

NetComm NB5 ADSL-2/2+ Series Modem Router Block of Public IPs and Disabling NAT

The following document outlines how to disable the NB5's NAT (Network Address Translation) feature in order to implement an additional block of public IP addresses.

This type of setup is commonly used when you wish to individually assign a public IP address to a local computer or other TCP/IP enabled device(s) that are connected on the LAN side of the NB5. This will then enable them to be publicly available and remotely accessible via the allocated public IP. Some examples of such computers or devices include Web Servers, Mail Servers, IPCameras etc.

For this example we will use the following IP addressing information of which is usually provided by your ISP -

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Default WAN IP - 58.6.33.30 (ISP PPPoE/A assigned)

/29 Block of public IP addresses

Network IP Address: 58.6.33.32
Useable IP Range: 58.6.33.33 – 58.6.33.38
Broadcast IP Address: 58.6.33.39
Subnet Mask: 255.255.255.248

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1. Reset the NB5 to factory default by holding the reset button (back of unit) for 10 seconds whilst the unit is powered.
2. Login to the NB5 web-based interface i.e <http://192.168.1.1> and if prompted, enter the default username and password of "admin" for both.
3. Setup your initial PPPoE/A WAN connection by selecting the '**Basic**' – '**Quick Start**' menu options followed by entering your supplied username and password required to build your initial Internet connection. After selecting '**Connect**' verify this connection has been established by browsing a web site and then please be sure to click the '**Save Setting**' option.

Quick Start

User ID	<input type="text" value="username"/> <i>Example: user@ispname</i>
Password	<input type="password" value="••••"/> <i>Provided by your ISP.</i>
Protocol	<input type="text" value="PPPoE"/>
VPI	<input type="text" value="8"/>
VCI	<input type="text" value="35"/>

Connect

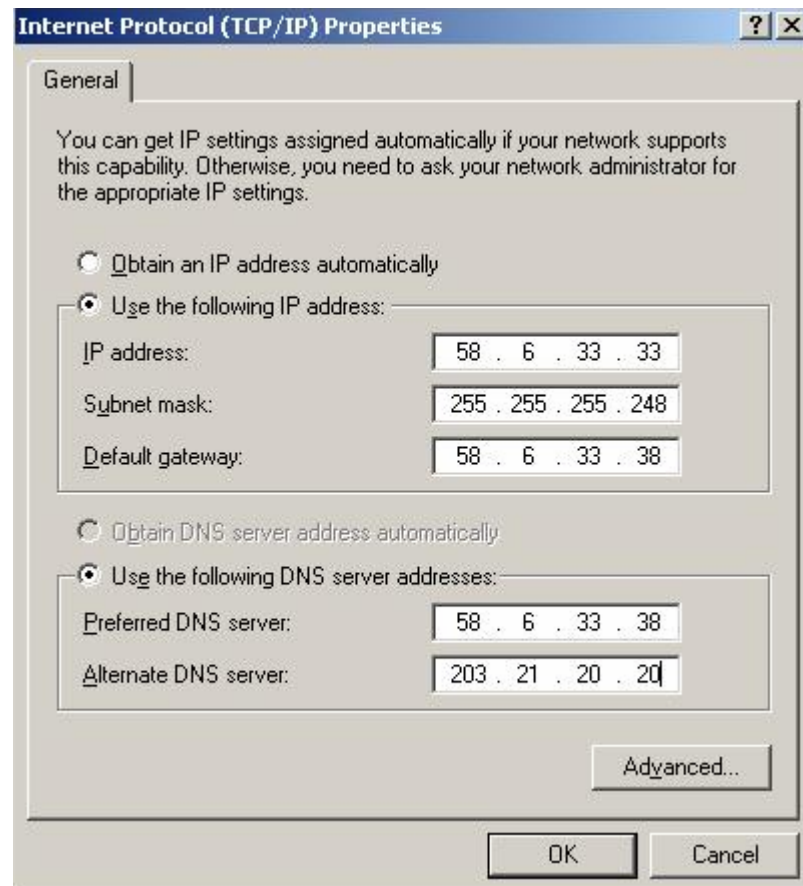
Note: After clicking on Connect, please be sure to click your username/password and other settings will be saved.

4. From the '**Basic**' menu select '**LAN Configuration**'. Turn DHCP '**Server and Relay Off**', change the LAN '**IP address**' from 192.168.1.1 to the last useable public IP address in your block followed by the associated '**Subnet Mask**' e.g 58.6.33.38, 255.255.255.248 then select the '**Apply**' and '**Save Setting**' options.

LAN Group 1 Configuration

IP Address:	<input type="text" value="58.6.33.38"/>
Netmask:	<input type="text" value="255.255.255.248"/>
Default Gateway:	<input type="text" value="202.173.128.33"/>
Host Name:	<input type="text"/>
Domain:	<input type="text"/>
<input type="radio"/> Enable DHCP Server	
Start IP:	<input type="text" value="58.6.33.33"/>
End IP:	<input type="text" value="58.6.33.38"/>
Lease Time:	<input type="text" value="3600"/> Seconds
<input type="radio"/> Enable DHCP Relay	
Relay IP:	<input type="text" value="20.0.0.3"/>
<input checked="" type="radio"/> Server and Relay Off	

5. After the previous settings have been saved you won't be able to access the NB5s configuration page until you change the IP addressing of your computer to an address within the same public IP subnet, appropriate subnet mask, gateway and DNS e.g 58.6.33.33, 255.255.255.248, 58.6.33.38, 58.6.33.38 respectively.



6. Access the NB5's web-based interface using the following address format <http://yourlastpublicip> e.g <http://58.6.33.38>



7. Select '**Advanced**' – '**WAN**' – '**Quickstart**' (default connection) then disable the '**NAT**' and '**Firewall**' options followed by '**Apply**' and '**Save Setting**'

PPPoE Connection Setup

Name: Type: Sharing:

Options: ☐ NAT ☐ Firewall VLAN ID: Priority Bits:

PPP Settings

Username:
 Password:
 Idle Timeout: secs
 Keep Alive: min
 Authentication: ☒ Auto ☐ CHAP ☐ PAP
 MTU: bytes
 On Demand: ☐ Default Gateway: ☒
 Enforce MTU: ☒ Debug: ☐
 PPP Unnumbered: ☐ LAN:

PVC Settings

PVC:
 VPI:
 VCI:
 QoS:
 PCR: cps
 SCR: cps
 MBS: cells
 CDVT: usecs
 Auto PVC: ☐

8. The process should now be complete and any other available public IP addresses from your block can now be assigned to additional machines or devices.

To test simply try to remotely ping the public IP addresses of which you have assigned.

As NAT is now disabled on the NB5 your machines will be exposed to the Internet so it would be recommended to implement some form of software based firewalling to increase security and help prevent against external attacks.

Note: Although the images and procedure outlined above reflect the exact steps with the NB5 firmware version 62.51.1 this same principle will also apply to the NetComm NB4, NB5PLUS4 & NB5PLUS4W ADSL modem routers.