



How to publish your NAS on the internet

ThecusOS 6

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❖ Overview

This guide will show you how to publish your NAS on the Internet, this allows you to access and configure your NAS files via the internet remotely.

❖ Before you start

• Checking your network environment

No matter whether you have a fixed or dynamic IP, we would recommend you connect your NAS to an IP router (see figure below).



❖ Making your Thcus NAS accessible via the Internet

To ensure that you can **remotely access** your NAS via the internet, please complete the following **3** steps.

1 Create a Thcus ID

2 Apply for a FREE DDNS

3 Connect to your Thcus NAS

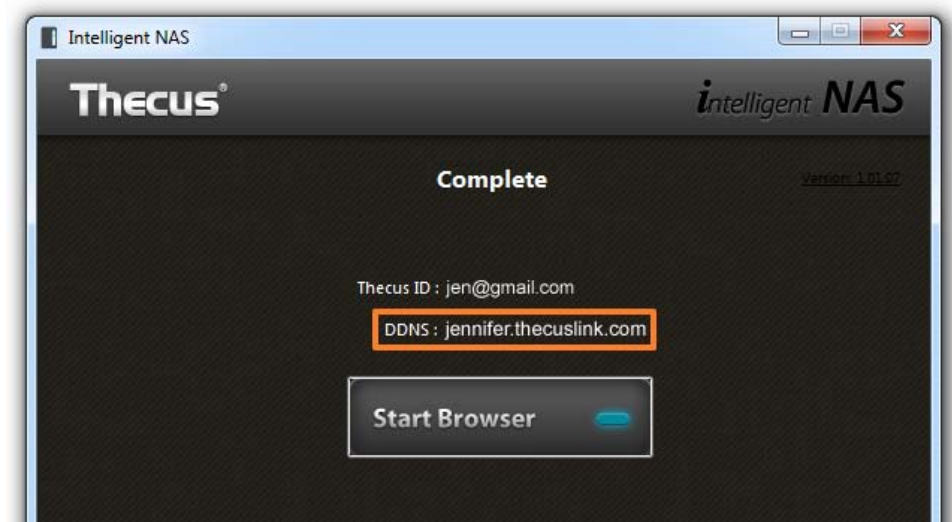
Step 1. Creating a Thcus ID

This requires the registration of an email account. Please see

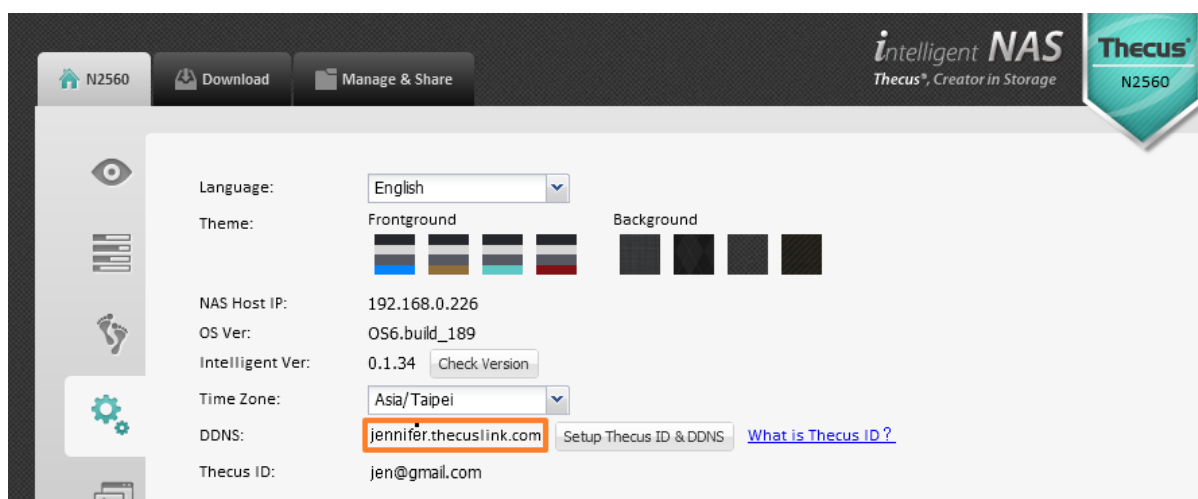
["Getting Started-Step 2. Create a Thcus ID"](#).

Step 2. Applying for a FREE DDNS

Once you have created a Thcus ID, you will receive a FREE DDNS for your NAS. You can find your DDNS using the Intelligent NAS utility (Please see the screenshots below):



▲ N2310

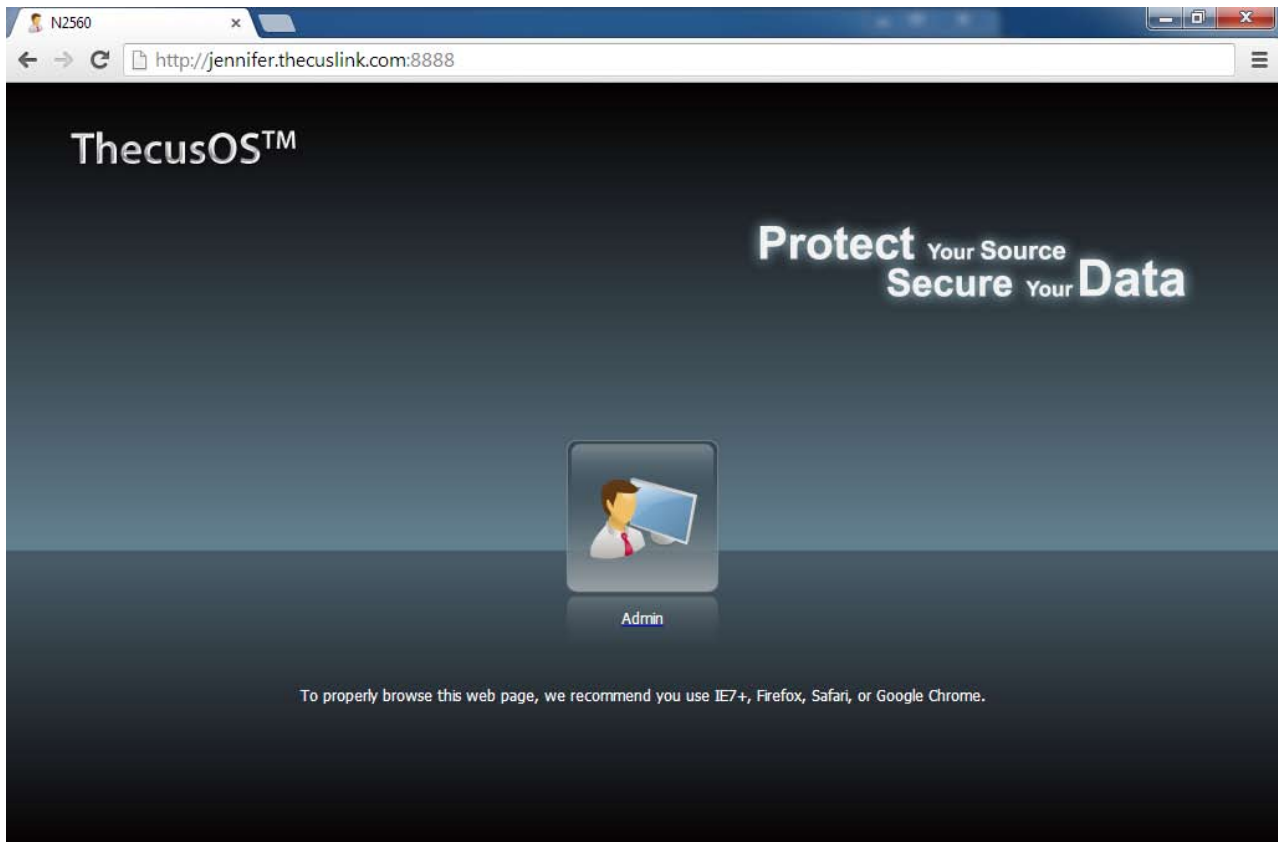


▲ N2520/N2560/N4520/N4560

Step 3. Connecting to your Thecus NAS with web browsers

After the steps above, you should be able to connect to the login page via the Internet using your NAS's public IP address or DDNS hostname:

e.g. <http://192.168.1.2:8888> or <http://jennifer.thecuslink.com:8888>



If you are unable to, please consult the next section:

❖ Failing to access services on your Thecus NAS via the Internet

The following steps help to ensure that your settings correct:

Step 1. Checking your router

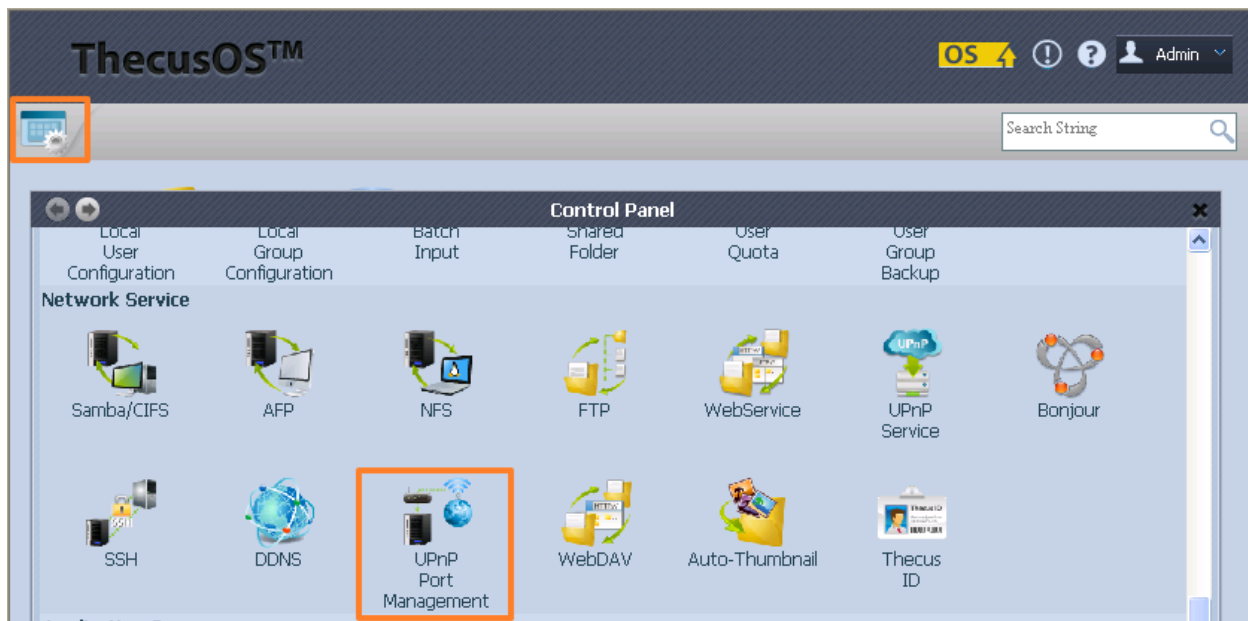
To be sure that your router has **"Universal Plug and Play (UPnP)"** or **"UPnP IGD" enabled***, please compare your settings with the below screenshots of the UPnP service settings of various brands of router. Please select one to see its UPnP Configuration page:

- **NETGEAR R6250**
- **D-Lnk DIR-868L**
- **D-Link DIR600**
- **ASUS RT-N16**

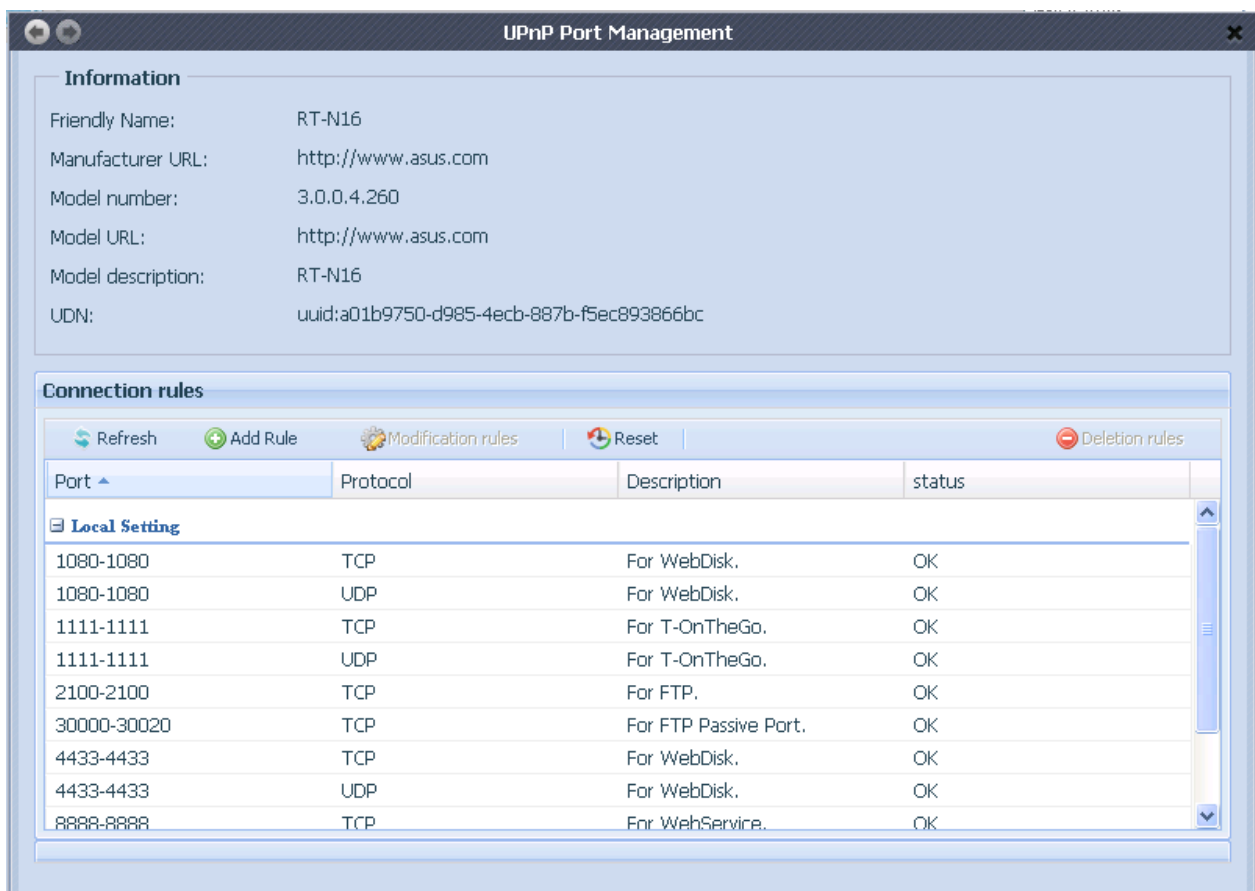
* If your router does not support UPnP, you may need to input the port forwarding physically. Please see ["How to configure your router manually"](#).

Step 2. Checking the UPnP Port Forwarding service on your Thcus NAS

Login into the admin UI of your Thcus NAS. Browse to **Control panel>Network Service>UPnP Port Management**.



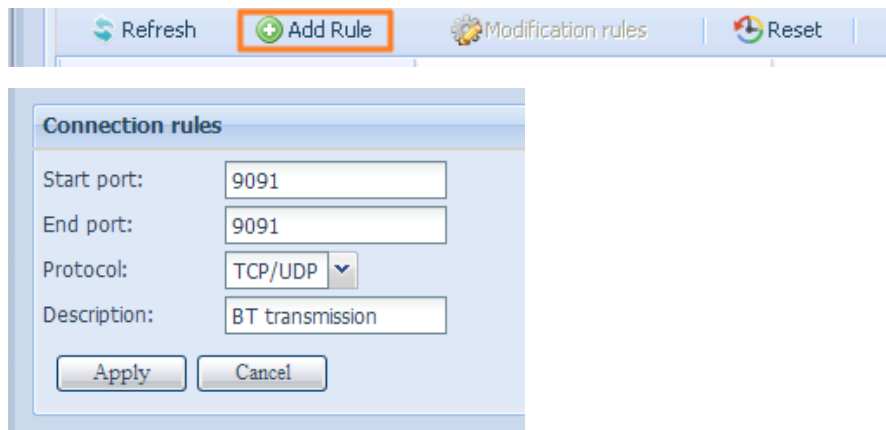
Information regarding an associated router's UPnP Port Management is shown in the screenshot below. If similar information is shown it means that your router is working fine:



If similar information is not displayed, please consult the following cases:

Case 1. The services you desired are NOT listed

Click **"Add Rule"** to add more port mapping rules to allow access desired services from the Internet.



UPnP Port Management	
Item	Description
Start port*	Specific port number to start at. e.g. 9091
End port*	Specific port number to end at. e.g. 9091
Protocol*	Choose the required protocol for port forwarding. e.g. TCP/UDP
Description	The name of the port service. e.g. BT transmission
Apply	Click "Apply" to confirm the changes.
Cancel	Click "Cancel" to abort the changes

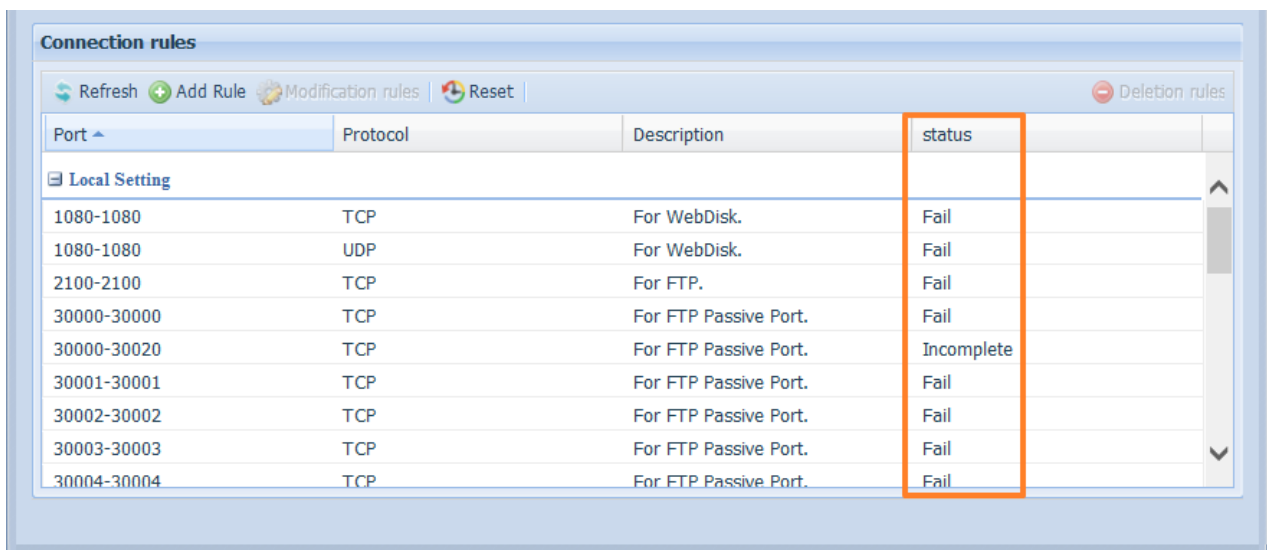
*For the default service ports of Thecus NAS, please see [Appendix A](#).



Some routers do not allow the input of port numbers below 1024, so doing so in some instances may result in "setting failure" errors.

Case 2. Service connection failure

Please try to log into your **router's admin UI** and **disable the UPnP function and then enable it again**. After this, please **reboot** your Thecus NAS and check the UPnP Port Management window. You can also try to access the Thecus NAS admin UI via your Thecus ID's DDNS again.



Connection rules			
Refresh Add Rule Modification rules Reset Deletion rules			
Port	Protocol	Description	status
Local Setting			
1080-1080	TCP	For WebDisk.	Fail
1080-1080	UDP	For WebDisk.	Fail
2100-2100	TCP	For FTP.	Fail
30000-30000	TCP	For FTP Passive Port.	Fail
30000-30020	TCP	For FTP Passive Port.	Incomplete
30001-30001	TCP	For FTP Passive Port.	Fail
30002-30002	TCP	For FTP Passive Port.	Fail
30003-30003	TCP	For FTP Passive Port.	Fail
30004-30004	TCP	For FTP Passive Port.	Fail

Case 3. The UPnP device cannot be found

You may input port forwarding manually. Please see [How to configuring your router manually](#).



Step 3. If none of the above methods work, , please go to <http://esupport.thecus.com/support/index.php> or email support@thecus.com.

❖ Configuring Your Router Manually

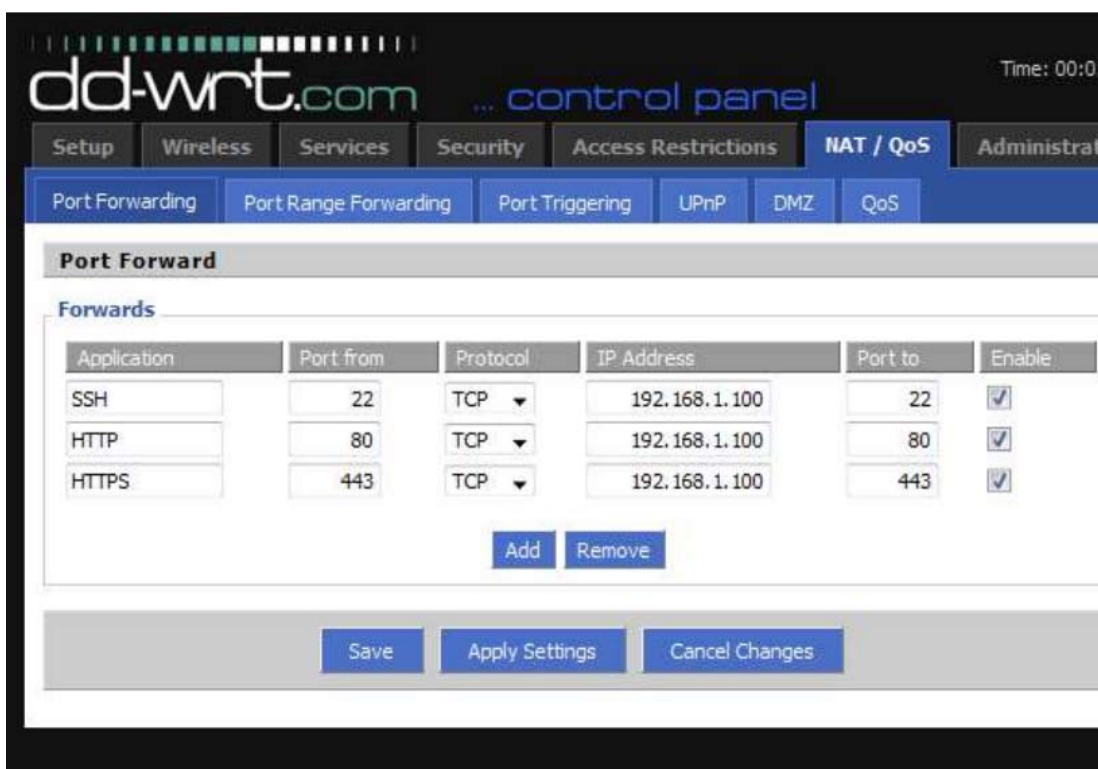
Each manufacturer has different software that they use on their routers. Below are screenshots of the port forwarding settings of 3 popular routers*.

• DD-WRT:

Application: Service name. e.g. HTTP, BitTorrent Transmission

Port from/Port to/Protocol: Please see [Appendix A](#),

IP Address : Enter Your Thecus NAS's IP address



* For more information on how to access your router and the necessary username and password. Please check you're the device documentation, the stickers on your router, or the manufacturer's website.

• Tomato:

Proto/Ext Ports/Int Port: Please see [Appendix A](#)

Int Address: Enter your Thecus NAS's IP address

Description: Service name. e.g. HTTP, BitTorrent Transmission

Tomato
Version 1.28

Status
Bandwidth
Tools
Basic
Advanced
Port Forwarding
DMZ
Triggered
UPnP / NAT-PMP
QoS
Access Restriction
Administration
About

Port Forwarding

On	Proto	Src Address	Ext Ports	Int Port	Int Address	Description
	UDP		1000,2000		192.168.1.2	ex: 1000 and 2000
	Both		1000-2000,3000		192.168.1.2	ex: 1000 to 2000, and 3000
	Both	1.1.1.0/24	1000-2000		192.168.1.2	ex: 1000 to 2000, restricted
	TCP		1000	2000	192.168.1.2	ex: different internal port
<input checked="" type="checkbox"/>	TCP		8822	22	172.16.66.100	SSH

Add

- Src Address** (optional) - Forward only if from this address. Ex: "1.2.3.4", "1.2.3.4 - 2.3.4.5", "1.2.3.0/24".
- Ext Ports** - The ports to be forwarded, as seen from the WAN. Ex: "2345", "200,300", "200-300,400".
- Int Port** (optional) - The destination port inside the LAN. If blank, the destination port is the same as Ext Ports. Only one port per entry is supported when forwarding to a different internal port.
- Int Address** - The destination address inside the LAN.

• NETGEAR:

Service Name: e.g. HTTP, BitTorrent Transmission

Service Type/Starting Port/Ending Port: Please see [Appendix A](#),

Server IP Address: Enter your Thecus NAS's IP address

NETGEAR
SMARTWIZARD
router manager
RangeMax™ Wireless-N Gigabit Router model WNR3500L

Select Language:
English
Apply

Port Forwarding / Port Triggering

Please select the service type.
☒ Port Forwarding
☐ Port Triggering

Service Name: Age-of-Empire
 Server IP Address: 192.168.1.1
Add

#	Service Name	Start Port	End Port	Server IP Address

Edit Service **Delete Service**
Add Custom Service

Port Forwarding / Port Triggering Help

Port triggering is an advanced feature that you can use for gaming and other Internet applications. Port forwarding can typically be used to enable similar functionality, but it is static and has some limitations.

Port triggering opens an incoming port temporarily and does not require the server on the Internet to track your IP address if it is changed by DHCP, for example.

Port triggering monitors outbound traffic. When the router detects traffic on the specified outbound port, it remembers the IP address of the computer that sent the data and triggers the incoming port. Incoming traffic on the triggered port is then forwarded to the triggering computer.

Using the Port Forwarding / Port Triggering screen, you can make local computers or servers available to the Internet for different services (for example, FTP or HTTP), to play Internet games (like Quake III), or to use Internet applications (like CU-SeeMe).

If you still encounter problems, please go to <http://esupport.thecus.com/support/index.php> or email support@thecus.com.

❖ Appendix A : The default service ports of Thecus NAS

System	Port number	Protocol
Admin UI	8888	TCP
Network Service	Port number	Protocol
Webservice	80(http)/443(https)	TCP
WebDav(T-OnTheGo)	9800(http)/9802(https)	TCP
FTP	2100, 30000-30020(Data connection in Passive Mode)	TCP
SSH	22	TCP
Thecus NAS APP	Port number	Protocol
Webdisk	1080(TCP), 4433(UDP)	TCP/UDP
BiTorrent Transmission	9091	TCP/UDP
PLEX	32400	TCP
Twonky Media	TCP: 9000/9001, UDP: 1900/1030	TCP/UDP
Mobile Application	Port number	Protocol
T-OnTheGo	9800(http)/9802(https)	TCP

❖ Appendix B: Screenshots of the routers' UPnP Configuration page

• NETGEAR R6250

Select **Advanced** > **Advanced Setup** > **UPnP**.

The UPnP screen appears as follows.

The screenshot shows the UPnP configuration page for a NETGEAR R6250 router. At the top, there are three buttons: 'Apply' (green), 'Cancel' (purple), and 'Refresh' (purple). Below these, there is a checkbox labeled 'Turn UPnP On' which is checked. To the right of this checkbox is a text input field containing the number '30'. Below this, there is another text input field containing the number '4'. At the bottom, there is a table titled 'UPnP Portmap Table' with five columns: 'Active', 'Protocol', 'Int. Port', 'Ext. Port', and 'IP Address'. The table is currently empty.

• D-Link DIR-868L

The screenshot shows the Advanced Network Settings page for a D-Link DIR-868L router. The page has a navigation bar at the top with the D-Link logo and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'ADVANCED' tab is selected. On the left side, there is a sidebar with various configuration options, including 'VIRTUAL SERVER', 'PORT FORWARDING', 'APPLICATION RULES', 'QOS ENGINE', 'NETWORK FILTER', 'ACCESS CONTROL', 'WEBSITE FILTER', 'INBOUND FILTER', 'FIREWALL SETTINGS', 'ROUTING', 'ADVANCED WIRELESS', 'WI-FI PROTECTED SETUP', 'ADVANCED NETWORK', 'GUEST ZONE', 'IPv6 FIREWALL', and 'IPv6 ROUTING'. The 'ADVANCED NETWORK' option is selected. The main content area is titled 'ADVANCED NETWORK SETTINGS' and contains several sections: 'UPNP', 'WAN PING', 'WAN PORT SPEED', 'IPv4 MULTICAST STREAMS', and 'IPv6 MULTICAST STREAMS'. The 'UPNP' section has a checkbox labeled 'Enable UPnP IGD' which is checked. The 'WAN PING' section has a checkbox labeled 'Enable WAN Ping Response' which is unchecked. The 'WAN PORT SPEED' section has a dropdown menu labeled 'WAN Port Speed' with 'Auto 10/100/1000Mbps' selected. The 'IPv4 MULTICAST STREAMS' section has a checkbox labeled 'Enable IPv4 Multicast Streams' which is unchecked. The 'IPv6 MULTICAST STREAMS' section has a checkbox labeled 'Enable IPv6 Multicast Streams' which is checked. At the bottom, there are two buttons: 'Save Settings' and 'Don't Save Settings'. On the right side, there is a 'Helpful Hints...' section with several bullet points providing information about UPnP and WAN settings.

- D-Link DIR600



- ASUS RT-N16

