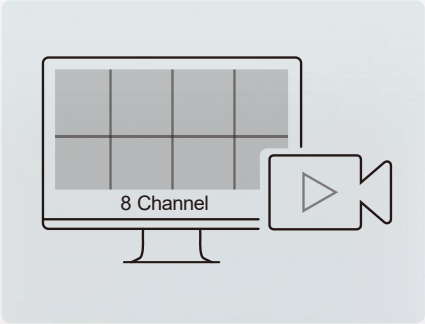
Optional Subscription-Based

Chose how many channels you like to purchase, subscripted and use it.



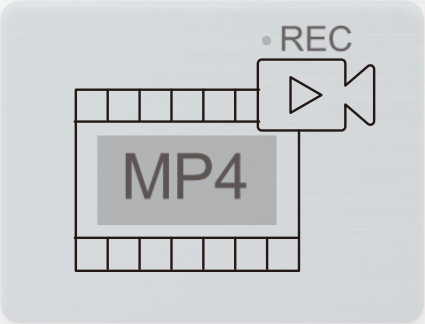
Performance improvement

Use QVR Pro Client as same as QVR Pro, including dynamic frame, live view and replay, alert reiew of E-map.



More channels

Can up to 8 channels



Standard MP4 file type

Based on MP4 file format, can easily play on different players.

Building a multi media streaming platfrom

QuMagie AI albums and pictures classification

Plex Server streaming and converting

CAYIN MediaSign Player HEVC (H.265) live converting and displaying

Streaming the stream to meeting room or display devices by Cinema28

How to set up Wi-Fi Mesh with QMiro-201W?

QMiroPlus-201W

QMiro-201W

QMiroPlus-201W + QMiro-201W deployment advices

Single QMiroPlus-201W/QMiro-201W for master	Single QMiroPlus-201W for master Multiple QMiro-201W for satellites
2,100 sq ft./195 sq meter	Additional 2,100 sq ft./195 sq meter for each
1-2 rooms apartment Small store	3-5 rooms appartement Large store Single-family villa

* Home size, materials, and layout can affect how Wi-Fi signal travels. These are suggestion deployment values based on laboratory tests.

** Single mesh site can only have 4 QMiroPlus-201W/QMiro-201W: 1 x primary + 3 x nodes

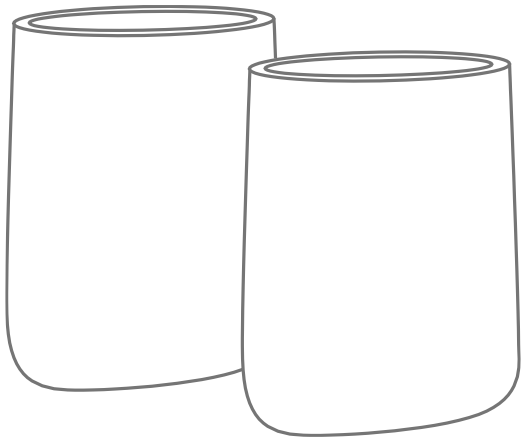
Add more QMiro-201W extend your Wi-Fi coverage if needed

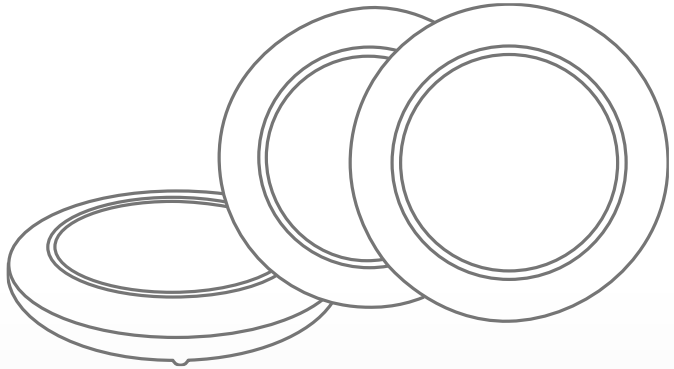
Do we really need 2 or 3 APs?

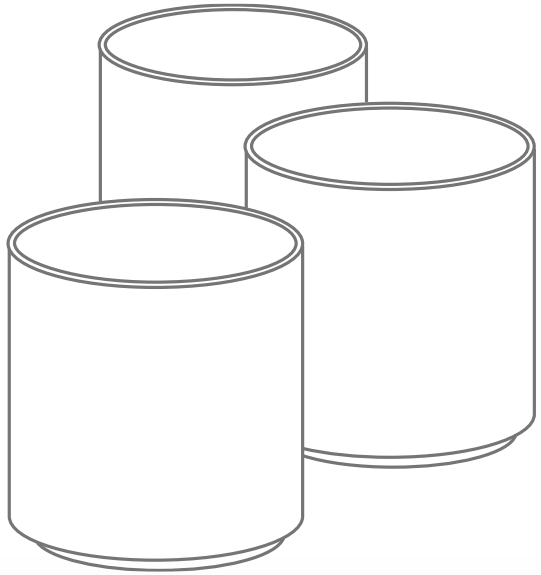
Why don't we get just one and gradually upgrade if needed?

1 Single selling pack, buy more if needed

2 QuRouter APP help you easily deploy Wi-Fi Mesh







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