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 as 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. Open your web browser and navigate to the site http://192.168.20.1

2. Click on “Switch to advance view” at the bottom of the window.
3. Use admin for the username and admin for the password. Click Submit

4. Click on Services, Select Routing and then select NAT.
5. Set the Mapping no to number 1 if this is your first Port Fowarding Rule
6. Select the protocol to be used for the port forwarding rule. Options include TCP, UDP or TCP/UDP both.
7. Set your Source IP to 0.0.0.0
8. Enter the Port number or port range into the Incoming Port Range fields.
9. Enter the IP address of the computer or device to which you will be port forwarding to in the Destination IP Address Field. This will be a local IP Address between the range of 192.168.20.2 to 192.168.20.254.
10. Click on Save NAT.

11. The Port Forwarding Rule will be displayed as follows.

![Screen shot of USB WiFi Gateway with NAT settings](image-url)
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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