NETGEAR[®] LTE Gateway 6100D

User Guide



[UG template version 13a]

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Get Started

The following topics give you all the information you need to set up your gateway and Sprint service the first time.

Package Contents

Your package includes several items.

- NETGEAR LTE Gateway 6100D
- Power adapter
- Micro-SIM (preinstalled)
- Ethernet cable
- Get Started poster

Your Gateway

The following illustrations show your gateway's LEDs, buttons, and connectors.

Front View



Back View



Care and Maintenance

As with any electronic device, you should handle the gateway with care to ensure reliable operation. Follow these guidelines in using and storing your device.

- Protect your device from liquids, dust, and excessive heat.
- Do not apply adhesive labels to your device. They may cause your device to overheat and may alter the antenna's performance.

System Requirements

The following items are required to use your NETGEAR LTE Gateway 6100D.

- One or more computers that support Wi-Fi (802.11b/g/n or 11ac).
- Web browser (required if you'll be using the browser interface to view status and to configure settings). Chrome browser is recommended for the best user experience when you log in to the gateway .The following browsers are supported:
 - Chrome (version 30 and above)
 - Internet Explorer (version 9 and above)
 - Safari (version 5.1.7 and above)

If you'll be connecting to your gateway through Ethernet:

Computer with an available Ethernet port

Set Up Your Gateway

The following topics describe how to set up and start using your gateway.

Attach the Antennas

The gateway comes with two external antennas that are interchangeable.

1. Attach the antennas to the gateway.



2. Adjust the angle of the antennas so that they are vertical.

Place Your Gateway

Place your gateway in a location with a good 3G or LTE signal.

1. Place your gateway in a location with good 3G or 4G coverage, such as near a window.



- 2. Also, for best results, place your gateway:
 - Near the center of the area where your computers and other devices operate, and preferably within line of sight to your Wi-Fi devices.
 - So it is accessible to an AC power outlet and near Ethernet cables for wired computers.
 - In an elevated location such as a high shelf, keeping the number of walls and ceilings between the gateway and your other devices to a minimum.
 - Away from electrical devices that are potential sources of interference. Equipment that might cause interference includes ceiling fans, home security systems, microwaves, computers, the base of a cordless phone, or a 2.4 GHz cordless phone.
 - Away from any large metal surfaces, such as a solid metal door or aluminum studs. Large expanses of other materials such as glass, insulated walls, fish tanks, mirrors, brick, and concrete can also affect your wireless signal.

Start Your Gateway for the First Time

Learn how to start your gateway for the first time.

The gateway is designed to activate automatically the first time that it is turned on using handsfree activation. Typically, the activation process will be seamless, not requiring any action on your part.

To start your gateway:

- 1. Connect the power adapter to the gateway and plug the power adapter into an electrical outlet.
- 2. Make sure that the Power On/Off button on the rear panel of the gateway is pressed in.
 - The **Power** and **Wi-Fi** LEDs light.
 - The gateway automatically connects to a 3G or LTE network, and the 3G LED or the LTE LED lights.
 - The Internet OLED lights to show that you have Internet access.

If your account did not activate for some reason, connect to the gateway network and use a Web browser to log in to the gateway. Alerts on the home page allow you to try the activation again. You must activate your account before you can use Sprint data services.

Connect to Your Gateway's Network

You can connect with Wi-Fi or you can use an Ethernet cable for a wired connection to an Ethernet LAN port.

Tip: The Wi-Fi network name and password are on the label of the gateway.

Tip: Alternatively, you can use WPS to connect your computer or device to the gateway, if your computer or device supports WPS. (See Connect Through WPS.)

To find and select a Wi-Fi network, then connect with Wi-Fi:

- 3. Do one of the following, depending on your operating system:
 - Windows 7: Click the Wi-Fi icon d in the system tray.
 - Windows Vista: Click Control Panel > Network and Internet > Network and Sharing Center > Connect to a network.
 - Windows XP: Click Control Panel > Network Connections > Wireless Network Connections > View available wireless networks.
 - Mac: Click the AirPort icon
 (in the upper right corner of your screen).
 - Linux: Please see the user documentation of the Linux distribution.
 - Other operating systems: Please see the user documentation for your operating system or computer.
- 4. Select the Wi-Fi network for the gateway and connect to it. (If prompted for a network key/security key/password, enter the Wi-Fi password on the gateway label.)

To use WPS to connect with Wi-Fi:

- 1. Check the WPS instructions that came with your computer or wireless device.
- 2. Press the WPS button **Example** on the gateway.
 - For 2 minutes, the gateway tries to detect a computer or wireless device that is using WPS to connect to its Wi-Fi network.
- 3. On your computer or wireless device, press its WPS button or follow its WPS instructions.
 - Your computer or wireless device connects to the Wi-Fi network.

To connect with Ethernet:

A yellow Ethernet cable comes in the package with your gateway.

- 1. Connect an Ethernet cable (included in the package) to one of the yellow Ethernet LAN ports on the rear panel of the gateway.
- 2. Connect the other end of the Ethernet cable to an Ethernet port on your computer.



The **Ethernet LAN** LED on the gateway lights.

Your computer connects to the gateway's local area network (LAN). A message might display on your computer screen to notify you that an Ethernet cable is connected.

Get Help

Learn where you can get more information or assistance.

Visiting the Sprint Website

Sign on to sprint.com/mysprint to get up-to-date information on Sprint services and options.

- Review coverage maps.
- Access your account information.
- Add additional options to your service plan.
- Purchase accessories.
- Check out frequently asked questions.
- And more.

Contacting Sprint Customer Service

You can reach Sprint Customer Service online or by calling toll-free.

- Log in to your account at sprint.com/mysprint.
- Call us toll-free at 1-888-788-4727 (business use) or 1-888-211-4727 (personal use).

Gateway Basics

Learn about the buttons, connectors, and other components of your gateway.

Your gateway provides a simple way to use your Internet connection (3G or LTE) with any Wi-Fi-enabled device, and to share your Internet connection with friends and family.



Components of Your Gateway

Your gateway consists of several main components.

• Main and Guest Wi-Fi networks: The Wi-Fi networks (access points) connect your computers and other Wi-Fi-enabled devices to the gateway.

- Main Wi-Fi dual-band: The gateway has two Main Wi-Fi networks, so you can connect with 2.4 GHz or 5 GHz Wi-Fi. To connect with 5 GHz, your computer or Wi-Fi-enabled device must support 5 GHz.
- **Modem**: The modem connects your gateway to the Internet via the best available network (customizable):
 - LTE: Newer technology, faster speeds compared with 3G
 - 3G: CDMA technology, more widely available compared with LTE
- **Routing hardware**: The routing hardware handles traffic between the modem, the Wi-Fi access point, and the Wi-Fi network.
- **USB port**: You can connect a USB drive and share it.
- **Power over Ethernet**: The gateway has one fast (10/100) Ethernet WAN port that supports Power over Ethernet (PoE), standard IEEE 803.3at-2009. The PoE port allows an Ethernet cable to provide both data connection and electrical power to the gateway. PoE can serve as main power or backup power.

Note: You can choose to connect only PoE, or to connect both PoE and the gateway AC power adapter. When both are connected, the gateway automatically selects PoE power. If you remove PoE, the gateway continues to work and automatically switches to AC power. If both are connected and you remove AC power, the gateway continues to work and automatically switches to PoE power.

3G and LTE Networks

These wireless networks connect you to the Internet.

Depending on your coverage area, you may have:

- Only LTE coverage
- Only 3G coverage
- A combination of these networks

The gateway automatically connects to the fastest network that is available to you. If you have both 3G and LTE coverage and your connection happens to get disrupted, your gateway can automatically switch to the other network. (For more information, see Mobile Network Settings.)

Your gateway is designed to always connect to an available network if possible. If your gateway

is not connected (dropped signal, roaming not supported, etc.), the **Signal Strength** LED is off. The connection status can also be seen on your gateway's **Status** Details page.

Your gateway can be set to connect automatically to the best available network, or to connect to LTE or 3G networks only. See Setting the Allowed Network Mode.

Your gateway can also be set to allow roaming on Sprint networks, domestically, and internationally. See Setting the Roaming Mode.

Power Button

Use the Power button to turn your gateway on and off.

To turn your gateway on:

- 1. Make sure that power adapter for your gateway is plugged in to an electrical outlet.
- 2. Press the **Power On/Off** button so that it is in the on position.

Note: The LEDs on the gateway light unless you logged in to the gateway and turned off the LEDs from the Device page.

To turn your gateway off:

Press the **Power On/Off** button so that it is in the off position.

Note: The LEDs on the gateway turn off.

LEDs

The LED status indicators show the gateway's Internet and network connections.

LED	Description
Signal	5 bars: Excellent coverage.
Quality	4 bars: Strong coverage.
	3 bars: Moderate coverage.
	1 bar: Poor coverage.
	Off: No coverage.
3G	Solid blue: The gateway has a connection with the 3G network.
Connection	Off: The gateway does not have a 3G connection.
3G	
LTE	Solid blue: The gateway has a connection with the 4G LTE network.
Connection	Off: The gateway does not have a 4G connection.
LTE	
Wi-Fi	Solid green: The 2.4 GHz wireless radio is on.
WIFI	Solid purple: The 5 GHz wireless radio is on.
	Solid blue: Both the 2.5 GHz and the 5 GHz wireless radios are on.
	Off: The wireless radios are off.

Ethernet	Solid blue: The Ethernet WAN port is connected to a device and is ready.
WAN	Off : The gateway does not detect a link on this port.
*	
Ethernet LAN	Solid blue : One or more local Ethernet ports 1 – 4 have detected wired links.
.	Off: The gateway does not detect links on these ports.
USB	Solid blue: The gateway has accepted the USB device and the USB device
⊷⇔	is ready.
	Off: No USB device is connected.
Internet	Solid blue: The Internet connection is ready.
$\langle \mathcal{O} \rangle$	Solid amber: Network error.
4	Slow blinking amber: The gateway failed to cut over from an Internet WAN
	connection to a mobile broadband connection.
	Off: No Internet connection.
Power	Solid green: The gateway is ready.
(1)	Slow blinking green: The gateway is powering up.
\sim	Solid red: System failure.
	Slow blinking red: Thermal cutoff alarm.
	Off : No power is supplied to the gateway.
Wi-Fi On/Off	Solid blue: The wireless radios are on.
((•))	Off: The wireless radios are off.
WPS	Solid blue: WPS security is enabled.
0.940	Blinking blue: Someone is using WPS to join the gateway's Wi-Fi network.
	Off: WPS is not in use.

Micro-SIM

Your gateway comes with a preinstalled micro-SIM card that gives you access to the Sprint network.

NOTE: Do not remove the SIM card. Hot swapping is not supported.

Launch Your Mobile Network Connection

After your gateway powers on and boots up, a connection to the best available network (3G or LTE) is launched automatically.

Your gateway remains connected at all times, unless:

- You are out of signal range or the signal is blocked.
- You are in a roaming area and you have chosen not to allow roaming.

Note: Even though your gateway is connected, you are billed only when data is sent or received. See If the Connection is "Always On," Am I Always Being Billed?

Web Browser Interface

When you connect to the gateway network (either with Wi-Fi or with an Ethernet cable), you can use a Web browser to log in to your gateway to view or change its settings.

Log In to Your Gateway

Tip: If you want to change your gateway's Wi-Fi settings, use a wired Ethernet connection to avoid being disconnected when the new Wi-Fi settings take effect.

To log in to your gateway:

- 1. On a computer or wireless device that is connected to your gateway's network, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

Note: If you're using the Google Chrome Web browser, after typing in the address bar, press the **Down Arrow** key and then press the **Enter** key. (If you don't press the **Down Arrow** first, a Google search starts and you are not prompted to log in to your gateway.)

Note: After 10 minutes of inactivity, the gateway automatically logs you out.

4. If your Web browser displays an error message, see Cannot Display the Home Page.

Home Page

The home page is the entry page when you log in to the gateway.

You can:

- Activate your account if it did not automatically activate.
- View your data usage and status information for your data connection.
- Manage your mobile broadband network connection and Wi-Fi connections.
- View alert messages.

					9	Sprint
					Support About V	WAN Status Log
🚹 Home	Alerts 1					
Devices	Router software u	pdate successful. Press	Ok to continue .			
WI-FI	Data Usage					
Security Settings	Billing Cycle Total used in this		Days Left 25	Session: Data used Duration	0.00 GB 0 day 00 hr 06 min 22 sec	
Status	Used This Mo	nth:				Reset
Sprint LTE		Sent	Received		Combined	
Sprint LIE 2:5	4G	0.00GB	0.16GB		0.16GB	
	3G	0.00GB	0.00GB		0.00GB	
Data Connected	Total	0.00GB	0.16GB		0.16GB	
Disconnect	Displayed data us Check Carrier Us	(C) (C)	manage usage. Th	e amounts sl	nown are approximate and may	vary.
Wi-Fi Devices Connected 0	My Account S	ummary				
Wi-Fi (2.4GHz) No Devices Connected	My Data Plan:	3G/4G Demo Con	nection Plan			
Wi-Fi (5GHz) No Devices Connected	My Number: My Sprint	9134995816				

Item	Description
Home	Click to view the Home Page.
Devices	Click to view the Devices Page.
Wi-Fi	Click to view the Wi-Fi Connect Tab.
Security	Click to view the Security Settings.
Settings	Click to view the General Settings.
Connection Details	Mobile broadband connection information – see Mobile Network Settings.
Devices Connected	List of devices connected to the gateway's Main or Guest Wi-Fi networks.
My Account Summary	Basic information about your Sprint data plan. For more details, click My Sprint to connect to your account at sprint.com/mysprint.
Feedback	Click to access the Sprint Twitter [®] feed and Facebook [®] page or to send your comments on your gateway. See Feedback. (Your device must be connected to the network for this option to work.)
International Information	Click to view Sprint's International Coverage Areas search feature in a new browser window or tab. (Your device must be connected to the network for this option to work.)
Important Information	Click to read important safety information about the gateway.
Alerts	Alerts remain until issue is resolved.

Data Usage Session	Estimated data usage for current session.
Data Usage of This Month	Estimated data usage for current billing period.

Alerts

Alerts notify you about situations that require your attention and suggest the actions you need to take to resolve them.

Alerts 2		
SIM not installed	Insert a SIM with the gold contacts facing each other	
Updates available	New firmware updates are now available	Update now

The following information is displayed for each alert.

ltem	Description
Alert title	A short description of the issue to be addressed.
Description	The alert message and, if appropriate, links or buttons to take action on the alert. (For example, the Update now link in the second alert shown above would take you to the Software Update screen.)

The alerts disappear only when the issues they describe are resolved. Some of the alerts you may encounter include:

- Software Update Available
- Max Wi-Fi devices reached
- Mobile Broadband disconnected
- Wi-Fi is off
- Gateway is not activated
- SIM errors
- Roam Guard

Activate Your Account from the Home Page

Until your account is activated, you cannot use Sprint data services.

If you have already signed up for an account, the gateway automatically attempts activation when first powered up. In this case, you won't see a Retry Activation message. You will just be connected to the Sprint network

To activate your account:

- 1. On the home screen, go through the alerts until you see the **Hotspot not activated** alert.
- 2. Click **Retry Activation**.
- 3. Follow any instructions that may appear.

Note: If you already signed up for an account, the gateway automatically attempts activation when first powered up. If this happens, you will not see a Retry Activation message. You will just be connected to the Sprint network.

Data Usage

Data usage estimates are shown in the Data Usage section of the home page.

Note: Data usage amounts are approximate and should not be used for billing purposes. For accurate data usage amounts, check with Sprint or click the My Sprint link in the My Account Summary section to view your account details.

The Data Usage section displays monthly billing period statistics and current session statistics.

Item	Description	
Current billing c	ycle	
Usage of This Month	The amount of data sent and received during the billing period for each network type.	
Reset button	Click to set the displayed monthly usage values to 0MB. Important: This does not reset the actual data usage for the billing cycle.	
Session		
Used	Data amount used since your device connected to the network.	
Elapsed time	Length of time that your device has been connected to the network.	

My Account Summary

The My Account Summary section shows basic information about your plan and includes a link to see more detailed information.

My Account Summary	
My Data Plan: 3G/4G Demo Connection Plan	
My Number: 9136536034	
My Sprint	

The following information is displayed.

Item	Description	
My Data Plan	The type of Sprint data plan used on your gateway.	
My Number	My Number The telephone number linked to your data plan.	
My Sprint	Click to connect to your account at mysprint.sprint.com/mysprint.	

Connection Details

The Connection Details section shows details about your mobile broadband service and connection state, and lists the devices that are connected to the Main and Guest Wi-Fi networks. The following information is displayed.

Item	Description
Signal strength and roaming status	The more bars, the stronger the signal. A triangle in the icon means your device is roaming.
Network carrier name	Name of the available network. For example, Sprint.
Network type	LTE or 3G
Roaming message	Indicates whether your device is roaming on a Sprint network, domestically, or internationally.
Connect / Disconnect button	Click this button to connect or disconnect your device from the mobile network.
Devices Connected	 Wi-Fi 2.4 GHz: A list of devices currently connected to the Main Wi-Fi 2.4 GHz network. Wi-Fi 5 GHz: A list of devices currently connected to the Main Wi-Fi 5 GHz network Guest Wi-Fi: A list of devices currently connected to the Guest Wi-Fi network. You can click any of the device names to view their details, or to block them from using your network. See Display and Block Currently Connected Devices (Block List).

Support

This page provides links to resources that can help you use your device and manage your Sprint account.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click the **Support** link in the top right corner.

Support	
<u>User Guide</u>	Learn how to setup and use your router.
Web	Visit <u>sprint.com/support</u> for the complete User Guide, along with videos, tutorials,and community forums for your device.
Manage Account	1-888-211-4727
<u>Voice your Feedback</u>	

The following information is displayed.

Item	Description
User Guide	Open an online copy of this guide in a new Web browser window or tab. (You must be connected to the Internet to use this link.)
Web	Click the link to open the online support website in a new Web browser window or tab where you can find a variety of resources to help you with your gateway. (You must be connected to the Internet to use this link.)
Manage Account	Contact Sprint Customer Service by telephone (for business use or personal use).
Voice Your Feedback	Send NETGEAR your comments on your device. See Feedback Page.

About

View information about your gateway and account.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click the **About** link in the top right corner.

Account Details		Device	
My Number:	9139980782	Model:	LG6100D-10000S
MSID:	9132268940	Router URI :	http://myrouter
MEID:	35759505002289	Firmware:	VER:02.02.84
IMEI:	357595050022894	Firmware Date:	Aug 23 2014 01:09:19
ICCID:	89011200000188126725	Bootloader Version:	VER:02.01.24
looid.	0001120000100120120	Current PRL:	24020
Wi-Fi Details (2.4G	iHz)	Wi-Fi Details (5GH;	z)
Wi-Fi Name:	BB TA Cand	Wi-Fi Name:	SprintGateway-5G-45A
Wi-Fi Password:	12345678	Wi-Fi Password:	D6YCMEVHMQ
Wi-Fi MAC:	08:BD:43:BD:B4:5A	Wi-Fi MAC:	08:BD:43:BD:B4:5A
Wi-Fi IP Address:	192.168.0.1	Wi-Fi IP Address:	192.168.0.1
Wi-Fi Security Type:	WPA2-PSK [AES]	Wi-Fi Security Type:	WPA2-PSK [AES]
Wi-Fi Max Users:	64	Wi-Fi Max Users:	64
Wi-Fi Range:	Long	Wi-Fi Range:	Long
SSID Broadcast:	Yes	SSID Broadcast:	Yes
Router Firmware		WWAN Info	
Firmware Version:	NTG9X15C_45.04.24.00	Activation Date :	12/16/2013 14:12:26
Build Date:	2014/04/06 21:49:52	Refurbish Date :	Not Refurbished
PRI Version:	00.16	IP Address :	184.254.137.84
		IPv6 Address :	NA
		User NAI : netgear144@sprintpcs.c	com
		LTE APN NI :	r.ispsn
		Network	
		View Network Status De	etails

The following information is displayed.

Item	Description
Account Details	
My number	The gateway's telephone number.
IMEI	International Mobile Equipment Identify number.

ICCID	The serial number of the SIM.	
Wi-Fi Details		
Wi-Fi Name	The Main Wi-Fi network name.	
Wi-Fi MAC	The MAC address of the LTE module. Each wireless device has a	
Address	unique MAC address (assigned by its manufacturer).	
Wi-Fi Security Type	The security standard used for the Wi-Fi network. (See Wi-Fi Security.)	
Wi-Fi Range	Select the range for the Wi-Fi signal.	
SSID Broadcast	Indicates whether the SSID (Wi-Fi network name) is being broadcast. (See Wi-Fi Options Tab.) You could choose to not broadcast and give the Wi-Fi name directly to users.	
Firmware		
Firmware Version	The LTE modem firmware version.	
Build Date	The date the firmware version was created.	
PRI Version	The PRI version.	
Network Status		
View Details	Click the link to jump to the Status Details Page.	

WAN Status

You can view the status of the WAN connection.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click the **WAN Status** link in the top right corner.

WAN Status		
Interface Type	Mobile	
IP Address	24.221.73.32	
IPv6 Address	NA	
Connection Type	DHCP	
IP Subnet	255.255.255.252	
Domain Name Server	5	
Server 1	68.28.68.132	
Server 2	68.28.67.132	
Default Gateway	24.221.73.33	
DHCP Server	24.221.73.33	

The following information is displayed.

ltem	Description
Interface Type	Displays which WAN interface is being used, mobile or Ethernet.
IP Address	WAN IP address.
Connection Type	Displays whether the connection is static or dynamic (DHCP).
IP Subnet	IP subnet mask.
Domain Name Servers	The primary and secondary domain name servers for the WAN interface.
Default Gateway	IP address of the default gateway.
DHCP Server	IP address of the DHCP server.

Feedback

Use the links on this page to access the Sprint Twitter[®] feed and Facebook[®] page and to send your comments on your device, look up support information, and participate in a customer survey.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click the **Feedback** link in the bottom left corner of any page.

The following information is displayed.

Item	Description
Connect with us	
Facebook	Click to view the AirCard Facebook page in a new browser window or tab. (Your device must be connected to the network for this option to work.)
Twitter	Click to view the AirCard Twitter feed in a new browser window or tab. (Your device must be connected to the network for this option to work.)
Product Support	
User Guide	Open an online version of this user guide in a new window or tab.
FAQs	Read frequently asked questions and answers.
Survey	·
Customer Feedback Survey	Participate in a NETGEAR customer survey.

Your Network Connections

Find out how to launch, share, and end your Internet network connection.

Launch Your Mobile Network Connection

After your gateway powers on and boots up, a connection to the best available network is launched automatically.

Your gateway remains connected at all times, unless:

- You are out of signal range or the signal is blocked.
- You are in a roaming area and you have chosen not to allow roaming.

Note: Even though your gateway is connected, you are billed only when data is sent or received. See If the Connection is "Always On," Am I Always Being Billed?

Set Up a Guest Wi-Fi Network

You can create a separate Guest Wi-Fi network that you can share with temporary users.

Computers and wireless devices on the Guest Wi-Fi network:

- Cannot access devices that are on the Main Wi-Fi network (such as printers or other computers)
- Cannot log in to the gateway to change its settings

Turn the Guest Wi-Fi Network On and Off

You can turn the Guest Wi-Fi network on and off from the gateway's Wi-Fi page.

To turn the guest Wi-Fi network on and off:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Wi-Fi.
- 5. In the Guest Wi-Fi area, click **Turn On** or click **Turn Off**.

Share Your Wi-Fi Network

Your gateway provides two ways of sharing your network connection with other users.

- Users find and select the Main or Guest Wi-Fi network information.
- User connects to the Main or Guest Wi-Fi network using WPS.

Manually Enter the Wi-Fi Information

Users can connect to the network by manually entering the Wi-Fi information.

Share your network connection with others:

- 1. Provide the Main or Guest Wi-Fi network name and password to them.
- Users must open their device's Wi-Fi network manager and connect to the Main or Guest Wi-Fi network using the password you provided. (See How Do I Connect to Wi-Fi?)

Connect Through WPS

Wi-Fi Protected Setup (WPS) provides a fast, simple, and secure way to connect WPS-enabled devices to your Wi-Fi network.

With WPS, you don't have to give the name (SSID) and Wi-Fi password of your Main or Guest network to other users. The WPS feature is available on certain cameras, printers, smartphones, and laptops. These devices have either a hardware button or a WPS-related option in the software. Please consult the user documentation of your device.

WPS is always available for the Main and Guest Wi-Fi networks as long as the Wi-Fi radio is on.

WPS is not available in the following situations:

- The Wi-Fi radio is off because someone pressed the Wi-Fi On/Off button on the gateway.
- The Wi-Fi security option is WPA Personal, WEP, or WEP-related (for example, WEP 64 Bit Open). WPS is available if the Wi-Fi security option is WPA/WPA2 Personal. (See Wi-Fi Options Tab.)
- Broadcast network name is not enabled. (See Wi-Fi Options Tab.)
- MAC Filter Mode is White list (Allow only those in list), but no computers have been added to the list. (See Allow or Deny Computers Access to the Network (MAC Filter).)

If the maximum number of connected devices on the chosen network (Main or Guest) has already been met, an error message indicating that the maximum number of devices has been reached is displayed when you attempt WPS. Disconnect one of the connected devices and then retry.

You can use the WPS button on the gateway or you can log in to the gateway and use the **Wi-Fi > Connect** page.

Devices Page

The Devices page lets you see lists of devices that are connected to your Main and Guest Wi-Fi networks.

Note: These lists are also in the Devices Connected section on the left side of the page.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Devices.



The following information is displayed.

Item	Description
Main Wi-Fi (2.4 GHz)	A list of devices currently connected to the Main Wi-Fi network in the 2.4 GHz band.
Main Wi-Fi (5 GHz)	A list of devices currently connected to the Main Wi-Fi network in the 5 GHz band.
Guest Wi-Fi	A list of devices currently connected to the Guest Wi-Fi network.
Ethernet	A list of devices currently connected to the device through an Ethernet connection to an Ethernet LAN port.

You can click any of the device names to view detailed information, and to block them from using your network. See Enable or Disable the Block List.

Wi-Fi Connect Tab

From the Wi-Fi tab, you can configure the Wi-Fi network, including Wi-Fi security.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Wi-Fi and the Connect tab displays.

Main Wi-Fi (2.4GHz)	Guest Wi-Fi
Turn OffName:SprintGateway-963Password:8P1E4HHN39Edit	Guest Wi-Fi allows you to share your connection Turn On
Main Wi-Fi (5GHz)	WPS
Turn Off Name: SprintGateway-5G-963 Password: BDMNUDDA0W Edit	WPS supports both 2.4GHz and 5GHz. WPS

You can configure access to your Main and Guest Wi-Fi networks.

You can:

- Edit the Main or Guest Wi-Fi names and passwords. See Change Wi-Fi Network Names and Passwords.
- Turn the Guest Wi-Fi network on or off. See Setting up a Guest Wi-Fi Network.
- Connect devices using WPS. See Connecting Through WPS.

The following information is displayed.

Item	Description	
Main Wi-Fi (2.4 GHz)		
Name	This is the name that identifies your Main Wi-Fi network and is visible to other Wi-Fi-enabled devices. See Change Wi-Fi Network Names and Passwords.	
WPS	Connect a device to the Main Wi-Fi network using WPS. See Connecting Through WPS.	
Main Wi-Fi (5 GHz)		
Name	This is the name that identifies your Main Wi-Fi network and is visible to other Wi-Fi-enabled devices.	
WPS	Connect a device to the Main Wi-Fi network using WPS. See Connecting Through WPS.	
Guest Wi-Fi (2.	Guest Wi-Fi (2.4 GHz)	
Turn Off / Turn On	Click this button to turn the Guest Wi-Fi network on or off. Note: The rest of the Guest Wi-Fi fields / buttons appear only when the Guest Wi-Fi network is on.	
Name	This is the name that identifies your Guest Wi-Fi network and is visible to other Wi-Fi-enabled devices. See Change Wi-Fi Network Names and Passwords.	

Wi-Fi Options Tab

From the Wi-Fi Options tab, you can configure your Wi-Fi network's connection settings and security and additional Wi-Fi options.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click **Wi-Fi > Options**.

N. IN		
Network Name	SprintGateway-963 3-32 characters.	
Password		
Password	8P1E4HHN39 (8-63 characters)	
Guest Wi-Fi		
Network Name	NETGEAR_Guest1	
	3-32 characters.	
Password	К5уJWyBR	
	(8-63 characters)	
Options		
Wi-Fi Range		
	Short (small coverage, less power)	
	O Medium	
	O Long	
	(large coverage, more power)	
Connection		
20/40 MHz Coexistence	Disable v	
Connection Rate	802.11b/g/n (40 MHz) 🔹	
Wi-Fi Channel	Auto 💌	
RTS Threshold	2347	
Fragmentation Threshold	2346	
Security		
Broadcast Network Name	Yes •	
Encryption	WPA2-PSK [AES]	
	WPA2-PSK Personal AES is the most secure encryption type.	
Guest Encryption	WPA2-PSK [AES]	
	WPA2-PSK Personal AES is the most secure encryption type.	
Max WiFi Clients		
Main WiFi Clients	64	
Guest WiFi Clients	64	
Subar min chema	04	

You can:

- Edit the Main or Guest Wi-Fi names and passwords. See Change Wi-Fi Network Names and Passwords.
- Configure your Wi-Fi network's connection parameters and security and additional Wi-Fi options.
- Specify the maximum number of devices that can connect to the Wi-Fi network.

Note: For some of these Wi-Fi settings, if you change them, all connected devices will be disconnected and have to reconnect after the settings are saved.

The following information is displayed.

Item	Description		
Main Wi-Fi			
Network Name	This is the name that identifies your Main Wi-Fi network and is visible to other Wi-Fi-enabled devices. (See Change Wi-Fi Network Names and Passwords).		
Guest Wi-Fi	Guest Wi-Fi		
Network Name	This is the name that identifies your Guest Wi-Fi network and is visible to other Wi-Fi-enabled devices. (See Change Wi-Fi Network Names and Passwords).		
Wi-Fi Options			
Wi-Fi Range	Short Medium Long		
Connection			
20/40 MHz Coexistence	The gateway can run in either 40 MHz mode or 20 MHz mode when the wireless mode is set to Up to 300 Mbps. The gateway uses 40 MHz mode unless a nearby Wi-Fi network is using 40 MHz mode. If that happens, the gateway uses 20 MHz mode to coexist with that network.		
Connection Rate	 This setting determines the type of Wi-Fi devices that can connect to your network. For the Main and Guest 2.4 GHz networks, the default connection is Up to 300 Mbps. The other choices are Up to 130 Mbps and Up to 54 Mbps. For the 5 GHz network, the default connection rate is Up to 300 Mbps. The other choices are Up to 400 Mbps and Up to 800 Mbps. 		
Wi-Fi Channel	This is the active channel of the Wi-Fi access point. If your network is having performance issues (possibly caused by other Wi-Fi networks in the vicinity using the same channel), try a different Wi-Fi channel.		
RTS Threshold	This setting specifies the smallest packet size, in bytes, for which RTS/CTS (Request to Send/Clear to Send) handshaking is used. The recommended value is 2347. Change this value only if you're experiencing inconsistent data flow. Make only minor changes to this value.		
Fragmentation Threshold	This setting specifies the largest allowable size, in bytes, for a packet. If the packet is larger than this, it is fragmented into multiple packets before it is transmitted. To prevent poor network performance, it's recommended to keep this value as large as possible (up to 2346).		
Security			
---------------------------	--		
Broadcast Network Name	If broadcast is enabled (Yes), the wireless network is displayed in the list of Wi-Fi networks available in the local area. For increased security, set this field to No . You will need to give the Wi-Fi network name (Main or Guest) to the people who will be accessing your network, and WPS will not be available.		
Encryption	The type of security used by the Main Wi-Fi network. See Wi-Fi Security.		
Guest Encryption	The type of security used by the Guest Wi-Fi network. See Wi-Fi Security.		
Max Wi-Fi Clients	The maximum number of Wi-Fi clients that can connect to the gateway Main Wi-Fi network and Guest Wi-Fi network.		

MAC Filter

MAC (Media Access Control) filtering can prevent unauthorized wireless devices from connecting to your network.

The MAC filter is used to grant (white list) or block (black list) wireless devices access to the Wi-Fi and mobile broadband (3G or LTE) networks. Access is based on the MAC address of each wireless device.

MAC filtering increases security of your network. You can give access to your network, based on the MAC address of the wireless devices. This makes it harder for a hacker to use a MAC address to access your network.

To set up MAC filtering or turn it off:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Wi-Fi and then click the MAC Filter tab.



You can:

- Turn MAC filtering off (None) or on (Black List or White List).
- Add or remove a device from the list.

The following information is displayed.

Item	Description
MAC Filter	None: Any device can connect to the Wi-Fi networks.
Mode	Black List: The listed devices will not be able to connect to the Wi-Fi networks.
	White List: Only the listed devices will be allowed to connect to the Wi-Fi networks.
Black List or WI	hite List
Name	A description of the device (the owner's name, the device's purpose, etc.)
MAC Address	The device's MAC address.

Wi-Fi Security

Learn about the Wi-Fi security options available to you.

By default Wi-Fi security is enabled for your device and its Wi-Fi networks.

Note: All devices used with the gateway must support the selected security type.

Note: WPS is available only if you select either a WPA2 Personal option (including WPA/WPA2 Personal) or no security (not recommended). (See Connect Through WPS.)

Note: WEP is available only for the Guest network.

You can change the security used for Wi-Fi:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Wi-Fi > Options**.

- 5. In the list beside **Encryption** (for Main Wi-Fi) or **Guest Encryption** (for Guest Wi-Fi) select one of the following options. Note that not all options may be available, depending on the **Connection Rate**.
 - None: No security is used (no password is required to access the Wi-Fi network); this setting is not recommended. Anyone may access your device and use your Internet connection. (You are responsible for payment for data usage fees.)
 - WEP 64 Bit Open: This option provides security, but it's relatively weak. This
 option works with older and newer Wi-Fi devices and is recommended only if any of
 your devices don't support WPA or WPA2.

Open WEP uses the key for encryption, but not for authentication.

WEP 64 Bit – Shared: This option provides security, but it's relatively weak. This
option works with older and newer Wi-Fi devices and is recommended only if any of
your devices don't support WPA or WPA2.

Shared WEP uses the same key for encryption and authentication; some consider shared WEP to be less secure than open WEP.

 WEP 128 Bit – Open: This option provides security, but it's relatively weak (but stronger than WEP 64 Bit – Open). This option works with older and newer Wi-Fi devices and is recommended only if any of your devices don't support WPA or WPA2.

Open WEP uses the key for encryption, but not for authentication.

 WEP 128 Bit – Shared: This option provides security, but it's relatively weak (but stronger than WEP 64 Bit – Shared). This option works with older and newer Wi-Fi devices and is recommended only if any of your devices don't support WPA or WPA2.

Shared WEP uses the same key for encryption and authentication; some consider shared WEP to be less secure than open WEP.

- WPA PSK TKIP: This is a strong security standard that is supported by most Wi-Fi devices.
- WPA2 PSK AES: This is a stronger, newer security standard that is limited to newer Wi-Fi devices.
- WPA2 PSK TKIP: This is a stronger, newer security standard that is limited to newer Wi-Fi devices.
- 6. Click Submit.

The option you select determines the Wi-Fi security used and also the maximum length of the Wi-Fi password.

Change Wi-Fi Network Names and Passwords

The Main and Guest Wi-Fi network names identify your Wi-Fi networks and are visible to other Wi-Fi-enabled devices.

You can change the names and passwords for your Main and Guest Wi-Fi networks on the gateway's **Wi-Fi > Options** page.

For optimal security, you should make your Wi-Fi network names and passwords unique, and change them on a regular basis.

Note: If you change either of the Wi-Fi network names or passwords, all connected devices will be disconnected and will have to reconnect using the new values.

Note: For security reasons, it's recommended you disable SSID Broadcast. (See Wi-Fi Options Tab.)

To make your Wi-Fi passwords more secure:

- Use numbers and both uppercase and lowercase letters.
- Use special characters (for example, '@', '#', etc.).

Also, the password length depends on the Wi-Fi encryption type that you've selected.

- None: No password is required.
- WEP 64 bit Open: The password must be 5 ASCII characters.
- WEP 64 bit Shared: The password must be 5 ASCII characters.
- WEP 128 bit Open: The password must be 13 ASCII characters.
- WEP 128 bit Shared: The password must be 13 ASCII characters.
- WPA-Personal TKIP: The password must be 8 to 63 ASCII characters.
- WPA-Personal TKIP/AES: The password must be 8 to 63 ASCII characters.
- WPA2-Personal TKIP/AES: The password must be 8 to 63 ASCII characters.
- WPA/WPA2 Personal: The password must be 8 to 63 ASCII characters.

To change the Wi-Fi network name and password:

1. On a computer or wireless device that is connected to your gateway, launch a Web browser.

- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Wi-Fi > Options**.
- 5. In the Main Wi-Fi and Guest Wi-Fi sections, change the **Network Name** and **Password** fields as desired. (The required lengths appear beneath the fields.)
- 6. Click **Submit**.
- 7. When prompted, click **Submit** again. (All devices that were connected will have to reconnect with the new settings.)

Enable or Disable the Black List

You can enable your gateway's black list on the gateway's Wi-Fi MAC Filter page. This lets you identify devices that should not be allowed to access your Wi-Fi networks.

To enable or disable the Wi-Fi black list (MAC filtering):

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Wi-Fi and then click the MAC Filter tab.
- 5. Beside **MAC Filter Mode**, select **Black List** to block devices, or select **White List** to prevent devices from being blocked.
- 6. Click **Submit**.

Display and Block Currently Connected Devices (Block List)

To detect a potential intruder, you may want to display a list of the Wi-Fi-enabled devices that are currently connected to your gateway. You can view this list the gateway's home page.

To stop a device from connecting to your network, you can add it to your gateway's block list. The blocked device will not be able to connect again until you choose to unblock it.

Note: You have to enable the block list before you can block devices from using your Wi-Fi networks. (See Enable or Disable the Block List.)

To manage the block list:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.) The Devices Connected section of the home page shows a list of the devices connected to your Main and Guest Wi-Fi networks.
- 4. To block a listed device, click its device name. The device's IP address and MAC address display.
- 5. Click **Block Device**.
- 6. Click **Block Device** again.

View and Unblock Devices on the Black List

You can view a list of devices that you have blocked from connecting to your gateway on your gateway's Wi-Fi MAC Filter page.

To allow any of these devices to connect to the network again, you can remove them from your device's block list.

To view and unblock devices on the block list:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Wi-Fi > MAC Filter**.
- 5. Select the **Black List (Block all in list)** radio button.

A list of the devices blocked from using your Wi-Fi networks appears.

 Click the ³ beside the device you want to unblock. The device is removed from the list immediately.

Allow or Deny Computers Access to the Network (MAC Filter)

MAC (Media Access Control) filtering can prevent unauthorized wireless devices from connecting to your network.

The MAC filter is used to grant (white list) or block (black list) wireless devices access to the Main and Guest Wi-Fi networks. Access is based on the MAC address of each wireless device.

In the MAC Filter page (Wi-Fi > Mac Filter), you can choose one of three modes:

- None: All computers are allowed to access the network.
- Black list: All computers are allowed to access the network, unless they're in this list.
- White list: Only computers that are in this list are allowed to access the network.

Regardless of the mode, a user must provide the correct Wi-Fi password to access the network.

To specify computers that can access the network:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Wi-Fi and then click the MAC Filter tab.
- 5. Beside MAC Filter Mode, select White list.
- 6. In the empty **Name** field, enter a name for the device. For example, Amy's PC.
- 7. In the empty **MAC Address** field, enter the MAC address of the device you're adding to the list. (If you don't know this address, see Finding the MAC Address.)
- 8. Click the 👽 beside the row. Repeat steps 6 through 8 for each computer for which you want to allow access.

IMPORTANT: Make sure you add the computer you are using, or else you will not be able to access the network after your device resets.

9. Click Submit.

To specify computers that are not allowed to access the network:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

- 4. Click Wi-Fi and then click the MAC Filter tab.
- 5. Select the **Black list** radio button.
- 6. Determine and block an unwanted user of your network:
 - In the Devices Connected section, if you see a device you don't recognize, you can click its name and compare its MAC address to the MAC address of each of the devices on your network.

Tip: To determine the MAC address of each device you have, see Finding the MAC Address. If none of your devices have this MAC address, that device might be an intruder.

- In the Name field, enter a name for the device. For example, Amy's PC.
- In the MAC Address field, enter the MAC address of the device you're adding.
- Click the O beside the row.
- 7. For each device you want to block, repeat steps 4 through 6.

Tip: You can also block the device from the device list. See Display and Block Currently Connected Devices (Block List).

To remove a device from the Allowed or Disallowed list:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Wi-Fi and then click the MAC Filter tab.
- 5. In the list of allowed/disallowed devices, click the 🙆 beside the row.
- 6. Click Submit.

Wi-Fi Channel

The Wi-Fi channel is the active channel of the Wi-Fi access point. If your network is having performance issues (possibly caused by other Wi-Fi networks in the vicinity using the same channel), try a different Wi-Fi channel.

You can change the channel from your gateway's Wi-Fi Options tab.

Note: All connected devices will be disconnected and have to reconnect if the channel is changed.

To change the Wi-Fi channel:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Wi-Fi > Options**.
- 5. Select a different channel number in the **Wi-Fi Channel** list, or, to have your device automatically determine the channel to use, select **Auto**.

Note: If you choose Auto, your device could reselect the same channel. If this happens, try again.

6. Click Submit.

Set the Maximum Number of Wi-Fi Devices

You can enter the maximum number of Wi-Fi devices that are allowed to connect to the gateway at the same time.

If your network is having performance issues, you might want to allow fewer Wi-Fi devices to connect to your gateway at the same time, or change the maximum number of devices that can connect to either the Main Wi-Fi or Guest Wi-Fi networks at the same time. (When Guest Wi-Fi is turned on, the maximum number of Wi-Fi devices is shared between Main Wi-Fi and Guest Wi-Fi.)

Note: Your gateway is factory preset to allow a maximum of 80 Wi-Fi devices.

Note: If you change the Max Wi-Fi Devices value, the Main Wi-Fi and Guest Wi-Fi values automatically adjust to match the new total.

To set the maximum number of Wi-Fi devices:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

- 4. Click **Wi-Fi > Options**.
- 5. Scroll down to view the Max Wi-Fi section.
- 6. Beside Max Wi-Fi, select the total number of Wi-Fi devices that can connect to your device at the same time.

Note: The Main Wi-Fi limit cannot be set to 0.

7. Click **Submit**.

Security

Learn about how to use security features to control access to the gateway through the Internet.

Dynamic DNS

Learn about Dynamic DNS (DDNS), a service that lets you access your gateway by using a host name or domain.

A Dynamic DNS (DDNS) service provides a central public database where information (such as email addresses, host names, and IP addresses) can be stored and retrieved. The Dynamic DNS server also stores password-protected information and accepts queries based on email addresses.

If you want to use a DDNS service, you must register for it. The Dynamic DNS client service provider will give you a password or key.

Note: The gateway supports only basic DDNS, and the login and password might not be secure. If you have a private WAN IP address, do not use DDNS service as it can lead to problems.

To set up DDNS:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Security > Dynamic DNS**.

Dynamic DNS	
Use Dynamic DNS Service	
Service Provider	www.DynDNS.org
User Name	
Password	
Host Name	.selfip.net

- 5. If you have registered with a DDNS service provider, select the **Use a Dynamic DNS Service** check box.
- 6. Select the name of your Dynamic DNS service provider.

- 7. Type the host name that your Dynamic DNS service provider gave you. (The DDNS service provider might call this the domain name.)
- 8. Type the user name for your DDNS account.
- 9. Type the password (or key) for your DDNS account.
- 10. Click Submit.

Remote Management

The remote management feature lets you access your gateway over the Internet to view or change its settings.

You need to know the gateway's WAN IP address to use this feature.

Tip: Be sure to change the password for admin to a secure password. The ideal password contains no dictionary words from any language and contains uppercase and lowercase letters, numbers, and symbols. It can be up to 30 characters. See Change the Admin Password.

To set up remote management:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Security > Remote Management.

Rem	note Management		
>	Turn Remote Management On		
	Remote Management Address		https://0.0.0.08443
All	ow Remote Access By		
0	Only This Computer		
0	IP Address Range	From	
		To	
۲	Everyone		
	Port Number		8443
Re	mote Logging Settings		
	Enable Remote Log Config		
	Remote IP Address		10 . 0 . 0 . 47
	Cancel Submit		

- 5. Select the Turn Remote Management On check box.
- 6. In the Allow Remote Access By section, specify the external IP addresses to be allowed to access the gateway's remote management.
- 7. For enhanced security, restrict access to as few external IP addresses as practical.
- 8. Select one of the following:
 - To allow access from a single IP address on the Internet, select the Only This Computer radio button. Enter the IP address to be allowed access.
 - To allow access from a range of IP addresses on the Internet, select the IP Address Range radio button. Enter a beginning and ending IP address to define the allowed range.
 - To allow access from any IP address on the Internet, select the Everyone radio button.
- 9. Specify the port number for accessing the web browser interface.
 - Normal web browser access uses the standard HTTP service port 80. For greater security, enter a custom port number for the remote web management interface. Choose a number from 1024 to 65535, but do not use the number of any common service port. The default is 8080, which is a common alternate for HTTP.
- 10. To enable remote logging, select the **Enable Remote Log Config** check box and specify the remote IP address.
- 11. Click Submit.

To use remote access:

- 1. Launch a Web browser on a computer that is not on your home network.
- 2. Type your gateway's WAN IP address into your browser's address or location field followed by a colon (:) and the custom port number.

For example, if your external address is 134.177.0.123 and you use port number 8080, enter https://134.177.0.123:8080 in your browser.

TR069 Client

You can set up the gateway to let you use TR069 client to manage the gateway remotely.

TR069 client is configured by the Sprint network.

To set up TR069 client in the gateway:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Security > Remote Management > TR069 Client.

TR-069 client-Configuration	
🗹 Turn WAN Management Protocol O)n
Inform Interval	60
ACS URL	http://cosmos.bredband.com:8080/ACS-server/ACS
ACS Connection Request Port	6363
ACS User Name	00600F-3N91425K0084E
ACS Password	••••••
Connection Request User Name	
Connection Request Password	
Cancel Submit	

- 5. Select the Turn WAN Management Protocol On check box.
- 6. Enter the settings for the connection.
- 7. Click Submit.

SNMP

You can enable SNMP in the gateway and use SNMP to manage the gateway remotely.

Using SNMP v3 support provides the best results and the best security when you are using SNMP. SNMP v2C and v3 are supported, but not v1. SNMP version 3 adds both encryption and authentication, which can be used together or separately.

To enable SNMP in the gateway:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click Security > Remote Management > SNMP.

SNMP - Configuration	
SNMP agent	🗵 Enable
	O Disable
Protocol	UDP 🔻
Port	161
Username	admin
Password	••••••
	[Authentication : MD5 & Encryption : DES]
IP address of trap manager	
Location	California
Contact	Admin
Poll interval	300
Cancel	it

- 5. Select the SNMP agent **Enable** radio button.
- 6. Enter the settings for the connection.

NOTE: The user name and password are required only for SNMP v3. SNMPv2c performs authentication using these community strings: **public** for read-only and **netgear** for read-write. The trap community string is fixed to **netgear**.

7. Click Submit.

Firewall Rules

The Firewall Rules page sets the level of security on your local network.

To specify the firewall security level:

All security levels, except None, protect against known Internet attacks and attempts at remote access to your modem.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click **Security > Firewall**.



- 5. Select the radio button for the security level that you want.
- 6. Click the **OK** button to confirm the change.

The following settings are available.

Item	Description
High	The High security setting allows only basic Internet functionality. The High security setting guarantees to pass only Mail, News, Web, FTP, IPSEC and Telnet. All other traffic is not allowed. High security restricts modification by NAT configuration options.
Medium	The Medium security setting allows only basic Internet functionality by default, just like High level security. Medium security, however, allows customization through NAT configuration so certain traffic can pass.
Low	The Low security setting will allow all traffic except for known attacks. With low security, your modem is visible by other computers on the Internet.
Custom	Custom is an advanced configuration option that allows you to edit the firewall configuration directly. Only expert users should attempt this

Known attacks that will be blocked include the following:

• LAN to modem protocol UDP, destination ports 135,136,137,138,389,3268

- LAN to modem protocol TCP, destination ports 53, 135, 136, 137, 138, 389, 3268
- LAN to WAN protocol UDP, destination ports 135, 136, 137, 138, 139, 161, 389, 445, 3268
- LAN to WAN protocol TCP, destination ports 53, 135, 136, 137, 138, 139, 161, 389, 445, 3268

Block Internet Access

You can create a custom firewall rule to block all Internet access based on a schedule that you set.

To do this, you specify a custom firewall and set up a blocked services rule.

To block all Internet access during a specific time:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Security > Firewall > Firewall Rules.
- 5. Select the **Custom** radio button and click **OK**.



- 6. Click Security > Firewall > Block Services.
- 7. In the Services Blocking section, select the **Per Schedule** radio button and click **Submit**.

8. In the Block Services List, click the Add button.

The Add Block Service pop-up screen displays.

9. From the Service Type list, select Any.

Add Block Service		
Services Blocking		
Service Type	Any	▼
Service Type/User Defined	Any	
Protocol	TCP/UDP	
Starting Port	1	(1~65535)
Ending Port	65534	(1~65535)
Filter Services For		
Only This IP Address	192 · 168	. 0 .
O IP Address Range		
From	192 . 168	. 0 .
То	192 . 168	. 0 .
 All IP Addresses 		
Cancel Submit]	

The screen populates with these settings:

- The Protocol list is automatically set to **TCP/UDP**.
- The Starting and Ending Ports are automatically set to 1 through 65534. These cover all possible ports.
- In the Filter Services For section, All IP Services is selected.

10. Click Submit.

For information about how to set up a blocking schedule, see Schedule When to Block Internet Sites and Services.

Use Keywords to Block Internet Sites

You can use keywords to block certain Internet sites from your network. You can use blocking all the time or based on a schedule.

To block Internet sites:

- 11. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 12. In the address or URL field of your browser, type http://myrouter.
- 13. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 14. Click **Security > Firewall > Block Sites**.

Block Sites	
o learn more about advanc	ed content filtering and keyword blocking features from NETGEAR, please go to
Keyword Blocking	
Never	
Per Schedule	
Always	
Type keyword or don	nain name here.
Add Keyword	
	g these keywords or domain names:
	g these keywords or domain names:
	g these keywords or domain names:
	g these keywords or domain names:
	g these keywords or domain names:
	g these keywords or domain names:
	g these keywords or domain names:
Block sites containin	g these keywords or domain names:
	g these keywords or domain names:
Block sites containin	g these keywords or domain names:
Block sites containin Delete Keyword Ulow trusted IP addr	

15. Select one of the keyword blocking options:

- Per Schedule: Turn on keyword blocking according to the Schedule screen settings. (See Schedule When to Block Internet Sites and Services.)
- Always: Turn on keyword blocking all the time, independent of the Schedule screen.

16. In the Add Keyword field, enter a keyword or domain that you want to block.

For example:

- Specify XXX to block http://www.badstuff.com/xxx.html.
- Specify .com if you want to allow only sites with domain suffixes such as .edu or .gov.

- Enter a period (.) to block all Internet browsing access.
- 17. Click the Add Keyword button.

The keyword is added to the keyword list. The keyword list supports up to 32 entries.

18. Click the **Submit** button.

Your settings are saved. Users on the LAN cannot access the blocked sites.

Note: Site blocking works by interrupting DNS queries. So if the client has already resolved the domain name, then it is not blocked until the next query. This may take few minutes.

To delete keywords from the list:

 Select the word and click the **Delete Keyword** button. The keyword is removed from the list.

Block Services from the Internet

You can block Internet services on your network based on the type of service. You can block the services all the time or based on a schedule.

NOTE: The Firewall Rule should be set to **Custom** for blocked services to take effect.

NOTE: To disable Block Services, the Firewall Rule must be set to other than Custom.

To block services:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click Security > Firewall > Block Services.

Services Blocking		Schedule		
Block Services	List			
Service Type	Start Port	End Port	Protocol	Actions
JDP_DENY1	135	139	UDP	1 😣
JDP_DENY2	161	161	UDP	1 📀
JDP_DENY3	389	389	UDP	/ 😮
JDP_DENY4	445	445	UDP	1 😮
JDP_DENY5	3268	3268	UDP	/ 😮
CP_DENY1	53	53	TCP	1 😢
CP_DENY2	135	139	TCP	/ 😮
CP_DENY3	161	161	TCP	1 😢
CP_DENY4	389	389	TCP	/ 😮
CP_DENY5	445	445	TCP	1 😢 🖉
CP_DENY6	3268	3268	TCP	/ 😮

Tip: For information about how to specify the schedule, see Schedule When to Block Internet Sites and Services.

5. To add a service that is in the Service Type list, select the application or service.

The settings for this service automatically display in the fields.

6. To add a service or application that is not the list, click the 😳 Add button.

The Services screen displays.

Service Name	Protoco	I	Start Port	End Port	Actions
	TCP				0

- 7. In the **Service Name** field, type the name of the service.
- 8. If you know that the application uses either TCP or UDP, select the appropriate protocol; otherwise, select **TCP/UDP** (both).
- 9. Enter the starting port and ending port numbers. If the service uses a single port number, enter that number in both fields.

Tip: To find out which port numbers the service or application uses, you can contact the publisher of the application, ask user groups or newsgroups, or search on the Internet.

Schedule When to Block Internet Sites and Services

When you schedule blocking, the same schedule is used to block sites and to block services.

For information about how to specify what you want the router to block, see Use Keywords to Block Internet Sites and Block Services from the Internet.

To schedule blocking:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Security > Firewall > Schedule.

Days to Block	
Every Day	
Sunday	
Monday	
Tuesday	
Wednesday	
Thursday	
🗵 Friday	
Saturday	
Time of day to block	:: (use 24-hour clock)
All Day	
Start Blocking	0 0
	Hour Minute
End Blocking	23 59
	Hour Minute
Time Zone	
(GMT-08:00) Pacific Ti	me (US and Canada); Tijuana 🔻
Automatically adjust	for daylight savings time
	Current Time Wednesday, Dec 11, 2013 16:16:01

- 5. Specify when to block keywords and services:
 - Days to Block. Select the check box for each day that you want to block the keywords or select the Every Day check box, which automatically selects the check boxes for all days.
 - Time of Day to Block. Select a start and end time in 24-hour format, or select All Day for 24-hour blocking.
- 6. Select your time zone from the list.

- 7. If you use daylight saving time, select the **Automatically adjust for daylight savings time** check box.
- 8. Click the **Submit** button.

NOTE: For the schedule to take effect, **Per Schedule** must be selected for Block Services or Block Sites.

Avoid Keyword Blocking on a Trusted Computer

You can exempt one trusted computer from blocking.

The computer you exempt must have a fixed IP address. You can use the reserved IP address feature to specify the IP address. See Address Reservation.

To specify a trusted computer:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Security > Firewall > Block Sites.
- 5. Scroll down and select the Allow trusted IP address to visit blocked sites check box.
- 6. In the **Trusted IP Address** field, enter the IP address of the trusted computer.
- 7. Click the **Submit** button.

ALG Services

Application level gateway (ALG) allows customized NAT traversal filters to be plugged into the gateway to support address and port translation for certain application layers such as FTP, PPTP, and IPSec.

Note: When the firewall level is set to High, some services may not be configurable.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click **Security > ALG**.



5. Select the check boxes for the ALG services that you want.

IP Passthrough

You can designate a computer behind the gateway to receive unsolicited traffic from the public network.

IP passthrough allows your wireless network carrier to assign an address directly on the Internet to external devices that are configured as the IP passthrough clients. This feature might be used for specific enterprise network or enterprise VPN configurations, or to allow direct remote access into the IP passthrough address.

You can continue to use other LAN or Wi-Fi clients to access the Internet through the gateway.

Note: The public WAN IP will be assigned to this computer and the firewall settings will be disabled only for this port. Before setting up IP passthrough, make sure that you understand the effects of making this change and confirm that your IP passthrough device has its own firewalling or security settings.

To set up IP passthrough:

- 1. Use an Ethernet cable to connect the computer to a LAN Ethernet port on the gateway.
- 2. On this computer, launch a Web browser.
- 3. In the address or URL field of your browser, type http://myrouter.
- When prompted to log in, enter admin for the user name and type the password. (The default password is password.)

5. Click **Settings > Network > IP Passthrough**.



- 6. Select the IP Passthrough Enable check box.
- 7. To specify the device, do one of the following:
 - Leave the MAC Address radio button selected and type the MAC address of the device. MAC addresses are in the form of xx:xx:xx:xx:xx, where xx represents hexadecimal numbers.
 - Select the Connected Devices radio button and select the device from the list. If you do not see the device in the list, make sure that it is connected to one of the gateway's Ethernet LAN ports.
 - Select the **Port Number** radio button and select a port number. The connected device may be assigned a LAN IP address. When the lease period expires (approximately 3 5 minutes), the computer should have a WAN IP address. To check the lease time of the IP address on Windows machine, run ipconfig /all in console.
- 8. Click Submit.

Note: When enabling IP passthrough, you must clear any existing DHCP lease to get the correct IP address assigned from the router. On Windows client, you can use the command ipconfig /release, followed by ipconfig /renew. On Linux client, you can use ifconfig eth1 down, followed by ifconfig eth1 up. The Ethernet interface ID may differ on different machines and may not be eth1.

Note: If the IPPT device is connected before IPPT is configured and enabled, the IPPT device will have a LAN IP with a lease time of 24 hours. You must release and renew the IP address to obtain a WAN IP.

Note: For detailed IP passthrough usage scenarios, consult Sprint.

IPPT Functionality with Dual WAN

IP passthrough can co-function with the dual WAN feature. In dual WAN, the Internet access is through Ethernet WAN as long as it is available. If the gateway detects that the Ethernet WAN is

not working, the gateway initiates a mobile data call to be used for Internet access. When Ethernet WAN is available again, the gateway falls back to the Ethernet WAN connection. See Ethernet WAN Settings for more details.

The IPPT client IP address changes depending on which WAN interface is active. When WAN Ethernet is active, the IPPT client has a WAN Ethernet IP address and when mobile is active, the IPPT client has a mobile WAN IP address. When the gateway is in the process of switching the Internet connection, the IPPT client may have an old WAN IP address or LAN IP address from 5 seconds to 5 minutes. During this time, the IPPT client loses Internet connectivity.

Note: If you reboot your gateway, you must have the WAN Ethernet cable connected and active if you intend to use this feature. The feature will not work if the Ethernet cable is unplugged when the gateway boots up.

USB File Sharing

You can connect a USB drive to the gateway's USB port and share it with others on your network.

You can specify how you want file sharing to be managed for files on a USB device attached to the gateway USB port.

To set up file sharing for a USB drive:

1. Connect a USB drive to the USB port on your gateway.



- 2. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 3. In the address or URL field of your browser, type http://myrouter.
- 4. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 5. Click **Settings > Router > File Sharing**.

USB File Sha	ring				
File Server		Enable	Ŧ		
Domain Name		netgear.com	I		
Host Name		myrouter			
File Sharing					
Status	Share Name		Size	File System	Actions
Enable	ShareO		1.9G	VFAT	1 🕄
File Sharing L	Jsers				
User Name	Password		Access Rights		Actions
John	*****		Read Only		/ 😮
			Read Only	T	0

6. To allow file sharing, select **Enable** in the File Server field.

When this feature is enabled, all of the files on the USB drive are available as Windows Shared Files to other devices on the local area network (LAN). Shared files are not available to clients on the Internet outside of the local network.

7. In the Domain Name field, specify the network name.

This feature allows a computer on the LAN to access the shared files with a name rather than the IP address. The host name displays in the Windows Network on local network computers. Files can be accessed with the router's IP address (for example, \\192.168.15.1), the host name (for example, \\dslrouter), or the link in the network neighborhood.

8. In the File Sharing Users section, specify user names and passwords for access to network file shares.

With this feature, anyone who tries to access the files on the USB device must enter a user name and password. Each user can be set to read only or have write access to the files on the USB drive. Existing passwords cannot be viewed. You must change them if they are forgotten.

- 9. To add a user, click the 😳 Add button and type the user name and password.
- 10. To edit a user's credentials or password, click the user name.

Gateway Settings

Manage the gateway settings. From the Settings page, you can configure your device, network, and router settings.

General Settings

From the General tab, you can configure your device's LED status indicators, the gateway's (web browser) URL and administrator password.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings** and the General tab displays.

Router LED			
Router LED		⊙ On	
		Off	
Homepage			
Homepage URL	http://	myrouter	
Homepage		myrouter	
Set Password			
Old Password			
New Password			
Confirm New Password			

The following information is displayed.

Item	Description
Router LED	
Router LED	Indicates whether the LEDs are used (On) or not (Off). See Turning the LED On or Off.

Homepage	
(Web UI name) URL	The URL used to show the home page. See Changing the Gateway's URL.
Set Password	The password used to show the home page. See Changing the Password.

LED Settings

By default, the LEDs are on because they are status indicators. You can log in to the gateway and turn the LEDs off and on.

To turn the LEDs off and on:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > General > Device**.
- 5. Beside LED, select On or Off as desired.)
- 6. Click **Submit**.

Login Settings

You can customize the URL that you use to log in to the gateway and you can change the administrator password.

Change the Gateway URL

You may want to change the URL for the gateway to something more memorable.

To change the URL:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > General > Device**.
- 5. In the **URL** field (in the **Homepage** section), type the new value (maximum 31 letters and numbers).

6. Click Submit.

Change the Admin Password

For security reasons, you should change the gateway's admin password on a regular basis.

It is strongly recommended that you enable password recovery, so that if you forget the password you can recover it.

Note: If you forget the admin password, you'll need to reset your device to its default settings and go through the device setup. (See What Do I Do if I Forget the Administrator Password?.)

To change the administrator password:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > General > Device**.
- 5. In the **Old Password** field, type the old password.
- In the New Password field, type the new password (1–31 letters, numbers, and symbols).
- 7. In the **Confirm New Password** field, type the new password again.
- 8. Click Submit.

Software and Reset

From this page, you can save your current device settings and restore them later, update your software, reset your device to default settings, and set your device startup options.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click Settings > General > Software and Reset.

Download / Backup	Restore Settings
Download a copy of your routers settings onto your computer, so you can restore it later. Save as	If you saved your settings on a file previously, import it here to restore your router with those settings. Browse Submit
Software Update	Manual Software Update
Last Checked Check for Update Install updates automatically Check for each week on I Hour Minutes D D D D D D D D D D D D D D D D D D	Locate and select the upgrade file on your hard disk. Upload You can also manually download the latest software package from <u>http://www.sprint.com/downloads</u> . After downloading the image , You can use this section for updating it to the router.
Factory Reset	Reset
Reset your Router to factory settings, just like when you took it out of the box the first time. Reset	Clear Programming Reset Settings Reset Reset Reboot Reboot

You can:

- Back up and restore your gateway's configuration, if needed. See Export Settings and Import Settings.
- Update your gateway's software. See Update the Software and Firmware.
- Reset some or all of your gateway's settings. See Reset Device Settings Only, Reset the Gateway to Factory Default Settings, and Clear Account Details Only.
- Reboot the gateway.

The following information is displayed.

Item	Description
Download / Backup	Click Save to make a copy (export) of the gateway's current configuration, so that you can restore it later if needed. See Exporting Settings.
Restore Settings	Click Choose file to use a previously saved copy of your device configuration. See Importing Settings.
Software Update	Click Check for update to see if a new version of software has been released and if there is, download and install it. The last time you checked is shown on the screen (Last checked at). See Update the Software and Firmware. Note: Software downloads count against your plan's data limit.
Firmware Update	Click Upload to see if a new version of your device's firmware has been released, and if there is, download and install it.
Factory Reset	Click to reset your device to factory default settings and clear your account details. See Reset the Gateway to Factory Default Settings. (You can do this only with assistance from Sprint.)
Reset	 Settings Reset. Click to reset your device to factory default settings, but leave your Sprint account details unchanged. See Reset Device Settings Only. Clear Programming. Click to clear your account details. See Clear Account Details Only.

System Logs

Technical support staff may need you to configure system logging in this page for the purpose of error diagnosis.

Note: You should adjust settings on this page only under the direction of technical support staff.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click **Settings > General > System Logs**.



You can:

- Stop capturing logs
- Save as a file
- Clear logs

Date & Time Settings

Configure the date and time settings.

To specify the date and time settings:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click **Security > Date & Time**.

Date and Time					
Local Time	Thursday	Thursday, Jan 01, 1970 00:43:49			
Time Zone	EST	EST			
Daylight Saving Time	e				
	Disabl	Disabled			
	Month	Week	Day	Hours	Minutes
Start	Jan 💌	1 •	Sun v	• 00	• 00
End	Jan 🔻	1 .	Sun v	•	• • • • • • • • • • • • • • • • • • • •
Automatic Time Upda	ate				
	Enable	d			
Time Server					
time-d.netgear.com 🔰	2				
time-e.netgear.com 🔰	,				

Note: The Local Time field displays the local time.

- 5. In the Time Zone list, select the time zone.
- 6. If your location uses daylight saving, select the **Daylight Saving Time** check box.
 - Selecting this check box enables daylight saving time. If the current time falls within the daylight saving period, then daylight saving time takes effect. The Start and End fields display.
- 7. If needed, change the settings in the Start and End fields.
- 8. Select or clear the Automatic Time Update check box.
 - This check box enables or disables the NTP server. You can edit the first NTP server entry and you can add, remove, or edit a second NTP server.
- 9. Click **Submit**.

Your changes are saved.

Network Setup

From the Network Setup page, you can specify how the gateway selects mobile networks and roaming, and receive network configuration updates from Sprint.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network**.

Network Mode	
Network Mode	 Automatic (LTE preferred)
	O LTE only
	CDMA only
Roaming Mode	
Roaming Mode	 Sprint Only
	 Domestic CDMA (Including Sprint)
	 All Networks (including international)
Roaming Guard	
Roaming Guard	Provide warning alert while in roarning area.
	☑ Domestic
	✓ International
Update PRL	Update Data Profile Manual Configuration Advanced Settings

You can:

- Configure network selection and roaming options.
- Check the network for a new Preferred Roaming List.

The following information is displayed.

Item	Description
Network Mode	The type of network that your device can connect to. See Setting the Allowed Network Mode.
Roaming Mode	The areas in which your device can roam. See Setting the Roaming Mode.
Roaming Guard	If selected, the roaming areas where a warning will appear when you enter them. See Enabling / Disabling the Roaming Guard Warning Message.
----------------------------	---
Update PRL	Click to check if a new PRL (Preferred Roaming List) is available on the network, and use it to update your device.
Update Network Settings	Click to re-run HFA (Hands Free Activation).
Manual Configuration	Use only when instructed by Sprint.
Advanced Settings	Use only when instructed by Sprint.

Network Access Point Names

In this page, you can add, modify, or remove access point names (APNs) for the networks you want to connect to.

To connect to a carrier's network when roaming, your device must be configured with an access point name (APN) for that carrier. The APN is checked by the carrier to determine the type of network connection to establish.

Note: Your gateway comes with the APN for Sprint preconfigured.

To view or change the access point names:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Network > Access Point Names.

Access F	oint Names			
Active	Name	APN	Username	Password
0		otasn		
0		r.ispsn		
0		r.ispsn		
0				

Configure Access Point Names

Your gateway comes preconfigured with the access point name (APN) for Sprint.

To add an APN for another network:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Network > Access Point Names.

Access F	oint Names			
Active	Name	APN	Username	Password
0		otasn		
0		r.ispsn		
0		r.ispsn		
0				

- 5. In the blank line, enter the APN details:
 - Active: If the new APN is going to be used now, select this button.
 - **Name**: Enter a short description (for example, the carrier name).
 - **APN**: Enter the APN you obtained from the carrier.
 - **Username**: Enter the user name you obtained from the carrier (if required).
 - **Password**: Enter the password you obtained from the carrier (if required).
- 6. Click **Submit**.
- 7. Click the 😳 beside the new APN entry.

To select the APN to be used:

• Select the **Active** button at the beginning of the entry.

To remove an APN from the list:

• Click the 😣 beside the APN entry.

The list of all APNs that have been set up includes the following information.

Item	Description
Active	The access point currently in use. Only one access point can be marked as active.
Name	Network carrier name (for example, Sprint).
APN	The operator's access point name (obtained from the operator).
Username	If required, the user name (obtained from the operator) used to connect to the APN.
Password	If required, the password (obtained from the operator) used to connect to the APN.

View SIM Security

If you are using a SIM that has security enabled, you can display the SIM security status.

To display SIM security status:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network > SIM Security**.

SIM Security		
SIM Security	Inactive	

If the SIM has security enabled, SIM Security is shown as Active.

Status Details

This page shows you details about the current mobile broadband connection (3G or LTE).

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.

- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network > Status Details**.

The information that is displayed depends on your current connection.

4G/LTE Details

Item	Description
Connected Status	Indicates whether you are connected to an LTE network.
Service type	Indicates the LTE service type.
RSRP	The signal strength of the LTE network (reference signal received power).
RSRQ	The signal quality of the LTE network (Reference Signal Received Quality). RSRQ is the ratio between the RSRP and the Received Signal Strength Indicator (RSSI).
RS-SINR	Signal to Interference Noise Ratio based on Reference Signals (narrowband and wideband).
PLMN ID	Public land mobile network ID (operator network ID).
Serving Cell	The 3G/4G cell that is currently serving the gateway (router).
TX Power	The transmitter power. A higher number is better.
IP Address	The IP address of the 4G LTE connection.
Channel UL	The channel that is used to upload to the 4G LTE network.
Channel DL	The channel that is used to download from the 4G LTE network.
IMSI	The International Mobile Station Identity is an identifier of a device on the network.
Band	The LTE band being used for the connection.
Last Error Code	Technical support staff may request this value from you.
ICCID	The Integrated Circuit Card ID.

3G Details

Item	Description
Status	Indicates whether you are connected to a 3G network.
PS service type	Indicates the 3G service type (for example, CDMA, HRPD, CDMA_HRPD).
IP Address	The IP address of the 3G connection.
IPv6	IPv6 is the next generation Internet Protocol (IP) address standard that will supplement and eventually replace IPv4.
Coverage Type	The type of 3G network available.
RSSI	Signal strength of the network.
Ec/lo	Dimensionless ratio of the average power of a channel, typically the pilot channel, to the total signal power.
MDN	Mobile Directory Number. This is your 10-digit telephone number.
MSID	Mobile Station Identifier.
DRC Cover	Digital Rate Control Cover.
DRC Value	Digital Rate Control Value.
Channel	DRC Channel number.
Roaming	Indicates if you are roaming on Sprint, domestically, or internationally.
PRL Version	Preferred Roaming List version. To update the PRL, see Network Page.
1xRTT PN	Technical support staff may request this value from you.
EVDO PN	Technical support staff may request this value from you.
PRev	Technical support staff may request this value from you.
Rx Power	Technical support staff may request this value from you.
Serving SID	The Serving System ID identifies your home network area and is used to determine if you are home or roaming.

NID	Technical support staff may request this value from you.
Packet Zone ID	Technical support staff may request this value from you.
Frame Error Rate	Used to determine the quality of a signal connection. Technical support staff may request this value from you.
Subnet Color Code	Technical support staff may request this value from you.
AN-AAA	Technical support staff may request this value from you.
Packet Error Rate	Technical support staff may request this value from you.
MIP Error Code	The Mobile IP Error Code. Technical support staff may request this value from you.

Ethernet Setup

You do not need to change the settings on the Ethernet Setup screen unless instructed to do so by your service provider.

To view or change the Ethernet setup:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click Settings > Network > Ethernet Setup.

Internet IP Address	
 Get Dynamically from ISP Use Static IP Address 	
IP Address	
IP Subnet Mask	
Gateway IP Address	
Domain Name Server(DNS	S) Address
 Get Automatically from ISF 	
O Use These DNS Servers	
Primary DNS	
Secondary DNS	
МТО	
MTU Size	1492

- 5. To change the IP address setting, select one of the following radio buttons and click **Submit**.
 - **Get Dynamically from ISP**: This is the default setting, which works with most Internet connections. The ISP assigns IP addresses as needed.
 - Use Static IP Address: If your ISP has assigned you a static IP address, select this radio button and type the IP address, subnet mask, and gateway IP address into the fields.
- 6. To change the **Domain Name Server (DNS) Address** setting, select one of the following radio buttons and click **Submit**.
 - Get Automatically from ISP. This is the default setting. The ISP automatically assigns DNS servers.
 - Use These DNS Servers. To use specific DNS servers, select this radio button and type the appropriate IP addresses in the Primary DNS and Secondary DNS fields.
- 7. To change the MTU size, type a value in the **MTU Size** field and click **Submit**.

Note: The maximum transmission unit (MTU) is the largest data packet a network device transmits. For more information about this setting, see MTU Size.

MTU Size

Learn about maximum transmission unit (MTU) size and how to change this setting.

The maximum transmission unit (MTU) is the largest data packet a network device transmits. When one network device communicates across the Internet with another, the data packets travel through many devices along the way. If a device in the data path has a lower MTU setting than the other devices, the data packets must be split or "fragmented" to accommodate the device with the smallest MTU.

The best MTU setting for your gateway is often the default value. In some situations, changing the value fixes one problem but causes another. Leave the MTU unchanged unless one of these situations occurs.

You have problems connecting to your ISP or other Internet service, and the technical support of either the ISP recommends changing the MTU setting. These Web-based applications might require an MTU change:

- A secure website that does not open, or only part of a Web page displays.
- Yahoo! Mail.
- MSN portal.
- America Online's DSL service.
- You use VPN and have severe performance problems.
- You used a program to optimize MTU for performance reasons, and now you have connectivity or performance problems.
- An incorrect MTU setting can cause Internet communication problems. For example, you might not be able to access certain Websites, frames within Websites, secure login pages, or FTP or POP servers.

If you suspect an MTU problem, a common solution is to change the MTU to 1400. If you are willing to experiment, you can gradually reduce the MTU from the maximum value of 1500 until the problem goes away. The following table describes common MTU sizes and applications.

The following table lists common MTU sizes.

MTU Size	Application
1500	The largest Ethernet packet size. This setting is typical for connections that do not use PPPoE or VPN, and is the default value for NETGEAR gateways, adapters, and switches.
1492	Used in PPPoE environments.
1472	Maximum size to use for pinging. (Larger packets are fragmented.)
1468	Used in some DHCP environments.

1460	Usable by AOL if you do not have large email attachments, for example.
1436	Used in PPTP environments or with VPN.
1400	Maximum size for AOL DSL.
576	Typical value to connect to dial-up ISPs.

Router Settings

Adjust your gateway's router settings through the Basic, Port Forwarding, and Port Filtering pages.

Router Basic Settings

From this page you can configure the router's UPnP feature, LAN settings, and DMZ settings.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router**.

UPnP	
UPnP	ON
	O OFF
LAN	
IP Address	192 - 168 - 0 - 1
NetMask	255 - 255 - 255 - 0
RIP Direction	Both •
RIP Version	Disabled •
OSPF	 Enabled Disabled
OSPF Network Area	0
DHCP Server	Enabled
	O Disabled
DHCP IP Range	
From	192 168 0 2
То	192 · 168 · 0 · 254
DHCP Lease Time	86400 Seconds
DNS Mode	O Manual
	 Automatic
DMZ	
DMZ	O ON
	OFF

5. You can make changes to any of these fields. When you finish, click **Submit**.

The following information is displayed.

Item	Description
UPnP	
UPnP	Current state of the Universal Plug and Play feature (On or Off). (See UPnP (Universal Plug and Play).)
LAN	
IP Address	The routing hardware's IP address on the LAN.
Netmask	The routing hardware's internal LAN subnet mask.
DHCP Server	This field enables (On) or disables (Off) DHCP. See DHCP.
DHCP IP Range	This specifies the starting and ending address of the range of IP addresses available for your device to dynamically (that is, not permanently) assign to computers connected to it. See DHCP.
DHCP Lease Time	This is the amount of time, in minutes, a computer can use its assigned IP address before it is required to renew the lease. After this time is up, the computer is automatically assigned a new dynamic IP address. See DHCP. Enter a number between 2 and 10080.
	Enter a humber between 2 and 10060.
DNS Mode	This specifies how the DNS servers (that the DHCP clients are to communicate with) are obtained.
	Manual: The routing hardware assigns DHCP clients the DNS servers specified in the DNS 1 and DNS 2 fields. Use this option to access a DNS server that provides customized addressing or if you have a local DNS server on your network.
	Note: The DNS 1 and DNS 2 fields appear only if DNS Mode is Manual.
	Auto: The DNS server specified by Sprint is used.
DMZ	
DMZ On/Off	Enable / disable demilitarized zone.

DMZ Address	If DMZ is enabled, this is the IP address of a single computer used to receive all unsolicited incoming connections.
Submit	

UPnP (Universal Plug and Play)

UPnP provides simple and robust connectivity among consumer electronics, intelligent appliances, and mobile devices from many different vendors. (For more information, see upnp.org.)

Note: If UPnP is enabled, there are potential security risks.

To enable UPnP:

Before you can use UPnP, you must enable it.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router**.
- 5. Next to **UPnP**, select **On**.
- 6. Click **Submit**.

DHCP

DHCP (Dynamic Host Control Protocol) automatically assigns an IP address to each device on the network and manages other network configuration information for devices connected to your network. You do not need to manually configure the IP address on each device that's on your network.

The assigned IP addresses are not permanent (as opposed to when using static IP addresses).

Most ISPs (Internet Service Providers) use DHCP.

Normally, you should enable DHCP, in which case you must configure each device on the network with one of the following:

- TCP/IP settings set to Obtain an IP address automatically.
- TCP/IP bound to the Ethernet connection with DHCP.

If DHCP is disabled, you must configure each device on the network with:

- Fixed (permanent/static) IP address.
- DNS server addresses (provided by Sprint).

To enable DHCP:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router**.
- 5. Next to **DHCP Server**, select **Enabled**.
- 6. You can set the following DHCP settings:
 - DHCP IP Range: This is the starting and ending address of the range of IP addresses available for your device to dynamically (that is, not permanently) assign to computers connected to it.

Note: The start address must be 192.168.0.10 or above and the ending address must be 192.168.0.50 or below.

 DHCP Lease Time: This is the amount of time, in minutes, a computer can use its assigned IP address before it is required to renew the lease. After this time is up, the computer is automatically assigned a new dynamic IP address.

Note: Enter a number between 2 and 10080.

- DNS Mode: This specifies how the DNS servers (that the DHCP clients are to communicate with) are obtained. (See DNS Mode.)
- 7. Click Submit.

DNS Mode

The DNS Mode setting specifies how the DNS servers (that the DHCP clients are to communicate with) are obtained.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.

- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router**.
- 5. Set **DNS Mode** to one of the following:
 - Auto: The DNS server specified by Sprint is used.
 - Manual: The routing hardware assigns DHCP clients the DNS servers specified in the DNS 1 and DNS 2 fields. (These fields appear when Manual is selected.) Use this option to access a DNS server that provides customized addressing or if you have a local DNS server on your network.
- 6. Click **Submit**.

Port Forwarding

Port forwarding lets you forward incoming traffic to specific ports and devices (per their local IP address) on your network. (Normally, incoming traffic is blocked.)

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Port Forwarding**.

Port Forwardi	ng			
Port Forwarding) 💿 Enable O Disable			
Name	IP Address	Port	Protocol	Actions
	192 · 168 · 0 ·		TCP •	•

You can:

• Enable or disable port forwarding. See Enable Port Forwarding.

Note: You must enable port forwarding before you can view and update the port forwarding list.

 Enter port forwarding details for an application. (See Enable Port Forwarding for an Application.)
 For example, you can configure port forwarding so that:

- You can access your Remote Desktop from the Internet (by specifying the WAN [public] IP address that your device is using).
- Internet users can access a Web, FTP, or email server, or gaming or Internet application hosted by your computer.
- Remove an application from the port forwarding list. (See Port Forward Panel: Disable Port Forwarding for an Application.)

Note: Port forwarding creates a security risk. When not required, port forwarding should be disabled.

Note: Port forwarding does not apply to normal browsing, file downloading, running most online games or other applications hosted on the Internet. (Some online games require port forwarding.)

The following information is displayed.

Item	Description
Port Forwarding	Indicates whether port forwarding is on (Enable) or off (Disable).
List of forwarded port	s: This list appears only if port forwarding is on. Each port displays:
Name	A name describing the application using the port.
IP Address	The IP address of the server being accessed.
Port	The port that is forwarded. If the application uses more than one port, each port must be forwarded separately.
Protocol	The protocol (TCP, UDP, etc.) being used for this application.
Actions	

Enable Port Forwarding

Before you can use or configure port forwarding, you must enable it.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

4. Click **Settings > Router > Port Forwarding**.

Port Forwardi	ng			
Port Forwarding	EnableDisable			
Name	IP Address	Port	Protocol	Actions
	192) · 168) · 0) ·		TCP	0

- 5. Next to Port Forwarding, select Enable.
- 6. Click **Submit**.

Enable Port Forwarding for an Application

You can enable port forwarding for certain application types.

Note: Port forwarding must currently be enabled. (See Enabling Port Forwarding.)

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Port Forwarding**.
- 5. In the blank row of the list, enter a name that describes the application (for example, RandomEmailApp).
- 6. In the **IP** field, enter the IP address of the server to be accessed.
- 7. In the **Port** field, enter the port used by the application. (If the application uses more than one port, each port must be forwarded separately.)
- 8. In the **Protocol** list, click the protocol(s) used for this application (TCP, UDP).
- 9. Click the 😳 to add this row to the list.
- 10. Click Submit.

Disable Port Forwarding for an Application

If you want to stop forwarding any ports, you can remove them from the forwarding list.

Note: Port forwarding must currently be enabled. (See Enabling Port Forwarding for an Application.)

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Port Forwarding**.
- 5. Click the 🥹 beside the row that you want to remove.
- 6. Click **Submit**.

Port Filtering

Port filtering lets you either allow (white list) or prevent (black list) which applications (for example, HTTP, FTP, email servers) can access the Internet.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Port Filtering**.

Port Filtering		
Port Filtering	No Filtering	

You can:

- Enable port filtering. (See Port Filtering Panel: Enable Port Filtering.)
- Add an application to a port filtering list. (See Port Filtering Panel: Enable Port Filtering for an Application.)
- Remove an application from the port filtering list. (See Port Filtering Panel: Disable Port Filtering for an Application.)

The following information is displayed.

Item	Description
Port Filtering	 Indicates which type of filtering is being used. No Filtering: All applications are allowed to access the Internet. Black List: Applications in the list are not allowed to access the Internet.
List of filtered ports: 7	This list appears only if port filtering is on. Each port displays:
Name	A name describing the application using the port.
Port	The port that the application uses to access the Internet.
Protocol	The protocol (TCP, UDP, etc.) being used by the application.
Actions	

Enable Port Filtering

Before you can use or configure port filtering, you must enable it.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Port Filtering**.

Port Filtering		
Port Filtering	No Filtering	v

- 5. In the **Port Filtering** list, select **Black List** to prevent specific applications from using the Internet.
- 6. Click **Submit**.

Enable Port Filtering for an Application

You can enable port filtering for certain application types.

Note: Port filtering must currently be enabled. (See Port Filtering Panel: Enabling Port Filtering.)

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Port Filtering**.
- 5. In the **Name** field, enter a name that describes the application being filtered (for example, RandomEmailApp).
- 6. In the **Port** field, enter the port used by the application.
- 7. In the **Protocol** list, select the protocol(s) used for this application (TCP, UDP, or both).
- 8. Click the 😳 to add this filter to the list.
- 9. Click Submit.

Disable Port Filtering for an Application

If you currently have port filtering enabled and some ports already in the list (Black List or White List), you can remove any of those rows.

Note: Port filtering must currently be enabled. (See Port Filtering Panel: Enable Port Filtering.)

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Port Filtering**.
- 5. Select **Black List**.
- 6. To remove an application from the list click the 😢 beside the row that you want to remove.
- 7. Click Submit.

Address Reservation

Address reservation lets you specify a specific IP address that the gateway assigns to a computer or device when it connects to the gateway's local area network (LAN).

When you specify a reserved IP address for a computer on the gateway's local area network (LAN), that computer always receives the same IP address each time it accesses the DHCP server. Reserved IP addresses should be assigned to servers that require permanent IP settings.

To reserve an IP address:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router > Address Reservation**.
- 5. Click the **Add** button.

Add Address Re	servation	×
Device Name		
IP Address		
MAC Address		
Cancel	Submit	

- 6. Enter the device name, IP address, and MAC address of the computer that you want to add.
- 7. Click **Submit**.

To edit a reserved IP address:

- 1. Select the radio button next to the reserved address.
- 2. Click the **Edit** button.
- 3. Edit the IP address, MAC address, or device name.
- 4. Click the **Accept** button when finished.

To delete a reserved IP address:

- 1. Select the radio button next to the reserved address.
- 2. Click the 😢 Delete button.

MAC Address Cloning

Your computer's local address is its unique address on your network. This is also referred to as the computer's MAC (Media Access Control) address. The format for the MAC address is XX:XX:XX:XX:XX:XX:XX.

To set up MAC address cloning:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Router > MAC Address Cloning.

Rout	er MAC Address
۲	Use Default Address
0	Use Computer MAC Address
0	Use This MAC Address 04 : A1 : 51 : 85 : F0 : 96

- 5. If your ISP does not require MAC authentication, select **Use Default MAC Address**.
- 6. If your ISP requires MAC authentication, select one of the following:
 - **Use Computer MAC address**: Disguise the router's MAC address with the MAC address of the computer that you are currently using to configure the gateway.
 - Use This MAC Address and manually type the MAC address: Disguise the router's MAC address with the MAC address of another computer (not the one that you are currently using).
- 7. Click **Submit**.

DMZ – General

You can select one computer to receive all unsolicited incoming connections.

The IP address of the DMZ (demilitarized zone) is the default recipient of incoming packets (from the Internet) that are not handled by port forwarding rules or NAT'd connections:

- If port forwarding is enabled, incoming traffic is routed according to the port forwarding rules or NAT'd connections.
- If incoming traffic was not routed as a result of the above:
 - If DMZ is enabled, then incoming traffic is routed to the computer that uses the IP address specified by the DMZ settings.
 - If DMZ is not enabled, the incoming traffic is blocked.

Note: Putting a computer in the DMZ opens all the ports of that computer, and exposes that computer to various security risks. Use this option only as a last resort — if possible, use other options instead (for example, port forwarding).

Enable DMZ

Before you can use or configure DMZ, you must enable it.

To enable DMZ:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router**.
- 5. Next to **DMZ Enabled**, select **ON**.
- 6. Click **Submit**.

Configure DMZ

Specify which computer is to receive all unsolicited incoming connections.

To configure DMZ:

Note: DMZ must currently be enabled. (See Enable DMZ.)

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.

- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Router**.
- 5. In the **DMZ Address** field, enter the IP address of the computer that you want exposed to the Internet. (If you don't know how to find the IP address, see Finding the IP Address.)

Share a USB Printer

The Netgear ReadySHARE Printer utility lets you share a USB printer that is connected to the USB port on your router. You can share this USB printer among the Windows and Mac computers on your network.

Install the Printer Driver and Cable the Printer

Some USB printer manufacturers (for example, HP and Lexmark) request that you do not connect the USB cable until the installation software prompts you to do so.

To install the driver and cable the printer:

1. On each computer on your network that shares the USB printer, install the driver software for the USB printer.

If you do not have the printer driver, contact the printer manufacturer.

2. Use a USB printer cable to connect the USB printer to the router USB port.

Download the ReadySHARE Printer Utility

The ReadySHARE Printer utility works on Windows and Mac computers.

To download the utility:

1. Visit netgear.com/readyshare.



- 2. In the ReadySHARE Printer pane, click the PC Utility or Mac Utility link.
- 3. Follow the onscreen instructions to download the file.

Install the ReadySHARE Printer Utility

You must install the ReadySHARE Printer utility on each computer that will share the printer. After you install it, the utility displays as NETGEAR USB Control Center on your computer.

To install the utility:

1. Double-click the ReadySHARE Printer utility setup file that you downloaded.

The InstallShield wizard displays.

2. Follow the wizard instructions to install NETGEAR USB Control Center.

After the InstallShield Wizard completes the installation, the NETGEAR USB Control Center prompts you to select a language.

3. Select a language from the list and click the **OK** button.

The NETGEAR USB Control Center displays.

NETGEAR USB Control Center				- • ×
System Iools About				
Device		Statu		
MFP - Canon - MP180		Walf	ing to Connect	
	Connect	Disconnect	N	letwork Scanner

Some firewall software, such as Comodo, blocks the Netgear USB Control Center from accessing the USB printer. If you do not see the USB printer displayed in the screen, you can disable the firewall temporarily to allow the utility to work.

4. Select the printer and click the **Connect** button.

The printer status changes to Manually connected by Mycomputer. Now, only your computer can use the printer.

5. Click the **Disconnect** button.

The status changes to **Available**. Now all computers on the network can use the printer.

6. To exit the utility, select **System > Exit**.

Use the Shared Printer

For each computer, after you click the Connect and Disconnect buttons once, the utility automatically manages the printing queue and handling. By default, the utility starts automatically whenever you log on to Windows and runs in the background.

To manually connect and print:

1. Click the NETGEAR USB Control Center icon



The NETGEAR USB Control Center displays.

NETGEAR USB Control Center				
stem Iools About				
Device		Statu	15	
MFP - Canon - MP180		Wait	ing to Connect	
	Connect	Disconnect	N	etwork Scanner

2. Click the **Connect** button.

The printer status changes to Manually connected by Mycomputer. Now, only the computer you are using can use this printer.

- 3. Use the print feature in your application to print your document.
- 4. To release the printer so that all computers on the network can use it, click the **Disconnect** button.

To print and release the printer to any computer on the network:

1. To print your document, use the print feature in your application.

The NETGEAR USB Control Center automatically connects your computer to the USB printer and prints the document. If another computer is already connected to the printer, your print job goes into a queue to wait to be printed.

2. If your document does not print, use the NETGEAR USB Control Center to check the status. See View or Change the Status of a Printer.

View or Change the Status of a Printer

You can check to find out which computer is using a printer and change this setting.

To view or change the status:

1. Click the NETGEAR USB Control Center icon



The NETGEAR USB Control Center displays.

ystem Iools About				
Device			Status	
SIMPP - Canon - MP180			Waiting to Co	nnect
	Connect	1	Disconnect	Network Scanner

The Status column shows the status for each device:

- Available. No print jobs are in process. You can use the USB printer from any computer in the network.
- **Connected**. Your computer is connected to the printer and will be released when your print job is done.
- Manually Connected by. Only the connected computer can use the printer.
- Waiting to Connect. Your computer is not connected to the shared printer yet.
- 2. To print from your computer when the status shows Manually connected by another computer, click the **Disconnect** button.

The printer is released from the connection and the status changes to Available.

- 3. To print from your computer when the status shows Waiting to Connect:
 - Click the **Connect** button.

The printer status changes to Manually connected by Mycomputer. Now, only your computer can use the printer.

• To allow the printer to be shared, click the Disconnect button.

The printer is released from the connection and the status changes to Available.

Use the Scan Feature of a Multifunction USB Printer

If your USB printer supports scanning, you can also use the USB printer for scanning. For example, the USB printer displayed in the Windows Printers and Faxes window is ready for print jobs.

To use the scan feature of a multifunction USB printer:

1. Click the NETGEAR USB Control Center icon

The NETGEAR USB Control Center displays.

stem Iools About					
Device			Status		
MFP - Canon - MP180		Weiting to Connect			
	Connect	1.0	Disconnect		vork Scanner

- 2. Make sure that the printer status shows as Available.
- 3. Click the Network Scanner button.

The scanner screen displays so that you can use the USB printer for scanning.

Change NETGEAR USB Control Center Settings

You can stop the NETGEAR USB Control Center from starting automatically when you log in to Windows. You can also change the language and specify the time-out to release the printer connection.

To turn off automatic NETGEAR USB Control Center startup:

1. Click the NETGEAR USB Control Center icon

The main screen displays.

2. Click Tools > Configuration.

Control Center - Configuration
Basic
Automatically execute when logging on Windows
Timeout
10 minute (1-600)
Language
English
German Swedish
French
Dutch Italian
Note: Language setting will take effect on next execution.
OK Cancel Apply

- 3. Clear the Automatically execute when logging on Windows check box.
- 4. Click the **OK** button.

Your change is saved.

To change the language:

- 1. Click **Tools > Configuration**.
- 2. In the **Language** list, select a language.
- 3. Click the **OK** button.

The next time NETGEAR USB Control Center starts, the language changes.

To specify the time-out:

- 1. Click **Tools > Configuration**.
- 2. In the **Timeout** field, type the number of minutes.

The time-out is the number of minutes that a computer holds its connection to the printer when the connection isn't being used.

3. Click the **OK** button.

Your settings are saved.

Mobile Network Settings

View information about your mobile network activation, data usage, and settings.

View Network Activation Information

You can check whether network access is activated.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **About** in the top right corner of the page.
- 5. Check the **Activation Date** in the WWAN Info section. This is the date that the gateway was activated on the Sprint network.

View Data Usage

You can view an estimate of your data usage on your device's home and Data Usage pages, and on the gateway's home page.

Note: The data usage shown is an estimate only and is not accurate for billing purposes.

Note: The session data counter resets automatically each time your device is powered off and on, and when the mobile broadband network connection disconnects and reconnects (for example, when going through a tunnel). The billing plan data counter resets automatically when the next billing cycle starts.

To view an estimate of your data usage:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

The Data Usage Session section displays:

- Amount of data used in the current session.
- The length of time the connection has been active.

The Data Usage Billing Cycle section displays:

- Total amount of data used in the current billing cycle, and amounts used for each network type.
- Number of days remaining in the current billing cycle.
- Date that the next billing cycle begins.
- **Check Carrier Usage**: Click to connect to Sprint's website and view detailed billing plan information.

Network Settings

Adjust your device's network settings to select the network types that can be connected, and set roaming options.

Set the Roaming Mode

Use this feature to choose where your device can be used in roaming mode.

You can adjust this setting on your gateway's **Settings > Network** page, using the following options:

- Sprint Only Your device can be used only in Sprint service areas.
- **Domestic CDMA (Including Sprint)** Your device can roam only in North America.
- Any Network Your device can roam anywhere in the world.

To set the roaming mode:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network**.
- 5. Beside **Roaming Mode**, select the desired value.
- 6. Click Submit.

Enable or Disable the Roaming Guard Warning Message

Use this feature to have your device display a warning when you enter a roaming area.

To enable or disable the roaming guard warning message:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network**.
- 5. Beside Roaming Guard, select the warnings you would like to display (Domestic and/or International).
- 6. Click Submit.

Set the Network Mode

Use this feature to select the types of networks that your device can connect to.

You can adjust this setting on the gateway's **Settings > Network** page, to one of the following options:

- Automatic (LTE preferred) The connection will be established on the fastest available network.
- LTE only The connection can be established only on an LTE network. Your device will not connect to CDMA networks.
- **CDMA only** The connection can be established **only** on a CDMA (3G) network. Your device **will not** connect to LTE networks.

To set the network mode:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network**.
- 5. Beside Network Mode, select the desired network mode that your device can connect to.

6. Click Submit.

Ethernet WAN Settings

Your gateway has an Ethernet WAN port on the rear panel. You can use an Ethernet cable to connect the gateway to Internet service.

Connect the Ethernet WAN Port

You can connect the gateway to a cable or DSL modem with an Ethernet cable and set up the router to use that modem's Internet service instead of the mobile service.

To install the gateway with an Ethernet Internet connection:

- 1. Prepare your modem.
 - Unplug your modem's power.
 - If the modem has a battery backup, remove its batteries.
 - If your modem was already connected to another router, disconnect the cable between your modem and that router.
 - Make sure that your modem is turned off and is cabled only to the wall jack for your Internet service.
- 2. Connect your modem.
- 3. Plug in, then turn on your modem. (Replace the batteries if you removed them.)
- 4. Use an Ethernet cable to connect your modem to the Ethernet WAN port of your gateway.



- 5. Connect the power adapter to the gateway, and plug the power adapter into an outlet.
- 6. If no LEDs are lit, press the **Power On/Off** button on the rear panel of the gateway.
 - The **Power** ⁽¹⁾ LED lights.
 - When the gateway connects to the Internet, the Ethernet WAN LED lights.

Internet Connection Mode

The gateway can access the Internet through the mobile broadband network or through an Ethernet WAN connection with a cable modem or DSL modem. The WAN Ethernet connection can be through a corporate network, a cable modem, or a DSL modem. You can specify how the gateway manages Internet connections. The gateway has three Internet connection modes:

- Mobile. The gateway uses only the mobile broadband network for Internet access. This is the default setting.
- Dual WAN. The gateway uses Ethernet WAN as the primary Internet connection. The mobile broadband connection is used as a failover (backup) Internet connection if the Ethernet WAN connection is not working.
- Fixed-line. The gateway uses only the Ethernet WAN connection for Internet access.

Dual WAN Configuration

When the dual WAN setting is selected, the gateway monitors network connectivity over Ethernet. If the Ethernet WAN connectivity is disrupted, the gateway uses the mobile broadband connection. When the Ethernet WAN connection is restored, the gateway automatically switches back to using the Ethernet WAN connection.

You can configure the gateway to detect network connectivity over Ethernet in one of two ways:

- Periodically ping a specified IP address.
- Periodically send DNS requests to a DNS server.

You can also configure how many consecutive failures (DNS query or ping) determine a network connection failure and how often to query DNS server or ping. These settings affect the time it takes to fail over and fall back. NETGEAR recommends using at least three intervals to indicate a failure.

For example, if the ping method is selected, the gateway pings the specified IP address four times during each try. So if the interval is set as 10 and the retry is set as 3, the gateway sends 12 pings (4 pings in each try every 10 seconds).

For a failover scenario, if the Ethernet cable is disconnected, the gateway detects a physical connection failure within 15 seconds and does not wait for specified number of consecutive failures to switch to mobile Internet. During fallback, the gateway requires the physical connection and a successful ping or DNS query to determine Ethernet connection is operational.

Note: During failover, it may take a few seconds for LAN clients to resume Internet use.

Note: If you reboot your gateway, you must have the Ethernet WAN connection in place for this feature to work correctly. You cannot have your cable unplugged.

Set Up a Dual WAN Configuration

To configure WAN Ethernet with mobile backup on failure:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Network > Dual WAN Settings.

Internet Connection Mode	
Always use Mobile Broadband connection	Ŧ

5. Select the Use WAN Ethernet with Mobile Backup on Failure option in the list.

The screen adjusts.

Internet Connection Mode	
Use WAN Ethernet with Mobile Backup on Fa	ilure 🔻
Failover/Fallback Detection Method	
 DNS lookup using WAN DNS Server 	
Ping this IP address	
Failover Configuration	
Retry Interval	30 (In Seconds)
Failover After	3 (In Intervals)
Fallback Configuration	
Retry Interval	30 (In Seconds)
Fallback After	3 (In Intervals)
Cancel Submit	

- 6. Select a failover/fallback detection method:
 - DNS lookup using WAN DNS Server. This method is more indicative of network availability.

NOTE: Make sure that you confirm your assigned DNS server settings. Sometimes your upstream router assigns its own DNS server, which might not be a true indication of Internet connectivity. For this reason, the IP address method might be preferred in some configurations.

- Ping this IP address.
- 7. For Failover Configuration, enter the Retry Interval and the Failover After interval.

NETGEAR recommends using at least three intervals.

8. For the Fallback Configuration, enter the Retry Interval and the Fallback After interval.

NETGEAR recommends using at least three intervals.

9. Click Submit.

Set Up a Fixed Ethernet WAN Internet Connection

You can set up the gateway to use only an Ethernet WAN connection.

To configure a fixed WAN Ethernet connection:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Network > Dual WAN Settings.

Internet Connection Mode	
Always use Mobile Broadband connection	v

- 5. Select the Always use Fixedline Broadband connection option in the list.
- 6. Click **Submit**.

IPv6 Internet Connections

The gateway supports IPv6 Internet connections. You can use the Auto Config feature to let the gateway detect the IPv6 connection, or you can manually set up a DHCP or 6to4 tunnel connection.
Requirements for Entering IPv6 Addresses

IPv6 addresses are denoted by eight groups of hexadecimal quartets that are separated by colons. You can reduce any four-digit group of zeroes within an IPv6 address to a single zero or omit it. The following errors invalidate an IPv6 address:

- More than eight groups of hexadecimal quartets
- More than four hexadecimal characters in a quartet
- More than two colons in a row

Use Auto Config to Detect the IPv6 Internet Connection

To use Auto Config to configure an IPv6 Internet connection:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network > IPv6**.
- 5. In the Internet Connection Type list, select Auto Config.

IPv6	
Internet Connection Type	Auto Config
Auto Config	
DHCP User Class (if Required) DHCP Domain Name (if Requi	red)
Routers IPv6 Address on WAN Not Available	
LAN Setup	
Routers IPv6 Address on LAN	
Not Available	
IP Address Assignment	
O Use DHCP Server	
 Auto Config 	
Use This Interface ID	
Cancel	

- 6. The gateway automatically detects the information in the following fields:
 - Router's IPv6 Address on WAN. This field shows the IPv6 address that is acquired for the router's WAN (or Internet) interface. The number after the slash (/) is the length of the prefix, which is also indicated by the underline (_) under the IPv6 address. If no address is acquired, the field displays Not Available.
 - Router's IPv6 Address on LAN. This field shows the IPv6 address that is acquired for the router's LAN interface. The number after the slash (/) is the length of the prefix, which is also indicated by the underline (_) under the IPv6 address. If no address is acquired, the field displays Not Available.
- 7. (Optional) In the DHCP User Class (If Required) field, enter a host name.

Most people can leave this field blank, but if your ISP has given you a specific host name, enter it here.

8. (Optional) In the DHCP Domain Name (If Required) field, enter a domain name.

You can type the domain name of your IPv6 ISP. Do not enter the domain name for the IPv4 ISP here. For example, if your ISP's mail server is mail.xxx.yyy.zzz, type xxx.yyy.zzz as the domain name. If your ISP provided a domain name, type it in this field. For example, Earthlink Cable might require a host name of home, and Comcast sometimes supplies a domain name.

- 9. Select an IP Address Assignment radio button:
 - **Use DHCP Server**. This method passes more information to LAN devices but some IPv6 systems might not support the DHCv6 client function.
 - Auto Config. This is the default setting.

This setting specifies how the gateway assigns IPv6 addresses to the devices on your home network (the LAN).

10. (Optional) Select the **Use This Interface ID** check box and specify the interface ID to be used for the IPv6 address of the router's LAN interface.

If you do not specify an ID here, the gateway generates one automatically from its MAC address.

11. Click Submit.

Specify a DHCP IPv6 Internet Connection

You can manually specify a DHCP IPv6 Internet connection.

To specify a DHCP IPv6 Internet connection:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Network > IPv6.
- 5. In the Internet Connection Type list, select **DHCP**.

IPv6	
Internet Connection Type	DHCP
DHCP	
User Class (if Required)	
Domain Name(if Required)	
Routers IPv6 Address on WAM	4
Not Available	
LAN Setup	
Routers IPv6 Address on LAN	
Not Available	
IP Address Assignment	
O Use DHCP Server	
 Auto Config 	
Use This Interface ID	0 : 0 : 0 : 0
Cancel	t

- 6. The gateway automatically detects the information in the following fields:
 - Router's IPv6 Address on WAN. This field shows the IPv6 address that is acquired for the router's WAN (or Internet) interface. The number after the slash (/) is the length of the prefix, which is also indicated by the underline (_) under the IPv6 address. If no address is acquired, the field displays Not Available.
 - **Router's IPv6 Address on LAN**. This field shows the IPv6 address that is acquired for the router's LAN interface. The number after the slash (/) is the length of the

prefix, which is also indicated by the underline (_) under the IPv6 address. If no address is acquired, the field displays Not Available.

7. (Optional) In the DHCP User Class (If Required) field, enter a host name.

Most people can leave this field blank, but if your ISP has given you a specific host name, enter it here.

8. (Optional) In the DHCP Domain Name (If Required) field, enter a domain name.

You can type the domain name of your IPv6 ISP. Do not enter the domain name for the IPv4 ISP here. For example, if your ISP's mail server is mail.xxx.yyy.zzz, type xxx.yyy.zzz as the domain name. If your ISP provided a domain name, type it in this field. For example, Earthlink Cable might require a host name of home, and Comcast sometimes supplies a domain name.

- 9. Select an IP Address Assignment radio button:
 - Use DHCP Server. This method passes more information to LAN devices but some IPv6 systems might not support the DHCv6 client function.
 - Auto Config. This is the default setting.

This setting specifies how the gateway assigns IPv6 addresses to the devices on your home network (the LAN).

10. (Optional) Select the **Use This Interface ID** check box and specify the interface ID to be used for the IPv6 address of the router's LAN interface.

If you do not specify an ID here, the gateway generates one automatically from its MAC address.

11. Click Submit.

IPv6 6to4Tunnel

The remote relay router is the router to which your gateway creates a 6to4 tunnel. Make sure that the IPv4 Internet connection is working before you apply the 6to4 tunnel settings for the IPv6 connection.

To set up an IPv6 Internet connection by using a 6to4 tunnel:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

- 4. Click Settings > Network > IPv6.
- 5. In the Internet Connection Type list, select **6to4Tunnel**.

IPv6	
Internet Connection Type	6to4 Tunnel
Remote 6to4 Relay Rout	er
 Auto 	
 Static IP Address 	0 : 0 : 0 : 0
LAN Setup	
Routers IPv6 Address on LAN	ı
Not Available	
IP Address Assignment	
O Use DHCP Server	
 Auto Config 	
Use This Interface ID	
Cancel Submi	it

The gateway automatically detects the information in the Router's IPv6 Address on LAN field. This field shows the IPv6 address that is acquired for the router's LAN interface. The number after the slash (/) is the length of the prefix, which is also indicated by the underline (_) under the IPv6 address. If no address is acquired, the field displays Not Available.

- 6. Configure the remote 6to4 relay router settings by selecting one of the following radio buttons:
 - **Auto**. Your gateway uses any remote relay router that is available on the Internet. This is the default setting.
 - Static IP Address. Enter the static IPv4 address of the remote relay router. Your IPv6 ISP usually provides this address.
- 7. Select an IP Address Assignment radio button:
 - Use DHCP Server. This method passes more information to LAN devices but some IPv6 systems might not support the DHCv6 client function.
 - Auto Config. This is the default setting.

This setting specifies how the router assigns IPv6 addresses to the devices on your home network (the LAN).

8. (Optional) Select the **Use This Interface ID** check box and specify the interface ID to be used for the IPv6 address of the router's LAN interface.

If you do not specify an ID here, the gateway generates one automatically from its MAC address.

9. Click Submit.

Ethernet WAN Security Settings

The Security Settings page lets you configure advanced settings for the Ethernet WAN port.

To specify security settings:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Security > Security Settings.



- 5. Specify the following settings:
 - Disable Port Scan and DoS Protection. DoS protection protects your LAN against denial of service attacks such as Syn flood, Smurf Attack, Ping of Death, Teardrop Attack, UDP Flood, ARP Attack, Spoofing ICMP, Null Scan, and many others. This feature should be disabled only in special circumstances.
 - Respond to Ping on Internet Port. If you want the gateway to respond to a ping from the Internet, select this check box. Use this feature only as a diagnostic tool because it allows your gateway to be discovered. Do not select this check box unless you have a specific reason.

- Disable IGMP Proxy. IGMP proxying allows a computer on the local area network (LAN) to receive the multicast traffic it is interested in from the Internet. If you do not need this feature, you can select this check box to disable it.
- 6. Click **Submit**.

Software and Reset

Export and Import Settings

You can save your gateway settings so that you can make changes to your configuration and, if necessary, restore the original settings.

Export Settings

Settings include configuration information for your gateway and its Wi-Fi networks.

You can, for example, export (save) the current configuration, then make some changes and test them. You can then import (restore) the saved configuration.

To export the settings to a text file:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > General > Software and Reset.
- 5. In the Download / Backup Settings section, click **Save as**.
- 6. Save the file to an appropriate location in your computer. By default, the file (export.cfg) is saved to your Downloads folder.

Import Settings

This feature lets you restore a saved configuration.

NOTE: For best results, restore settings from a file backed up using the same version of firmware.

To import settings:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)

- 4. Click Settings > General > Software and Reset.
- 5. In the Restore Settings section, click the **Choose File** button.
- 6. Navigate to the folder where your previously saved configuration file is stored.
- 7. Click **Open** to restore your device with the imported settings.

Note: Your device may reset, and you may need to reconnect to Wi-Fi and the Internet. (See How Do I Connect to Wi-Fi? and Launching Your Network Connection.)

Update the Software and Firmware

From time to time, updates may become available for your gateway, and your gateway will receive an alert. You can also check for new updates manually.

The updates may improve performance and add or modify features. The updates may include the following:

- Firmware
- Software
- Other files

Download Software Updates

You can download software updates from your device or from the Web page.

When a software update becomes available:

- If your device is connected to Sprint's LTE network, the update downloads automatically and an Alert message appears on the home page. Click **Install now** to install the update. Your device reboots automatically to use the new software. Any devices that were previously connected will have to be reconnected.
- If your device is connected to Sprint's 3G network, an Alert message appears on the home page. Click **Download now** to download and install the software update. Your device reboots automatically to use the new software. Any devices that were previously connected will have to be reconnected.

You can also check for updates manually without having received an alert.

There are two ways to get the software update. You can get it from the Alert message, or from the Software and Reset page.

To get the update from the Alert:

1. On a computer or wireless device that is connected to your gateway, launch a Web browser.

- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. In the Alert message for the available update, click **Install Now**.
- 5. Follow the onscreen instructions.

To get the update from the Software and Reset page:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > General > Software and Reset**.
- 5. Click **Check for update**. If an update is available, an **Install Now** button appears.
- 6. Click Install Now.
- 7. Click Continue.

Upgrade Firmware from a File

You can download firmware upgrades from Sprint, if available. The file name is MobileApp.upg.

To perform a manual software update:

- 1. Download the MobileApp.upg file from sprint.com/downloads.
- 2. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 3. In the address or URL field of your browser, type http://myrouter.
- 4. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 5. Click Settings > General > Software and Reset.
- 6. In the Manual Software Update pane, click the **Upload** button.
- 7. Browse and select the file.
- 8. Click the **Upload** button.

The new software is installed on the gateway.

Reset Your Gateway

In some cases, you may want or need to clear your account information to use your gateway with another account, reset most settings (except for your account and network activation), or reset your device to its factory default settings.

You can clear these settings from your device's Reset page, or from the gateway's Software and Reset page.

Clear Account Details Only

If you want to use your device with another account, you need to clear your current account.

You can clear these settings from your gateway's Reset page, or from the Software and Reset page.

Note: All connected devices will be disconnected and your device will reboot automatically. You will have to activate your device with your new account before they can reconnect.

To clear account details:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > General > Software and Reset.
- 5. Below Clear Programming, click Reset.
- 6. Click Begin Reset.

Reset Device Settings Only

If you want to reset your device to its default behavior, but don't want to change your account or network activation, you need to reset your device settings.

You can reset these settings from your gateway's Reset page or from the Software and Reset page.

Note: All connected devices will be disconnected and your device will reboot automatically. After the reset finishes, they can reconnect.

To reset device settings:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > General > Software and Reset.
- 5. Below Settings Reset, click Reset.
- 6. Click Begin Reset.

Reset the Gateway to Factory Default Settings

In some cases you will need to reset your device's software to its factory default settings.

WARNING: If you reset the software to default settings, you must go through the device setup, as if you've just purchased your device. (See Starting Your Device for the First Time.)

You'll need to reset the software to default settings if:

- You've forgotten the administrator password.
- You've changed the DHCP settings such that your device is inoperable. (For example, there's no communication with your device.)

You can reset your device to factory settings from the gateway's Software and Reset page.

Note: All connected devices will be disconnected and your device will reboot automatically.

To reset the gateway to its factory settings:

Note: You need Sprint's assistance to do a factory reset of your device. Contact Sprint Customer Service to obtain an SPC code that you will need to enter to perform the reset.

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > General > Software and Reset**.
- 5. Below Factory Reset, click Reset.

- 6. Enter the SPC code provided by Sprint, then click **Submit**.
- 7. Click Begin Reset.

Set Up a Virtual Private Network (VPN)

Learn about and set up virtual private network (VPN) client-to-gateway and site-to-site tunnels.

A VPN is a network that uses primarily public telecommunication infrastructure, such as the Internet, to provide remote offices or traveling users an access to a central organizational network. You need networking knowledge to implement these features.

VPN Overview

Learn about VPN client-to-gateway VPN tunnels and site-to-site VPN tunnels, which use IPSec IKEv1 (PSK/XAuth).

• **Remote-client-to-gateway VPN**. The gateway must be connected to the public network either through an LTE connection or WAN uplink. Remote users on the Internet can create an IPSec tunnel from their computers to the gateway using the WAN IP address of the gateway. Once connected, the remote users can access the LAN-side resources of the gateway.

The gateway supports the following clients:

- NETGEAR ProSAFE VPN Client VPNG01L/VPNG05L Professional Software Version 5.14.003, available here: http://kb.netgear.com/app/answers/detail/a_id/20316
- IPSecuritas VPN client Version 3.4 for MAC OS platforms from Lobotomo Software, available here: http://www.lobotomo.com/products/IPSecuritas/
- **Site-to-site VPN**. You can establish an IPSec tunnel between two gateways. The LANside users from either gateway can access the other through the site-to-site tunnel. When you are configuring the site-to-site tunnel, each gateway must have a unique IP address range for its LAN side.
- VPN Passthrough. Allow IPSec tunneling through the gateway. This feature enables gateway NAT clients to connect using their own VPN software, terminating only on their device. The VPN tunnel "passes through" the gateway NAT. This feature is enabled by default.
- **IP Passthrough**. This feature opens a direct connection to one client where the network IP address is assigned to that client. This is not VPN itself but can be used to facilitate VPN setup from the assigned IP passthrough client. The following options are supported: MAC address, name, Ethernet ports 1 through 4. Only one option at a time is allowed.

Note: This is not a VPN by itself, but can be used to facilitate VPN setup from other devices.

IPsec Parameters

IPsec encryption places a heavy load on the gateway CPU. For this reason, the gateway supports only up to four clients at the same time. If you are sending a large amount of traffic over these links, you may need to use fewer tunnels.

The IPsec parameters are as follows:

- IKE
 - IKE Phase I and II encryption options are 3DES, AES-128, and AES-256. (AES-128 is the default setting.)
 - IKE Phase I and II authentication options are MD5, SHA1, and SHA256. (SHA1 is the default setting.)
 - IKE Phase I and II key group options are DH1 (768), DH2 (1024), DH5 (1536), and DH14 (2048). (DH2 is the default setting.)
- Perfect Forwarding Secrecy (PFS) can be enabled or disabled. (It is enabled by default.)
- NAT traversal is automatically enabled using NAT-D (NAT-Discovery) when establishing IPsec tunnels. (It is disabled by default.)
- Multiple subnets. You can specify multiple subnets and masks for each tunnel for the local and remote networks.

Set Up a Remote Client-to-Gateway VPN

To set up a remote client-to-gateway VPN, you must complete the following tasks:

- 1. Configure remote clients in the gateway.
- 2. Use VPN client software to configure the remote clients.

Configure Remote Clients in the Gateway

Specify the VPN settings and add VPN users.

Note: The client-to-gateway VPN requires client configuration to be 3DES, SHA1, DH2 and PFS disabled.

To configure a remote client in the gateway:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.

- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Manage VPN > Client-to-Gateway Configuration**.

Remote Client to GW VPN Configuration			
Pre-Shared key(PSK)		Edit	
VPN remote virtual IP			
Subnet Mask			
	Save		
VPN Users			
User Name	User Password		Actions
]	0

5. Click the 🖋 (Edit) button and enter a pre-shared key, and then click Save.

Note: The key is an alphanumeric string with a maximum length of 32 characters.

6. Fill in the VPN remote virtual IP field and the Subnet Mask field and click the **Save** button.

Note: This is the IP address range that the remote clients will receive when establishing a VPN tunnel.

 In the VPN Users section, fill in the User Name field and the User Password field and click the O (Add) button.

The new VPN user displays on the Manage VPN Connection screen.

To edit a VPN user:

- 1. Select the VPN user from the VPN Users list.
- 2. Click the **Edit** button.
- 3. Type the changes for the user name and password.
- 4. Click the **Save** button.

The changes are saved.

To delete a VPN user:

1. Select the VPN user from the VPN Users list.

2. Click the **Delete** button.

The user is removed from the VPN Users list.

Enable the Client-to-Gateway VPN

Enabling the VPN activates the remote client-to-gateway VPN server feature on the gateway. If you disable the VPN, your settings are retained.

To enable the VPN:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Manage VPN > VPN Control**.
- 5. Select the VPN Status **Enable** radio button.
- 6. Click the **Save** button.

The VPN connection is activated.

To disable the VPN:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Manage VPN > VPN Control.
- 5. Select the VPN Status **Disable** radio button.
- 6. Click the **Save** button.

The VPN connection is disabled, but your VPN settings are retained.

Configure a Windows Computer as a Remote Client

This example describes how to use NETGEAR ProSAFE VPN client software to set up a VPN client for the gateway.

To use NETGEAR ProSAFE to set up a VPN client:

1. Download the trial version of NETGEAR ProSAFE VPN client (VPNG01L/VPNG05L Professional Software Version 5.14.003) and install it on the Windows computer.

NOTE: This software is available here: http://kb.netgear.com/app/answers/detail/a_id/20316.

- 2. Launch the VPN client software.
- 3. In the left pane, select **Global Parameters**.
- 4. Specify the following settings:
 - Lifetime (sec):
 - Authentication (IKE): Enter **3600**, **1800**, **28800**.
 - Encryption (IPSec): Enter **1200**, **1200**, **28800**.
 - Dead Peer Detection (DPD):
 - Check interval: Enter 30.
 - Max. number of retries: Enter 5.
 - Delay between retries: Enter 15.
 - Miscellaneous:
 - Retransmissions: Enter 5.
 - X-Auth timeout: Enter 60.
- 5. Enter the gateway settings:
 - Click **Configuration > Wizard**.
 - Select A router or a VPN gateway.
 - Enter the IP or DNS address of the gateway to connect to.
 - Enter the pre-shared key.
 - Enter the IP private (internal) address of the remote network. (This is the router LAN IP you are connecting to, for example 192.168.0.0.)
 - Click Next.
 - Review the settings are correct and then click **Finish**.
- 6. In the left pane, select **Gateway**, and click the **Authentication** tab.

- 7. In the Authentication screen, specify these settings:
 - In the IKE section, specify the following:
 - Encryption: Select **3DES**.
 - Authentication: **MD5**.
 - Key Group: Select DH2 (1024).
 - Click the **Advanced** tab under the Gateway heading and specify the following:
 - Select Mode Config.
 - Deselect Aggressive Mode.
 - Select X-Auth Popup.
- 8. Under the Gateway heading, select **Tunnel**, and click the **IPSec** tab.
- 9. Specify these settings on the IPSec screen:

Note: The gateway and the client's network must have different subnet ranges that do not overlap.

- In the ESP section, specify the following:
 - Encryption. Select **3DES**.
 - Authentication. Select SHA-1.
 - Mode. Select **Tunnel**.
- Deselect **PFS** to disable it.
- 10. Leave the rest of the tabs with their default values.
- 11. Click the **Apply** button.
- 12. Click the **Save** button.
- 13. To initiate the VPN connection to the gateway, right-click the tunnel on the left pane and select **Open Tunnel**.

When the connection is initiated, the icon on the Tunnel menu on the left pane turns green to indicate that the tunnel is established.

The remote client device can access the LAN-side resources of the gateway including access to the gateway web management interface.

ShrewSoft Client Configuration

The following examples show screen settings for ShrewSoft Client configuration:

VPN Site C	onfiguration	×	
General	Client Name	Resolution Authenticatic	
Remote Host Host Name or IP Address Port			
Auto	Configuration	ike config push 💌	
	ter Mode	and assigned address 🔹 💌	
MTU 138	30 Address	Obtain Automatically	
	Netmask		
	Save Cancel		
		Save Cancel	
		Save Cancel	
/PN Site Co	onfiguration		
/PN Site Co		Save Cancel	
General			
General Firewa	Client Name I		
General Firewa NAT 1	Client Name I		
General Firewa NAT 1 NAT 1	Client Name I Il Options Traversal	Resolution Authenticatic	
General Firewa NAT 1 NAT 1 Keep-	Client Name I II Options Fraversal Fraversal Port	Resolution Authenticatic	
General Firewa NAT 1 NAT 1 Keep- IKE Fr	Client Name I II Options Fraversal Fraversal Port alive packet rate	Resolution Authenticatic · · · enable · · 4500 300 Secs	
General Firewa NAT 1 NAT 1 Keep- IKE Fr Maxim	Client Name I II Options Fraversal Fraversal Port alive packet rate ragmentation	Resolution Authenticatic	
General Firewa NAT 1 NAT 1 Keep- IKE Fr Maxim	Client Name I II Options Fraversal Fraversal Port alive packet rate ragmentation num packet size	Resolution Authenticatic	
General Firewa NAT 1 NAT 1 Keep- IKE Fr Maxim Other (En	Client Name I Il Options Traversal Port alive packet rate ragmentation num packet size Options hable Dead Peer hable ISAKMP Fa	Resolution Authenticatic () enable 4500 e 300 Secs enable 540 Bytes Detection ilure Notifications	
General Firewa NAT 1 NAT 1 Keep- IKE Fr Maxim Other (En	Client Name I II Options Traversal Port alive packet rate ragmentation num packet size Options table Dead Peer	Resolution Authenticatic () enable 4500 e 300 Secs enable 540 Bytes Detection ilure Notifications	
General Firewa NAT 1 NAT 1 Keep- IKE Fr Maxim Other (En	Client Name I Il Options Traversal Port alive packet rate ragmentation num packet size Options hable Dead Peer hable ISAKMP Fa	Resolution Authenticatic () enable 4500 e 300 Secs enable 540 Bytes Detection ilure Notifications	

[VPN Site Configuration
	Authentication Phase 1 Phase 2 Policy
	Authentication Method Mutual PSK + XAuth Local Identity Remote Identity Credentials Identification Type IP Address Address String Use a discovered local host address
	Save Cancel

1	/PN Site Configuration		
	Name Resolution Authentication Phase 1 Phase		
	Proposal Parameters		
	Exchange Type main 💌		
	DH Exchange auto 🔹		
	Cipher Algorithm 3des 🗸		
	Cipher Key Length 🚽 Bits		
	Hash Algorithm sha1 🔹		
	Key Life Time limit 86400 Secs		
	Key Life Data limit 0 Kbytes		
	Enable Check Point Compatible Vendor ID		
	Save Cancel		

VPN Site Configuration	×
Authentication Phase 1	Phase 2 Policy
Proposal Parameters	
Transform Algorithm	esp-3des 👻
Transform Key Length	The Bits
HMAC Algorithm	sha1 🔻
PFS Exchange	disabled 🔻
Compress Algorithm	disabled 🔻
Key Life Time limit	3600 Secs
Key Life Data limit	0 Kbytes
[Save Cancel



ShrewSoft Client Configuration Content

n:version:4

n:network-ike-port:500

n:network-mtu-size:1380

n:client-addr-auto:1

n:network-natt-port:4500

n:network-natt-rate:300

n:network-frag-size:540 n:network-dpd-enable:0 n:client-banner-enable:0 n:network-notify-enable:1 n:client-dns-used:1 n:client-dns-auto:1 n:client-dns-suffix-auto:1 n:client-splitdns-used:1 n:client-splitdns-auto:1 n:client-wins-used:1 n:client-wins-auto:1 n:phase1-dhgroup:0 n:phase1-life-secs:86400 n:phase1-life-kbytes:0 n:vendor-chkpt-enable:0 n:phase2-life-secs:3600 n:phase2-life-kbytes:0 n:policy-nailed:0 n:policy-list-auto:1 s:network-host:10.0.0.40 s:client-auto-mode:push s:client-iface:virtual s:network-natt-mode:enable s:network-frag-mode:enable s:auth-method:mutual-psk-xauth s:ident-client-type:address

s:ident-server-type:address

b:auth-mutual-psk:MTIzNDU2Nzg=

s:phase1-exchange:main

s:phase1-cipher:3des

s:phase1-hash:sha1

s:phase2-transform:esp-3des

s:phase2-hmac:sha1

s:ipcomp-transform:disabled

n:phase2-pfsgroup:-1

s:policy-level:auto

s:client-saved-username:admin

Set Up a Site-to-Site VPN

This example describes how to set up a site-to-site VPN tunnel between two gateways at different locations. The LAN subnets of these two gateways must each be in a unique range.

Note: If your remote gateway is behind a NAT firewall, make sure that each side of the tunnel uses both a local identity and a remote identity. The local identity must match the remote identity on the other side of the tunnel, and vice versa. You must initiate the VPN tunnel from the side that is behind the NAT firewall.

To do this, you must complete the following tasks:

- 1. Make sure that each gateway uses a different subnet range and that the ranges do not overlap.
- 2. Specify the VPN connection for each gateway.
- 3. Enable the VPN on each gateway.

Add an IKE Policy

You must add an IKE policy before you configure the site-to-site VPN connection.

You can create up to ten IKE policies. An IKE policy that is in use (assigned to the site-to-site configuration) cannot be deleted. You can create up to eight site-to-site VPN configurations, but only four can be enabled at a time.

To add an IKE policy:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Manage VPN > Site-to-Site Configuration.
- 5. In the IKE Policy section, click the **Add** button.

Add IKE Policy		×
IKE Policy Name		
Local ID		
Remote ID		
IKE Phase 1		
Exchange Mode	Main v	
Key Lifetime	28800 Secs	
Encryption AES128(Default)	Authentication SHA-1(Default) Key Group DH2(1024)(Default)	¥
IKE Phase 2		
Perfect Forwarding Secrecy	V	
Key Lifetime	3600 Secs	
Encryption AES128(Default)	▼ Authentication SHA-1(Default) ▼ Key Group DH2(1024)(Default)	•
Cancel Submit		

- 6. In the IKE Policy Name field, enter a unique name for the policy.
- 7. In the Local ID field, enter a user-fully qualified domain name (user@mydomain.com) or a fully qualified domain name (www.mydomain.com).

Note: If the remote side of the tunnel is configured to expect an identifier, then both must match in order for the negotiation to succeed. If NAT-T is being used, a single word (instead of an address) can be used.

Note: If the Local ID field is blank, the gateway uses its own WAN IP address.

8. In the Remote ID field, enter an IP address, a user-fully qualified domain name (user@mydomain.com) or a fully qualified domain name (www.mydomain.com).

Note: If the remote side of the tunnel is configured to expect an identifier, then both must match in order for the negotiation to succeed. If NAT-T is being used, a single word (instead of an address) can be used. If the remote gateway is behind a NAT firewall then Remote ID and Local ID cannot be blank.

Note: If the Remote ID field is blank, the gateway uses the IP address of the remote gateway.

9. In the Exchange Mode field, select **Main** or **Aggressive**.

In Main mode, IKE separates the key information from the identities, allowing for the identities of peers to be secure at the expense of extra packet exchanges. In Aggressive mode information is packed in fewer packets.

Note: Aggressive mode is valid only for IKEv1.

10. In the IKE Phase 1 Key Lifetime field, enter the lifetime of the generated keys of Phase 1 of the IPSec negotiation from IKE.

After the time has expired, IKE renegotiates a new set of Phase 1 keys. The default value is 28800. The minimum and maximum values are 3600 and 604800.

11. Select the Phase 1 encryption.

Each IKE exchange uses one encryption algorithm that can be 3DES, AES128, or AES256. The default value is AES128.

12. Select the Phase 1 authentication.

Each IKE exchange uses one hash algorithm. MD5 and SHA-1 are supported. The default value is SHA1.

13. Select the key Phase 1 key group (DH group).

Each IKE exchange uses one DH group to make a secure exchange. Supported DH groups are: DH1 (768), DH2 (1024), DH5 (1536), and DH14 (2048). The default value is DH2 (1024).

14. To use perfect forward secrecy, leave the **Perfect Forwarding Secrecy** check box selected.

When perfect forward secrecy is selected, IKE generates a new set of keys in Phase 2 rather than using the same keys generated in Phase 1. The new keys are exchanged in an encrypted session. Enabling this feature affords the policy greater security.

15. In the IKE Phase2 Key Lifetime field, enter the lifetime of the generated keys of Phase 2 of the IPSec negotiation from IKE.

After the time has expired, IKE renegotiates a new set of Phase 1 keys. The default value is 3600. The minimum and maximum values are 3600 and 604800.

16. Select the Phase 2 encryption.

Each IKE exchange uses one encryption algorithm that can be 3DES, AES128 or AES256. The default value is AES128.

17. Select the Phase 2 authentication.

Each IKE exchange uses one hash algorithm. MD5 and SHA-1 are supported. The default value is SHA1.

18. Select the key Phase 2 key group (DH group).

Each IKE exchange uses one DH group to make a secure exchange. Supported DH groups are: DH1 (768), DH2 (1024), DH5 (1536), and DH14 (2048). The default value is DH2 (1024).

19. Click **Submit**.

Edit an IKE Policy

You can edit IKE policies. The following rules apply.

- You can't edit the IKE policy if it is in use by VPN site-to-site configuration.
- You can't edit the IKE policy name. To configure different IKE policy name, you must delete the policy and recreate it with different name.

To edit an IKE policy:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Manage VPN > Site-to-Site Configuration.

The IKE Policy section shows a list of IKE policies.

5. Click the **Edit** icon in the Action column for the policy.

The Edit IKE Policy screen displays.

- 6. Change the settings.
- 7. Click **Submit**.

Delete an IKE Policy

You can delete IKE policies. You can't delete the IKE policy if it is in use by VPN site-to-site configuration.

To delete an IKE policy:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Manage VPN > Site-to-Site Configuration.

The IKE Policy section shows a list of IKE policies.

- 5. Click the **Delete** icon in the Action column for the policy.
- 6. Click Yes.

Specify the Site-to-Site VPN Connection

You must create an IKE policy before you can specify site-to-site configuration. You can configure up to eight site-to-site VPN configurations.

To specify the VPN connection information:

- 1. On the first gateway, click **Settings > Manage VPN > Site-to-Site Configuration**.
- 2. In the Site-to-Site VPN Configuration Details section, click the **Add** button.

Add VPN Configuration Details		
Tunnel Enabled		
Site Name		
Responder Mode		
Remote Gateway		
Authentication Mode	Pre-Shared Key	•
Pre-Shared Key		
Mode	Tunnel	•
IKE Policy Name		•
Dead Peer Detected		
Enabled		
Requested Frequency	30 Secs	
Maximum Requests	5	
Cancel Next		

- 3. To enable the tunnel, select the Tunnel Enabled check box.
- 4. In the Site Name field, enter a unique name for VPN.

Note: If the remote gateway is behind a NAT firewall then the name of the tunnel must be anonymous.

5. If you want to use only responder mode, select the Responder Mode check box.

By default, this check box is not selected so that the VPN connection can work as the initiator or responder. In responder mode, the connection has to be initiated by other end.

Note: If the remote gateway is behind a NAT firewall, enable the responder mode. The tunnel must be initiated from the remote gateway.

6. In the Remote Gateway field, enter the remote gateway's IP address or fully qualified domain name (my.domain.com).

Note: Dynamic DNS can be useful if the WAN IP address is expected to change if the remote gateway supports Dynamic DNS.

- 7. In the Authentication Mode list, leave **Pre-Shared Key** selected.
- 8. Enter the pre-shared key.
- 9. Select a mode.

Tunnel mode protects traffic between different networks when traffic must pass through an intermediate, untrusted network. Transport mode is used for end-to-end communications (for example, for communications between a client and a server). The default setting is Tunnel mode.

10. In the IKE Policy Name list, select an IKE policy. (See Add an IKE Policy.)

11. If you want to use dead peer detection (DPD), complete the relevant fields:

- Select the **Enabled** check box.
- Enter a value from 10 to 30 seconds in the Requested Frequency field. The default value is 30 seconds.
- Enter a value from 3 to 5 in the Maximum Requests field. This is the maximum number of requests to send at the selected time interval before the tunnel is considered dead. The default value is 5.
- 12. Click Next.

Add Local Network		×
Network Address Subnet Mask	192 . 168 . 0 . 0 255 . 255 . 255 . 0	
Cancel Submit		

You can add up to eight different local network or remote networks. This network information is exchanged between the gateways so that the correct routing is implemented. This defines the local network subnet that the remote devices will have access to.

NOTE: You can add these additional networks after completing this wizard by editing the configuration.

13. Enter local network address and local network subnet mask.

Note: The local network IP address must be different from the remote network IP address. You can edit or delete a local network any time.

14. Click Next.

The Add Remote Network screen displays.

15. Enter the network address and subnet mask of the remote network subnet.

This is required only if the remote gateway is not capable of exchanging its network subnet or if you want to add an additional remote subnet in the routing. This defines the remote network subnet that the local devices will have access to.

Note: The local network IP address must be different from the remote network IP address. You can edit or delete a remote network any time.

16. Click Next.

The main VPN configuration displays. When a tunnel is enabled, it displays in green.

You can change the VPN site-to-site settings. The following guidelines apply:

- You can edit or delete site-to-site configuration. Click the **Edit** button to edit a specific configuration. To delete the configuration, click the **Delete** button.
- To add or delete a local or remote network, first disable the tunnel, then click the **Add** or **Delete** button under Local or Remote Network.
- You cannot edit the site name. In order to change the site name, you must delete the site-to-site configuration and reconfigure it with different name.

Configure the Global VPN Settings for Site-to-Site VPNs

Below listed configuration applies to all site-to-site configurations.

To configure global VPN settings:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Settings > Manage VPN > Global Settings.

Global VPN Settings	
IKE/ISAKMP Port	500
IKE/ISAKMP NAT-T Port	4500
NAT-T KeepAlive Interval	20 Secs
Tunnel Connect Retry	30 Secs

- 5. Enter the Internet Key Exchange / Internet Security Association and Key Management Protocol (IKE/ISAKMP) port. The default setting is 500, which is a standard VPN port.
- Enter the Internet Key Exchange / Internet Security Association and Key Management Protocol network address translation traversal (IKE/ISAKMP NAT-T) port. The default is 4500, which is a standard VPN NAT-T port.
- 7. Enter a value from 0 to 3600 seconds in the NAT-T Keep Alive Interval field. This setting defines how often keep alive will be sent to maintain the NAT traversal on other end. The default is 20 seconds.
- 8. Enter a value from 10 to 255 seconds in the Tunnel Connect Retry field. This setting defines the interval between connection retries. This is applicable for connections that are configured for initiator and responder, not as responder only. The default setting is 30 seconds.

Enable the Site-to-Site VPN

Enabling the VPN activates the VPN server feature on the gateway.

To enable the VPN:

- 1. On the first gateway, select **Settings > Manage VPN > VPN Control**.
- 2. Select the VPN Status **Enable** radio button.
- 3. Click the **Save** button. The VPN connection is activated.
- 4. On the second gateway, select **Settings > Manage VPN > Global Settings**.
- 5. Select the VPN Status **Enable** radio button.
- 6. Click the **Save** button. The VPN connection is activated.

The IPSec VPN tunnel is established between the two gateways. The LAN-side resources from one gateway can access the other through this tunnel.

To disable the VPN:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click Settings > Manage VPN > VPN Control.
- 5. Select the VPN Status **Disable** radio button.
- 6. Click the **Save** button.

The VPN connection is disabled, but your VPN settings are retained.

View the VPN Status

You can view the status of VPN tunnels that are currently running.

To view the VPN status:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Manage VPN > Status**.

The VPN Status screen provides details of any tunnel that is running. The following information is displayed:

- Connection Name: Name of the VPN connection.
- **Device IP**: IP address of the router or gateway that the VPN tunnel is connected to.
- Virtual IP: Remote network subnet.
- **Remote Device IP**: IP address of the remote device.
- Bytes Transferred: Number of bytes transferred over the tunnel.
- **Connection Time**: Amount of time that the tunnel was connected.
- Connection Status: Status of the tunnel (for example, ESTABLISHED).

To disconnect an active tunnel, click the **Disconnect** button in the Action column.

Manage Certificates for Site-to-Site VPN

You can manage (enter new, view, or delete) CA certificates, private keys, and End Entity certificates.

The VPN certificate process involves three steps:

- 1. Generate the CA certificate, private key, and End Entity certificate.
- 2. Input the CA certificate, private key, and End Entity certificate into the gateway (manage certificates).
- 3. Assign a certificate to the site-to-site tunnel.

VPN certificates and private key are created externally (for example, on a Linux machine). The process for generating private key and End Entity certificates is not specified here.

To manage End Entity certificates or CA certificates:

1. Select Settings > Manage VPN > Certificates.

A list of existing certificates and public keys displays.

Certificates	Actions	
Test1.pem	View Delete	
Test2.pem	View Delete	
Test3.pem	View Delete	
BB184.pem	View Delete	
	Add	
Certificates	Actions	
caRoot.pem	View Delete	
Root2.pem	View Delete	
	Add	
List of Public Keys	Add	
List of Public Keys	Add	
Keys	Actions	

2. To view the contents of the certificate, click the corresponding **View** button.

The certificate details display.

3. To add a CA certificate or End Entity certificate, click the respective **Add** button.

The Add Certificate or Add CA Certificate screen displays.

Add CA Certific	cate	×
Name		
Certificate		
	BEGIN CA CERTIFICATE (insert ca certificate here) END CERTIFICATE	
Cancel	Submit	

- 4. Enter a unique name for this certificate.
- 5. Cut and paste the certificate content and private key in their respective fields.

Name	test0
Certificate	
	BEGIN CERTIFICATE MIIDUDCCAjiqAwIBAgIJAKuy+11CHuEgMA0GCSqGSIb3DQEBBQUAMDUXEZARBgNV BAYTCjMyNDIyYXNhc2QxDjAMBgNVBAoTBTIzNDIOMQ4wDAYDVQQDEwUyMzQyNDAe Fw0xNDASMjMwMzIzMjFFW0xNzA3MjIwMzIzMjFAMDUXEZARBgNVBAYTCjMyNDIy YXNhc2QxDjAMBgNVBAoTBTIzNDIOMQ4wDAYDVQQDEwUyMzQyNDCCASIwDQYJKoZI hrcNAQEBBQADggEPADCCAQcGggEBAX219Ffa6w66IxDcHVEqNNpNu445E61m1Uo moQxag5SNUjub32SmIP8ugBr3qnaxZRGG3kE1/pztsMh19xr60xCDNKx/BCS 1Fw11N+5Ury9/w7PqitUWihTehk8ZkP/6H33rb6+LN/p7DmIXe6JPLUHGE9gTAm/ S9R/IN+5D3UCt3YDrULwwCJ7Mj5WgX+jmgYKufX80UTNdia5nWLgek5BSM+CG7vP NrWbLNMMSR6+IDwbHx6jDClpvyg77vE7CdDIX4VIKG2yek9+N1uwCIWKFW1Zc jKhHoMFhGfbp1FzwAPZDZF39XywVhKxS210A7LSEjnXDaR06c8ECAwEAAANJMGEw DwYDVR0TAQH/BAUWAWEB/ZAOBgNVHQ8BAf8EEAMCAQYwHQYDVR00BBYEFCq2f76u fsiszVLdCGAADDPU/fpkMB8GA1UdIwQYMBAAFCq2f76ufsiszVLdCGAADDPU/fpk
Private Key	
	BEGIN RSA PRIVATE KEY MIIEowIAAOIBAQCtovRX2usOuiMQ3B1RKjTaTbkeOXhOtZtVKJqEMWoOUjVLo7rG 92Upoj/LoAa96p2scORhnd5BJfv6c7bFodfca+jsQg2SfwQkpRcIpTfuVK8vf80 z6orVMI0J3c2FGZD/+h9962+vizf6ew51F3uiTy1BxhPYEwJv0vUfxzftv91Ard2 A71C8MAiezIOloF/o5oGJLn8fKFEZXYmuZ114HpEgbDPghu7zza1m4V4TN0eviA8 Gx8eowwpab8oG07xE+wnQ0yuFYpFhtsnpPPjdbsAiFpBVuyZXIyoR6bBYRn26dRc 8AD2Q2Rd/V8sFYSsUttaA0y0hI51w2kdOnPBAgMBAAECggEAA5T51Pdi1psp8TQM 368sQaxwVVHI0eLZp2vyD64pzYRIW6EN/kir91ewRjg4kqfvacAsQYtyIhF5wb19 Q44ssKqwquR7jyVR2c6g5ju1TMAFRd1mY1kVmutySK5h85+EbF/GCyxygCVU8RE uSHUL1KWQT04XcEBwI5E67Hh073TFh0E9ISGJ17YvDGojs0yFsqvBdD9BeRdkVLM QwhTmuX41PV350f12syOMn#ULH09vVnYDh/qTFigQyn5MoVSvIKW0jDSmczvReh cRIIR2qehkqvqWy2VVCfzpxg5hq4vJmrXUl11bn5FWxp0mrPEPjx8udYm+g0wvU0 wvCowKBgQDb5A0K4HLLeI3bhFtBpdSeSYt1DcmspQTSFFfKxh7bitv337n59yuQ

NOTE: To obtain the public key from Cisco, send the following IOS command: **cisco(config)# crypto key export rsa <Label> pem terminal des <passphrase>.**

When the certificate and private key are added, the List of Certificates window updates its list.

6. To delete a certificate, click the **Delete** button.

Authentication Mode

The gateway supports both the pre-shared key and certificate methods to authenticate.

To specify authentication mode:

1. Click the **Add** button for site-to-site configuration or click the **Edit** button if the configuration already exists.

The Edit VPN Configuration Details screen displays.

Edit VPN Configuration D	etails	×
Tunnel Enabled		
Site Name	Site2Site2	
Responder Mode		
Remote Gateway	10.200.2.13	
Authentication Mode	Pre-Shared Key	
Pre-Shared Key	Pre-Shared Key	
Mode	Certificates	
IKE Policy Name	IKEProfile2	
Dead Peer Detected		
Enabled		
Requested Frequency	30 Secs	
Maximum Requests	5	
Cancel Submit	t	

2. In the Authentication Mode list, select **Certificate**.

The Pre-Shared key entry in the list changes to Site to Site Certificate.

- 3. Specify the certificate or private key name for the certificate.
- 4. Click the **Submit** button.
Frequently Asked Questions

Find out answers to questions you may have.

How Can I Tell I'm Connected to 3G or LTE?

When you log in to the gateway (http://myrouter), the network type icon (3G or LTE) appears in the Status section on the left side of the page, and the connection status is shown on the Network > Status Details Page.

How Do I Connect to Wi-Fi?

You may have to manually connect to Wi-Fi after certain events — for example, as part of the initial device setup, or after a software update.

Tip: The Wi-Fi network name and password are displayed on the label of the gateway.

Tip: Alternatively, you can use WPS to connect a device to the gateway, if your device supports WPS. (See Connecting Through WPS.)

To connect to Wi-Fi:

- 1. Do one of the following, depending on your operating system.
 - Windows 7: Right-click the Wi-Fi icon 📶 in the system tray.
 - Windows Vista: Click Control Panel > Network and Internet > Network and Sharing Center > Connect to a network.
 - Windows XP: Click Control Panel > Network Connections > Wireless Network IConnections > View available wireless networks.
 - Mac: Click the AirPort icon
 (in the upper right corner of your screen).
 - Linux: Please see the user documentation of the Linux distribution.
 - Other operating systems: Please see the user documentation for your operating system or computer.
- 2. Select one of the Wi-Fi networks provided by the gateway and connect to it. (If prompted for a network key/security key/password, enter the Wi-Fi password.)

Is Roaming on LTE Supported?

At the time of this release, roaming (that is, using a network other than Sprint) on LTE is not supported.

To change the roaming setting, see Setting the Roaming Mode.

What Do I Do If I Forget the Main or Guest Wi-Fi Password?

To see the Main Wi-Fi password and Guest Wi-Fi password:

- 1. Look on the gateway's label.
- 2. If you changed the Wi-Fi password and have forgotten what it is, use an Ethernet cable to connect a computer to one of the gateway's yellow Ethernet LAN ports.
- 3. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 4. In the address or URL field of your browser, type http://myrouter.
- 5. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 6. Click **Wi-Fi > Options**.

What Do I Do If I Forget the Administrator (admin) Password?

The default password is password. If you changed the password and forgot it, you will need to contact Sprint Customer Support for assistance with resetting the software to default settings. (See Resetting to Factory Default Settings.)

If the Connection Is "Always On," Am I Always Being Billed?

No. The connection to the network goes dormant after a period of inactivity, but the connection can be re-established faster than having to reconnect. Billing occurs only when data is passed across the network.

Questions About WPS

Find answers to common questions about WPS.

What Is WPS?

Wi-Fi Protected Setup (WPS) provides a fast, simple, and secure way to connect WPS-enabled devices to your Wi-Fi network. You don't have to give the name (SSID) and Wi-Fi password of your network to other users.

The WPS feature is available on certain cameras, printers, smartphones, and laptops. These devices have either a hardware button or a WPS-related option in the software. Please consult the user documentation of your device.

How Do I Use WPS?

Please see Connecting Through WPS.

If a Wireless Device Has a WPS Button or a WPS Software Option, Must I Use It to Connect Via Wi-Fi?

If this is the only way your device provides to connect through Wi-Fi, then you must use the WPS button or the WPS software option. Some laptops support two methods — a WPS button or software option, and Wi-Fi network manager software where you can connect by entering the Wi-Fi network name (SSID) and password, as described in How Do I Connect to Wi-Fi?.

Please consult the user documentation of your device.

What Should I Do If the Antenna Is Loose?

If you attached the antennas and they seem loose, remove the antennas and tighten the locking nuts on the gateway as show. Then reattach the antennas. See Attach the Antennas.



How Do I Access My Corporate Network Through a VPN?

Once you complete a wireless connection, you may need to launch an extranet client provided by your company and supply the appropriate user name and password to gain access. For support, contact your company help desk.

Are Terminal Sessions Supported?

Terminal sessions (for example, via telnet or ssh) are not supported.

Tips

This section provides information on getting the most out of your device and your network connection.

Gateway Location

Follow these guidelines in placing your device.

- Avoid moisture or extreme temperatures.
- For improved reception, place your gateway near a closed window.
- Place your device within easy reach of a reliable power supply and the computer to which it will be connected.

Improving Signal Strength

There are several ways you can improve the signal strength.

- Make sure you're inside a network coverage area.
- Try reorienting your device.
- Move your device and your computer to another location you may be in or near a structure that is blocking the signal. Every obstacle (for example, walls, ceilings, furniture) between the gateway and other wireless devices decreases the signal strength.
- Place your gateway in a centralized location, as high as possible in the room.
- Make sure there's plenty of space around your gateway to provide the best signal reception.
- Keep your gateway at least 3–6 feet away from electrical devices that generate RF interference (for example, microwaves, TVs, 2.4 GHz cordless phones, cellular phones, baby monitors, wireless speakers). If you're not using these electrical devices, turn them off.
- If possible, place your gateway and your computers and devices so that the signal passes through open doorways or drywall, as opposed to concrete, brick, metal, walls with insulation, and so on.
- If you cannot obtain service, contact Sprint a network or account problem may be preventing you from obtaining service.

Improving 3G Network Service

To improve your network service, periodically check for PRL and profile updates.

The PRL (Preferred Roaming List) is an account configuration item set by your service provider. It controls the radio channels and network carrier used by the 3G modem.

To check for these updates:

- 1. On a computer or wireless device that is connected to your gateway, launch a Web browser.
- 2. In the address or URL field of your browser, type http://myrouter.
- 3. When prompted to log in, enter **admin** for the user name and type the password. (The default password is **password**.)
- 4. Click **Settings > Network > Preferences**.
- 5. Click Update PRL.

Improving Wi-Fi Performance

There are several ways you can improve Wi-Fi performance.

- Try a different channel number. (See Wi-Fi Channel.)
- Check whether any device updates are available. (See Update Software and Firmware.)
- See the tips in Improving Signal Strength.

Windows XP and Windows 7 Users

1. Open the Device Manager.

In Windows XP:

- Click Start > Settings > Control Panel.
- Double-click System.
- Click Hardware.
- Click Device Manager.

In Windows 7:

- Click Start > Control Panel.
- Click Device Manager.

- 2. Double-click Network adapters.
- Double-click the Wi-Fi client network adapter of your computer for example, "Intel(R) WiFi Link 5100 AGN" in the screenshot below.
 - Network adapters
 Bluetooth Device (Personal Area Network)
 Bluetooth Device (RFCOMM Protocol TDI)
 Part Intel(R) 82567LF Gigabit Network Connection
 Intel(R) WiFi Link 5100 AGN
 Microsoft Virtual WiFi Miniport Adapter
 NETGEAR WWAN Network Adapter #2
 VirtualBox Host-Only Ethernet Adapter
- If the Wi-Fi client network adapter is by Intel, click Advanced and, in the Property list, click Power Management and move the slider all the way to the right (to Highest). Click OK.

— or —

If the Wi-Fi client network adapter is not by Intel, select a configuration with minimal power savings (to maximize throughput).

Note: The above settings are often controlled by 3rd-party value-add applications and may be automatically changed. If Wi-Fi performance improves for a while after performing the above steps, but then declines, recheck the above settings.

Security Tips

Follow these tips to minimize security risks.

- Change the Wi-Fi network name (SSID) and Wi-Fi password on a regular basis. (See Change Wi-Fi Network Names and Passwords.)
- Disable SSID broadcast. (See Options Section.)
- Use the highest level of Wi-Fi security that your devices support. (See Wi-Fi Security.)
- Change the login password. (See Changing the Password.)
- Use MAC filtering to specify computers that are or aren't allowed to connect to the network. (See Allow or Deny Computers Access to the Network (MAC Filter).)

Finding the MAC Address

You'll need to know the MAC address of a device in a couple of cases.

 Allowing or denying computers access to the network. (See Allow or Deny Computers Access to the Network (MAC Filter).) **Tip:** You can display a list of connected devices, including the MAC address of each device. See View and Unblock Devices (Block List).

The steps to finding the MAC address of a device vary, depending on your operating system.

Windows

- 1. Open a command prompt window.
 - Click Start and Run.
 - Type **cmd** or **command**, and click **OK**.
- 2. At the command prompt, type **ipconfig/all** and press **Enter**.
- 3. Write down the physical address for the entry that relates to the wireless network connection; it appears as a series of numbers and letters this is the MAC address of your wireless adapter.

Mac OS X

- 1. From the Apple menu, select **System Preferences**.
- 2. Select Network.
- 3. Select the adapter that is connecting to the routing hardware.
- 4. Select Advanced.
- 5. Select **Ethernet**. The Ethernet ID is listed. This is the same as the MAC address.

Linux

Please see the user documentation of the Linux distribution.

Other Operating Systems

Please see the user documentation for your operating system or computer.

Finding the IP Address

You'll need to know the IP address of a device when configuring certain features.

- Port forwarding
- DMZ

The steps to finding the IP address of a device vary, depending on your operating system.

Windows

- 1. Open a command prompt window.
- 2. Type cmd or command, and click OK.
- 3. At the command prompt, type **ipconfig** and press **Enter**.
- 4. Write down the IP address for the entry that relates to the wireless network connection. (The IP address might be listed under "Ipv4 Address," or something similar.)

Mac OS X

- 1. From the Apple menu, select **System Preferences**.
- 2. Select **Network**.
- 3. Select the wireless adapter. The IP address is displayed in the right pane.

Other Operating Systems

Please see the user documentation for your operating system or computer.

Troubleshooting

Learn about various troubleshooting tips, and what to do when a specific message is displayed.

General Tips

Here are some general tips to get you started.

- If some settings are preventing you from connecting to Wi-Fi, connect via Ethernet. Cable your computer to an Ethernet LAN port on your device.
- Go to sprint.com/support to access troubleshooting and other resources.
- The knowledge base at the NETGEAR website (support.netgear.com) may also be useful.

Insufficient Signal Strength

If you have insufficient signal strength, an icon is displayed on your device's home screen, and on the web page's Connection Details section.

Insufficient signal strength, indicated by 🔊, may occur because:

- You are outside network coverage areas.
- Your device's internal antenna is pointing in the wrong direction.
- You are in or near a structure that is blocking the signal.
- You are near a device that is causing radio signal interference.
- A network or account problem is preventing you from obtaining service.

See also Improving Signal Strength.

Cannot Connect to Wi-Fi

If your computer cannot connect to the Main or Guest Wi-Fi networks of the Netgear 6100D, there are several things you should check.

Make sure that:

- The maximum number of Wi-Fi devices has not been reached. (For information about how to determine the number of connected Wi-Fi devices and set the maximum, see View and Unblock Devices (Block List) and Set the Maximum Number of Wi-Fi Devices.)
- You're connecting to the correct Wi-Fi network (SSID), and you're using the correct Wi-Fi password.

- Nobody has changed the name or password of the Wi-Fi network.
- Your computer supports the type of Wi-Fi security that the network is set to use.

Note: To connect to the gateway's Wi-Fi network, each computer or Wi-Fi device must support the gateway's Wi-Fi security type.

- Your computer supports Wi-Fi 802.11g (if **Connection Rate** is set, in the Wi-Fi Options Section to **802.11g only**).
- Your computer has not been blocked through MAC filtering. (See Allow or Deny Computers Access to the Network (MAC Filter).)

Cannot Display the Home Page

Your Web browser may display an error message when you try to display the home page. The error message depends on your Web browser.

- "Could not connect to remote server" (Opera)
- "Internet Explorer cannot display the webpage" (Internet Explorer)
- "Oops! This link appears to be broken" (Google Chrome)
- "Safari can't open the page" (Safari)
- "The connection has timed out" (FireFox)

Check the following:

- Your gateway is turned on. (See Turning Your Device On and Off.)
- You have established a connection to your device (through Wi-Fi or through an Ethernet cable).
- Make sure that you're typing the correct address in the Web browser.
 - Try http://myrouter (unless you've changed the URL in Changing the URL.)
 - If the home page is still not displayed, try http://192.168.0.1 or, if you're using custom routing settings, replace 192.168.0.1 with the appropriate IP address.
- The Web browser is a recent version, and Java-enabled. The following are recommended:
 - Internet Explorer 10.0 or higher
 - Firefox 21.0
 - Google Chrome (version 30 or higher)

- Safari (version 5.1.7 or higher)
- If your computer has other adapters (for example, Ethernet) connected to other networks, disable or remove them from your computer.
- If Internet security software is running on your computer, disable it and see whether the error message still occurs. Some firewall software may block access to the home page.
- If DHCP is enabled on your device, make sure DHCP is enabled on your computer. (See DHCP.)
- Check your Web browser settings:
 - 1. Open the Control Panel in Windows.
 - 2. Double-click Internet Options.
 - 3. From the **Security** tab, restore the default settings.
 - 4. From the **Connections** tab, select **Never dial a connection**.
 - 5. From the **Advanced** tab, restore the default settings.
 - 6. Close and reopen your Web browser.
- Disconnect your device from your computer (if you're using the micro-USB cable). Remove the battery from your device. Reinsert the battery.

If, after checking all of the above, you still cannot display the home page, consider resetting the software to default settings. (See Resetting to Factory Default Settings.)

Cannot Connect to the Mobile Broadband Network

If this message is displayed, go through the following steps.

- Make sure your computer is connected to your device (through Wi-Fi or with an Ethernet cable). (See Connect to Your Gateway's Network.)
- Make sure you're in a network coverage area.
- Check the **Network Mode** setting (See Setting the Allowed Network Mode). For example, if it's set to **LTE Only**, you won't be able to connect if you don't have LTE coverage.
- If you're roaming on 3G, make sure that roaming is enabled. (See Setting the Roaming Mode.) (Roaming is not supported on LTE.)

Note: Roaming charges may apply.

- If you're roaming internationally, make sure that **Any Network** is selected. (See Setting the Roaming Mode.)
- Try the tips in Improving Signal Strength.
- Check with Sprint a network or account problem may be preventing your device from obtaining service.

Technical Specifications

This section lists the electrical, radio frequency, and other parameters of your device for those who require technical information.

Radio Frequency and Electrical Specifications

This section lists the radio frequency and electrical parameters of your device.

Item	Description
Approvals	FCC
Current	Maximum: 1.66A (full load of system)
Transmit	PCS: 1850 – 1910 MHz Cellular: 824 – 849 MHz Secondary 800 MHz: 817 – 824 MHz LTE: - Band 25: 1850 – 1915 MHz - Band 26: 814 – 849 MHz - Band 41 (TDD): 2496 – 2690 MHz
Receive	PCS: 1930-1990 MHz Cellular: 869-894 MHz Secondary 800 MHz: 862-869 MHz LTE: - Band 25: 1930 – 1995 MHz - Band 26: 859 – 894 MHz - Band 41 (TDD): 2496 – 2690 MHz

Software Specifications

This section lists the specifications that your device supports.

Item	Description
CDMA (3G) specification	IS-2000 Release 0
Data service	IS-707A
3GPP	Release 9
Wi-Fi specification (with DBDC support)	IEEE 802.11b IEEE 802.11g IEEE 802.11n (2x2 MIMO support) IEEE 802.11a IEEE 802.11ac (2x2 MIMO support)

Wi-Fi security and	WEP Open & Shared
encryption protocols	WEP-64
encryption protocols	WEP-128
	WEP-120 WPA-Personal TKIP & AES (Pre-Shared Key or WPA-PSK)
	WPA2-Personal TKIP & AES (WPA2-PSK)
	WPA+WPA2-Personal (WPA+WPA2 PSK)
WPS	Wi-Fi Simple Configuration 2.0 (WSC 2.0) based Wi-Fi
WF5	Protected Setup (WPS)
SMS (IS-637)	Not supported
FAX	Not supported
ΙΟΤΑ	Supported
OTASP (IS-683A, IS-683B,	Supported
IS-683C)	
ΟΤΑΡΑ	Supported
PRL (Preferred Roaming	Supported
List)	
Authentication	Supported
Voice	Not supported
NAM	Single
Position Location	Not supported
TTY/Accessibility	Not supported
Mobile IP	Supported
Network protocols	TCP, UDP, ARP, RARP, ICMP
(routing hardware)	
VPN	Passthrough of the following VPN types:
	PPTP
	IPSec
	Tunneling of multiple VPN sessions simultaneously is
	supported.

Environmental Specifications

This section describes the environmental conditions that your gateway can be used in.

Item	Description
Operating temperature	32 to 140°F
Storage temperature	14 to +140°F
Humidity	149°F, 90% relative humidity for 24 hours

Mechanical Specifications

This section describes the dimensions and physical features of your device.

ltem	Description
Dimensions (W x L x H)	6.5" x 9.5" x.1.8"
Weight	23.4 oz. without antenna 25.9 oz. with antenna
Headset jack	Not supported
LED	Blue / Amber / Orange

Wall Mounting

You can wall-mount your gateway.

To wall-mount the gateway:

1. Drill holes in the wall where you will wall-mount the gateway.



2. Install wall anchors in the holes.



Note: Use pan head Phillips wood screws, 3.5 x 20 mm (diameter x length, European) or #6 type screw, 1 inch long (U.S.).

3. Insert screws into the wall anchors, leaving 3/16 in. (0.5 cm) of each screw exposed.

Regulatory Notices

This section contains regulatory information for your device.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For product available in the Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

This device and its antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.

L'émetteur ne doit pas être placé près d'une autre antenne ou d'un autre émetteur, ou fonctionner avec une autre antenne ou un autre émetteur.

The device could automatically discontinue transmission in case of absence of information to transmit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

Le dispositif pourrait automatiquement cesser d'émettre en cas d'absence d'informations à transmettre, ou une défaillance opérationnelle. Notez que ce n'est pas l'intention d'interdire la transmission des informations de contrôle ou de signalisation ou l'utilisation de codes répétitifs lorsque requis par la technologie.

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems;

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

The maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

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