

NETGEAR Nighthawk R7000 QoS Configuration and Best Practices Guide

Setting Up Your NETGEAR Nighthawk R7000 Router

1. Once the router has been powered on, navigate to <http://192.168.1.1>
2. Create a password and security questions, then click **next**.

Admin Account Settings

The admin password is used to log in to your router's web interface. Secure your Network by changing the admin password.

User Name	admin
New Password	
Confirm New Password	
Security Question #1*:	Please select a question. ▼
Answer*:	
Security Question #2*:	Please select a question. ▼
Answer*:	

*=required information

Next

3. Save the router information, then click **next**.

Congratulations!

You are successfully connected to the Internet.

2.4G Wireless Settings:	
2.4GHz Wireless Network Name (SSID):	NETGEAR00
Wireless Network Key (Password)	windytable566
5G Wireless Settings:	
5GHz Wireless Network Name (SSID):	NETGEAR00-5G
Wireless Network Key (Password)	windytable566
Router Admin Settings:	
Admin User Name:	admin
New Admin Password:	default

Print this Next

4. Select **Yes** to update the router's firmware.

Firmware Update Assistant

New firmware is found. Do you want to update the firmware?

Current GUI Language Version:	1.0.7.12_2.1.38.2
New GUI Language Version:	1.0.9.28_2.1.38.1
Current Firmware Version:	1.0.7.12
New Firmware Version:	1.0.9.28_10.2.32

Release Notes:

1. [Bug Fix] Includes security fixes.
2. [Bug Fix] Fixes security issues.
3. [Bug Fix] Fixes the issue where the WPS feature can't be used if Smart Connect is enabled.
4. [Bug Fix] Fixes the issue where the GUI does not respond after clicking the Exit button on the password recovery page when using Chrome or Firefox.
5. [Bug Fix] Fixes the issue where the file copy is stopped when the router gets a DHCP NAK from the DHCP server on the Internet port.
6. [Bug Fix] Fixes the issue where Internet sessions are disconnected when the DHCP lease update occurs on the Internet port.
7. [Bug Fix] Fixes the issue where the image delays when the IPTV channel changes.
8. [Bug Fix] Fixes security issues.
9. [Bug Fix] Fixes the Wi-Fi disconnect issue caused by a flood of broadcast traffic.
10. [Bug Fix] Fixes security issues.

5. Click **I agree**, then **Next** to keep your router up-to-date.

Enable router to automatically update to future firmware. This keeps your router up to date with the latest features and security fixes.

Select one of the following options:

☒ I Agree ☐ I Disagree

Enable collection of [router analytics data](#) that will help NETGEAR improve our services and products.

Select one of the following options:

☒ I Agree ☐ I Disagree

Please make your selection for both features above to continue.

Configuring QoS for VoIP Phones

1. Log into <http://192.168.1.1> using the credentials you created at step 1.

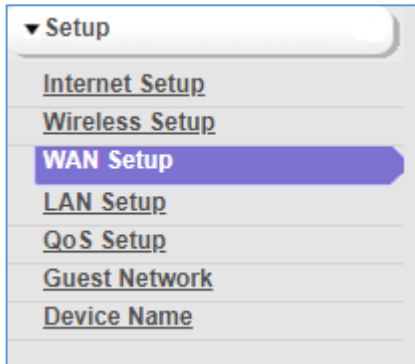
Nighthawk R7000

BASIC

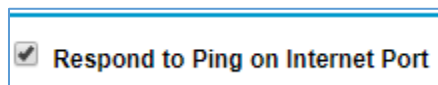
ADVANCED

2. Click the **Advanced** tab.

3. Click **Setup**, then **WAN Setup**



4. Click the box next to **Respond to Ping on Internet Port**



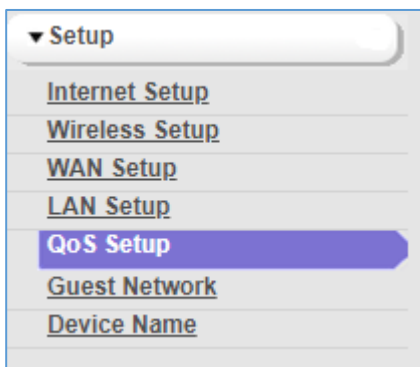
5. Select **Open** for **NAT Filtering**, then click the box next to **Disable SIP ALG**



6. Click **Apply**



7. Click **QoS Setup**



8. Click the box next to **Enabled QoS** ☒ **Enable QoS**

9. Click the **speed test** button to automatically adjust QoS

☒ Let Speedtest detect my Internet bandwidth
(Please make sure no device is accessing the Internet while running the test)

[Speed Test](#)

 **SPEEDTEST**
by OOKLA
[Privacy Policy](#)

Latest test result: Thu Jun 7 04:41:02 2018

 **DOWNLOAD**  **UPLOAD**

311.24Mbps 22.44Mbps

10. Click **Apply**

[Apply](#) [Cancel](#)

11. Click the link: **Click here to see bandwidth utilization by device and application.**

☒ **Automatically update performance optimization database** [Update Now](#)

Current Performance Optimization Database on Router

Version: v1.170.0.0.11

Release Date: 2017/07/23

[Click here to see bandwidth utilization by device and application](#)

12. Click the checkbox next to your Clarity phone.

Attached Devices						
Edit		DOWNLOAD SPEED 348.07 Mbps UPLOAD SPEED 22.72 Mbps		Access Control: Turned Off		
				Go to Access Control to allow or block devices. Refresh		
	Priority	Connection Type	Device Name	Internet Download Speed by Device		Internet Upload Speed by Device
☐	High	Wired	DESKTOP-48PNV7M 192.168.1.2	0.04 Mbps		0.08 Mbps
☒	Normal	Wired	Polycm_0004f26a9d3c 192.168.1.3	0.00 Mbps		0.00 Mbps

13. Click **Edit**.

14. Set Priority to **Highest**, set Device Type to **VoIP**.

15. Click **Apply**.

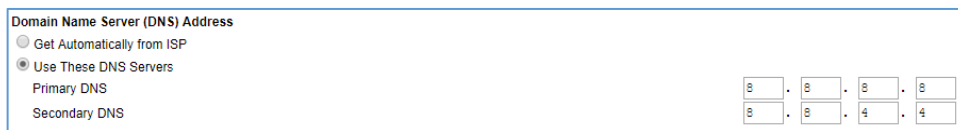


16. Repeat steps 16-20 for all Clarity phones

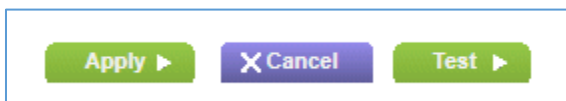
17. Click **Internet Setup**



18. Under **Domain Name Server (DNS) Address** click **Use These DNS Servers**. Primary DNS will be 8.8.8.8, Secondary DNS will be 8.8.4.4.



19. Click **Apply**.



20. Setup is now complete.

Netgear

To Internet Service Provider (ISP):



1

High Speed Business Class Internet from ISP (Cable, Fiber). Satellite and LTE is NOT recommended or supported. Stand alone modem provided by customer or Internet Service Provider (ISP)



2

Router shipped pre-configured from Clarity, with Quality of Service and WiFi. Supports up to 4 Ethernet connections

* OPTIONAL Ethernet switch provides additional Ethernet connections

3

Phone handsets shipped pre-configured from Clarity. Connect to network with computer "Ethernet" cables (see inset at right)



* OPTIONAL Jabra Wireless Headset



Ethernet Cable



* Customer responsible for Ethernet cabling

Checklist

- ✓ High Speed Internet
- ✓ Recommended Single-Port Stand-Alone Modem
- ✓ Ethernet Cabling from Router (or optional switch) to Phones

4



Computers may be plugged into the PC port on the back of the phone