



# NetCommWireless

## Port Forwarding Setup

(NB604n)

## **Port Forwarding**

Port forwarding enables programs or devices running on your LAN to communicate with the internet as if they were directly connected.

This is most commonly used for VOIP ATA devices or online gaming (via game console or computer).

Port forwarding works by "forwarding" a specific TCP or UDP port from the modem / router to the computer or device you are using.

You can also restrict which incoming connections will have the rule applied to it. This enables you to specify all incoming connections, from a specific subnet or from an individual IP address.\*



Different services and different games all use different TCP or UDP ports.

You will need to consult any information supplied with your service or game in order to find which ports need to be forwarded.



You can only forward a port to **one** location (IP address).

In some cases, this may cause issues when multiple LAN devices (computers, game consoles, or VOIP ATAs) attempt to use online gaming at the same time or make multiple VOIP service connections.

In these cases, you would need to use an alternate port for any subsequent connections after the first device.

Please consult your VOIP provider or game manufacturer for assistance with this.

\* - If supported by your model of modem / router.

## Adding a Port Forwarding Rule

This guide will take you through the steps required to add a port forwarding rule to your modem / router.

1. Navigate to <http://192.168.1.1> in a web browser.
2. Enter "admin" (without quotes) as both the username and password when prompted.

The screenshot shows the NetComm router's web interface. The left sidebar contains a navigation menu with the following items: Device Info, Basic setup, Advanced Setup (highlighted with a red box), Layer 2 Interface, WAN Service, LAN, NAT (highlighted with a red box), Virtual Servers (highlighted with a red box), Port Triggering, DMZ Host, ALG, Multi NAT, Security, Parental Control, Quality of Service, Routing, DNS, DSL, UPnP, DNS Proxy, Packet Acceleration, Storage Service, Interface Grouping, IPSec, Power Management, Wireless, Diagnostics, and Management. The main content area is titled "NAT -- Virtual Servers Setup" and contains a descriptive paragraph: "Virtual Server allows you to direct incoming traffic from WAN side (identified by Protocol and External port) to the Internal server with private IP address on the LAN side. The Internal port is required only if the external port needs to be converted to a different port number used by the server on the LAN side. A maximum 32 entries can be configured." Below this text is a table with the following columns: Server Name, External Port Start, External Port End, Protocol, Internal Port Start, Internal Port End, Server IP Address, WAN Interface, and Remove. The table is currently empty. Below the table are two buttons: "Add" and "Remove". At the bottom of the page, there is a copyright notice: "©1997-2011 NetComm Corporation. All rights reserved."

3. Select the **Advanced Setup > NAT > Virtual Servers** options from the menu on the left hand side of the page.
4. Click the **Add** button to add a port forwarding rule.

5. Check the Interface currently selected in the **Use Interface** field is correct.

**NetComm**

Device Info  
Basic setup  
Advanced Setup  
Layer 2 Interface  
WAN Service  
LAN  
NAT  
Virtual Servers  
Port Triggering  
DMZ Host  
ALG  
Multi NAT  
Security  
Parental Control  
Quality of Service  
Routing  
DNS  
DSL  
UPnP  
DNS Proxy  
Packet Acceleration  
Storage Service  
Interface Grouping  
IPSec  
Power Management  
Wireless  
Diagnostics  
Management

NAT -- Virtual Servers

Select the service name, and enter the server IP address and click "Apply/Save" to forward IP packets for this service to the specified server.  
**NOTE: The "Internal Port End" cannot be modified directly. Normally, it is set to the same value as "External Port End". However, if you modify "Internal Port Start", then "Internal Port End" will be set to the same value as "Internal Port Start".**  
Remaining number of entries that can be configured:32

Use Interface:

Service Name:  
 Select a Service:   
 Custom Service:


Server IP Address:

External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End
<input type="text" value="5060"/>	<input type="text" value="5060"/>	<input type="text" value="TCP/UDP"/>	<input type="text" value="5060"/>	<input type="text" value="5060"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text" value="TCP"/>	<input type="text"/>	<input type="text"/>

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6. To create your own defined port forwarding rule, select the **Custom Service** field and give the port forwarding rule a unique name.
7. Enter the IP address of the computer or device you wish to port forward to in the **Server IP Address** field. This will be a local IP address in the subnet 192.168.1.X; where X can equal 2 to 254.
8. Enter the **port** number or port range into the External Port Start and External Port End fields. Note that the Internal Port Start and Internal Port End fields will automatically populate with the same port numbers.
9. Select the protocol to be used for the port forwarding rule. Options include TCP, UDP or TCP/UDP both.

10. Click the **Apply/Save** button.



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**NAT -- Virtual Servers Setup**

Virtual Server allows you to direct incoming traffic from WAN side (identified by Protocol and External port) to the Internal server with private IP address on the LAN side. The Internal port is required only if the external port needs to be converted to a different port number used by the server on the LAN side. A maximum 32 entries can be configured.

Server Name	External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End	Server IP Address	WAN Interface	Remove
VoIP_Port	5060	5060	TCP/UDP	5060	5060	192.168.1.3	ppp0	<input type="checkbox"/>

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11. The port forwarding rule will now be displayed as the example above shows.

**Please note:** Some services require more than one port forwarded. You can do this by specifying a sequential range of ports instead of just one.

**For example:** 6881-6999.

To do this, you would enter **"6881"** in the **"Port Start"** fields and **"6999"** in the **"Port End"** fields for both the **"External Packet"** and **"Forward to Internal Host"** sections.



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Please consult your VOIP provider or game manufacturer for assistance with this.