NB5 Series effective Port Forwarding

Port Forwarding is a feature supplied in most routers that allows you to open specific ports to a specific IP address. This provides a way to control access to specific areas and applications on the internal network such as online games and peer-to-peer programs.

There are 2 points to be aware of when setting up port forwarding.

- You can only assign a port number to 1 IP address. Once the port number is used it may not be assigned to any other IP address.
- You can assign more than 1 port number to any specified IP address.

This document outlines the process involved in setting up port forwarding for the NB5xx series.

Step 1:- Choosing and assigning a static IP address to your PC

When configuring rules such as port forwarding or DMZ host, it is important to assign the required PC with a static IP address. This ensures that the PC is not assigned a different IP address by the DHCP pool.

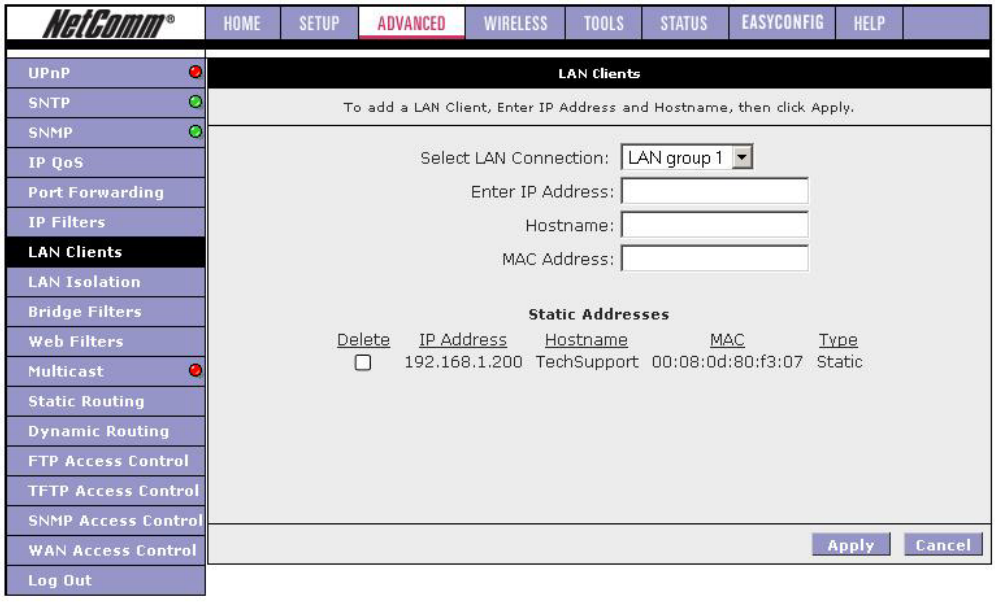
When selecting an IP address it is important to choose an IP that is outside the DHCP IP range (but within same subnet … or at least on the extreme end of the DHCP pool spectrum). For this example we will choose 192.168.1.200.

If you are planning to open different port numbers to different PCs, choose the next available IP address to assign to the PC.

Step 2:- Configuring LAN Clients Option

Once you have selected an IP address for your PC, it is important to assign it to the LAN clients list. To set this up, you will need to follow the outlined process:-

1) Log on to the NB5 web configuration http://192.168.1.1, username and password should be admin and admin.
2) Select “Advanced settings” > “Advanced” > “LAN Clients”.
3) Enter the IP address (192.168.1.200).
4) Enter the Computer’s “Host Name” or “Mac Address” and select “Apply” (you can find this information by running “ipconfig.exe /all” on command prompt).
5) You should notice that the IP address will now be assigned statically as below.



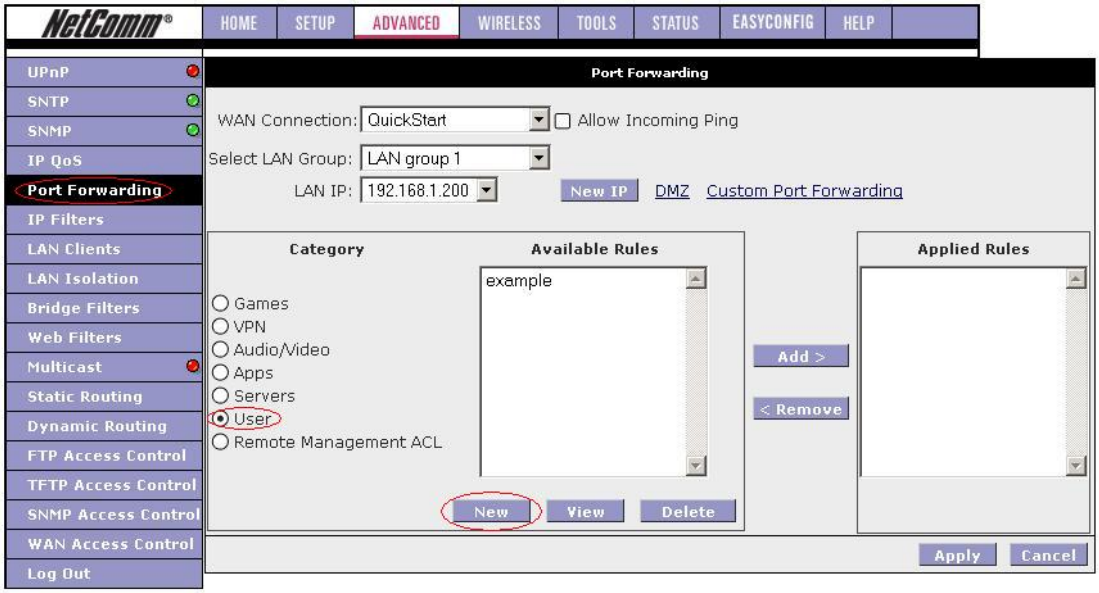
Step 3:- Configuring Port Forwarding

There are presently 2 ways to configure port forwarding on the NB5 series. The first method is to use rule based port forwarding and the second is custom port forward. The custom port forward gives you more control of the rule compare to the other. This document outlines both processes.

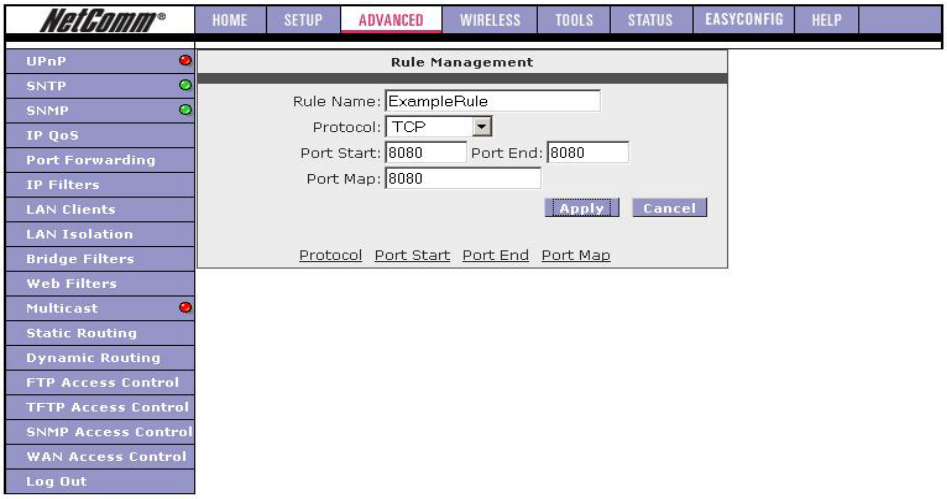
Rule Based port forwarding

To set up Rule Based port forwarding, follow these steps.

1) Log in to the “Web Configuration Page” of the modem.
2) Click on “Advanced settings” > “Advanced” > “Port Forwarding”
3) Select “User”, in “Category” section. Then Select “New” to start creating a new rule.

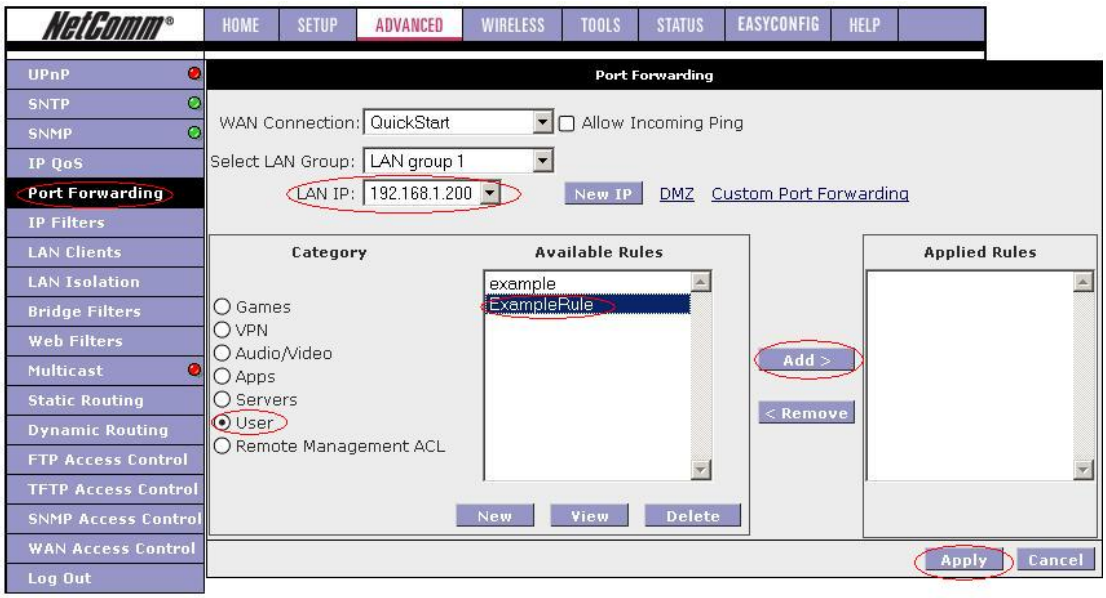


4) In the “Rule Management” section, complete the fields as required below. You will need to specify the “Rule Name”, “Port Start”, “Port End”, “Port Map” and “Protocol” for your rule. Depending on the number of ports you wish to open you will assign the first port within your required range to be the “Port Start” and the last port number to be the “Port End”. The “Port Map” will generally be the first port within the range for your internal port (you should ensure the application program is listening on the specific port number – please refer to the software manual / vendor for information). Then simply select the “Protocol” you wish to select and give your rule a meaningful name (in this example we are opening the port 8080).
5) Click “Apply” to finalise.



6) Next, assign the port forward rule to your IP address. Click on “Port Forwarding” on the side menu.

7) Click on “User”, in the “Category” section. You should find the new rule you had just created. Then from the top “LAN IP” dropdown box, select your Computer’s IP address. Highlight the new rule that you just created, click on “Add” to add the rule to your “Applied Rules” Box. Click on the “Apply” button to finish.

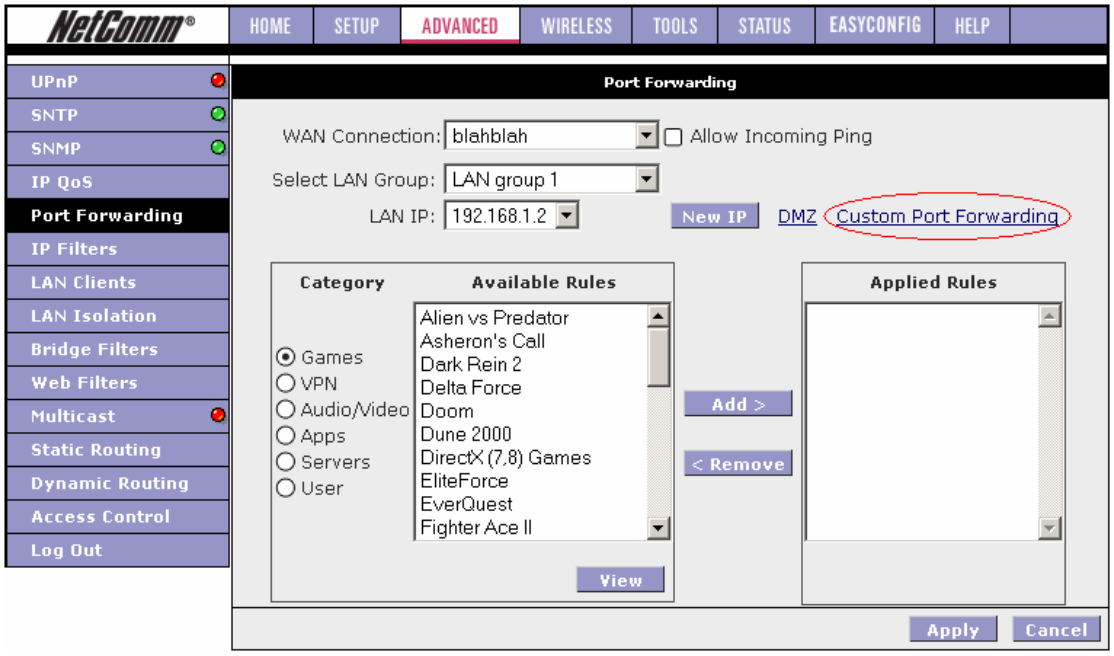


Note:- To ensure that the settings are saved, click on “Tools”, “System Command”, “Save All” and “Restart”.

Custom port forwarding

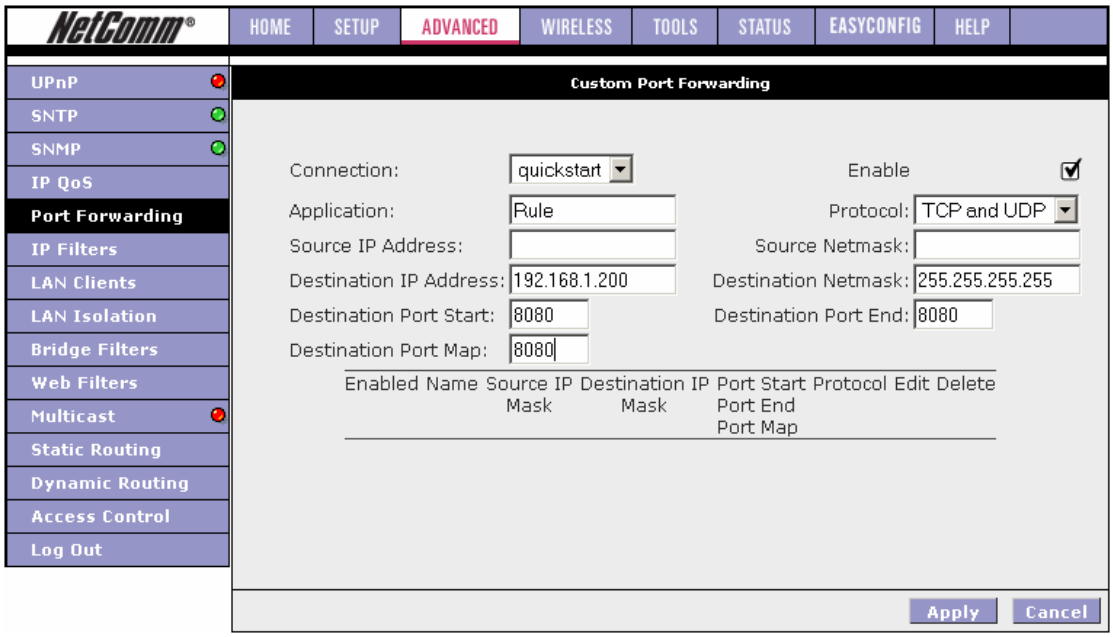
To setup a custom port forward rule, please follow these steps:

1) Log in to the “Web Configuration Page” of the modem.
2) Click on “Advanced Settings” > “Advanced” > “Port Forwarding”
3) Click on “Custom Port Forwarding” link



4) Fill in the following sections:

Connection	- This is generally set to “PPPoE” or “Quickstart”.
Application	- Type in the application name for which you are creating the port forwarding rule (e.g. bittorrent)
Protocol	- Select the appropriate protocol (use TCP/UDP if unsure)
Source IP address	- *Leave it blank*
Source Netmask	- *Leave it Blank*
Destination IP Address	- IP address of the PC assigned in LAN Clients.
Destination Netmask	- Leave as 255.255.255.255
Destination Port Start	- Starting port number of your port Range
Destination Port end	- Last port number of your port Range
Destination Port Map	- Usually the first port on your range (you should also ensure the application is configured to listen on the specific port number – please refer to software manual / vendor for information)



5) Once completed (similar to below), click on “Apply” to enable the rule.