# User guide. verizon/

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#### Inseego Revision History

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Please visit www.inseego.com for the latest information about your device.

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# **Getting Started**

Overview
Components and Indicators
Power Management
Caring for Your Router

# Overview

The Router R1000 is a wireless device that delivers Internet services. You can connect up to 124 devices via Wi-Fi and up to 3 devices via Ethernet. Connect laptops, tablets, e-readers, gaming consoles and more.

## **System Requirements**

- Compatible with all major operating systems.
- Works with the latest versions of browsers, including Android™, Google Chrome®, Firefox®, Internet Explorer®, Safari® and Mobile Safari™.

To use Wi-Fi mode, your computer needs Wi-Fi capability. If your computer does not have Wi-Fi capability you can use Ethernet.

Your Router R1000 must have a data plan to function properly.

# Components and Indicators



- **1** Phone ports 1&2(RJ11)\* phone connector port
- Home Security port (RJ31)\* Home Security connector port for alarm panels
- **3** Ethernet ports 1-3 Local Area Network (LAN) connector port
- 4 Modem port connects to 5G modem
- **WPS button** allows devices to connect to the router using WPS
- **6 USB port** refer to File Sharing section for additional information
- **Power on/off button** powers the router on and off
- **8** Power port AC power connector port
- **9** Status indicator LED device status. Refer to Indicator States table for more information

**WARNING!** Do not connect phone, fax or any other devices to the yellow port labeled **ALARM**. Doing so may cause the phone to stop working.

<sup>\*</sup> Future option

# **Indicator States**

INDICATOR		LED	DESCRIPTION
All		Unlit	The LTE Internet and Home Phone is powered off or not receiving power, or the screen is in power-saving mode
Power button	•		Normal operation
		Blue blinking	Battery is in Low Power Mode (LPM)
	•	Updat	No AC power. Router operating on battery - only voice service is available
4G		Red solid	Normal operation. Indicates Internet
			connectivity
		Unlit	No connection (no data call). Indicates no Internet connectivity
Wi-Fi indicator		Blue solid	Wi-Fi user(s) connected but not sending or receiving data
		Blue blinking	Wi-Fi user(s) connected and sending or receiving data
	d	Unlit	No user(s) connected via Wi-Fi
LAN indicator		Blue solid	User(s) connected via Ethernet but not sending or receiving data
		Blue blinking	User(s) connected via Ethernet and sending or receiving data
	Ľ	Unlit	No user(s) connected via Ethernet
WPS button		Amber blinking	Searching for wireless devices to connect via WPS. You have two minutes to start WPS on the wireless device you want to connect to the router
		Green solid	WPS connection successful
		Red blinking	Router could not find a wireless device. Try again to establish a WPS connection

# **Power Management**

Your Router R1000 will provide both voice\* and data service when the backup batteries are installed, and the device is plugged into an AC power source.

- **Backup Batteries** Your Router R1000 ships with three AA batteries. If only battery power is being used, data service is not available.
- **AC Wall Charger** You can use the router when the batteries are installed, and the charger is plugged into a wall outlet. Please ensure the wall outlet is located near the router and is easily accessible.

#### **Factory Operation**

When disconnected from AC power and operating on backup battery power, only voice service will be available.\*

Before using the Router R1000, read the battery safety information in the "Safety Hazards" section of this guide. (See <a href="Proper Battery Use and Disposal">Proper Battery Use and Disposal</a> on page <a href="Proper Battery Use and Disposal">???</a>.)

<sup>\*</sup> Future feature. A phone that does not require separate electric power to operate is required to place or receive calls (including 911) during a power outage.

# Caring for Your Router

Like any electronic product, the Router R1000 must be handled with care to ensure reliable operation. The following guidelines are recommended:

- Protect the router from liquids, dust, and excessive temperatures.
- Do not apply adhesive labels to the router as they may cause the router to potentially overheat or alter the performance of the antenna.
- Store the router in dry and secure location when not in use.

# **Using the Router R1000**

Accessing the Network
Getting Started
Connecting to Your Router
Using Your Router After Setup

# Accessing the Network

#### **4G LTE**

With 4G LTE bandwidth you can get the broadband speed you require for Internet connectivity for your home, small office or even a vacation destination. You can connect to the Internet, access your corporate intranet, check your email and download attachments.

#### 4G Mobile Broadband with LTE\*

- Download: typical download speeds between 5-12 Mbps with maximum download speed of 150 Mbps.
- Upload: typical download speeds between 2-5 Mbps with maximum upload speed 50 Mbps.

#### Wi-Fi 802.11a/b/g/n

- 802.11a uses the 5.0 GHz peak data rate with a bandwidth of 54 Mbps.
- 802.11b uses the 2.4 GHz peak data rate with a bandwidth of 11 Mbps.
- 802.11g uses the 2.4 GHz peak data rate with a bandwidth of 54 Mbps.
- 802.11n uses the 2.4 GHz or 5.0 GHz peak data rate with a bandwidth of 150 Mbps.
- 802.11ac uses the 5.0 GHz peak data rate with a bandwidth of 1733 Mbps.

<sup>\*</sup> Speeds shown are those published by Verizon Wireless, Inc. Actual throughput speed and coverage may vary.

# **Getting Started**

To set up and use your LTE Internet and Home Phone for the first time:

- Confirm your computer meets the minimum system requirements. (See <u>System Requirements</u> on page ??.)
- 2 Insert and charge the batteries. (See <u>Inserting and Charging the Battery</u> on page ??.)
- 3 Plug in the power adapter. (See <u>Powering On and Off</u> on page ??.)
- Connect your computer or other Wi-Fi enabled devices to the router using Wi-Fi. (See <a href="Connecting to Your Router">Connecting to Your Router</a> on page <a href="?">??</a>.)
- Connect up to three devices via Ethernet. (See <u>Connecting Wired/Ethernet Devices</u> on page ??.)

#### **Inserting the Batteries**

- 1 Press your finger against the battery cover removal tab on the underside of the router, then lift and open the cover.
- 2 Insert the three AA batteries as shown below.

# Insert Photos

- 3 Close the battery cover making sure it snaps shut.
- 4 Make sure to change the batteries after a power outage or twice a year, whichever occurs first.

# **Removing the Batteries**

- 1 Power off and unplug the router if applicable.
- 2 Press your finger against the battery cover removal tab on the underside of the router, then lift and open the cover.
- **3** Remove the batteries from the battery compartment.

**IMPORTANT** Whenever you remove or insert batteries, ensure your Router R1000 is not connected to any device or power source. Never use tools, knives, keys, pens or any type of object to force the battery cover open or to remove the battery. Using any of these types of objects could result in puncturing the battery.

#### **Battery Tips**

**IMPORTANT** Always use high-quality AA batteries with your Router R1000.

- Do not use sharp objects or excessive force or remove the battery, as this may damage the router and the batteries.
- Battery life depends on the network, signal strength, temperature, features, and accessories
  you use.
- When storing your batteries, keep them in a cool, dark, dry place, 5°C (41°F) to 30°C (86°F).
- Never expose batteries to temperatures below -20°C (4°F) or above 54°C (130°F).
- It is normal for batteries to gradually wear down over time. Replace your batteries if you experience a power outage or twice a year, whichever occurs first.

#### **Powering On and Off**

#### **Powering On**

- Onnect the power cord to the charger. Plug the AC power cord into the router power port on the back of the router.
- 2 Plug the power adapter into an AC wall outlet.
- 3 Press the ON/OFF button on the back of the device to turn the device on.

**CAUTION!** Use only a charger with your Router R1000 that has been approved by Verizon Wireless. Failure to use an approved charger may increase the risk that your router will overheat, catch fire, resulting in serious bodily injury, death, or property damage.



If the router is disconnected from AC power and running on the battery alone, only voice calls are supported. A phone that does not require separate electric power to operate is required to place or receive calls (including 911) during a power outage.

#### **Powering Off**

1 Press the ON/OFF button on the back of the device to turn the device off.

# Connecting to Your Router

#### **Connecting Wi-Fi Devices**

You can connect to your Router R1000 with your computer, tablet or other wireless devices that have Wi-Fi and Internet browser software. Your Router R1000 is compatible with all major operating systems, and works with the latest version of browsers, including Android, Google, Chrome, Firefox, Internet Explorer, Safari and Mobile Safari. Your default Wi-Fi Name (SSID) and Password can be found on the router label on the bottom of the device.

# Insert label Photo

#### To connect to your router:

- 1 Turn on your Wi-Fi capable device and make sure your Router R1000 is connected to AC power. The router broadcast its own wireless network and name.
- Open the Wi-Fi application or controls on the computer or Wi-Fi capable device that you want to connect to your router and find the Wi-Fi name (SSID).
  - The steps to connect to a Wi-Fi network vary depending on your operating system and whether you use the native application or third-party software. Generally, with a PC you click on the Wi-Fi icon in the task bar where you can select available networks or click the Wi-Fi icon in the menu bar on a Mac® computer. If you are unfamiliar with wireless networking on your computer, consult the computer's help system.
- When prompted, enter your Password, which can be found on the label on the bottom of the router. Your Wi-Fi capable device should now be connected to the Internet.

You can view or change Router R1000 settings by connecting to the router's web user interface at <a href="http://my.router">http://my.router</a> or <a href="http://192.168.1.1">http://192.168.1.1</a> Make sure that your computer or Wi-Fi capable device is connected to the Router R1000 and enter the URL listed above into your search bar.

To find the Web User Interface Admin Password on the Router R1000, use the Wireless Password located on the bottom of the device.

# **Connecting Wired/Ethernet Devices**

You can connect up to three wired devices such as laptops, printers, and gaming consoles via Ethernet.

- 1 Plug the end of an Ethernet cable into one of the three Ethernet ports.
- 2 The other end of the cable must remain plugged into the Ethernet port of the device you wish to connect.





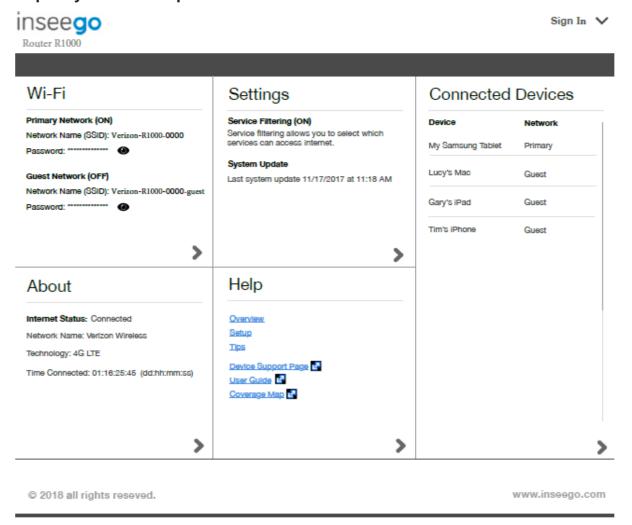
# Using Your Router After Setup

You can use the Router R1000 to connect up to a total of 124 Wi-Fi capable devices and three devices connected via Ethernet simultaneously to the mobile broadband network.

The Router R1000 comes from the factory with security settings turned on. You can change the security settings using the Web User Interface.

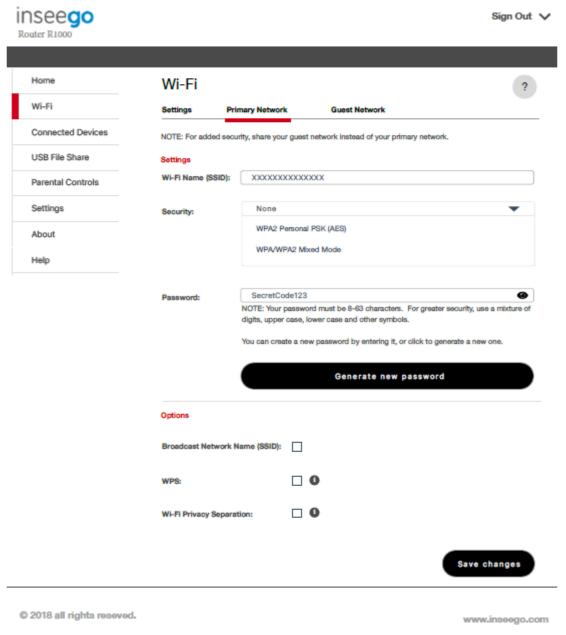
To change your security settings:

1 Open the web browser of a device connected to the Router R1000 and enter http://my.router or http://192.168.1.1

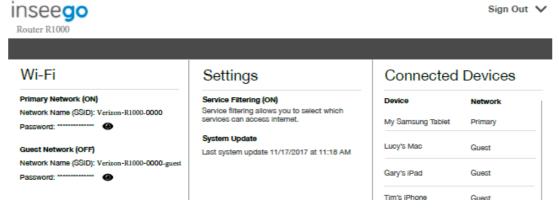


- 2 Sign In with the Admin Password which can be found on the bottom of the router.
- To change your Wi-Fi Name/Password, from the Web Interface home page, select **Wi-Fi>Primary Network**. By default, your Wi-Fi and Admin Passwords are the same.

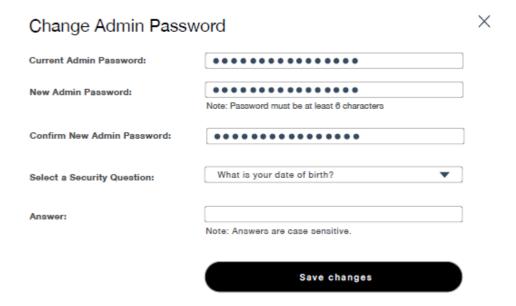
- 4 Enter the new Wi-Fi Name in the Wi-Fi Name (SSID) field and the new Wi-Fi Password in the Password field.
- 6 Click Save Changes.



**6** To change your Admin Password from the Web User Interface Home page, select **Sign Out**.



- **7** Enter your current admin password in the Current Password Field.
- 8 Enter your new admin password in the New Admin Password field, and re-enter to confirm in the Confirm New Admin Password field.
- Select a Security Question and supply an Answer that you will be able to remember.
- Click Save Changes.



# Router R1000 Settings

Managing Your Router
Home
Data Usage
Wi-Fi Name/Password
Connected Devices
Voice Signal
Data Signal
Battery
Software Update
Messages
About

# **Managing Your Router**

Manage, monitor, and customize your Router R1000 settings by using the Web User Interface.

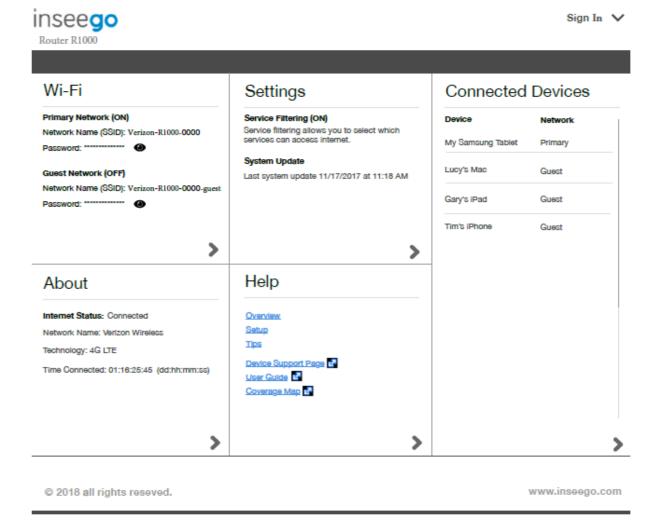
#### The Router R1000 Web User Interface

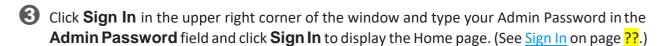
To connect to the Router R1000 web interface and customize your router settings:

Connect your computer or Wi-Fi capable device to your Router R1000 to access the Internet.(See Connecting to Your Router on page ??.)

**IMPORTANT** You can only access the Router R1000 Web User Interface when you are connected to the router.

Open your connected device's web browser and type <a href="http://my.router/">http://192.168.1.1</a> into the address bar. Press **Enter**. The Router R1000 Home page opens. (See <a href="Sign In">Sign In</a> on page <a href="??">??</a>.)





You are now able to customize your router settings configuration.

## Sign In

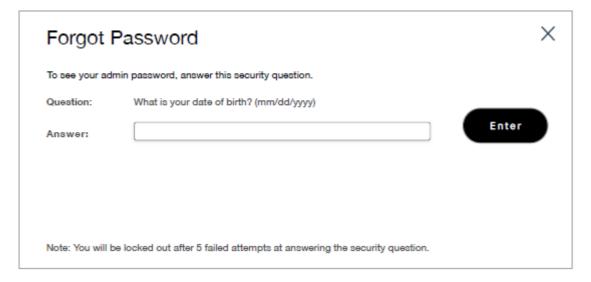
The Sign In page is the first page you see after connecting and prior to signing in. You can access more information after you SignIn.



#### Sign In

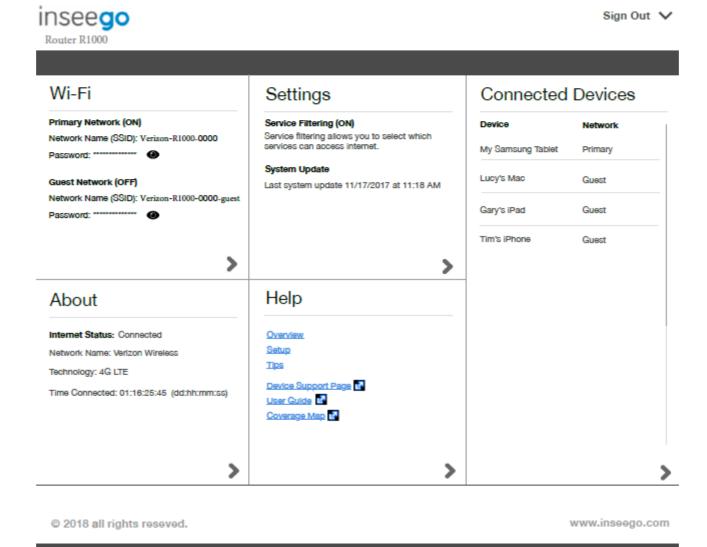
Type the Admin Password (found on the label on the bottom of the device) in the **Sign In** field at the top right corner of the window. Click **Sign In**.

If you forget your Admin Password, click **I forgot the Admin Password** and a reminder will appear with a Security Question challenge. Answer the question and Click **Enter**.



#### Home Menu

The Home Menu is the primary navigation for the Router R1000 Settings. You can access each feature under the appropriatemenu.



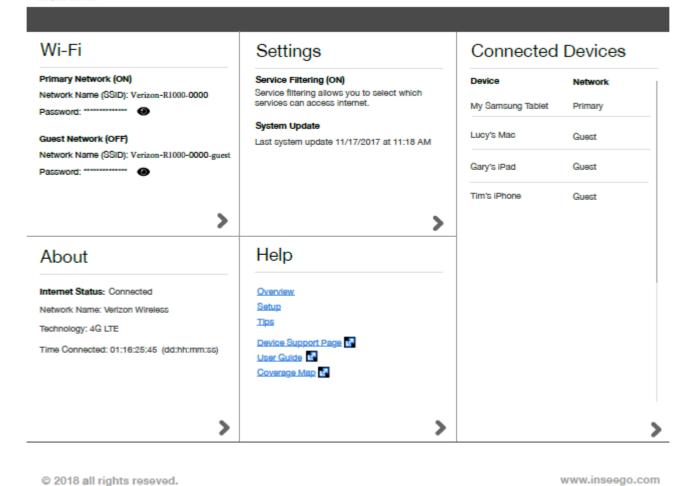
# Home

The Router R1000 Home page is your gateway to configuring and managing your router and allows you to quickly access commonly used links and all available menu options for your router. The Home page contains the following quick link tile:

- Wi-Fi (See Wi-Fi on page ??.)
- **Settings** (See <u>Settings</u> on page ??.)
- Connected Devices (See Connected Devices on page ??.)
- About (See About on page ??.)
- **Help** (See Help on page ??.)



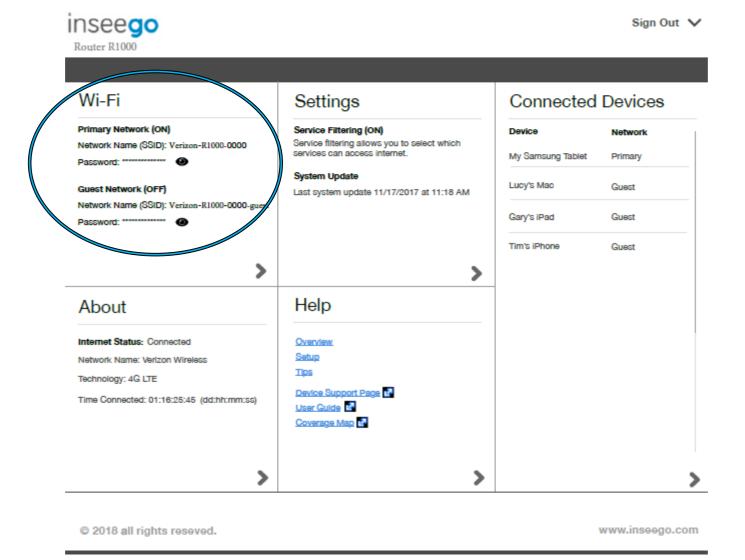
Sign Out 🗸



28

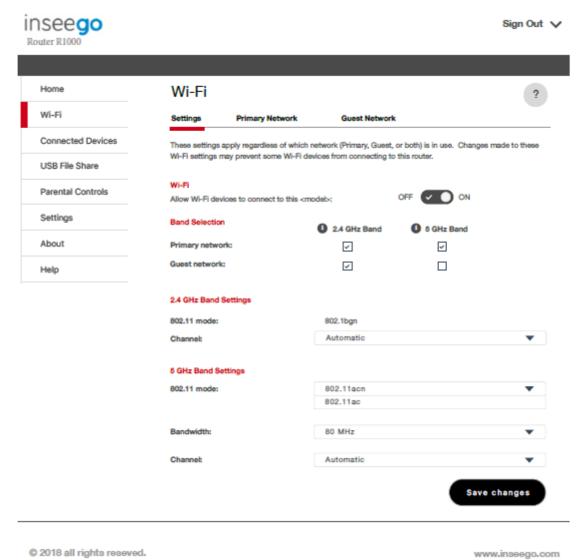
#### Wi-Fi

To manage Wi-Fi settings on the Router R1000 click on the Wi-Fi tile:



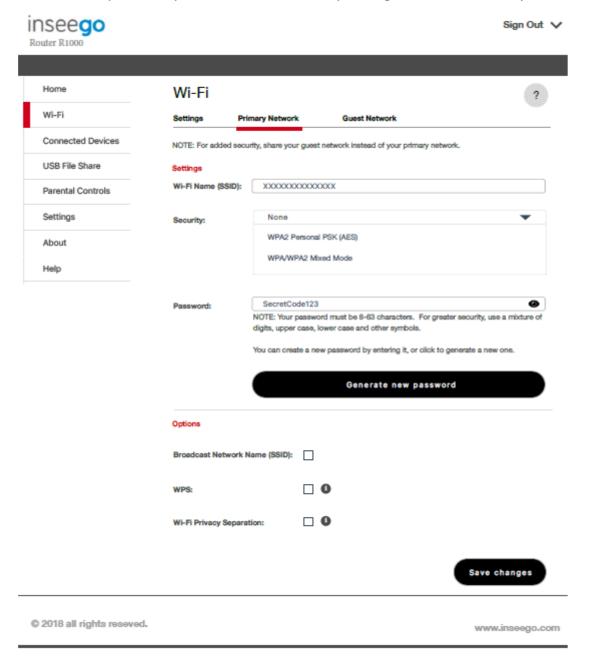
#### **Customize my Wi-Fi Settings**

Clicking on **Wi-Fi** tile will take you to the Settings page on the Wi-Fi menu, where you can customize Wi-Fi profiles on your Router R1000.



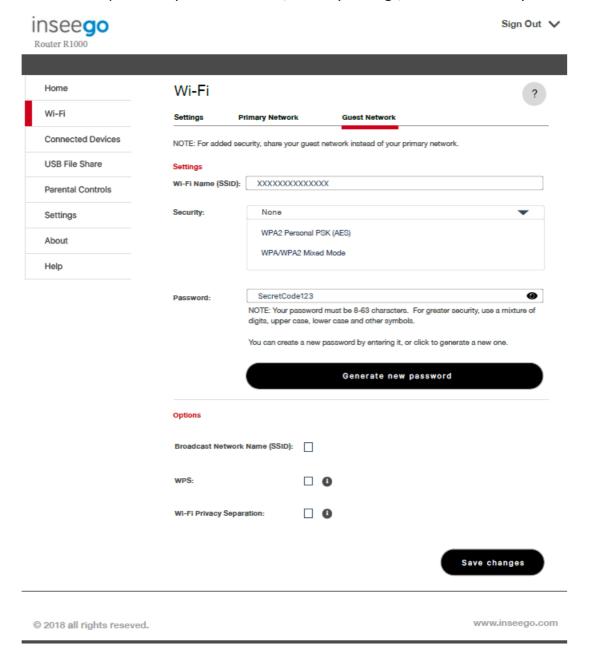
#### **Change my Wi-Fi Primary Network**

Clicking on **Wi-Fi** tile will take you to the Settings page on the Wi-Fi menu. Click on the Primary Network tab to make updates to your Wi-Fi Name, Security settings, and Password on your Router R1000.



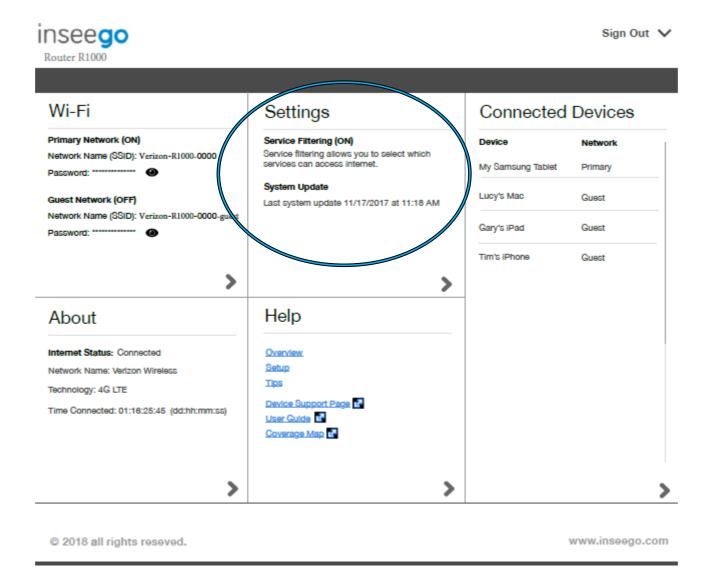
#### **Change my Wi-Fi Guest Network**

Clicking on **Wi-Fi** tile will take you to the Settings page on the Wi-Fi menu. Click on the Guest Network tab to make updates to your Wi-Fi Name, Security settings, and Password on your Router R1000.



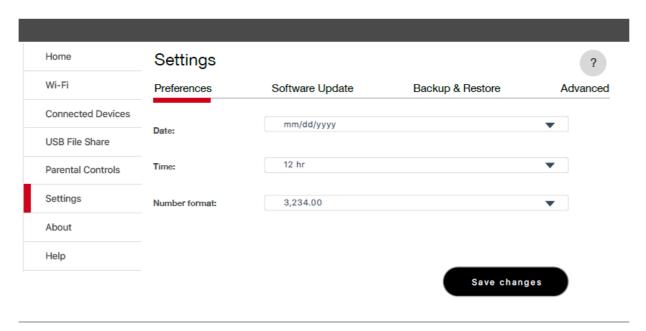
#### **Settings**

To manage Settings on the Router R1000 click on the Settings tile:



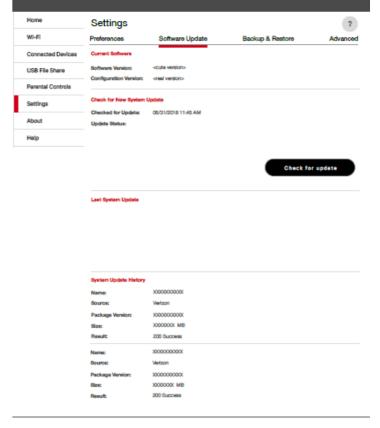
#### **Customize my Settings Preferences**

customize settings on your Router R1000. Settings for Date, Time and Number format can be updated in this section.



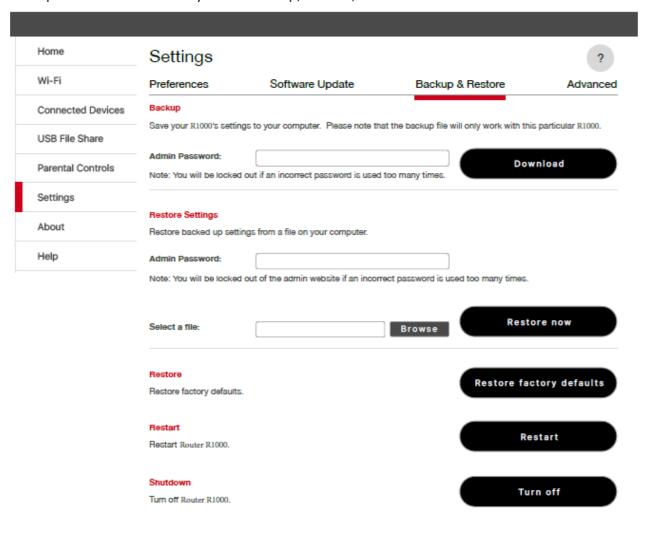
#### **Customize my Settings Software Update**

Clicking on **Settings** tile will take you to the Preferences page on the Settings menu. Click on the Software Update tab where you can check the software version and check if software updates are available.



#### **Customize my Settings Backup & Restore**

Clicking on **Settings** tile will take you to the Preferences page on the Settings menu. Click on the Backup & Restore tab where you can backup, restore, restart and shut down the Router R1000.

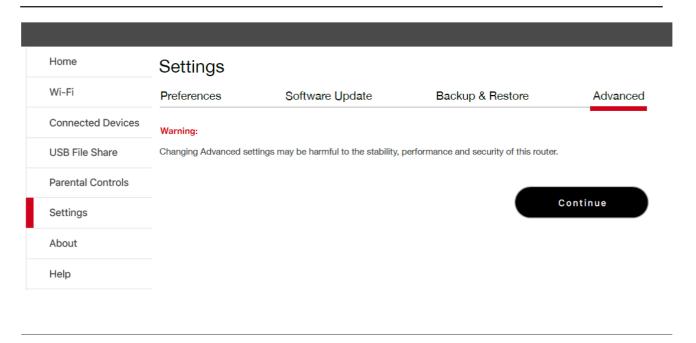


# **Customize my Settings Advanced**

Clicking on **Settings** tile will take you to the Preferences page on the Settings menu. Click on the Advanced tab where you can change advanced settings Router R1000.

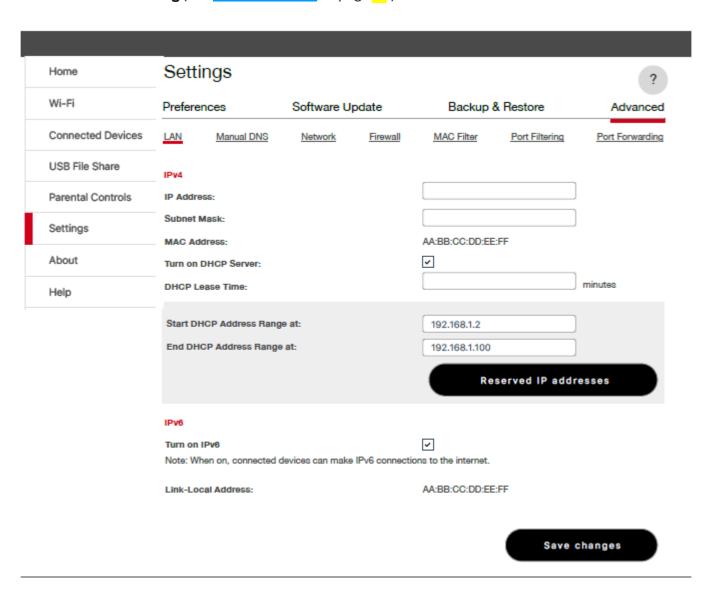
Click on **Continue** to access the Advanced settings.

**WARNING** Changing Advanced settings may be harmful to the stability, performance and security of the Router R1000.



The Advanced page contains the following menu options:

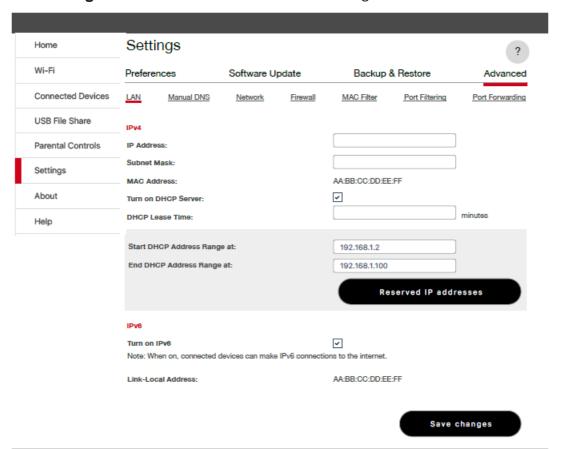
- LAN (See <u>LAN</u> on page??.)
- Manual DNS (See Manual DNS on page ??.)
- Networks (See <u>Networks</u> on page ??.)
- **Firewall** (See <u>Firewall</u> on page ??.)
- MAC Filter (See MAC Filter on page ??.)
- Port Filtering (See Port Filtering on page ??.)
- Port Forwarding (See Port Forwarding on page ??.)



#### LAN

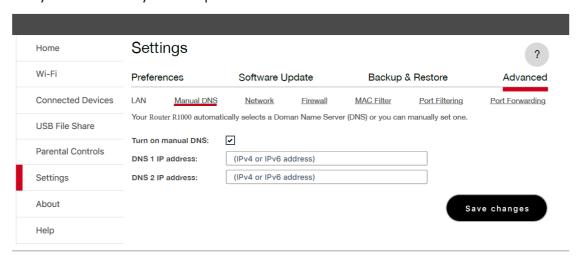
The LAN page gives you settings and information about the Router R1000's network. The LAN menu contains the following sections:

- IPv4
  - **IP Address** The IP address for the Router R1000.
  - **Subnet Mask** The subnet mask network setting for the Router R1000. The default value 255.255.255.0 is standard for small (class "C") networks. If you change the LAN IP Address, ensure you use the correct Subnet Mask for the IP address range containing the LAN IP address.
  - MAC Address The Media Access Controller (MAC) or physical address for the Router R1000.
  - Turn On DHCP Server The Turn On DHCP Server checkbox enables or disables the DHCP Server feature. Normally this should be left turned on.
  - **DHCP Lease Time** Use to determine how often connected devices must renew the IP address assigned to them by the DHCP server. Normally this is left at the default value, but if you have special requirements you can change the value.
  - **Start/End DHCP address range at** The start and end range of IP addresses reserved for use by the Router R1000's DHCP server table.
- IPv6
  - Enable IPv6 The Enable IPv6 checkbox turns ON/OFF the IPv6 feature.
  - **Link-Local Address** Displays the local address when IPv6 is turned on.
- Save Changes Use to activate and save new settings.



# **Manual DNS**

The Router R1000 automatically selects a Domain Name Server (DNS). The Manual DNS menu allows you to manually select up to two DNS IP addresses.



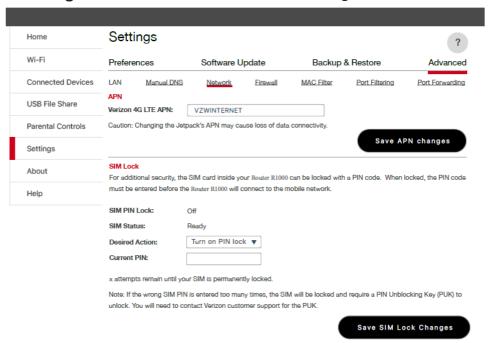
To manually select a Domain Name Server:

- Click the box next to **Turn on manual DNS**.
- 2 Enter the IP address for the first DNS in the **DNS 1 IP address** field.
- 3 Enter the IP address for the second DNS in the DNS 2 IP address field, if applicable.
- 4 Click Save Changes.

# **Network**

The Network menu contains the following sections:

- Verizon 4G LTE APN Displays the network carrier APN.
- SIM Lock Allows user to engage SIM lock on the Router R1000.
- Save Changes Use to activate and save new settings.



#### **APN**

The 4G LTE APN displays the pre-configured APN and should not be changed unless you have a corporate account with your own APN. If you need to change the APN, enter the new APN and click **Save APN changes**.

# SIM Lock

SIM menu gives you settings and information about the Router R1000's Subscriber Identity Module (SIM) card. The SIM card inside your Router R1000 can be locked with a PIN code for additional security. If locked, the PIN code must be entered before the Router R1000 can connect to the Internet. The SIM menu takes you to the SIM page. The SIM menu has the following options:

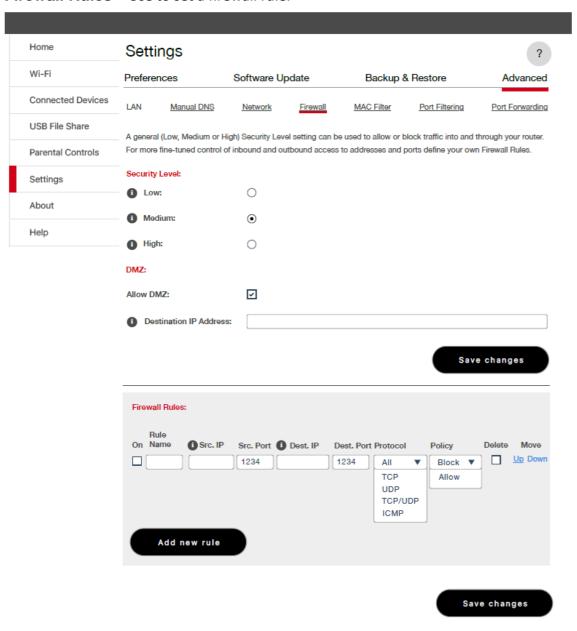
- **SIM PIN Lock** Indicates whether or not the PIN lock feature is in use. If ON, the PIN lock has been turned on, and the SIM PIN must be entered in order to connect to the mobile network. If OFF, the PIN lock feature is not turned on, and the SIM PIN is not required.
- **SIM status** Indicates the current status of the SIM card. Possible values include:
  - **Ready** This is the normal state. The SIM PIN is not used.
  - **PIN Locked** The SIM PIN must be entered before you can use the mobile network.
  - **PUK Locked** The PUK for the SIM must be entered in order to continue. The PUK can be obtained from your service provider.
  - **Unlocked** The SIM PIN is needed, but has already been entered.
  - **No SIM** No SIM was detected. If you do have a SIM, check that it is inserted correctly.
  - **SIM Error** A SIM was detected, but it did not respond as expected, and cannot be used.
- **Desired action** Allows you to turn the PIN lock feature ON/OFF.
- Current PIN Type the desired PIN in the Enter current PIN field. The default PIN is 1111.
- Save SIM Lock Changes Use to activate and save new settings.

**IMPORTANT!** Entering an incorrect PIN will lock the SIM. The default PIN is 1111.

# **Firewall**

The Router R1000 firewall determines which Internet traffic is allowed. The Firewall menu contains the following sections:

- Security Level Sets general security level for the Router R1000 to Low, Medium or High.
- **Allow DMZ** Allows the connected device specified as the DMZ IP address to receive all traffic which would otherwise be blocked by the firewall.
- Destination IP Address Enter the IP address of the connected device you wish to become the DMZ device.
- Save Changes Use to activate and save new settings.
- **Firewall Rules** Use to set a firewall rule.

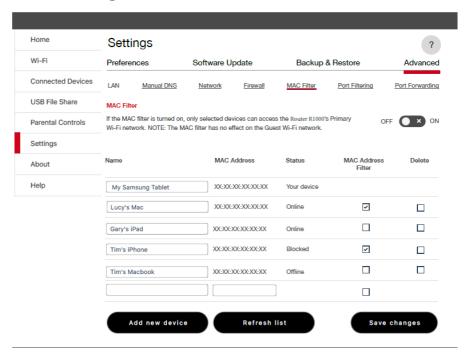


#### **MAC Filter**

The MAC Filter allows you to specify which devices can access the Router R1000 Wi-Fi network.

**ON/OFF** — Turns the MAC Filter ON/OFF. Before turning on, ensure that the Allowed Devices list is not empty. When turning on, any Connected Device which is not in the Allowed Devices list will immediately be disconnected.

- Add new device Use to add a new device to the devices list.
- **Refresh list** Use to refresh the screen and delete any unsaved changes.
- Save Changes Use to activate and save new settings.



#### To add a device to the device list:

- 1 Click Add new device and enter the device name in the Name field.
- 2 Enter the MAC Address in the MAC Address field.
- Mark the MAC Address Filter check box as required.
- Mark the **Delete** check box as required.
- 6 Click **Save changes** to activate and save the settings.

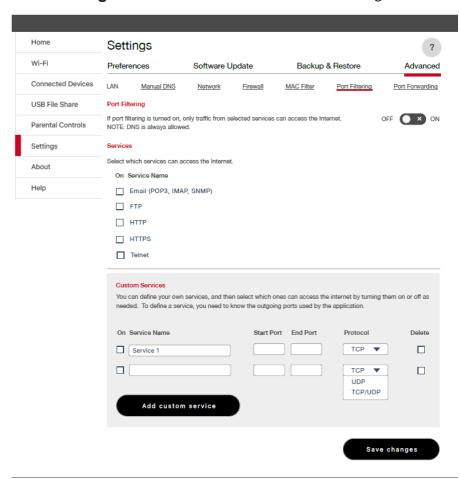
# **Port Filtering**

Port Filtering allows you to block outgoing Internet connections and permit only allowed applications to access the Internet. You can also customize a list of allowed applications which permits only certain programs to connect to the Internet.

Slide the **ON/OFF** button to **ON** to turn on Port Filtering. When the feature is **turned on** you must select a port filtering service in the **Services** list to allow that application to connect to the Internet. For example, if you select Email in the Applications list but do not select HTTP, you can connect to an Email server, but you cannot connect to a web page using your Internet browser.

The Port Filtering menu contains the following sections:

- **Services** Turn on each port filtering application that needs to be able to access the Internet by checking the box next to one or more applications. When port filtering is turned on, all other applications are blocked.
- **Custom Services** You can define your own applications, and then turn them ON/ OFF as needed. To define a service, you need to know the outgoing ports used by the service.
  - Add custom service Use to define your own service, and then turn them on or off as needed.
- **Save Changes** Use to activate and save new settings.



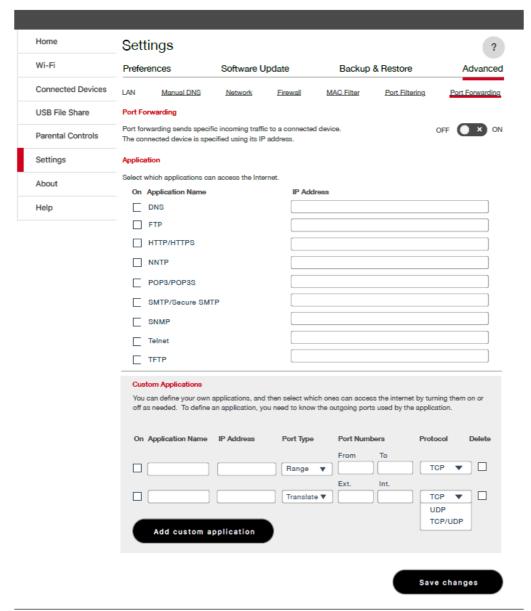
To select the service you wish to allow:

- Mark the checkbox to the left of the application. The choices are Email (POP3, IMAP, SMTP), FTP, HTTPS, and Telnet.
- Click **Add custom service** to add a new custom service to the list of allowed services. You can define and turn on custom Port Filtering services. You need to know details of the traffic used and generated by the services you wish to define.
  - The **Add custom service** option is only available when port filtering is turned **ON**. You can add up to ten custom services.
- Enter the beginning of the range of port numbers used by outgoing traffic for the custom application being added in the **Start Port** field.
- 4 Enter the end of the range of port numbers in the **End Port** field. If the port is a single port instead of a range, type the same value for both the **Start Port** and the **End Port**.
- Select the protocol (TCP, UDP, or TCP/UDP) used by each port range from the **Protocol** dropdown menu.
- 6 Click **Save Changes** to activate and save any changes made to the custom applications.
- Select the **Delete** checkbox next to any custom application you wish to delete and click **Save Changes**.

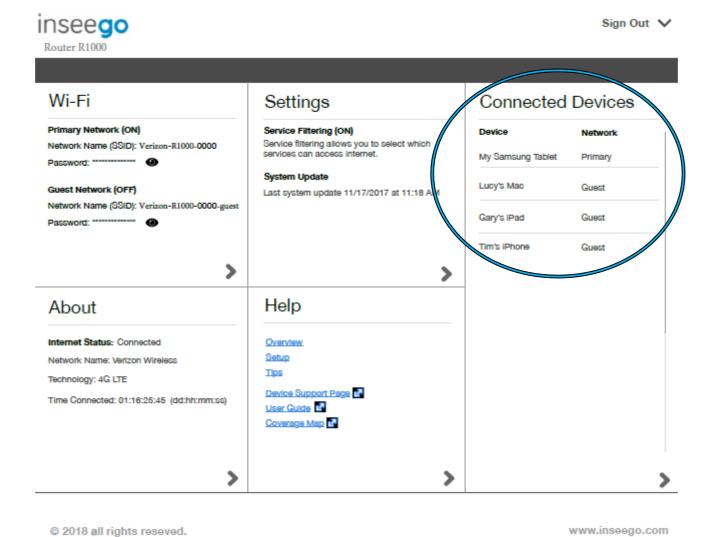
# **Port Forwarding**

Port Forwarding allows incoming traffic from the Internet to be forwarded to a particular computer or device on your Wi-Fi network. Normally, the built-in firewall blocks incoming traffic from the Internet. Use Port Forwarding to allow Internet users to access any server you are running on your computer, such as a Web, FTP, or E-mail server. For some online games, Port Forwarding must be used in order for the games to function correctly. The Port Forwarding menu contains the following sections:

- ON/OFF Slide the ON/OFF button to ON to activate Port Forwarding.
  - **Default Applications** The IP address for the selected application. Choose from DNS, FTP, HTTP/HTTPS, NNTP, POP3/POP3S, SMTP/Secure SMTP, SNMP Telnet and TFTP.
- Custom Applications
  - Add Custom Application Allows you to define your own applications. Once defined, these applications can be turned ON/OFF in the same way as pre-defined applications.
  - Save Changes Use to activate and save new settings.

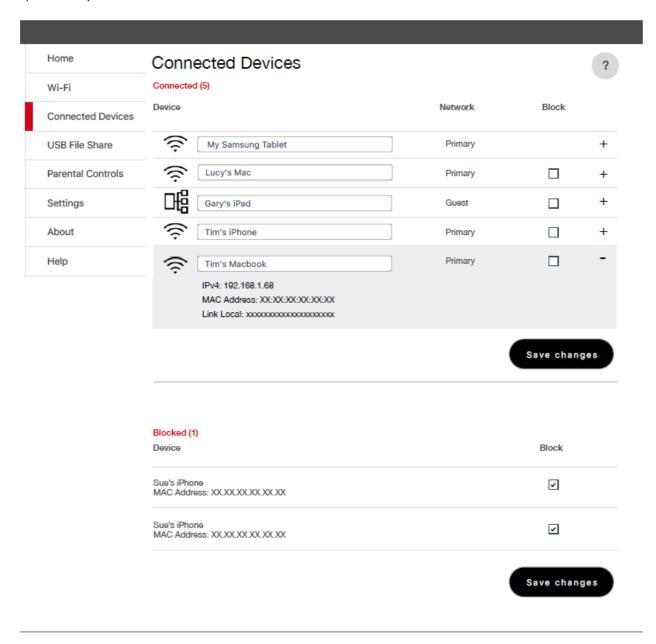


To manage Connected Devices on the Router R1000 click on the Connected Devices tile:



# **Change my Connected Devices**

Clicking on **Wi-Fi** tile will take you to the Settings page on the Wi-Fi menu. Click on the Primary Network tab to make updates to your Wi-Fi Name



The Connected Devices page allows you to view and edit devices that are currently connected to your Router R1000. You can also view and unblock any blocked devices. The Connected Devices page contains the following:

- **Connected Devices** Displays the IP Address, MAC Address and Link Local of all devices connected to the Wi-Fi network. The Wi-Fi network name is displayed after the heading.
- **Blocked Devices** Displays the name and MAC address of any blocked devices.

#### **Connected Devices**

The **Connected Devices** section lists all devices connected to the Wi-Fi network. The **Primary Network** menu contains the following options:

- Type The first column indicates the type of connected device. You can use the Edit option
  to set or change the type. If the type has not been set, no icon is displayed. Once you set the
  device type, an appropriate icon is displayed.
- Name Normally, this is the hostname of the connected device, as set on the connected device. If you have used this interface to assign a name to a connected device, the assigned name displays in place of the hostname. In rare cases, the hostname may be unavailable. You can use the
- Network Shows if the device is connected to the Primary or Guest network.
- IPv4 Address The IP address of the connected device.
- **MAC Address** The MAC Address is a unique network identifier for this connected device.
- **Link-Local** If the connected device supports IPv4, the Link-Local IPv4 address is displayed.
- **Block** Allows you to prevent a specific device from connecting to the Jetpack.

#### **Blocked Devices**

The **Blocked Devices** section lists any devices you have blocked. Note that since these devices are not currently connected, and are blocked from connecting, they do not have an IP address. Instead, they are identified by their name and MAC address. To unblock a device, uncheck the blocked device and **Save changes**.

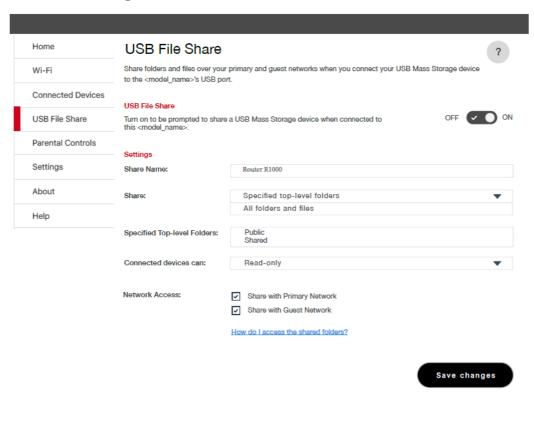
# **Change my USB File Share Settings**

Clicking on **Wi-Fi** tile will take you to the Settings page on the Wi-Fi menu. Click on the **USB File Share** tab to make updates to your USB file sharing. USB file share allows all connected users to access content on a USB drive inserted into the back of the Router R1000 similar to accessing data on a network drive.

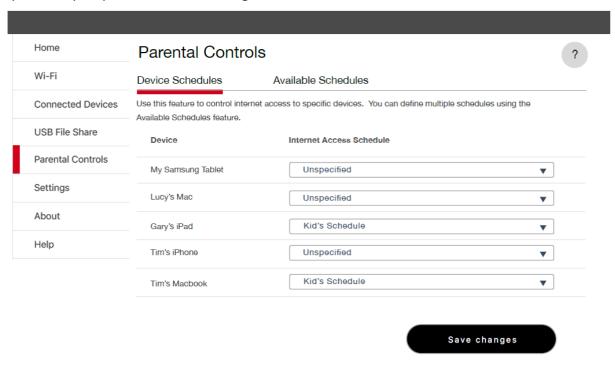
**IMPORTANT!** USB File Share is turned off by default.

The **USB File Share** page allows you to turn USB File Share ON/OFF. You can also select content to share, access type (read-write or read-only), and Network access.

- 1 To enable USB file sharing on a USB Mass Storage device when connected to your Router R1000, slide the **USB File Share** ON/OFF button to ON.
- 2 Under Settings, list out the **Share Name** for how you want to see the USB Mass Storage appear in your network drive on your computer.
- 3 Specify what folders users will be able to access under the **Share** setting.
- To select access type settings. select either **Read-write** or **Read-only** from the **Access Type** dropdown menu.
- **5** To specify network access, mark the appropriate **Network Access** checkbox.
- 6 Click Save Changes to activate and save your settings.



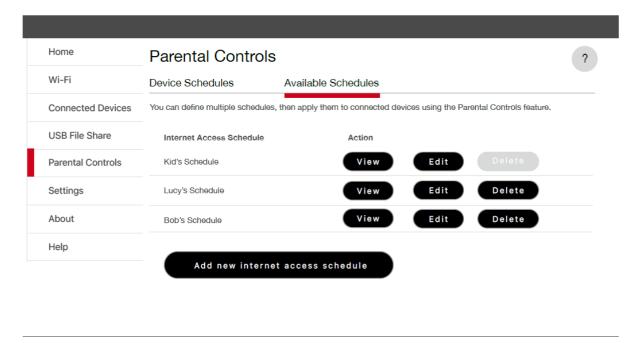
Clicking on **Wi-Fi** tile will take you to the Settings page on the Wi-Fi menu. Click on the **Parental Controls** tab to make updates to your parental controls settings.



The **Parental Controls** page allows you to control internet access to specific devices.

On the Device Schedules tab, you can view and select schedules for connected devices.

Click on Available Schedules to view, edit, delete and add schedules.



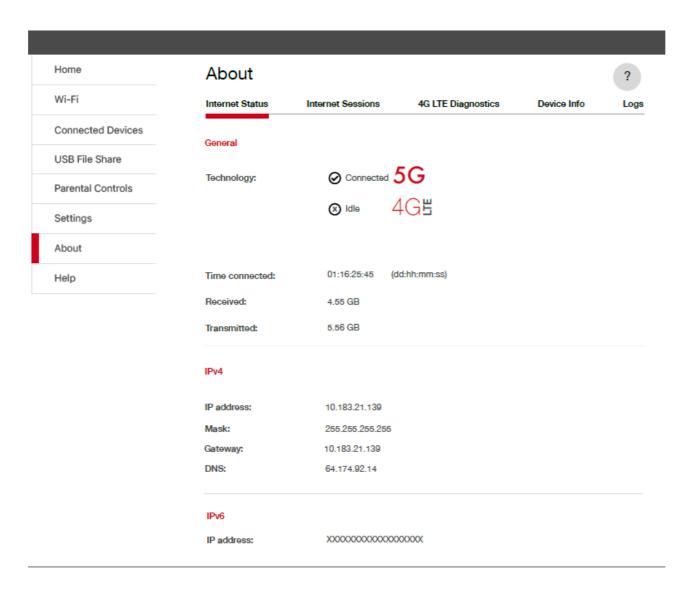
# **About My Router R1000**

Clicking on **About** tile will take you to the About page.

The About Jetpack page allows you to view detailed information about Jetpack internet status, device specific information, diagnostics, troubleshooting and support. The About page contains the following menu options:

- Internet Status (See Internet Status on page ??.)
- Internet Sessions (See Internet Sessions on page ??.)
- 4G LTE Diagnostics (See 4G LTE Diagnostics on page??.)
- Device Info (See <u>Device Info</u> on page ??.)
- Logs (See Logs on page??.)

#### **Internet Status**



# **Internet Status**

The Internet Status section has the following options:

- **Technology** The type of technology used to connect to the Internet.
- **Time connected** How long the Router R1000 has been connected to the network.
- **Received** The amount of data received from the network.
- **Transmitted** The amount of data sent to the network.

#### IPv4

The IPv4 section has the following options:

- IP address The IP address for the Router R1000.
- Mask The subnet mask network setting for the Router R1000. The default value 255.255.255.0 is standard for small (class "C") networks. If you change the LAN IP Address, ensure you use the correct Subnet Mask for the IP address range containing the LAN IP address.
- **Gateway** The address of the server used to access the Internet.
- DNS The address of the Domain Name Server (DNS).

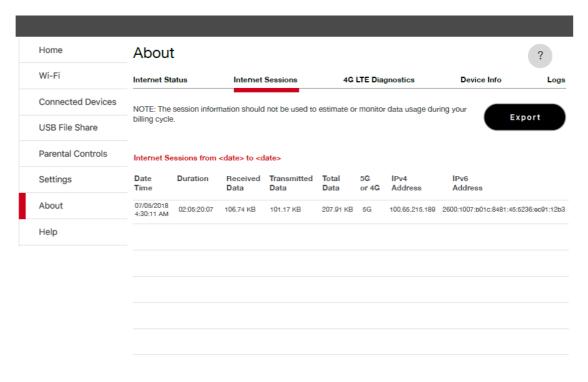
#### IPv6

The IPv6 section has the following option:

IP address — The IP address for the Router R1000.

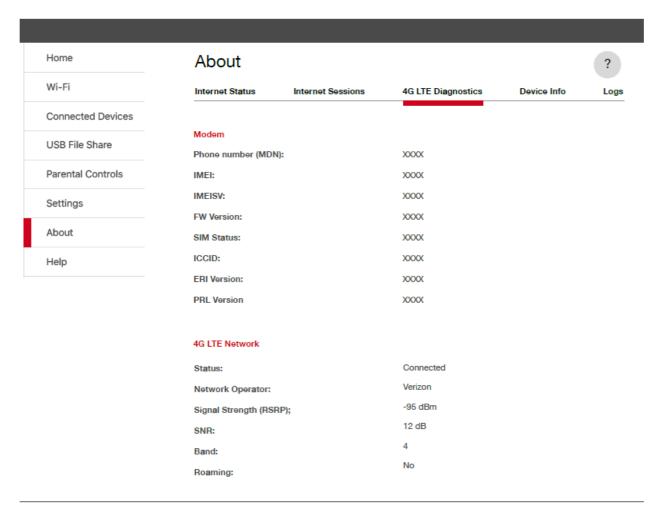
#### **Internet Sessions**

The Internet Sessions provides information on usage for specified periods of time.



The Diagnostics page shows information about the Router R1000 firmware and other system-level information. You can also view the system log. This page is used mostly for troubleshooting and is not required for normal operation. The Diagnostics page contains the following sections:

- Modem (See Modem on page ??.)
- 4G LTE Network (See 4G LTE Network on page ??.)



#### Modem

The Modem section has the following options:

- **Phone number (MDN)** The Phone Number or Mobile Directory Number (MDN) is used by the mobile data network to identify this particular data service.
- **IMEI** The International Mobile Equipment Identity (IMEI) number for the Router R1000.
- **IMEISV** The International Mobile Equipment Identity (IMEI) combined with an approval number for the Router R1000.
- **FW Version** The modem firmware version.
- **SIM Status** Status of the SIM card. If the SIM card is missing, or this field indicates some form of SIM error, the Router R1000 will not be able to connect to the mobile network.
- **ICCID** The ID number assigned to the SIM Card.
- **ERI version** The Enhanced Roaming Indicator version that is currently installed.
- **PRL version** The version of the Preferred Roaming List (PRL), which tells the modem which non-home carrier towers should provide roaming coverage.

# **4G LTE Network**

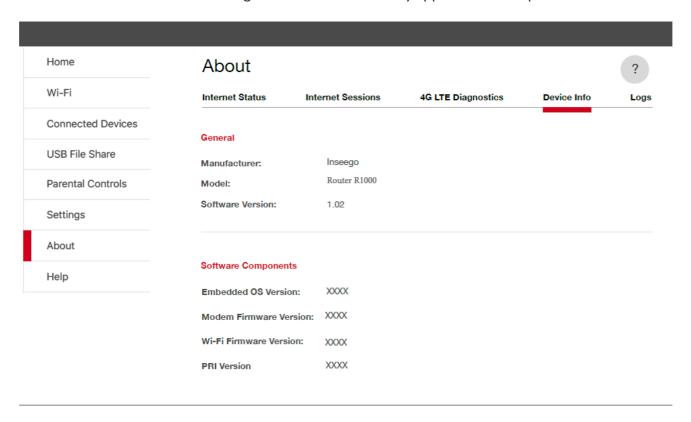
The 4G LTE Network section has the following options:

- **Status** Status of the network (Connected, Disabled, Not available, or Available).
- **Network operator** The vendor that currently provides wireless access.
- Signal Strength (RSRP) Indicates the signal strength for LTE.
- SNR A measure of signal quality; the higher the number the better the signal.
- **Band** Indicates what LTE band the Router R1000 is currently operating on.
- Roaming Indicates if the Router R1000 is currently roaming.

#### **Device Info**

The Device Info page contains detailed information about the Router R1000. The Device Info page contains the following sections:

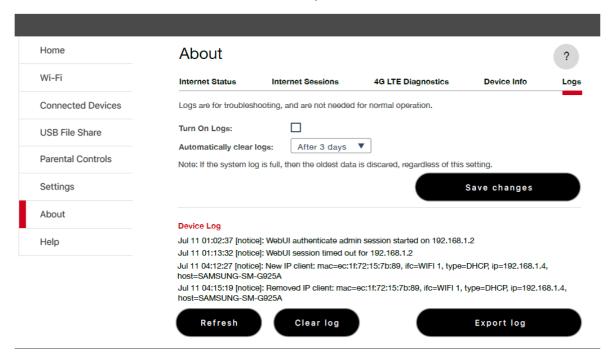
- Manufacturer The manufacturer of the Router R1000.
- **Model** The model number or name of the Router R1000.
- Software Version The current software version.
- Software Components:
  - **Embedded OS Version** The Router R1000 operating system (OS), including its components, version.
  - **Modem Firmware Version** The current modem firmware version.
  - **Wi-Fi Firmware Version** The current Wi-Fi firmware version.
  - **PRI version** The configuration version currently applied to the Jetpack.



# Logs

The Logs page allows you to turn logs ON/OFF, and to delete system logs.

Logs record various operations and are used for troubleshooting and are not needed for normal Router R1000 operation.



# **Turn On/Off Logs**

To turn on system logs:

- Select the checkbox next to **Turn On Logs** to turn on logs and uncheck box to turn logs off.
- 2 Click Save Changes.

<u>Clear log</u> To clear a system log:

1 Click Clear log.

**Export log**To export a system log:

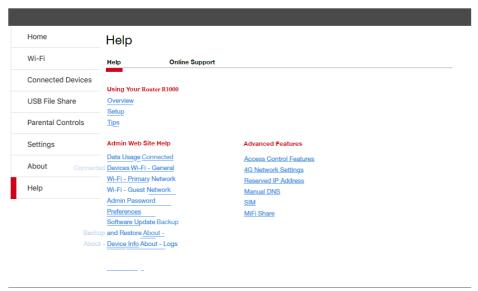
1 Click Export log.

# Help

The Help page contains the following sections:

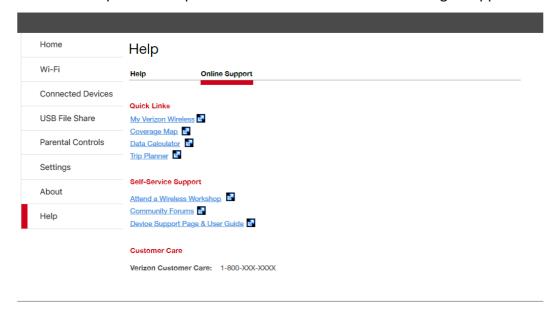
# Help

- Using Your Router R1000 provides quick links to Overview, Setup and Tips
- Admin Web Site Help provides quick links to Wi-Fi settings, passwords, preferences and device info.
- Advanced Features provides quick links to advances device settings.



# Help

- Quick Links, Self-Service Support provides quick links to key websites where uses can get help.
- Customer Care provide the phone number for customers to call to get support.



# Troubleshooting

Overview Common Problems and Solutions Technical Support

# Overview

When properly installed, the Router R1000 is a highly reliable product. Most problems are caused by one of these issues:

- Phones or ethernet devices connected to incorrect ports. Please refer to the labels next to the ports for proper connections.
- Network coverage is unavailable due to coverage area, an account problem, or a network problem. To display a Verizon Wireless coverage map, see <u>Verizon Wireless Coverage map</u>.

The following tips can help solve many common problems encountered while using the Router R1000.

# **First Steps**

- Make sure you are using the Router R1000 in the correct geographic region.
- Ensure that your wireless coverage extends to your current location.
- If you do not receive a strong data signal, move the device to a different location.
- Ensure you have an active subscription plan.
- Restarting your computer and your Router R1000 can resolve many issues.

**IMPORTANT** Before contacting support, be sure to restart both your computer and your Router R1000.

# **Common Problems and Solutions**

The following are some common problems and solutions.

#### Does 911 work on this device?

Yes, but since the Router R1000 is designed for an indoor environment, please be prepared to provide your location inside the premises to public service personnel. The GPS chipset embedded in this device will work best if the device is located near a window or other opening.

Does the Router R1000 work during a power outage? While the Router R1000 has backup batteries, if the landline device requires external power to operate, service (including the ability to make and receive E911 calls) will not be available during a power outage. Service will only be available during a power outage if the home phone connected to the device does not rely on external power to operate (as is the case with many corded phones).

Only 911 voice service will be available during a power outage. Data service will not be available.

# How long is the backup battery life of the Router R1000?

Talk usage time on backup battery is approximately 2 hours and standby time is approximately 24 hours. You can replace the AA batteries to extend the talk and standby time. Internet connectivity is disabled to preserve talk time when in backup battery mode. Actual values can vary with environmental conditions\*

# How do I reset the Wi-Fi and Router settings back to factory settings?

To reset the Wi-Fi and router settings:

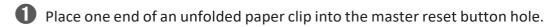
- 1 Connect to Router R1000. Open a web browser on the connected device and enter <a href="http://my.router/or.http://192.168.1.1">http://my.router/or.http://192.168.1.1</a> in your browser.
- Open the Router R1000 Backup and Restore page after Signing In to the Web User Interface. (See <u>Backup and Restore</u> on page 65.) The Backup and Restore page has a **Restore factory defaults** button. This button resets all Wi-Fi and Router settings to their factory default values. All existing settings are lost.

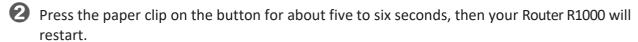
<sup>\*</sup> If the router is disconnected from AC power and running on the battery alone, only voice calls are supported. A phone that does not require separate electric power is required to place or receive calls (including 911) during a power outage.

# How do I reset the Router R1000 back to factory settings?

The master reset button is in a small hole located on the bottom of the Router R1000. This button returns the device to factory settings, including resetting the Wi-Fi Name (SSID) and Password and Admin Password.

To reset the Router R1000:





**WARNING!** The "Reset to Factory Defaults" operation overwrites ALL existing settings. If the Wi-Fi settings change, you will lose this connection, and need to reconnect using the new settings.

# **Technical Support**

**IMPORTANT** Before contacting support, be sure to re-start both your computer and the Router R1000 and perform the trouble shooting steps in this guide.

# **Technical Support**

For additional information and technical support, visit any Verizon Wireless store, the online support page at http://Verizonwireless.com/support, or contact Customer Service at **1-800-922-0204** if additional help is required.

# Product Specifications and Regulatory Information

Product Specifications
Regulatory Information
Wireless Communications
Limited Warranty and Liability
Safety Hazards
Proper Battery Use and Disposal

# **Product Specifications**

# **General**

Name:	Router R1000
Model:	R1000
Approvals:	FCC (North America)
Weight:	TBD
Dimensions:	213 mm x 120 mm x 127 mm, 8.39 in x 4.72 in x 5.0 in
Wireless Network	LTE
Wireless Network –	Real simultaneous Dual tri band
Wi-Fi Mode	802.11 a/b/g/n/ac
Default SSID	Verizon-R1000-XXXX
Batteries (non-rechargeable) - Size - Talk/standby time	AA Alkaline (3 @ 1500mAh each) 2 hours talk/24 hours standby on new batteries
Chip Set:	Altair® FourGee 3800
Interface Types:	Phone (RJ11) (2)/Alarm (RJ31) (1)/Ethernet (3)/Modem (1)/WPS (1)/USB (1)/Power (1)
LED:	Status

# Technology/Bands

Technology:	4G LTE
Band Designation:	4G LTE Cat 4: B2/B4/B13
GPS:	A-GPS for E911 only

# **Environmental**

Operating Temperature:	-10° C to +55° C (14°F to 131° F)
Storage Temperature:	-30° C to +70° C (-22°F to 158° F)
Drop:	1 meter (3.28 feet) drop, no damage – fully operational
Vibration Stability:	5 Hz to 500 Hz, 0.1 octave/second

# **Regulatory Information**

# Federal Communications Commission Notice (FCC – United States)

Electronic devices, including computers and wireless modems, generate RF energy incidental to their intended function and are therefore subject to FCC rules and regulations.

This equipment has been tested to, and found to be within the acceptable limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment.

This equipment generates radio frequency energy and is designed for use in accordance with the manufacturer's user manual. However, there is no guarantee that interference will not occur in any particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures.

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

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions.

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

WARNING: DO NOT ATTEMPTTO SERVICE THE WIRELESS COMMUNICATION DEVICE YOUR SELF. SUCH ACTION MAY VOID THE WARRANTY. THE ROUTER IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT INSEEGO TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

**FCC CAUTION:** Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

**MODIFICATIONS:** The FCC requires that you be notified that any changes or modifications made to this device that are not expressly approved by Inseego Corp. may void your authority to operate the equipment.

**NOTE:** The Radio Frequency (RF) emitter installed in your modem must not be located or operated in conjunction with any other antenna or transmitter, unless specifically authorized by Inseego Corp.

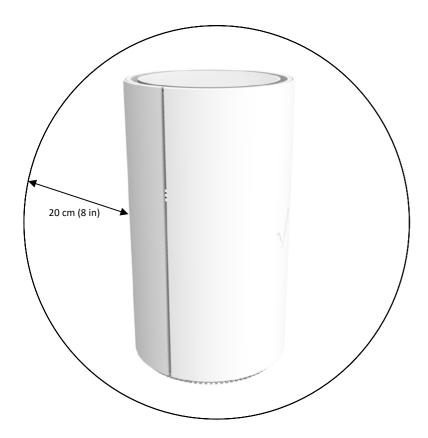
# **RF Exposure Content**

# FCC Equipment Authorization ID: PKRNVWR1000

This device is authorized for use in Fixed or Mobile applications.

This product has been evaluated for SAR and meets the FCC Guidelines for exposure to radio waves.

For better signal reception, coverage range and data throughput, do not place the router near any physical obstruction, including in close proximity of any object. For RF Safety, a mandatory minimum of 36 cm separation should be maintained between the device and any part of a human body when using the device. Increasing the separation between the device and the body will result in better reception and reduced exposure to radio energy.



# Wireless Communications

**IMPORTANT** Due to the transmission and reception properties of wireless communications, data occasionally can be lost or delayed.

This can be due to the variation in radio signal strength that results from changes in the characteristics of the radio transmission path. Although data loss is rare, the environment where you operate the modem might adversely affect communications.

Variations in radio signal strength are referred to as fading. Fading is caused by several different factors including signal reflection, the ionosphere, and interference from other radio channels.

Inseego or its partners will not be held responsible for damages of any kind resulting from the delays or errors in data transmitted or received with the Verizon Router R1000 device, or failure of the Verizon Router R1000 device to transmit or receive such data.

# Limited Warranty and Liability

Inseego Corp. warrants for the 12-month period immediately following receipt of the Product by Purchaser that the Product will be free from defects in material and workmanship under normal use. THESE WARRANTIES ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The exclusive remedy for a claim under this warranty shall be limited to the repair or replacement, at Inseego's option, of defective or non-conforming materials, parts or components. The foregoing warranties do not extend to (I) non-conformities, defects or errors in the Products due to accident, abuse, misuse or negligent use of the Products or use in other than a normal and customary manner, environmental conditions not conforming to Inseego's specification, of failure to follow prescribed installation, operating and maintenance procedures, (II) defects, errors or nonconformities in the Product due to modifications, alterations, additions or changes not made in accordance with Inseego's specifications or authorized by Inseego, (III) normal wear and tear, (IV) damage caused by force of nature or act of any third person, (V) shipping damage, (VI) service or repair of Product by the purchaser without prior written consent from Inseego, (VII) products designated by Inseego as beta site test samples, experimental, developmental, reproduction, sample, incomplete or out of specification Products, or (VIII) returned products if the original identification marks have been removed or altered.

# Safety Hazards

Do not operate the Verizon Router R1000 in an environment that might be susceptible to radio interference resulting in danger, specifically:

# Areas where prohibited by the law

Follow any special rules and regulations and obey all signs and notices. Always turn off the host device when instructed to do so, or when you suspect that it might cause interference or danger.

# Where explosive atmospheres might be present

Do not operate your device in any area where a potentially explosive atmosphere might exist. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Be aware and comply with all signs and instructions.

Users are advised not to operate the device while at a refueling point or service station. Users are reminded to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. Potential locations can include gas stations, below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

# Near medical and life support equipment

Do not operate your device in any area where medical equipment, life support equipment, or near any equipment that might be susceptible to any form of radio interference. In such areas, the host communications device must be turned off. The device can transmit signals that could interfere with this equipment.

# On an aircraft, either on the ground or airborne

In addition to FAA requirements, many airline regulations state that you must suspend wireless operations before boarding an airplane. Please ensure that the modem is turned off prior to boarding aircraft in order to comply with these regulations. The modem can transmit signals that could interfere with various onboard systems and controls.

# While operating a vehicle

The driver or operator of any vehicle should not operate a wireless data device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some countries, operating such communications devices while in control of a vehicle is an offense.

# Electrostatic discharge (ESD)

Electrical and electronic devices are sensitive to electrostatic discharge (ESD). Macintosh native connection software might attempt to reinitialize the device should a substantial electrostatic discharge reset the device. If the software is not operational after an ESD occurrence, then restart your computer.

# **Proper Battery Use and Disposal**

# **IMPORTANT** In event of a battery leak:

- Do not allow the liquid to come in contact with the skin or the eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
- Seek medical advice immediately if a battery has been swallowed.
- Communicate the appropriate steps to be taken if a hazard occurs. Due to the transmission and reception properties of wireless communications, data occasionally can be lost or delayed.

Please review the following guidelines for safe and responsible battery use.

- Do not disassemble or open, crush, bend or deform, puncture, or shred.
- Do not modify or remanufacture, attempt to insert a foreign object into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.
- Only use the battery for the system for which it was specified.
- Do not short circuit a battery or allow a metallic or conductive object to contact the battery terminals.
- Replace the battery only with another battery that has been qualified with the system per this standard. Use of an unqualified battery may present a risk of fire, explosion, leakage, or other hazard.
- Promptly dispose of used batteries in accordance with local regulations.
- Battery usage by children should be supervised.
- Avoid dropping the Router R1000 or battery. If the Router R1000 or the battery is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.
- Improper battery use may result in a fire, explosion, or other hazard.

# Glossary

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- 4G LTE Fourth Generation Long Term Evolution. LTE is a standard for wireless data communications technology and an evolution of the GSM/UMTS standards. The goal of LTE is to increase the capacity and speed of wireless data networks using new DSP (digital signal processing) techniques and modulations that were developed around the turn of the millenium. A further goal is the redesign and simplification of the network architecture to an IP-based system with significantly reduced transfer latency compared to the 3G architecture. The LTE wireless interface is incompatible with 2G and 3G networks, so that it must be operated on a separate wireless spectrum.
- **802.11 (a, b, g, n,ac)** A set of WLAN Wi-Fi communication standards in the 2.4 and 5 GHz frequency bands.
- **bps** Bits per second. The rate of data flow.
- **Broadband** High-capacity high-speed transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.
- **DHCP** Dynamic Host Configuration Protocol. Software found in servers and routers that automatically assigns IP addresses and other configuration data to computers, tablets, printers, and other devices connected to the IP network.
- **DHCP Server** A server or service with a server that assigns IP addresses.
- **DNS** Domain Name System. A system for converting host names and domain names into IP addresses on the Internet or on local networks that use the TCP/IP protocol.
- **Firmware** A computer program embedded in an electronic device. Firmware usually contains operating code for the device.
- **GB** Gigabyte. A multiple of the unit byte for digital information storage. Usage depends on context. When referring to disk capacities it usually means 10° bytes. It also applies to data transmission quantities over telecommunication circuits.
- Gbps Gigabits per second. The rate of data flow.
- **Hotspot** A Wi-Fi (802.11) access point or the area covered by an access point. Used for connecting to the Internet.
- HTTP Hypertext Transfer Protocol. An application-level protocol for accessing the World Wide Web over the Internet.
- **IEEE**—Institute of Electrical and Electronics Engineers. An international technical/professional society that promotes standardization in technical disciplines.
- IMEI International Mobile Equipment Identity. Used in LTE networks to identify the device. It is usually printed on the device and can often be retrieved using a USSD code.
- **IP** Internet Protocol. The mechanism by which packets are routed between computers on a network.
- **IP Type** The type of service provided over a network.
- IPaddress Internet Protocol address. The address of a device attached to an IP network (TCP/IP

network).

- ISP Internet Service Provider. Also referred to as the service carrier, an ISP provides Internet connection service. (See Network Operator)
- Kbps Kilobits per second. The rate of data flow.
- LAN Local Area Network. A type of network that lets a group of computers, all in close proximity (such as inside an office building), communicate with one another. It does not use common carrier circuits though it can have gateways or bridges to other public or private networks.
- MAC Address Media Access Control. A number that uniquely identifies each network hardware device. MAC addresses are 12-digit hexadecimal numbers. This is also known as the physical or hardware address.
- Mbps Megabits per second. The rate of data flow.
- **MSID** Mobile Station IDentifier. A number for a mobile phone that identifies that phone to the network. These numbers are carrier specific.
- **Network Operator** The vendor who provides your wireless access. Known by different names in different regions, some examples are: wireless provider, network provider, and service provider.
- **NetworkTechnology** The technology on which a particular network provider's system is built; such as LTE or GSM.
- **Port** A virtual data connection used by programs to exchange data. It is the endpoint in a logical connection. The port is specified by the port number.
- Port Forwarding A process that allows remote devices to connect to a specific computer within a private LAN.
- Port Number A 16-bit number used by the TCP and UDP protocols to direct traffic on a TCP/IP host. Certain port numbers are standard for common applications.
- PRL Preferred Roaming List. A list that your wireless phone or device uses to determine which networks to connect with when you are roaming. (Network operator specific).
- **Protocol** A standard that enables connection, communication, and data transfer between computing endpoints.
- **Proxy** A firewall mechanism that replaces the IP address of a host on the internal (protected) network with its own IP address for all traffic passing through it.
- **Router** A device that directs traffic from one network to another.
- SIM Subscriber Identification Module. Found in LTE and GSM network technology, the SIM is a card containing identification information for the subscriber and their account. The SIM card can be moved to different devices.
- **SSID** Service Set IDentifier. The name assigned to a Wi-Fi network.
- **TCP/IP** Transmission Control Protocol/Internet Protocol. The set of communications protocols used for the Internet and other similar networks.
- TTY Text Telephones (TTY), also known as Telecommunications Device for the Deaf (TDD), are used by the deaf, hard—of—hearing, and individuals with speech impairments to communicate.
- UDP User Datagram Protocol (UDP) is a communications protocol that offers a limited amount
  of service when messages are exchanged between computers in a network that uses the Internet

Protocol (IP). UDP is an alternative to the Transmission Controll Protocol (TCP) and, together with IP, is sometimes referred to as UDP/IP

- **USB** Universal Serial Bus. A connection type for computing device peripherals such as a printer, mobile modem, etc. USB connectors may be used for data transfer or charging.
- **USB Port Types** The USB ports on computers and hubs have a rectangular Type A socket, and peripheral devices have a cable with a Type A plug. Peripherals that do not have an attached cable have a square Type B socket on the device and a separate cable with a Type A and Type B plug. Ports and connectors are available in different sizes (for example, standard, mini, and micro).
- **VPN** Virtual Private Network. A secure private network that runs over the public Internet. Commonly used to connect to an office network from elsewhere.
- **Wi-Fi** Wireless Fidelity. Any system that uses the 802.11 standard developed and released in 1997 by the IEEE.
- Wi-Fi Client A wireless device that connects to the Internet via Wi-Fi.
- **WPA/WPA2** Wi-Fi Protected Access. A security protocol for wireless 802.11 networks from the Wi-Fi Alliance.