Port Forwarding Setup Guide
(NP800 Series)
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 sub-net 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.

Port Forwarding is required when applications require ports to be open to operate correctly.
You will need to know the port/s that you are trying to open, and also the IP Address of the device (computer, VoIP ATA, etc.) that you are Port Forwarding to.

_**Setting a Static IP Address**_

If you are Port Forwarding to a device other than a computer, you will need to contact the manufacturer of the device to find out what it’s IP Address is. You will also need to ensure this IP Address is a Static IP Address.

If you are Port Forwarding to a computer, you will need to set a Static IP Address on your computer, specifically on the network card of your computer.

To do this try the following:

1. Select **Start > All Programs > Accessories > Command Prompt**.
2. Enter ‘ncpa.cpl’ (without quotes) and press enter.
3. Right click on either your **wireless network connection** or your **local area connection** (depending on the type of connection you have to your router) and select Properties.
4. Select **Internet Protocol (TCP/IP [V4 for Windows Vista or 7])** and press the properties button.
5. Select ‘Use the following IP address’. Enter the static IP address details. An example of a Static IP Address details you can use is as follows:

   **IP Address**: 192.168.20.2
   **Subnet Mask**: 255.255.255.0
   **Default Gateway**: 192.168.20.1

6. Select ‘Use the following DNS addresses’. If you know your ISP’s DNS addresses use these or you can use the following addresses.

   **Preferred (Primary) DNS**: 192.168.20.1
   **Alternate (Secondary) DNS**: 4.2.2.2

7. Press the **Ok** button on the **Internet Protocol (TCP/IP)** properties page and also on the Local Area Connection Properties page.

2. If asked to login, the default username and password is "admin" and "admin" without the quotes.

3. Select Advanced on the left-menu then Port Fw. from the top-menu.

You should now see on screen the following:

Tick the check box for 'Enable Port Forwarding'.

For Description, Enter a descriptive name for the port forwarding rule to be configured. In the above example, "Test" is the name for the rule.

For Local IP, enter the IP address of the device you are port forwarding to.
In above example, 192.168.20.2 is the IP address.

For Protocol, Select the correct protocol type for your ports traffic, either TCP or UDP. If you are unsure what protocol your port requires, choose Both.
In the above example, TCP is selected.

In the above example, we have port forwarded the port 3000.
For Local Port, Enter the local port number you wish to forward to your device.
In above example, 3000 is the Port number.
For Public Port, Enter the public port number you wish to forward to your device.
In above example, 3000 is the Port number.

After entering the above details, press the Add button.
Once you click on Add button it will show you the Current Port Forwarding Table which should resemble the following screenshot.
Now press the **Apply** button.

Port Forwarding for port 3000 to the device connected to the router using the IP address 192.168.20.2 has now been configured.

For more information on Port Forwarding, Please visit [www.portforward.com](http://www.portforward.com)

**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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