Network Attached Storage

User's Guide

NetStreamer NAS 1100

ADVANTECH
eBusiness Solution

Warning

This is a Class A device. It might cause interference on residential areas.

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1 About the Product

This manual refers to NAS 1100. NAS 1100 is one product among NetStreamer's series of storage devices, specially designed for file sharing with multi-platform file sharing support capabilities. Data storage in the NAS can be partitioned either as application-based or user-based, with each partition having its own security definitions. Remote access is also supported allowing the administrator to manage remotely. In addition, backup and volume management can be done through a Web browser-based GUI interface.

The product should come with the following items:

- One CD (NetStreamer NAS Series Companion CD)
- NAS User's Guide
- Warranty Card
- 2 sets of keys
- Cross-over Ethernet LAN Cable

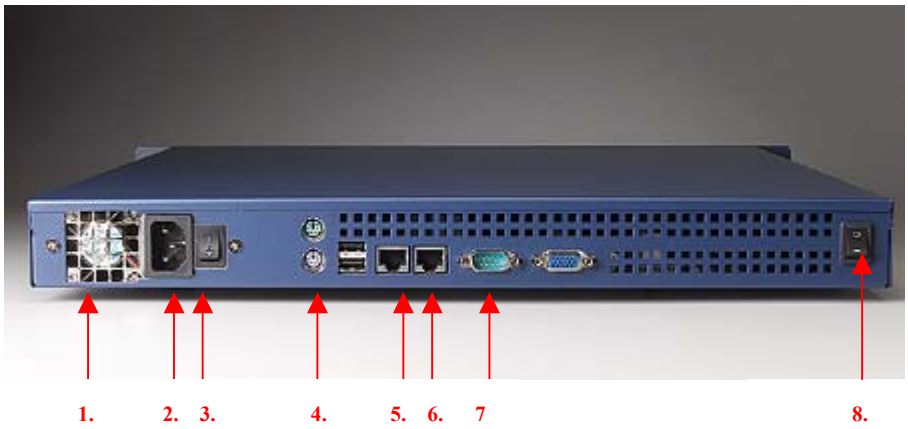
If one of the items is missing or defective, contact your local vendor immediately for a replacement.

1.1 Mechanical Outline

Front Panel

1. Fast Ethernet 1 LED
2. Fast Ethernet 2 LED
3. Hard Drive LED
4. Power LED

Back Panel



1. Fan
2. AC Input
3. Power On/Off Switch
4. PS/2
5. Fast Ethernet2 (FE2) Port
6. Fast Ethernet1 (FE1) Port
7. UPS Transmission Port
8. ATX Power Switch

Important：Before powering on the unit, make sure the power voltage from the outlet is the same as the input voltage of the unit。

1.2 Alarm / Warning LED's and Reset Switches

Power LED: This LED on the back should be orange when the unit is powered on. This indicates normal operation.

Hard Drive Activity LED: There is one hard drive activity LED on the unit. Each LED should be lit when the unit is powered on. A blinking green LED means read/write operations on the hard drive are taking place.

Network Status LED: There are two 10/100 Fast Ethernet LED. A blinking green LED indicates transmit/receive network operation is in action.

1.3 Hard Drive Installation

Hard drives contain sensitive electronic components. When installing the hard drives, special attention must be taken to avoid system failures. Static electricity can damage system components. Before handling the hard drives, wear anti-static devices. Without wearing anti-static devices, another option is to regularly touch any metal surface (or the NAS metal surface) to discharge static electricity. Make sure that connectors are connected correctly.

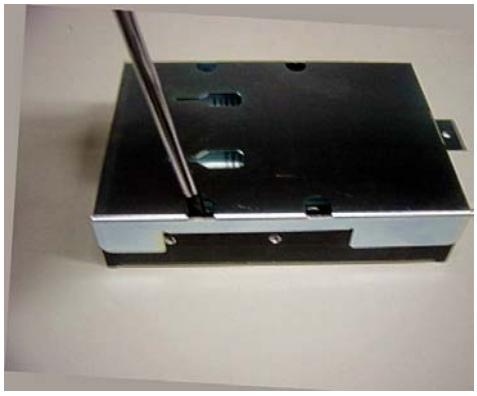
After installing the hard drives into the drive carriages, follow the suggestions below:

1. Before powering up the NAS, make sure hard drives; CPU and DRAM are installed completely. It is recommended the four hard drives to be installed during first time RAID setup as NAS 1100 does not support on-line expansion.
2. Identify and check that the LEDs are showing the correct status.
3. Check cabling connections. Cables should be wired correctly. This should be the first thing to verify if a problem is encountered.

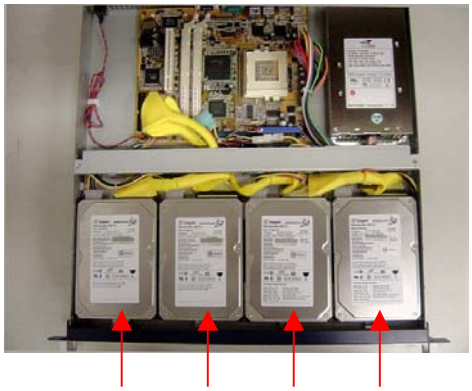
Installing the Hard Drive to the Drive Carriage

NAS supports 40-pin IDE hard drives.

1. Configure all the IDE drives as "Cable Select". (From the motherboard's IDE cable, the drive connected to the middle as slave) Place the carriage frame around the IDE hard drive; fasten the screws between the hard drive and the carriage frame.



2. The drive arrangement is as follows:



	HDD#1	HDD#2	HDD#3	HDD#4	DOM
IDE Channel	IDE 3	IDE 3	IDE 4	IDE 4	IDE 2
Slave or Master	Slave	Master	Slave	Master	Master

Note: Please follow the procedures listed below to install the hard disk drives and DOM.

3. Connect the IDE cable and the 4-pin power cable. Make sure to connect the Master drive to the black IDE connector and the Slave drive to the gray IDE connector.

4. Install IDE HDD set into NAS by tightening the screws into place.

Important: After the RAID has been built, changing the drive IDs will damage the RAID and cause data loss.

2 Installing the NAS

Before installing the NAS, check proper voltage of the electrical outlet. Make sure the voltage from the electrical outlet matches the input voltage of the unit. Take note of the following items listed below:

- TCP/IP Network
- CAT 5 network cable with RJ45 connectors --- 10BaseT, 100BaseTX
- Web-Enabled (have a Web browser) workstation with a CD-ROM drive installed

Note: Network connection: It is recommended for first time installation to use the first Ethernet port FE1 (Fast Ethernet1) as the startup connection. To use the other ports, use the Web-based management tool afterwards to configure. This can be done using the Web browser.

2.1 Basic Installation

NAS needs two basic connections: Network connection and power connection.

1. Connect RJ-45 unshielded twisted pair network cables from the NAS FE1 (Fast Ethernet1), FE2 (Fast Ethernet2)
2. Plug-in the power cable to the socket.
3. Push the ATX switch to power on the unit.

2.2 NAS Assistant Software

The NAS Assistant is a software utility for managing the NAS unit. It is the simplest and easiest tool for configuring, managing and troubleshooting the NAS. This will be the most frequently used tool for administering the unit.

The NAS Assistant can provide most of the information of all NAS systems in the network. After running the NAS Assistant for the first time, it will automatically search for all NAS systems in the network. Information of the NAS systems will be displayed including the NAS server name, firmware version, IP address, NAS Group, Gateway and the MAC address of each NAS system on the network.

NAS Assistant installation procedure:

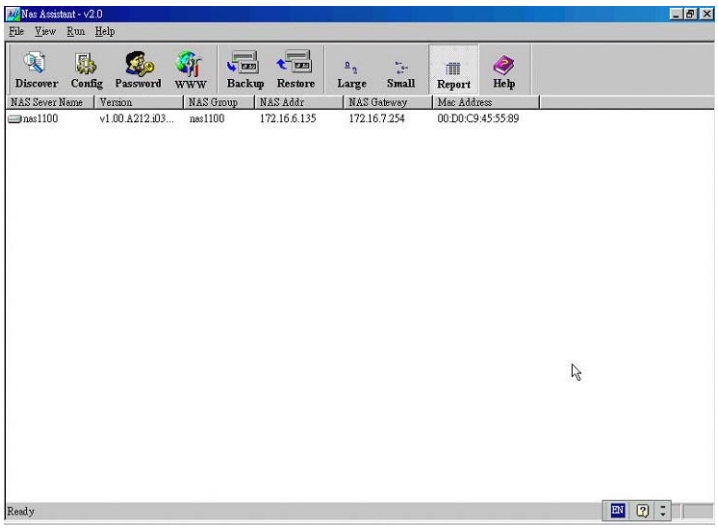
1. The NAS Assistant software utility works with Microsoft Windows operating systems (98/ME/NT/2000) and needs a Web browser (preferably with MSIE 5.5 or above) for access to the system unit. The software utility should be installed in a workstation that is connected to the network and meets the software requirements.

2. Put the Companion CD into the CD-ROM drive. With auto-play enabled, the NAS Companion screen should automatically display. Please click the **[NAS Assistant]** to start the installation process.

3. The NAS Assistant can also be manually installed if auto-play is not enabled. On the Companion CD, locate and click on the *NAS Assistant.exe.* This will install the software utility.

4. The NAS Assistant will automatically search and display all of the NAS systems on the network. Their status will be displayed. After displaying the status, it is ready to configure the NAS.

5. By default, the NAS will search for a DHCP server in the network and obtain an IP address from the DHCP server. To assign a Static IP to the NAS, assign a name to the NAS (i.e., nas1100A). Double click on the NAS (i.e., nas1100A) or select NAS then click on **[Config]** button. This will open a window for setting up the IP address to the NAS.



NAS Assistant Buttons

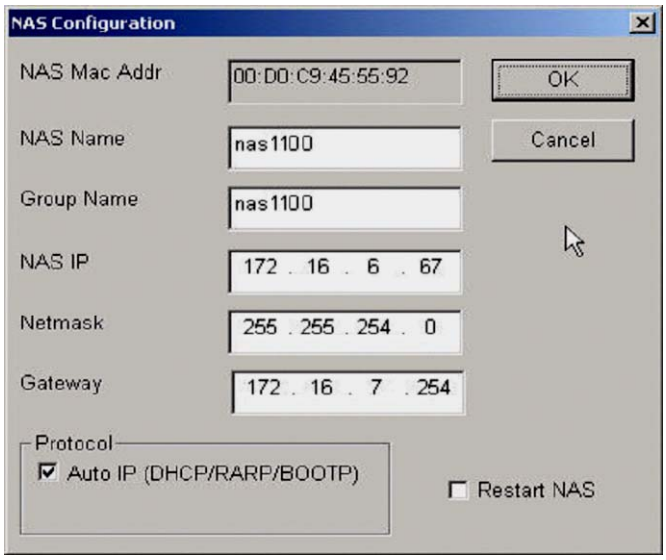
Discover NAS systems

Click on this button to have NAS Assistant search for NAS systems on the network. A detailed list of the systems will be displayed.

Configure IP address

Click on this button to configure the IP address of the NAS. If an IP address of 10.10.10.10 is displayed on the list, a Static IP can be manually assigned, or it can be set to Auto IP. Auto IP mode enables the unit to obtain IP address automatically from the DHCP server.

1. Click the NAS system from the list.
2. Click on the **[Config]** button to open the NAS configuration window. Basic information can be changed like the NAS Name, Group Name, NAS IP, Netmask and Gateway.
3. To complete the configuration click on **[OK]**. A password will be asked for verification.

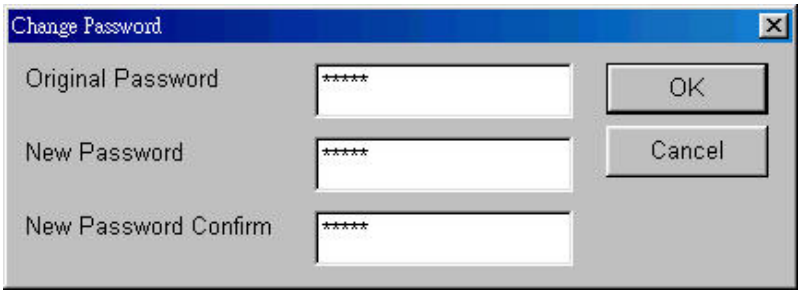


Password setting

Click on this button to set the password of the administrator.

1. Click the NAS system from the list.

2. Click on the **[Password]** button to open the **[Change Password]** dialog box. After setting the password, remember the password or write it down in a secure place.



Web browser-based management

Click on this button to manage the NAS. Clicking this button will open the Web browser.

1. Click the NAS system from the list.

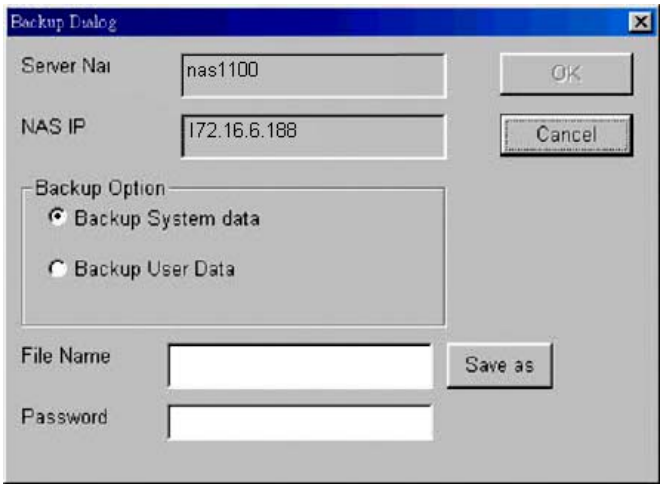
2. Click on the **[WWW]** button to open the Web browser. Enter the administrator username and password. Proceed with the configuration changes

Backup

Click on this button to backup data. NAS Assistant supports client side backup of the NAS. The **[Backup Dialog]** box will open. NAS Assistant can backup two types of data:

- Backup System Data: This includes NAS system language, and default settings information.

- Backup User Data: This includes the users' shared folders and files, users' accounts, groups and information.



1. Click the NAS system to be backed up.

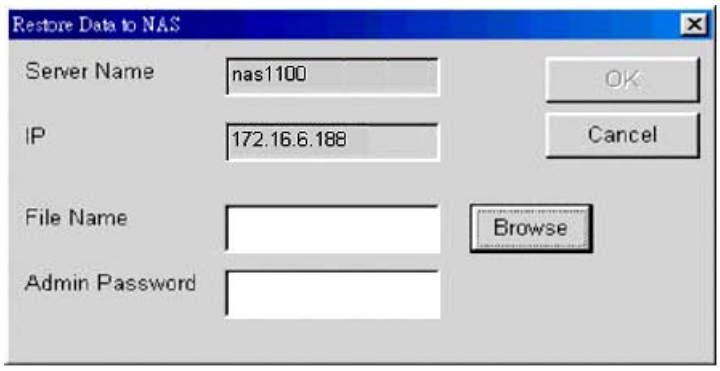
2. Click on the **[Backup]** button to open the **[Backup Dialog]** dialog box. Select and click on **[Backup System Data]** or **[Backup User Data]**.

3. Enter the filename to be used for saving the backup file on the**[File Name]** box. Click **[Save As]** to specify the path of the backup file. The administrator password must be entered on the **[Password]** box for the backup file to be saved.

4. Click on **[OK]** to start the backup job.

Restore

Click on this button to restore data. The **[Restore Data to NAS]** dialog box will open. Once a backup file has been created using the backup tool, it can be restored. Using the restore tool, the data that were backed up can be reverted back to its original state.



1. Click the NAS system from the list.

2. Click on the **[Restore]** button to open the **[Restore Data to NAS]** dialog box. To start restoring the backup data file, click on **[Browse]**, select the path and filename to be restored.

3. Enter the administrator password in the **[Admin Password]** blank. Click on **[OK]** to complete the operation.

Important:

1. If changes were made to the NAS system after the backup process, another backup needs to be done to have a current backup.

2. Before restoring data, make sure the NAS system has enough storage space. Otherwise, the restore process will fail.

Large Icons

Click on this button to display large icons view.

Small Icons

Click on this button to display small icons view.

Report

Click on this button to show detailed list of information about the NAS system. Information includes Server Name, firmware version, IP address, Gateway, MAC address and others.

2.3 Installing NAS Syncer

NAS Syncer is a backup utility provided by NAS. It is installed on a client machine allowing clients to backup the data from their machines to the NAS. It can also backup shared network folders and their subsequent subdirectories to the NAS.

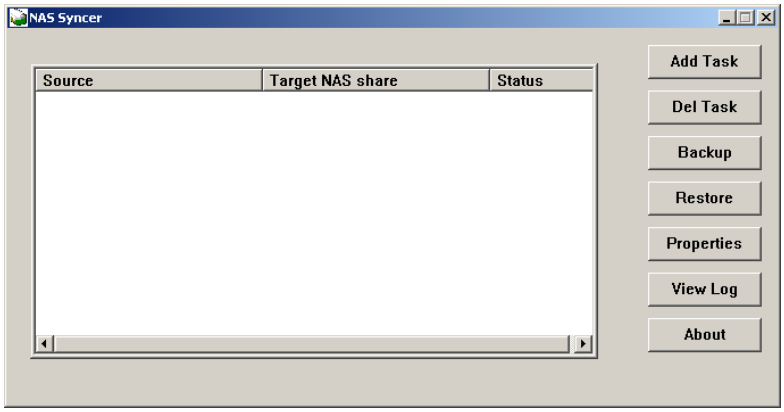
1. With auto-run set to enable, insert the Companion CD into the CD-ROM drive. Select **[Install NAS Syncer]** and it will automatically install the utility.

2. To install manually (i.e., auto-run is disabled), locate and click on the **[NasSync.exe]** file. The install program will open allowing the installation to continue.

3. When NAS Syncer is installed, the following will be displayed.

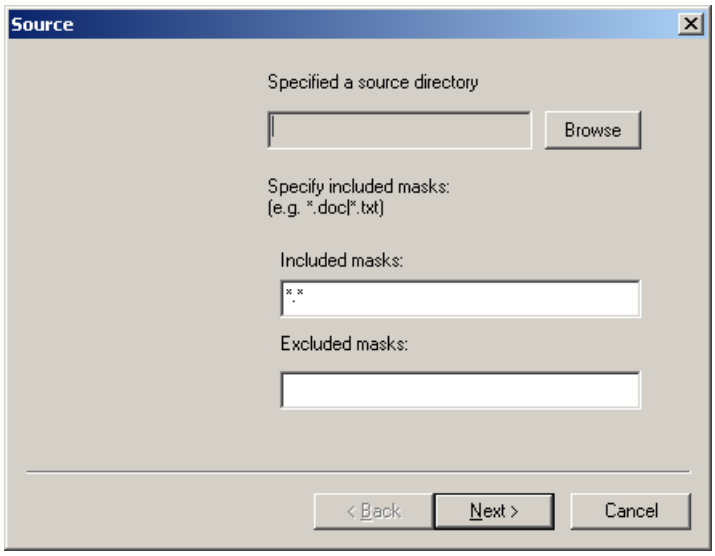
Add Task

Click on this button to add backup jobs.

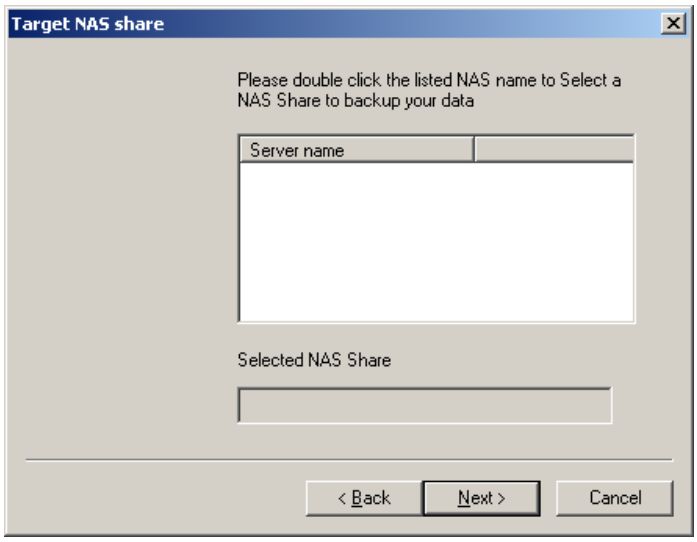


Browse to and select a source folder to backup. A source folder can be a folder on the local machine or a shared network folder.

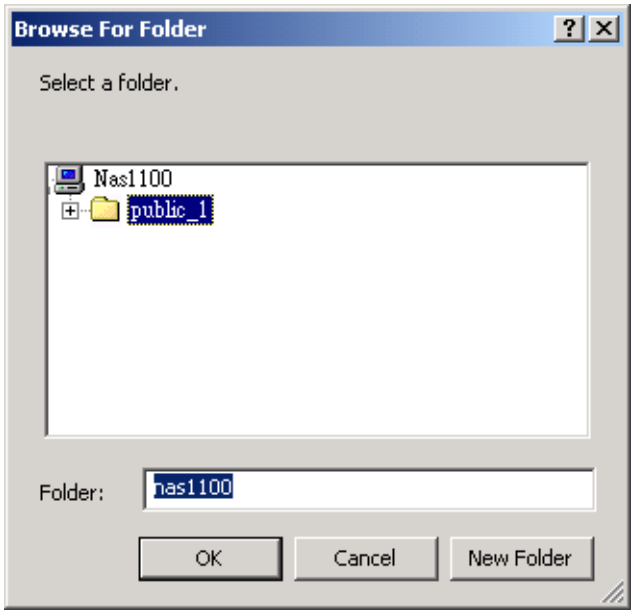
You can use wildcards to include or exclude the choice of filenames to display.



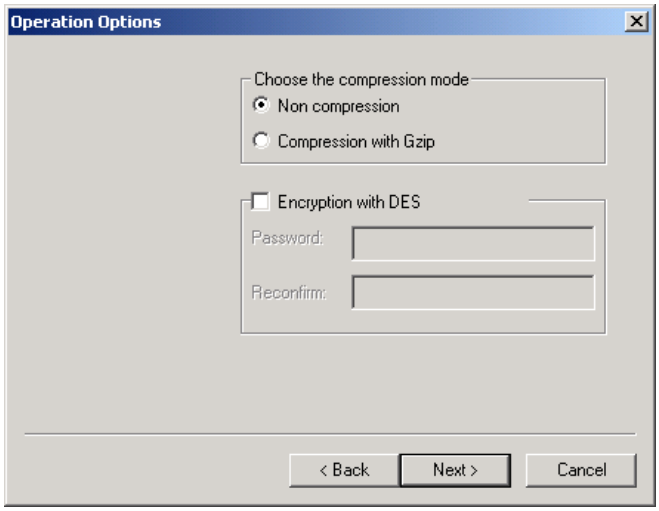
After selecting the folders to be backed up, the next step is to select the NAS system on the network where the backup will be stored. Select and click on the NAS system. A dialog box will open showing the destination NAS system and the folders available.



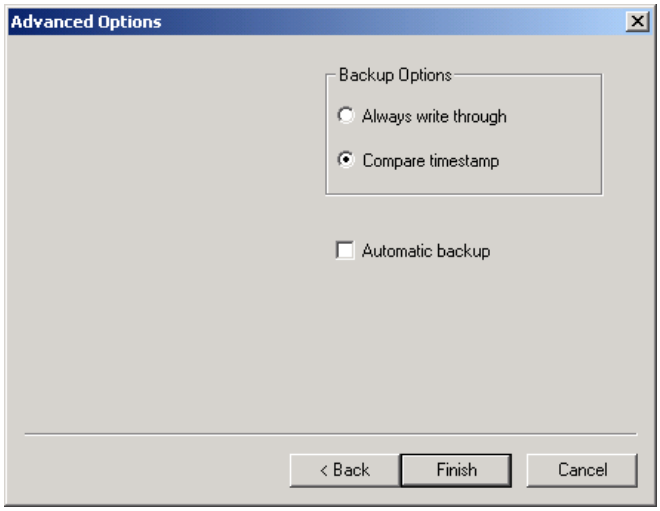
Select and click on the destination folder.



Several options for the backup process are available. Gzip compression can be used to compress the data during backup. Password protection can also be selected as an encryption method to protect the backup file.



Select **[Always write through]** or **[Compare timestamp]**. To backup automatically, select the **[Automatic backup]** checkbox.



Delete Task

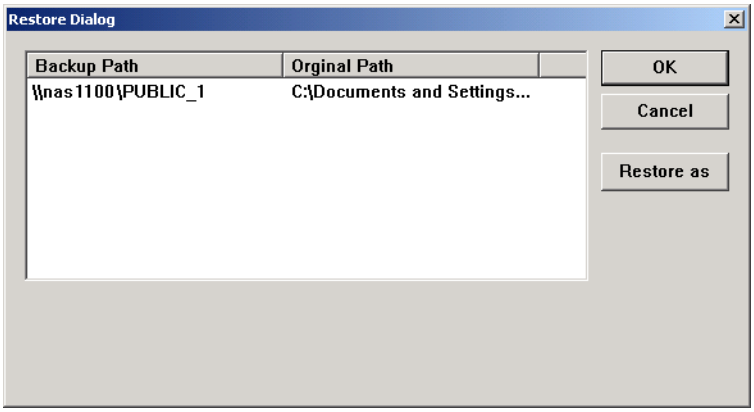
Click on this button to remove any tasks that are not needed.

Backup

Click on this button to start the backup process.

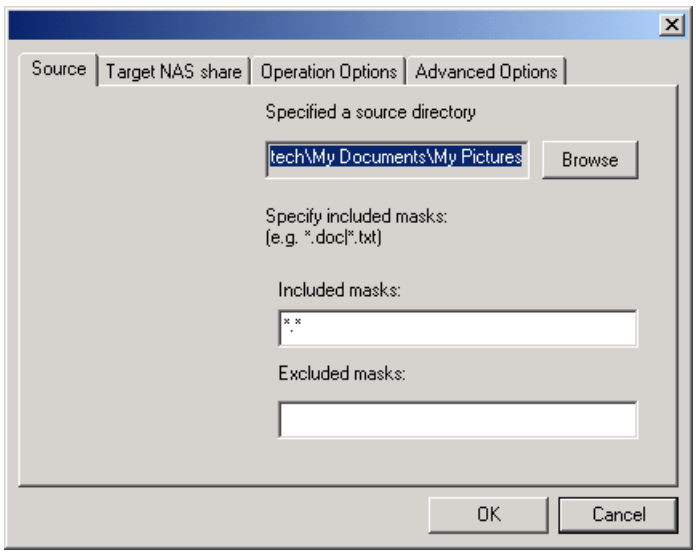
Restore

Click on this button to restore data. It will open the **[Restore Dialog]** box. To select other directories, click on **[Restore as]** button, locate and specify by clicking the directory, then click on **[OK]** to start the restore process.



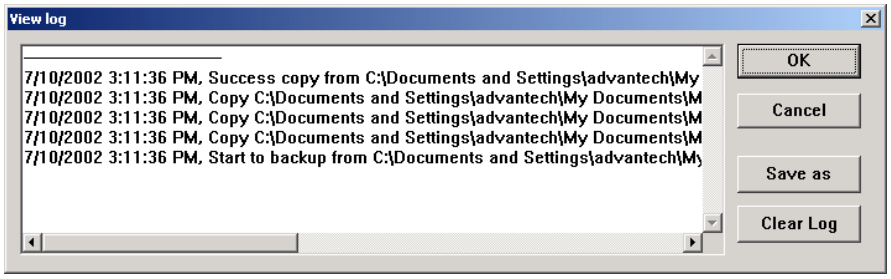
Properties

Click on this button to view details about the task. Changes can be made here.



View Log

Click on this button to view the backup log. The log can be saved to a specified filename if desired.



2.4 NAS Web Browser Setup Wizard

The NAS has a user-friendly and easy to use "Setup Wizard" for the management tool interface. The wizard guides you through the entry and settings of the system and network configuration.

When the first time the NAS system is installed, use the NAS Assistant to configure NAS IP address. After IP configuration complete, open the Web browser; enter this IP address at the address toolbar. This will initiate the "Setup Wizard". The "Setup Wizard" will provide step-by-step guide and prompt for the basic information of the NAS system.

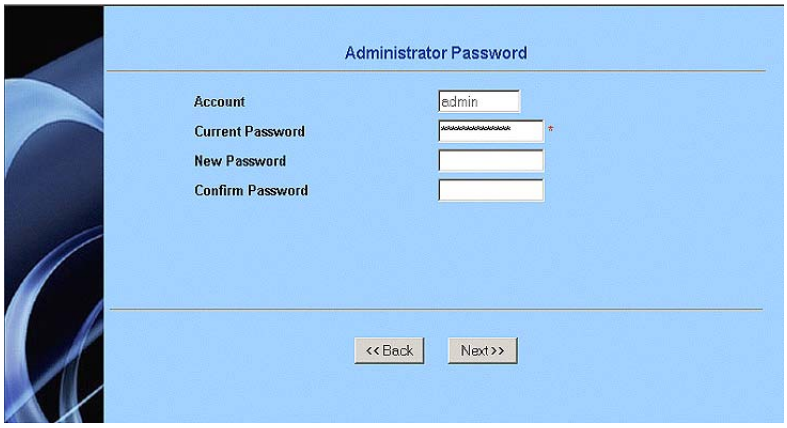
Setup Wizard – Welcome Page

Setup Wizard starts with the **[Welcome]** page. Click on **[Next]** to continue.

Setup Wizard – Administrator Password Setting

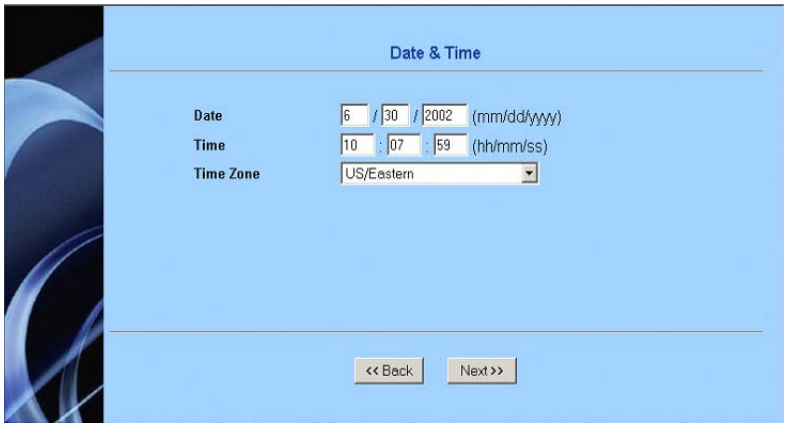
Enter the administrator password and click **[Next]** to continue.

The default Administrator ID and password are both "admin".



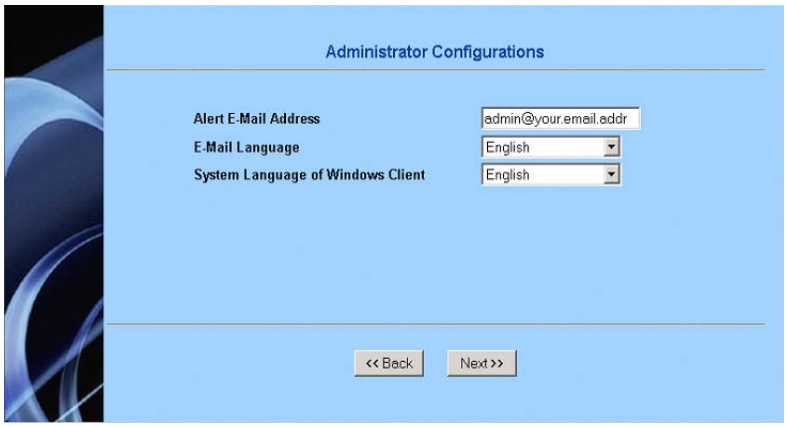
Setup Wizard – Date and Time Setting

Enter the current date, time and region. Click on **[Next]** to continue.



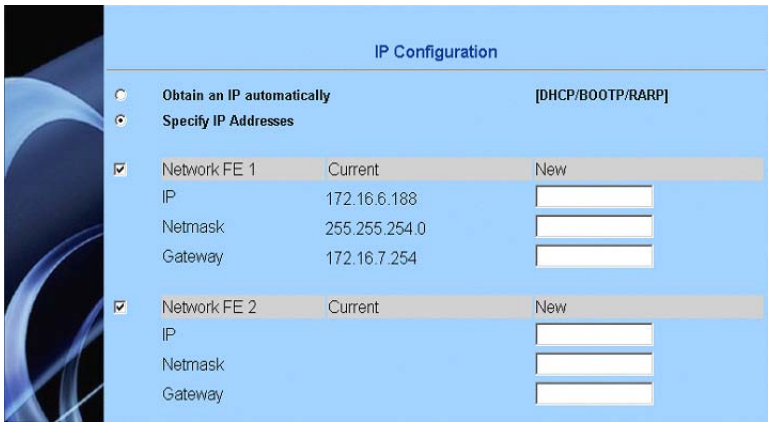
Setup Wizard – Administrator Setup

Enter the administrator's email address and language setting. Click **[Next]** to continue. (The language setting is the language used on the email client).



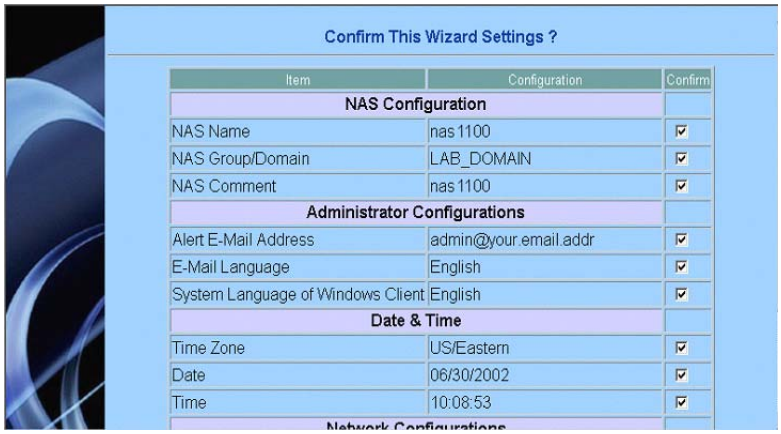
Setup Wizard – IP Setup

The network settings will be setup in this section. Dynamic IP or Static IP Settings are available options. Select which option best fits your network configuration. Click on **[Next]** to continue.



Setup Wizard – Setup Confirmation

In this part, the settings can be confirmed and applied. If changes need to be made, click on **[Back]**. If all settings are confirmed and acceptable, make a check on all the check boxes on the right side, and click on **[Apply]** to continue.

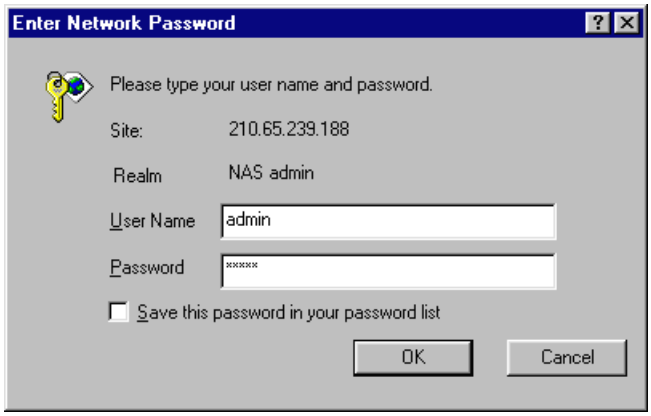


Confirm This Wizard Settings ?

Item	Configuration	Confirm
NAS Configuration		
NAS Name	nas1100	☑
NAS Group/Domain	LAB_DOMAIN	☑
NAS Comment	nas1100	☑
Administrator Configurations		
Alert E-Mail Address	admin@your.email.addr	☑
E-Mail Language	English	☑
System Language of Windows Client	English	☑
Date & Time		
Time Zone	US/Eastern	☑
Date	06/30/2002	☑
Time	10:08:53	☑
Network Configurations		

Setup Wizard – Setup Complete

After finishing the steps above, the setup needs to be completed. The last step will prompt for the administrator password. Enter the password and click **[OK]**. (Enter "admin" as the default [User Name] and [Password].) Setup is now complete.

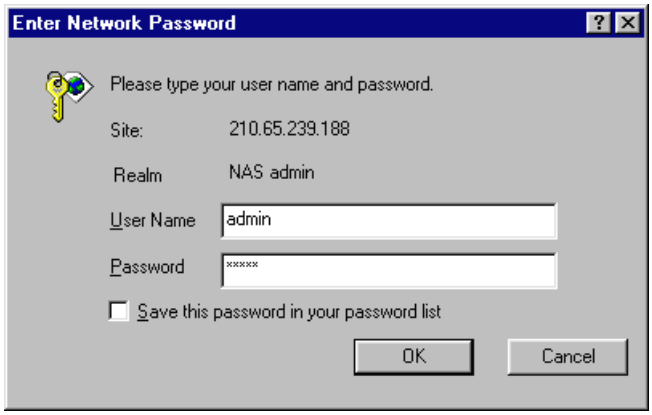


3 NAS Web Administration UI

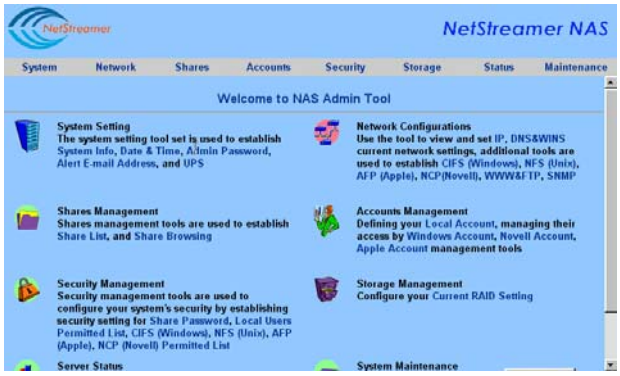
After using Setup Wizard for the first time configuration, the system is ready. Future configuration changes can be made through any Web browser (i.e. Microsoft Internet Explorer, Netscape Navigator). Administration of the NAS can be done through Web browser.

Note: Use Microsoft Internet Explorer 5.5 or later. For Netscape Navigator users, recommended is v.6.0 and above.

1. Start the Web browser.
2. On the address toolbar of the Web browser, enter the IP address that was assigned to the NAS system.
3. When the Web browser connects successfully to the NAS system, it will prompt for a username and password. (Enter "admin" as the default user name and password.)

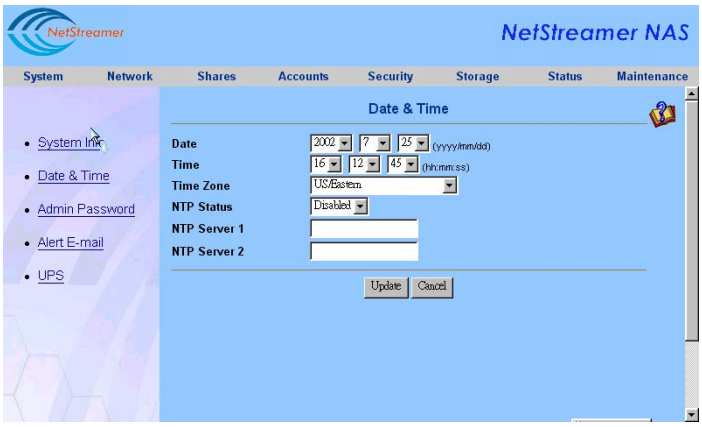


4. The default username is "**admin**". Enter the "**admin**" password. The **[Welcome to NAS Admin Tool]** page will open. From this screen, the administrator can control the system settings, system security and network settings (includes Windows, UNIX, Novell and Apple Macintosh networks), hard drive settings and other information



3.1 System Setup

Date and Time Setting



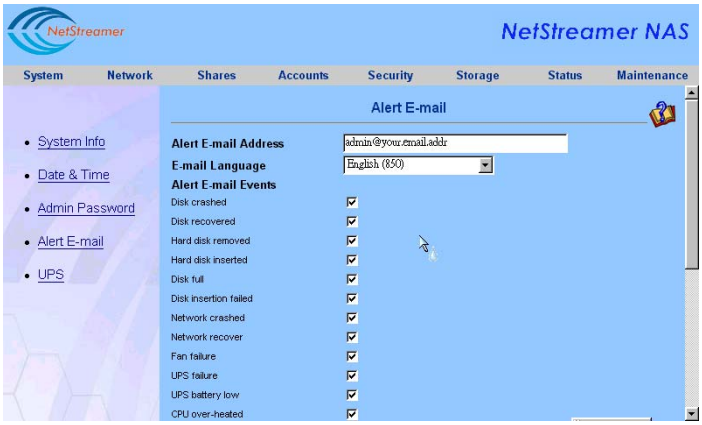
For time setting, the 24-hour time format is used. Set the local date, time and time zone that best suites you.

NTP Protocol can be enabled by setting the NTP Status. This is used to synchronize the system time with NTP server on the network.

Admin Password

The admin password can be changed on this page. The password is case-sensitive, maximum of 14 characters, should not include special characters such as ~!@#$%^&*<>/："'()+|\?=`[]. Enter the current password and new password. Reenter the new password to confirm. Click **[Update]** to set the new password.

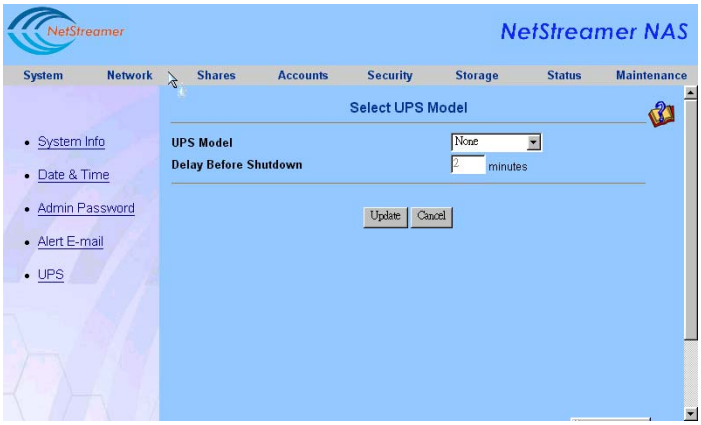
Email Alert



NAS can alert the administrator when some critical system events occur. It can be setup such that an email will be sent to the administrator. On this page, enter the email address of the administrator. When one of the selected events listed happens, an email including the description of the event will be sent to the administrator. Action can then be taken immediately to avoid system failure.

Note: For the email alert notification to take effect, the DNS and email address settings must be set properly.

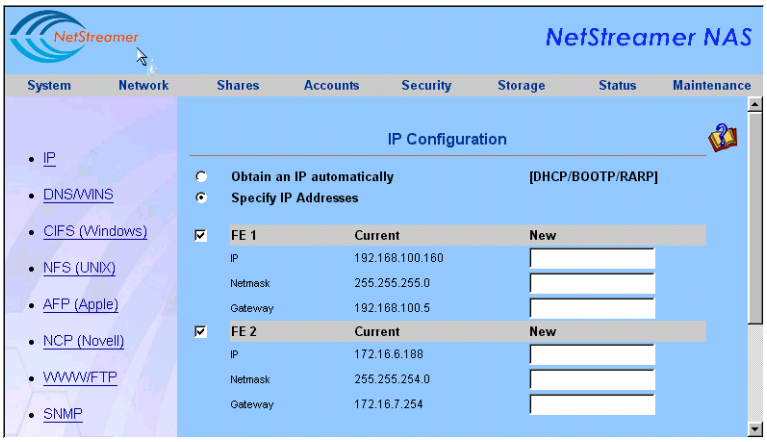
UPS Setting



The NAS supports the APC Smart UPS through the RS-232 interface. During a power failure, this function allows additional time for the system to shutdown properly. It can be set to shutdown automatically after a specified number of minutes. The main purpose is to protect the data on the NAS.

3.2 Network Setup

IP Configuration



If a DHCP server is installed on the network, the option **[Obtain an IP automatically]** can be selected. Without the DHCP server, select **[Specify IP Addresses]** and manually enter the IP addresses on the **[New]** field box.

The two Fast Ethernet ports can be setup for "Load Balancing", also known as "Trunking" or "Teaming". This can be done in the advanced configuration setting. This allows both network ports to act as one, doubling their performance, and sharing one IP address among the two network ports.

If the two Fast Ethernet ports are set to Fail-over, the

performance of both network ports will be that of a single network port. However, when one of the ports goes down, the other one takes over. This is the concept of fail-over.

If the network domain resides on two or more subnets, the administrator has the option to assign different IP addresses to the different network ports. This will result in "Load Balancing" while the network ports can effectively service clients on different subnets.

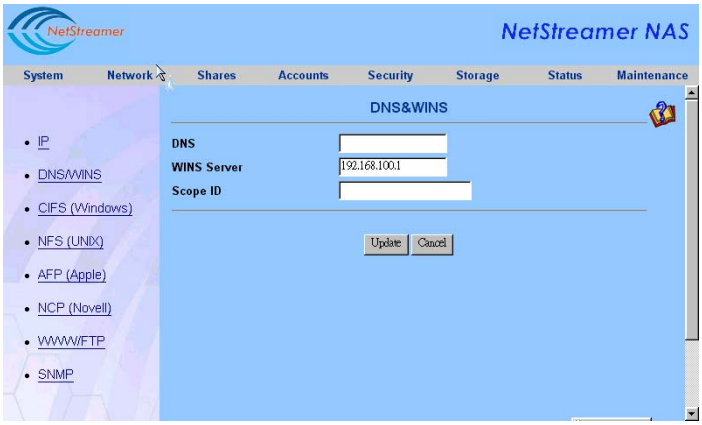
Note:

1. The two Fast Ethernet ports of the NAS can be set for Load Balance/Fail-over. If they are designed to independently function, make sure there is different subnet of the network set up for each of them.

2. With "Load Balancing" on the NAS, a matching switch with "Load Balancing" function is not needed. The NAS Load Balancing uses software emulation to perform this function.

3. To use the NAS 1100's FEC (Fast Ether Channel/802.13ad) features, a matching switch with FEC capabilities is required.

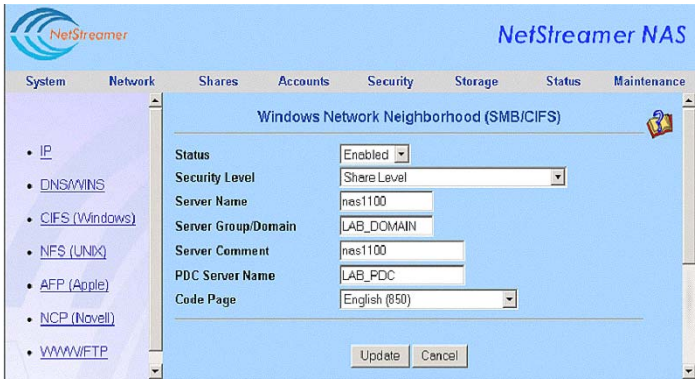
DNS and WINS



If there is a DNS (Domain Name Service) or WINS (Windows Internet Naming Service) server on the network, enter their respective IP addresses into the field boxes.

A Scope ID can also be entered. The Scope ID is the ID for NetBIOS over TCP/IP. Click **[Update]** to complete the settings.

Windows Network Neighborhood SMB/CIFS Setting



On this page, the NAS can be setup to be shared among Windows clients. If the NAS is to be shared, on the **[Status]** field, select **[Enabled]**. Set the desired **[Security Level]**.

Share Level -

The access rights for the files on the system are based on each individual Share. Every share can be set to have **[Read-only]** or **[Read/Write]** access.

User Level –

The access rights for the files on the system are based on each individual user. The definitions are listed below:

1. By PDC only: If the network has a PDC installed. The client's access rights are based on the PDC.
2. By PDC then Local Account: During login, verify the

account from the PDC. If verification fails, use the local NAS user accounts.

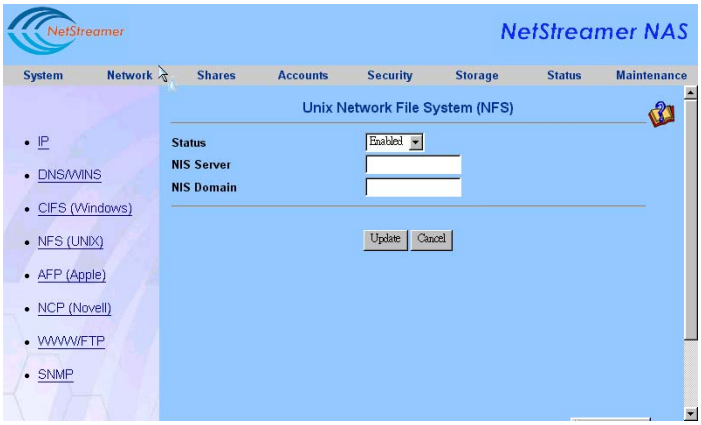
3. By Local Account then PDC: During login, attempt to use local NAS user account. If attempt fails, login using PDC user account.

4. By Local Account only: Use local NAS user account for login.

If it is part of a workgroup, writing to a workgroup/domain will depend on the approval of the workgroup.

If it is decided that the NAS should join a domain, on the Server Group/Domain setting, specify the domain name. This will allow the NAS system to join the Windows domain.

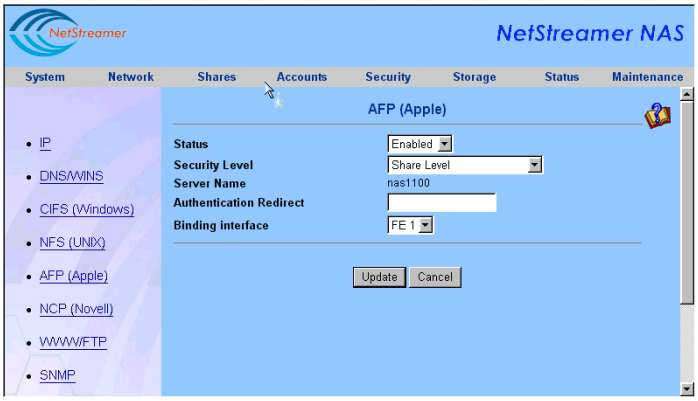
UNIX Network File System (NFS)



On this page, the NAS system can be setup to be shared among UNIX clients. Set the status to Enabled to set sharing among UNIX clients.

If an NIS (Network Information Service) server is available, enter the NIS server IP address and NIS domain.

AFP (Apple)

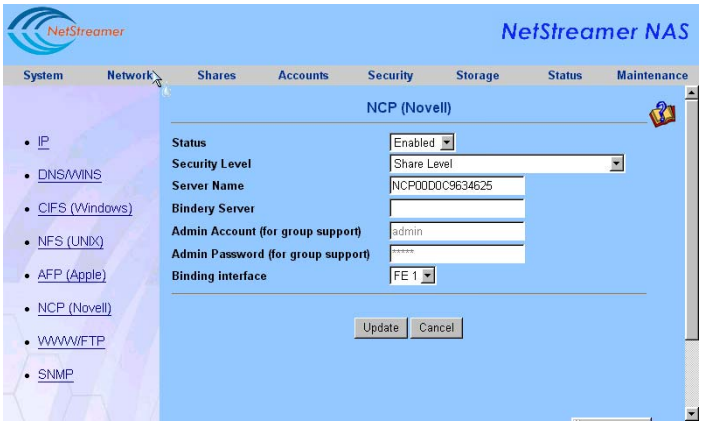


On this page, the NAS system can be setup to be shared among Apple Macintosh clients. Set the status to Enabled to set sharing among MAC clients

Select **[Share Level]** or **[Users on an AFP machine]**. For **[Users on an AFP machine]** setting, on the **[Authentication Redirect]**, enter the IP address of the Apple server.

Select **[Binding interface]** for which LAN port will provide AFP service

NCP (Novell)



On this page, the NAS system can be setup to be shared among Novell Netware clients. Set **[Status]** to **[Enabled]** and determine the **[Security Level]** to be applied for your environment.

Share Level -

The access rights for the files on the system are based on each individual share. Every share can be set to have **[Read-only]** or **[Read/Write]** access.

User Level –

The access rights for the files on the system are based on each individual user.

1. By Bindery Server only： If the network has a Bindery Server installed. The client's access rights will be based on the Bindery.

2. By Bindery Server then Local Account： During login, verify the account from the Bindery Server. If verification fails, use the local NAS user accounts.

3. By Local Account then Bindery Server： During login, attempt to use local NAS user account. If attempt fails, login using Bindery Server user account.

4. By Local Account only: Use local NAS user account to login.

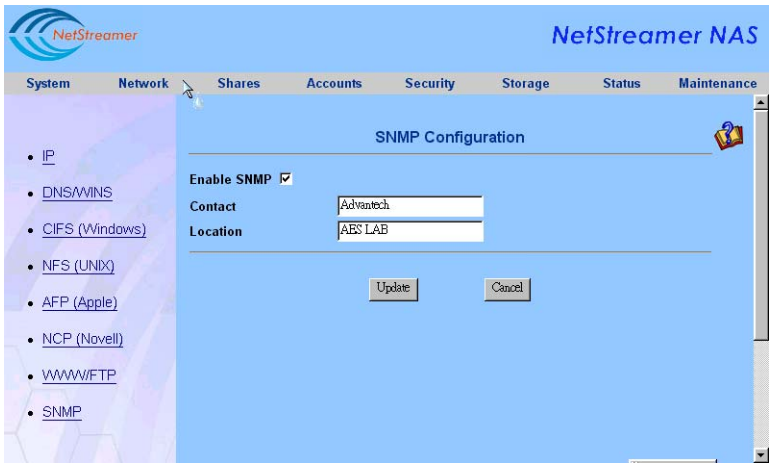
If Bindery Server is selected, enter the server name and administrator password.

WWW & FTP

Set **[WWW File Access]** to **[Enabled]** to allow the Web browser for accessing the files on the NAS.

On the **[Login Page]**, the following can be selected: Setup **[Wizard]**, **[Admin Page]**, or **[Share Page]**. To use FTP service, set **[FTP service]** to **[Enabled]**.

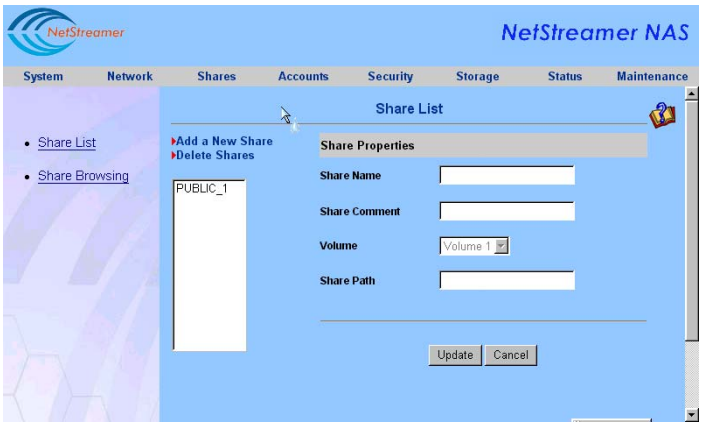
SNMP Configuration



On this page, the NAS system can be setup to be SNMP enabled. To enable SNMP service, click on the **[Enable SNMP]** check box. On the **[Contact]** field box, enter the administrator name. On the **[Location]** field box, enter the location of the NAS system. Click on **[Update]** to apply the changes.

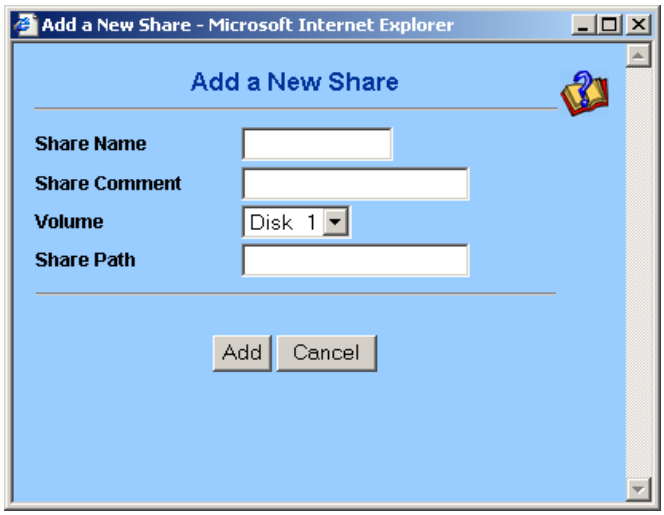
3.3 Share Management

Share List



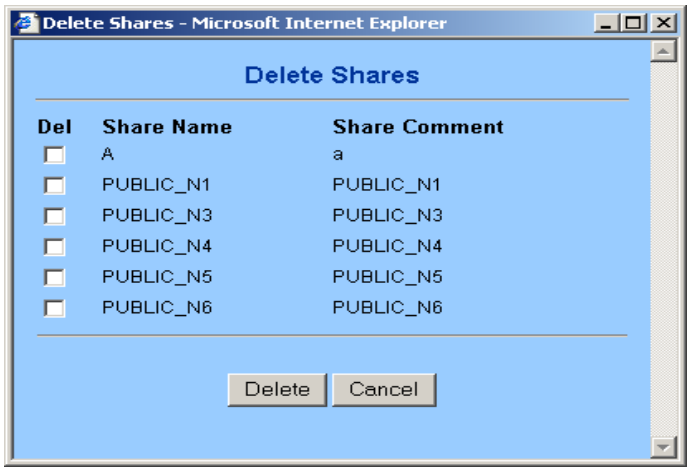
On this page, a listing of the shares is displayed. Shares can also be added or deleted.

To add a new share, click on **[Add a New Share]**. The **[Add a New Share]** dialog box opens. Enter the **[Share Name]**, **[Share Comment]**, and **[Share Path]**. Click **[Add]**.

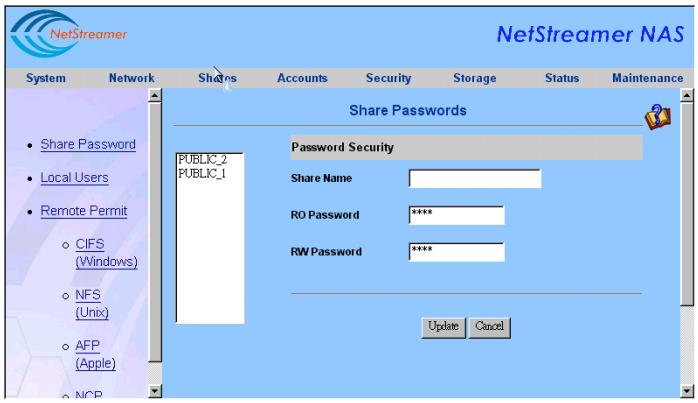


If this system has more than one volume, select the volume name in the **[Volume]** field box.

To delete the shares, select **[Delete Shares]**. The **[Delete Shares]** dialog box appears. Select the check box of the share to be deleted. Click **[Delete]** to complete the operation.



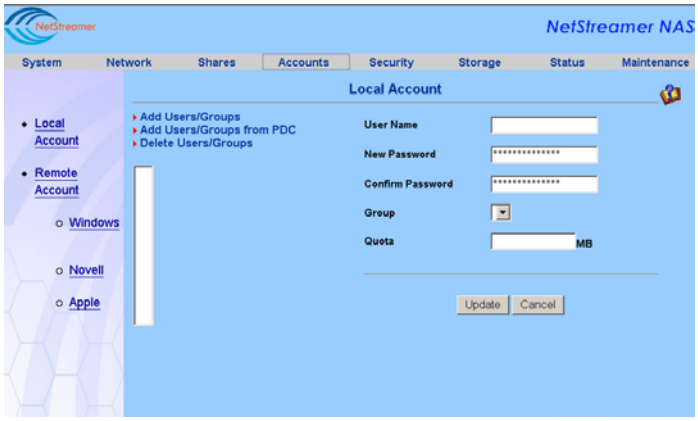
Share Browsing



On this page, the folders that are shared are listed. The shares and the files stored on these shares can be browsed.

3.4 Account Management

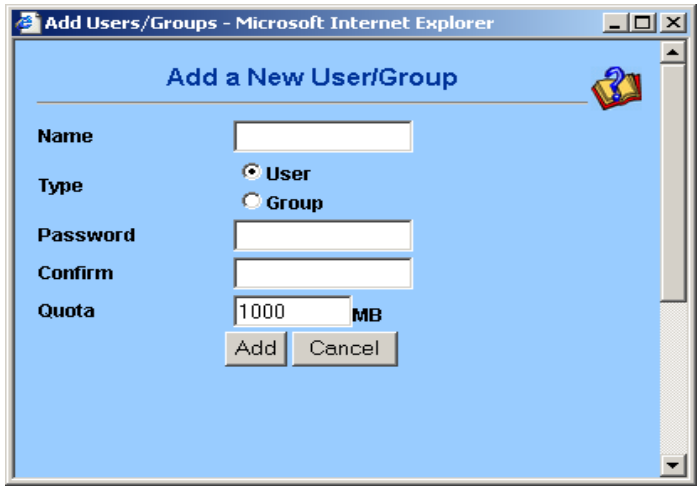
Local Users/Groups



d

On this page, users and groups can be added and deleted. Additionally, changing users' password, adding users to groups and editing users/groups can be done on this page.

Add User/Group



On this dialog box, a new user/group account will be created on the local system and it will not influence the account settings of the remote server.

Use PDC to add Users/Groups

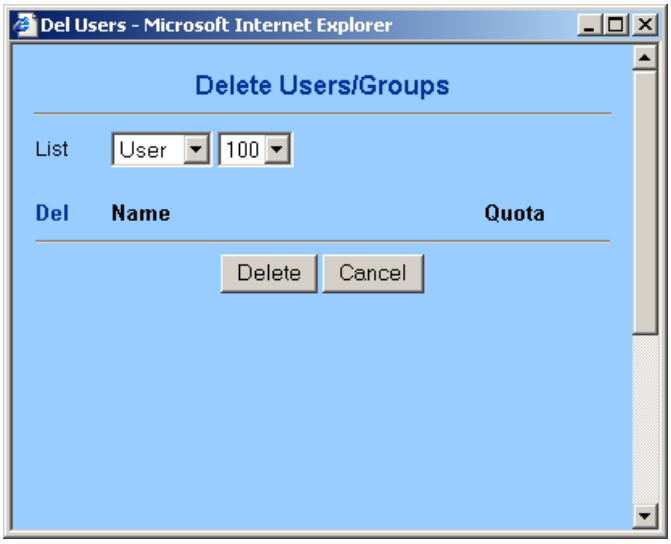
If a Windows PDC server is available on the network and the security setting on the Windows SMB/CIFS page is set to **[User Level]**, the PDC accounts/groups can be added to the local accounts of the NAS system, as well as the password, then configure the user disk quota and the group relationships.

Use Bindery to add Users/Groups

If a Bindery server is available on the network and the security setting on the Novell NCP page is set to **[User**

Level], the Bindery accounts/groups can be added to the local accounts of the NAS system, then configure the user disk quota and group relationships.

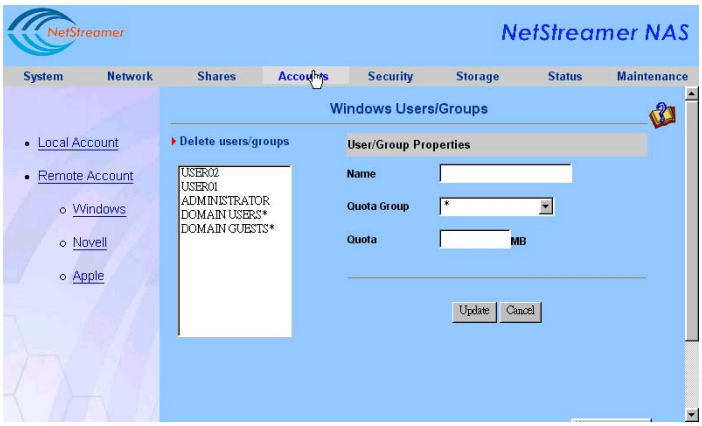
Delete Users



Check the **[User Name]** or the **[Group Name].** Click **[Delete]** to complete the operation.

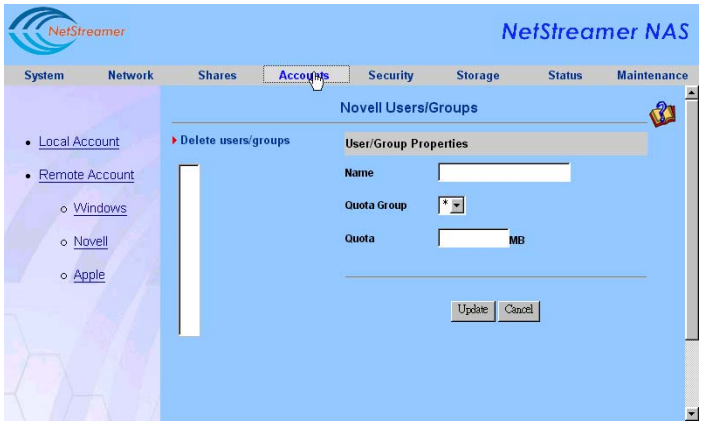
3.5 Remote Account

Windows Users/Groups



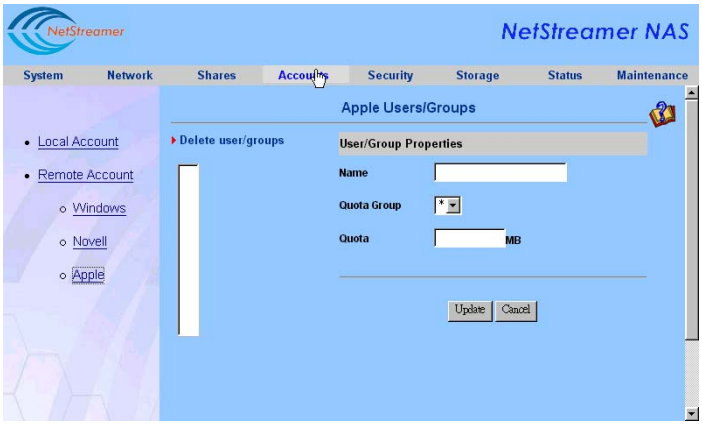
On the list, choose the user/group on the PDC that will be authorized to set the disk quota on the local system.

Novell Users/Groups



On the list, choose the user/group on the Bindery server that will be authorized to set the disk quota on the local system.

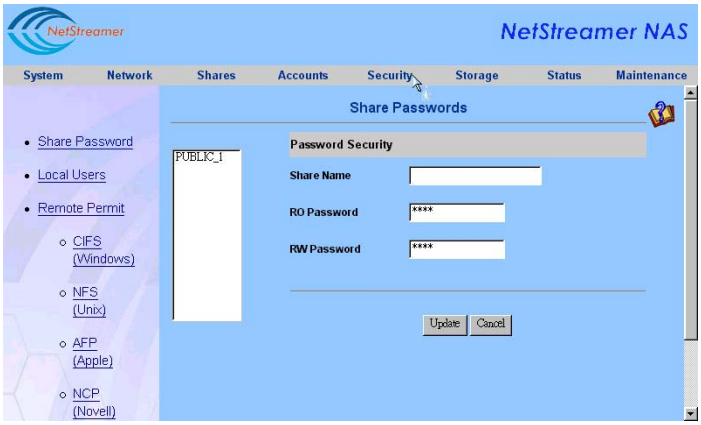
Apple Users/Groups



On the list, choose the user/group on the AFP server that will be authorized to set the disk quota on the local system.

3.6 Security Management

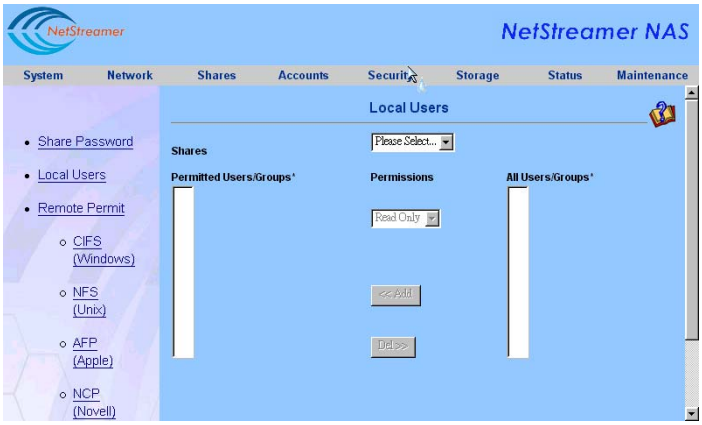
Share Passwords



Select the share name on the left side, and the **[Read-only]** / **[Read-Write]** passwords can be set.

The password can be up to 14 characters, but not including special characters: "-!@#$%^&*<>/：'"()+|\?=`[]".

Local Users



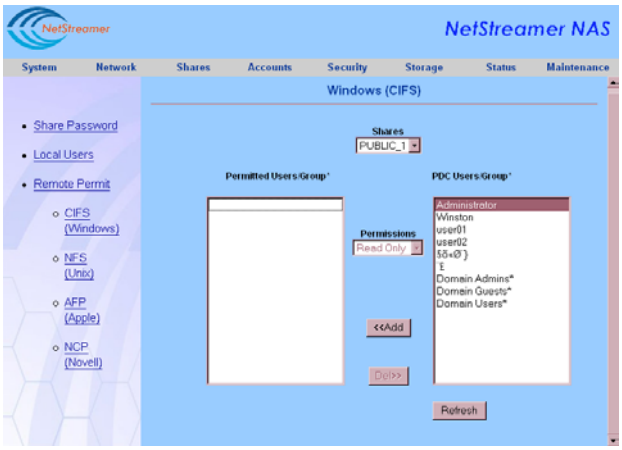
1. Select one Share from the share list box in change of permission.

2. Select the specify users or groups from all Users/Groups* listed first and click [Add] button to permit.

3. Select the permitted user/group to change the access right for [Read Only], [Read Write] or [Deny],and the default permission for new adding users/groups is [Read Only].

Note: Name with a "*" mark means a group.

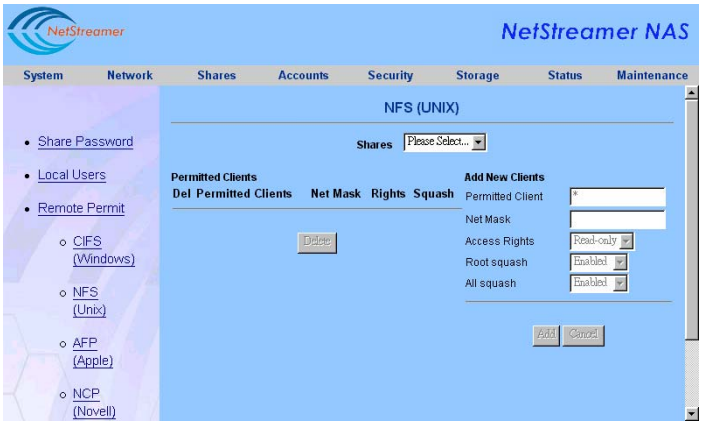
CIFS (Windows)



Choose a **[Share]** from the shares column. From **[PDC Users/Groups**] select a user/group that needs to be changed. Click **[Add]** to allow permissions to the user/group. Select the type of permission to be granted by selecting the user/group and modifying its access authority as **[Read Only]**, **[Read Write]** or **[Deny]**. The default permission is **[Read-only]**.

Note: Any name which is followed with a mark * indicates a group.

NFS (UNIX)



Example for NIS Server Permit Shares:

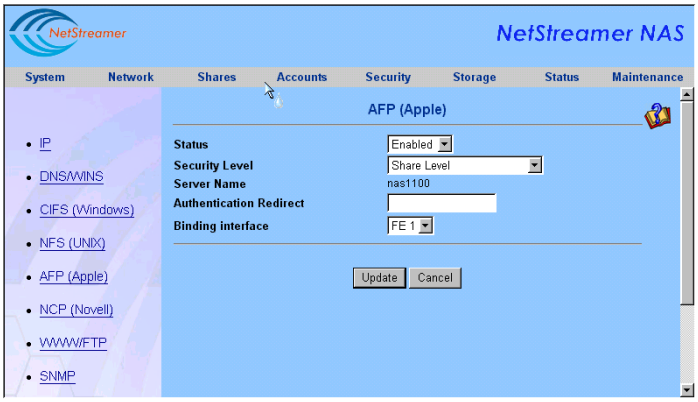
1. Select a Share in this page.
2. **[Permitted clients]**: The default mark **"*"** indicates all the clients (based on the **[Network Mask]**); or enter a permitted IP address.
3. **[Network mask]**: The IP address can be entered according to the Network environment (i.e. 255.255.255.0 or any 32 bits combination); if nothing is entered, it indicates all.
4. **[Access Rights]**: Available options are **[Read-only]** or **[Read-Write]**.
5. **[Root squash]**: "Enabled means the client manager cannot execute the **[Management]** in NAS and modify any share attribute. **[Disabled]** means the

clients can use the **[chmod]** command to modify the rwx (read, execute and write) settings (the default NAS number is 755, as for the rest, the setting is as follows --> all users: 0111, group: 0101, the others: 0101).

6. **[All squash]**: **[Enabled]** means all the clients have the same rights to execute NAS operation. **[Disabled]** means all the users have the right to change their own rights. To let UNIX and Linux clients completely manage the users, groups and the authority, disable the **[Root squash]** and **[All squash]** options so that the UNIX and Linux clients can set up and control all the Read-Write and Log in / Log out functions which are from NFS to NAS.

7 The **[mount]** command can be used to define the mappings of UNIX / Linux clients' drive. (Ex: mount –t nfs [nas ip]:[share name] [mounting point])

AFP (Apple)



Example for AFP machine user:

1. Make some configuration changes on the AFP page. The security level must be set as **[User for AFP machine]**. Enter the Apple Server name or IP address in **[Authentication redirection]** field box.

2. Determine the **[File share]** from the **[Control Panel]** of the Apple Server.

3. Choose **[add users/groups]** and enter a new user account.

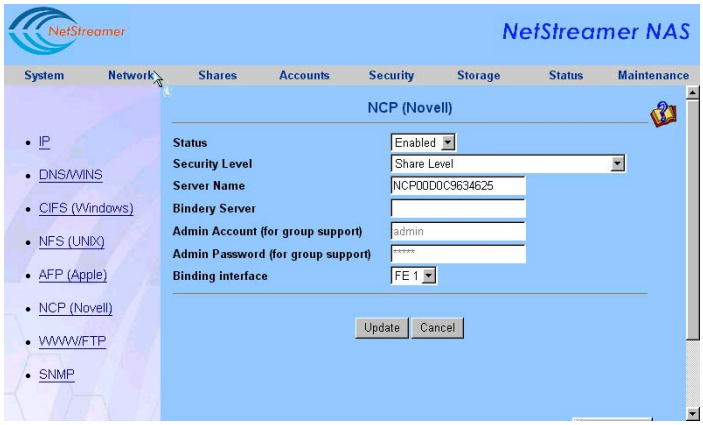
4. Select a share on this page and define the permissions and disk partition for this new user. Select the user name from **[All Users/ Groups]** and add it to **[Permitted User / Group]**.

5. A dialog box will prompt for a selection of all the

permit shares. Any share that is selected will appear on the Mac desktop and become a general folder.

6. Adding user / group *
   When adding any user or group, make sure this user or group exists in the AFP authentication system which have been set.

NCP (Novell)



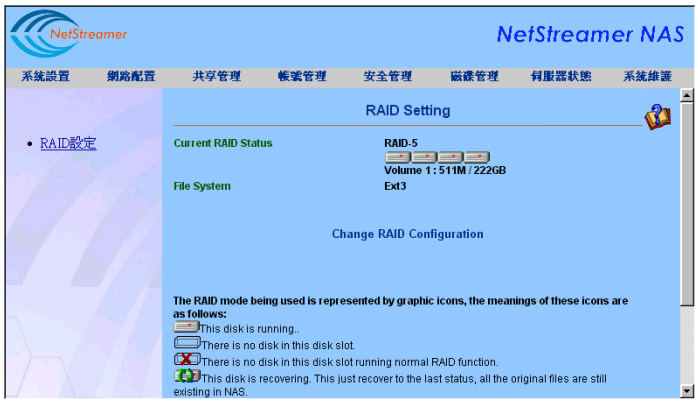
Select a Share from the Shares List

Choose a user/group from **[Bindery Server Users/Groups]**. Click **[Add]** to make it a member of the Permitted Users/Groups. Change its permissions to **[Read-only]**, **[Read- Write]** or **[Deny]**. The default permissions for a new user or group is **[Read-only]**.

Note: With authentication from the Remote Server to NAS, the system will automatically list the user "ADMIN" and the group "EVERYONE*" in the permit user or group, but the permissions of **[Read-only]** or **[Read Write]** will not be allowed. The administrator has to modify the permissions manually. Also any name followed with the mark "*" means a group.

3.7 Storage Management

RAID configuration



It is recommended to populate four hard drives when setting RAID for the first time. This ensures future storage space and makes sure data security is stable. The hard drives can be allocated as follows:

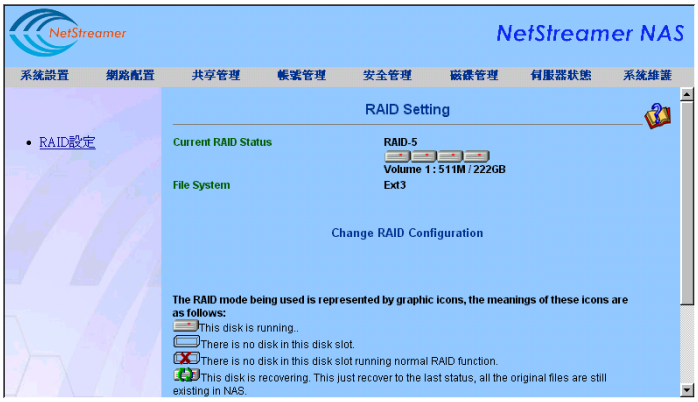
RAID Level	Volume Arrangement
RAID 5	1 volume over 4 disks
RAID 5 with 1 Spare	1 volume over 3 disks; with 1 hot-spare disk
RAID 1	2 volumes over 4 disks
RAID 0	1 volume over 4 disks
Non-RAID	4 volumes

For file system, the following can be set:

Journaling File System (ext3): System boot-up is quicker with this file system when the system is abnormally shutdown.

Regular File System (ext2): System boot-up is slower with this file system when the system is abnormally shutdown.

You can view the modified RAID status by selecting the **[Preview]** option. You can also choose to let the system to **[Create Default Shares]**. After confirming your modification, click **[Confirm to Change]**.

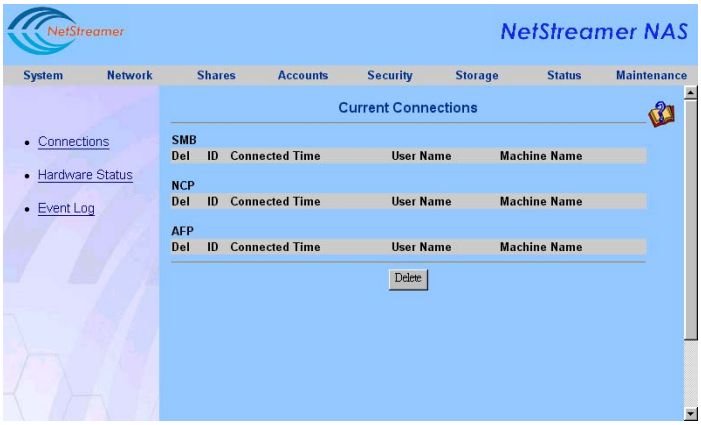


Note: Any changes to the RAID configuration will result in unrecoverable data loss.

3.8 Server Status

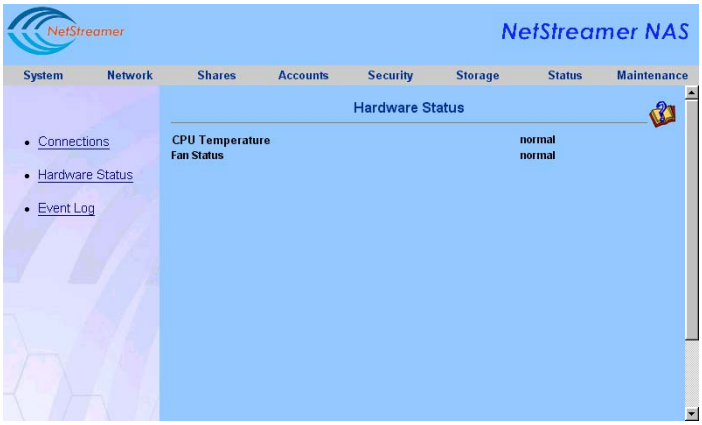
Connections

This page shows the list of users who are connected to the system.



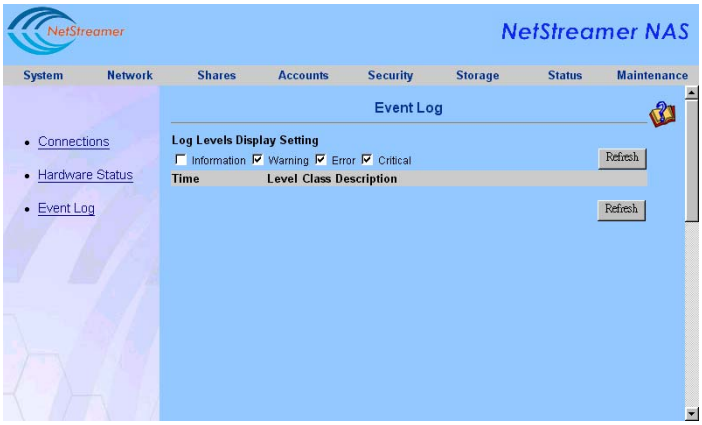
Hardware Status

This page displays the status of the hardware at this moment. This includes CPU temperature and fan status.



Event Log

Display the event log of NAS



3.9 System Maintenance

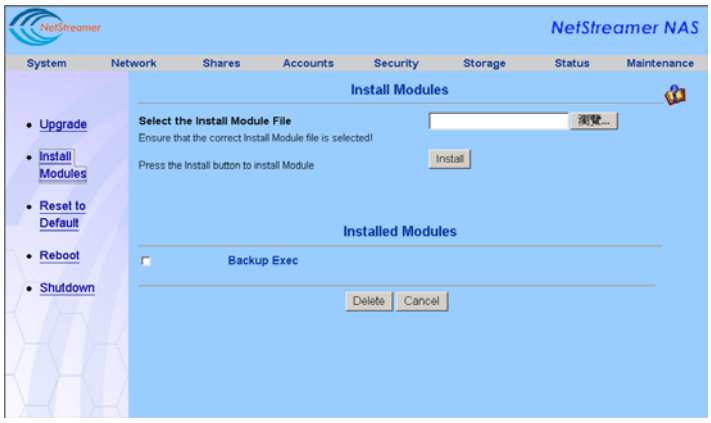
Upgrade

Upgrading the firmware can be accomplished though this page. Obtain the latest firmware from the manufacturer. Follow the steps below to upgrade your system

1. Click the **[Yes, go ahead]**.
2. Click **[Browse]** and select the path and system update file.
3. Click **[Yes]** to update the firmware. After the file update, the system will reboot automatically.

Install modules

Provide add-on features to NAS 1100, if you need this supported, please get this module from your vendor.

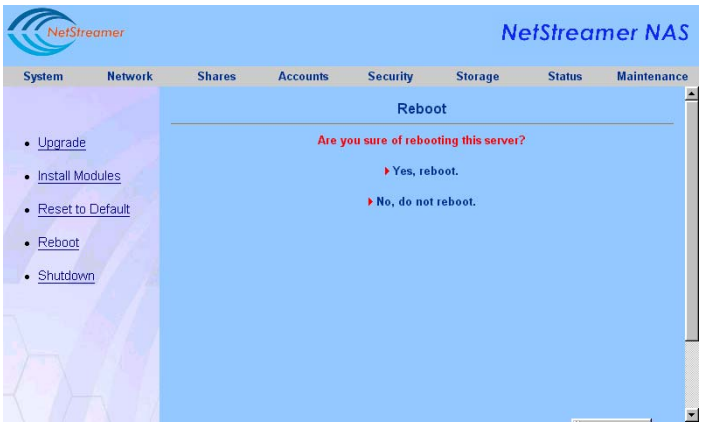


Reset to Default

On this page, the configuration settings can be reset back to the default settings.

Reboot

Click on **[Yes, reboot]**, NAS will reboot automatically.



Shutdown

On this page, you can shutdown the NAS. Auto shutdown condition can also be set.

3.10 Troubleshooting

If the NAS Assistant fails to get an IP address for the NAS, use a cross-over network cable. The IP address can be set as either dynamic or static. Follow the steps below:

1. Install the NAS Assistant software on the workstation.
2. Unplug the network cable from RJ45 jack. Use a cross-over network cable and connect the workstation to the NAS directly.
3. Use the NAS Assistant. You can now find the IP address of NAS, which is set as the default numbers (FE1: 10.10.10.10, FE2: 10.10.10.11).
4. Set the subnet IP address of the workstation's network card on the same subnet segment (i.e., 10.10.10.0x where x can be any digit after 0, but not including 10). Set the subnet mask as 255.255.255.0 and reboot the computer (For Windows 2000, it is not necessary to reboot).
5. Open NAS Assistant again. It will find the present IP address of NAS. Click the **[Config]** button to reset the IP as Auto IP (DHCP) or manually enter an IP address.
6. Plug back the straight-through network cable to NAS and workstation. Reboot the NAS.

Appendix A Specifications

Software specification

Client Platform	● Microsoft Windows 95/98/NT 4.0/2000/Me/XP ● Novell Netware clients ● Microsoft Netware clients ● Apple Macintosh System 7.5.5, 7.6, OS 8.x, 9.x, X ● Solaris 7, 8 ● HP-UX 11 ● AIX 4.3.3 ● SCO UnixWare 7.1.1 ● Red Hat Linux 6.2, 7.0, 7.1
IP Address Assignment	● Support DHCP/BOOTP/RARP or fixed IP
RAID File System	● RAID 0 (disk striping) ● RAID 1 (disk mirroring) ● RAID 5 (disk striping with parity) ● RAID 5 with 1 Spare
System Monitoring Management	● Web-Based Administration ● SNMP MIB II (Read only) ● e-Mail (SMTP)
Setup and Configuration	● Web-based system management user interface ● Supports English, Traditional Chinese and Simplified Chinese

Hardware Specifications

CPU	● Intel® Pentium® III Processor up to 1GHz; Intel® Celeron® Processor up to 1GHz (Coppermine) (Optional)
Chipset	● Intel 815E (ICH2) chipset; supports 66/100/133 MHz FSB
Memory	● Two DIMM SDRAM Sockets; up to 512MB (Optional)
Drive Bays	● 4 Internal Ultra-DMA 100 IDE Hard Disk Bays (Optional)
Network Connection	● Dual Auto-sensing 10/100 Base-T Ethernet

	with Fail-over and Load Balance (Intel 82559)
System Specification	● Case model: 1U, 19" Rack Mount ● Control buttons： Power on ● Indicator LED's: Front Panel - Power LED, HDD Active , LAN1, LAN2 Active LED
Power Supply Specification	● 200W Single ATX Power Supply ● Input: AC 90 ~ 264 V full range @47 ~ 63 Hz
Physical Specification	● Size: 482 (W) x 44 (H) x 440 (D) mm ● Weight: 8 kg (w/o HDD)
Environment Specification	● Temperature: 0 ~ 40℃(operating) -20 ~ 60℃ (storage) ● Humidity: 5 ~ 95% @ 40℃

Appendix B Important Notes

1. Please read the security instruction carefully.
2. Keep this installation guide for the reference.
3. Before cleaning the device, unplug the power cord from the outlet. Do not use liquid or spray cleaning materials. Use a wet piece of cloth for cleaning.
4. Keep the device near the power outlet for convenience.
5. Keep the device away from moisture and humidity.
6. When installing, put the device on a stable platform. Falling or dropping the unit may cause damage.
7. The openings around the device are designed for ventilation and they protect the device from overheating. Do not seal or cover these openings.
8. Make sure the power voltage value is correct before connecting your device to the outlet.
9. Arrange carefully the power cords to avoid being stepped on. Don't put stuffs on the power cords.
10. Pay attention to all the warnings and notices.
11. If you won't use the device for a long period of time, unplug the power from the power supply to avoid damage from

transient current.

12. Avoid spilling liquids to protect from fire or the electric shock.

13. Please keep the device closed. For security reasons, have only authorized technicians to dissemble the device.

14. If any of the following case happens to you, please contact customer service to check the device:

    a. Power cord or outlet damaged

    b. Liquid sinks into the device

    c. Device has been wet

    d. Device does not function properly, or the function does not correspond according to the installation guide

    e. Device fell and is damaged

    f. Device has an obvious crack

    g. Don't place this device on uncontrollable environment. If the room temperature is below –20℃(-4℉) or higher than 60℃ (140℉), it is possible to damage the unit.

According to IEC 704-1 1982, the Voice Pressure level of the operator position is nearly the same or lower than 70dB(A).

Disclaimer of Warranties: This instruction is based on IEC 704-1. We won't take any responsibility for its assurance.