

### **NAS Series**

### **Frequently Asked Questions**

May 2005

©Copyright 2005. QNAP Systems, Inc. All Rights Reserved.



### 1. Some NAS models support redundant power supply. What is the use of the red button on the power supply?

The red button is used for reactivating power when an error occurs. When the power protection mechanism is enabled, or an alarm buzzer sounds, or the power supply is not functioning properly, press the red button to reset and check if the power supply works. If not, power damage may have occurred and the machine should be sent for RMA.

### 2. Does NAS support user import function in Windows 2000 or Windows NT?

Yes.

- a. NASWare 4.x supports AD accounts import of Windows 2000 and Windows 2003.
- b. For non NASWare 4.x versions, you can use PDC synchronization function to import user accounts in Windows 2000 or Windows NT. In Windows 2000, please use "Mixed Mode" and user PDC name to configure PDC synchronization function.

### 3. What should be done when administrator cannot login administration interface via WAN after enabling DMZ function?

<u>Scenario:</u> Suppose there is a NAS-2108R with the following settings: WAN IP: 210.66.58.30 LAN IP: 192.168.1.254

DMZ server IP: 192.168.1.100

When setting DMZ IP as 192.168.1.100, the administrator cannot link to WAN IP (210.66.58.30) to monitor NAS from a real IP on the Internet.



#### Solution:

a. When enabling DMZ settings for NAS-2108R, the system will automatically map WAN IP to the IP address of DMZ server via one-to-one NAT. In this case, all ports connected to WAN IP will be transferred to DMZ IP (e.g. 192.168.1.100 in the screen below).

Network Settings · Router and Firewall	DMZ
Configuration Routing Table Touring to the state Touring table Virtual Server	Enable DMZ     DMZ Host IP Address     Log
One-to-one NAT Control and the consists of the Net defined interaction Special Application Control and the constant Control and the constant Web Site Filter Control and the constant states	
Web Content Filter Configure the static content of theorem Advanced Firewall Rule Configure actions theory of the DMZ Configure 1992	

b. In Virtual Server settings, set a LAN IP for NAS-2108R. Set 80 as the port number so that the administrator can connect to the administration page of NAS-2108R (WAN IP: 210.66.58.30) via a real IP from the Internet.

Network Settings - Router and Firewall Configuration Routing Table Institute fire fire fire Institute fire fire Institute fire fire fire Virtual Server	Add a virtual server	
	Virtual Server IP Address Protocol External / Internal Port Allow NAT Access	192 168 1 254 TCP - www - 80 / www - 80
One-to-one NAT Configure the one-to-one- half address magazing Special Application Londragane special application Web Site Filter	Log	

The system will apply the settings in priority order according to the listing on the left. Therefore, DMZ settings will be enabled at last.



### 4. Which hard disk, tape drive, UPS, and backup software models are compatible with NAS?

For the compatibility list for NAS, please go to the link: <a href="http://csdread.csdread@ftp.qnap.com.tw/CSD/FAQ">http://csdread@ftp.qnap.com.tw/CSD/FAQ</a>

#### 5. Why files are not completely backed up by remote replication of NAS?

This may due to corruption of files or file name settings. If the files are not damaged, you can check the language settings of the source and destination NAS servers. Make sure their language settings are the same.

### 6. Why remote replication does not start after a long while when file compression option is enabled?

When file compression option is selected for remote replication, files will be compressed first before backup. Therefore, more time will be taken before replication starts.

#### 7. Can access control be set for sub-folders in the main folders?

NAS supports access control for main folders. If you are using NASWare 4.x and Windows 2003 together, setting access control of sub-folders is supported.

### 8. Can users in different network domains configure the same NAS as network disk drive?

Yes. To access NAS by computer name, make sure there is WINS server in your network and the service is enabled. If not, you can access the server via NAS IP.



# 9. Can the logo on the first page be changed in NAS administration interface?

Yes. The logo can be changed in Change Logo page in System Tools. Note that the size of display logo cannot exceed 20K. It is recommended to upload images with resolution of 100x100 pixels.

# 10. What should be done when the administration page cannot be opened?

- a. Check if the IP address is the same as the one displayed on the LCD panel.
   For NAS models without LCD panel, please refer to c and d.
- b. Clear the cookies & cache in IE browser, or remove Proxy settings and try again.
- c. Restart NAS.
- d. Reset network configuration (IP: 192.168.0.1) and administrator password to default by pressing the reset button of the machine.

#### 11. What should be done when NAS cannot get the IP address and "DHCP Linking" is shown on the LCD panel?

The network environment may not have DHCP server. When NAS cannot acquire IP address via DHCP server, set a fixed IP via the LCD panel. For further details, please refer to the user manual.

# 12. What is the use of the function "Convert to Journal File System" in Disk Configuration for NAS firmware version 2.27 or later?

"Convert to Journal File System" function speeds up disk checking and saves time for disk checking due to improper shutdown of older NAS versions. After conversion, disk data will not be lost. Note that if power outage occurs in the process, it may cause data damage. When this option is enabled once, it will not appear on the page again.



#### 13. Why PDC Authentication of NASWare 2.x cannot be used for NAS? What should be done?

- Make sure the system used by PDC is Windows NT4.0 or Windows 2000.
   Windows 2003 is currently not supported.
- b. PDC must be in the same network domain as NAS.
- c. Make sure the administrator password entered for PDC authentication is correct.

# 14. What should be done when disk error is detected for RAID 5 configuration?

Take out the failed disk and replaced it with a proper one of the same model and same size. There is no need to turn off NAS when replacing the disk. To replace the failed disk with a different volume one, make sure the new disk is larger in size than the old one for rebuilding RAID configuration. However, only the size of the old disk will be used for the new one. Extra disk volume of the new disk will not be used.

#### 15. What should be done when disk access rate becomes very slow?

- a. Restart the server.
- b. Check the current disk settings and status. In case of hard disk failure, repair it ASAP.
- c. Check if other devices for network access have the same problem. If the internal network is not functioning properly, like certain PCs are infected, contact your technical support.
- d. When there is mass access to disk data or replication is in process, disk access will become slower due to heavy workload of NAS. You may try to access NAS later.



#### 16. Why NAS cannot be upgraded?

- a. Check the firmware version of the upgrade image. To download the latest firmware, please go to the download section in <u>www.qnap.com.tw</u>.
- b. Check the file name of the upgrade image. Note that the file name cannot contain empty character. It is recommended to save the file in C:\.
- c. To upgrade the firmware of NAS 2.x versions, the image must be saved to the first disk temporarily. Therefore make sure the first disk is connected, formatted and can work properly.

### 17. How can fail over and load balance be supported by NAS models of two or more ports?

Only one IP address should be configured for both functions.

- a. When fail over is enabled and the primary port fails due to hardware or connection problems, the backup port will replace the primary one for data transfer automatically. When the primary port resumes, the transfer job will shift to the primary port again. This function will be supported by using a switch of layer II or higher level.
- b. When load balance is enabled, data flow will be distributed to all network connections to provide system services. This function is effective for the third layer packet of routing protocol, i.e. IP or NCP IPX. For multicast/ broadcast and packets not belonging to routing protocol, e.g. NetBEUI or Microsoft's IPX), data transfer can only be done via the primary port. Moreover, load balance should be used with switch supporting trunking function. The following models are supported currently:
  - Cisco 5500 series (look for EtherChannel support)
  - SunTrunking software
  - Alteon AceDirector switches / WebOS (use Trunks)
  - BayStack Switches, Stackable models (450)
  - Linux bonding



#### 18. What backup programs are supported by NAS?

Please refer to question 4. For NASWare 2.7.3, or NASWare3.10.3 or later, NetVault is supported.

For operation instruction, please go to the following FTP site. FTP server: <u>ftp.qnap.com.tw</u> OD: csdread Password: csdread Directory: /CSD/FAQ/Backup\_Tools

### **19.** When using NAS-2108R with printer, driver is detected for the printer port but printing function cannot work.

- a. Connect the printer to NAS-2108R and turn on the printer.
- b. Turn on NAS-2108R.
- c. Go to Network Printer Service in Network Settings page. Then enable network printer service and enter the printer name.
- d. Use search function in Windows or install network printer in network neighborhood.
- e. When the printer is found, install the printer driver.
- f. After successful configuration, the printer can be used.

#### 20. Can the disks of NAS be configured to RAID 5?

The following models support RAID 5 configuration: NAS-4000P NAS-4010 NAS-410T NAS-4020 NAS-4020 NAS-4030 NAS-4100 NAS-4120A/B/C NAS-4300



#### 21. Can NAS partner with PC for remote replication?

Remote replication can be only supported by QNAP NAS series currently.

### 22. Why the disk size of NAS is reduced after RAID configuration completes?

- a. When configuring two disks as RAID 1, the disk size usable is equal to the size of one disk.
  When configuring N disks as RAID 5, the disk size usable is equal to the size of (N-1) disk(s).
- b. Hard disk manufacturer calculates disk size as 1M=1000K while computer calculates actual disk capacity as 1M=1024K. When a manufacturer marks a disk size as 160G (disk size: 160G=160,000M=160,000,000K), the actual usable disk capacity could be 160,000,000,000K/1024/1024 = 152 G. Therefore when configuring 3 disks as RAID 5, the total capacity will be 152 x (3-1)=304G.
- c. When snapshot is enabled, certain amount of disk size is reserved for snapshot settings. Therefore, the actual disk size available will be reduced.

#### 23. How many user accounts created in NAS products at maximum?

NasWare 2.x supports 1,024 user accounts, and NasWare 3.x supports 10,000 users at maximum.

#### 24. What should be done when the error message "Invalid" is shown?

The hard disk may have been installed to other NAS before. This is a security mechanism of QNAP disks to prohibit installation of disks to other servers. To solve the problem, enter the following address in the browser (NAS IP should be fixed IP): http://IP/console.cgi?Hconf=yes After executing this CGI program, a message will be displayed: HD hidden file modification done...

If the problem persists, format the hard disk and try to use it again.



#### 25. How to configure the size of snapshot?

Snapshot is used to back up a copy of disk volume as backup source upon any changes to the disk volume after a particular point of time. 5 snapshots can be created at maximum. You can configure the disk capacity for snapshot in System Settings. When the disk size for snapshot is insufficient, old snapshot files will be overwritten. In general, the disk size reserved for snapshot is a fifth of the total disk capacity. Note that if the disk size set for snapshot is not enough for one snapshot copy, this function will fail. In that case, it is recommended to back up data by tape backup or remote replication to another server.

### 26. What should be done when the message Re-launch process (proftpd) keeps showing on Event Logs for NAS firmware 4.1.4 and 4.1.4?

Please check if the first character of the server name is numeric. If yes, change the character to English alphabet, e.g. nas001. NAS server name can be a combination of alphabets and numbers but cannot be purely numeric.

### 27. Why the administrator password cannot be reset after pressing the reset button?

If the option "Enable configuration reset switch" is not enabled in Hardware Settings of System Tools, administrator password will not be restored when you press the reset button. In such case, you have to send the server for RMA.





#### 28. What is the maximum file size NAS supports for access?

2TB, as the maximum size of a volume is 2TB.

### 29. Can I upgrade NAS firmware to the latest version and skip all versions in between the latest one and the one I'm using?

You can upgrade NAS firmware to the latest version if the one you are using and the new one belong to the same level. For instance, to upgrade v3.03 to v3.10.2, v3.04 can be skipped. However, to upgrade NAS firmware from one level to another, like 3.x to 4.x, you have to install a transition firmware first. For example, to upgrade NAS-4120 version 3.x to v4.1.2, you have to install a firmware U\_NAS4120\_20041110-4.1.2-V3.img first.



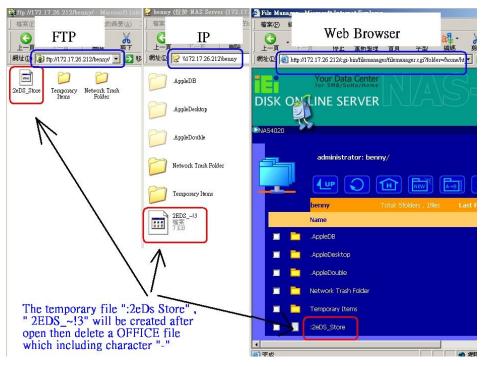
#### 30. What folders or files will be generated upon access to NAS via MAC?

Folders: AppleDB, AppleDesktop, AppleDouble, Network Trash Folder, Temporary Items, TheVolumeSettingsFolder.

Files: :2eDs Store" and "2EDS\_~!3

Please do NOT delete these files.

The name of temporary files varies according to different connection methods.



#### 31. Why I can't login NAS with administrator account under MAC OS?

This is a limitation of MAC. Please login with a manually created account or login NAS as guest.



#### 32. Which tape library models are supported by NAS?

The following LVD models are supported:

- ✓ Exabyte Mammoth -LT
- ✓ IBM Tape Drive Model 440
- ✓ TANDBERG DLT7000
- ✓ HP SureStore DDS4
- ✓ HP SureStore dat 40 Model:C5687A
- ✓ HP StorageWorks DAT 72
- ✓ HP StorageWorks Ultrium 460
- ✓ HP Surestore Ultrium 215
- ✓ HP Surestore Ultrium 230

### 33. When adding NAS to AD, will the access authority of Windows copied to NAS?

No. Access authority set in Windows will not be copied to NAS. You should set the access right on NAS. Please refer to <a href="http://support.microsoft.com/default.aspx?scid=kb;en-us;266627#kb3">http://support.microsoft.com/default.aspx?scid=kb;en-us;266627#kb3</a>

#### 34. Why I cannot login NAS with a valid user name and password?

Windows does not support logging in to NAS with the same user name via the same device at the same time. Check if the user name is used to login NAS on the same device when you login. If yes, make sure the user has logged off and try again.

If you connecting NAS via network neighborhood, run "**net use**" in command prompt to check if any user is connected. Enter **net use \* /d /y** and try again.



# 35. What should be done to make NAS back up the folders automatically via remote replication?

Set the remote server IP as 127.0.0.1 to make NAS back up the data. For example, there are two network shares A and B. To make NAS back up data on A to B automatically, set remote NAS IP as 127.0.0.1 and remote folder as B, the data will then be backed up from A to B.

#### 36. Which anti-virus programs are supported Virus Scan Agent?

Most anti-virus programs are supported by Virus Scan Agent basically, e.g. Trend Micro and Norton.

#### **37.** Do NAS series with tape backup support Auto Loader?

No. Current NAS models do not support auto loader tape backup.

#### 38. What server functions are supported NAS-2108R?

NAS-2108R is a file server. It also supports printer server, DHCP server, WINS server, DNS server, as well as IP sharing (NAT) functions.

#### 39. Does NAS-2108R support firewall function?

Yes. NAS-2108R can divide network connection as external WAN and internal LAN, establish a firewall in between, and filter network packets transferred to ensure network security. The server can also control internal network and monitor users' network access activity.

#### 40. What kind of file transfer services are supported by NAS-2108R?

All NAS products support Windows (CIFS/SMB), Apple (AFP), Unix/Linux (NFS), Novell (Netware), FTP, and web (HTTP) for file transfer.



#### 41. Which RAID configuration does NAS-2108R support?

NAS-2108R supports two hard disks at maximum which can be configured as RAID 0 and RAID 1. The disks can also be configured as single disk volume.

### 42. Can users access NAS-2108R that uses dynamic IP address with a fixed domain name?

NAS-2108R is built-in with DDNS function. You can register a domain name from a DDNS provider, e.g. <u>http://www.dyndns.org</u> and enter the settings in NAS. Users can then access NAS by using fixed domain name.

#### 43. Can other servers be set up under the LAN port of NAS-2108R?

Yes. NAS-2108R provides virtual server, one-to-one NAT, and port mapping functions. If you are using ADSL service, you can set up your own server with DDNS configuration.

#### 44. Can extra hub or switch be connected to the LAN port of NAS-2108R?

Yes. If the eight built-in LAN ports are insufficient, you can connect extra hub or switch to the LAN port of the server.

#### 45. Which wireless protocol is used by NAS-2108RW?

NAS-2108RW uses IEEE802.11b as wireless protocol. The maximum transfer rate is 11Mbps. In spacious area without interruption, the maximum transfer distance can be up to 300 meters. There is no restriction on transfer angle and direction.

#### 46. Is NAS-2108RW an access point?

Yes. NAS-2108RW is a wireless access point as the bridge between wireless and wired network. It provides LAN and WAN connection for any PC with wireless network card via AP connection.



# 47. Does NAS-2108RW supports encryption function for wireless transfer?

Yes. IEEE802.11b is built in with encryption mechanism WEP (Wired Equivalent Privacy). NAS-2108RW also supports 64/128 bits encryption mechanism, which enables more secure data transfer after WEP process.

### 48. If I am using two NAS-2108RW servers, do they support roaming function?

No. The wireless network of NAS-2108RW is built on LAN area and does not roaming function. When you are out of the AP of a wireless network area and move to another AP area, you have to update the IP address to continue to use wireless network function.

### 49. Can I use wireless connection and LAN port of NAS-2108RW to connect the network at the same time?

Yes. Besides wireless connection function, you can also connect to the network via the eight LAN ports of NAS-2108RW.

#### 50. Which NAS models support tape backup function?

The following NAS models support tape backup function: NAS-4100 NAS-410T NAS-4120/A/B NAS-4300

#### 51. Does NAS-4100 support scheduled tape backup?

Yes. You can schedule daily, weekly or monthly tape backup job at particular time.



#### 52. My company often schedules backup job in non-office hours, how can I check the backup result when out of office?

You can check the status of NAS backup and restore jobs in office or at home by accessing web administration interface. All current statistics and past records are recorded in Statistics and Logs section

#### 53. How do I find the reason when backup fails?

You can refer to the status field on the page that the job is executed to find out the reason. You may also go to Statistics and Logs to check if there are any messages related to the failed job.

#### 54. How can I execute incremental backup job?

When you have run full backup once and selects to run incremental backup, the system will back up any modified files since last backup by full or incremental backup.

### 55. What should I do to identify the backup source and label of a tape if I forget to mark the information on the tape?

You can go to Tools section of NAS administration page to check the tape data like backup source, label, backup time, and server information etc.

### 56. What should be done when the size of backup directories is larger than the tape capacity?

When a tape is fully used for backup, a message will be shown on the web page of NAS administration to indicate changing of tape. You can replace the tape with a new one and continue the backup job.

#### 57. Can a tape be re-written for different backup jobs?

No. A tape can only be used for a single backup job. Any unused space cannot be used.



#### 58. What will NAS do if the power supply of UPS is abnormal?

NAS will be turned off at preset time.

#### 59. What will NAS do when the voltage of UPS battery is too low?

NAS will be turned off at preset time.

#### 60. Does NAS support IP sharing and file sharing at the same time?

Yes. NAS-2108R, NAS-101R, and NAS-104R series support both functions.

#### 61. Can NAS block the Internet access of certain computers?

Yes. NAS-104R, NAS-101R, and NAS-2108R provide string filter/ web site filter and firewall functions to block certain computers to access specified websites.

### 62. Why I cannot configure printer for a PC in AD domain and an authorization warning message is shown?

Please login as administrator or other users with administrator right in AD. Or do not login AD and use the administrator access right of the PC to configure printer first.

# 63. Why testing is successful when pressing the test button of remote replication to connect remote NAS, but there is authentication error message in Statistics & Logs?

When you use edit function and press the test button, you have to enter the password again and apply to settings.



#### Appendix: Status Description for Hard Disk and Disk Configuration

#### Hard Disk

English Display	Status Description
Ready	The hard disk status is normal
No disk	<ul> <li>No disk currently</li> <li>✓ Disk tray is not installed or there is main board error. Users can check disk tray. If there is main board error, please contact QNAP customer service.</li> </ul>
Invalid	<ul> <li>Indicates the disk does not have a record on NAS</li> <li>✓ The disk is used on NAS the first time, or the disk on the same NAS model is used. Users can re-configure disk volume.</li> </ul>
R/W error	Disk fails ✓ When R/W error is shown, users should back up data immediately and replace the failed disk.

#### Disk Configuration/ RAID Configuration

English Display	Status Description
Initializing	Initializing disk
Formatting	Formatting disk
Creating	Creating RAID configuration
Removing	Removing RAID configuration
Rebuilding	Rebuilding RAID configuration
Checking	Error checking on hard disk or disk configuration in process ✓ NAS will check disk automatically if it is shut down improperly

English Display	Status Description
Ready	The status of current disk or disk configuration is normal
Unmounted	Hard disk is not installed or hard disk configuration is not configured
Not Active	<ul> <li>RAID configuration is damaged and cannot be enabled</li> <li>✓ When this message is shown, users should back up disk data immediately and replace the failed disk.</li> </ul>
Uninitialized	<ul> <li>Initialization fails</li> <li>✓ Single disk does not support hot swap. If the hard disk is unplugged when NAS is turning on, disk configuration will be damaged and will lead to data loss.</li> </ul>



In degraded mode	<ul> <li>A disk of RAID 1 or RAID 5 configuration is unplugged or fails. RAID data protection mechanism fails.</li> <li>✓ In this situation, users should back up disk data immediately and replace the failed disk to rebuild</li> </ul>
	RAID configuration.

#### Note:

- When R/W error is displayed for hard disk status, or "Not active" or "In degraded mode" is displayed for RAID configuration, please replace the hard disk immediately to ensure RAID data protection can work properly.
- Note the disk order when replacing disk(s) to avoid damage to RAID5 configuration caused by plugging out normal disk(s). (Each disk slot has a label. Please mark the disk as indicated by the labels.)
- RAID5 allows only one disk failure at a time. When a disk fails, the configuration will be in degraded mode. If more than a disk fails, RAID5 will not function properly and there will be data loss!