

# Port Triggering Setup Guide for VPN Connections

NF20 / NF20MESH

## Port Triggering Setup Guide

If you have a VPN client software such as a Cisco VPN client or Nortel connectivity client running on your computer behind the gateway, and if you are not able to connect to a VPN then you can set up a Port Triggering rule to open the required ports. Please contact your VPN provider to know which TCP/UDP ports to open in the Gateway. When you know the port number to be opened then please refer to the instructions below.

## Logging in to the web interface of the Gateway

- 1 Connect your computer to the Gateway using a wired or wireless connection. We recommend connecting via Ethernet cable.
- 2 Open a web browser (such as Internet Explorer, Google Chrome, Safari or Mozilla Firefox), type the following address into the address bar and press **Enter**.  
<http://192.168.20.1>
- 3 Enter the Gateway Login **Username** and **Password** printed on the label at the bottom of the Gateway and click on the **Login** button.



- 4 Navigate to **Device info-> WAN** and find the interface with **Service UP** in **IPv4 status**. For example, in below provided screenshot Interface **ppp0.1** service is UP. Remember the name of interface for later use.

Device Info

Summary

Connected Devices

WAN

Statistics

Route

ARP

DHCP

CPU & Memory

Basic Setup

Advanced Setup

Wi-Fi

Voice

Diagnostics

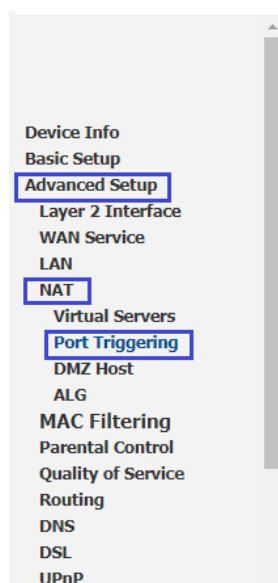
Management

Logout

WAN Info

| Interface | Description | Type  | VlanMuxId | IPv6    | Igmp Pxy | Igmp Src Enbl | MLD Pxy  | MLD Src Enbl | NAT     | Firewall | IPv4 Status | IPv4 Address   | IPv6 Status     | IPv6 Address |
|-----------|-------------|-------|-----------|---------|----------|---------------|----------|--------------|---------|----------|-------------|----------------|-----------------|--------------|
| ppp0.1    | ETH WAN     | PPPoE | Disabled  | Enabled | Disabled | Disabled      | Disabled | Disabled     | Enabled | Enabled  | ServiceUp   | 125.254.29.167 | ServiceStarting |              |
| ptm0.2    | VDSL        | IPoE  | Disabled  | Enabled | Disabled | Disabled      | Disabled | Disabled     | Enabled | Enabled  | ServiceDown |                | ServiceDown     |              |

- 5 Click on the **Advanced Setup** menu at the left of the page, then click **Port Triggering** option from the NAT submenu.



### NAT -- Port Triggering Setup

Some applications require that specific ports in the Router's firewall be opened for access by the remote parties. Port Trigger dynamically opens up the 'Open Ports' in the firewall when an application on the LAN initiates a TCP/UDP connection to a remote party using the 'Triggering Ports'. The Router allows the remote party from the WAN side to establish new connections back to the application on the LAN side using the 'Open Ports'. A maximum 32 entries can be configured.

Due to limited resources, port triggering feature has some limitation:

sum of the outputs of all configuration entries  $\leq 1000$

sum of the inputs of one configuration entry  $\leq 1000$

| Application Name | Trigger  |            |     | Open     |            |     | WAN Interface | Remove |
|------------------|----------|------------|-----|----------|------------|-----|---------------|--------|
|                  | Protocol | Port Range |     | Protocol | Port Range |     |               |        |
|                  |          | Start      | End |          | Start      | End |               |        |

Add Remove

- Click on **Add** then select correct interface in **Use interface** field which you have from **step 4**. Select **Custom application** and type an **Application Name**. Example: VPN as shown in step 7 screenshot
- Add the **Port Start** and **Port End** (range of ports that you want to open) as provided by your VPN provider to open the ports. Select port type UDP or TCP as per the information provided by your VPN provider. click on Apply/Save.

NAT -- Port Triggering

Some applications such as games, video conferencing, remote access applications and others require that specific ports in the Router's firewall be opened for access by the applications. You can configure the port settings from this screen by selecting an existing application or creating your own (Custom application) and click "Save/Apply" to add it.  
Remaining number of entries that can be configured:64

Use Interface: **ppp0.1/ppp0.1**

Application Name: **VPN**

☐ Select an application: **Select One**

☒ Custom application: **VPN**

Save/Apply

| Trigger Port Start | Trigger Port End | Trigger Protocol | Open Port Start | Open Port End | Open Protocol |
|--------------------|------------------|------------------|-----------------|---------------|---------------|
| 500                | 500              | TCP              | 500             | 500           | TCP           |
| 1800               | 1800             | TCP              | 1800            | 1800          | TCP           |
|                    |                  | TCP              |                 |               | TCP           |
|                    |                  | TCP              |                 |               | TCP           |
|                    |                  | TCP              |                 |               | TCP           |
|                    |                  | TCP              |                 |               | TCP           |
|                    |                  | TCP              |                 |               | TCP           |
|                    |                  | TCP              |                 |               | TCP           |
|                    |                  | TCP              |                 |               | TCP           |

Save/Apply

- When the port triggering rules have been created as shown below, you should be able to establish your VPN connection.

Device Info  
 Basic Setup  
 Advanced Setup  
 Layer2 Interface  
 WAN Service  
 LAN  
 NAT  
 Virtual Servers  
 Port Triggering  
 DMZ Host  
 ALG  
 MAC Filtering  
 Parental Control  
 Firewall  
 Quality of Service  
 Routing  
 DNS  
 DSL  
 UPnP  
 DNS Proxy  
 DLNA

#### NAT -- Port Triggering Setup

Some applications require that specific ports in the Router's firewall be opened for access by the remote parties. Port Triggering dynamically opens the 'Open ports' in the firewall when an application on the LAN initiates a TCP/UDP connection to a remote party using the 'Triggering Ports'. The Router allows the remote party from the WAN side to establish new connections to the application on the LAN side using the 'Open Ports'. A maximum of 32 entries can be configured.

| Application Name | Trigger  |            |      | Open     |            |      | WAN Interface | Remove                   |
|------------------|----------|------------|------|----------|------------|------|---------------|--------------------------|
|                  | Protocol | Port Range |      | Protocol | Port Range |      |               |                          |
|                  |          | Start      | End  |          | Start      | End  |               |                          |
| VPN              | TCP      | 500        | 500  | TCP      | 500        | 500  | ppp0.1        | <input type="checkbox"/> |
| VPN              | TCP      | 1800       | 1800 | TCP      | 1800       | 1800 | ppp0.1        | <input type="checkbox"/> |