



**QNAP**

# QMiro-201W

## User Guide

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# 1. Preface





## About This Guide

This guide provides information about the device and step-by-step instructions on installing the hardware. It also provides instructions on basic operations and troubleshooting information.

## Audience

This document is intended for consumers and network administrators. This guide assumes that the user has a basic understanding of network, storage, and backup concepts.

## Document Conventions

Symbol	Description
	Notes provide default configuration settings and other supplementary information.
	Important notes provide information on required configuration settings and other critical information.
	Tips provide recommendations or alternative methods of performing tasks or configuring settings.
	Warnings provide information that, when ignored, may result in potential loss, injury, or even death.

## 2. Product Overview

### About the QMiro-201W

The QMiro-201W is QNAP's first tri-band wireless mesh network (WMN) router equipped with QuWAN to support SD-WAN deployment. The router features four internal antennas and supports one 2.4 MHz and two 5 MHz network bands. You can configure and manage multiple QMiro-201W devices using the QuRouter web interface or mobile app.

### Hardware Specifications



#### Warning

If your QNAP product has hardware defects, return the product to QNAP or a QNAP-authorized service center for maintenance or replacement. Any attempt to repair or perform maintenance procedures on the product by you or an unauthorized third party invalidates the warranty.

QNAP is not responsible for any damage or data loss caused by unauthorized modifications and installation of unsupported third-party applications.

For details, see the [QNAP Warranty Terms and Conditions](#).



#### Tip

Model specifications are subject to change without prior notice. To see the latest specifications, go to <https://www.qnap.com>.

Component	QMiro-201W
Processor	
CPU	Qualcomm® IPQ4019 SoC
Frequency	4-core 716.8 MHz
Architecture	ARM Cortex-A7
Memory	512 MB DDR3L
Flash memory	4 GB eMMC
Network	
Gigabit Ethernet ports	1 x 10 GbE RJ45
Antenna	4 internal antennas
Total power consumption	24W
External I/O Ports & Expansion Slots	
USB ports	1 x USB 3.2 Gen 1 Type-A port
Interface	
Buttons	<ul style="list-style-type: none"> <li>• Reset</li> <li>• Wi-Fi Protected Setup (WPS)</li> </ul>
Dimensions	
Dimensions (H x W x D)	68 × 100 × 175.5 mm (2.67 x 3.93 x 6.90 in)
Net weight	0.44 kg (0.97 lbs)
Other	
Operating temperature	0°C to 40°C (32°F to 104°F)
Relative humidity	Non-condensing relative humidity: 5% to 95%

## Software Features

Feature	Description
System status and management	<ul style="list-style-type: none"> <li>• Device connection status</li> <li>• Device health status</li> <li>• WAN status</li> <li>• Wireless status</li> <li>• Firmware schedule management</li> </ul>
Wired network management	<ul style="list-style-type: none"> <li>• WAN/LAN port configuration</li> <li>• Network port connection status</li> <li>• IPv4 address routing management</li> </ul>
Security	Network Address Management (NAT) and port forwarding
VPN	<ul style="list-style-type: none"> <li>• Remote access support using L2TP, OpenVPN, and QBelt (QNAP proprietary VPN) protocols</li> <li>• Client IP pool management</li> <li>• VPN client management</li> <li>• Connection logs</li> <li>• Maximum VPN tunnels: 30</li> </ul>
Access control	<ul style="list-style-type: none"> <li>• Parental control</li> <li>• Domain Name Filtering (DNS) and content filtering</li> </ul>
System settings	<ul style="list-style-type: none"> <li>• Backup and restore</li> <li>• Restart, reset</li> <li>• Manage audio alerts</li> <li>• Local account and QNAP ID management</li> <li>• USB settings: USB device user management, USB usage overview, FTP server management</li> </ul>
QuWAN	Configure organization, region, site, device name, and device role

## Wireless Specifications

Specification	Description
Standards	<ul style="list-style-type: none"> <li>• IEEE 802.11ac/n/a 5 GHz</li> <li>• IEEE 802.11ac/n/b/a 2.4 GHz</li> </ul>
Operating frequencies	<ul style="list-style-type: none"> <li>• 2.4 GHz</li> <li>• 5 GHz-1</li> <li>• 5 GHz-2</li> </ul>

Specification	Description
Speeds	AC2200 <ul style="list-style-type: none"> <li>• 5 GHz (1734 Mbps): 2 x 2 (80 MHz)</li> <li>• 2.4 GHz (400 Mbps): 2 x 2 (40 MHz)</li> </ul>
Modes	<ul style="list-style-type: none"> <li>• Router mode</li> <li>• Access point (AP) mode</li> </ul>
Guest wireless network	<ul style="list-style-type: none"> <li>• 1 x 5 GHz</li> <li>• 1 x 2.4 GHz</li> </ul>
Encryption	<ul style="list-style-type: none"> <li>• WPA2-PSK</li> <li>• WPA-PSK + WPA2-PSK</li> <li>• WPA-Enterprise</li> <li>• WPA2-Enterprise</li> </ul>
Wireless network management	<ul style="list-style-type: none"> <li>• Supports MU-MIMO technology</li> <li>• Supports band steering for tri-band (2.4 GHz and 5 GHz band) access points</li> <li>• Transmission power (high, middle, and low)</li> <li>• 20/40/80 MHz bandwidth</li> <li>• Auto and custom DFS (Dynamic Frequency Selection) channels</li> <li>• RTS/CTS (Request to Send/Clear to Send) functions</li> <li>• Smart connect</li> <li>• Wireless scheduler</li> <li>• Wi-Fi Protected Setup (WPS)</li> </ul>

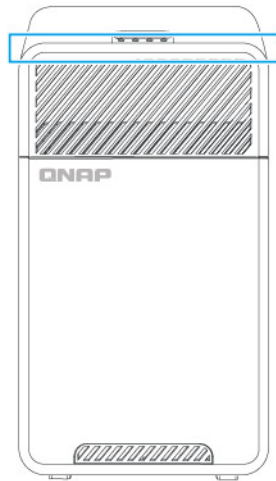
## Package Contents

Item	Quantity
QMiro-201W router	1
AC power adapter	1
Ethernet cable	1

## Components



## Front Panel LED

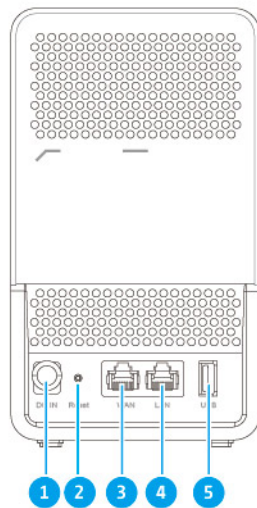


This LED indicates the system status and related information when the device is powered on. The following LED information applies only when the device is powered on and is connected to a network.

LED	Status	Description
Pre-configuration		
System Status	Green	<ul style="list-style-type: none"> <li>The device is being initialized.</li> <li>An error has occurred.</li> </ul>
	Flashes green every 0.1 seconds	The device is being located using the QuRouter application.
	Flashes blue every 2 seconds	The device is ready to be configured.
Post-configuration		

LED	Status	Description
<ul style="list-style-type: none"> <li>• System Status</li> <li>• Wireless</li> </ul>	Off	The device is powered off.
	Red	<ul style="list-style-type: none"> <li>• The device is not connected to a network.</li> <li>• The node is out of range.</li> </ul>
	Blue	The device is ready.
	Green	<ul style="list-style-type: none"> <li>• The device is booting.</li> <li>• The firmware is being updated.</li> </ul> <div style="border-left: 2px solid red; padding-left: 10px; margin-top: 10px;"> <p><b>Important</b> When updating the firmware, do not remove the power cord or USB cable, and do not force-exit the application.</p> </div> <ul style="list-style-type: none"> <li>• The device is being reset.</li> <li>• An error has occurred.</li> </ul>
	Flashes blue every 0.5 seconds	<ul style="list-style-type: none"> <li>• The router is being located in the QuRouter web interface.</li> <li>• The WPS button has been pressed.</li> <li>• A node is being added to the primary device in a mesh network.</li> </ul>
	Flashes orange every 0.5 seconds	The node in the mesh network has weak signal.

### Rear Panel



No.	Component
1	Power input

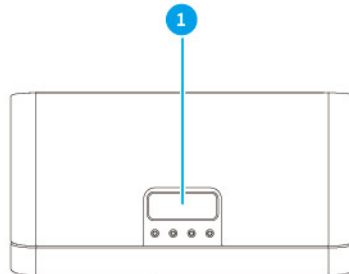
No.	Component
2	Reset button For details, see <a href="#">Reset Button</a> .
3	WAN port
4	LAN port
5	USB 3.2 Gen 1 Type-A port

## Reset Button

QNAP routers can be reset to factory defaults using the reset button located on the rear side of the device. For details on the component placement, see the rear side of the device (see [Rear Panel](#)).

Operation	User Action	Result
Reset	Press and hold the button for 3 seconds.	The router resets and all default settings are restored. This will clear any statically assigned IP address information, WAN and LAN configurations, and security settings. The router is unbound from the QNAP ID.

## Top Panel




No.	Component
1	WPS button For details, see <a href="#">WPS Button</a> .

## WPS Button

Wi-Fi Protected Setup (WPS) is a protocol that enables a simple wireless network setup. It allows users to set up a wireless network without the need to configure any network names, passwords, and other cryptographic information.

You can configure WPS by pressing the WPS button on the top of the device (see [Top Panel](#)). Alternatively, you can configure WPS through QuRouter; for details, see [Configuring Wi-Fi Protected Setup \(WPS\)](#).

Operation	User Action	Result
Enable WPS	<ol style="list-style-type: none"> <li>1. Press the WPS button located on the router.</li> <li>2. Enable WPS on the client device.</li> </ol> <div style="display: flex; align-items: flex-start; margin-top: 10px;">  <p><b>Tip</b> The WPS feature might be labelled differently, depending on the product. The function is typically located in the Wi-Fi settings page.</p> </div>	The WPS protocol is enabled and the client device joins the network.

## Safety Information

The following instructions help ensure personal safety and environmental safety. Read these instructions carefully before performing any operations.

### General Instructions

- The device should be stored in a secure location with restricted access, controlled through the use of a tool, lock and key, or any means of security.
- Only qualified, skilled, and authorized persons with knowledge of all restrictions, safety precautions, and installation and maintenance procedures should have physical access to the device.
- To avoid potential injury or damage to components, ensure that the drives and other internal system components have cooled before touching them.
- Observe electrostatic discharge (ESD) procedures to avoid potential injury or damage to components.

### Power

- To reduce the risk of fire or electric shock, ensure that you only connect the power cord to a properly grounded electrical outlet.



Devices with redundant power supply may have one or more power supply unit (PSU) cords. To avoid serious injuries, a trained service technician must disconnect all PSU cords from the device before installing or replacing system components.

## 3. Installation and Access

This chapter provides specific hardware installation and router access steps.

### Installation

#### Installation Requirements

Category	Item
Environment	<ul style="list-style-type: none"> <li>Room temperature: 0°C to 40°C (32°F to 104°F)</li> <li>Non-condensing relative humidity: 10% to 90%</li> <li>Wet-bulb temperature: 27°C (80.6°F)</li> <li>Flat, anti-static surface without exposure to direct sunlight, liquids, or chemicals</li> </ul>
Hardware and peripherals	Network cable
Tools	Anti-static wrist strap

#### Setting Up the Router

- Place your router in an environment that meets the requirements.  
For details, see [Installation Requirements](#).
- Power on the router.
- Check if the LED status is green.  
For details, see [Front Panel LED](#).
- Connect the router to the network and the computer.  
For details, see [Connecting the Router to the Internet](#).
- Configure the router settings.  
For details, see [Configuring QuRouter](#).
- Log in with your QNAP ID or local account credentials.  
For details, see [Binding the Router with a QNAP ID](#).

#### Connecting the Router to the Internet

- Connect the power cord to the electrical outlet.  
The router powers on and the front panel LED turns green.
- Connect the router to the Internet.
  - Connect an Ethernet cable to the WAN port of the router.
  - Connect the other end of the Ethernet cable to the ISP gateway.
  - Connect an Ethernet cable to the LAN port of the router.
  - Connect the other end of the Ethernet cable to the Ethernet port of the computer.
- Verify that the router is recognized by the computer.

- a. Open Qfinder Pro on the host computer.



**Note**

To download Qfinder Pro, go to <https://www.qnap.com/utilities>.

- b. Locate the router on the list.



**Note**

Verify the router name by checking the MAC address or the SSID listed on the rear side of the router.

4. Open a web browser on your computer.
5. Enter 192.168.100.1 in the address bar.  
The QuRouter login screen appears.
6. Follow the installation guide to configure the initial settings of the router.

## Router Access

Method	Description	Requirements
Web browser	<p>You can access the router using any computer on the same network if you have the following information:</p> <ul style="list-style-type: none"> <li>• Router IP address</li> <li>• Login credentials of a valid user account</li> </ul> <p>For details, see <a href="#">Accessing the Router Using a Browser</a>.</p>	<ul style="list-style-type: none"> <li>• Computer that is connected to the same network as the router</li> <li>• Web browser</li> </ul>
Qfinder Pro	<p>Qfinder Pro is a desktop utility that enables you to locate and access QNAP devices on a specific network. The utility supports Windows, macOS, Linux, and Chrome OS.</p> <p>To download Qfinder Pro, go to <a href="https://www.qnap.com/utilities">https://www.qnap.com/utilities</a>.</p> <p>For details, see <a href="#">Accessing the Router Using Qfinder Pro</a>.</p>	<ul style="list-style-type: none"> <li>• Computer that is connected to the same network as the router</li> <li>• Web browser</li> <li>• Qfinder Pro</li> </ul>

## Accessing the Router Using a Browser

You can access the router using any computer on the network if you know its IP address and the login credentials of a valid user account.




**Note**

If you do not know the IP address of the router, you can locate it using Qfinder Pro.

1. Verify that your computer is connected to the same network as the router.
2. Open a web browser on your computer.
3. Enter the IP address of the router in the address bar.

- Specify the default username and password.


Default Username	Default Password
admin	<p>The MAC address of the router image omitting any punctuation and capitalizing any letters.</p> <p> <b>Tip</b> For example, if the MAC address is 00:0a:0b:0c:00:01, the default password is 000A0B0C0001.</p>

- Click **Login**.  
The QuRouter dashboard page appears.

## Accessing the Router Using Qfinder Pro

Qfinder Pro is a desktop utility that enables you locate and access QNAP devices on a specific network. The utility supports Windows, macOS, Linux, and Chrome OS.

- Install Qfinder Pro on a computer that is connected to the same network as the router.  
To download Qfinder Pro, go to <https://www.qnap.com/en/utilities>.
- Open Qfinder Pro.  
Qfinder Pro automatically searches for all QNAP devices on the network.
- Locate the router in the list and then double-click the name or IP address.  
The default web browser page opens.
- Specify the default username and password.

Default Username	Default Password
admin	<p>The MAC address of the router image omitting any punctuation and capitalizing any letters.</p> <p> <b>Tip</b> For example, if the MAC address is 00:0a:0b:0c:00:01, the default password is 000A0B0C0001.</p>

- Click **Login**.  
QuRouter dashboard page appears.

## Accessing the Router Using the QuRouter App

- Open QuRouter on your Android or iOS device.
- Tap **Existing Device Login**.
- Select the region.  
The QNAP ID login page appears.
- Specify your QNAP ID and password.
- Tap **Sign In**.

The Overview page appears.

## 4. QuRouter

### About QuRouter

QuRouter is a centralized management interface that comes with your QNAP router, accessible by visiting the router's IP address in a web browser. With its intuitive interface, QuRouter makes it easy to set up, secure, and configure the features of your router.

### System Requirements

Category	Details
Hardware	A QNAP router
Software	<ul style="list-style-type: none"> <li>• Web browser:               <ul style="list-style-type: none"> <li>• Microsoft Edge 42 or later</li> <li>• Mozilla Firefox 60.0 or later</li> <li>• Apple Safari 11.1 or later</li> <li>• Google Chrome 70.0 or later</li> </ul> </li> <li>• Qfinder Pro 6.9.2 or later</li> </ul>

### Getting Started

1. Open a web browser on your computer.
2. Enter `192.168.100.1` in the address bar.  
The QuRouter login screen appears.
3. Log in with your QNAP ID or local account credentials.  
For details, see [Binding the Router with a QNAP ID](#).
4. Configure network settings.  
For details, see the following topics:
  - [Configuring WAN Settings](#)
  - [Configuring LAN Settings](#)
5. Configure wireless settings.  
For details, see the following topics:
  - [Configuring Wireless Network Settings](#)
  - [Configuring the Guest Wireless Network](#)
  - [Configuring Wi-Fi Protected Setup \(WPS\)](#)
6. Configure system settings.  
For details, see the following topics:
  - [Editing the Device Name](#)
  - [Configuring Access Control Settings](#)



- [Restart, Reset, Backup, and Restore](#)
  - [Configuring Audio Alert Settings](#)
7. Configure QVPN settings.  
For details, see the following topics:
- [Adding a VPN Client](#)
  - [Enabling QBelt VPN Server](#)
  - [Enabling L2TP VPN Server](#)
  - [Enabling OpenVPN VPN Server](#)

## Configuring QuRouter

This sections explains how to configure the router using the web management interface during the initial setup process.

1. Open a web browser.
2. Enter 192.168.100.1 in the address bar.  
The QuRouter login screen appears.
3. Alternatively, use Qfinder Pro to locate the router on the list.
4. Double-click on the name or IP address.  
The web browser opens the QuRouter web page.
5. Click **Start**.  
The **Set Up and Access QuWAN** page appears.
6. Click **OK**.  
The **WAN Settings** page appears.
7. Select one of the following WAN interface settings.

Setting	Description
<b>DHCP</b>	Obtain IP address settings automatically via DHCP
<b>Static IP</b>	Manually assign a static IP address. You must specify the following information: <ul style="list-style-type: none"> <li>• Fixed IP address</li> <li>• Subnet mask</li> <li>• DNS server</li> </ul>
<b>PPPoE</b>	Select this option to specify a username and password for Point-to-Point Protocol over Ethernet (PPPoE).

8. Click **Apply**.
9. Specify the current location of the device.
  - a. Click the drop-down list to select the country or region.



### Note

If the selected location does not match with the IP geolocation of the device a confirmation message appears prompting you to use the router in basic wireless mode. The basic wireless mode has the following limitations:

- The only channels available are from 1 to 11 in th 2.4 GHz band
- 5 GHz bands are unavailable
- 2.4 GHz band operates on low output power

b. Click **Apply**.

QuRouter verifies the location of the device.

10. Select the Wi-Fi point of the router.



**Note**

The WiFi point is the physical location of the installed router.

11. Click **Apply**.

12. Specify a new SSID and password for the router.



**Note**

You can find the default SSID and password on the rear side of the router.



13. Click **Apply**.

14. Add another router to the mesh network.

a. Select a router from the list.

b. Click **Apply**.


c. Select the Wi-Fi point.

d. Click **Apply**.

15. Update the firmware to the latest version.  
For details, see the [Firmware](#) section.

16. Click **Apply**.

17. Specify the default username and password.

Default Username	Default Password
admin	<p>The MAC address of the router image omitting any punctuation and capitalizing any letters.</p> <p> <b>Tip</b> For example, if the MAC address is 00:0a:0b:0c:00:01, the default password is 000A0B0C0001. The MAC address can be found on the asset tag on the rear side of the device.</p>

18. Click **Login**.  
The **Local Account** window appears.
19. Optional: You can log in to QuRouter using your QNAP ID and password.  
For details, see [Binding the Router with a QNAP ID](#).
20. Reenter or modify the local account username and password.
21. Click **OK**.  
A confirmation message appears.

QuRouter saves the settings.

## Binding the Router with a QNAP ID

1. Open QuRouter.
2. Log in with your QNAP ID and password.




### Note

To create a new QNAP account, click **Create Account**.

3. Click **Login**.  
The **Local Account** window appears.
4. Enter the local account credentials in order to complete the 2-step verification process.
5. Click **OK**.  
The QuRouter dashboard opens and the **Edit Device Name** window appears.
6. Specify a device name containing between 3 to 15 alphanumeric characters.
7. Click **OK**.

The router is bound to the QNAP ID.

## Unbinding the Router from a QNAP ID

1. Log in to QuRouter.
2. Go to **System > Access Control > Administrator**.
3. Below **Unbind QNAP ID**, click .  
A confirmation message appears.
4. Click **OK**.



**Note**

The router is unbound from the QNAP ID and you are logged out of QuRouter.

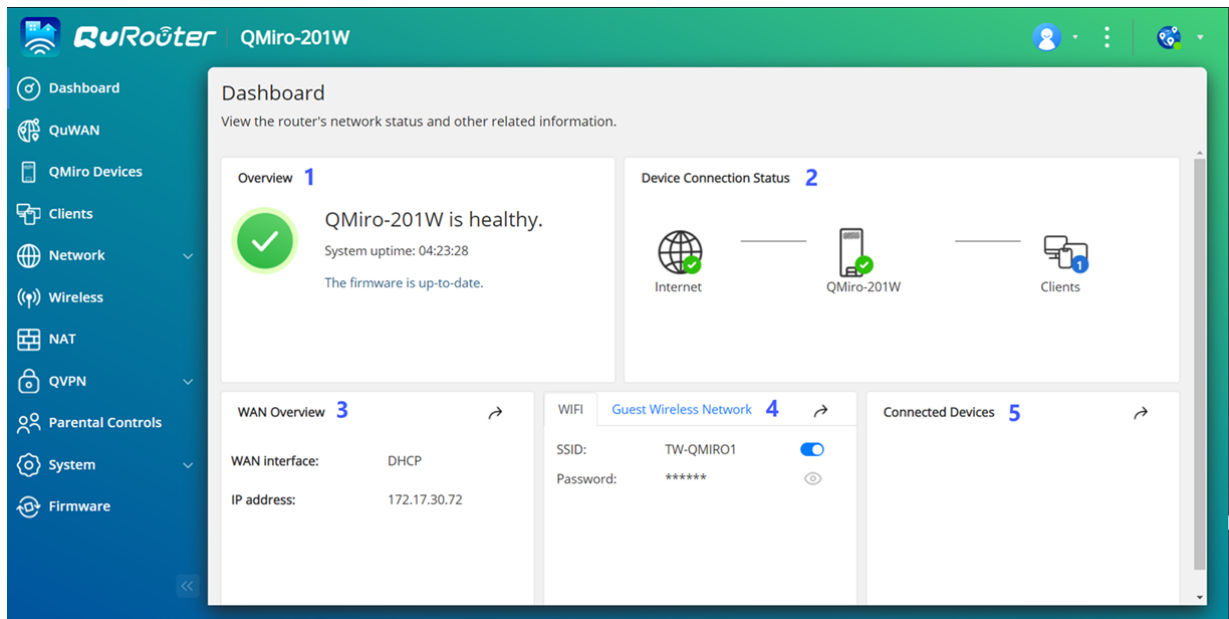
## 5. QuRouter Navigation






### Taskbar



No.	Element	Possible User Actions
1	[USER_NAME]	<b>Logout:</b> Logs the user out of the current session
2	<b>More</b>	Click the button to view the following menu items: <ul style="list-style-type: none"> <li>• <b>Language:</b> Opens a list of supported languages and allows you to change the interface language of QuRouter</li> <li>• <b>About:</b> Displays the following information:                             <ul style="list-style-type: none"> <li>• Operating system</li> <li>• Hardware model</li> <li>• Firmware version</li> </ul> </li> </ul>
3	<b>QuWAN</b>	<ul style="list-style-type: none"> <li>• Click the button to view the following QuWAN-related information:                             <ul style="list-style-type: none"> <li>• QuWAN Orchestrator connection status</li> <li>• Organization</li> </ul> </li> <li>• Click <b>QuWAN Settings</b> to manage the QuWAN settings.</li> <li>• Click <b>Go to QuWAN Orchestrator</b> to open QuWAN Orchestrator in a new tab or window.</li> </ul>

## Dashboard



No	Section	Displayed Information	User Action
1	Overview	<ul style="list-style-type: none"> <li>System uptime (number of days, hours, minutes, and seconds)</li> <li>Firmware information</li> </ul>	-
2	Device Connection Status	<ul style="list-style-type: none"> <li>Internet status</li> <li>Device status</li> <li>Number of connected client devices</li> </ul>	-
3	WAN Overview	<ul style="list-style-type: none"> <li>WAN interface</li> <li>IP address</li> </ul>	Click  to open <b>Network &gt; WAN</b> .
4	Wireless	WIFI / Guest Wireless Network <ul style="list-style-type: none"> <li>SSID</li> <li>Password</li> </ul>	Click  to disable the wireless or guest wireless network.  <b>Tip</b> Click  to make the password visible
5	Connected Devices	Hostname of the connected device	Click  to open the <b>Clients</b> page.

## 6. System Configuration

### System

#### Configuring Router Operation Modes

QuRouter provides access to two router operation modes.


- **Wireless router:** The default router mode where the device can connect to the Internet and share the wireless network with its client devices. NAT and DHCP are enabled by default.
- **Access point (AP):** The router connects to a wireless router using a network cable to extend the coverage of the wireless signal to other network devices. Router-related features (DHCP server, NAT, QuWAN, and WAN) are disabled when the router operates as a wireless access point. For details on configuring access point mode, see [Configuring Access Point \(AP\) Mode](#).

1. Go to **System > Operation Mode** .
2. Select a router operation mode.
3. Click **Apply**.

QuRouter applies the operation mode settings.

#### Configuring Access Point (AP) Mode

1. Log in to QuRouter.
2. Go to **System > Operation Mode** .
3. Select **Access point (AP) mode**.
  - a. Optional: Select **Enable Spanning Tree Protocol (STP)**.
  - b. Select one of the following:
    - **DHCP:** Obtains the IP address information automatically from the DHCP server.
    - **Static IP:** Specify the IP address information manually. Configure the following static IP address settings:

Setting	User Action
Fixed IP address	Specify a fixed IP address.   <b>Tip</b> Examine your network setup for guidance on how to best configure these settings.
Subnet mask	Specify the subnet mask used to subdivide your IP address.
Lease time	Specify the length of time that an IP address is reserved for a DHCP client. The IP address is made available to other clients when the lease expires
Default gateway	Specify the IP address of the default gateway for the DHCP server.
DNS server	Specify a DNS server for the DHCP server.

4. Click **Apply**.  
A confirmation message appears.

5. Click **OK**.



### Important

The following settings are changed when the router is switched to AP mode.

- The router is unbound from the QNAP ID.
- The router is removed from the QNAP organization and QuWAN. You must reconfigure the QuWAN settings if you enable the router mode again.

6. Run Qfinder Pro on a computer that is connected to the same local area network.



### Note

To download Qfinder Pro, go to <https://www.qnap.com/utilities>.

7. Locate the router in the list and double-click the name or IP address.  
The login screen appears.
8. Enter the local account credentials of the router.
9. Click **Login**.



### Note

QuRouter displays only information related to access point settings such as network, wireless, firmware, and system settings.

## Locating the Router

This section describes how to locate an on-premise router by remotely activating the LED indicator on the router.

1. Go to **QMiro Devices**.
2. Identify the router in the QMiro Device List.

3.



Click

The **Settings - [Device\_Name]-[Location]** window appears.

4. Click **Start**.

The router LED flashes 5 times.

## Enabling the Router LED

1. Go to **QMiro Devices**.
2. Identify the router in the QMiro Device List.

3.



Click

The **Settings - [Device\_Name]-[Location]** window appears.

4.



Click next to **LED status**.

The router LED is enabled.



## Managing Logs

Important events, errors, or warnings are recorded for the router that can be used to diagnose issues or monitor router operations. Common events include enabling or disabling network services, configuring account and system settings, and configuring security settings.


1. Go to **System > Event Logs** .
2. Perform any of the following tasks.

Task	User Action
Search log files	<ol style="list-style-type: none"> <li>a. Locate the search field.</li> <li>b. Enter search terms.</li> </ol>
Export log files	<ol style="list-style-type: none"> <li>a. Click <b>Export</b>. A file explorer window opens.</li> <li>b. Specify the file name for saving the document.</li> <li>c. Click <b>Save</b>. QuRouter saves the CSV file.</li> </ol>
Delete log files	<ol style="list-style-type: none"> <li>a. Click <b>Clear</b>. A confirmation message appears.</li> <li>b. Click <b>Clear</b>.</li> </ol>

QuRouter performs the specified task.

## System Settings

### Editing the Device Name

1. Go to **System > System Settings > Device Name Settings** .
2.  Click **Edit** .  
The **Edit Device Name** window appears.
3. Specify device name that consists of 3 to 15 characters from any of the following group:  
Valid characters: A–Z, a–z, 0–9
4. Click **OK**.

QuRouter updates the device name.

### Restart, Reset, Backup, and Restore



QuRouter system settings allows you to remotely control the restart, reset, backup, and restoration operations of the router.

#### Restarting the Router

1. Restart the router using one of the following methods.
  - **System Settings**

1. Go to **System > System Settings > Restart / Reset / Backup / Restore** .
2. Click **Restart**.  
A confirmation message appears.
3. Click **OK**.

- **QMiro Devices**

1. Go to **QMiro Devices**.
2. Identify the router.
3. .  
Click  .  
The **Settings - [Device\_Name]-[Location]** window appears.
4. Click **Restart**.  
A confirmation message appears.
5. Click **OK**.

QuRouter restarts the device.

## Resetting the Router



Reset the router to restore the device to its default state.

1. Reset the router using one of the following methods.

- **System Settings**

1. Go to **System > System Settings > Restart / Reset / Backup / Restore** .
2. Click **Reset**.  
A confirmation message appears.
3. Click **OK**.

- **QMiro Devices**

1. Go to **QMiro Devices**.
2. Identify the router.
3. .  
Click  .  
The **Settings - [Device\_Name]-[Location]** window appears.
4. Click **Reset**.  
A confirmation message appears.
5. Click **OK**.

QuRouter resets the device to default settings and the router is unbound from the QNAP ID.



### Important

Resetting the primary device resets all the nodes in the mesh network.

### Backing Up System Settings

1. Go to **System > System Settings > Restart / Reset / Backup / Restore** .
2. Click **Backup**.

The device exports the system settings as a BIN file and downloads the file to your computer.

### Restoring System Settings



**Warning**

If the selected backup file contains user or user group information that already exists on the device, the system will overwrite the existing information.


1. Go to **System > System Settings > Restart / Reset / Backup / Restore** .
2. Under **Restore**, click **Browse**.  
A file explorer window opens.
3. Select a valid BIN file that contains the device system settings.
4. Click **Restore**.

QuRouter restores the router settings.

### Configuring Audio Alert Settings

1. Go to **System > System Settings > Audio Alert** .
- 2.




Click  .  
QuRouter enables audio alerts on the router.

### Configuring Access Control Settings

Access Control is a security feature that enforces security policies on devices that can access the router network to increase network security and minimize security threats.

1. Go to **System > Access Control > Access Control Settings** .
2. Enable the access control settings.



Setting	User Action
Local Management via HTTP	Enable to use encrypted browser communication via the Hypertext Transfer Protocol (HTTP).   <b>Note</b> HTTP connections are faster than Hypertext Transfer Protocol Secure (HTTPS); however, the transferred content is not encrypted.
Remote Management	Enable to allow administrators remote access to the web interface of the router.

## Configuring Local Account Settings



**Note**

The administrator account is the default router account. You cannot delete the administrator account.

1. Go to **System > Access Control > Administrator** .
2.  Click  to configure local account credentials. The **Local Account** window appears.
3. Configure the local account settings.

Description	User Action
Username	Specify a username that contains 5 to 32 characters. Valid characters: A–Z, a–z, 0–9
Current Password	Enter the current password of the local account.
New Password	Specify a password that contains 8 to 64 ASCII characters.
Confirm New Password	Enter the password again.



4. Click **OK**.


QuRouter updates the local account settings.

## USB Settings

The **System > USB Settings** page allows you to access and manage USB-related settings, FTP access, and FTP users.

### Configuring FTP Access

1. Go to **System > USB Settings** .
2. Enable **FTP Server**.
3.  Click  . The **FTP Settings** window appears.
4. Configure the FTP server settings.

Setting	User Action
<b>Concurrent Connections</b>	Specify a number between 1 and 9.   <b>Note</b> QuRouter allows up to 9 concurrent connections.
<b>File Name Encoding</b>	Select from the following options:  <ul style="list-style-type: none"> <li>• <b>utf-8</b></li> <li>• <b>big5</b></li> </ul>

5. Click **Save**.  
QuRouter saves the FTP settings.





**Note**

Click the external link IP address to access the contents of the USB device connected to the router if you are accessing the network through the WAN port.  
Click the internal link IP address to access the contents of the USB device connected to the router if you are accessing the network through the LAN port.

### Adding an FTP User



1. Go to **System > USB Settings** .
2. Click **Add FTP User**.  
The **Add FTP User** window appears.
3. Configure the FTP user settings.

Setting	User Action
Username	Enter a username that contains 5 to 32 characters. Valid characters: A–Z, a–z, 0–9
Password	Specify a password that contains 8 to 63 characters.  <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"></div> <div> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• Passwords are case-sensitive.</li> <li>• Click  to make the password visible.</li> </ul> </div> </div>

4. Click **Add**.

QuRouter saves the FTP user information.


### Configuring an FTP User

1. Go to **System > USB Settings** .
2. Identify an FTP user to configure.
3.   
Click  .  
The **Edit FTP User** window appears.
4. Configure FTP user settings.  
For details, see [Adding an FTP User](#).
5. Click **Edit**.

QuRouter updates the FTP user information.

### Deleting an FTP User

1. Go to **System > USB Settings** .
2. Identify an FTP user you want to delete.

3.  Click  .  
A confirmation message appears.
4. Click **OK**.

QuRouter deletes the FTP user.

## Firmware

QNAP recommends keeping your router firmware up to date. This ensures that your router can benefit from new features, enhancements, and bug fixes.

### Checking for Live Updates

1. Go to **Firmware**.
2. Enable **Live update**.
3. Select one or more of the following options:
  - **Update now**
  - **Schedule update at**



#### Note

Select the date and time to schedule the firmware update.

4. Click **Apply**.  
A confirmation message appears.
5. Click **Apply**.

QuRouter checks for firmware updates.

### Updating the Firmware Manually

The update may require several minutes or longer, depending on your hardware configuration and network connection.

1. Download the router firmware.
2. Go to <http://www.qnap.com/download>.
  - a. Select your router model.
  - b. Read the release notes and confirm the following:
    - The router model matches the firmware version.
    - Updating the firmware is necessary.
  - c. Ensure that the product model and firmware are correct.
  - d. Download the firmware package.
  - e. Extract the firmware package file.
3. Go to **Firmware**.

4. Select **Manual update**.
5. Click **Browse** and then select the extracted firmware package file.
6. Click **Apply**.

The device is immediately restarted.

## 7. Network Settings

### Configuring WAN Port Settings

1. Go to **Network > WAN** .
2. Configure the port settings.
3. Select the WAN interface setting from the following options.

Setting	User Action
<b>DHCP</b>	Select to obtain IP address settings automatically via DHCP
<b>Static IP</b>	Manually assign a static IP address. You must specify the following information: <ul style="list-style-type: none"> <li>• Fixed IP address</li> <li>• Subnet mask</li> <li>• Default gateway</li> <li>• DNS Server</li> </ul>
<b>PPPoE</b>	Select to specify a username and password for Point-to-Point Protocol over Ethernet (PPPoE).

4. Specify an MTU value between 98 and 9000.



#### Note


The Maximum Transmission Unit (MTU) is the largest packet size that is transmitted by a network.

5. Click **Apply**.


QuRouter updates the WAN settings.

### Configuring LAN Port Settings

1. Go to **Network > LAN** .
2. Configure LAN IP settings.

Setting	User Action
<b>Fixed IP address</b>	Specify a fixed IP address. <div style="margin-top: 10px;">  <b>Tip</b>            Examine your network setup for guidance on how to best configure these settings.         </div>
<b>Subnet Mask</b>	Specify the subnet mask used to subdivide your IP address.



Setting	User Action
<b>Enable DHCP server</b>	Configure the DHCP server settings. <ul style="list-style-type: none"> <li>• <b>Start IP address:</b> Specify the starting IP address in a range allocated to DHCP clients.</li> <li>• <b>End IP address:</b> Specify the ending IP address in a range allocated to DHCP clients.</li> <li>• <b>Lease time:</b> Specify the length of time that an IP address is reserved for a DHCP client. The IP address is made available to other clients when the lease expires.</li> <li>• <b>DNS server 1::</b> Assign an IP address for the primary DNS server.</li> <li>• <b>DNS server 2:</b> Assign an IP address for the secondary DNS server.</li> </ul> <div style="border-left: 2px solid #0070C0; padding-left: 10px; margin-top: 10px;">  <b>Note</b>            QNAP recommends specifying at least one DNS server to allow URL lookups.         </div>
<b>Reserved IP Table</b>	Click <b>Add</b> to configure a reserved IP table. Specify the following: <ul style="list-style-type: none"> <li>• Device name</li> <li>• IP address</li> <li>• MAC address</li> </ul>

3. Click **Apply**.

QuRouter updates the LAN port settings.

## Routing Table

The **Network > Routing > Routing Table** page provides status information about configured route entries from the following sources:

- Directly connected networks
- Dynamic routing protocols
- Statically configured routes


## Static Route

You can create and manage static routes in the **Static Route** section of network settings. Under normal circumstances, QuRouter automatically obtains routing information after it has been configured for Internet access. Static routes are only required in special circumstances, such as having multiple IP subnets located on your network.

## Adding a Static Route

1. Go to **Network > Routing > Static Route** .
2. Click **Add Static Route**.  
The **Add Static Route** window appears.


### 3. Configure the settings.

Setting	User Action
<b>Destination</b>	Specify a static IP address where connections are routed to.
<b>Subnet Mask</b>	Specify the IP address of the destination's subnet mask.
<b>Next Hop</b>	Select from the following next hop options: <ul style="list-style-type: none"> <li>• <b>WAN Port:</b> Select an available WAN port IP address for the routing path.</li> <li>• <b>IP Address:</b> Specify the IP address of the closest or most optimal router in the routing path.</li> </ul>
<b>Metric</b>	Specify the number of nodes that the route will pass through. <div style="border-left: 2px solid #0070C0; padding-left: 10px; margin-top: 10px;">  <b>Note</b> Metrics are cost values used by routers to determine the best path to a destination network. </div>
<b>Description</b>	Enter a description for the static route.

### 4. Click **Apply**.


QuRouter creates the static route.

## Configuring a Static Route

1. Go to **Network > Routing > Static Route** .
2. Identify a route.
3.  .  
Click **Edit** .  
The **Edit Static Route** window appears.
4. Configure the static route settings.  
For details, see [Adding a Static Route](#).
5. Click **Apply**.

QuRouter updates the static route settings.

## Deleting a Static Route

1. Go to **Network > Routing > Static Route** .
2. Identify a route.
3.  .  
Click **Delete** .  
A confirmation message appears.
4. Click **Apply**.



QuRouter deletes the route.

## Wireless


Wireless settings allows you to deploy wireless networks using the 2.4 GHz and 5 GHz bandwidth, deploy the guest wireless network, configure advanced wireless settings, and enable the WPS function.

### Configuring Wireless Network Settings

1. Go to **Wireless**.
2. Configure the wireless network settings.

Setting	User Action
<b>Smart Connect</b>	Enable to combine 2.4 GHz and 5 GHz networks and use a single SSID and password for all wireless connections.
<b>SSID</b>	Specify the wireless network SSID.
<b>Security</b>	<p>Select one of the following security authentication methods:</p> <ul style="list-style-type: none"> <li>• <b>WPA2-PSK</b></li> <li>• <b>WPA-PSK+WPA2-PSK</b></li> <li>• <b>WPA-Enterprise</b></li> <li>• <b>WPA2-Enterprise</b></li> </ul> <p> <b>Note</b> Enter a Remote Authentication Dial-In User Service (RADIUS) server IP address and server port number if the security authentication method is set to WPA-Enterprise or WPA2-Enterprise.</p>
<b>Password</b>	<p>Specify a password that contains 8 to 63 characters.</p> <p> <b>Note</b> The password is case-sensitive.</p>
<b>Enable Wireless Scheduler</b>	You can select specific days and time periods to enable the VAP group.
<b>Enable Band Steering</b>	Enable to automatically reroute the wireless client to a wireless network that is utilizing the best frequency band available.
<b>Enable MU-MIMO</b>	Enable multiple-input, multiple-output technology (MU-MIMO) to allow the router to communicate concurrently with multiple wireless devices.
<b>Transmission Power</b>	<p>Select a MU-MIMO transmission power.</p> <ul style="list-style-type: none"> <li>• <b>High</b></li> <li>• <b>Medium</b></li> <li>• <b>Low</b></li> </ul>
<b>Preamble Type</b>	<p>Specify the preamble type.</p> <ul style="list-style-type: none"> <li>• <b>Short</b></li> <li>• <b>Long</b></li> </ul>
<b>CTS/RTS</b>	Specify a CTS/RTS value between 1 and 2347.

### 3. Configure the settings for 5 GHz and 2.4 GHz bands.


Setting	User Action
<b>Bandwidth</b>	Specify the bandwidth range for the following bands: <ul style="list-style-type: none"> <li>• 2.4 GHz:               <ul style="list-style-type: none"> <li>• 20 MHz</li> <li>• 40 MHz</li> </ul> </li> <li>• 5 GHz - 1 and 5 GHz - 2:               <ul style="list-style-type: none"> <li>• 20 MHz</li> <li>• 40 MHz</li> <li>• 80 MHz</li> </ul> </li> </ul>
<b>Channels</b>	Select the DFS channel that is less frequently used.   <b>Note</b> The channel is set to <b>Auto</b> by default to avoid radio frequency interference.



### 4. Click **Apply**.

QuRouter updates the wireless network settings.


## Configuring the Guest Wireless Network

1. Go to **Wireless > Guest Wireless Network**.
2. Select **Enable**.
3. Configure the guest wireless network settings.

Setting	User Action
<b>SSID</b>	Specify a service set identifier (SSID) that can contain up to 32 characters.   <b>Note</b> The SSID is case-sensitive.

Setting	User Action
<b>Security</b>	<p>Select one of the following security authentication methods:</p> <ul style="list-style-type: none"> <li>• WPA2-PSK</li> <li>• WPA-PSK+WPA2-PSK</li> <li>• WPA-Enterprise</li> <li>• WPA2-Enterprise</li> </ul> <p> <b>Note</b> Enter a Remote Authentication Dial-In User Service (RADIUS) server IP address and server port number if the security authentication method is set to WPA-Enterprise or WPA2-Enterprise.</p>
<b>Password</b>	<p>Specify a password that contains 8 to 63 characters.</p> <p> <b>Note</b> The password is case-sensitive.</p>
<b>Guest wireless IP address</b>	Specify a fixed IP address for the guest wireless network.
<b>Subnet mask</b>	Specify the subnet mask used to subdivide your IP address



4. Configure the guest wireless DHCP server settings.

Setting	User Action
<b>Start IP address</b>	Specify the starting IP address in a range allocated to DHCP clients.
<b>End IP address</b>	Specify the ending IP addresses in a range allocated to DHCP clients.
<b>DNS server 1</b>	Specify a DNS server for the DHCP server.
<b>DNS server 2</b>	<p>Specify a secondary DNS server for the DHCP server.</p> <p> <b>Important</b> QNAP recommends specifying at least one DNS server to allow URL lookups.</p>

5. Click **Apply**.

QuRouter saves the guest wireless network settings.

## Configuring Wi-Fi Protected Setup (WPS)

1. Go to **Wireless > WPS**.
2.  .  
Click  .  
The WPS function is enabled.
3. Configure the WPS settings.
  - a. Select the WPS SSID from the drop-down menu.
  - b. Click **WPS**.



**Note**

To enable WPS using the push button on the router, see [WPS Button](#).

- c. Enable the WPS function on the client device.



**Note**

- Ensure that the client device is equipped with the WPS function. Typically, this function is located in the Wi-Fi settings page.
- The location and feature name may differ depending on the product.

The client device joins the wireless network.


### Clients and Blocked Clients List

The client list allows you to access wired and wireless clients connected to the router network. You can also add clients to or remove clients from the blocked list.

The blocked list controls the management of clients blocked from accessing wired and wireless services.

### Adding a Device to the Blocked List

1. Go to **Clients > Blocked List** .
2. Click **Block client**.  
The **Add Device to Blocked List** window appears.
3. Configure the blocked list settings.



Setting	User Action
Description	Specify the device description.   <b>Note</b> <ul style="list-style-type: none"> <li>• The description must be between 1 to 20 characters.</li> <li>• Valid characters: A–Z, a–z, 0–9</li> <li>• Valid special characters: Hyphen (-), Underscore (_), Period (.)</li> </ul>
MAC Address	Specify the MAC address of the device.

4. Select the interface.
5. Click **Apply**.

QuRouter adds the device to the blocked list.



### Configuring a Device in the Blocked List

1. Go to **Clients > Blocked List** .
2. Identity a device.

3.  Click  .  
The **Edit Blocked List Device** window appears.
4. Configure the device settings.  
For details, see [Adding a Device to the Blocked List](#).
5. Click **Apply**.

QuRouter updates the device information.

## Deleting a Device from the Blocked List

1. Go to **Clients > Blocked List** .
2. Identify a device.
3.  Click  .  
A confirmation message appears.
4. Click **Apply**.

QuRouter deletes the device from the blocked list.

## Wireless Mesh Network

QuRouter allows you to create wireless mesh networks by adding other QMiro devices to the local network topology. The primary router can connect to other nodes in the network and communicate with each other to route data from and to clients. Wireless mesh networks work dynamically to adjust user requirements and maintain user connectivity.

### Mesh Network Components

- **Primary:** The primary device is the router that is first initialized in the local network topology. This device controls the communication protocols and data routing between other node devices in the network.
- **Node:** Nodes are secondary devices added to the primary router in the local network topology.



## Adding a Node to the Mesh Network

1. Go to **QMiro Devices**.
2. Click **Add Node**.  
The **Add Node** window appears.
3. Select a router from the list.
4. Click **Next**.
5. Select a Wi-Fi point.
6. Click **Apply**.

QuRouter adds the node to the mesh network.

## Removing a Node from the Wireless Mesh Network

You must reset the node in order to remove the node from the wireless mesh network and configure it as a standalone router.

1. Go to **QMiro Devices**.
2. Identify the node.
3.  Click  .
4. The **Settings - [Device\_Name]-[Location]** window appears.
5. Click **Reset**.  
A confirmation message appears.
6. Click **OK**.

QuRouter resets the node and removes the node from the wireless mesh network.

## SD-WAN

### About QuWAN

QuWAN is a QNAP cloud-based SD-WAN networking solution that provides a centralized control platform to manage network functions of devices within its private network topology. QuWAN can intelligently and securely direct traffic across the WAN network.

You can configure the SD-WAN settings on the router and access QuWAN Orchestrator to manage the SD-WAN overlay network.

### Configuring QuWAN Settings


1. Log in to QuRouter.




**Note**

If you are logging in with your QNAP ID for the first time, you are prompted to enter the local account credentials as part of the 2-step verification process.

2. Go to **QuWAN**.
3. Configure the QuWAN settings.

Setting	User Action
Organization	Select an organization associated with your QNAP ID.   <b>Note</b> If there are no organizations associated with your QNAP ID, click <b>Create or edit organization</b> . QuRouter redirects you to QNAP Account website where you can create a new organization or edit an existing one.
Region	Select a region linked with the selected organization. Click <b>Add Region</b> to create a new region.



Setting	User Action
Site	<p>Select a site from the drop-down menu.</p> <p> <b>Note</b> Click <b>Create or edit site</b> to create a new site associated with the selected organization or edit an existing site.</p>
Device Role	<p>Select one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Hub</b>: Configure the device as an SD-WAN hub. A public IP address is required for the WAN connection to select the device as a hub.</li> <li>• <b>Edge</b>: Configure the device as an SD-WAN edge.</li> </ul>
Location	<p>Select one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Locate by IP address</b></li> <li>• <b>Update by GPS coordinates</b></li> </ul>

4. Click **Join the Organization and QuWAN**.



**Important**

- The router is unbound from the QNAP ID once it is part of the QuWAN topology.
- The router can support a maximum of 30 VPN tunnels.

A confirmation message appears.

5. Click **OK**.

QuRouter adds the router to the QuWAN topology.

## Accessing QuWAN Orchestrator

1. Open QuRouter.

2.



Click  located on the taskbar.

3. Click **Go to QuWAN Orchestrator**.  
QuWAN Orchestrator opens in a new browser tab.

## QVPN

QVPN settings allows you to create and manage VPN servers, add VPN clients, and monitor VPN logs.

### QVPN Settings

#### Enabling QBelt VPN Server




QBelt is QNAP's proprietary communications protocol that incorporates Datagram Transfer Layer Security (DTLS) protocol and AES-256 encryption.

1. Open QuRouter.
2. Go to **QVPN > QVPN Settings** .

3.  Click .

4.  Click .

5. Configure the QBelt server settings.

Setting	Description
<b>Client IP pool</b>	Specify a range of IP addresses available to connected VPN clients.   <b>Important</b> By default, this server reserves the use of IP addresses from 10.6.0.0/24. If another connection is configured to use this range, an IP conflict error will occur. Before adding this server, ensure a VPN client isn't configured to use this range as well.
<b>Service Port (UDP)</b>	Select the port used to access the server.   <b>Tip</b> Default port: 443
<b>Pre-shared key</b>	Specify a key (password) to verify connecting VPN clients.
<b>DNS</b>	Specify a DNS server for the QBelt server.   <b>Note</b> The DNS server limitation is 1 by default.


6. Click **Apply**.

QuRouter saves the QBelt server settings.

## Enabling L2TP VPN Server



1. Open QuRouter.
2. Go to **QVPN > QVPN Settings** .

3.  Click .

 **Important**  
 You cannot enable the L2TP server if the router is using the QuWAN service. To enable the L2TP server, you must first leave the organization and QuWAN service by clicking **Leave the organization and QuWAN** in QuWAN.

4.  Click .

5. Configure the L2TP server settings.

Setting	Description
<b>Client IP pool</b>	Specify a range of IP addresses available to connected VPN clients.   <b>Important</b> By default, this server reserves the use of IP addresses from 10.6.0.0/24. If another connection is configured to use this range, an IP conflict error will occur. Before adding this server, ensure a VPN client isn't configured to use this range as well.
<b>Authentication</b>	Select one of the following authentication methods: <ul style="list-style-type: none"> <li>• PAP</li> <li>• MS-CHAPv2</li> </ul>
<b>Pre-shared key</b>	Specify a key (password) to verify connecting VPN clients.
<b>DNS</b>	Specify a DNS server for the L2TP server.   <b>Note</b> The DNS server limitation is 1 by default.

6. Click **Apply**.

QuRouter saves the L2TP server settings.


**Enabling OpenVPN VPN Server**



1. Open QuRouter.
2. Go to **QVPN > QVPN Settings** .

3.  .  
Click

4.  .  
Click

5. Configure the OpenVPN server settings.

Setting	Description
<b>Client IP pool</b>	Specify a range of IP addresses available to connected VPN clients.   <b>Important</b> By default, this server reserves the use of IP addresses from 10.6.0.0/24. If another connection is configured to use this range, an IP conflict error will occur. Before adding this server, ensure a VPN client isn't configured to use this range as well.

Setting	Description
<b>Service Port</b>	Select the port used to access the server.   <b>Tip</b> Default port: 443
<b>Encryption</b>	Select from the following encryption methods: <ul style="list-style-type: none"> <li>• <b>Medium (AES 128-bit)</b></li> <li>• <b>High (AES 256-bit)</b></li> </ul>
<b>DNS</b>	Specify a DNS server for the OpenVPN server.   <b>Note</b> The DNS server limitation is 1 by default.

6. Enable **Use this connection as a default gateway for remote devices**.


**Note**

Enable to allow the default network gateway to be redirected across the OpenVPN server. All non-local traffic from the client is transferred through the VPN server.

7. Enable **Enable compressed VPN link**.

**Note**

This setting compresses data before transferring it over the VPN. This will increase data transfer speeds, but requires additional CPU resources.

8. Optional: Click  to download configuration files to set up a OpenVPN server manually.
9. Click **Apply**.

QuRouter saves the OpenVPN server settings.

## Adding a VPN Client

1. Open QuRouter.
2. Go to **QVPN > Client List**.
3. Click **Add**.
4. Specify the username and password.
5. Click **Apply**.

QuRouter adds the VPN client.

## QVPN Connection Logs

Go to **QVPN > Logs** to view the record of connections to external VPN servers. Recorded information includes connection dates, connection duration, client names, source IP addresses, and protocol information.

## 8. Security

### Network Address Translation (NAT)

NAT allows private networks that use unregistered IP addresses to connect to the Internet. NAT translates private IP addresses in the internal network to public IP addresses before forwarding the packets onto another network.

### Application Layer Gateway (ALG)

The ALG function allows you to implement transparent network translation on certain application layer protocols. NAT ALG supports the following protocols:

- File Transfer Protocol (FTP)
- Point-to-Point Tunneling Protocol (PPTP)
- Session Initiation Protocol (SIP)


You can enable the ALG function on these protocols by enabling the toggle switch located beside the protocol name.

### Port Forwarding

You can configure port forwarding rules that can be used to direct incoming and outgoing traffic on your router to a device connected to your network.

#### Adding a Port Forwarding Rule



1. Go to **NAT > Port Forwarding** .
2. Click **Add Rule**.  
The **Add Rule** window appears.
3. Configure the rule settings.

Setting	User Action
<b>Protocol</b>	Select from the following options: <ul style="list-style-type: none"> <li>• <b>All</b></li> <li>• <b>TCP</b></li> <li>• <b>UDP</b></li> </ul>
<b>WAN service port</b>	Specify the service port for the rule.
<b>Host IP address</b>	Specify the LAN IP address.
<b>LAN service port</b>	View the LAN service port information.
<b>Allowed remote IPs</b>	Specify one or more remote IP addresses. <div style="border-left: 2px solid #0070C0; padding-left: 10px; margin-top: 10px;">  <b>Note</b> Leaving this field blank will allow access from any remote IP address.           </div>
<b>Description</b>	Specify the rule description.

4. Click **Apply**.



QuRouter adds the rule.

## Configuring a Port Forwarding Rule

1. Go to **NAT > Port Forwarding** .
2. Identify a rule.
3.  Click  .  
The **Edit Rule** window appears.
4. Modify the port forwarding rule settings.  
For details, see [Adding a Port Forwarding Rule](#).
5. Click **Apply**.

QuRouter updates the port forwarding rule.

## Deleting a Port Forwarding Rule

1. Go to **NAT > Port Forwarding** .
2. Identify a rule.
3.  Click  .  
A confirmation message appears.
4. Click **Apply**.

QuRouter deletes the rule.


## Parental Controls

QuRouter provides parental control functions to manage content filtering, safe search, web browsing schedules, and protect connected clients from inappropriate and harmful content. Network administrators can create custom parental control rules to limit several aspects of the Internet, block websites, and add or remove devices from the created control rules.

### Adding a Parental Control Role

1. Go to **Parental Controls**.
2. Click **Add Role**.  
The **Add Role** window appears.
3. Configure the role settings.



Setting	User Action
<b>Role name</b>	Specify a name for the parental control role.
<b>Enable website filter</b>	Select this option to enable website filtering to prevent users from viewing certain URLs or websites.

Setting	User Action
<b>Domain Name Filter</b>	Enter an entire domain name or specific URLs. Separate multiple URLs with commas (,).
<b>Safe Search</b>	<p>Enable safe search to filter out explicit content in the following sites:</p> <ul style="list-style-type: none"> <li>• <b>YouTube</b></li> </ul> <p> <b>Note</b> You can select from the following restriction modes:</p> <ul style="list-style-type: none"> <li>• <b>Restricted</b></li> <li>• <b>Medium</b></li> </ul> <ul style="list-style-type: none"> <li>• <b>Google</b></li> <li>• <b>Bing</b></li> </ul>

4. Click **Apply**.



QuRouter creates the parental control role.

## Configuring a Parental Control Role

1. Go to **Parental Controls**.
2. Identify a role.
3.  Click  .  
The **Edit Role** window appears.
4. Configure the parental role settings.  
For details, see [Adding a Parental Control Role](#).
5. Click **Apply**.

QuRouter updates the parental control role.

## Deleting a Parental Control Rule

1. Go to **Parental Controls**.
2. Identify a rule.
3.  Click  .  
A confirmation message appears.
4. Click **Apply**.

QuRouter deletes the rule.



## Adding a Device to a Parental Control Role

1. Go to **Parental Controls**.

2. Identify the role to which you want to add a device.
3. Click **Add Device**.  
The **Add Device** window appears.
4. Select a wireless device from the list.
5. Click **Add**.

QuRouter adds the device to the parental control role.

### Deleting a Device from a Parental Control Role

1. Go to **Parental Controls**.
2. Identify the device to delete listed in the parental control role.
3.  Click .  
A confirmation message appears.
4. Click **OK**.

QuRouter removes the device from the parental control role.



## 9. QuRouter App

### QuRouter

*This applies to the following application versions (and later): QuRouter 1.0.0 for Android and iOS.*

QuRouter is a QNAP mobile application that lets you configure and manage QMiro routers. Go to the Google Play Store or the App Store to download QuRouter for configuring your QNAP router through a mobile device.

To configure a new router, see [Configuring the Router Using the QuRouter App](#).

To add a new node to the mesh network, see [Adding a Node to the Mesh Network](#).

### System Requirements

QuRouter is available on the following mobile platforms:




- Android 5.0 (or later)
- iOS 11 (or later)

Visit the Google Play Store or the Apple App Store to download the latest QuRouter version on your mobile device.

### Configuring the Router Using the QuRouter App


1. Open QuRouter on your Android or iOS device.
2. Tap **Set Up New Device**.  
The **Select a Device** page appears.
3. Select the QMiro device.
4. Tap **Start**.  
The **Power on the Device** page appears.
5. Tap **Next**.  
The **Connect to the Internet** page appears.
6. Tap **Next**.
7. Check if the router status LED is flashing blue.
8. Tap **LED Indications** to check router LED indications and their status meaning.
9. Tap **Next**.
10. Connect the mobile device to the router using one of the following:

Connection	User Action
Connect via Wireless	Connect the mobile device to the router wireless function. <ol style="list-style-type: none"> <li>a. Go to <b>Settings</b> &gt; <b>Wi-Fi</b> on your mobile device.</li> <li>b. Enable Wi-Fi.</li> <li>c. Scan for the router SSID.</li> </ol>

	<p>d. Tap the SSID.</p> <p>e. Enter the router password.</p> <p> <b>Note</b> The SSID and password are listed on the asset tag of the router.</p> <p>f. Tap <b>Connect</b> on Android devices and <b>Join</b> on iOS devices.</p> <p>g. Open the QuRouter app.</p> <p>h. Tap <b>OK</b>.</p>
<p>Connect via Bluetooth</p>	<p>Connect the mobile device to the router Bluetooth.</p> <p>a. Go to <b>Settings &gt; Bluetooth</b> on your mobile device.</p> <p>b. Enable Bluetooth.</p> <p>c. Open the QuRouter app.</p> <p>d. Select the router from the list.</p> <p>e. Tap <b>Next</b>.</p> <p> <b>Tip</b> Tap  to locate your router.</p>

The mobile device connects to the router.

11. Enter the last 6 alphanumeric characters of the router MAC address.

 **Note**  
The MAC address is listed on the asset tag of the router.

12. Tap **Next**.

13. Select the location.

- a. Select the location of your router from the following:
- **Living Room**
  - **Bedroom**
  - **Office**
  - **Dining Room**
  - **Study**
  - **Others:** Specify a customized name for the router location.

b. Tap **Apply**.

14. Tap **Next**.

15. Configure the wireless domain settings.
  - a. If the router and mobile device locations are not the same, the **Incompatible Wireless Domain Settings** window appears.
  - b. Tap **OK**.
  - c. Select the current location of the router.
  - d. Tap **Apply**.
16. Specify a new SSID and password for the router.
17. Tap **Apply**.

A confirmation message appears informing you to connect to the updated router SSID in the Wi-Fi settings page of the mobile device.
18. Tap **Finish**.

The **Firmware Update** page appears.
19. Tap **Next**.

The firmware update process begins.
20. Tap **Log in with QNAP ID**.
21. Select from the following:
  - **Global**
  - **China**
22. Specify your QNAP ID and password.
23. Tap **Sign In**.

The **Remote Access Settings** page appears.
24. Specify a unique name for the myQNAPcloud Link SmartURL of the router.
25. Tap **Next**.





The **Router Setup Complete** page appears.
26. Tap **Finish**.

The **Overview** page appears.

## Overview

The **Overview** screen shows the connection status of all the QMiro devices in the mesh network. On this screen, you can access the wireless settings, the guest wireless settings, and view the network traffic of the primary device.



No.	Description	User Action
1	More	<p>Tap  and select an option.</p> <ul style="list-style-type: none"> <li>• <b>[QNAP_ID]</b>: Tap the QNAP ID to log out.</li> <li>• <b>Install New Router</b>: Allows you to add a node to the mesh network.</li> <li>• <b>About</b>: Select the following options: <ul style="list-style-type: none"> <li>• <b>Feedback</b>: Access the QNAP Feature Request / Bug Report web page</li> <li>• <b>Support</b>: Access the QNAP support page.</li> <li>• <b>Disclaimer</b>: Access the QNAP Disclaimer page.</li> </ul> </li> </ul>
2	Internet	<p>Tap the  icon to access the network settings page.</p>
3	Mesh	<p>Tap the  icon to access the mesh network settings page.</p>
4	Clients	<p>Tap the  icon to access the wired and wireless clients connected to the router.</p>
5	Wireless	<p>Tap this section to access the wireless settings of the router.</p>
6	Guest Wireless Network	<p>Tap this section to access the guest wireless settings of the router.</p>

## 10. Glossary

### **myQNAPcloud**

Provides various remote access services such as DDNS and myQNAPcloud Link

### **QNAP ID**

User account that enables you to use myQNAPcloud remote access and other QNAP services

### **Qfinder Pro**

QNAP utility that lets you locate and access QNAP devices in your local area network

### **QuRouter**

The QNAP web management interface that allows you to view and configure QNAP routers

### **QuWAN**

QNAP SD-WAN management system

### **QuWAN Orchestrator**

QNAP centralized management cloud platform for SD-WAN infrastructure

## 11. Notices

This chapter provides information about warranty, disclaimers, licensing, and federal regulations.

### Limited Warranty

QNAP offers limited warranty service on our products. Your QNAP-branded hardware product is warranted against defects in materials and workmanship for a period of one (1) year or more from the date printed on the invoice. ("Warranty Period"). Please review your statutory rights at [www.qnap.com/warranty](http://www.qnap.com/warranty), which may be amended from time to time by QNAP in its discretion.

### Disclaimer

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QNAP products are not intended for use in medical, life saving, life sustaining, critical control or safety systems, or in nuclear facility applications.

In no event shall QNAP's liability exceed the price paid for the product from direct, indirect, special, incidental, or consequential damages resulting from the use of the product, its accompanying software, or its documentation. QNAP makes no warranty or representation, expressed, implied, or statutory, with respect to its products or the contents or use of this documentation and all accompanying software, and specifically disclaims its quality, performance, merchantability, or fitness for any particular purpose. QNAP reserves the right to revise or update its products, software, or documentation without obligation to notify any individual or entity.

Back up the system periodically to avoid any potential data loss is recommended. QNAP disclaims any responsibility of all sorts of data loss or recovery.

Should you return any components of the package of QNAP products for refund or maintenance, make sure they are carefully packed for shipping. Any form of damages due to improper packaging will not be compensated.

All the features, functionality, and other product specifications are subject to change without prior notice or obligation. Information contained herein is subject to change without notice.

All the features, functionality, and other product specifications are subject to change without prior notice or obligation. Information contained herein is subject to change without notice.

Further, the ® or ™ symbols are not used in the text.

### CE Notice



This QNAP NAS complies with CE Compliance Class B.

## FCC Notice

### FCC Class B Notice



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.



#### Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.



#### Important

Any modifications made to this device that are not approved by QNAP Systems, Inc. may void the authority granted to the user by the FCC to operate this equipment.

## Radio Equipment Directive (RED) 2014/53/EU Article 10



RED 2014/53/EU requires that for products which could potentially have an issue with a non-harmonized frequency in a specific EU country, the product documentation must list the restrictions, and the packaging must carry a label reflecting that country's code.

This QNAProuter complies with RED 2014/53/EU article 10.



## EU RoHS Statement

This equipment complies with the European Union RoHS Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment. The directive applies to the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) in electrical and electronic equipment.

## ISED Compliance Statement

Industry Canada has been renamed Innovation, Science, and Economic Development Canada (ISED) following the issue of RSP-100 Issue 11 and DC-01 Issue 06. Equipment certifications previously issued by Industry Canada remain valid and do not require updating. Meaning you may see the names used interchangeably in documentation. The following statement is applicable to ASiR-pRRH which has Innovation, Science and Economic Development (ISED) approval: This device complies with ICES-003 of Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

## Radiation Exposure Statement

This product complies with the IC radiation exposure limits set for an uncontrolled environment. To comply with RSS 102 RF exposure compliance requirements, a separation distance of at least 27 cm must be maintained between the antenna of this device and all persons. The device for the band 5150-5350 MHz is only for indoor usage to reduce potential harmful interference to co-channel mobile satellite systems.

## EU Directive 2002/96/EC Waste Electrical and Electronic Equipment (WEEE)



According to the requirement of the WEEE legislation the following user information is provided to customers for all branded QNAP Electronics products subject to the WEEE directive.

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.