NETGEAR®

N300 WiFi Range Extender WN2000RPT

User Manual

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*.

Contact your Internet service provider for technical support.

Compliance

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

See the regulatory compliance document before connecting the power supply.

Trademarks

Table of Contents

Overview

1

This user manual is for the NETGEAR® N300 WiFi Range Extender WN2000RPT, which is referred to as *the extender*.

This chapter covers the following topics:

- *Unpack Your Extender*
- *Front Panel LEDs and Button*
- *Rear Panel Ports, Buttons, and Connector*
- *When to Use Your Extender*
- *How the Extender Works*

Note: For more information about the topics covered in this manual, visit the support website at *support.netgear.com*.

Note: Firmware updates with new features and bug fixes are made available from time to time on *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 do not match what is described in this guide, you might need to update your firmware.

Note: In this manual, the terms *wireless* and *WiFi* are interchangeable.

Unpack Your Extender

Your box contains the following items:

- N300 WiFi Range Extender WN2000RPT
- Power adapter
- Installation guide

Front Panel LEDs and Button

Use the LEDs during installation to find the best location for the extender or to monitor the extender performance.

Link Rate LED

Extender Status LED

Device to Extender Connection LED

WPS button and LED
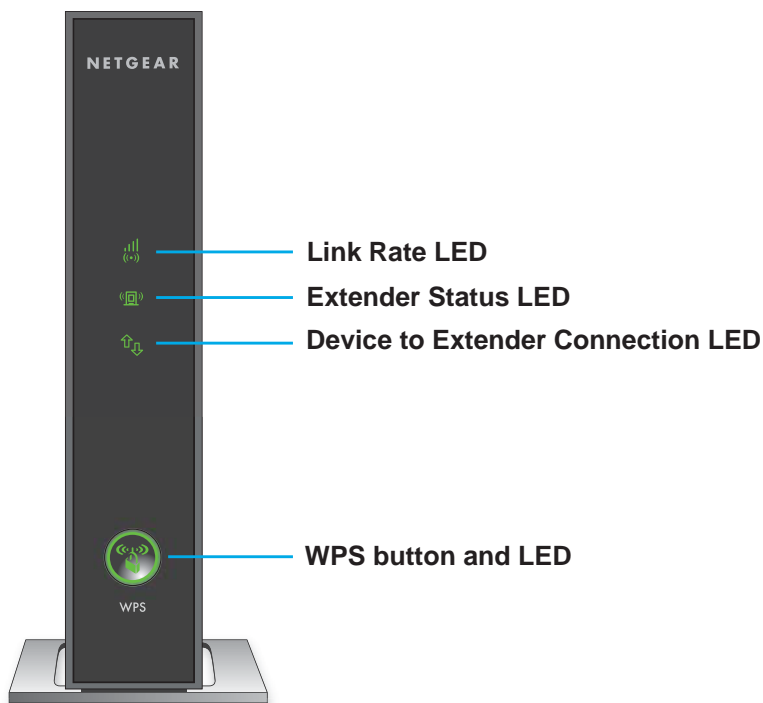
Figure 1. Front panel LEDs and Button

The LEDs and button are described in the following table.

Table 1. Front panel LEDs and button

LEDs and Button		Description
Link Rate LED		**Green**. The WiFi connection between the extender and the WiFi router is optimum.
		Amber. The WiFi connection between the extender and the WiFi router is good.
		Red. The WiFi connection between the extender and the WiFi router is poor.
		Off. The extender and the WiFi router do not have a WiFi connection.
Extender Status LED		**Green**. The extender is on.
		Amber. The extender starts. After about one minute, the LED lights green.
		Off. The extender is off.
Device to Extender Connection LED		**Green**. The extender is connected to a computer or WiFi device.
		Off. The extender is not connected to a computer or WiFi device.
WPS button and LED		The **WPS** button lets you make the following connections: • Connect the extender to a WiFi router or access point. • If the extender is already connected to a WiFi network, connect a WiFi device to the WiFi network of the extender.
		Solid Green. WiFi security is enabled (WPS or WPA2) for the WiFi network of the extender.
		Blinking Green. A WPS connection is in progress.
		Off. WiFi security is not enabled for the WiFi network of the extender.

Rear Panel Ports, Buttons, and Connector

The following figure shows the ports, buttons, and connector on the rear panel of the extender. The rear panel also shows the default access information, MAC address, and serial number of the extender.

Restore Factory Settings button

Ethernet LAN ports

Power connector
On/Off button
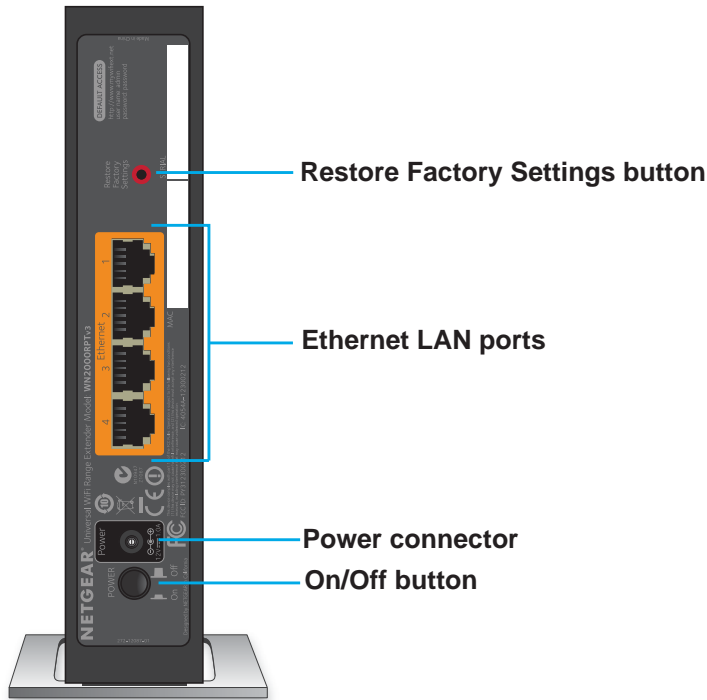
Figure 2. Rear panel

When to Use Your Extender

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

NETGEAR recommends that you connect through the extender network only when the WiFi device is in a "dead zone" where connection from the existing network is poor or nonexistent.

How the Extender Works

The extender works like a bridge between a WiFi router (or a WiFi access point) and a WiFi device outside the range of the WiFi router. The extender has two main jobs:

1. The extender connects to a WiFi network.

   When the extender connects over WiFi to an existing network, it functions as a network client, similar to how a WiFi device connects to a network.

2. The extender acts as an access point for WiFi devices.

   The extender has its own WiFi network that WiFi devices can join. In its role as an access point, the extender performs tasks that WiFi routers do, such as broadcasting its network name (SSID).

The extender must do each of these jobs so that both ends of the bridge are in place.
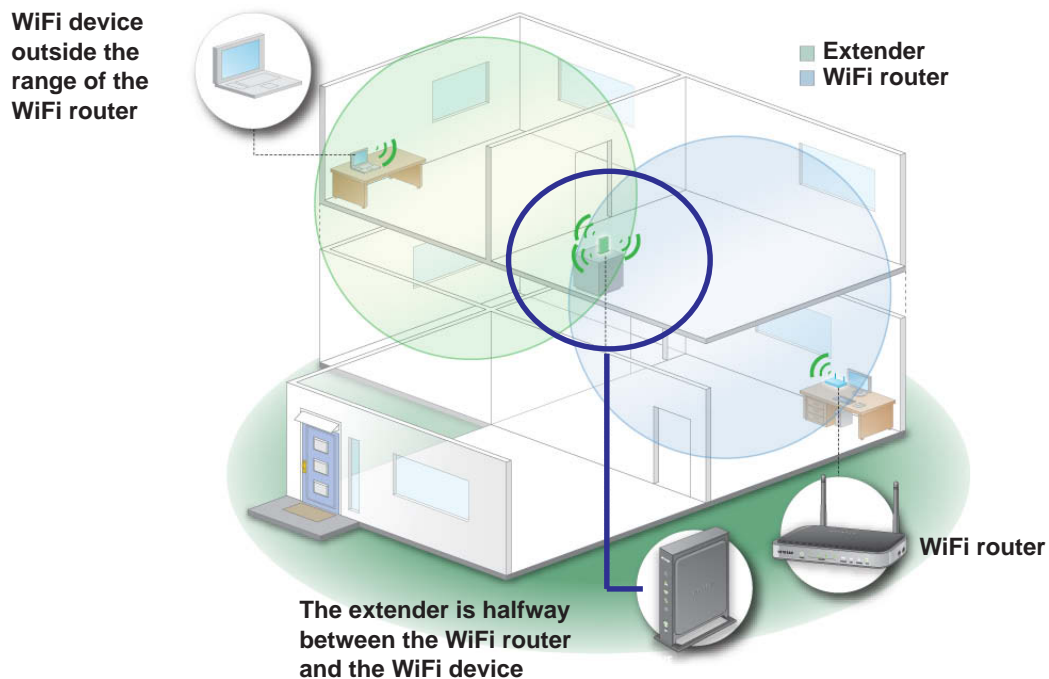
Figure 3. Range extender in a home

Get Started

2

This chapter covers the following topics:

- *How to Position the Extender*
- *Connect the Extender to Your WiFi Router*
- *Connect the Extender with WPS to a WiFi Network*
- *Access the Extender over WiFi and Use the Setup Wizard*
- *Access the Extender over Ethernet and Use the Setup Wizard*

How to Position the Extender

The ideal location to place the extender is halfway between your WiFi router and your WiFi device.
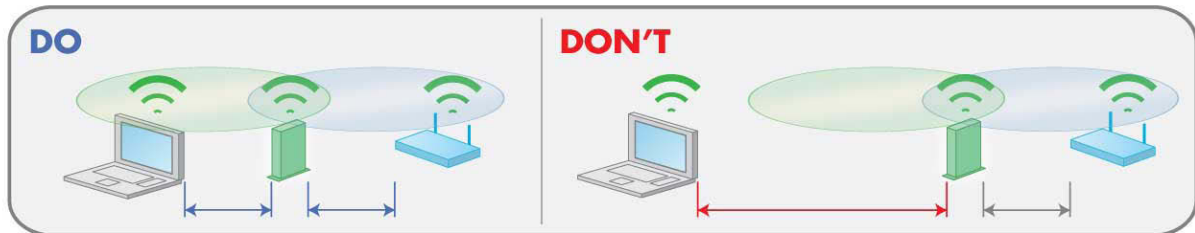
Figure 4. Range extender location

The best connection is established with a clear line of sight between the extender and the WiFi router and a clear line of sight between the extender and the WiFi device that you are using. If a thick wall or other materials block this straight path, move the extender to a different location halfway between the WiFi device and the WiFi router.

When you make the initial connection between the extender and the WiFi router, place the extender close to the WiFi router. After you have established a connection between the extender and the WiFi router, move the extender to the location where you intend to use it. (You might need to unplug the extender, replug it at its new location, and restart it.) Use the Link Rate LEDs on the extender to choose the location where the connection between the extender and the WiFi router is optimal. These steps are described in detail in the following sections.

Connect the Extender to Your WiFi Router

To connect the extender to your WiFi router and find the best location, use *one* of the following methods:

- **WPS**. Use the extender's WPS button to establish a WiFi connection between the extender and the WiFi router (see *Connect the Extender with WPS to a WiFi Network*). Use this method if your WiFi router supports Wi-Fi Protected Setup (WPS).
- **WiFi**. Use a computer or WiFi device to join the extender's default WiFi network, then launch a web browser to set up the connection between the extender and a WiFi network (see *Access the Extender over WiFi and Use the Setup Wizard*). Use this method if your WiFi router does not support WPS.
- **Ethernet**. Use an Ethernet cable to connect a computer to the extender, then launch a web browser to set up the connection between the extender and a WiFi network (see *Access the Extender over Ethernet and Use the Setup Wizard*). Use this method if you have difficulty establishing a WiFi connection to the extender.

Connect the Extender with WPS to a WiFi Network

The easiest way to connect the extender to a WiFi network is by using Wi-Fi Protected Setup (WPS). For this method to be successful, your WiFi router must support WPS.

If your WiFi router does not support WPS, see one of the following sections:

- *Access the Extender over WiFi and Use the Setup Wizard* on page 14
- *Access the Extender over Ethernet and Use the Setup Wizard* on page 19

WPS lets you join a secure WiFi network without typing the network name and password. The **WPS** button is a physical button on the front panel of the extender. For more information about the **WPS** button and LED of the extender, see *Front Panel LEDs and Button* on page 6. Your WiFi router might have a physical WPS button, a software WPS button, or both.

WPS does not support WEP network security. If you are using WEP security, follow the instructions in *Access the Extender over WiFi and Use the Setup Wizard* on page 14.

➢ **To connect the extender with WPS to a WiFi router:**

1. Place the extender close to the WiFi router.

   Note: In a later step in this procedure, after you have established a connection to the WiFi router, you can place the extender at its permanent location.

2. Plug the extender into an electrical outlet.
3. If necessary, press the **Power** button.

   The Status LED lights green.

   You are now ready to connect the extender to your WiFi router.

4. Press the **WPS** button on the extender.
5. Within two minutes, press the **WPS** button on your WiFi router.

   After a few seconds, the extender connects to your existing WiFi network. Because you placed the extender close to the WiFi router, the Link Rate LED on the extender lights green, indicating a good connection between the WiFi router and the extender.

   If the Link Rate LED does not light green, try *Step 4* and *Step 5* again. If it still does not light green, see *Access the Extender over WiFi and Use the Setup Wizard*.

6. Now that the extender is connected to the WiFi router, move it to a location where you can boost your WiFi range.

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

7. Plug the extender into an electrical outlet at the new location and restart the extender.

   Unless the extender is outside the range of your WiFi router, the extender connects automatically to the WiFi router.

The Link Rate LED help you choose a spot where the extender-to-router connection is optimal. The following tables describe how the LEDs show the quality of the connection.

LED Status	LED Color	Performance
Both the Link Rate LED and the Device to Extender Connection LED are green.	and	The extender provides the best performance.
The Link Rate LED is amber and the Device to Extender Connection LED is green.	and	The extender provides a workable performance.
The Link Rate LED is red.		The extender provides a poor performance.
The Link Rate LED is off.		The extender cannot function.

If the Link Rate LED is off, the extender cannot connect to the WiFi router. If the Link Rate LED is red, the extender has a poor connection to the WiFi router.

8. If the extender has no connection or a poor connection, move the extender closer to your WiFi router and try again until the Link Rate LED is green, or at least amber.

9. Use a WiFi network manager on the computer or mobile device to connect to the extender's newly created WiFi network. The extender's default NETGEAR_EXT WiFi network name (SSID) changes to the name of your existing WiFi network, with **_EXT** at the end of the name, for example:

- **Existing network name**. *MyNetworkName*
- **New extender network name**. *MyNetworkName*_EXT

10. Select the new network and use your WiFi router password to connect.

You are now using your extended WiFi network.

Note: If your computer or mobile device cannot join the new WiFi network of the extender, see *You Cannot Join a WiFi Network and Receive an Error Message* on page 65.

Access the Extender over WiFi and Use the Setup Wizard

If your WiFi router does not support WPS, access the extender over WiFi and use the browser-based NETGEAR genie® Setup Wizard to connect the extender to an existing WiFi network.

The extender has a default NETGEAR_EXT WiFi network name (SSID) so you can access it over WiFi. After you have used the Setup Wizard to connect the extender to an existing WiFi network, the extender changes its default NETGEAR_EXT network name to the name of the existing WiFi network and adds **_EXT** at the end of the name, for example:

- **Existing network name**. *MyNetworkName*
- **New extender network name**. *MyNetworkName*_EXT

➢ **Access the extender over WiFi and use the Setup Wizard to connect the extender to an existing WiFi network:**

1. Place the extender close to the WiFi router.

    Note: In a later step in this procedure, after you have established a connection to the WiFi router, you can place the extender at its permanent location.

2. Plug the extender into an electrical outlet.

3. If necessary, press the **Power** button.

    The Status LED 🔲 lights green.

4. Make sure that your computer or mobile device is not connected to a WiFi network or Ethernet network.

    If the computer or mobile device is already connected to a network, you might not be able to connect to the extender.

5. Open a WiFi network manager on your computer or mobile device to find and connect to the NETGEAR_EXT WiFi network of the extender.

    You can use any WiFi network utility on a computer, tablet, or smartphone to find and connect to the NETGEAR_EXT WiFi network of the extender. The following figure shows an example of a WiFi network utility.

After the connection with the computer or mobile device is established, the Device to Extender Connection LED 🔄 lights solid green.

6. Open a web browser window from the same computer or mobile device.

The browser takes you directly to the NETGEAR genie Setup Wizard start screen.

Note: If you are not automatically directed to NETGEAR genie Setup Wizard start screen, go to **www.mywifiext.net**, and enter **admin** for the user name and **password** for the password.

7. Under Do you want NETGEAR Genie to help?, select the **Yes** radio button, and click the **Next** button.

NETGEAR genie searches for WiFi networks automatically.
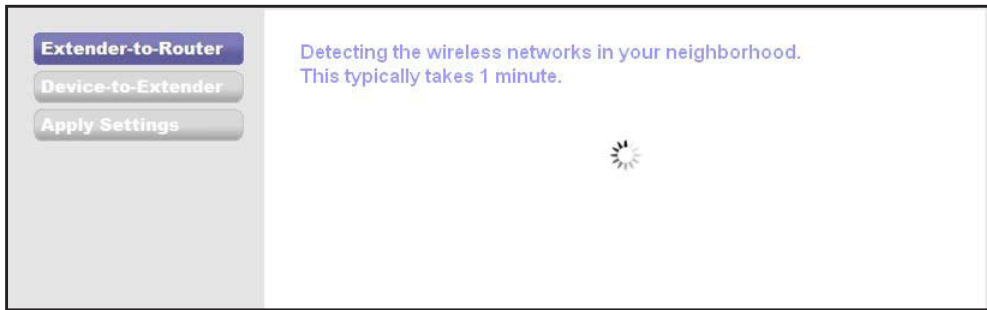
8. Select a WiFi network to extend, and click the **Continue** button.
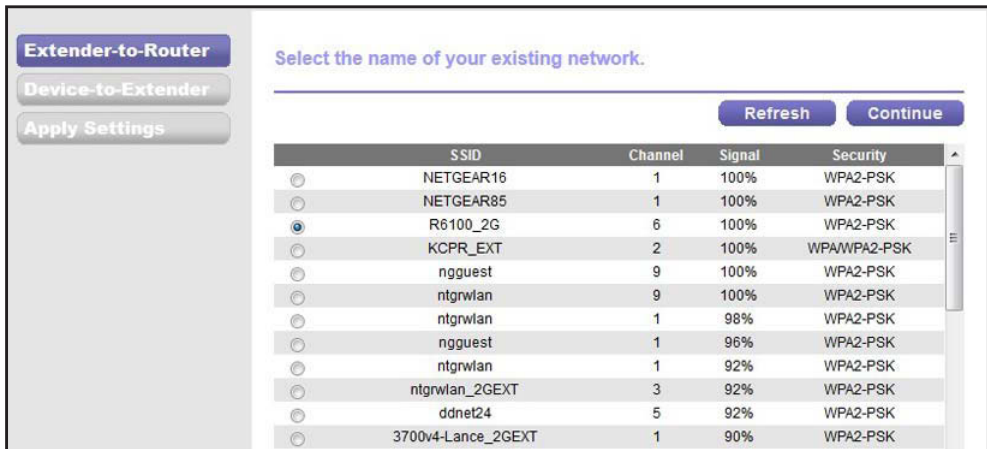
9. Type the network passphrase (also called a password or network key) in the **PassPhrase** field, and click the **Continue** button.

10. Use the default extension name, or, in the **2.4GHz Network Name (SSID)** field, enter a new network name for your extender WiFi network, and click the **Continue** button.
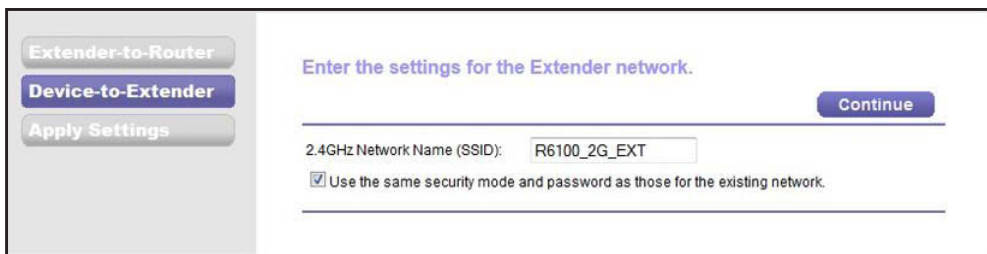
The extender applies the settings.
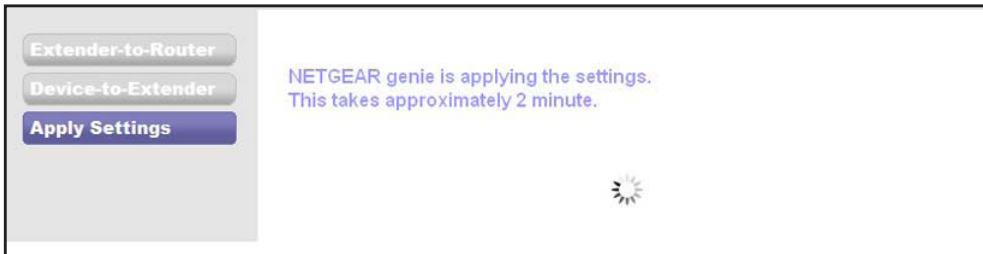
11. Wait about two minutes while the extender creates the WiFi network.

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

> **Note:** Unless you entered a new network name in *Step 10*, the extender changes its default NETGEAR_EXT network name to the name of the WiFi network to which you connected the extender and adds _**EXT** at the end of the name.

> **Note:** If your computer or mobile device cannot join the new WiFi network of the extender, see *You Cannot Join a WiFi Network and Receive an Error Message* on page 65.

13. Select the **My wireless devices are connected to the Extender network** check box, and click the **Continue** button.

The next screen that displays describes the color of the Link Rate LED, which corresponds to the color of the LED on the front of the extender. Because you placed the extender close the WiFi router, the Link Rate LED is green.

Extender-to-Router
Device-to-Extender
Apply Settings

Congratulations! The Extender has successfully connected to your existing network.

The link rate LED is green, indicating that the Extender is connecting to the existing network at best speed.

Finish

14. Click the **Finish** button.

    A pop-up screen displays.

15. To bookmark the URL of the extender, click the **OK** button.

    A NETGEAR website displays. You are now online.

16. Now that the extender is connected to the WiFi router and you can connect a computer or mobile device to the extender's WiFi network, move it to a location where you can boost your WiFi range.

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

17. Plug the extender into an electrical outlet at the new location and restart the extender.

    Unless the extender is outside the range of your WiFi router, the extender connects automatically to the WiFi router.

    The Link Rate LEDs help you choose a spot where the extender-to-router connection is optimal. The following tables describe how the LEDs show the quality of the connection.

LED Status	LED Color	Performance
Both the Link Rate LED and the Device to Extender Connection LED are green.	and	The extender provides the best performance.
The Link Rate LED is amber and the Device to Extender Connection LED is green.	and	The extender provides a workable performance.
The Link Rate LED is red.		The extender provides a poor performance.
The Link Rate LED is off.		The extender cannot function.

If the Link Rate LED is off, the extender cannot connect to the WiFi router. If the Link Rate LED is red, the extender has a poor connection to the WiFi router.

18. If the extender has no connection or a poor connection, move the extender closer to your WiFi router and try again until the Link Rate LED is green, or at least amber.

19. Use a WiFi network manager on the computer or mobile device to reconnect to the extender's WiFi network.
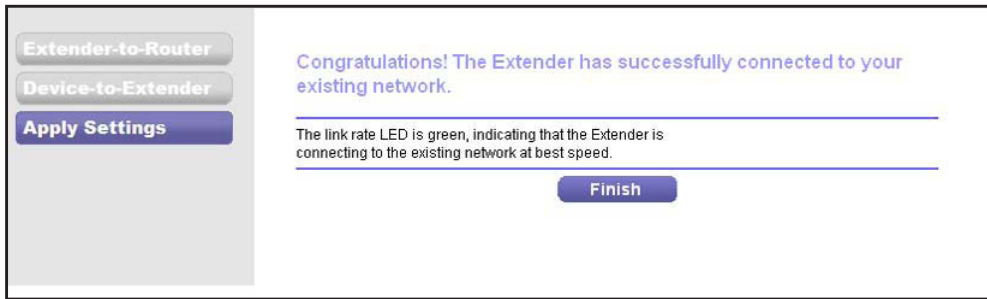
> **Note:** Unless you entered a new network name in *Step 10*, the extender changes its default NETGEAR_EXT network name to the name of the WiFi network to which you connected the extender and adds **_EXT** at the end of the name.

20. Select the new network and use your WiFi router password to connect.

You are now using your extended WiFi network.

Access the Extender over Ethernet and Use the Setup Wizard

If your WiFi router does not support WPS, you can use an Ethernet cable to connect your computer to one of the LAN ports of the extender. Then use the browser-based NETGEAR genie® Setup Wizard to connect the extender to an existing WiFi network.

After you have used the Setup Wizard to connect the extender to an existing WiFi network, the extender changes its default NETGEAR_EXT WiFi network name (SSID) to the name of the existing WiFi network and adds **_EXT** at the end of the name, for example:

- **Existing network name**. *MyNetworkName*
- **New extender network name**. *MyNetworkName*_EXT

> **Note:** After you have set up the extender, you can also connect Ethernet-enabled devices such as gaming consoles and printers to the Ethernet LAN ports of the extender. For more information, see *Connect Ethernet-Enabled Devices* on page 51.

➢ **Access the extender over Ethernet and use the Setup Wizard to connect the extender to an existing WiFi network:**

1. Place the extender close to the WiFi router.

> **Note:** In a later step in this procedure, after you have established a connection to the WiFi router, you can place the extender at its permanent location.

2. Plug the extender into an electrical outlet.

3. If necessary, press the **Power** button.

The Status LED lights green.

4. Make sure that your computer or mobile device is not connected to a WiFi network or Ethernet network.

If the computer or mobile device is already connected to a network, you might not be able to connect to the extender.

5. Connect your computer to the extender with an Ethernet cable. You can use any of the four Ethernet LAN ports of the extender.

⚠️ **CAUTION:**

Do not use Ethernet cable to connect the extender to a WiFi router. If you do so, the extender does not work because it is designed to use only a WiFi connection to a WiFi router.

6. If you have trouble connecting, try the following:
   - Wait a couple of minutes.

     If you start your computer, connect the Ethernet cable to the extender, and launch your browser quickly, the computer might still need a couple of minutes to recognize the Ethernet LAN connection before you can connect.

   - Make sure that your Ethernet cable is securely connected to the extender and the computer, and that the extender Device to Extender Connection LED lights.

     If the LED is not lit, reconnect the Ethernet cable, and relaunch your Internet browser.

7. Open a web browser window from the same computer or mobile device.

   The browser takes you directly to the NETGEAR genie Setup Wizard start screen.

   Note: If you are not automatically directed to NETGEAR genie Setup Wizard start screen, go to **www.mywifiext.net**, and enter **admin** for the user name and **password** for the password.

8. Under Do you want NETGEAR Genie to help?, select the **Yes** radio button, and click the **Next** button.

   NETGEAR genie searches for WiFi networks automatically.

9. Select a WiFi network to extend, and click the **Continue** button.

10. Type the network passphrase (also called a password or network key) in the **PassPhrase** field, and click the **Continue** button.

11. Use the default extension name, or, in the **2.4GHz Network Name (SSID)** field, enter a new network name for your extender WiFi network, and click the **Continue** button.

The extender applies the settings.

12. Wait about two minutes while the extender creates the WiFi network.

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

> **Note:** Unless you entered a new network name in *Step 11*, the extender changes its default NETGEAR_EXT network name to the name of the WiFi network to which you connected the extender and adds _**EXT** at the end of the name.

> **Note:** If your computer or mobile device cannot join the new WiFi network of the extender, see *You Cannot Join a WiFi Network and Receive an Error Message* on page 65.

14. Select the **My wireless devices are connected to the Extender network** check box, and click the **Continue** button.

The next screen that displays describes the color of the Link Rate LED, which corresponds to the color of the LED on the front of the extender. Because you placed the extender close the WiFi router, the Link Rate LED is green.

15. Click the **Finish** button.

A pop-up screen displays.

16. To bookmark the URL of the extender, click the **OK** button.

A NETGEAR website displays. You are now online.

17. Disconnect the Ethernet cable from the computer and the extender.

18. Now that the extender is connected to the WiFi router and you can connect a computer or mobile device to the extender's WiFi network, move it to a location where you can boost your WiFi range.

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

19. Plug the extender into an electrical outlet at the new location and restart the extender.

Unless the extender is outside the range of your WiFi router, the extender connects automatically to the WiFi router.

The Link Rate LEDs help you choose a spot where the extender-to-router connection is optimal. The following tables describe how the LEDs show the quality of the connection.

LED Status	LED Color	Performance
Both the Link Rate LED and the Device to Extender Connection LED are green.	and	The extender provides the best performance.
The Link Rate LED is amber and the Device to Extender Connection LED is green.	and	The extender provides a workable performance.
The Link Rate LED is red.		The extender provides a poor performance.
The Link Rate LED is off.		The extender cannot function.

If the Link Rate LED is off, the extender cannot connect to the WiFi router. If the Link Rate LED is red, the extender has a poor connection to the WiFi router.

20. If the extender has no connection or a poor connection, move the extender closer to your WiFi router and try again until the Link Rate LED is green, or at least amber.

21. Use a WiFi network manager on the computer or mobile device to reconnect to the extender's WiFi network.
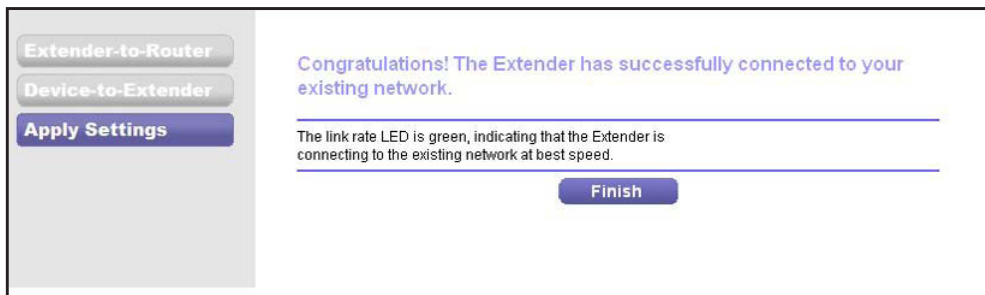
   Note: Unless you entered a new network name in *Step 11*, the extender changes its default NETGEAR_EXT network name to the name of the WiFi network to which you connected the extender and adds _**EXT** at the end of the name.

22. Select the new network and use your WiFi router password to connect.

   You are now using your extended WiFi network.

Manage the Extender Network and Security Settings

3

This chapter covers the following topics:

- *Log In to the Extender After Initial Setup*
- *Change the Password*
- *Connect the Extender to a WiFi Network Without Using the NETGEAR genie Setup Wizard*
- *Connect the Extender to a Hidden WiFi Network*
- *Use WPS to Add a WiFi Device to the Extender's WiFi Network*
- *Manage the Extender WiFi Settings*
- *Change the Extender IP Address*
- *Manage Advanced WiFi Settings*
- *Manage a WiFi Access List*
- *Run the Setup Wizard Again After Initial Setup*
- *Connect Ethernet-Enabled Devices*

Log In to the Extender After Initial Setup

You can log in to the extender to view or change the extender's settings.

If you connect to the extender before it has been set up, the browser automatically goes to www.mywifiext.net and displays the NETGEAR genie screens that step you through the setup process. For more information, see *Access the Extender over WiFi and Use the Setup Wizard* on page 14 or *Access the Extender over Ethernet and Use the Setup Wizard* on page 19.

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

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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.

   Note: NETGEAR recommends that you set a more secure password after you log in. For more information, see *Change the Password* on page 27.

   If your extender has an Internet connection, the following screen displays and the extender automatically checks for new firmware at the NETGEAR website.
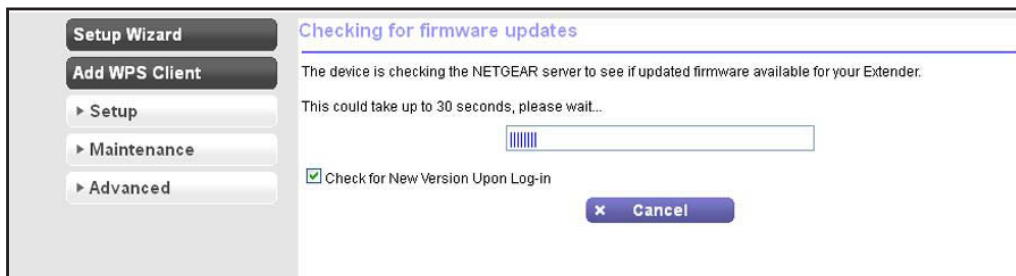
   For more information about upgrading firmware, see *Upgrade the Firmware* on page 56.

   The Status screen displays. Menu selections display on the left. The Status screen shows the current settings for the extender.

For more information about the Status screen, see *View the Status and Traffic Statistics of the Extender* on page 58.

4. To change your language, select a language from the menu in the top right of the screen.

   By default, the language selection is **Auto**, which means that the extender uses the language that it detects from the browser that you use.

Change the 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 an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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.

6. Type the new password twice.

7. Click the **Apply** button.

   Your settings are saved.

Connect the Extender to a WiFi Network Without Using the NETGEAR genie Setup Wizard

If the extender is not yet connected to a WiFi network or you want to change the connection to another WiFi network, you can connect the extender to a WiFi network without using the NETGEAR genie Setup Wizard.

➢ **To connect the extender to a WiFi network without using the NETGEAR genie Setup Wizard:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select **Setup > Connect to an Existing Network**.

   The extender scans for WiFi networks and displays a list.

If your WiFi network is functioning but not on the list, your WiFi network might be hidden, or the connection between the WiFi router and the extender might be poor. For more information, see the following sections:

- *Connect the Extender to a Hidden WiFi Network* on page 31

- *Improve the Connection Between the Extender and the WiFi Router* on page 66

5. Select the radio button for the network to which you want to connect the extender, and click the **Continue** button.

6. In the **Passphrase** field, enter the passphrase or key for the WiFi network, or, if your WiFi network uses WEP, enter the key in the **Security Encryption (WEP) Key** field, and click the **Continue** button.

7. Use the default extension name, or, in the **2.4GHz Network Name (SSID)** field, enter a new network name for your extender WiFi network.
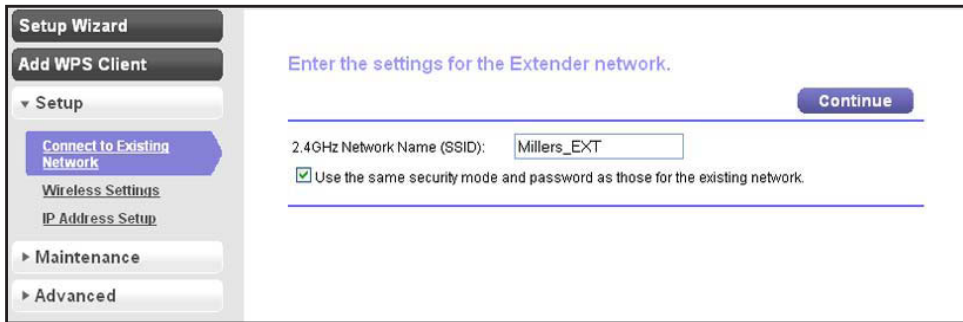
8. To specify security settings for the extender WiFi network that are different from the WiFi network of the WiFi router, clear the check box.

   The screen adjusts and lets you select security settings. For more information about WiFi security options, see *Manage the Extender WiFi Settings* on page 36.

9. Click the **Continue** button.

10. Wait about two minutes while the extender creates the WiFi network.
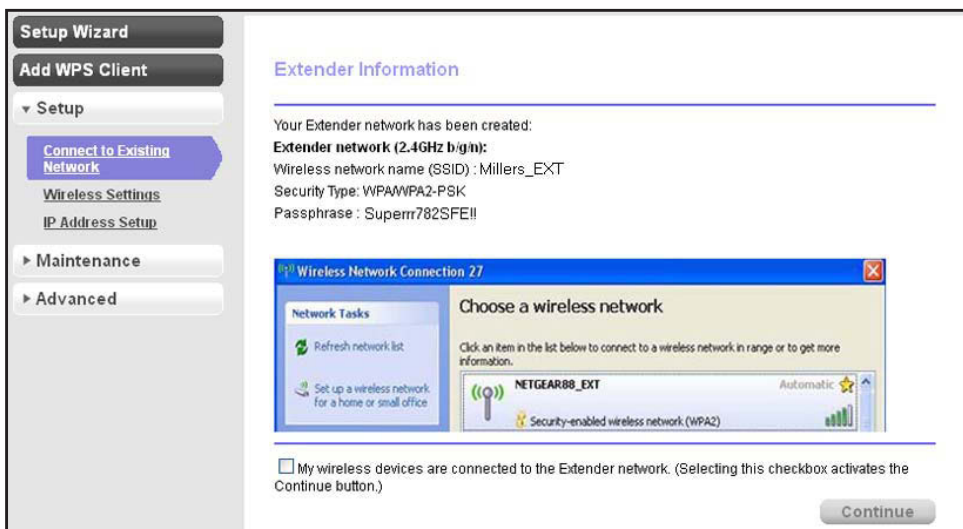
11. Use a WiFi network manager on the computer or on a mobile device to connect to the extender's newly created WiFi network.

   Note: Unless you entered a new network name in *Step 7*, the extender uses the network name of the WiFi network to which you connected the extender and adds _**EXT** at the end of the name.

   Note: If your computer or mobile device cannot join the new WiFi network of the extender, see *You Cannot Join a WiFi Network and Receive an Error Message* on page 65.

12. Select the **My wireless devices are connected to the Extender network** check box, and click the **Continue** button.

   The new WiFi network settings for the extender are saved and the Status screen displays.

Connect the Extender to a Hidden WiFi Network

You can manually connect the extender to a hidden WiFi network without using the NETGEAR genie Setup Wizard.

Before you start the following procedure, you must know the name of the hidden WiFi network, the type of security that the network uses, and the key or passphrase to connect to the network.
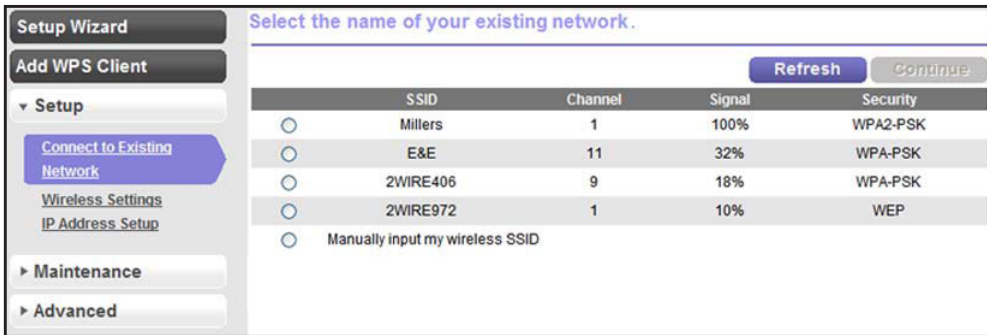
➢ **To connect the extender to a hidden WiFi network without using the NETGEAR genie Setup Wizard:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select **Setup > Connect to an Existing Network**.

   The extender scans for WiFi networks and displays a list.

5. Select the **Manually input my wireless SSID** radio button, and click the **Continue** button.

   The screen adjusts.

---

6. In the **Name (SSID)** field, enter the name of the WiFi network to which you want to connect the extender.

7. From the **Security** menu, select the security settings for the WiFi network.

   The screen adjusts.

8. Enter the passphrase or key for the WiFi network, and click the **Continue** button.

9. Use the default extension name, or, in the **2.4GHz Network Name (SSID)** field, enter a new network name for your extender WiFi network.

10. To specify security settings for the extender WiFi network that are different from the WiFi network of the WiFi router, clear the check box.

    The screen adjusts and lets you select security settings. For more information about WiFi security options, see *Manage the Extender WiFi Settings* on page 36.

11. Click the **Continue** button.

12. Wait about two minutes while the extender creates the WiFi network.
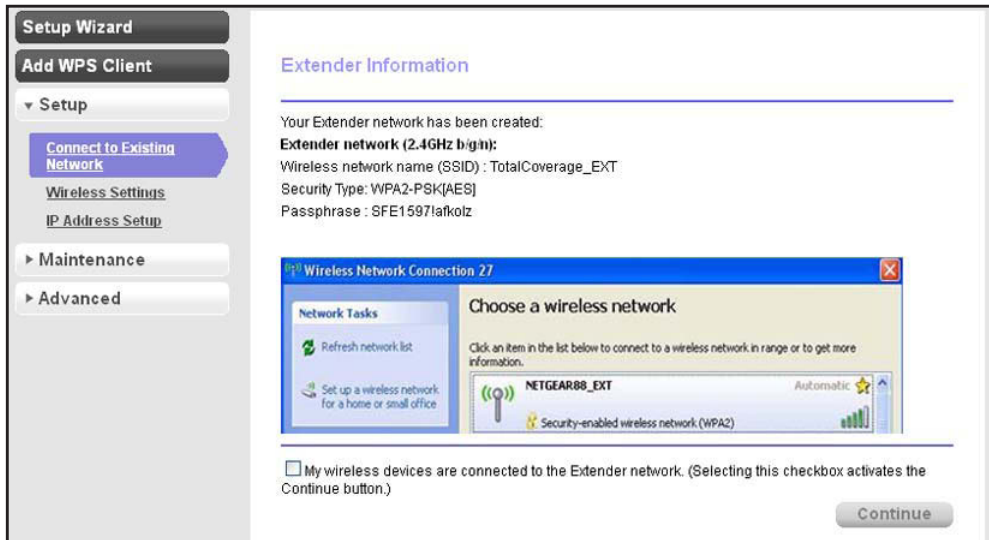
13. Use a WiFi network manager on the computer or on a mobile device to connect to the extender's newly created WiFi network.

> **Note:** Unless you entered a new network name in *Step 9*, the extender uses the name of the WiFi network to which you connected the extender and adds _**EXT** at the end of the name.

> **Note:** If your computer or mobile device cannot join the new WiFi network of the extender, see *You Cannot Join a WiFi Network and Receive an Error Message* on page 65.

14. Select the **My wireless devices are connected to the Extender network** check box, and click the **Continue** button.

The new WiFi network settings for the extender are saved and the Status screen displays.

Use WPS to Add a WiFi Device to the Extender's WiFi Network

WPS (Wi-Fi Protected Setup) lets you connect a computer or WiFi device to the extender's network without entering the WiFi network passphrase or key. Instead, you use a **WPS** button or enter a PIN to connect.

If you use the Push button method, the WiFi device that you are trying to connect must have a physical Push button or a software Push button. If you use the PIN method, you must know the PIN of the WiFi device that you are trying to connect.

WPS supports WPA and WPA2 WiFi security. If your extender network is open (no WiFi security is set), connecting with WPS automatically sets WPA + WPA2 WiFi security on the extender network and generates a random passphrase.

You can view this passphrase on the Wireless Settings screen (for more information, see *Manage the Extender WiFi Settings* on page 36).

> **Note:** For information about using WPS to connect the extender to a WiFi network during setup, see *Connect the Extender with WPS to a WiFi Network* on page 12.

Use WPS with the Push Button Method

To use the Push button method to connect a WiFi device to the extender's WiFi network, the WiFi device that you are trying to connect must have a physical Push button or a software Push button.

➢ **To let a WiFi device join the extender's WiFi network using WPS with the Push button method:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

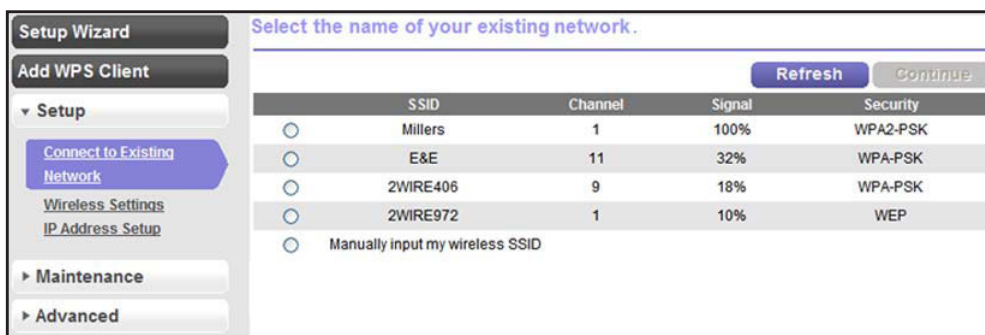2. In the address field of your browser, enter **http://www.mywifiext.net**.

   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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select **Add WPS Client**.

   The screen displays a description of the WPS method.

5. Click the **Next** button.

   By default, the **Push Button (recommended)** radio button is selected.

6. Either click the button onscreen or press the **WPS** button on the front panel of the extender.

   For two minutes, the extender attempts to find the WiFi device (that is, the client) that you want to join the extender's WiFi network.

7. Within two minutes, go to the WiFi device and press its **WPS** button (to join the extender's WiFi network without entering a password.

8. To verify that the WiFi device is connected to the extender's WiFi network, select **Maintenance > Network Devices**.

    The WiFi device displays onscreen.

Use WPS with the PIN Method

To use the PIN method to connect a WiFi device to the extender's WiFi network, you must know the PIN of the WiFi device that you are trying to connect.

➢ **To let a WiFi device join the extender's WiFi network using WPS with the PIN method:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

    If you have not yet personalized your password, type **password** for the password.

4. Select **Add WPS Client**.

    The screen displays a description of the WPS method.

5. Click the **Next** button.

    On the screen that displays, the **Push Button (recommended)** radio button is selected by default.

6. Select the **PIN Number** radio button.

7. In the **Enter Client's PIN** field, enter the PIN number of the WiFi device.

8. Click the **Continue** button.

    For four minutes, the extender attempts to find the WiFi device (that is, the client) that you want to join the extender's WiFi network.

9. Within four minutes, go to the WiFi device and use its WPS software to join the network without entering a password.

10. To verify that the WiFi device is connected to the extender's WiFi network, select **Maintenance > Network Devices**.

The WiFi device displays onscreen.

Manage the Extender WiFi Settings

You can change the WiFi network name (SSID) for the extender's network and set up WiFi security. If you did not change these settings already during initial setup, the network name is NETGEAR_EXT, and the network is open (no WiFi security is set up).

Note: Although the WiFi security of the extender's network can be different from the WiFi security of the network that the extender is connected to, you typically would select the same type of WiFi security for both networks.

➢ **To change the WiFi settings for the extender's network:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

If you have not yet personalized your password, type **password** for the password.

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

5. In the **Name (SSID)** field, type a new name.

If more than one extender operates in your neighborhood, changing the SSID makes it easier to identify the extenders.

6. From the **Regio**n menu, select the region in which you operate the extender.

    Note: If you purchased the extender in the United States or Canada, the selection from the **Region** menu is **North America**. You cannot change this selection.

7. In the Security Options section of the screen, select the type of WiFi security that you want to use for the extender's WiFi network:

    -   **None**. An open WiFi network that does not provide any security. Any WiFi device can join the network.

    -   **WEP**. WEP is an older standard, and is less secure than WPA or WPA2. WEP uses encryption keys and data encryption for data security. Select 64-bit or 128-bit encryption and enter a key. To join the extender's WiFi network, a user must enter the key. For more information, see *Configure WEP* on page 39.

    -   **WPA-PSK [TKIP]**. WPA is more secure than WEP. Enter a passphrase. For more information, see *Configure WPA, WPA2, or WPA + WPA2* on page 38.

    -   **WPA2-PSK [AES]**. WPA2 is even more secure than WEP, but some older WiFi devices do not detect WPA2. Enter a passphrase. To join the extender's WiFi network, a user must enter the passphrase. For more information, see *Configure WPA, WPA2, or WPA + WPA2* on page 38.

    -   **WPA-PSK [TKIP] + WPA2-PASK [AES]**. When your network includes WiFi devices that support either WPA or WPA2, select WPA-PSK [TKIP] + WPA2-PASK [AES] security. Enter a passphrase. To join the extender's WiFi network, a user must enter the passphrase. For more information, see *Configure WPA, WPA2, or WPA + WPA2* on page 38.

    > ⚠ **CAUTION:**
    >
    > If you use a WiFi device to change the extender's WiFi settings, you are disconnected when you click the **Apply** button. To reconnect, you must select the new network name that you created, and enter the passphrase or WiFi security key that you set up.

8. Click the **Apply** button.

    Your settings are saved.

9. If you are disconnected, reconnect your WiFi device to the extender's network with its new settings.

    The Setup Wizard can guide you through this process. For more information, see *Run the Setup Wizard Again After Initial Setup* on page 47.

Configure WPA, WPA2, or WPA + WPA2

Both WPA and WPA2 provide strong data security. WPA2 with AES is a hardware implementation. If you want to use WPA2 security, make sure that all devices in your WiFi network support WPA2 security. If you are not sure, use WPA + WPA2 security.

➢ **To configure WPA, WPA2, or WPA + WPA2 in the extender:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

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

5. In the Security Options section, select the **WPA-PSK [TKIP]**, **WPA2-PSK [AES]**, or **WPA-PSK + WPA2-PSK** radio button.

6. In the **PassPhrase** field, enter the passphrase.

7. Click the **Apply** button.

   Your settings are saved.

8. If you are disconnected, reconnect your WiFi device to the extender's network with its new settings.

   The Setup Wizard can guide you through this process. For more information, see *Run the Setup Wizard Again After Initial Setup* on page 47.

Configure WEP

WEP is legacy WiFi security. Unless your WiFi network includes devices that do not support WPA2 or WPA security, NETGEAR recommends that you use WPA2, WPA, or WPA + WPA security.

Note: WEP security does not support WPS. If you change the security to WEP, you can no longer let WiFi devices join the extender's WiFi network by using WPS.

➢ **To set up WEP:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

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

5. In the Security Options section, select the **WEP** radio button.

6. From the **Encryption Strength** menu, select the encryption strength setting:
   - **64 bit**. Requires an encryption key of 10 hexadecimal digits (any combination of 0–9, a–f, or A–F) or a string of five characters.
   - **128 bit**. Requires an encryption key of 26 hexadecimal digits (any combination of 0–9, a–f, or A–F) or a string of 13 characters.

7. Specify the active key by selecting the **Key 1**, **Key2**, **Key3**, or **Key 4** radio button.

Only one key can be the active key.

8. Enter a key next to the selected radio button.

The size of the key depends on your selection from the **Encryption Strength** menu (64 bit or 128 bit.) The key values that are not case-sensitive.

9. Click the **Apply** button.

Your settings are saved.

10. If you are disconnected, reconnect your WiFi device to the extender's network with its new settings.

The Setup Wizard can guide you through this process. For more information, see *Run the Setup Wizard Again After Initial Setup* on page 47.

Change the Extender IP Address

By default, the extender receives its IP address automatically from the WiFi router to which it connects. If the WiFi router does not have a DHCP server or its DHCP server is disabled, you can assign a static IP address to the extender.

Before you assign a static IP address, you must know the IP address range, subnet mask, gateway IP address, and primary DNS server of your network.

CAUTION:

NETGEAR recommends that you change the IP address of the extender only if you are technically experienced or have a technically experienced person to help you. Incorrect configuration can prevent you from connecting to the extender and might require you to reset the extender to factory default settings.

➢ **To change the IP address of the extender to a static IP address:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

If you have not yet personalized your password, type **password** for the password.

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

5. Select the **Use Static IP Address** radio button.

6. Specify the static IP address settings:

   - **IP Address**. The static IP address to be assigned to the extender.
   - **IP Subnet Mask**. The subnet mask associated with the IP address.
   - **Gateway IP Address**. The IP address for the gateway for your WiFi network.
   - **Primary DNS**. The primary domain name server (DNS) for your WiFi network.

7. Click the **Apply** button.

   Your settings are saved, and you are disconnected from the extender.

8. To continue to configure the extender, reconnect to the extender using the new IP address.

Manage Advanced WiFi Settings

The extender is already configured with the optimum settings. Do not change the advanced settings unless directed by NETGEAR support. Incorrect settings might disable the extender unexpectedly.

➢ **To view or change the advanced WiFi settings:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select **Advanced > Wireless Settings**.
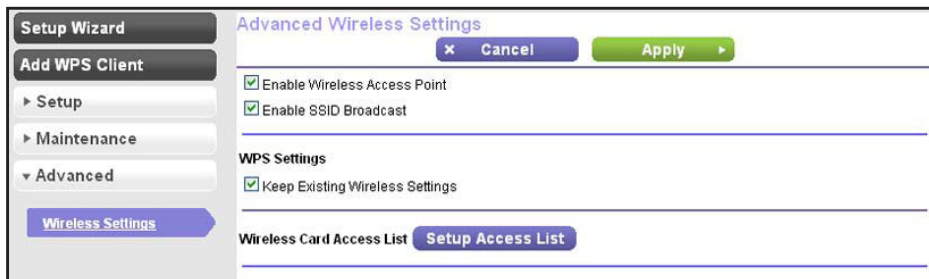
5. View or change the following settings:

- **Enable Wireless Access Point**. By default, the extender functions as a WiFi access point. Clear the **Enable Wireless Access Point** check box only if you want to prevent WiFi devices from connecting to the extender. LAN devices can still connect to the extender over an Ethernet cable.

- **Enable SSID Broadcast**. By default, the extender broadcasts its WiFi network name (SSID). Clear the **Enable SSID Broadcast** check box only to hide the network name of the extender. In such a situation, the network name of the extender does not display in a WiFi network manager. A user who wants to join the hidden WiFi network of the extender must know its network name.

- **Keep Existing Wireless Settings**. By default, the settings on the Wireless Settings screen remain the same when you use WPS to establish a WiFi connection. Clear the **Keep Existing Wireless Settings** check box only if you want to allow the WPS process to change the SSID and passphrase on the Wireless Settings screen.

  If you clear the **Keep Existing Wireless Settings** check box and use WPS to add a computer or WiFi device to the extender's network, the SSID and passphrase are automatically generated and other devices that are already connected to the extender's network might be disconnected. You can view the SSID and passphrase on the Wireless Settings screen (see *Manage the Extender WiFi Settings* on page 36).

  NETGEAR recommends that you keep the **Keep Existing Wireless Settings** check box selected.

6. Click the **Apply** button.

   Your changes are saved.

Manage a WiFi Access List

By default, any WiFi device that is configured with the correct network name (SSID) can access the WiFi network of the extender. For increased security, you can restrict access to the WiFi network of the extender to allow only specific WiFi devices based on their MAC addresses. Devices that are not on the access list cannot join the WiFi network of the extender.

Each network device has 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 WiFi 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 the Wired and WiFi Network Devices* on page 61).

> **CAUTION:**
>
> If you use a WiFi device to set up the access list, add your WiFi 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.

Set Up and Enable the Access List

Before you can enable the access list, you must add the MAC addresses of the WiFi 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 an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select **Advanced > Wireless Settings**.
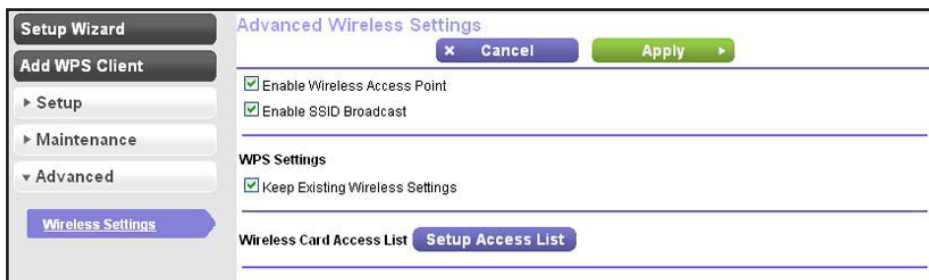
5. Click the **Setup Access List** button.

If you have not yet added any WiFi devices, the Wireless Card Access List is empty.

6. Click the **Add** button.

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

8. In the **MAC Address** field, type the MAC address of the WiFi device.

9. Click the **Apply** button.

The WiFi device is added to the Wireless Card Access List.

10. To add more WiFi devices, repeat *Step 6* through *Step 9*.

11. Above the Wireless Card Access List, select the **Turn Access Control On** check box.

> ⚠ **CAUTION:**
>
> If you use a WiFi device to set up the access list, add your WiFi device to the access list. Otherwise, you are disconnected when you click the **Apply** button.

12. Click the **Apply** button.

Now only WiFi devices that are in the Wireless Card Access List can access the WiFi network of the extender.

Disable the Access List

After you have enabled the access list on the extender, you can disable the access list again.

➢ **To disable the access list:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select **Advanced > Wireless Settings**.
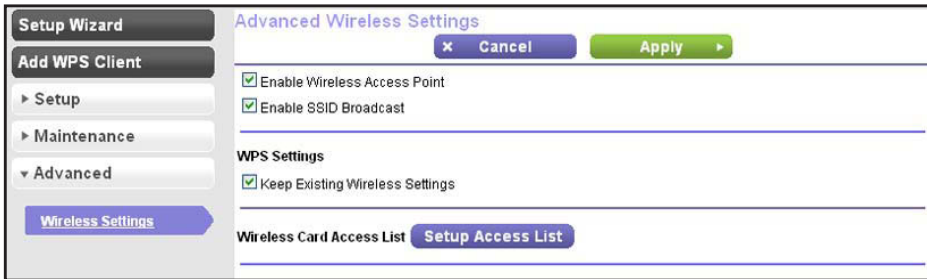
5. Click the **Setup Access List** button.

6. Above the Wireless Card Access List, clear the **Turn Access Control On** check box.

7. Click the **Apply** button.

   Now any WiFi device can access the WiFi network of the extender.

Change a Device on the Access List

You can change the name or MAC address of a device on the access list.

➢ **To change a WiFi device on the access list:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

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

5. Click the **Setup Access List** button.

6. Select the radio button to the left of the device that you want to change.

7. Click the **Edit** button.

8. Change the name of the device or the MAC address.

9. Click the **Apply** button.

   The changed settings display in Wireless Card Access List.

Remove a Device from the Access List

If you no longer want to grant a device access to the WiFi network of the extender, you can remove the device from the access list.

➢ **To remove a WiFi device from the access list:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

If you have not yet personalized your password, type **password** for the password.

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

5. Click the **Setup Access List** button.

6. Select the radio button to the left of the device that you want to remove.

7. Click the **Delete** button.

The device is removed from the Wireless Card Access List.

Run the Setup Wizard Again After Initial Setup

There might be situations in which you want to run the Setup Wizard again after the initial setup.

➢ **To run the Setup Wizard again:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

If you have not yet personalized your password, type **password** for the password.

4. Select **Setup Wizard**.
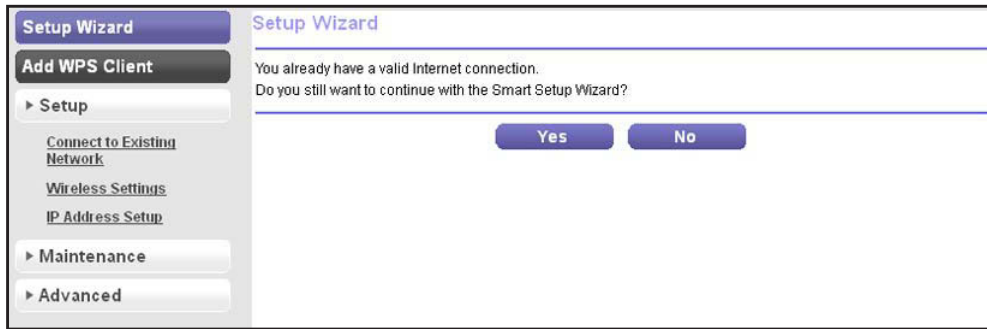
5. Click the **Yes** button.

6. NETGEAR genie searches for WiFi networks automatically.
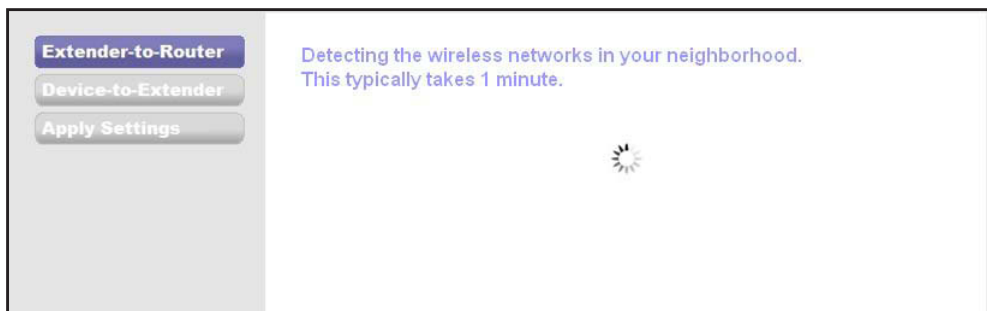
7. Select a WiFi network to extend, and click the **Continue** button.
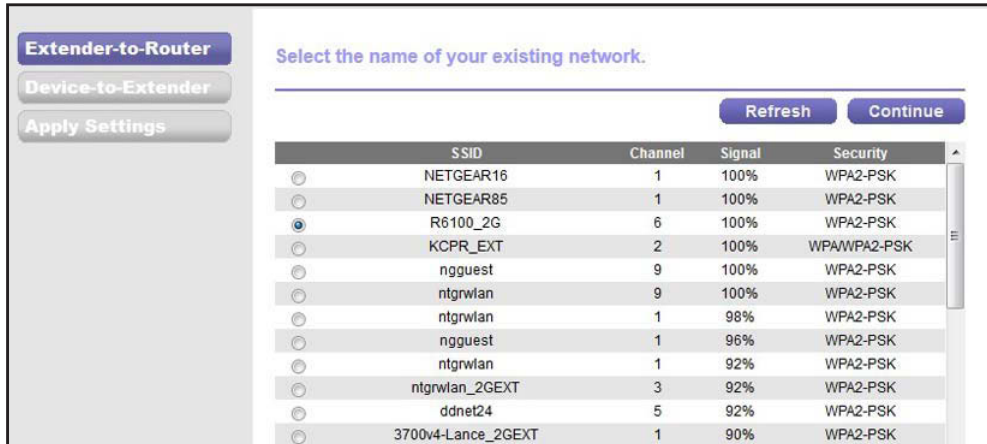
8. Type the network passphrase (also called a password or network key) in the **PassPhrase** field, and click the **Continue** button.

9. Use the default extension name, or, in the **2.4GHz Network Name (SSID)** field, enter a new network name for your extender WiFi network, and click the **Continue** button.

The extender applies the settings.

10. Wait about two minutes while the extender creates the WiFi network.

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

Note: Unless you entered a new network name in *Step 9*, the extender the extender uses the network name of the WiFi network to which you connected the extender and adds _**EXT** at the end of the name.

Note: If your computer or mobile device cannot join the new WiFi network of the extender, see *You Cannot Join a WiFi Network and Receive an Error Message* on page 65.

12. Select the **My wireless devices are connected to the Extender network** check box, and click the **Continue** button.

The next screen that displays describes the color of the Link Rate LED, which corresponds to the color of the LED on the front of the extender.
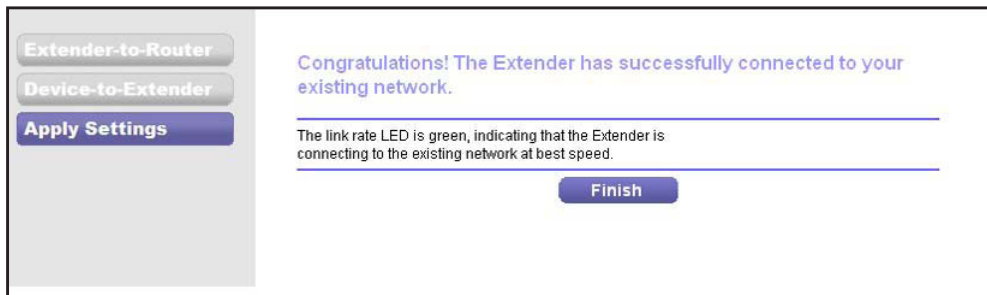
If the link rate LED is not green, see *Improve the Connection Between the Extender and the WiFi Router* on page 66.

13. Click the **Finish** button.

A pop-up screen displays.

14. To bookmark the URL of the extender, click the **OK** button.

A NETGEAR website displays. You are now online.

Connect Ethernet-Enabled Devices

You can use the extender to connect as many as four Ethernet-enabled devices, such as smart TVs, game consoles, and Blu-ray players, to the WiFi network.

After you have set up the extender, plug the Ethernet cable from a device that you want to connect directly into one of the extender's Ethernet LAN ports.
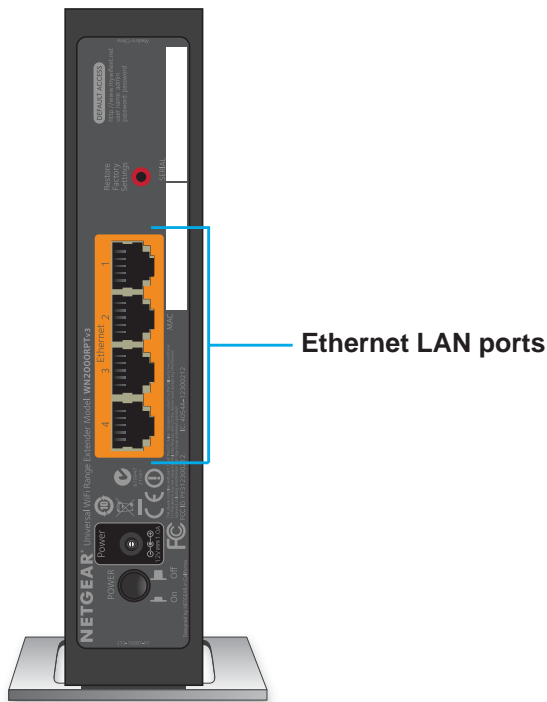
Ethernet LAN ports

Figure 5. Ethernet LAN port on the rear panel

Maintain and Monitor the Extender 4

This chapter covers the following topics:

- *Back Up the Configuration Settings*
- *Restore the Configuration Settings*
- *Return the Extender to Its Factory Default Settings*
- *Upgrade the Firmware*
- *View the Status and Traffic Statistics of the Extender*
- *View the Wired and WiFi Network Devices*

Back Up the Configuration Settings

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 have changed the extender configuration settings but are not content with the new settings, you can restore the extender configuration to the backed-up settings.

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

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select extender **Maintenance > Backup Settings**.
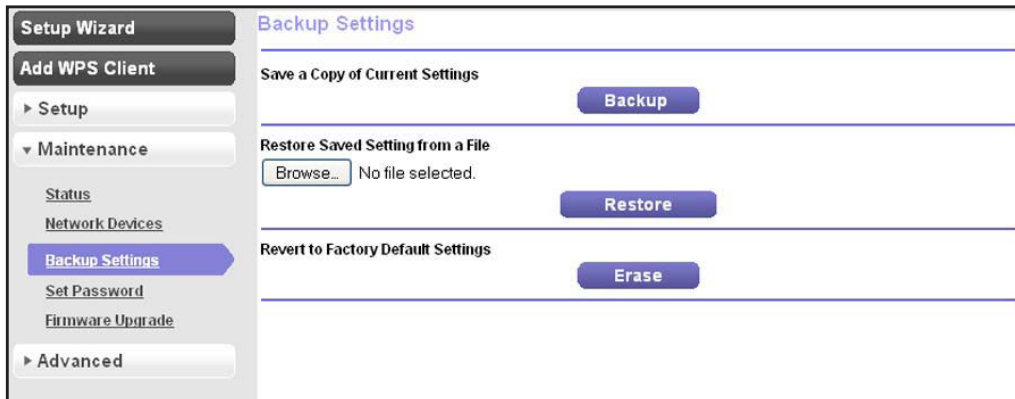
5. Click the **Backup** button.

   Your browser extracts the configuration file from the extender. By default, the name of the backup file is `NETGEAR_WN2000RPTv2.cfg`.

6. If you do not have your browser set up to save downloaded files automatically, locate where you want to save the file.

Restore the Configuration Settings

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

⚠️ **CAUTION:**

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

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

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

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

Setup Wizard	Backup Settings
Add WPS Client	Save a Copy of Current Settings
▸ Setup	Backup
▾ Maintenance	Restore Saved Setting from a File
Status	Browse... No file selected.
Network Devices	Restore
Backup Settings	Revert to Factory Default Settings
Set Password	Erase
Firmware Upgrade	
▸ Advanced	

5. Click the **Browse** button.

6. Locate and select the previously saved backup file.

   By default, the name of the backup file is `NETGEAR_WN2000RPTv2.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 Default Settings

Under some circumstances (for example, if you have lost track of the changes that you made to the extender settings), you might want to erase the configuration and reset it to factory default settings.

To reset the extender to factory default settings, you can use either the **Restore Factory Settings** button on the rear panel or the Erase function. However, if you have lost the password to access the extender, you must use the **Restore Factory Settings** button.

For a list of factory default settings, see *Factory Default Settings* on page 68.

Use the Factory Reset Button

⚠️ **CAUTION:**

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

➢ **To reset the extender to factory default settings:**

1. Insert a straightened paper clip into the hole of the **Restore Factory Settings** button ⭕ and hold it for about seven seconds.

2. Release the button.

   The extender resets and restarts. This process takes about one minute.

Erase the Extender Configuration Settings

⚠️ **CAUTION:**

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

➢ **To erase the extender's settings:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

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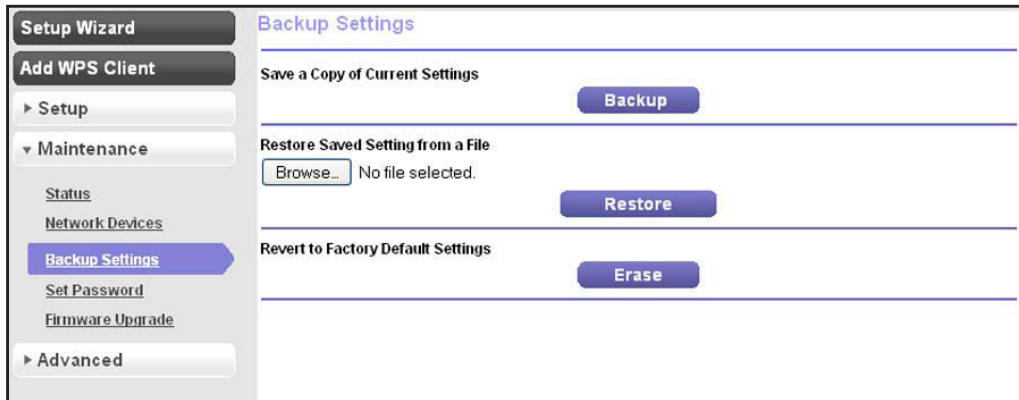
CAUTION:

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 resets and 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 at login.

➢ **To check manually for new firmware and, if available, upgrade the firmware:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the 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.

   The firmware file has a `.img` extension.

> **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 upgrade starts and the extender restarts. The firmware upgrade process takes a couple of minutes.

➢ **To disable the automatic new firmware check:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

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

5. Clear the **Check for New Version Upon Log-in** check box.

   A confirmation pop-up screen displays.

6. Confirm your decision.

View the Status and Traffic Statistics of the Extender

The Status screen displays when you log in to the extender after initial setup. The Status screen shows the current settings for the extender and provides access to the traffic statistics, such as the number of packets sent and number of packets received for each port.

➢ **To view the status of the extender and the traffic statistics and to change the poll interval:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

4. Select **Maintenance > Status**.

The following table describes the fields on the Status screen.

Field	Description
Hardware Version	The hardware version of the extender.
Firmware Version	The current firmware version of the extender. If you upgrade the firmware, this field changes.
GUI Language Version	The language version that is set on the extender. If you upgrade the firmware, this field might change.
Connection Status to Existing Network	
Name (SSID)	The name (SSID) of the WiFi network to which the extender is connected.
Connection Status	Shows whether the extender is connected to a WiFi network.
Link Rate	The combined transmission (Tx) and receive (Rx) link rate in Mbps of the current WiFi connection.
Extender IP Info	
MAC Address	The physical address of the extender.
IP Address	The IP address of the extender. The default is 192.168.1.250.
DHCP Client	Shows whether the DHCP client of the extender is on.
IP Subnet Mask	The IP subnet mask that is associated with the IP address of the extender. The default is 255.255.255.0.
Gateway IP Address	The IP address of the WiFi network gateway.
Domain Name Server	The IP address of the Domain Name Server (DNS) of the WiFi network.

Field	Description
Extender Wireless Settings	
Name (SSID)	The name (SSID) of the WiFi network of the extender.
Region	The location in which the extender is operating.
Channel	The active channel of the WiFi network.
Wireless AP	Shows whether the WiFi access point of the extender is on.
Broadcast Name	Shows whether broadcasting of the network name (SSID) of the extender is on.
Wi-Fi Protected Setup	Shows whether Wi-Fi Protected Setup (WPS) is configured.

5. Click the **Show Statistics** button.

The following table describes the traffic statistics fields that display for each of the four LAN ports and for the WLAN port.

Field	Description
Status	The link status of the port.
TxPkts	The number of packets transmitted on the port since the extender was restarted.
RxPkts	The number of packets received on the port since the extender was restarted.
Collisions	The number of collisions on the port since the extender was restarted.
Tx B/s	The packet transmission rate in bytes per second on the port.
Rx B/s	The packet reception rate in bytes per second on the port.
Up Time	The time elapsed since the extender was restarted.

6. To change the poll interval:

    a. Click the **Stop** button.

    b. In the **Poll Interval** field, enter a new value in seconds.

    c. Click the **Set Interval** button.

View the Wired and WiFi Network Devices

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

➢ **To display the wired and WiFi devices:**

1. On your computer, launch an Internet browser such as Mozilla Firefox or Microsoft Internet Explorer.

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 type your password.

   If you have not yet personalized your password, type **password** for the password.

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

Setup Wizard	Network Devices			
Add WPS Client				
▶ Setup	Wired Devices			
▼ Maintenance	#	IP Address	MAC Address	Device Name
	1	192.168.100.1	00:0C:44:10:7C:F8	<unknown>
Status	2	192.168.100.159	38:60:77:77:90:A3	ROLAND-PAVILION
Network Devices	3	192.168.100.215	00:0D:4B:74:6B:7B	<unknown>
Backup Settings				
Set Password	Wireless Devices(Wireless intruders also show up here)			
Firmware Upgrade	#	IP Address	MAC Address	Device Name
	1	192.168.100.217	00:1E:4C:47:33:B2	VOSTRO1500
▶ Advanced		Refresh		

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

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

   The information onscreen is updated.

FAQs and Troubleshooting

5

This chapter covers the following topics:

- *FAQs*
- *You Cannot Connect to the Extender*
- *You Cannot Join a WiFi Network and Receive an Error Message*
- *Improve the Connection Between the Extender and the WiFi Router*

FAQs

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

1. **Question**. Does the extender work if I connect it to my WiFi router with an Ethernet cable?

   Answer. No, the extender is designed only to connect over WiFi to a WiFi router.

2. **Question**. What are the default user name and password to log in to the extender?

   Answer. If you are online at **http://www.mywifiext.net**, you can use the following user name and password to log in:

   - **User name**. admin
   - **Password**. password

3. **Question**. When I try to connect to the network, the Setup Wizard keeps asking me for my passphrase, and I am sure I've entered the correct passphrase. What can I do?

   Answer. It is likely that the extender is placed at the borderline of the range that the WiFi router covers. For more information, see *How to Position the Extender* on page 11 and *Improve the Connection Between the Extender and the WiFi Router* on page 66.

4. **Question**. I receive an error message on the Review Settings screen on the Setup Wizard. What can I do?

   Answer. Make sure that your computer is connected to the extender by using the SSID and the passphrase that you have set up, and clicking the **Refresh** button in your browser. You should be returned to the Setup Wizard.

5. **Question**. I connected to NETGEAR_EXT and launched a browser, but why can I not see the Setup Wizard?

   Answer. First, make sure that your device is set up to use DHCP. Second, make sure that the Device to Extender Connection LED is green. Finally, relaunch the browser and enter **www.mywifiext.net**.

6. **Question**. I have enabled a WiFi MAC filter (WiFi access control or ACL) on my WiFi router. What should I do when installing the extender?

   Answer. 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 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:

   a. Disable the MAC filter on your router.

   b. Turn on the extender and connect all of your WiFi devices to the extender.

   c. Make sure that the Link Rate LED remains lit.

    d. Log in to the router and check the attached devices on the Attached Devices or similar screen.

    e. Add any MAC addresses that begin with 02:0F:B5 to your router's MAC filter table.

7. **Question**. 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?

    Answer. The extender cannot detect whether 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 defaults to get the IP address back.

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

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

You Cannot Connect to the Extender

If you have trouble connecting to the extender, determine what prevents you from connecting:

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

- If your browser displays an error page, make sure that you include *http://* when you type **http://www.mywifiext.net** in the address field of your Internet 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 over WiFi, check if the Link Rate LED is off or red. For more information, see *Improve the Connection Between the Extender and the WiFi Router* on page 66.

- If you cannot get a WiFi connection working, you can use an Ethernet cable to connect your computer to the extender. For more information, see *Access the Extender over Ethernet and Use the Setup Wizard* on page 19.

You Cannot Join a WiFi Network and Receive an Error Message

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:

- You might have 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 up. Make sure that the WiFi router is turned on. If possible, move the extender closer to the WiFi router. For more information, see *Improve the Connection Between the Extender and the WiFi Router* on page 66.

- If the extender Link Rate LED is red, a poor WiFi connection exists between the WiFi router and the extender. You can establish the best connection with a clear line of sight between the extender and the WiFi router. Make sure that no physical obstacles exist between the extender and the WiFi router, and try to move the extender closer to the WiFi router. For more information, see *Improve the Connection Between the Extender and the WiFi Router* on page 66.

If you use the Setup Wizard, and the extender cannot connect to the WiFi router or cannot get an IP address from the WiFi router, or the WiFi router is not connected to the Internet, 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.

Either run the Setup Wizard again or exit the Setup Wizard and try again later (see *Log In to the Extender After Initial Setup* on page 26 and *Run the Setup Wizard Again After Initial Setup* on page 47).

FAQs and Troubleshooting

65

Improve the Connection Between the Extender and the WiFi Router

The extender LEDs can help you tell whether the extender is correctly set up and working as it should.

➢ **To improve the connection between the extender and the WiFi router:**

1. Move the extender closer to the WiFi router or to a different spot where it provides a better line of sight.

   You might need to unplug the extender, replug it at its new location, and restart it. Unless the extender is outside the range of your WiFi router, the extender connects automatically to the WiFi router.

2. As you move the extender, continue to check the Link Rate LED and the Device to Extender LED on the top panel until you find a location where the Link Rate LED is green or amber, and the Device to Extender LED is green.

   The following table describes how the LEDs show the quality of the connection.

LED Status	LED Color	Performance
Both the Link Rate LED and the Device to Extender Connection LED are green.	and	The extender provides the best performance.
The Link Rate LED is amber and the Device to Extender Connection LED is green.	and	The extender provides a workable performance.
The Link Rate LED is red.		The extender provides a poor performance.
The Link Rate LED is off.		The extender cannot function.

Factory Settings and Technical Specifications

A

This appendix covers the following topics:

- *Factory Default Settings*
- *Technical and Environmental Specifications*

Factory Default Settings

To reset the extender to factory default settings, you can use either the **Restore Factory Settings** button on the rear panel or the Erase function. For more information, see *Return the Extender to Its Factory Default Settings* on page 55.

The following table lists the factory default settings.

Table 2. Factory default settings

Factory Settings		
Setup Wizard		Enabled
WiFi	WiFi communication	Enabled
	WiFi 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 WiFi signal rate (IEEE Standard 802.11). Actual throughput can vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate.

Technical and Environmental Specifications

The following table shows the technical and environmental specifications.

Table 3. Technical specifications

Technical Specifications	
Network protocol and standards compatibility	Data and routing protocols: TCP/IP, DHCP client, DNS relay, NAT (many-to-one), VPN pass-through (IPSec, PPTP)
Power adapter	• North America (input): 120V, 60 Hz, input • All regions (output): 12 VDC @ 1A output 15W maximum
Physical specifications	• Dimensions: 7 by 5.1 by 2.1 in. (178 by 130 by 54 mm) • Weight: 0.63 lb (0.28 kg)
Environmental	• 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	• 10BASE-T, 100BASE-TX, RJ-45 • 802.11n, 802.11g, 802.11b