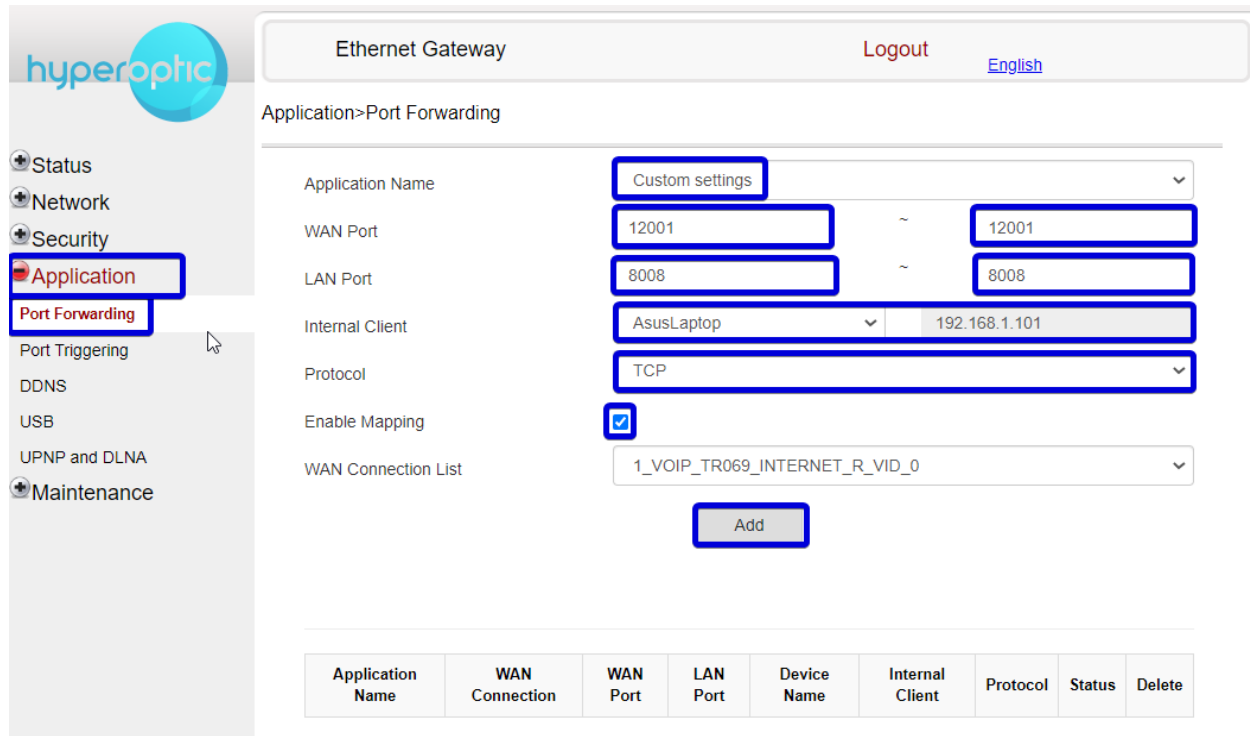


Port forwarding for Nokia HA-140W-B

Port forwarding can be used to establish a home-based FTP server, web server or similar kind of a server. The server is located on the LAN client (e.g. desktop computer or laptop). To set up Port forwarding, log into your router and go to **Application > Port Forwarding**. See image 1.



Application Name	WAN Connection	WAN Port	LAN Port	Device Name	Internal Client	Protocol	Status	Delete
Custom settings	1_VOIP_TR069_INTERNET_R_VID_0	12001	8008	AsusLaptop	192.168.1.101	TCP		

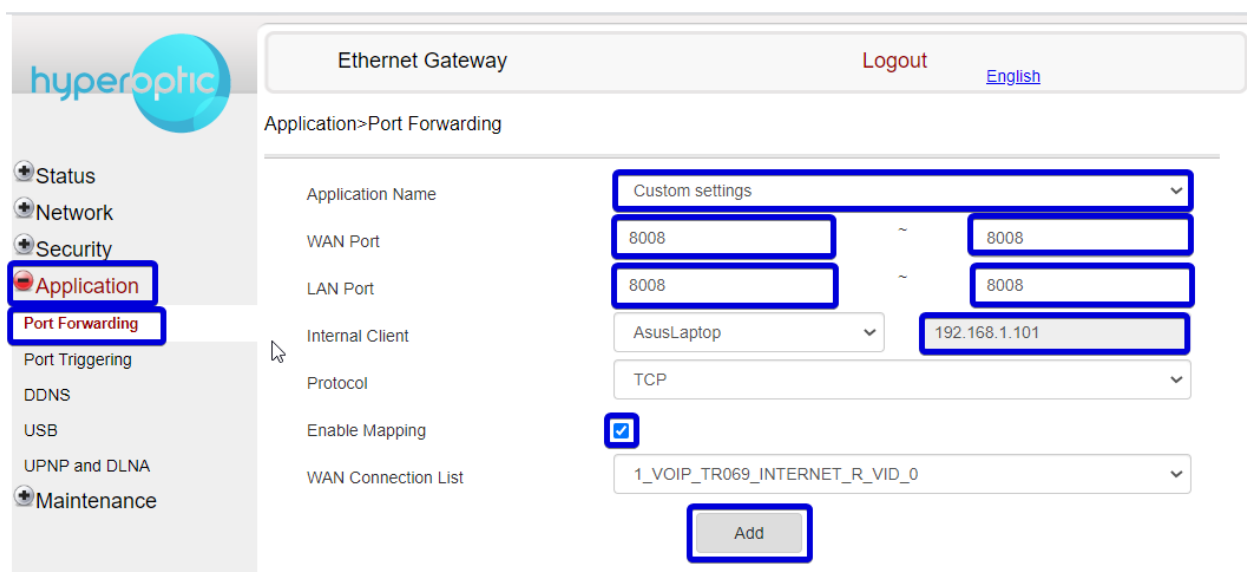
Image 1. Port forwarding configured with port mapping (WAN port maps to LAN port)

To set a specific port forwarding rule, select **Custom settings** for **Application Name** line. In the WAN Port field, set an arbitrary port on WAN interface of a router (e.g. TCP port 12001). All requests coming to the server from the internet side will have a destination IP address of the router itself, and a destination port as listed in **WAN Port** fields. For **LAN port** fields, list the port on which the LAN client server app is running (in this case TCP port 8008). Select the appropriate LAN client (server machine) from the dropdown menu on **Internal Client**. **Protocol** is determined by the type of server application (in this case **TCP**). Tick **Enable Mapping** and click **Add** to save the rule. Once the rule is saved, you'll see the confirmation (see image 2).

WAN Connection	WAN Port	LAN Port	Device Name	Internal Client	Protocol	Status	Delete
1_VOIP_TR069_INTERNET_R_VID_0	12001~12001	8008~8008	AsusLaptop	192.168.1.101	TCP	ACTIVE	Delete

Image 2. Port forwarding rule confirmation

Similarly, ports on WAN and LAN side can be kept the same (see image 3). Image 3 shows the second way things can be configured. It's up to you whether you prefer to use the methods in image 1 or image 3.



Ethernet Gateway Logout [English](#)

Application>Port Forwarding

Application Name: Custom settings

WAN Port: 8008 ~ 8008

LAN Port: 8008 ~ 8008

Internal Client: AsusLaptop 192.168.1.101

Protocol: TCP

Enable Mapping:

WAN Connection List: 1_VOIP_TR069_INTERNET_R_VID_0

Image 3. Alternative approach of configuring port forwarding (LAN and WAN ports are the same)

Please also note that ports TCP 8080 and 443 **should never be used on WAN**, as these ports are reserved for Hyperoptic Ltd. remote management. If you'd like to use these ports on your server in a LAN, then you can use different ports on WAN as shown in Image 1 (e.g. you can use ports on WAN 12000, 12001 and map them to LAN ports 8080, 443 respectively).

A list of commonly used ports can be seen in image 4. For additional information on TCP/UDP port numbers, please refer to https://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers

Port Number(s)	Protocol	Application
20	TCP	FTP data
21	TCP	FTP control
22	TCP	SSH
23	TCP	Telnet
25	TCP	SMTP
53	UDP, TCP	DNS
67	UDP	DHCP Server
68	UDP	DHCP Client
69	UDP	TFTP
80	TCP	HTTP (WWW)
110	TCP	POP3
161	UDP	SNMP
443	TCP	SSL
514	UDP	Syslog
16,384 – 32,767	UDP	RTP (voice, video)

Image 4. List of commonly used ports