

NETGEAR®

N300 WiFi Range Extender

Model WN3000RP

User Manual



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350 East Plumeria Drive
San Jose, CA 95134
USA

N300 WiFi Range Extender

Support

Thank you for selecting NETGEAR products.

After installing your device, locate the serial number on the label of your product and use it to register your product at <https://my.netgear.com>. You must register your product before you can use NETGEAR telephone support. NETGEAR recommends registering your product through the NETGEAR website. For product updates and web support, visit <http://support.netgear.com>.

Phone (US & Canada only): 1-888-NETGEAR.

Phone (Other Countries): Check the list of phone numbers at <http://support.netgear.com/general/contact/default.aspx>.

Compliance

For regulatory compliance information, visit <http://www.netgear.com/about/regulatory>.

See the regulatory compliance document before connecting the power supply.

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Get to Know Your Extender

1

This chapter covers the following topics:

- *Front Panel*
- *Extender Side and Bottom Panels*
- *How the Extender Works*
- *When to Use Your Extender*

For more information about the topics covered in this manual, visit the support website at <http://support.netgear.com>.

Firmware updates with new features and bug fixes are made available from time to time at downloadcenter.netgear.com. Some products can regularly check the site and download new firmware, or you can check for and download new firmware manually. If the features or behavior of your product does not match what is described in this guide, you might need to update your firmware.

Front Panel

The LEDs are located on the front panel.

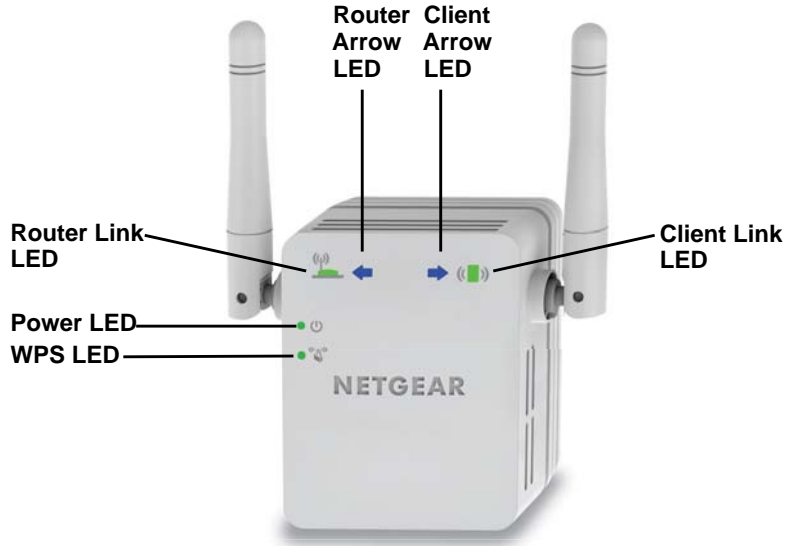







Figure 1. Extender front panel

Table 1. LEDs

LED	Description
Router Link LED 	The connection between the extender and the router or access point. <ul style="list-style-type: none"> • Solid green. Best connection. • Solid amber. Good connection. • Solid red. Poor connection. • Off. No connection.
Client Link LED 	The connection between the extender and a computer or WiFi device. <ul style="list-style-type: none"> • Solid green. Best connection. • Solid amber. Good connection. • Solid red. Poor connection. • Off. No connection.
Power LED 	<ul style="list-style-type: none"> • Solid amber. The extender is booting. • Solid green. The extender is powered on. • Off. The extender is powered off.
WPS LED 	<ul style="list-style-type: none"> • Solid green. WiFi security is enabled (WPA or WPA2). • Blinking green. A WPS connection is in progress. • Off. WiFi security is not enabled.
Router Arrow and Client Arrow 	If the Router Arrow or Client Arrow LED blinks, see Find the Best Location on page 14. If no arrow LEDs are lit, the extender is in a good location.

Extender Side and Bottom Panels

Buttons are located on the side panel has buttons. The Factory Reset button and an Ethernet port are located on the bottom panel.

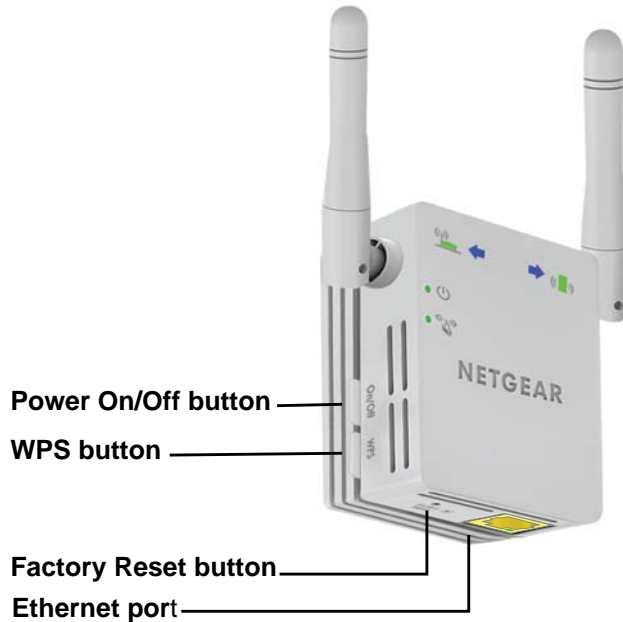


Figure 2. Extender side and bottom panels

How the Extender Works

The extender increases the distance of a WiFi network. The extender connects to your network's WiFi signal and it broadcasts its own WiFi signal. When you are too far away to connect to your network's WiFi signal, you can connect to the extender's WiFi network.

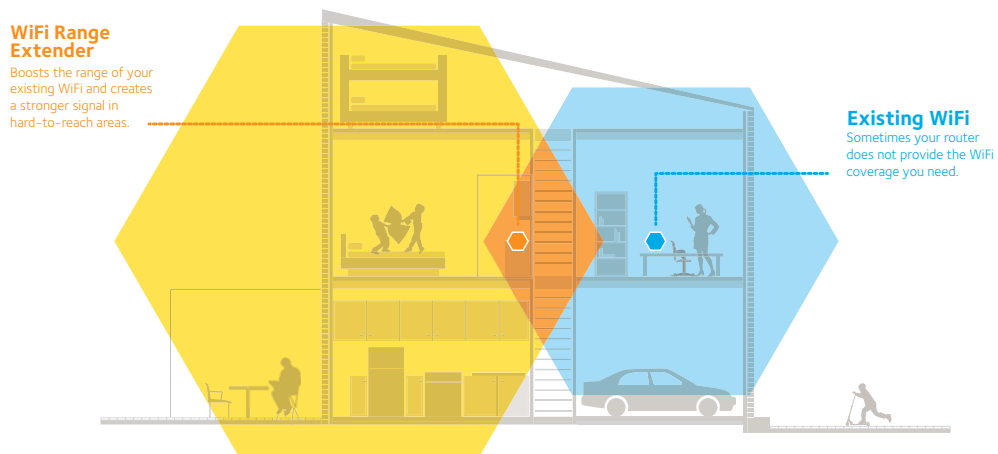


Figure 3. The extender WiFi signals reach areas outside the range of your router

When to Use Your Extender

NETGEAR recommends that you connect to the extender only when your WiFi network connection is poor. Data traffic routed through the extender is inherently slower than traffic routed directly from the network.

2. Install Your Extender

2

This chapter covers the following topics:

- *Install the Extender as a Range Extender*
- *Install the Extender as an Access Point*

Install the Extender as a Range Extender



The extender connects to your network's WiFi signal and then rebroadcasts that signal to extend the WiFi signal coverage.

Place the Extender and Apply Power

NETGEAR recommends that you place the extender near the router during initial setup. Then move it farther away from the router as needed to increase the area that receives a WiFi signal.

➤ **To place the extender:**

1. Place your extender in the same room as your WiFi router.
2. Plug the extender into an electrical outlet.

The Power LED   lights green within one minute. If the Power LED does not light, press the **Power** button.

Connect to an Existing WiFi Network

To extend the range of your WiFi network, you must connect the extender to your existing WiFi network. You can connect with WPS or with NETGEAR genie Smart Setup.

Connect with WPS

Wi-Fi Protected Setup (WPS) lets you connect the extender to a secure WiFi network without typing the network name and password. The **WPS** button is a physical button on the router or access point.


WPS does not support WEP network security. If you are using WEP security, see [Connect with NETGEAR genie Smart Setup](#) on page 11.

➤ **To connect with WPS:**

1. Press the **WPS** button on the side panel of the extender.

The WPS LED   blinks.



2. Within two minutes, press the **WPS** button on your router or access point.

The WPS LED on the extender lights solid green, the Router Link LED  lights, and the extender connects to your existing WiFi network.

Note: If the Router Link LED does not light, try again. If it still does not light, see [Connect with NETGEAR genie Smart Setup](#) on page 11.

3. On your computer or wireless device, find the new extender network name.


The extender's wireless network name (SSID) changes to your existing WiFi network name, with **_EXT** at the end of the name, for example:

- **Existing WiFi network name.** MyNetworkName
 - **New extended network name.** MyNetworkName_EXT
4. Connect your WiFi devices to the new extended network.
Use the same WiFi password that you use for your WiFi router.
 5. Unplug the extender and move it to a new location closer to the area with a poor WiFi signal.
The location that you choose must be within the range of your existing WiFi router network.
 6. Plug the extender into an electrical outlet.
The Power LED ●  lights green within one minute. If the Power LED does not light, press the **Power** button.
 7. Use the Router Link LED  on the front panel to help you choose a spot where the extender-to-router connection is optimal.

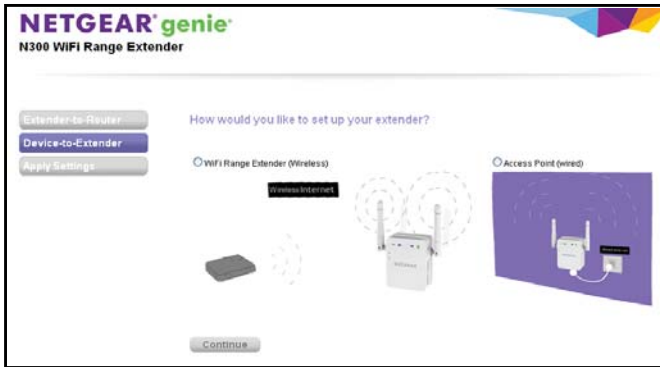
Connect with NETGEAR genie Smart Setup

You can use a web browser to connect to the extender and set it up.

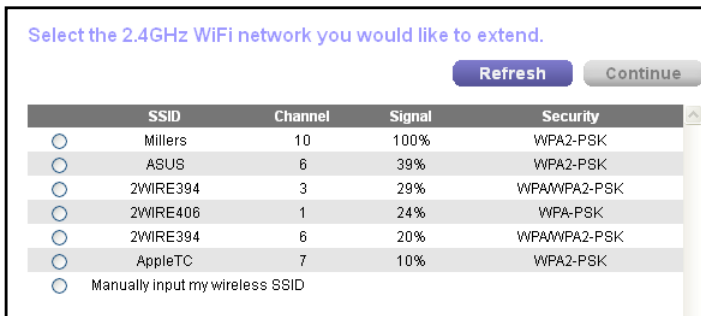
➤ To connect with the browser-based Smart Setup:

1. Use a WiFi network manager on a computer or WiFi device to find and connect to the extender WiFi network.
After the connection with the computer or WiFi device is established, the Client Link LED  lights.
 2. Open a web browser window from the same computer or WiFi device.
The browser takes you directly to NETGEAR genie Smart Setup.
- Note:** If you are not automatically directed to NETGEAR genie, launch a web browser and enter **www.mywifiext.net** in the address field.

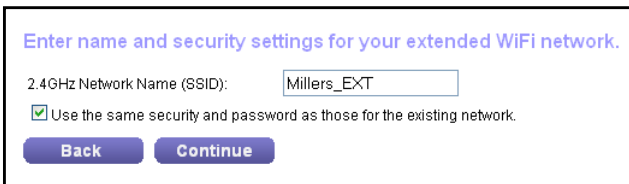
The NETGEAR genie screen displays.



3. Select the **WiFi Range Extender (Wireless)** radio button and click the **Continue** button. The extender finds WiFi networks in your area and displays a list.



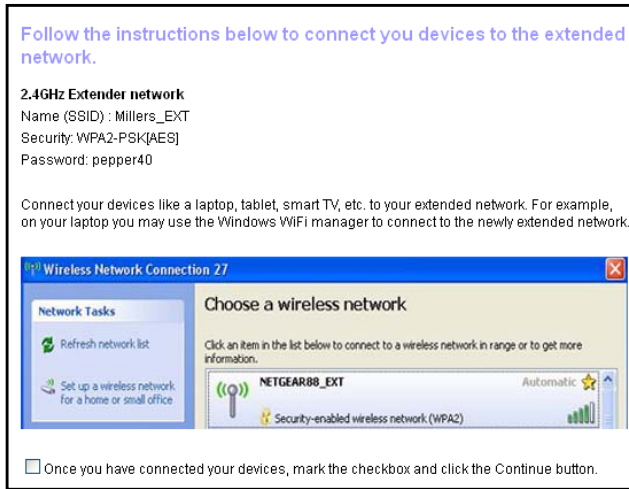
4. Select a WiFi network to extend and click the **Continue** button.
5. When prompted, type the network password (also called passphrase or security key) in the **Password** field and click the **Continue** button.
6. In the **Name** field, type a name (SSID) for your new extender WiFi network and click the **Continue** button.



Note: You can use the same security settings as the settings for your existing network by selecting the check box.

N300 WiFi Range Extender

The settings are applied and the following screen displays:

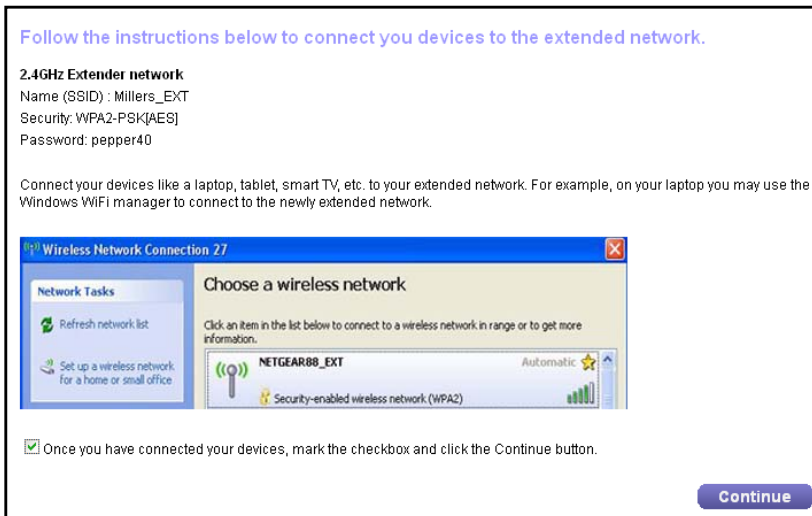


On iPads, iPhones, and MacBook computers, this screen closes automatically.

7. Use a WiFi network manager on the computer or WiFi device to connect to the extender's newly created WiFi network.

Repeat this step for all of your computers and WiFi devices.

8. If the screen is still displayed on your computer or device, select the check box shown in the following figure and click the **Continue** button.





A message displays confirming that the extender connected to the WiFi network.

9. Click the **Finish** button.
10. Unplug the extender and move it to a new location closer to the area with a poor WiFi signal.

The location that you choose must be within the range of your existing WiFi router network.

11. Plug the extender into an electrical outlet.



The Power LED ●  lights green within one minute. If the Power LED does not light, press the **Power** button.

12. Use the Router Link LED  on the front panel to help you choose a spot where the extender-to-router connection is optimal.

Find the Best Location

If the WiFi signal is weak, the first time you join the extender network, an arrow LED blinks for two minutes. If this happens, adjust the position of the extender. Use the following table to understand the arrow LEDs.



Table 2. Arrow LEDs

Arrow LED State	Action
No arrow LEDs are lit.	No action is needed. The extender is in a good location.
 Router arrow blinks.	Move the extender closer to the router.
 Client arrow blinks.	Move the computer or WiFi device closer to the extender.

Extender WiFi Performance

The extender LEDs indicate the strength of the extender's WiFi connections. Use the following table to understand the extender LEDs.

Table 3. WiFi Performance LEDs

LED	Description
 Router Link LED indicates the strength of the WiFi signal between the router and the extender.	The LEDs are color coded as follows: <ul style="list-style-type: none"> • Green indicates the best connection. • Amber indicates a good connection. • Red indicates a poor connection. An LED that is off indicates no WiFi connection.
 Client Link LED indicates the strength of the WiFi signal between the extender and the computer or WiFi device.	

Connect an Ethernet-Enabled Device

After the extender connects to your existing WiFi network, you can connect a wired device to the extender using an Ethernet cable. That device can then access your existing network through the extender's WiFi connection.

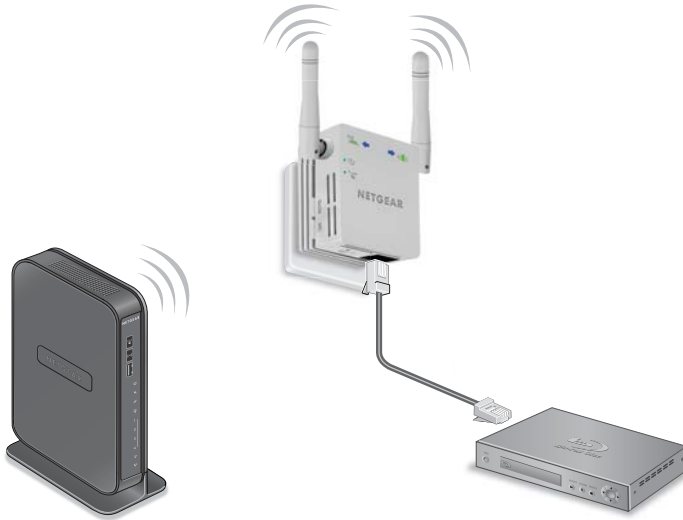


Figure 4. You can connect a computer or device to the Ethernet port on the extender

Here are some examples of when you might want to use a wired connection to the extender:

- You want to use a computer to log in to the extender to view or change its settings, but you are experiencing trouble connecting to the extender WiFi network.
- You already installed the extender and now you want to connect a device to the extender's Ethernet port.

➤ **To cable a computer or device to the extender Ethernet port:**

1. Set up the extender.

For more information about initial setup, see *Place the Extender and Apply Power* on page 10.

2. Connect the extender to an existing WiFi network.
3. Plug the Ethernet cable from an Ethernet-enabled device into the Ethernet port on the extender.


The computer or device connects to the extender. Your computer might display a message notifying you of an Ethernet connection.

Install the Extender as an Access Point

You can use the extender as a WiFi access point, which creates a new WiFi hotspot by using a wired Ethernet connection to your router.

➤ **To install the extender as an access point:**

1. Place your extender in the same room as your WiFi router.
2. Plug the extender into an electrical outlet.

The Power LED ●  lights green within one minute. If the Power LED does not light, press the **Power** button.

3. Use a WiFi network manager on the computer or WiFi device to find and connect to the NETGEAR_EXT (SSID) WiFi network.

After the connection with the computer or WiFi device is established, the Client Link LED () lights.

4. Open a web browser window from the same computer or WiFi device.

The browser takes you directly to NETGEAR genie Smart Setup.

Note: If you are not automatically directed to NETGEAR genie, launch a web browser and enter **www.mywifiext.net** in the address field.

The NETGEAR genie screen displays.



5. Select the **Access Point (Wired)** radio button and click the **Continue** button.
6. Use an Ethernet cable to connect the extender to a router Ethernet port or a remote Ethernet jack with network access.

The extender joins the network and creates a WiFi hotspot.

7. Follow the genie steps to set up WiFi security for the new WiFi network.

3

3. Manage the Extender Network

This chapter covers the following topics:

- *Log In to the Extender After Initial Setup*
- *Change the admin Password*
- *Recover the admin Password*
- *Use the Setup Wizard to Connect the Extender to a Network*
- *Add a WPS Client to the Extender Network*
- *Specify Basic WiFi Settings*
- *Control the WiFi Network Broadcast*
- *Specify WPS Settings*
- *Set Up a Wireless Access List*
- *Set Up the Extender to Use a Static IP Address*

Log In to the Extender After Initial Setup

After installation, you can log in to the extender to view or change its settings.

➤ **To log in to the extender after the initial setup:**

1. Connect a computer or WiFi device to the extender's network.
2. Launch a web browser and in the address field, enter **www.mywifiext.net** or **www.mywifiext.com**.

A login screen displays.

3. Enter **admin** for the user name and **password** for the password.

If your extender is connected to the Internet, the extender automatically checks for new firmware at the NETGEAR website.

The Status screen displays.

The screenshot shows the NETGEAR genie N300 WiFi Range Extender Status page. The page is divided into several sections:

- Setup Wizard**: Includes links for Setup Wizard, Add WPS Client, Setup, Maintenance, Status (selected), Network Devices, Backup Settings, Set Password, Firmware Upgrade, and Advanced.
- Status**:
 - Hardware Version: WN3000RPv2
 - Firmware Version: V1.0.0.24
 - GUI Language Version: V1.0.0.17
 - Connection Status to Existing Network:
 - Name (SSID): Millers
 - Connection Status: Connected
 - Link Rate: 54Mbps
 - Extender IP Info:
 - MAC Address: 08:BD:43:C2:EA:CE
 - IP Address: 192.168.1.84
 - DHCP Client: ON
 - IP Subnet Mask: 255.255.255.0
 - Gateway IP Address: 192.168.1.254
 - Domain Name Server: 192.168.1.254
 - Extender Wireless Setting:
 - Name (SSID): Millers_EXT
 - Region: Europe
 - Channel: 10
 - Wireless AP: ON
 - Broadcast Name: ON
 - Wi-Fi Protected Setup: Configured
- Help Center**: Includes a search bar and a GO button.
- Help & Support**: Includes links for Documentation, Online Support, Extender FAQ, and GNU GPL.

Change the admin Password

The user name to access the extender is admin, and its default password is password. NETGEAR strongly recommends that you set a more secure password.

➤ **To change the password for the extender:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type **http://www.mywifiext.net** in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password and want to change it again, type your personalized password.

4. Select **Maintenance > Set Password**.

5. Type the old password, and type the new password twice.
6. To be able to recover the password, select the **Enable Password Recovery** check box. NETGEAR recommends that you enable password recovery.
7. Click the **Apply** button.

Your changes take effect.

Recover the admin Password

NETGEAR recommends that you enable password recovery if you change the password for the router user name admin. Then you can recover the password if it is forgotten. This recovery process is supported in Internet Explorer, Firefox, and Chrome browsers but not in the Safari browser.

➤ To set up password recovery:

1. Launch a web browser from a computer or WiFi device that is connected to the network.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type `http://www.mywifiext.net` in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password and want to change it again, type your personalized password.

The Status screen displays.

4. Select **Maintenance > Set Password**.

5. Select the **Enable Password Recovery** check box.
6. Select two security questions and provide answers to them.
7. Click the **Apply** button.

Your changes are saved.

➤ **To recover your password:**

1. Launch a web browser from a computer or WiFi device that is connected to the network. In the address field of your browser, enter **http://www.mywifiext.net**.
A login screen displays.
2. Click the **Cancel** button.
If password recovery is enabled, you are prompted to enter the serial number of the extender.
The serial number is on the product label.
3. Enter the serial number of the extender.
4. Click the **Continue** button.
A screen displays requesting the answers to your security questions.
5. Enter the saved answers to your security questions.
6. Click the **Continue** button.
A screen displays your recovered password.
7. Click the **Login again** button.
A login screen displays.
8. With your recovered password, log in to the extender.

Use the Setup Wizard to Connect the Extender to a Network

The first time that you use a browser to connect to the extender to install it, the NETGEAR genie installation wizard displays. If you want to use a wizard to set up the extender again, you can log in to the extender and use the Setup Wizard.

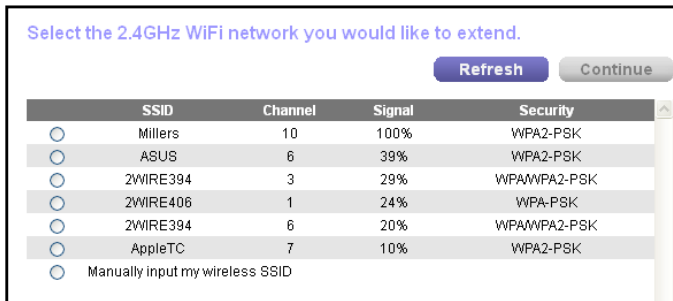
➤ **To use the Setup Wizard to connect the extender to a WiFi network:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type **http://www.mywifiext.net** in your browser.

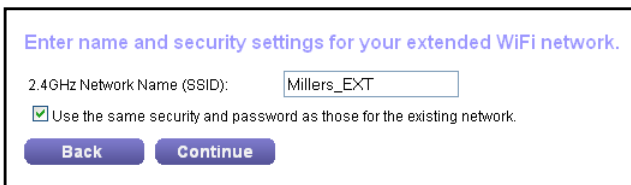
3. Type **admin** for the user name and **password** for the password.
If you already changed the password, type your personalized password.
4. Select **Setup Wizard**.

The extender finds the wireless networks in your area and displays a list.



5. To select the network you want the extender to join, do one of the following:
 - Select the radio button for the network.
 - Select the **Manually input my wireless SSID** radio button and type the name of the network.
6. Enter the security settings for the network that you selected.
7. Click the **Continue** button.

You are prompted to name the extender network.



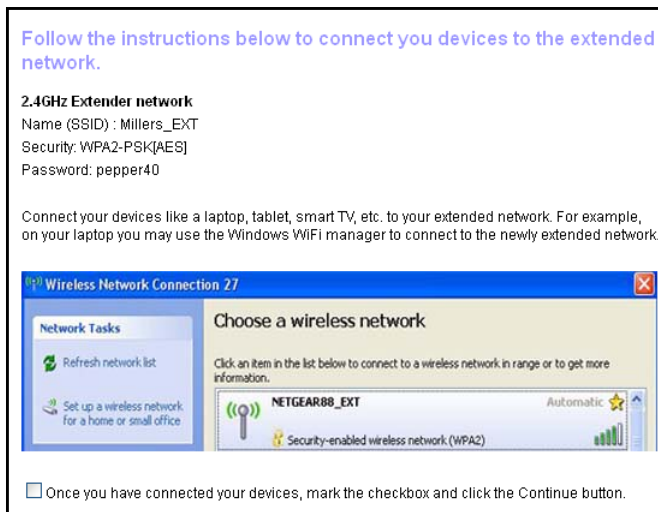
By default, the extender network name is the same as the network that you selected with **_EXT** at the end.

8. Either change the name or leave it as is, and click the **Continue** button.

The settings are applied to the extender.

Note: You can use the same security settings used in your existing network by selecting the check box.

The settings are applied and the following screen displays:



9. Use a WiFi network manager on the computer or WiFi device to connect to the extender's newly created WiFi network.

10. Enter your password.

Your computer or wireless device connects to the network.

Add a WPS Client to the Extender Network

A WPS client is a computer or wireless device. WPS lets you add a wireless computer or device to the extender's WiFi network without typing the WiFi password. WPS does not support WEP network security. If you are using WEP security, see [Connect with NETGEAR genie Smart Setup](#) on page 11.

Note: For instructions about how to use the physical **WPS** button on the extender, see [Connect with WPS](#) on page 10.

➤ To add a WPS client:

1. Launch a web browser from a computer or wireless device that is connected to the network.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

A login screen displays.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type <http://www.mywifiext.net> in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select **Add WPS Client**.
5. Click the **Next** button.
6. Select a setup method:
 - **Push button**. Click the **WPS** button on this screen.
 - **PIN Number**. The screen adjusts. Enter the client security PIN, and click the **Next** button.
7. Within two minutes, go to the client device and use its WPS software to connect to the WiFi network.

The WPS process automatically sets up your wireless computer with the network password when it connects. The extender WPS screen displays a confirmation message.

Specify Basic WiFi Settings

Changing the wireless setting disconnects all computers or wireless devices from the WiFi network. To reconnect to the WiFi network, you must use the new settings.

➤ To specify basic WiFi settings:

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.
You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type **http://www.mywifiext.net** in your browser.
3. Type **admin** for the user name and **password** for the password.
If you already changed the password, type your personalized password.
4. Select **Setup > Wireless Settings**.

The screenshot shows the 'Wireless Settings' configuration interface. At the top, there are 'Cancel' and 'Apply' buttons. The network name is 'My WN3000RPv3 Wireless Network'. The 'Name (SSID)' field contains 'Millers_EXT'. The 'Region' is set to 'North America', 'Channel' is '10', and 'Wireless mode' is 'Up to 130Mbps'. Under 'Security Options', 'WPA2-PSK [AES]' is selected with a radio button. Below this, there is a 'Password (Network Key)' field with a note '(8-63 characters or 64 hexdigits)'.

5. To change the network name (SSID), type a new name in the **Name (SSID)** field.

The name can be up to 32 characters long and it is case-sensitive. The default SSID is randomly generated and is on the router's label. If you change the name, make sure to write down the new name and keep it in a safe place.

6. In the **Region** list, select your region.

In some locations, you cannot change this setting.

7. To change the wireless channel, select a number in the **Channel** list.

In some regions, not all channels are available. Do not change the channel unless you experience interference (shown by lost connections or slow data transfers). If this happens, experiment with different channels to see which is the best.

When you use multiple access points, it is better if adjacent access points use different channels to reduce interference. The recommended channel spacing between adjacent access points is four channels (for example, use Channels 1 and 5, or 6 and 10).

8. To change the Mbps setting, select a setting from the **Mode** list.

9. Click the **Apply** button.

The new settings take effect and computers and wireless devices on the network are automatically disconnected.

Change the WiFi Password or Security Level

Your router comes with preset WPA2 or WPA security. The password that you enter to connect to your network is unique to your router and is on the router label. NETGEAR recommends that you use the preset security, but you can change the settings. NETGEAR recommends that you do not disable security.

➤ To change the WPA settings:

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type `http://www.mywifiext.net` in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select **Setup > Wireless Settings**.

- Under Security Options, select a radio button for a WPA option.

The screenshot shows the 'Wireless Settings' interface for a 'My WN3000RPv3 Wireless Network'. At the top, there are 'Cancel' and 'Apply' buttons. The 'Name (SSID)' field contains 'Millers_EXT'. The 'Region' is set to 'North America', 'Channel' is '10', and 'Wireless mode' is 'Up to 130Mbps'. Under 'Security Options', the radio buttons are: 'None', 'WEP', 'WPA-PSK [TKIP]', 'WPA2-PSK [AES]' (which is selected), and 'WPA-PSK [TKIP] + WPA2-PSK [AES]'. Below this, under 'Security Options (WPA2-PSK)', there is a 'Password (Network Key)' field with a note '(8-63 characters or 64 hexdigits)'. The 'Apply' button is highlighted in green.

The WPA2 options use the newest standard for the strongest security, but some older computers and wireless devices cannot use WPA2. By default, the **WPA-PSK [TKIP] + WPA2-PSK [AES]** radio button is selected so that new or old computers and wireless devices can connect to the WiFi network by using either WPA2 or WPA security.

The **Passphrase** field displays.

- In the **Passphrase** field, enter the network key (password).

It is a text string from 8 to 63 characters.

- Write down the new password and keep it in a secure place for future reference.
- Click the **Apply** button.

Your changes are saved.

Control the WiFi Network Broadcast

The extender wireless antennas automatically broadcast a WiFi signal. You can disable WiFi in the extender, or leave WiFi enabled but prevent the extender from broadcasting a signal. When the extender WiFi is enabled and it does not broadcast a signal, that creates a hidden network. Hidden networks do not display in the lists of available networks that your computer or WiFi devices find. To connect to a hidden network, you must know the WiFi network name and password and manually enter them instead of finding and selecting a WiFi network.

➤ To control the WiFi network broadcast:

- On your computer, launch a web browser.
- In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type `http://www.mywifiext.net` in your browser.

- Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select **Advanced > Wireless Settings**.

5. Select or clear the **Enable Wireless Access Point** check box.

When this check box is selected, the extender allows WiFi connections. Clearing this check box prevents wireless devices from connecting to the extender. LAN devices can still connect to the extender over an Ethernet cable.

6. Select or clear the **Enable SSID Broadcast** check box.

When this check box is selected, the extender broadcasts its wireless network name (SSID). Clearing this check box hides the extender's SSID. In such a situation, this network name does not display in a WiFi network manager. A user who wants to join this hidden network must know its network name.

7. Click the **Apply** button.

Your settings are saved.

Specify WPS Settings

- **To view or change the WPS settings:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type `http://www.mywifiext.net` in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select **Advanced > Wireless Settings**.

The screenshot shows the 'Advanced Wireless Settings' interface. It features a title bar with 'Cancel' and 'Apply' buttons. The main content area is divided into three sections:

- Wireless Settings:** Contains two checked checkboxes: 'Enable Wireless Access Point' and 'Enable SSID Broadcast'.
- WPS Settings:** Contains one checked checkbox: 'Keep Existing Wireless Settings'.
- Wireless Card Access List:** Contains a 'Setup Access List' button.

All the check boxes are selected by default.

5. Select or clear the check boxes:

- **Enable Wireless Access Point.** When this check box is selected, the extender allows WiFi connections. Clearing this check box prevents wireless devices from connecting to the extender. LAN devices can still connect to the extender over an Ethernet cable.
- **Enable SSID Broadcast.** When this check box is selected, the extender broadcasts its wireless network name (SSID). Clearing this check box hides the extender's network name. In such a situation, this network name does not display in a WiFi network manager. A user who wants to join this hidden network must know its network name.

6. Select or clear the **Keep Existing Wireless Settings** check box.

By default, the **Keep Existing Wireless Settings** check box is selected. NETGEAR recommends that you leave this check box selected.

If you clear this check box, the next time a new wireless client uses WPS to connect to the extender, the extender wireless settings change to an automatically generated random SSID and security key.

7. Click the **Apply** button.

Your settings are saved.

Set Up a Wireless Access List

By default, any wireless device that is configured with the correct network name (SSID) can access the extender's WiFi networks. For increased security, you can restrict access to the extender's WiFi networks so that only wireless devices with the MAC addresses that you add to an access list can connect.

Each network device is assigned a MAC address, which is a unique 12-character physical address, containing the hexadecimal characters 0–9, a–f, or A–F only, and separated by colons (for example, 00:09:AB:CD:EF:01). Typically, the MAC address is on the label of the wireless device. If you do not have access to the label, you can display the MAC address using

the network configuration utilities of the computer. You might also find the MAC addresses on the Network Devices screen (see [View Wired and Wireless Network Devices](#) on page 35).



CAUTION:

If you use a wireless device to set up the access list, add your wireless device to the access list. Otherwise, you are disconnected when you click the **Apply** button. To avoid this situation, use a computer with a wired connection to access the extender.

Before you enable the access list, you must add the MAC addresses of the wireless devices that you want to grant access to the WiFi network of the extender.

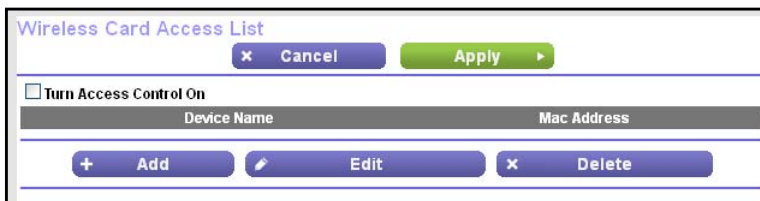
➤ **To set up and enable the access list:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type <http://www.mywifiext.net> in your browser.

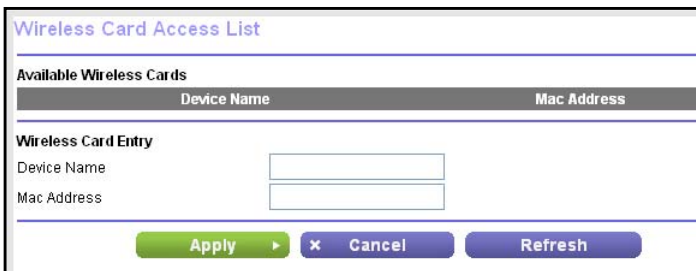
3. Type **admin** for the user name and **password** for the password.
If you already changed the password, type your personalized password.
4. Select **Advanced > Wireless Settings**.
5. Click the **Setup Access List** button.

The Wireless Card Access List screen displays.



6. Click the **Add** button.

The screen adjusts.



7. In the **Device Name** field, type a name for the wireless device.

8. In the **MAC Address** field, type the MAC address of the wireless device.
9. Click the **Apply** button.

The Wireless Card Access List screen displays.

10. Select the **Turn Access Control On** check box.
11. Click the **Apply** button.

Now only computers and devices in the Wireless Card Access List can join the extender's WiFi networks.

Set Up the Extender to Use a Static IP Address

By default, the extender gets its IP address dynamically from the router in your network. This is the most common setting and is suitable for most situations. You can set up the extender to use a static IP address. You specify the static IP address and it always stays the same. Working with a static IP address requires networking knowledge.

➤ To specify a static IP address:

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type `http://www.mywifiext.net` in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select **Setup > IP Address Setup**.

The screenshot shows a web interface titled "Device's IP Address". At the top, there are "Cancel" and "Apply" buttons. Below this, there are two radio button options: "Get Dynamically IP Address From Router" (which is selected) and "Use Static IP Address". Under the "Use Static IP Address" option, there are four input fields for the IP address, with the first four containing the values "192", "168", "1", and "250". Below these are input fields for "IP Subnet Mask", "Gateway IP Address", and "Primary DNS".

5. Select the **Use Static IP Address** radio button.
6. Complete the static IP address fields.
7. Click the **Apply** button.

Your settings are saved.

4

4. Monitor and Maintain the Extender

This chapter covers the following topics:

- *Back Up the Extender Configuration*
- *Restore Saved Configuration Settings*
- *Return the Extender to Its Factory Settings*
- *Upgrade the Firmware*
- *View Wired and Wireless Network Devices*

Back Up the Extender Configuration

When the extender works correctly after initial setup, NETGEAR recommends that you back up the extender configuration settings. After you have backed up the settings, if you change the extender settings but are not content with the new settings, you can restore the backed-up configuration settings.

➤ **To back up the extender configuration settings:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.
You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type **http://www.mywifiext.net** in your browser.
3. Type **admin** for the user name and **password** for the password.
If you already changed the password, type your personalized password.
4. Select **Maintenance > Backup Settings**.

5. Click the **Backup** button.
Your browser extracts the configuration file from the extender.
6. If your browser is not set up to save downloaded files automatically, locate where you want to save the file.
A copy of the current settings is saved in the location you specified.

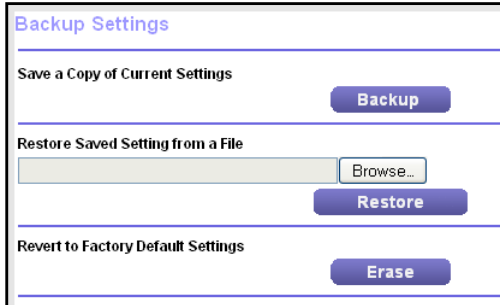
Restore Saved Configuration Settings

You can restore the configuration file of the extender to a previously saved configuration file.

➤ **To restore the extender configuration settings:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.
You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type **http://www.mywifiext.net** in your browser.

3. Type **admin** for the user name and **password** for the password.
If you already changed the password, type your personalized password.
4. Select **Maintenance > Backup Settings**.



The screenshot shows the 'Backup Settings' page. It has three main sections: 1. 'Save a Copy of Current Settings' with a 'Backup' button. 2. 'Restore Saved Setting from a File' with a text input field, a 'Browse...' button, and a 'Restore' button. 3. 'Revert to Factory Default Settings' with an 'Erase' button.

5. Click the **Browse** button.
6. Locate and select the previously saved backup file.
By default, the name of the backup file is `NETGEAR_WN3000RP.cfg`.



CAUTION:

After you click the **Restore** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting!

7. Click the **Restore** button.
A confirmation pop-up screen displays.
8. Confirm your decision.
The extender restarts. This process takes about one minute.

Return the Extender to Its Factory Settings

To reset the extender to factory default settings, you can use either the **Factory Reset** button or the Erase feature. For information about the factory settings, see *Factory Default Settings* on page 42.

Use the Factory Reset Button to Restore Factory Settings




CAUTION:

This process erases any settings that you configured in the extender.

➤ **To restore factory settings:**

1. Insert a paper clip into the **Factory Reset** hole and hold it until the Power LED blinks amber.



2. Release the button.
All the LEDs turn off for about three seconds.
The Power LED lights solid amber for about 30 seconds.
The Power LED ●  lights solid green.
The extender returns to its factory settings.

Erase the Extender Settings and Return to Factory Settings



CAUTION:

This process erases any settings that you configured in the extender.

➤ **To erase the extender's current settings:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.
You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type **http://www.mywifiext.net** in your browser.
3. Type **admin** for the user name and **password** for the password.
If you already changed the password, type your personalized password.

4. Select **Maintenance > Backup Settings**.



CAUTION:

After you click the **Erase** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting!

5. Click the **Erase** button.

A confirmation pop-up screen displays.

6. Confirm your decision.

The extender restarts. This process takes about one minute.

Upgrade the Firmware

Unless you changed the settings in the Firmware Upgrade screen previously, the extender is set up to check for new firmware automatically when you log in. You can also check for new firmware.

➤ **To check if new firmware is available and update the firmware:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type <http://www.mywifiext.net> in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select **Maintenance > Firmware Upgrade**.

5. Click the **Check** button.
6. If new firmware is available, follow the onscreen prompts to download it onto your computer.

Note: You might need to unzip the firmware file.

7. Click the **Browse** button.
8. Locate and select the new firmware file.



CAUTION:

After you click the **Upload** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting!

9. Click the **Upload** button.

The firmware update starts and the extender restarts. This process takes a couple of minutes

View Wired and Wireless Network Devices

You can view the active wired and wireless devices in both the extender network and the network to which the extender is connected. If you do not recognize a wireless device, it might be an intruder.

➤ **To view devices on the network:**

1. On your computer, launch a web browser.
2. In the address field of your browser, enter **http://www.mywifiext.net**.

You are prompted to enter a user name and password. If you do not see the login prompt, make sure to include **http://** when you type **http://www.mywifiext.net** in your browser.

3. Type **admin** for the user name and **password** for the password.

If you already changed the password, type your personalized password.

4. Select **Maintenance > Network Devices**.

The screenshot shows a web interface titled "Network Devices". It contains two tables. The first table, "Wired Devices", is currently empty. The second table, "Wireless Devices(Wireless intruders also show up here)", contains one entry. Below the tables is a "Refresh" button.

Network Devices				
Wired Devices				
#	IP Address	MAC Address	Virtual MAC Address	Device Name
Wireless Devices(Wireless intruders also show up here)				
#	IP Address	MAC Address	Virtual MAC Address	Device Name
1	192.168.1.128	00:1B:77:90:EF:2B	----	TECHPUBS

[Refresh](#)

For each wired and wireless device, the IP address, device name, and MAC addresses display.

5. (Optional) Click the **Refresh** button.

The screen is updated.

5. FAQs and Troubleshooting

5

This chapter covers the following topics:

- *FAQs*
- *Cannot Log In to the Extender*
- *Cannot Join the Extender WiFi Network*

FAQs

This section provides answers for difficulties you might experience with the extender.

The NETGEAR genie Smart Setup keeps asking me for my network security key (passphrase), and I am sure that I entered the correct passphrase. What can I do?

The extender is probably placed at the borderline of the range covered by the router or access point. For more information, see *Place the Extender and Apply Power* on page 10. If you are using WEP security, make sure that you are typing the wireless key in the correct field.

I am connected to NETGEAR_EXT and launched a browser. Why can't I see the NETGEAR genie Smart Setup?

Try these troubleshooting steps:

- Make sure that your computer is set up to use DHCP (most are).
- Make sure that the Client Link LED (■) is green and that you are using a valid IP address.
- Relaunch the web browser and type **www.mywifiext.net** or **www.mywifiext.com** in the address field of the web browser. Enter **admin** for the user name and **password** for the password.

Is seamless roaming supported? During a VoIP call, when I move to a different location, the call is dropped. What should I do?

No, the extender does not support seamless roaming. You might notice performance issues if your network device (laptop, smartphone, or tablet) connects to a different WiFi network. For example, you could connect to the extender WiFi network, begin a call, and move to the location of your existing network. Your device automatically connects to the network in your current location, which takes a few seconds. This might cause your call to be dropped. To prevent this problem, decide which WiFi network you want to use for your VoIP call, and stay within the range of that network.

My router security is WEP, and I entered the wrong passphrase or security key on the extender. I cannot access the extender anymore. What can I do?


The extender cannot detect if the WEP passphrase is correct. If you entered the wrong passphrase, your WiFi device cannot get the IP address from the extender. You must reset the extender to the factory settings to get the IP address back.

I enabled a wireless MAC filter, wireless access control, or access control list (ACL) on my router. What should I do when installing the extender?

When the WiFi device connects through the extender to your router, the MAC address of the WiFi device shown on the router is translated to another MAC address. If your router's MAC filter, wireless access control, or ACL is enabled, the WiFi device connects to the extender but cannot get an IP address from the extender and cannot access the Internet.

To allow the WiFi device to receive an IP address from the extender and access the Internet, you must provide the translated MAC address to the router.



➤ **To get the translated MAC address:**

1. Log in to your router and disable the MAC filter, wireless access control, or ACL.
For more information about how to disable your router's MAC filter, wireless access control, or ACL, see your router's documentation.
2. Power on the extender and connect all of your WiFi devices to the extender network.
3. Make sure that the Client Link LED () remains lit.
4. Log in to your extender.
 - a. Launch a web browser and in the address field, enter **www.mywifiext.net** or **www.mywifiext.com**.
A login screen displays.
 - b. Enter **admin** for the user name and **password** for the password.
5. Select **Maintenance > Network Devices**.
The Network Devices screen displays the MAC addresses and virtual MAC addresses for computers and devices that are connected to the extender network.
6. On the router, add all of the virtual addresses from your extender to your router's MAC filter table.
7. Enable the router's MAC filter, wireless access control, or ACL.

Cannot Log In to the Extender

If you experience trouble connecting to the extender, try to locate the source of the problem:

- Make sure that you use the correct user name and password to log in:
 - **User name.** admin
 - **Password.** password (unless you changed it)


For information about how to recover the admin password, see [Recover the admin Password](#) on page 19.
- If your browser displays an error page, include **http://** when you type **http://www.mywifiext.net** in the address field of your web browser. If you leave it out, you might not be able to connect.
- If you already set up the extender but can no longer connect to it with WiFi, check to see if the Power LED   is off. If the Power LED is not lit, press the **Power** button.
- If the extender is powered on but you cannot connect to the extender WiFi network, you can use an Ethernet cable to connect your computer to the Ethernet port on the extender. For more information, see [Connect an Ethernet-Enabled Device](#) on page 15.

Cannot Join the Extender WiFi Network

To join a WiFi network, you must know its network name (also called the SSID) so that you can select it. If the network is secure, you must know the passphrase or key. If the extender does not connect to the network that you select, the following message displays:

Connection was not established to the selected network.

If this situation occurs, the cause might be one of the following:

- It's possible that you typed the network name, passphrase, or key incorrectly. Use the Setup Wizard to select a WiFi network from the list with detected networks, and retype the passphrase or key. The passphrase or key is case-sensitive. For example, PASSWORD25 is not the same as Password25 or password25.
- If the extender cannot detect your WiFi network, check to see if your WiFi network is still working. Make sure that the wireless router is turned on. If possible, move the extender closer to the wireless router.
- If the extender Router Link  LED is red, a poor wireless connection exists between the wireless router and the extender. You can establish the best connection with a clear line of sight between the extender and the wireless router. Make sure that no physical obstacles exist between the extender and the wireless router and try to move the extender closer to the wireless router.
- When you use the Setup Wizard, it automatically checks to see if the Internet connection is working. If you cannot access the Internet with your computer or wireless device, the Setup Wizard displays the following message:

You are not able to connect to the Internet. Click Continue to run through setup again to connect to your network.

This message can display for the following reasons:

- The extender cannot connect to the wireless router.
- The extender cannot get an IP address from the wireless router.
- The wireless router is not connected to the Internet.

Either run the Setup Wizard again or exit the Setup Wizard and try again later.

A Supplemental Information

A

This appendix includes the following sections:

- *Factory Default Settings*
- *Technical Specifications*

Factory Default Settings

The following table lists the factory settings for the extender. You can use the **Factory Reset** button or the Erase feature to return the extender to these settings. (See [Return the Extender to Its Factory Settings](#) on page 32.)

Table 4. Factory Settings

Feature	Setting
Setup Wizard	Enabled
Wireless communication	Enabled
Wireless network name (SSID)	NETGEAR_EXT
Security	Disabled
Transmission speed	Auto ¹
Country/region	Varies by region
Operating mode	802.11n, 802.11g, 802.11b
Data rate	Up to 300 Mbps
DHCP	Client enabled

1. Maximum wireless signal rate (IEEE Standard 802.11). Actual throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate.

Technical Specifications

The following table includes the product specifications.

Table 5. Technical specifications

Extender Specifications	
Network protocol and standards compatibility	Data and routing protocols: TCP/IP, DHCP server and client, DNS relay
Power consumption	100–240V 0.1 A, 50–60 Hz
Physical specifications	<ul style="list-style-type: none"> • Dimensions: 67 x 55 x 34 mm (2.64 x 2.17 x 1.34 in.) • Weight: 102 g ~ 110 g (3.60 oz ~ 3.88 oz) varied by power plug type

Table 5. Technical specifications (continued)

Extender Specifications	
Environmental	<ul style="list-style-type: none">• Operating temperature: 32° to 140°F (0° to 40°C)• Operating humidity: 90% maximum relative humidity, noncondensing• Electromagnetic emissions: Meets requirements of FCC Part 15 Class B.
Interface	<ul style="list-style-type: none">• Local: 10BASE-T, 100BASE-Tx, RJ-45• 802.11n, 802.11g, 802.11b