



Port Forwarding Setup
(NB9WMaxx)

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.

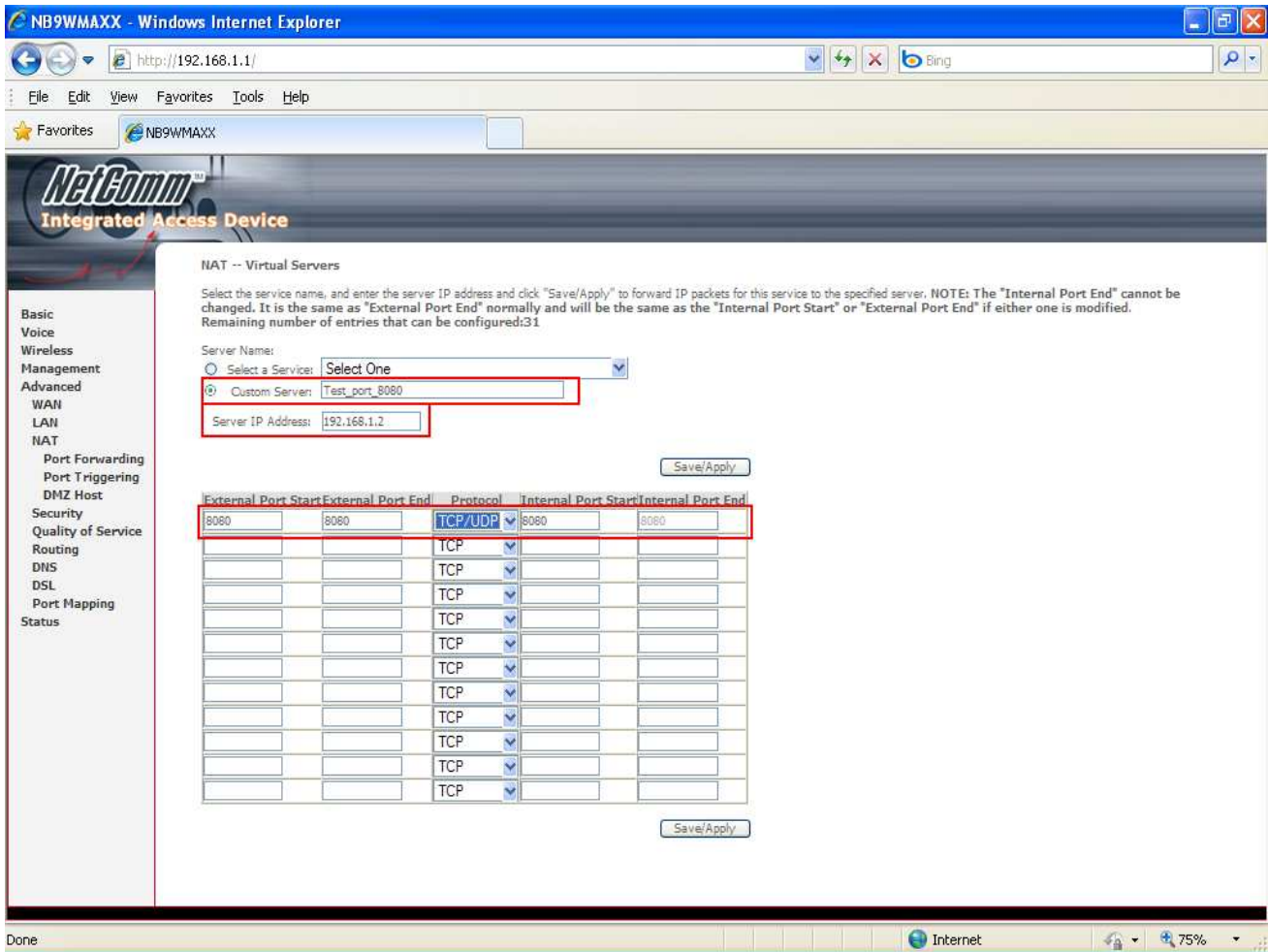
Adding a Port Forwarding Rule

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. If asked to login, the default username and password is "admin" for both without the quotes.
2. Select "**Advanced**" > "**NAT**" > "**Port Forwarding**" from the left menu.

The screenshot shows a Windows Internet Explorer browser window displaying the NetComm NB9WMAXX web interface. The address bar shows <http://192.168.1.1/>. The page title is "NB9WMAXX - Windows Internet Explorer". The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The Favorites bar shows "NB9WMAXX". The main content area is titled "NetComm™ Integrated Access Device" and "Advanced > NAT > Port Forwarding". Below the title, there is a descriptive text: "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 are "Add" and "Remove" buttons. A table with the following columns is visible: Server Name, External Port Start, External Port End, Protocol, Internal Port Start, Internal Port End, Server IP Address, Remove, and Edit. The table is currently empty. On the left side, there is a navigation menu with the following items: Basic, Voice, Wireless, Management, Advanced, WAN, LAN, NAT, Port Forwarding (highlighted), Port Triggering, DMZ Host, Security, Quality of Service, Routing, DNS, DSL, Port Mapping, and Status. The browser's status bar at the bottom shows "Internet" and a zoom level of "75%".

3. Press the "Add" button.



4. Under **Server Name**, select the "Custom Server" option. Enter a name for your Port Forwarding rule. This can be anything, it is used to describe the port forwarding rule

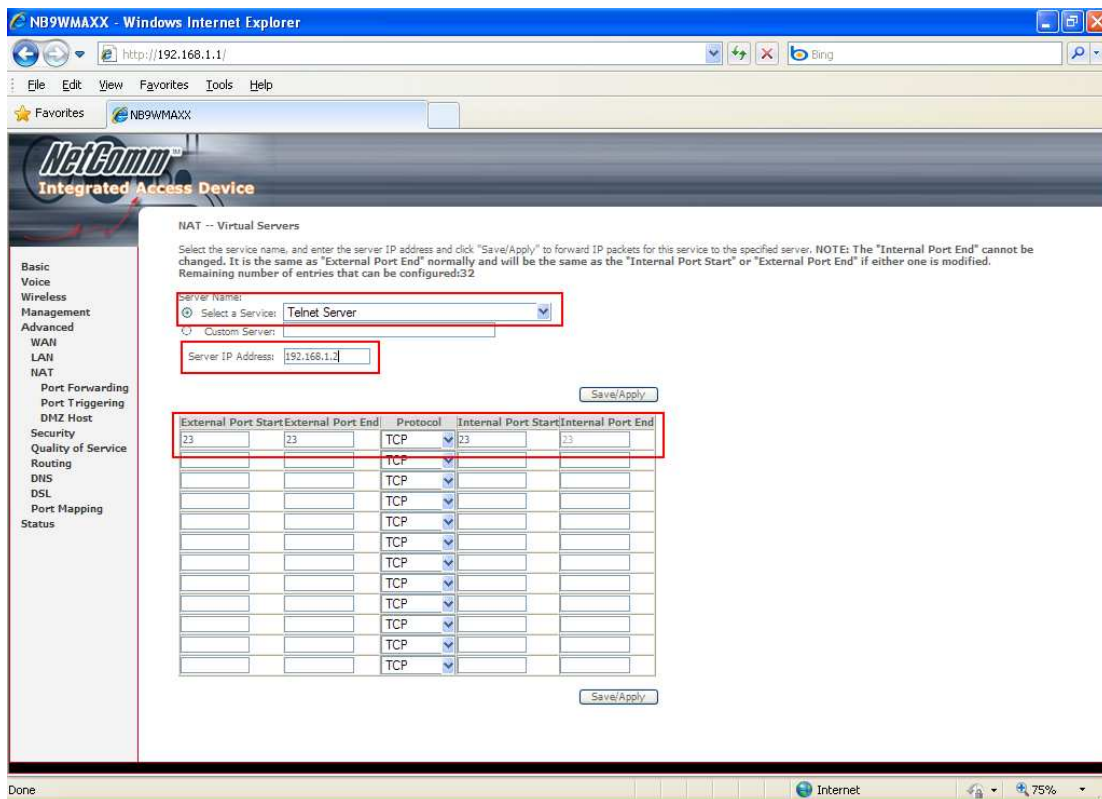
5. In the **Server IP Address** box, enter the IP Address of the computer or device you wish to Port forward to. By default, the IP Address will be 192.168.1.x, where 'x' is a number between 2 and 254. If you are unsure of the IP Address of your computer, or the address on your computer is "dynamic", please see the following page for more information about setting a "Static IP": <http://www.portforward.com/networking/staticip.htm>

6. Under **External Port Start** and **External Port End** on the next blank row of the table, enter the port number that you wish to Port Forward. If you are entering a range of ports (such as 1000-2000) then you would enter 1000 into External Port Start, and 2000 into External Port End.

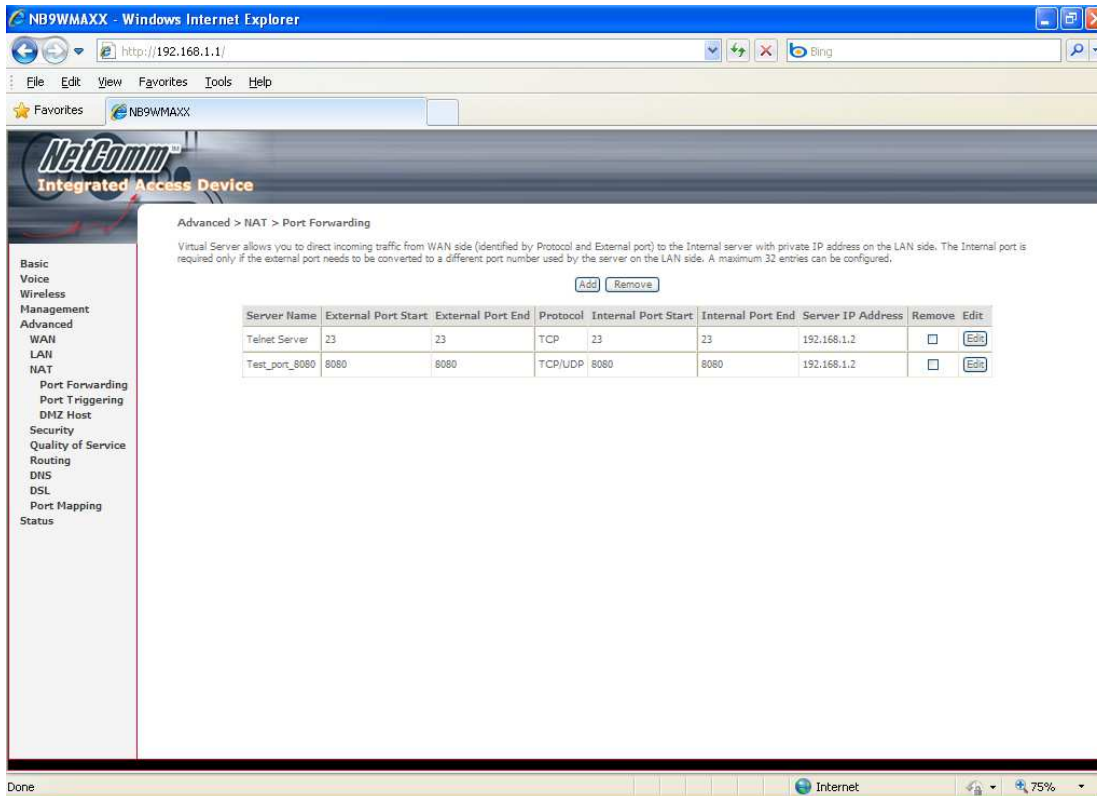
7. Under **Protocol** on the same row of the table, select the Protocol that is required for your ports. If you do not know this, select "TCP/UDP".

8. Under **Internal Port Start** and **Internal Port End** on the same row of the table, enter the port number that the forward ports will be redirected to. Typically, these are the same numbers as in Step 8. The same rules apply as in Step 8 if you wish to enter a range of ports.

9. There are also a number of preconfigured port forwarding rules under "Select a Service" that can be chosen. In the example below the Telnet service is added to allow port forwarding across the NB9WMaxx to the device using the IP address 192.168.1.2.



On entering the port forwarding rules each entry will be displayed at Advanced > NAT > Port Forwarding as below.



Note: If you wish to enter more Port Forwarding rules for this IP Address, then you can repeat steps 8-10.

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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