

NAS 224

Remote Access – Manual Configuration

Connect to your ASUSTOR NAS
through the Internet

ASUSTOR COLLEGE



COURSE OBJECTIVES

Upon completion of this course you should be able to:

1. Configure your network equipment to setup remote access to your NAS via the Internet.

PREREQUISITES

Course Prerequisites:

NAS 221: Remote Access – Using Cloud Connect™

Students are expected to have a working knowledge of:

Signing up for DDNS services and setting up routers

OUTLINE

1. Remote Access

1.1 Accessing your ASUSTOR NAS using the Internet

1.2 Configuring your router

1.3 Configuring DDNS service

1.4 Additional notes

Appendix

List of Ports Used by ASUSTOR Applications

1. Remote Access

1.1 Accessing your ASUSTOR NAS using the Internet

ASUSTOR provides users with quick and convenient solutions that allow them to use their NAS through the internet and remotely access their files, creating an exclusive private cloud. You can use any of the following methods to set up remote access to your NAS.

a. Directly connecting your NAS to the internet

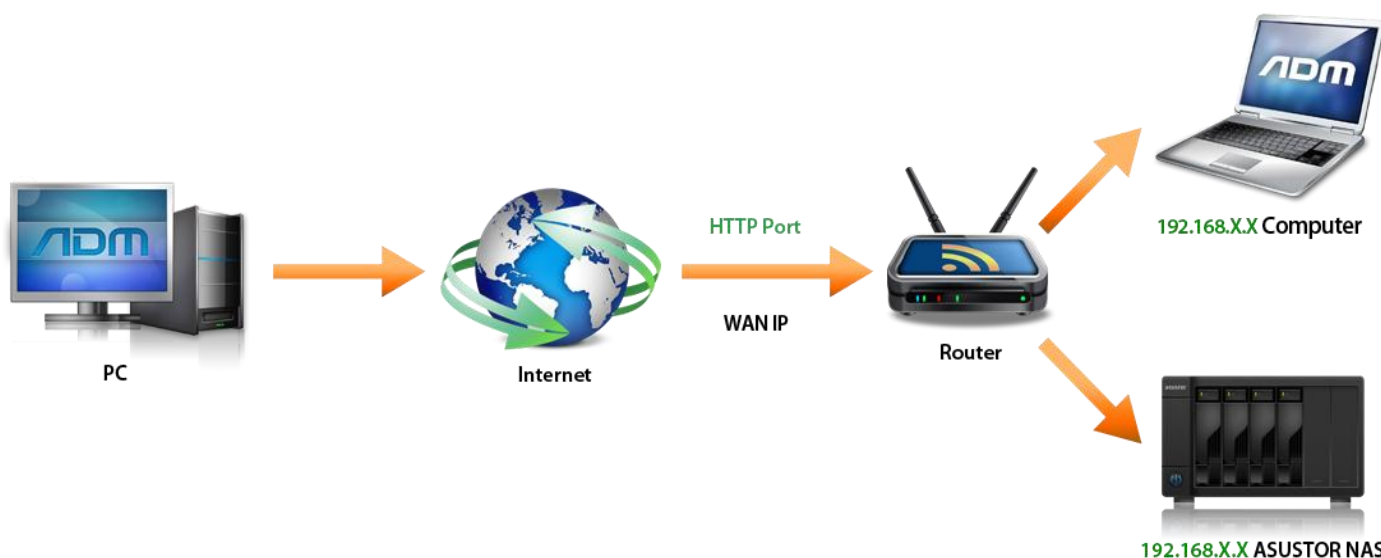
If you have a static IP address, you can choose to directly connect your NAS to the Internet, without having to go through any routers or firewalls. Please note that this method will directly expose your NAS to the Internet and you may be more likely to experience malicious attacks.



b. Connect your NAS to your router and then use ASUSTOR Cloud Connect™

ADM's built-in Cloud Connect™ function can help you to complete the necessary router configurations for setting up remote access to your NAS. For more information please see:

[NAS 221 Remote Access - Using Cloud Connect](#)



c. Connect your NAS to the internet and manually configure your connection.

If you are using an incompatible router and cannot use Cloud Connect™ to complete your remote connection settings, the instructions below will explain how to manually configure your router to give you remote access to your NAS.

1.2 Configuring your router

Ports are like telephone extension numbers in that they allow you to quickly find the person or service that you are looking for. To let the NAS on your local area network allow access from devices on the internet, you must first set up the correct port forwarding on your router. This way, when connection requests are received from the internet asking for the appropriate port, the router will know where to direct them.

Before configuring port forwarding please first note your router's IP address, administrator username and password. Usually port forwarding settings are located under one of the following headings on your router's settings page:

- Advanced Settings
- Firewall Settings
- Port Forwarding
- Virtual Server

In the following example, we will demonstrate how to set up port forwarding on a router made by ASUS.

STEP 1

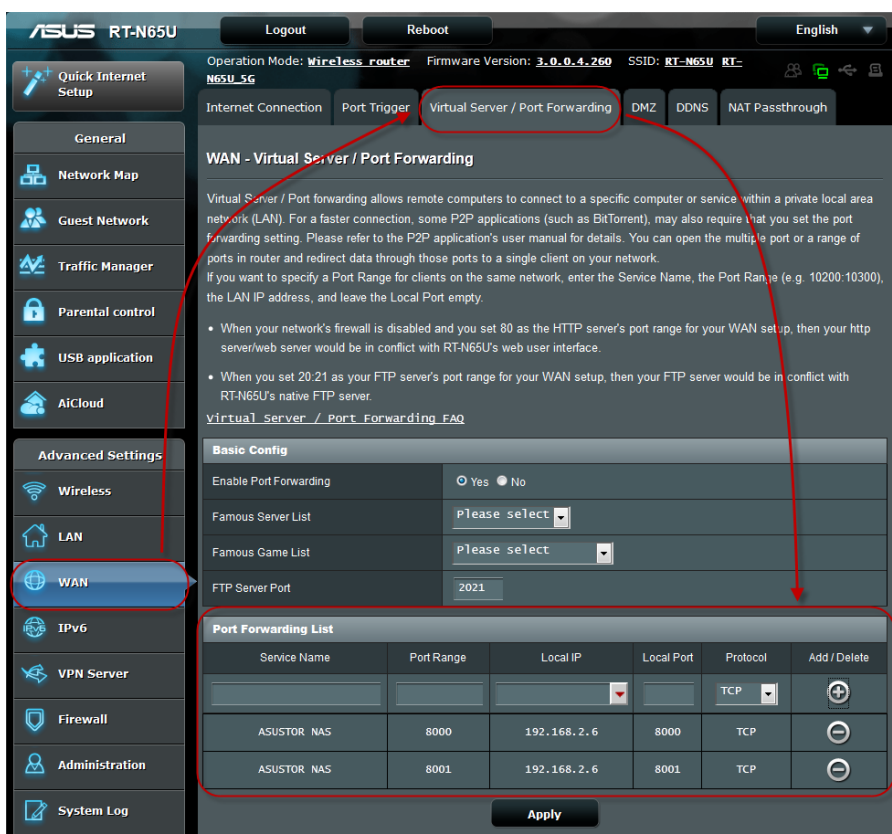
- ✓ Enter the router's LAN IP address into a Web browser. The ASUS router's default IP address is 192.168.1.1.
- ✓ Enter the administrator username and password. The default username and password for the ASUS router is "admin".
- ✓ In the [Advanced Settings] panel on the left hand side, click on **[WAN]**.
- ✓ Click on the **[Virtual Server/Port Forwarding]** tab.

STEP 2

- ✓ Enable port forwarding by clicking on the **[Yes]** radio button beside the **[Enable Port Forwarding]** heading.
- ✓ Under the **[Service Name]** field enter a name of your choice, and then enter the number of the external port you want to open, your NAS's IP address and port number in the corresponding fields. If you want to use your Web browser to access your NAS, you will need to open ADM's Web page service (default port: 8000). The table below shows you the information that you will need to fill out for each field.

Service Name	Port Range	Local IP	Port	Protocol
ADM	8000	192.168.1.168	8000	TCP

As mentioned previously, the IP address of the NAS in our example is 192.168.1.168.



- ✓ If you wish to open up other services in order to access them through the internet, please see the Appendix of this guide.

[Appendix: List of ports used by ASUSTOR applications.](#)

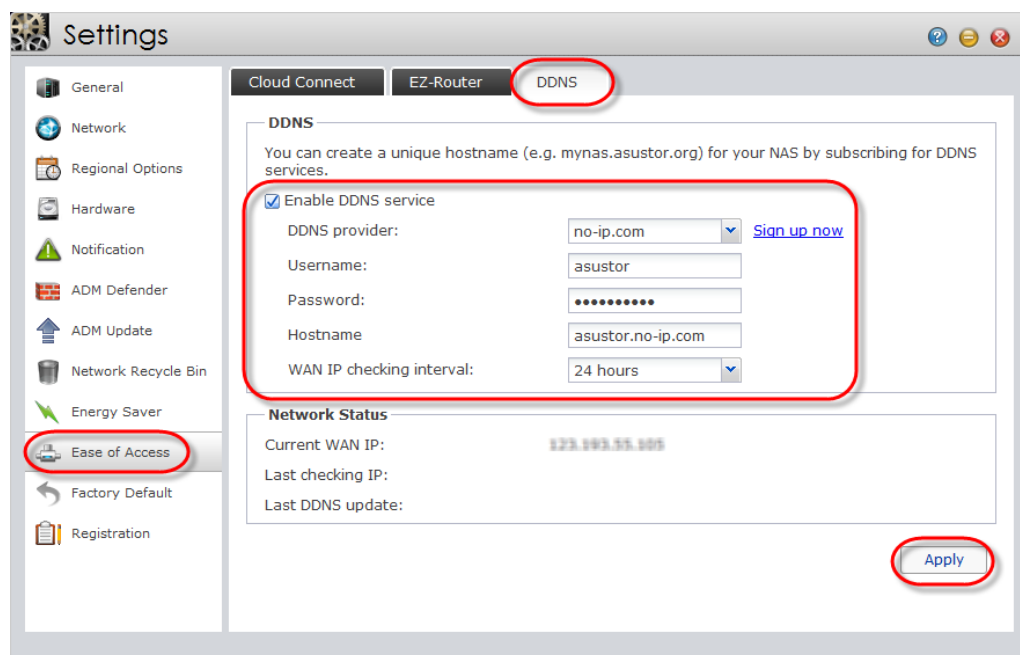
1.3 Configuring DDNS service

STEP 1

- ✓ Sign up for DDNS service. For instructions please see section 1.2 of [NAS 321: Hosting Multiple Websites with a Virtual Host.](#)

STEP 2

- ✓ Enable DDNS service on the NAS. For instructions please see section 2.2 of [NAS 321: Hosting Multiple Websites with a Virtual Host.](#)



1.4 Additional notes

1. The Internet uses ports to exchange data; each specific port can only be assigned to be used by one specific application or service. Two computers cannot simultaneously use the same port to access data.
2. Settings and configuration methods will differ between routers. If you require more detailed information on port settings please see the instruction manual for your router or visit the following website: <http://portforward.com/routers.htm>

Appendix

List of ports used by ASUSTOR applications

Service	Port	Protocol
ADM Web service	8000, 8001	TCP
Web service	80, 443	TCP
FTP service	21	TCP
MySQL service	3306	TCP
SSH service	22	TCP
Rsync service	873	TCP
iSCSI service	3360	TCP
Common Unix Printing System	631	TCP/UDP
Download Center	9999, 55555	TCP/UDP
WebDAV	9800, 9802	TCP